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*Strengthening Maternal,
Child and Family Wellbeing Through
Bridging Research and Practice*

October 19 - 20, 2016



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Universitas 'Aisyiyah Yogyakarta



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“Strengthening Maternal, Child and Family Wellbeing Through Bridging Research and Practice”

Reviewer:

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Endang Koni Suryaningsih

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Ery Khusnal



Hall 4 'Aisiyyah University Yogyakarta, Yogyakarta Indonesia

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International conference of 'Aisyiyah University of Yogyakarta with the theme "Strengthening Maternal, Child, and Family Wellbeing through Bridging Research and Practice" is held as the media to share information of research results and scientific experiences. The goals of the international conference are as follow:

1. Conducting one day seminar, presented by topic experts to gain more understanding of maternal, child and family health matters.
2. Conducting workshop to improve research quality and impacts in maternal, child and family wellbeing

The gratitude is also addressed to the Rector of 'Aisyiyah University of Yogyakarta and her staffs, the committees of the conference, and all parties who have participated and given the supports for the success of this international conference. However, this proceeding is still far from perfect. Thus, it is expected that there will be positive suggestion for further development of the proceeding in the future. It is also expected that the proceeding will give positive contribution for the development of health professionals in Indonesia. Please, enjoy the international conference.

Wassalamualaikum warahmatullah wabarakatuh

Yogyakarta, Oktober 2016

Head of LPPM 'Aisyiyah University of
Yogyakarta

Sarwinanti, M.Kep., Sp.Kep.Mat

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Group A



ACADEMIC LEVEL OF RESILIENCE IN NURSING STUDENT AT UNIVERSITY OF PADJADJARAN

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ABSTRACT

Resilience is one factor that helps to achieve academic excellence. Student who have been able to pass the state experiences or traumatic life event to find his strength back, will successfully deal with academic setbacks, stress and pressure during the study process. Assessment of resilience values at the level of student resilience needs to be done as a baseline in planning educational model. This study was conducted to determine the resilience of academic nursing students. A quantitative research design was used in this study. The samples were all students of the regular program of Nursing undergraduate at the University of Padjadjaran with a total sample of 622 respondents. The instruments used are The Child and Youth Resilience Measure (CYRM) Youth Version 28. The data analysis was used Mean values and frequency distribution. The results showed that most of the respondents 68.2% had high resiliency with a mean value of 2.61 (max 3). The highest resilience got by student class of 2012 with a mean value of 2.68 and the lowest in 2015 with mean value 2,54. Sub variables with the highest resilience was individual and the lowest in the aspect of context. This study showed that the majority of nursing students Padjadjaran University has become a resilient people, but still low on contextual aspects (cultural and spiritual). In order to increase resilience, efforts are needed to facilitate increased resiliency factors students by preparing students to develop problem-solving skills.

Keywords: Academic, nursing students, resilience

INTRODUCTION

Resilience is the ability to handle adverse situations with persistence and hope; wisdom, character, and the strength that comes when underwent a process (Latty Goodwin, 2004). Resilience is generally described in the literature as the ability to adapt or cope with extreme difficulty or stress (Garmezy, 1991; Masten, 2001; Best, Good & Garmezy, 1990, cited in Hand, 2008). Resilience refers to the ability to bounce back and deal with stress or successful adaptation with challenging and threatening situation/environment. Resilience helps students to succeed academically handle setbacks, stress and pressure during the learning process (Muhammad S., Hafiz, Naemullah et al, 2010).

Resilience is the survival instinct that is obtained naturally. Some studies identify the characteristics of people with high resilience and the factors in their lives that affect resilience. This information has significant implications for nursing educators in particular. Some students have learned to deal with failure, and they know how to recuperate a little motivation from us. Some students may be upset and shocked, but then they will take the initiative to seek help from us as educators. Some students may have a feeling crushed, paralyzed, embarrassment, or rejection.

The concept of resilience can help in increasing the strength of the resilience of the nursing students. Kimberly and Gordon (2001), explains that students who have a high resilience to get better GPA than their colleagues who have low resilience against a backdrop of economic social same. Muhammad S, et al (2010) explains that there is no correlation between academic resilience with academic achievement in middle school students. ass-Brailsford (2005) found that a group of young blacks in South Africa, achieve academic success with a high value of resilience. Wagnlid research results and Collins (2009), found that there is a positive relationship between resilience with academic achievement. However, in Pakistan, Uzma (2007) found no correlation between the resilience of the academic achievement of graduate students at the University of Sargodha. Male students have more resilience than the female students (Muhammad S, 2010). This result is contrary to Uzma (2007) who found that in Pakistan, female students are tougher than their male counterparts. This shows that academic achievement is a variable that is very complex and many variables that can affect it.

This research can help nursing educators, practitioners, teachers, and parents as well, to understand the importance of the concept of resilience and how to improve it. Based on the above discussion, the aim of this study was to conduct a study on the outcomes of nursing students resilience academic performance index.

METHOD

This research used quantitative research design. The samples were all students of the regular program of Nursing undergraduate at the University of Padjadjaran with a total sample of 622 respondents. The instruments used are The Child and Youth Resilience Measure (CYRM) Youth Version 28 was developed by Hülya Baltaci Sahin

and Zeynep Karataş (2014). Analysis of data using Mean values and frequency distribution.

RESULTS AND DISCUSSIONS

Data collection was carried to 622 students, comprising of students of 2012 as many as 158 respondents, 150 respondents in 2013 students, 2014 students and 181 student respondents in 2015 as many as 133 respondents. The data was collected using The Child and Youth Resilience Measure (CYRM) Youth Version instruments to measure academic resilience which contains 28 questions with answer options Yes, Sometimes, No.

Table 1. Overview Nursing Student Academic Resilience Padjadjaran University (n = 622)

	Min	Max	Mean	Std	High		medium		low	
					f	%	f	%	f	%
Nursing student	1.89	3.00	2.61	0.189	424	68.2	198	31.8	0	0
a. 2012	2.11	2.96	2.68	0.180	129	81.6	29	18.4	0	0
b. 2013	1.89	3.00	2.62	0.189	111	74.0	39	26.0	0	0
c. 2014	2.07	2.96	2.58	0.193	117	64.6	64	35.4	0	0
d. 2015	2.18	2.93	2.54	0.163	67	50.4	66	49.6	0	0

Table 1 shows the majority of respondents (68.2%) of nursing students have high resilience. nursing students in the class of 2012 has a resiliency with the highest mean value, while students in 2015 to have resilience with the lowest mean value.

Table 2. An overview of Sub Variable Frequency Distribution Resilience (n = 622)

Subvariabel	Hight		medium		low		Min	Max	Mean	SD
	F	%	F	%	F	%				
2012										
<i>Individual</i>	142	89.9	16	10.1	0	0	2.00	3.00	2.75	0.212
<i>Caregiver</i>	125	79.1	32	20.3	1	0.6	1.00	3.00	2.69	0.297
<i>Context</i>	101	63.9	32	20.3	0	0	2.00	3.00	2.60	0.203
2013										
<i>Individual</i>	109	72.7	41	27.3	0	0	1.73	3.00	2.64	0.240

<i>Caregiver</i>	106	70.7	43	28.7	1	0.7	1.43	3.00	2.61	0.310
<i>Context</i>	96	64.0	54	36.0	0	0	1.70	3.00	2.61	0.201

2014

<i>Individual</i>	125	69.1	56	30.9	0	0	2.00	3.00	2.61	0.236
<i>Caregiver</i>	118	65.2	62	34.3	1	0.6	1.43	3.00	2.57	0.319
<i>Context</i>	97	53.6	84	46.4	0	0	1.80	2.90	2.55	0.213

2015

<i>Individual</i>	77	57.9	56	42.1	0	0	2.00	3.00	2.54	0.199
<i>Caregiver</i>	85	63.9	48	36.1	0	0	1.71	3.00	2.57	0.267
<i>Context</i>	54	40.6	79	59.4	0	0	2.10	3.00	2.51	0.177

Table 2 shows that the students in 2012 had the highest mean value on individual subvariable, and the mean value is lowest in 2015. In subvariable caregiver, the highest mean score obtained by a student in 2012 and the lowest mean value in students in 2014 and 2015. In subvariable context, students in 2013 had the highest mean compare with the lowest mean in students 2015.

Table 3. Distribution an overview Average (Mean) and standard deviation Padjadjaran University Nursing Students Based On subvariable Individual Item Number (individual) (n = 622)

Item number	Statement	2012 Mean	2013 Mean	2014 Mean	2015 Mean	Fkep Mean
2	Working closely with the people around	2.84	2.78	2.72	2.65	2.75
8	Finish what has been started	2.88	2.77	2.77	2.66	2.78
11	Individual fun	2.55	2.45	2.38	2.37	2.44
13	Able to solve problems without hurting themselves or others	2.70	2.43	2.51	2.23	2.48
21	Realizing the power	2.63	2.51	2.55	2.46	2.54
14	Feel supported by friends	2.76	2.61	2.51	2.47	2.59
18	Friends accompanied at difficult condition	2.67	2.54	2.52	2.47	2.55
4	Know how to behave at different situation	2.91	2.89	2.81	2.72	2.84
15	Know where to go when asking for help	2.66	2.59	2.50	2.56	2.57
20	Have to opportunity to demonstrate the ability	2.75	2.73	2.65	2.63	2.69
25	Have the opportunity to learn something useful	2.91	2.86	2.80	2.82	2.85

Table 4. Distribution an overview Average (Mean) and standard deviation Padjadjaran University Nursing Students Based On subvariable caregiver Item Number (individual) (n = 622)

Item number	Statement	2012 Mean	2013 Mean	2014 Mean	2015 Mean	Fkep Mean
5	Parents or caregivers care with heart	2.73	2.63	2.54	2.65	2.63
7	Availability of enough food at home	2.70	2.59	2.56	2.44	2.58
6	Feel that parents/caregiver to know a lot about me	2.61	2.51	2.57	2.47	2.55
12	Telling to the family about my feeling	2.35	2.27	2.17	2.26	2.26
17	Argued family care when difficult	2.91	2.80	2.85	2.83	2.85
24	Feel safe when with family	2.94	2.88	2.91	2.83	2.89
26	Loved the way families celebrate something	2.60	2.59	2.44	2.53	2.54

Table 5. Distribution an overview Average (Mean) and standard deviation Padjadjaran University Nursing Students Based On subvariable context Item Number (individual) (n = 622)

Item number	Statement	2012 Mean	2013 Mean	2014 Mean	2015 Mean	Fkep Mean
9	Religion is source of strength	2.97	2.97	2.97	2.89	2.96
22	Participating in religious activities	2.44	2.52	2.50	2.47	2.48
23	Think it is important to help the community	2.64	2.63	2.55	2.50	2.58
3	Education is important	2.98	2.98	2.95	2.83	2.94
16	Felt like home while at school/education institution	1.66	1.81	1.78	1.90	1.78
1	Had figure/idol and wanted to be like him	2.53	2.47	2.34	2.25	2.40
10	Feeling proud of the ethnic background	2.83	2.87	2.79	2.67	2.80
19	Treated fairly	2.61	2.51	2.42	2.57	2.52
27	Loved the way the community celebrating something	2.53	2.51	2.38	2.29	2.43
28	Proud to be a citizen of Indonesia	2.77	2.87	2.83	2.81	2.82

Nursing Student Academic Resilience

Everyone is equipped with an ability to adapt and remain steadfast in the face of difficult situations (Reivich and Shatte, 2002). Based on the results shown in Table 1 shows that the ability of academic resilience of 424 respondents (68.2%) classified as having higher resilience compared with 198 respondents (31.8%) had moderate resilience. This resilience is a characteristic that has a difference in everyone and can be increased or decreased over time (Henderson, 2003). In Padjadjaran University nursing

student happens is students longer have a high resilience to the student in 2012 (81.6%) with a mean of 2.68, and the lowest number that has a high resilience is at the student in 2015 (50.4%) with a mean value of 2.54.

High level of resilience dominant showed that nursing students Padjadjaran University has been optimally cope with, through, and back to its original state after experiencing difficulties in her life. According to Connor and Davidson (2003), there are some characteristics of individuals with resilience such high: it has positive expectations with spiritual values are high, optimism, gratitude, depression levels were low, sense of humor, have the desire to do physical activity, and capable to make sense of purpose in life. Factors their social support makes individuals have a high resilience.

Based on the theory of Gotberg (1999), age is a factor that supports the quality of a person's resilience. The older a person, the higher its resilience. This is in line with the results of the research showed that the student of the oldest namely force in 2012 had a number of students with the highest resilience is high (81.6%) with a mean value of 2.68 and a force youngest ie force in 2015 had a few students with resilience is high (50.4%) with a mean 2:54.

Resilience is said to be a continuous process that occurs in a person to rise. In this study were taken from the questionnaire The Child and Youth Resilience Measure (CYRM) 28 there are 3 subvariable. Here are the results of analysis of each subvariaabel based on research that has been done.

Individual

The results of this study indicate that the majority of nursing students Padjadjaran University has a high value on individual subvariable (72.8%) with a mean of 2.64. It's just that nursing students have the lowest value on the statement "people fun" it could mean that students keperawatn not have enough confidence in him, as it says Hambly (1987) confidence is the belief people do things according to his wishes and is based on a worldview individuals against him, understand the weaknesses and strengths, accept the situation themselves.

This study also shows that student in 2015 with the lowest number of students who have a high value on individual subvariable. The low value of the resilience of the student of class 2015 can not fully say that the student in 2015 does not have a source of strength resilience in itself, but it can happen due to the student of 2015 is a new student

who is undergoing many changes in their life. Gunarsa (1995) explained that students have challenges in life, when people enter the world of college, individuals face a variety of changes, ranging from changes due to differences in the nature of High School education and Higher education, the difference in social relationships, the selection of subjects or majors, and economic problems. In addition to facing the above changes, new students will also face pressure due to the process of acculturation to a new culture in which he studies. Students have to face changes in culture, lifestyle changes, environmental changes and the student is required to cope with both the continuity of education is also going well.

The results showed that the student in 2015 was the lowest score in the aspect of peer support. This can be caused by the student of 2015 was in new condition to make friends with other students. Oktaviana (2012) says that social support comes from people who have a relationship that is meaningful to the individual such as family, close friends, spouses, co-workers, neighbors and relatives.

Caregiver

In addition to individual, other sources to make someone resilient is to have external support. Grotberg (1995) explains that the source of resilience one of which is the 'I Have' that trust relationship, structure and rules at home, role models, the urge to be independent, and access to health, education, welfare, and security services. The results showed (69.8%), Padjadjaran University nursing students have a high value on subvariable caregiver. If the note statement items with the lowest value is "talking to the family of feeling" in this case there is a connection with the age of the students possessed. Nursing students Padjadjaran University were in the age range 19-24 years, according Sarwono (2006), at the age of 16-19 years are the years when the growth of the "wall" separating themselves private (private self) and the public (the public), as well Erikson in Wong (2009) at the age of 20 -30 years (intimacy versus isolation) occurs the task of development relationships with others, in case of a healthy relationship, the intimacy will be achieved, but if not there will be self-isolation.

Context

In this study, a total of 55.9% with a mean value of 2:57 Padjadjaran University nursing students have a high value on subvariable context. But on the whole there is research data item lowest value statement that "feels like home when you're at school /

educational institution" in this case indicate that the nursing students feel the faculty of nursing, University of Padjadjaran not provide comfort for the students. This greatly affects the resilience of the students because this could be a factor inhibiting the development of students optimally process, because it indirectly uncomfortable environment will bring pressure. However, on the opposite sides can be seen that this uncomfortable environment can be a process for producing students who are resilient if they are able, but could have a negative impact on students who are not able to rise up from the pressure of the environment.

Conclusion

This study showed that the majority of nursing students Padjadjaran University has become a resilient people, but still low on contextual aspects (cultural and spiritual). In order to increase resilience, efforts are needed to facilitate increased resiliency factors students by preparing students to develop problem-solving skills.

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FOOD SERVICE QUALITY, AND PATIENTS SATISFACTION OF FOOD SERVICES IN DR. SARDJITO GENERAL HOSPITAL, YOGYAKARTA

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Abstract. Food service as an indicators of the quality of hospital services accounted for a large part on the satisfaction of patients and some indicators of food service quality in General Hospital of dr. Sardjito, Yogyakarta, Indonesia has not reached the target set. The study was conducted to determine the relation between food service quality and patient satisfaction in General Hospital of Dr. Sardjito. A cross sectional study was carried out in General Hospital of dr. Sardjito in August–October 2014 including 97 subjects. Patients satisfaction with food and food service quality aspects was measured by interview questionnaire. Data were analyzed using Chi Square or Fisher Exact Test. 53 of patients (54,64%) were not satisfied with quality of food services in hospital. Food quality correlated to patients satisfaction ($p < 0,05$), but not for accuracy of diet, behaviour of staff serving food ($p > 0,05$). Increasing the quality of foods and hospital food services increases the level of overall satisfaction with foods and food services.

Keywords: Food services

INTRODUCTION

Food service as one of the indicators of the quality of hospital services accounted for a large part on the satisfaction of patients. Based on what is done in 3 hospital in Central Java, the quality of the food service was ranked fourth (20.82%) were the most problematic getting unsatisfactory assessment of pasien (Suryawati *et al.*, 2006). Food service play important role in supporting the healing of patients and the quality of life during medical care, and also contribute a major role in the satisfaction of inpatients (Sahin *et al.*, 2006). Food services staff, services care, environmental aspect, characteristics of the patients are the aspects that mostly influence on patient's satisfaction (KepGub DIY, 2013). All aspects related to the food service are significantly associated with patient satisfaction as a whole (O'hara *et al.*, 1997). Satisfactions of the

food presentation is a strong predictor for predicting the level of patient satisfaction and also the taste and proper food temperature is the strongest aspects that affect patient satisfaction. Temperature, texture, and taste of food often gets complaints from patients and reflect on the satisfaction (KepGub DIY, 2013; Zakiyah *et al.*, 2005). Behaviours, behavior, speech, ignorance, staffs hospitality, as well as the easiness in getting information and communication also ranks high in patient satisfactory perception RS (Suryawati *et al.*, 2006). Previous study has shown that the patients satisfaction problem was still quite high. Data of Patients Satisfaction Survey by Nutrition Instalation in General Hospital of dr. Sardjito, Yogyakarta, Indonesia (2013) has shown that some indicators of food service quality and patients satisfaction has not yet reached the target set. The study was conducted to determine the relation between food service and patient satisfaction in General Hospital of Dr. Sardjito.

METHODS

This is an observational study with cross sectional design including 97 subjects in June – August 2014. Subjects were selected with a consecutive sampling. In order to get equitable subject distribution, samples are taken evenly distributed proportionally according to the size of unit's population in each type of treatment classes (I, II, III) as strata. Researcher identify the subject in the Inpatient Department of Dr. Sardjito through medical records or hospital computer data base in accordance with the inclusion and exclusion criteria. Researchers supported by three enumerators in data collection process and giving questionnaires to patients. Researcher or enumerator provides food quality, behaviour of staff serving food and patients satisfaction of hospital food service questionnaire to be filled by respondent. The questionnaire consists of the characteristics data of the subject, food quality, the behaviour of staff serving food and patient satisfaction with hospital food service questionnaire using a modified Foodservice Acute Care Hospital Patient Satisfaction Questionnaire (ACHFPSQ) that has been tested for validity and reliability (Messina *et al.*, 2012). Accuracy of the food serving time is measured by observation in every meal serving schedule. The accuracy of the diet treatment being delivered to the patients is also being observed and reconciled with patient medical record, doctor's dietary prescription, and food etiquette from Nutritional Division of the Hospital

. Completeness of the data is being checked daily to see if there is any shortage or improper data. If the data obtained is incomplete, or there are any irregularities of the data, for example: data is too extreme, researchers or enumerators will conduct interviews with respondents to obtain further more in-depth on the patient satisfaction data and completing the results of the quantitative questionnaire.

RESULT & DISCUSSION

The subjects of this study consisted of 56 male (57.73%) and 41 female (41.41%). The average age of subjects was 44 years old with the youngest 18 and the oldest 65 years old. Highest number of patients/subjects is coming from third class (54.64%). The majority of patient's education is high school education or equal (35.05%), who has occupation as farmer (30.93%), Javanese (93.81%), has income < Regional Standard Salary (78.35%) (KepGub DIY, 2013), and most of the subject has normal appetite (59.79%). Forty four of patients (45,36%) were satisfied and 53 of patients (54.64%) were not satisfied with the quality of food services in a hospital.

TABLE 1. Mean of Satisfaction

Variabel	Mean (%)	SD	Min. (%)	Max. (%)
Overall Satisfaction	75,87	7,58	61,36	98,48
Food Quality Satisfaction	74,83	7,69	59,35	97,90
Food Service Satisfaction	76,20	9,00	58,33	100
Staff Behaviour Satisfaction	80,15	9,99	66,67	100

TABLE 2. Statistics Test Results Food Quality, Behaviour of Food Serving Staff and Accuracy of Diet with Patient Satisfaction Of Food Service In Dr. Sardjito Hospital

Variable	Patients Satisfaction				Total		PR (95% CI)	P value
	Satisfy		Not Satisfy					
	N	%	n	%	n	%		
Food Quality								
Poor	49	89,09	6	10,91	55	56,7	9,354	0,000
Good	4	9,52	38	90,48	42	43,3	3,666 – 23,869	
	53	54,64	44	45,36	97	100		
Behaviour of Food								

Serving Staff							
Poor	1	100	0	0	1	1,01	0,369
Good	52	52,5	44	43,5	96	98,99	
	53	54,64	44	45,36	97	100	
Accuracy of Diet							
No	3	50,00	3	5,00	6	6,19	1,000
Yes	50	54,95	41	45,05	91	93,81	
	53	54,64	44	45,36	97	100	

Significant correlation was detected between the quality of food and patients satisfaction ($p < 0.05$), but no significant correlation between the accuracy of food serving schedule, the accuracy of diet, behaviour of food serving staff and patients satisfaction related to food services in the General Hospital of Dr. Sardjito, Yogyakarta, Indonesia ($p > 0.05$). Based on the interview, a number of subjects complained about the taste of the food were less consistent for examples: sometimes feels tasteless, less salty, bitterness, too salty, too spicy and less sweet on the vegetable and side dish. The food smell is not good like the smell of bitter/overcooked, unpleasant aroma of vegetables, side dishes nauseating aroma, fishy smell in fish dishes which causes reduced appetite of subjects. Vegetable cooking level, especially on the green leaf vegetables and carrots were overcooked that affect the color, texture, and taste become unattractive to subject's appetite. Pale color of the food served especially on side dishes reflecting on less appealing appetite experienced by the subjects. Texture of side dishes, especially in the meat and chicken are slight over cooked or too tender and texture of the vegetable side dishes, especially the tofu and tempeh bit too soft. Variance of the diet including cooking method and type of side dishes are less varied. A number of research subjects also gave negative comments associated with the appearance of food, hygiene utensils, and hygiene of the food served.

The average patient's satisfaction regarding food service at Dr. Sardjito Hospital is up to 75.85%, which has not reached the target of a minimum standard of hospital services by $> 85\%$. There is no statistically significant relationship between the accuracy of dietary treatment and subject's satisfaction of food services of the Dr. Sardjito Hospital. There are 6 people (6.19%) of the subject received improper dietary treatment and 3 of

them are not satisfied with the food services. The accuracy of meal serving time at the Hospital Dr.Sardjito during the period of this study is 100% accurate. Therefore this result could not be tested by statistic regarding it relation with patient satisfaction of food services. The behaviour of food serving staff in Dr. Sardjito Hospital according to the assessment from the patients is good (98.99%) and only 1.01% said that behaviour of food serving staff are poor though did not show as statistically significant ($p > 0.05$). This can be caused by differences in perception between the subjects of the research in understanding the questionnaire's question. Nevertheless, in several studies the behavior of food serving staff also gets high positive response (Messina *et al.*, 2012; Fallon *et al.*, 2008; Abdelhafez *et al.*, 2012). The quality of food has statistically significant association with satisfaction of food services at the Dr. Sardjito Hospital ($p < 0.05$). Research subjects or patients risk 9.35 times more likely to feel unsatisfied with the low quality of food than good food quality ($PR = 9.35$) and the satisfaction of respondents to the food quality reaches 43.43%, meaning more than a half of the respondents are unsatisfied with the food services. The food quality is a positive influence on customer's satisfaction (Joung *et al.*, 2011). Food taste (Sahin *et al.*, 2006), the food presentation (Sahin *et al.*, 2006; Abdelhafez *et al.*, 2012), the quality of food, presentation of favorite menu (Abdelhafez *et al.*, 2012) have been proofed statistically significant and an important factors for patient determining their satisfaction of the food served at the hospital. Interviews result with the research's subjects showed that the quality of the vegetable aroma, taste of vegetables, vegetable cooking level, vegetable color and meat/fish side dish, food color combinations, and poor variety of foods are related to subject's dissatisfaction subject on food services. The food presentation, variety of food, and the plating layout are the main factors that contribute to create negative perception and behaviours of consumers towards institutional food (Hartwell *et al.*, 2006). The Food itself and other aspects of the food services is a very important element to the overall patient's perception and experience of hospital services and how health or medical workers make a daily commitment to always provide good food for patient (Dall'Oglio *et al.*, 2015). Food quality is one of the most important key aspect of patient's satisfaction regarding hospital food services (Tranter *et al.*, 2006; Wright *et al.*, 2003; Watters *et al.*, 2003; Feldblum *et al.*, 2011).

CONCLUSION

Increasing the quality of foods and hospital food services increases the level of overall patient satisfaction with foods and food services. The subjects are 9.35 times more likely to feel unsatisfied by less good quality of food compared to good quality of food. The quality of the vegetable flavor, taste of vegetables, vegetable cooking level, vegetable and meat/fish side dish color, food color combinations, and a poor variety of foods are related to subject's dissatisfaction regarding food service. The accuracy of diet, behaviour of staff serving food have no relation with patients satisfaction to food services in General Hospital of dr Sardjito, Yogyakarta, Indonesia.

Improved food service process needs to be done to improve the oversight function in every implementation in food service with an emphasis on improving the quality of food, empowering workers, and oriented to patient satisfaction. Food service related to diet explanation and interactive communication between the patients with food service workers can be improved so that patients know exactly why they should consume foods that are served by the hospital and support the recovery of patients, especially in patients at risk of nutrition. Improved supervision or quality control functions ranging from food ingredients to the admission process of food preparation process to determine the source of the problem and break the chain of problems which resulted in a decrease in the quality of food. Especially related to flavor, taste, level of vegetable cooked, the color of vegetable, animal side dish colors, color combinations of food, and variety of food menu that does not seem monotonous. Future studies are expected to assess the expectations of patients and covers all care units in hospitals.

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THE EFFECT OF POST-PLACENTAL INTRA UTERINE INSERTION TO THE POST PARTUM DURATION

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ABSTRACT

Intra Uterine Device (IUD) post placenta is an effective and efficient method for post partum period which is risky of infection and the uterus perforation in the implementation after delivery is not higher than the implementation in the interval period. A quantitative in nature with cohort prospective approach was used in this study. The population of the study was all post-partum women at Mlati II Primary Health Centre Sleman. The samples were taken using accidental sampling technique with 25 respondents in each case and control groups. The data were analyzed using *Chi Square* (X^2). According to the result, p-value was 0.04 in which there is difference between post-partum period duration on post-partum women who use Post Placental IUD and post-partum women who did not use Post Placental IUD. The RR result was 1.77 (95% CI : 1.058-4.338) which means that post-partum women who use Post placental IUD have 1.77 times bigger risk tendency to experience a longer post-partum period duration. It is suggested that the result of the study can be a consideration of Family Planning program evaluation and is used as reference to make policies related to Family Planning.

Keywords : *Post placental IUD, Post-partum Duration*

INTRODUCTION

Nowadays, there are about 35% risks of unexpected pregnancy in the world. Using contraception can decrease until 20 – 35 % maternal mortality (Machiyama and Cleland, 2014). After partum process, women need effective and efficient contraception that can be used in a quite long period like IUD. A research evaluates that the effective contraception for post partum woman is by using IUD (Shukla, 2012).

The research conducted by Puzei (2005) results that the use of IUD is a program to avoid pregnancy in family planning. In China and Mexico, IUD post partum has been used in midwifery service. It is conducted to reduce a quarter of life birth growth in that country. IUD is a contraceptive tool which is widely used and effectively proven that it can be used in a long period. Moreover, it is easy to apply and reversible (Celen, et al., 2004).

IUD post placenta is an effective and efficient method for post partum period which is risky of infection and the uterus perforation in the implementation after delivery is not higher than the implementation in the interval period which is 3.9% (Charonis, 2009). Based on research conducted by Kefiye (2006), He argues that women are really motivated to use contraception in the period of post partum. They think that that period is the ideal time to postpone pregnancy and use contraception. A study conducted in Turkey 2005 reported that 95% post partum and 88% post abortus were willing to use contraceptive method after labor (Puzei, 2005).

The risk of infection is low which is between 0.1 – 1.1%. The perforation case is low which is 1.2 per 1000 IUD insertion (Riverat, 2012). The unplanned pregnancy rate of IUD users is 2-2.8% (Kelly, 2002)

The use of post placenta IUD is still low. It is due to the lack of information about IUD's significances. Besides, IUD implementation has side effect such as bleeding or the longer post partum period. Paul (2005) points out that post placenta IUD causes long post partum period and pain compared to women without IUD. Thus, IUD has effect on the change in post partum period.

RESEARCH METHOD

This research was a quantitative study. This study aims at investigating the effect of IUD post placenta on post partum period. This study used Kohort approach which was usually called prospective research. It was the best survey research study (non experiment) in investigating the relationship between risk factors and its effects (diseases). The samples were divided into two groups which were experiment and control group. The experiment group consisted of post partum mothers with post placenta IUD and the control consisted of post partum without IUD.

The research population was all spontaneous laboring women who used and did not used post placenta IUD. The samples were taken through accidental sampling technique in which the samples were mothers who met with the researcher accidentally based on researcher consideration that the mothers were appropriate to become a sample.

RESULT AND DISCUSSION

The number of samples was 50 respondents and divided into two groups, 25 respondents for experiment group and 25 respondents for control group. The criteria of the sample were women who did not have complication during labor, women with spontaneous labor, breastfeeding women, and women who were willing to become the respondents.

Table 1. The Effect of Using IUD Post Placenta to Postpartum Duration

Variable	Postpartum Duration				P-value	RR	(CI 95%)
	Length		Normal				
	N	%	N	%			
IUD post placenta							
Yes							
No	16	64.0	9	36.0	0.04	1.77	(1.058-4.338)
	9	36.0	16	64.0			

Based on Table 1, the result obtained p-value of 0.04, which means that there was difference between postpartum duration on women who used IUD post placenta and postpartum women who did not use IUD post placenta. The result of the analysis obtained RR value with 1.77 (95% CI: 1.058 to 4.338) which means that the postpartum women who used IUD post placenta had a 1.77 times greater risk of experiencing prolonged postpartum duration compared to postpartum women who did not use IUD post placenta.

This is supported with the research conducted by Paul (2005) mentioning that the duration of postpartum is affected by the amount of *lochea* and the speed of involution. This is caused by the presence of foreign objects (IUD) during postpartum period. It is also in line with Jones (2001) who explains that one of the side effects of using IUD can cause more amount of bleeding. IUDs can cause chemical reactions in uterus which causes prostaglandin hormone which will affect the amount of blood loss and pain (Cunningham, 2009). The chemical reaction can cause more amount of bleeding during the use of IUD, and it may cause prolonged duration postpartum period.

It is supported by Jones (2001,) who argues that one of the side effects of using IUD can cause more amount of bleeding experienced by the acceptors. It is related to the use of IUD that can cause chemical reactions within uterus causing the excretion of prostaglandin hormone. Based on the result of the research, it can be concluded that p-value was 0.04, meaning that there was different duration between postpartum women who used IUD post placenta and postpartum women who did not use IUD post placenta. The result of the analysis obtained RR value 1.77 (95% CI: 1.058 to 4.338) which means that postpartum women who used IUD post placenta had risk tendency 1.77

times more likely to experience prolonged postpartum duration compared with postpartum women who did not use IUD post placenta.

Statistical test results obtained p-value of 0.018 which means that it will affect the amount of blood that comes out from the uterus (Cunningham, 2009).

The variable of uterine involution based on statistical tests on the effect of the use of IUD post placenta toward uteri involution obtained RR value 1.06 (95% CI = 0.7009 to 0.2400) which means that postpartum women who used IUD post placenta can have uterus involution process with 1.06 times prolonged tendency compared to postpartum women who did not use IUD post placenta.

It is supported by a research conducted by Paul (2005) stating that the duration of postpartum period is influenced by the amount of *lochea* excretion and involution speed that is caused by a foreign object (IUD) during postpartum period. It is also consistent with the theory that one of side effects of IUD can cause more amount of bleeding from the uterus (Jones, 2001). IUD can cause chemical reaction in the uterus that raises prostaglandin hormone which will affect the amount of blood that comes out from the uterus (Cunningham, 2009).

CONCLUSIONS

According to the result, p-value is 0,04 in which there is difference between post-partum period length on post-partum mothers who use *Post placental IUD* and post-partum mothers who do not uses *Post placental IUD*. The RR result is 1,77 (95% CI : 1,058-4,338) which means that post-partum mothers who use *Post placental IUD* have 1,77 times bigger risk tendency to experience a longer post-partum period length.

The study can be used as consideration on evaluation of family planning programs that already exist in Sleman region, especially family planning program with IUD Post Placenta during postpartum period. It is also expected that the study can used as reference for policy making – policies that correlate to family planning implementation of UD Post Placenta during postpartum period.

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THE EFFECT OF EARLY INITIATION BREAST FEEDING COUNSELING TOWARD KNOWLEDGE IN PREGNANT WOMEN

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ABSTRACT

Solution to reduce the causes of neonatal deaths is through breastfeeding within the first hour, called Early Initiation of Breastfeeding. EIB may provide some benefits, such as: nutrition needs with optimum quality and quantity, increase bonding mother and baby, improve the health status of infants and mothers as a form of fulfilling the obligation to a baby as his religious belief (Islam), Early initiation of breastfeeding and will assist in the ongoing exclusive breastfeeding duration of breastfeeding for 2 years. However, rates of EIB is low. One contributing factor is the lack of knowledge of mothers about the implementation of the EIB and the attitude that refuses does EIB. Knowing the influence of early initiation of breastfeeding counseling (EIB) on the knowledge of early initiation of breastfeeding (EIB) in the third trimester of pregnant women. This research was a pre-experimental design "one group pretest-posttest design". The population in this study were all 3 trimester pregnant women who carry out checks on BPM Istri Utami Sleman Yogyakarta with the technique sampling is incidental sampling with 35 respondents. The data were analyzed using Wilcoxon-test. According to the research results of Wilcoxon-test to determine differences in the level of knowledge, the value of Z count equal to -4.796 with a significance of 0.000 (sig <0.05), meaning that the difference in the level of knowledge about the third trimester of pregnant women before and after the counseling of early initiation breastfeeding.

Keywords : *Counseling, Early Initiation of Breastfeeding, knowledge*

Introductions

The growth and development of infants neonatal period is the most critical period because it can lead to morbidity and infant mortality. Bantul regency in 2011 noted that the infant mortality rate of 8.5 / 1,000 live births, as much as 46.2% occurred during the neonatal or newborn up to 28 days. The cause was asphyxia, low birth weight and neonatal infections (Profil kesehatan Bantul, 2012). One solution to reduce the causes of death in infants is through breastfeeding within the first hour, called Early Initiation of Breastfeeding (EIB). Breastfeeding is then given exclusively for 6 months of full breastfeeding as the improvement can be continued until the first two years or more. Early Initiation of Breastfeeding (EIB) greatly help achieve the SDGs namely reducing child mortality, helping to reduce poverty and help reduce hunger because breastfeeding will increase the success of exclusive breastfeeding for six months and the

duration of breastfeeding, this may reduce the purchase of infant formula. If her milk abundant nutritional needs are met so that the baby will be reducing newborn mortality (Roesli, 2012).

According to data released in 2012 Provincial D.I. Yogyakarta coverage of new exclusive breastfeeding 49.5%, total is still said to be lower than the target achievement of exclusive breastfeeding in 2011 was 80%, this suggests that early initiation of breastfeeding has not done well. Factors associated with EIB of the mother is mother knowledge about the implementation of the EIB and the attitude that refuses to do EIB (Faizah, 2012). Mothers' knowledge of EIB can be improved by the extension as a means of education or health promotion in the mother (Nurazizah, 2011). Expected with good knowledge can improve motivation, where a strong motivation underlying intention to do EIB (Yulianti, 2008). Mothers' knowledge of early initiation of breastfeeding is one of the important factors in the successful implementation of the EIB, it is necessary for a good exposure information so that the mother's knowledge about the EIB also adequate and motivation to do EIB also strong. Knowledge of good mothers will increase 1.6 times higher for the implementation of the EIB compared to women with less knowledge of the EIB (Hidayat, 2012).

This type of research will be used in this research is the pre-experiment design with the draft "One group pretest-posttest design", this design is no comparison group (controls), but they could have done the first observation (pretest) which allow scientists to examine the changes that occurred after the experiment (treatment) (Sugiyono, 2012). The technique sampling in this research is incidental sampling, where sampling technique based on chance, that anyone who by chance met with investigators can be used as a sample (Sugiyono, 2012).

Method

Methods of data collection is done by giving questionnaires covered, where the alternatives and variations of the answers have been determined by researchers. Before the hypothesis test first tested the normality of the data to determine whether or not the

data is normal to the One-Sample-Kolmogorov-Smirnov. If the data is normal, the formula is used for different test paired t-test is to test the hypothesis of comparative two samples are correlated, otherwise if the data were not normally distributed, then the hypothesis test used was Wilcoxon-Test. Calculation of hypothesis testing was done using SPSS 17 for Windows (Sugiyono, 2012).

Results and Discussion

Tabel 1. Characteristics of Respondents

No	Characteristics	Amount(Person)	Percentage (%)
1	Age (Year)		
	20-25	12	34,29
	26-30	12	34,29
	31-35	11	31,42
	Total	35	100.0
2	Education		
	SD	3	8.6
	SMP	11	31.4
	SMA/SMK	15	42.9
	D3	2	5.7
	S1	4	11.4
	Total	35	100.0
3	Job		
	Housewife	19	54.3
	Karyawan	3	8.6
	Wiraswasta	9	25.7
	Guru	3	8.6
	Mahasiswa	1	2.9
	Total	35	100.0
4	Gravida		
	Primigravida	15	42.9
	Sekundigravida	13	37.1
	Multigravida	7	20.0
	Total	35	100.0

Table 1 shows that based on the characteristics of the mother's age, the majority of respondents aged 20-25 years and 26-30 years respectively amounted to 12 people (34.29%). Based on the characteristics of the mother's education level, the majority of respondents educated graduates end SMA / SMK as many as 15 people (42.9%). Based on the characteristics of the mother's occupation, the majority of respondents as a

housewife many as 19 people (54.3%). Based on the characteristics of the pregnancies (gravida), the majority of respondents included in the category of primigravida (first pregnancy) as many as 15 people (42.9%)

Tabel 2. Distribution Frequency of EIB Knowledge On Pregnant Women In Third Trimester In BPM Istri Utami Sleman Yogyakarta

No	Knowledge Level EIB	Pre-Test		Post-Test	
		Amount (person)	Percentage (%)	Amount (person)	Percentage (%)
1	Kurang	4	11.4	0	0
2	Cukup	19	54.3	4	11.4
3	Baik	12	34.3	31	88.6
Total		35	100.0	35	100.0

Table 2 shows that before being given counseling (pre-test), the majority of the level of knowledge of third trimester pregnant women about the EIB (Early Initiation of Breastfeeding) fall into the category quite as many as 19 people (54.3%) and otherwise at least the level of knowledge found in the category less of 4 people (11.4%). Subsequently, after being given counseling about EIB (post-test), the majority of the level of knowledge of third trimester pregnant women about the EIB (Early Initiation of Breastfeeding) fit in either category as many as 31 people (88.6%) and otherwise at least the level of knowledge found in the category pretty much as 4 people (11.4%). For the level of knowledge about the conditions of the post-test in this study was not found. If we compare the level of knowledge of third trimester pregnant women about the EIB on the conditions before and after counseling, it can be said the EIB extension services can increase the level of knowledge of third trimester pregnant women about the EIB better. Changes in the level of knowledge about the third trimester pregnant women before and after giving EIB counseling can be described as follows:

Table 3 Knowledge changes Pregnancy Trimester 3 on EIB Before and After Giving Wife BPM Extension EIB in Yogyakarta Sleman Utami

No	Knowledge Changes	amount (person)	Percentage (%)
1	Kurang – Cukup	4	11.4
2	Cukup-Baik	19	54.3
3	Baik-Baik (Tetap)	12	34.3
Total		35	100.0

Table 3 shows that the majority of changes in the level of knowledge of third trimester pregnant women about the EIB occurred in the process of change of the level of knowledge to be good enough as many as 19 people (54.3%) and reverse the process of change in the level of knowledge with the lowest number was found in a change of less category into pretty much as 4 people (11.4%). The process of change in the level of knowledge, as the above findings may be possible because of the factors supporting the characteristics of the respondent. If visits by life characteristics third trimester pregnant women are the majority aged 23 years and 30 years, so it can be said to be a young mother relatively more receptive to new sources of information and knowledge related to maternal and infant health, which in this case knowledge of EIB. So that their outreach activities on EIB able to add new information and knowledge about the EIB for pregnant women in the third trimester in BPM Istri Utami Sleman, Yogyakarta.

Table 4. Normality Test Results 1-KS

		EIB Knowledge (Pre-test)	EIB Knowledge (Post-test)
N		35	35
Normal Parameters ^{a,b}	Mean	20.80	26.71
	Std. Deviation	2.541	2.729
Most Extreme Differences	Absolute	.176	.285
	Positive	.126	.201
	Negative	-.176	-.285
Kolmogorov-Smirnov Z		1.044	1.683
Asymp. Sig. (2-tailed)		.226	.007

Table 4. Shows that findings of the test for normality 1-KS (Kolmogorov-Smirnov) on knowledge pretest shows the value asymptot sig > 0,05; whereas in variable of EIBknowledgepost-test Less than 0,05. So that different test using Wilcoxon test.

Tabel 5. Wilcoxon-Test Results The Level of EIB Knowledge In Third Trimester of Pregnancy Women Before and After Giving EIB Counseling in BPM Istri Utami Sleman Yogyakarta

Parameter	Hasil Uji Wilcoxon-Test
Z	-4.796 ^a
Asymp. Sig. (2-tailed)	.000

Table 5 shows that the obtained value of Z count of -4.796 with a significance of 0.000 (sig <0.05); it means that the differences in the level of knowledge about the third trimester pregnant women before and after EIB counseling.

The results of a study showed an increase in the level of knowledge about Early Initiation of Breastfeeding (EIB) after the extension services EIB and the results of Wilcoxon-Test which showed a significant difference in the level of knowledge trimester pregnant women 3 on EIB before and after the extension services, showed that the presence of the extension services can cause a positive effect on the increase in the level of knowledge of third trimester pregnant women about the EIB.

Sufficient knowledge of the EIB for the community and the family are very necessary so that they are motivated to do the EIB to potential child will be born later. Puspitasari research results (2012), found that the majority of pregnant women have a negative perception of the EIB. This is due to lack of knowledge of pregnant women about early initiation of breastfeeding. Pregnant women have less gain on early initiation of breastfeeding information from health professionals and when the previous bhousewifelh experiences more than half of pregnant women who do not do early initiation of breastfeeding for breastfeeding mothers who did not go out after giving bhousewifelh. This condition is increasingly encouraging the importance of education to the EIB third trimester pregnant women about the importance of EIB for the health of her baby.

Lack of knowledge of the parents, the medical side as well as a reluctance to do so makes EIB is still rarely practiced. This is in line with the results of research conducted by Anita (in Nilasari, 2010), that between mother knowledge about the EIB and the practice of a significant relationship.

Seeing the characteristics of the respondents were mostly against the background of a high school education or equivalent, working as housewife, certainly contributes positively about the meaning of EIB. All the respondents were in the age range 20-35 years, which is the best period for childbhousewifelh and lactation, thus supporting the implementation of the EIB. Gravida in Suparyanto (2010), spoke about the frequency of pregnancy a mother, regardless of whether the pregnancy is done for the long term, the pregnancy is lost for

any reason, including induced abortion or miscarriage, included therein. Research results show that respondents with gravida ≥ 3 times, amounting to 90% did the EIB. Respondents with a history of abortion, 100% did the EIB. This is consistent with that put forward by Hidayat (2008), that women with primigravid need services more, because of the possibility of complications of pregnancy and labor is greater.

The level of adequate knowledge is the basis for the development of one's reasoning power and roads to facilitate the receiving of motivation, and further implications on the attitudes and behavior of people in doing EIB. The level of knowledge a person closely associated with the level of education, although the high level of education a person has not made bail increasingly broad knowledge. Therefore, not only the knowledge gained from the process of formal education, but also of non-formal education process or the result of a person's life experience. Education majority of respondents in the category of secondary (high school graduates / equivalent) be a positive factor in favor of an increase in knowledge about EIB.

According to Bloom in Notoatmodjo (2010), knowledge is part of the cognitive domains that are divided into six stages, the third stage is the application, in this case the practice of EIB. Conduct based on good knowledge will tend lasting. Notoatmodjo (2010) adds that knowledge has not always happened in the application form, because knowledge is influenced by age, education, experience, and work. If the views of the majority of respondents work characteristics as housewife would provide support in the form of looser provide time for mothers to participate in extension activities of EIB in order to increase information and knowledge about the EIB. Conditions were difficult to find if the mother's status as active workers outside the home would have little time and opportunity to participate in various activities of health education as well as a visit to a health care of mothers and babies. Here is one of the advantages of mother's status as housewife would have more time and opportunity to devote all the attention and affection to the fetus conceived

According to Lucie (2009), counseling or education as a process of behavior change requires a relatively long time and careful planning, effective, and sustainable. Nevertheless, education as a medium for health education to the public and it can increase public knowledge about the importance of health behaviors, which in the

context of this study the extension services of the EIB is able to increase the level of knowledge trimester pregnant women of EIB, which in turn rests on the growth of motivation and maternal behavior EIB in giving to the baby, it is also in line with research conducted Nurazizah (2011), that knowledge of mothers about breastfeeding Early initiation can be improved with the extension as a means of health education or health promotion in the mother. This study successfully provide empirical evidence of the importance of the extension services of EIB in order to improve the level of knowledge of third trimester pregnant women about the EIB. Extension as a mechanism to deliver information to the EIB third trimester in pregnant women to be effective or not, successful or not is measured by the level of understanding of the EIB pregnant women as well as the extent to which understanding of the pregnant mother can influence the process of decision-making and behavior change to EIB. The decision making process is very influential on the welfare of the after choldbirth because if done Initiation of breastfeeding Early the risk of postpartum haemorargic will be prevented this according to research conducted by Wardani (2011), that the initiation of early may help prevent postpartum hemorrhage, and also the need to increase knowledge of pregnant women before delivery through EIB to make leaflets, brochures and books on suckle Early initiation so that mothers can cooperate on the implementation of the Early initiation of breastfeeding

Conclusions and Recomendations

From the results of this study concluded that the extension of the early initiation of breastfeeding can affect trimester 3 pregnant women increase knowledge. Test results obtained statistical p value of 0.000, it is concluded that there is a difference between knowledge singnifikan before and after the extension of the early initiation of breastfeeding counseling

For the health service in order to increase knowledge of midwives / health workers Early Initiation of Breastfeeding (EIB) so as to improve services in terms of counseling and counseling pregnant women about the importance of Early Initiation of Breastfeeding (EIB), so that pregnant women can increase knowledge of EIB, with knowledge expected good mother support the implementation of early initiation of breastfeeding in childbhousewifeh

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CORRELATIVE FACTORS OF CHRONIC ENERGY DEFICIENCY ON PREGNANT WOMEN

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ABSTRACT

Background: Pregnant women who experiencing chronic energy deficiency will impact to mothers and babies safety, and the quality of the baby born.

Objective: This study was to investigate correlative factors of chronic energy deficiency on pregnant women. **Method:** The study used analytical survey method with cross sectional approach with total samples 40 respondents. The data were analyzed by chi square test and regression logistic.

Result: Results show that correlative variables namely occupation with p value $0.009 < 0.05$ and anemia status variable with p value $0.020 < 0.05$. After being tested with regression logistic test on occupation and anemia status variables, it obtained p value 0.04 with OR 5.55 on occupation variable, so the dominant factor was occupation.

Conclusion and Suggestion: There was positive correlation between occupation and anemia status and chronic energy deficiency on pregnant women, and the most dominant factor was occupation. Primary Health center expected that can increase the service to pregnant women by giving more extensive knowledge about nutrition during pregnancy.

Keywords : pregnant women, Chronic Energy Deficiency

BACKGROUND

Nutritional status is a measure of success in nutrition for pregnant women. Nutrition of pregnant women is a nutrient that is needed in large quantities for their own mother's nutrition and development of the fetus (Bobak et al, 2005). Pregnant women (CED or Chronic Energy Deficiency) can disrupt fetal development, namely physical growth (stunting), obstructed labor, and metabolic causes of non-communicable diseases in adulthood (Buku Bumil CED, 2013).

Based on the results of Riskesdas 2013 showed that the prevalence risk of CED nationally reached 24.2%. Prevalence of CED among pregnant women in Yogyakarta in 2012 was 12.92%. Preliminary studies conducted in Bantul district health department in 2015 in the prevalence of pregnant women get results with chronic energy deficiency (CED) at 9.7%. The incidence of CED is still high enough in Jetis II Primary Helath

care as 20.18% (Risksdas, 2013). This study wants to know which factors are most influential in CED incidence in pregnant women.

METHOD

The study used analytical survey method with cross sectional. The population numbered 110 respondents, The technique sampling is Simple Random Sampling, The number of respondents are 40. The independent variables in this study were age, education, employment, history of illness, a history of anemia, and parity, dependent variable is incidence CED in pregnant women. The data were analyzed by using chi square test and regression logistic.

RESULT

1. Analisis Bivariat

- a. Age correlation with the incidence of CED on pregnant women in PHC Jetis Bantul Yogyakarta

Table 4.9 Age correlation with the incidence of CED in pregnant women in Primary Health Care of Jetis Bantul Yogyakarta

Age	CED				Total		(p)	(CI 95%)
	CED		NoCED					
	N	%	N	%	N	%		
Risk	2	40	3	60	5	100	0,345	(0,51-2,37)
Unrisk	23	65,7	12	34,3	35	100		
Total	25	60	15	40	40	100		

Table 4. There is no Age correlation with the incidence of CED in pregnant women in Primary Health Care of Jetis Bantul Yogyakarta p value $0,345 > 0,005$.

- b. Educational correlation with the incidence of CED in pregnant women in PHC of Jetis Bantul Yogyakarta

Table 4.10 Educational correlation with the incidence of ECDin pregnant women in PHC of Jetis Bantul Yogyakarta

Educational	CED						(p)	(CI 95%)
	CED		Not CED		Total			
	N	%	N	%	N	%		
Low	11	73,3	4	26,7	15	100		
High	14	56,0	11	44,0	25	100	0,329	(0,53-8,67)
Total	25	63,2	15	136,8	40	100		

Table 4.10 There is no Educational correlation with the incidence of ECDin pregnant women in Primary Health Care Jetis Bantul Yogyakarta value $0,329 > \alpha (0,05)$.

- c. Job correlation with the incidence of ECDin pregnant women in PHC Jetis Bantul Yogyakarta

Table 4.11 Job correlation with the incidence of ECDin pregnant women in PHC Jetis Bantul Yogyakarta

Job	CED				Total		(p)	(CI 95%)
	CED		NotCED					
	N	%	N	%	N	%		
Not working	22	75,9	7	24,1	29	100	0,009	(1,73-40,53)
Working	3	27,3	8	72,8	11	100		
Total	25	60	15	40	40	100		

Table 4.11 There is Job correlation with the incidence of ECDin pregnant women in PHC Jetis Bantul Yogyakarta

- d. History of disease correlation with the incidence of ECD on pregnant women in PHC Jetis Bantul Yogyakarta

Table 4.12 history of disease correlation with the incidence of ECD in pregnant women in Primary Health Care of Jetis II Bantul Yogyakarta

		CED							
History of disease	of	CED		Not CED		Total		(p)	(CI 95%)
		N	%	N	%	N	%		
Pernah sakit		3	100	0	0	3	100		
Tidak pernah sakit		22	59,5	15	40,5	37	100	0,279	(1,28-2,19)
Total		25	60	15	40	40	100		

Table 4.12 There is no history of disease correlation with the incidence of ECD in pregnant women in PHC Jetis Bantul Yogyakarta $0,279 > \alpha (0,05)$

- e. History of anemia correlation with the incidence of ECD in pregnant women in PHC Jetis Bantul Yogyakarta

Table 4.13 History of anemia correlation with the incidence of ECD on pregnant women in PHC Jetis Bantul Yogyakarta

History of anemia	CED						(p)	(CI 95%)
	CED		NotCED		Total			
	N	%	N	%	N	%		
Anemia	13	86,7	2	13,3	15	100	0,020	(1,30-37,88)
Not anemia	12	48,0	13	52,0	25	100		
Total	25	60	15	62,5	40	100		

Table 4.13 There is history of anemia correlation with the incidence of ECD on pregnant women in PHC Jetis Bantul Yogyakarta $0,020 < \alpha (0,05)$.

- f. Parity correlation with the incidence of ECD on pregnant women in PHC of Jetis Bantul Yogyakarta

Table 4.14 Parity correlation with the incidence of ECD in pregnant women in PHC Jetis Bantul Yogyakarta

Women in 1-10 years duration of sexual exposure							
Parity	CED						(CI 95%)
	CED		NotCED		Total		
	N	%	N	%	N	%	
□ 2 kali	6	66,7	3	33,3	9	100	1,00 (0,26-6,02)
1-2 kali	19	61,3	12	38,7	31	100	
Total	25	60	15	40	40	100	

Table 4.14 There is history of anemia correlation with the incidence of ECD in pregnant women in PHC Jetis Bantul Yogyakarta $1,00 > \alpha (0,05)$.

2. Analisis Multivariat

Multivariate analysis in this study using logistic regression with significance level of $p < 0.05$. Significant external variables based on the results of the bivariate analysis among others history of anemia and work.

Table 4.15 The most dominant factor on the incidence of CED in pregnant women in Primary Health Care of Jetis Bantul Yogyakarta

Variable	P Value	OR (95%CI)
Job	0,04	5,55
Not working		(1,06-29,05)
working		

Based on table 4.15 Multivariate analysis in this study using logistic regression with significance level of $p < 0.05$. Significant external variables based on the results of the bivariate analysis among others history of anemia and work.

Multivariate analysis on the job variables obtained number OR 5.55, which means pregnant women who do not work at risk of CED as much as 5.55 times, compared with pregnant women who work.

DISCUSSION

Age correlation with the incidence of CEDon pregnant women in PHC Jetis Bantul Yogyakarta

The study states there is no correlation between age with the incidence of CED in pregnant women in Primary Health Care of Jetis Bantul Yogyakarta, This is consistent with those expressed by the theory Arisman (2010) states that the age of the most good is more than 20 years and less than 35 years, with nutrition of pregnant women are expected to be better. Therefore we can conclude that age is not a factor of influence CED occurrence for the majority of the respondents ideal age to get pregnant.

Educational correlation with the incidence of ECDin pregnant women in PHC of Jetis Bantul Yogyakarta

The study states there is no relation between education and CED incidence in pregnant women, in theory from the Faculty of Public Health (2007) which states that higher education levels are expected knowledge or information about better nutrition owned so they can meet their nutritional intake. The results of this study are supported by Munir (2002), Yuliani (2002), Azma (2003) and Hapni (2004) showed no significant association between maternal education level with CED incidence in pregnant women.

Job correlation with the incidence of ECDin pregnant women in PHC Jetis Bantul Yogyakarta

The study states there is an employment relation with CED incidence in pregnant women with job where the Chi Square test results obtained value of $0.009 > \alpha$ (0.05). Many housewives, who experienced CED, for mothers who do not work just do not have time to meet the energy required, in addition to mothers who do not work do not have access to the info that a lot because of lack of time and workload is done everyday is very much like should do own homework, such as keeping house, raising children and husband, so the burden of the work done by pregnant women greatly affect nutritional requirements is consumed (Arisman, 2010).

History of Disease Correlation with the incidence of ECDin pregnant women in PHC Jetis Bantul Yogyakarta

Results of the study revealed no relation history of the disease with the incidence of CED in pregnant women in Primary Health Care of Jetis Bantul Yogyakarta, history of disease before pregnancy can act as a beginner occurrence of malnutrition as a result of decreased appetite, disturbance of absorption in the digestive tract or increased nutrient requirements by the presence of disease. This research was supported research by Surasih (2005) in which the results of the study showed no association with the disease history CED incidence in pregnant women in Banjarnegara district in 2005.

History of anemia Correlation with the incidence of ECDin pregnant women in PHC Jetis Bantul Yogyakarta

Results of the study revealed no relation history of the disease with the incidence of CED in pregnant women in Primary Health Care of Jetis Bantul Yogyakarta, history of disease before pregnancy can act as a beginner occurrence of malnutrition as a result of decreased appetite, disturbance of absorption in the digestive tract or increased nutrient requirements by the presence of disease. This research was supported research by Surasih (2005) in which the results of the study showed no association with the disease history CED incidence in pregnant women in Banjarnegara district in 2005.

History of Parity Correlation with the incidence of ECDin pregnant women in PHC Jetis Bantul Yogyakarta

Parity is the status of a woman in connection with the number of children ever born. The study states there is no parity relationship with CED incidence in pregnant women in Primary Health Care of Jetis Bantul Yogyakarta. This study is in line with the results of research by Surasih (2005) in which the results of the study showed no association parity with CED incidence in pregnant women in the district of Banjarnegara 2005

The Most Dominant Factor correlation of CKD In Pregnant Women In The Primary Health Care of Jetis Bantul Yogyakarta.

The test results obtained by the multivariate analysis on job variables 5.55, which means pregnant women who do not work at risk of CED as much as 5.55 times, compared with pregnant women who work. Multivariate analysis thus be obtained the most dominant factor is the work that has value OR 5.55.

The results are consistent with the theory by Arisman (2010) states that the factors affecting the nutrition of pregnant women pregnant burden. Pregnant women who do not work experienced something KEK is influenced by several factors namely one of which the burden of the work done by pregnant women daily.

CONCLUSION

The results showed a correlation with the incidence jobCED in pregnant women shown on $p \text{ value } 0,009 < \alpha (0.05)$, and a history of anemia shown $p \text{ value } 0,020 < \alpha (0.05)$, while the variables of age, education, history of pain and parity there is no correlation., the most dominant factor is the work shown on $p \text{ value of } 0.04$ and value OR 5.55.

SUGGESTION

The results of this study can be used to provide counseling pregnant women in class to prepare for pregnancy or counseling about the nutritional needs before and during kehamilannya, so that she can prepare her pregnancy well.

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EARTHQUAKE MITIGATION TRAINING IMPROVES THE PREPAREDNESS OF RED CROSS YOUTH MEMBERS

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ABSTRACT

Disaster preparedness is an effort to minimize the impact of the disaster. Researchs showed that the school's preparedness level was lower than the others. Red Cross Youth members play an important role as peer educator to improve the disaster preparedness in school. The study aims to determine the effect of earthquake mitigation training on the preparedness of Red Cross Youth Members. This was pre-experimental with one group pre-test post-test design. The respondents were 22 students obtained by total sampling technique. The result shows that there was an improvement on the preparedness of Red Cross Youth (p value 0,000) by training.

Keywords : Preparedness, Earthquake Mitigation Training, Red Cross Youth Members

INTRODUCTION

Indonesia is located between three big tectonic plates in the world. The location causes some frequent plates movement resulting in the emergence of earthquake belts, a series of active volcanoes, and geological faults which become disaster-prone zones. There are 25 earthquake-prone zones in Indonesia in which The Special Region of Yogyakarta is one of them. The mapping result of Regional Disaster Management Agency (BPBD) shows that in Yogyakarta, the very high vulnerability level of earthquake is found in the area of Pundong, while the high vulnerability level of earthquake is found in the areas of Banguntapan, Piyungan, Pleret, Jetis, Imogiri, and Kretek (The Department Of Energy And Mineral Resources 2008 & BPPD 2015).

Indonesia's location as described above causes Indonesia to have the disaster risks. Disaster risk is a potential loss emerging due to some disasters in particular areas in particular period which can result in death, injuries, illnesses, threatened life, insecurity loss, evacuation, treasure lost damage, and community activity disturbances. These disaster risks demand the alertness in facing disasters (Rijanta, Hizbaron, and Baiquni, 2014).

The alertness is focused more on the efforts in preparing the abilities to do emergency responses measures quickly and accurately in relation with the disaster relief in Indonesia. Schools as a public space have real roles in building the community resilience. The school alertness is meant to make the school community recognize, understand, and care about the environment and increase the skills to decrease the risks when there are disasters (Romdiati 2008 & Hidayati et al, 2011).

However, in fact, based on some researches in various regions in Indonesia, the schools' alertness level is still low proven from some researches done by Indonesian Institute of Science (LIPI) and United Nations Educational Scientific and Cultural (UNESCO) in 2006; the study results of LIPI 2011; BPBD DIY in 2015; and Dwisiwi in 2012. Some of the researches were analyzed and resulted in showing that schools are public spaces with the highest vulnerability, while, in fact, the alertness in school community is still low. The impacts which possibly happen is to worsen the earthquake impacts such as increasing death number, severe injuries, high number of people evacuated due to the damaged housing and public facilities, treasure loss damage, community activity disturbances, emergent illnesses due to damaged environment condition, bad sanitation, and drastically decreasing human body immunity (LIPI and UNESCO/ ISDR, 2006).

The above facts show that the efforts on disaster alertness in schools become a shared crucial agenda which are the efforts and responsibilities of schools' community and stakeholders. The Red Cross Youth (RCY) as a public agency/ institution around schools becomes one of the important elements in creating the schools' alertness. RCY is a tool to promote, educate, and develop the young members of RCY in formal institutions. One of the RCY's duties in the alertness issue becomes obligatory to know and to understand by the RCY members in *Wira* level (15-17 aged members in senior high schools). One of the RCY's roles is to give peer education which is highly effective in giving information to other students about the alertness in handling disasters. To fulfil this role, RCY really needs the disaster education such as training and skill development (Indonesian Red Cross of Aceh Region, 2013).

The Department Of Energy And Mineral Resources (2008) states that one of the earthquake disaster mitigation management including to build the alertness of the people and Regional Government through anticipation trainings to handle unpredictable

earthquakes. The Government concern on disaster management including the education, training, and consultation is written in Acts Number 21 Year 2008 about Disaster Management. The earthquake in May 2006 shows that the Government only focused on post-earthquake rehabilitation. On the contrary, focusing on pre-disaster can decrease the risks of more severe victims and damages. Therefore, the recent Government's focus should be emphasized on increasing the pre-disaster management.

Based on the preliminary study done at SMAN 1 Pleret on 16 November 2015, the interview result with the RCY elder members shows that the earthquake management training has been taught in RCY before but it has not been done regularly. The elder members of RCY of SMAN 1 Pleret said that the disaster management training is crucial to be done considering the region as the earthquake-prone areas. Besides, the members explained that the training can be regularly done in every force of RCY for the new members in the beginning of the extracurricular program. The elder members also stated that in Teaching Learning Activity in High Schools has no issue related on disaster management, it is only introduced in extracurricular activity. Based on the interview with 5 RCY members at SMAN 1 Pleret, they admitted that they had not got the training even though they admitted that it is very crucial to do on order to be alert in handling disasters if the disasters unpredictably happen.

RESEARCH METHOD

The research design uses preexperimental with one group pre-test post-test design. This research tests the effects of giving earthquake disaster management training toward the alertness of RCY SMAN 1 Pleret in handling disasters. This research is done toward 22 RCY members who are given the training during a week started 12 May to 19 May 2016.

The respondents in this research got a earthquake management training in 120 minutes. The training was done on Thursday, 12 May 2016 including the materials delivery, discussion, practice, and disaster management simulation. The tools used in the training were power point presentation materials and LCD projector. As the additional tool, the researcher also prepared the materials leaflets given to the training participant students.

The data collection steps are the researcher gave questionnaires in the form of questions on the students' alertness in handling earthquake before and after the disaster management training as the pretest and posttest and observations before training as the pretest.

The time allocated for completing the questionnaires was 15-20 minutes. Pretest was done before the respondents got the training while posttest was done a week after the respondents got the training. The research result analysis uses IBM SPSS statistic 20 computer program with Wilcoxon statistical test to find out the influence of the RCY members' alertness level before and after being given the disaster management training.

RESULTS AND DISCUSSION

Based on table 1, it can be found the description of respondent characteristics based on age in which the highest respondents are 11 respondents (50%) who are 16 years old. The highest respondents seen from the gender are females who are 15 respondents (68,2%). Seen from the grades, the highest percentage is the Grade 10 which has 10 respondents (72,7%).

Table 1 The Distribution of Respondents Characteristics Frequency Based on Age, Gender, and Grades at SMAN 1 Pleret Bantul Yogyakarta

Characteristics	N	%
Age (year)		
15	4	18,2
16	11	50
17	7	31,8
Gender		
Male	7	31,8
Female	15	68,2
Grades		
10	16	72,7
11	6	27,3
Total	22	100

Table 2 The Alertness of RCY Members at SMAN 1 Pleret Bantul Before and After Disaster Management Training

Category	Pre-test		Post-test	
	N	%	N	%
Very Alert	3	13,6	18	81,8
Alert	11	50	4	18,2
Almost Alert	7	31,8	-	0
Less Alert	1	4,6	-	0
Not Alert	-	0	-	0
Total	22	100	22	100

Based on Table 2, the data shows that before being given the earthquake disaster management training, there are 11 students (50%) belong to the Alert Category and the lowest alertness is in the Less Alert Category which is 1 student (4,6%). After being given the earthquake disaster management training, there are 18 students who are in Very Alert Category (81, 8%) and the lowest are in the Alert Category which are 4 students (18,2%).

Table 3 Wilcoxon Match Pairs Test Result

Wilcoxon Correlation	
Z	-4,118
Asymp.Sig. (2-tailed)	0,000

This research uses the significant level of 0,05 in which based on the wilcoxon match pairs test result in the table above, the p count is smaller than the significant level value ($p \text{ count} < \text{significant level value}$) resulting in 0,000. From the result above, it can be stated that H_a is accepted and H_0 is rejected. It can be concluded that the earthquake disaster management training influences the alertness of RCY members at SMAN 1 Pleret Bantul Yogyakarta.

Based on Table 2, the data shows that there is a difference in the Red Cross Youth members' alertness before and after being given the earthquake disaster management training. Before being given the earthquake disaster management training, there are 3 students who are in Very Alert Category (13,6%) while after being given the earthquake

disaster management training, the number of students belong to the Very Alert Category increases to 18 students (81,8%). Moreover, before being given the earthquake disaster management training, there are 11 students (50%) who are in Alert Category and after being given the earthquake disaster management training, the number decreases into 4 students (18, 2%). The number of students in Almost Alert Category before being given the earthquake disaster management training are 7 students (31,8%) and after being given the earthquake disaster management training, the number decreases into 0 student (0%). It also happen in the Less Alert Category before being given the earthquake disaster management training which has 1 student (4,6%). The number decreases after being given the earthquake disaster management training into 0 student (0%).

These results are in line with the Education and Training Center of Indonesian National Board of Disaster Management (Pusdiklat BNPB) which states that the main goal of the disaster management training is to increase the alertness (Pusdiklat BNPB, 2015). Besides, the new paradigm stated by the BNPB Banyuwangi (2015) mentions that giving the learning to change the mindset of the world community especially Indonesian on the importance of managing disasters before they happen/ the disaster risks decreases.

It is also strengthened by the Al-Qur'an Surah Ali Imran Verse 200 on Disaster Management by preparing alertness.

يَا أَيُّهَا الَّذِينَ ءَامَنُوا أَصْبِرُوا وَصَابِرُوا
وَرَابِطُوا وَاتَّقُوا اللَّهَ لَعَلَّكُمْ تُفْلِحُونَ

Meaning: "O the faithful people, be patient and strengthen your patience and keep being alert and have fear to Allah to be the lucky ones."

This verse clearly explains that alertness is highly needed to be ready in any situations. Beside the individual alertness, the Al-Quran also suggests that the communities in certain regions including school to have alertness planning related to the preparedness and ability in decreasing disaster risks.

CONCLUSION

Conclusion

The research done shows that there is a difference before and after giving the disaster management training in the alertness measurement result on the RCY members. The changing of the RCY members' alertness is indicated by the increasing alertness level that it can be found that the disaster management training is effectively used to increase the RCY members' alertness.

Recommendation

It is important for the RCY members to increase the pre-disaster knowledge, skills, or alertness on disasters in schools. After the pre-disaster knowledge, skills, or alertness on disasters of the RCY members are increased, the RCY members duties as peer educators is to spread the information of the disaster alertness to other students can be done optimally. Considering the importance of the disaster alertness material especially for potential regions in Indonesia, this issue, especially pre-disaster alertness, must be given to all school community elements as well as to RCY members. Schools also need to determine policies to decrease the disaster risks and conduct an integrated simulation for the whole school community. The next researches interested in the disaster issues especially on the disaster alertness can continue the research by inviting all elements including teachers and school staff. Besides, the research can be developed in other various methods to increase the alertness and do not only give disaster management training.

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BATHING BABY (SPONGING AND DYEING METHOD) AND UMBILICAL CORD CARE (WET AND DRY METHOD) TO THE RELEASE RATES OF UMBILICAL CORD

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ABSTRACT

Time release a long cord having a greater risk of incidence of umbilical cord infection that can cause stillbirth. The study aims to determine differences in release rates in the baby's umbilical cord care (wet and dry methods) and how to bathe the baby (sponging and dyeing method). The study design was cross sectional analytic. The research was conducted at Plosowahyu Lamongan. The samples were newborn without complications. Simple random sampling technique was used to draw the samples. The data collecting process were used observations and interviews. Data were analyzed using Chi Square test with $\alpha = 0,05$. The results showed $p=0.099$ means that there is no difference in the time of release of the cord on the bathing baby method using sponging and dyeing methods of and $p = 0.003$ means that there are differences in release rates in the umbilical cord of wet and dry treatment method. Based on the findings of research so need to increase role of hearts health workers provide information about baby care exactly umbilical cord care to avoid complications occurred that causes an increase in infant mortality rate (IMR)

Key words: umbilical cord, release time, sponging, dyeing, wet, dry

INTRODUCTION

The umbilical cord is the life line for the fetus during pregnancy. At labor process, the umbilical cord is cut and left along the 2-5 cm. The umbilical cord is left behind had no function. After birth, the umbilical cord blood vessel fibrosis, Wharton's jelly mongering and the cord apart.

Based on the survey conducted, researchers found there was still a baby of delayed release of the umbilical cord. Delays in the release of the umbilical cord can be the cause of infections such as neonatal tetanus. Tetanus and infections are the main cause of infant mortality. According to WHO (1998), neonatal tetanus and umbilical cord infection has been the cause of illness and death continuously in various countries. Each

year about 500,000 infants die from neonatal tetanus and 460,000 died from a bacterial infection. Neonatal tetanus as a cause of death could easily be avoided with a good cord care (Sodikin, 2009).

The umbilical cord is a potential point of infection, the ideal place colonization and replication of the organism. *Staphylococcus aureus* normally colonize the umbilical cord. The umbilical cord and umbilicus should be checked daily to detect signs of discharge and infection. The umbilical cord is usually off in 5-16 days. (Johnson, Ruth, 2004). According to Fanaroff & Martin (1992) in Bobak (2005) mentions neonatal sepsis or septicemia, neonatal infections bakteripada defined as the baby's bloodstream during the first four weeks of life. Sepsis is associated with a mortality rate of 13% to 50% and a strong possibility of morbidity in infants who survive. Factors affecting sepsis in the newborn is maternal factors, environmental factors and host factors. Environmental influences that predispose infants exposed to poor technique sepsis include newborn care. With hygiene practices in the administration of the umbilical cord can help reduce the risk of infection in neonates.

The treatment is performed on an infant include umbilical cord care and bathing the baby. Umbilical cord care together with other wound care operations. The goal of treatment is to prevent and identify bleeding or infection at an early stage. The correct cord care and the loss of the umbilical cord in the first week significantly reduced the incidence of infection in neonates. Antiseptic and topical antimicrobials can be used to prevent the colonization of germs from the delivery room, but its use is not recommended for routine. Antiseptic commonly used is alcohol and povidone iodine. However, recent studies proved that the use of povidone iodine can cause side effects because it is absorbed by the skin. Alcohol is also no longer recommended to treat the umbilical cord as it can irritate the skin and inhibit the release cord. Antimicrobials can be used are bacitracin, nitrofurazone, silver sulphadiazine, and triple dye. (Sarwono Prawirohardjo, 2014).

The first baby shower delayed until the baby's skin temperature is stable at 36.5 C or until the body temperature stabilized at 37 C. There are a variety of methods such as

bathing baby bathing baby using a sponge and dyeing bath. According to Partiwi in complete guide to the health of infants 0-24 months (2011) off the baby's umbilical cord between 5-21 days and between the time the baby is not too often bathed directly, just wiped his body with a coarse washcloth dipped in warm water to the umbilical cord is not moist and dry. According to Helen Varney in baby skin care should not immerse the baby until the umbilical cord off and dried. Before apart, wipe the area around the umbilical cord with alcohol to help dry. (Varney, Helen, 2001). However, based on the results of the survey researchers found there are still mothers baby bath with dyeing method.

The study was conducted to determine differences in release rates in the baby's umbilical cord care using wet and dry method and how to bath the baby using sponging and dyeing method.

RESEARCH METHOD

An analytic with cross sectional design study was used to determine differences in release rates in the baby's umbilical cord care using wet and dry method and how to bath the baby using sponging and dyeing method. The population is all had no complications newborn in the village Plosowahyu, Lamongan District. Twenty nine samples were recruited using simple random sampling technique. Furthermore, the data collecting process used questionnaires and interviews.

The independent variable is the method of bathing and umbilical cord care methods. The dependent variable is the time of the umbilical cord release. Baby bath method divided to sponging method and dyeing method. Sponging method is wiping the baby's body using a coarse washcloth dipped in warm water. Whereas dyeing method is bathing by dipping a baby into a tub of warm water. Umbilical cord care method consists of wet method and dry method. Dry method is care of the umbilical cord with not affix anything to the umbilical cord. Wet method is taking care of the umbilical cord by applying a liquid antiseptic or antimicrobial such as alcohol, povidone iodine or triple dye.

Criterion release time is quick when the umbilical cord off less than 5 days, normal when umbilical cord off 5-16 days, and late when the umbilical cord off 16 days.

Data processing using the editing, coding, scoring and tabulating then analyzed with SPSS using Chi Square (X²) to estimate or evaluate the relationship or a significant difference or not (Hidayat A, 2010). If the condition Chi Square does not qualify then tested the Fisher's Exact test.

RESULTS AND DISCUSSIONS

Table 1 Frequency Distribution of Baby Bath Method, Umbilical Cord Care Method and Speed Release Cord

Variable	f	%
Baby bath method		
Sponging Method	14	48,2
Dyeing Method	15	51,8
Umbilical Cord Care Method		
Dry Method	11	37,9
Wet Method	18	62,1
Release Rates of Umbilical Cord		
Quick (< 5 days)	2	6,9
Normal (5 – 16 days)	18	62,1
Late (> 16 days)	9	31

Table 2 Cross Tabulation between Baby Bath Method with the Release Rates of Umbilical Cord

Baby Bath Method	Release Rates of Umbilical Cord						Total	
	Quick		Normal		Late			
	F	%	f	%	f	%	f	%
Sponging method	2	14,3	10	71,4	2	14,3	14	100
Dyeing method	0	0	8	53,3	7	46,7	15	100

According to the table 2 is known that babies are bathed with sponging method are most of them have normal release between days 5-16 and none of the baby who experienced quick release on dyeing method.

Table 3 Cross tabulation Between Umbilical cord care methods with the Release Rates of Umbilical cord

Umbilical Cord Care Method	Release Rates of Umbilical Cord						Total	
	Quick		Normal		Late		f	%
	f	%	f	%	f	%		
Dry method	2	18,2	9	81,8	0	0	11	100
Wet Method	0	0	9	50	9	50	18	100

According to the table 3 is known that babies with dry method 18.2% have release rates umbilical cord quick less than 5 days and none of the babies who experienced quick release rates on a wet method.

Table 4 The Difference of Umbilical Cord Release Rates of Baby Bath Method and Umbilical Cord Care Method

Variables	p value Fisher Exact
Baby Bath Method	0,099
Umbilical Cord Care Method	0,003

The results of the data analysis baby bath method does not meet the requirements of the Chi Square test so that researchers continue the analysis by Fisher's Exact test. Based on table 4 is known that $p=0.099$ where $p>0.05$, there is no difference in the umbilical cord release rate on the baby bath method using sponging and dyeing method. While on umbilical cord care $p=0.003$ where $p<0.05$, there is difference a umbilical cord release rate on wet and dry method.

American College of Nurse-Midwives expect a nurse midwife become competent in the care of healthy neonates. Core Competencies for Basic Nurse-Midwifery Practice revised in 2002, states that a midwife-nurse "independently" set newborn care during the first 28 days of life "(Varney, 2007). Midwives can teach how to care for newborns daily. treatment that can be made include the prevention of infant infection that can be done by bathing the baby, doing good umbilical cord care and keeping umbilical cord is clean and dry.

The umbilical cord (umbilical funikulus) or also called funis stretching from the umbilicus to the surface of the fetal placenta and has a length of 50-55 cm. The umbilical cord wrap two arteries. Until the umbilical cord is clamped and then cut, the baby stay in touch with the umbilical cord. Immediately after the baby is born and begins to breathe himself, placental circulation will be stopped immediately. The umbilical cord is left is no function (Sodikin, 2009).

Loss of water from the Wharton's jelly led to mummification umbilical cord shortly after birth. Within 24 hours this Wharton's Jelly loses blue and white color, appearance wet soon became dry and black. The dividing line right above the raised skin of the abdomen, and in a few days it apart butts left a small wound granulation after recovering come to be the umbilicus (F. Gary Cunningham, 2005). The correct umbilical cord care and the loss of the umbilical cord in the first week significantly reduced the risk of incidence of infection in neonates (Sarwono Prawirohardjo, 2014).

Baby bathing providing an opportunity to clean the baby's entire body. The first baby bath delayed until the baby's skin temperature is stable at 36.5 C or until the body temperature stabilized at 37 C. There are a variety of bathing baby such as bathing baby using a sponge and a bathing baby with dyeing.

Dyeing method, it does not cause an increase in umbilical cord infection. Babies are usually more comfortable when bathed in a tub of warm water soak compared washed with wet sponge. (Simkin, 2007). However, Varney (2007) explained that babies do not need a full bath every day. Most important in umbilical cord care is to keep the umbilical cord dry and clean. Wash hands with soap and water before treating the umbilical cord.

According to Partiwi (2011), the time release of the baby's umbilical cord between were 5-21 days and between the time the baby is not too often bathed directly, just wiped his body with a coarse washcloth dipped in warm water to the umbilical cord is not moist and keep dry. Baby skin care should not immerse the baby until the umbilical cord off and dried. Before apart, wipe the area around the umbilical cord with alcohol to help dry (Varney, 2001).

Based on the results revealed that there was no difference in the release rate of umbilical cord on the sponging method and the dyeing method. Advice that can be given to treat umbilical cord is not applying any liquid to umbilical cord and when the

umbilical stump dirty wash carefully with soap and water DTT and immediately dry it thoroughly with a clean cloth (Johariyah, 2012). It can be concluded either bathing with a sponging method and dyeing method when the umbilical cord is wet, it will slow down the release umbilical cord. So the most important thing is to keep the cord dry and clean. After a sponge bath or dye bath, the umbilical cord should be dried with a clean dry cloth.

Wet umbilical cord care is umbilical cord care in order to prevent infection and improve the separation of the umbilical cord of the stomach using an antiseptic and antimicrobial. Antiseptic used is alcohol and povidone iodine. While antimicrobials commonly used is bacitracin, nitrofurazone, silver sulphadiazine, and triple dye. While the dry umbilical cord care is care umbilical cord simply by cleaning the umbilical cord and wrapped with dry gauze and sterile. For years health workers using various means to clean and disinfect the umbilical cord, including the use of isopropyl alcohol, dyes triple (triple dye), and antibiotic ointment (Varney, Helen, 2007).

According to the table 3 is known that babies with dry method 18.2% have release rates umbilical cord quick less than 5 days and none of the babies who experienced quick release rates on a wet method. The umbilical cord dries faster and younger loose when open, because the dressings are not recommended. According to the American College of Obstetricians and Obstetricians (1998), most practitioners provide "triple dye" or bacitracin ointment. (Cunningham, 2005). According to Sondakh (2013), Umbilical cord care is to maintain the umbilical cord in the open state to be exposed to air and covered loosely with a clean cloth. If umbilical cord exposed to dirt or feces, washed with soap and water and then dried until completely dry.

Recent research has shown that the use of povidone iodine can cause side effects because it is absorbed by the skin. Alcohol is also not advisable to treat the umbilical cord as it can irritate the skin and inhibit the release cord. Currently there is no clue about good antiseptic and safely used for the treatment talipusat, for it is best to keep the umbilical cord dry and clean (Prawirohardjo, 2014)

Based on the results revealed that there are differences in release rates in the umbilical cord of wet and dry method.

CONCLUSIONS AND SUGGESTIONS

Based on the survey results revealed that there is no difference in the release rate of the umbilical cord on the baby bathing techniques using sponging method and dyeing method. Moreover, there is a difference in the release rate of the umbilical cord on umbilical cord care using wet method and dry method. Based on the findings of research so need to increase role of hearts health workers provide information about baby care exactly umbilical cord care to avoid complications occurred that causes an increase in infant mortality rate (IMR). Health workers (nurses / midwives) can provide advice to parents, especially mothers so that they can perform umbilical cord care using the correct method is to dry method. Besides socialization that baby bathing method using sponge and dyeing it should be done, the important thing is to keep the cord dry and clean.

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THE CORRELATION BETWEEN EDUCATION AND OCCUPATION AND EARLY MARRIAGE IN SLEMAN YOGYAKARTA 2015

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ABSTRACT

Background: Early marriage in Indonesia is in the rank of 37th in the World in 2010. The impact of early marriage in the correlation with physiological problems, miscarriage (abortion), premature delivery, low birth weight (LBW), congenital abnormalities, easy to get infection, anemia during pregnancy, poisoning pregnancy (Gestosis), and maternal mortality.

Objective: This study was to determine the correlation between wives' education level and husbands' occupation and early marriage in Godean Sleman in 2014-2015.

Research Methode: This research is an analytical survey with a case-control study design. Retrospective time was approach. The sampling technique used total sampling. The total samples of this study were 90 respondent. The data analysis used Chi square.

Result: This study showed that there was no correlation between husbands' occupation and early marriage in Godean Sleman in 2014-2015 (p-value = 0.659, OR = 2.636). However, there was a correlation between wives' education level and early marriage in Godean Sleman in 2014-2015 (p-value = 0.02, OR 3.281). Low education level had 3.281 times greater risk of doing early marriage compared to higher education.

Conclusion & Suggestion: Husband's age were older compare to wife's age when getting married. It is suggested that Head of KUA can develop extension programs through *Bina Remaja Keluarga Sakinah (BRKS)* and develop the cooperation with schools, community leaders and health authorities to give special attention to adolescents, so the incidence of early marriage can be lowered.

Keywords : Education, Occupation, Early Marriage

BACKGROUND

Early marriage is presentation of low quality of the population and becomes a particular phenomenon in the society (BKKBN, 2012: 7). Early marriage is a marriage conducted under reproductive age which is less than 20 years (Maryanti & Majestika, 2009). Early marriage in Indonesia is in the rank of 37th in the World in 2010. It means that Indonesia is among countries with high percentage of early marriage in the world,

and the second highest in the Association of South East Asian Nations (ASEAN) after Cambodia (Department of Economic and Social Affairs, 2011). Based Basic Health Research (2013), among women aged 10-50 years, 2.6% did early marriage at the age under 15 years and 23.9% at age 15-19 years (Health Ministry of Indonesia, 2013) ,

According to (Kumalasari and Iwan, 2012), occupation is one of the factors that influence early marriage. *BKKBN* (2012: 4) states that marriage requires careful preparation, especially in the economic field, so the effort to get occupation both directly and indirectly will mature or postpone the wedding. Many female teens assume that when they marry in young age, they do not need to look for a job or to experiencing financial difficulties because the financial burden has been handled by the husbands. The statement is supported by (Sah, et al, 2014) who states that there is a relationship between husband's work with the incidence of early marriage.

According to Sarkar, 2009 stated that women are more likely to get married early when their future husbands work on the farm. Widyastuti, 2012 in her research said a person's occupation affects the income and welfare of one's life and family. If it is associated with early marriage, teenagers argue that if they have husbands who have been working, their life will be prosperous, so they will not experience financial difficulties. A research (Chowdhury et al., 2013) mentions that women who do not work will tend to do early marriages because, based on a research conducted (Stang, 2011) when one does not have income, the dependence of others will be greater, and the possibility to get married early is higher.

Other than occupation, based on Central Bureau of Population Research and Development youth education has also become one of the factors that influence early marriage. Generally, those who perform early marriage just graduated from elementary school, junior high school, or senior high school (*BKKBN*, 2011). Women who have at least a basic education are less likely to get married in teenager age than those who do not have basic education. Stang, 2011 states that there were 91.4% of respondents with low education. The study mentions that people with low education do more early to get marriage because they have less knowledge of the impact of early marriage.

The impact of early marriage in the correlation with physiologically, according to Rohan and Sandu (2013: 314), is miscarriage (abortion), premature delivery, low birth weight (LBW), congenital abnormalities, easy to get infection, anemia during pregnancy, poisoning pregnancy (Gestosis), and maternal mortality. According Romauli, 2009, early marriage also has psychology and social-economic impacts.

RESEARCH METHOD

Research employed analytical survey method with case-control study designs and retrospective approach. Samples were taken by total sampling for case group and random sampling for control group. It obtained 90 samples; those were 30 samples for case group and 60 samples for control group with ratio of 2: 1. The analyses used in this study were Chi Square and Odd Ratio.

RESULTS AND DISCUSSION

Table 1. Frequency Distribution of Respondent's Characteristics

Respondent's Characteristics	Case (Aged<20 years)	Control (Aged ≥20 years)
	Mean ± SD	Mean ± SD
Husband's Age	23.8 ± 6.099	32.17 ± 7.275
Wife's Age	18.4 ± 0.855	29.42 ± 7.434

Source: Secondary Data, 2015

Based on the above table it can be seen that the age difference between husband and wife in the case group was ± 5 years, and in control was ± 3 years. Besides, based on the above table it can also be seen that the husband's age were older compare to wife's age when getting married.

Table 2. Cross Tabulation of Wife Education with Early Marriage in Sleman
Yogyakarta
Year 2015

Wife's Level	Education	Case		Control		χ^2	OR	P-value
		N	%	N	%			
Low Education		11	36.7	9	15	5.432	3.281	0.02
High Education		19	63.3	51	85			

Source: Secondary Data, 2015

According to the table above, the numbers of respondents with low education were 20 respondents, and 11 of them did early marriages. However, the numbers of respondents who had higher education were 70 respondents, and 19 of them did early marriages. Women who did the early marriages that had low education were 11 people (36.7%), and those with higher education were 19 people (63.3%). Based on Chi Square test, it obtained p-value 0.02. Therefore, $p\text{-value} = 0.02 < \alpha (0.05)$, so it can be concluded that H_a is accepted, and H_o is rejected, meaning that there is a correlation between wife's education level and early marriage in Godean Sleman year 2014-2015. While the value of $OR = 3.281$, it means that the wife's education is a risk factor for early marriage. Women with low education 3.281 times have higher risk of early marriages compared to women with higher education.

The result was supported by a research conducted by Stang (2011: 107) stated that there were a correlation between education and early marriage. A previous research conducted by Yunita (2015: 5) also states that teenagers with primary education have the opportunity or risk of doing early marriages 9,750 times greater than those with a secondary education. Based on the result, it can be assumed that lack of education makes the lack of knowledge acquired. Women who have less knowledge will make decision to do early marriage without considering the impact of early marriage itself.

This statement is in line with a previous study conducted by Stang (2011: 107), mentioning that people with low education tend to do early marriages due to their lack of knowledge related to early marriage. According to Kumalasari and Iwan (2012: 120), the impact of early marriage is that the reproduction organs are not ready for pregnancy so that it can rise to several complications, such as low birth weight. The number of

early marriage cases also has impact to the high divorce rate, and psychological immature, so they tend to be unstable and emotional.

Romauli and Anna (2012: 7) mention that the level of education and low knowledge affects a limited mindset that will impact on individual behavior. Education can influence the determination of a person's attitude in making decisions, including the decision to get married. When people have higher education, it is expected that they can get more information; such information can improve one's knowledge, so they can determine wise attitude in the decision to get married.

This statement is in line with Kumalasari and Iwan (2012: 119) mentioning that person's education level affects early marriage. Teens who have high educational backgrounds have less risk for doing early marriage compared with those with low education. It happens because they get more knowledge. According Desiyanti (2015: 276), people education is a very important part of the issue that comes from a person because education allows people will gain knowledge that will shape their attitude in making decisions.

Table 3. Cross Tabulation of Husband's Occupation and Early Marriage in Godean Sleman Year 2014-2015

Husband's Occupation	Case		Control		Exact Sig. (2-sided)	OR
	N	%	N	%		
Non Government Workers	29	96.7	55	91.7	0.659	2.636
Government Workers	1	3.3	5	8.3		
Total	30	100	60	100		

Source: Secondary Data, 2015

Based on the above table it is known that the respondents who got married early and the future husband worked as a non-government employees were 29 (96.7%), and the respondent who worked as a government employee was 1 (3.3%), while respondents who did not have early married and the future husband worked as a non-government employees were 55 (91.7%) and those who worked as government employees were 5 (8.3%). Based on the results of the cross table above, there was Expected Count value

less than 5 in two cells (50%), which is in cell a and cell b, then the bivariate test used is the alternative test; it is Fisher's Exact Test.

The test results of Fisher's Exact Test showed that $p\text{-value} = 0.659$, showing that H_0 is accepted and H_a is rejected; it indicates no relationship between future husband's occupation early marriage in Godean Sleman year 2014-2015. The results of this study differ from previous studies conducted by Sah, et al (2014: 1321) which states that there is a relationship between future husband's occupation and the incidence of early marriage. The difference of the result happens possibly due to national status differences.

According to Suhendra (2015), Nepal is a poor country, so the rate of dependency in that country is still high. Sah, et al (2014: 1321) states that women who have early marriages mostly come from poor families. To alleviate the burden of their parents', they are arranged to get married with people who are considered economically capable; those who have jobs and can lean on to the husbands. Meanwhile, Indonesia is a developing country. It is assumed that life dependency in developing countries is lower than the poor countries. Based on the results of the study, women who do early marriage 100% working as employees of non-governmental, at least those who work have income, when people have their own income, they will have lower dependency on other people.

Although statistical tests showed no relationship between future husband's occupation and early marriage, if paying attention to the statistical test results which obtained OR value of 2.636, it means that future husband's occupation is a risk factor for early marriage. Women whose husbands work for the non-governmental aspect have 2.636 times higher risk of early marriages than women whose husbands work as government employees.

The result of this study is supported by a research conducted by (Chowdhury, 2013) who says that future husband's occupation has a significant influence on early marriage. Men who have good work will marry the women that they think are good too. While the research conducted by (Sarkar, 2009) mentions that women will tend to marry early if their husbands work in agriculture and private sector employees. This is possible

because women just see that their husbands have already worked regardless of their job status. However, it is known that working status correlates to people's income that will have an impact on the welfare of the family. It is supported by statement mentioned by (Widyastuti, 2012), mentioning that people's occupation affects the income and welfare of one's life and family. When the occupation status owned by someone is good, the income will also be good. Income is the influential factor of family status, welfare, and prosperity.

CONCLUSIONS AND SUGGESTIONS

There was correlation between level of education and early marriage in Godean Sleman Yogyakarta year 2015, with the value of statistical test $p\text{-value} = 0.02$ and OR of 3.281, which means that low level of education had greater risk of 3.281 times to do early married compared to those who had high education. There is no relationship between future husband's occupation and early marriage in Godean Sleman year 2014-2015, with the value of statistical test $p\text{-value} = 0.659$ and OR 2.636, which means that woman whose husbands worked for non-governmental aspect had 2.636 times higher risk of early marriages compared with women whose husband worked as government employees. Is expected Head of Religious Affairs can pay attention better on the cases related to teenagers especially early marriage, and can review related policy in relation with marriage laws especially in article 7 paragraph 1 about the determination of the age of marriage.

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THE INFLUENCE OF DATE FRUIT ON HEMOGLOBIN LEVEL OF PREGNANT WOMEN IN THEIR SECOND TRIMESTER IN SLEMAN YOGYAKARTA

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ABSTRACT

Background: Anemia in pregnant women is usually caused by iron deficiency. Midwifery Service Standard prevents anemia by giving at least 90 iron tablets during pregnancy. However, iron provision has the side effect of gastrointestinal disorder. The lowest percentage of pregnant women in the special region of Yogyakarta who received iron tablet (<70%) was Sleman. Midwife center “M” as a midwife center which gave date fruit as an alternative of iron tablet for pregnant women.

Method : The research method was Quasi experiment with pretest and posttest on equivalent control group design. The sampling technique was consecutive sampling with 30 respondents in every group. Intervention group received 7 khalas date fruits for 30 days and the control group received 1 iron tablet every day for 30 days.

Result : The average increases of hemoglobin level in pregnant women in their second trimester in the date fruit group was 0,17 gr/dL while in the iron tablet group it was 0,41 gr/dL. The result of statistical test using Independent Sample T-test showed that date fruit was as effective as iron tablet in increasing the hemoglobin level of pregnant women in their second trimester ($P=0,160$).

Conclusion : Date fruit was as effective as iron tablet in increasing the hemoglobin level of pregnant women in their second trimester in Midwife center “M” Kalasan, Sleman, Yogyakarta.

Keywords: Date fruit, iron tablet, hemoglobin level, pregnant woman.

INTRODUCTION

Anemia in pregnant women is one of the public health issues in Indonesia which should be addressed (Irianto, 2014). Anemia in pregnant women is usually caused by iron deficiency. Iron deficiency in pregnant women happen due to increased blood plasma volume or hemodilution and lack of intake of food containing iron (Oliver and Olufunto, 2012).

Anemia causes low physical ability in pregnant women because body cells don't receive enough oxygen supply (Irianto, 2014). Anemia in pregnant women makes them fatigued, faint, increase risks of infection, complication in pregnancy, delivery and perinatal death (Ministry of Health, 2014).

Anemia in pregnant women have risk of delivering premature babies and babies with low birth weight in the first trimester (Koura et al., 2012; WHO, 2007). Another risk is low birth weight in the third trimester (Sukrat et al., 2013). Anemia in pregnant women also have risk of antepartum bleeding, infection, pre eclampsia, pulmonary edema and maternal mortality (Oliver and Olufunto, 2012). Anemia in pregnant women can cause Intra Uterine Growth Retardation (IUGR), defect, congenital disorder and fetal death (Rosas et al., 2012).

One of government's efforts to reduce anemia in pregnancy is comprehensive antenatal service in government and private health facilities (Ministry of Health, 2014).

WHO recommends 60 mg iron tablet for 6 months for pregnant woman, giving health education on the importance of consuming iron, consuming food that contain lots of iron, consuming vitamin C and monitoring complications due to anemia while consuming iron (WHO, 2007).

Midwifery Service Standard of Indonesian Midwife Association States that to prevent anemia, midwives should giving at least 90 iron tablets for 3 months with 30 mg tablet every day for pregnant women from the first antenatal care visit and provide health education on nutrition in every antenatal visit, the importance of consuming iron tablet, advice to consume food containing iron and vitamin C, avoidance of tea, coffee, milk one hour before and after eating (IBI, 2006).

One of the efforts to improve nutrition in pregnant women in the special Region of Yogyakarta is providing iron tablet. This is to reduce anemia incidents in pregnant

women and risk of maternal mortality. The lowest percentage of pregnant women who received iron tablet (<70%) was Sleman Regency.

Side effects of taking iron supplement include gastrointestinal disorder, nausea, constipation, black feces and diarrhea. The often cause discomfort to those who consume it (Rosas et al., 2014; Wibowo and Purba, 2006; Gibney et al., 2013; Irianto, 2014).

One of the movements to avoid side effects of drugs is "Back To Nature", which is using effective, efficient, safe and economic medicinal plants which have been used in traditional medicines (Wijayakusuma, 2009).

Date fruit contains iron and folic acid, which can increase hemoglobin level. According to United States Department of Agriculture (USDA) in 2015, 100 grams of date fruit contains carbohydrate (10%), fiber (12%) and potassium (8%). Other nutritional contents are vitamin A (2%), calcium (2%), vitamin K (2%), riboflavin (2%), vitamin B6 (2%), magnesium (4%), iron (2%), folic acid (2%), selenium (2%), thiamine (2%), niacin, manganese (6%), copper (2%), pantothenic acid (2%) and phosphorus 2%.

Giving date fruit to pregnant women in Midwife center "M" has been performed since 2012. I Midwife center "M" gave date fruit as an alternative to iron tablet for pregnant women. However, studies on giving date fruit, especially on pregnant women, are rarely performed.

METHOD

The research design was Quasi experiment with pretest and post test non equivalent control group design. The sampling technique was consecutive sampling with 30 respondents in every group.

Intervention group received 7 khalas date fruits for 30 days and the control group received 30 mg iron tablet every day for 30 days. Univariate analysis described every variable. Bivariate analysis used Independent Sample T-test with significance level 95% (alpha 0,05) and linear regression for multivariate analysis.

RESULT AND DISCUSSION

The subjects of this study were 30 pregnant women in their second trimester who antenatal care visit to Independent Midwife “M” for date fruit group and Independent Midwife “I” for the control group who received iron tablet.

The inclusion criteria of this study was pregnant woman in the second trimester who antenatal care in Independent Midwife “M” and Independent Midwife “I”, good nutritional status, having finished at least elementary school education. The exclusion criteria of this study were worm infection, malaria and TBC, bleeding, gestational diabetes. The results of the study are described in the following table.

Table 1. Frequency Distribution of Respondents’ Characteristics

Variable	Date Fruit Group	Iron Tablet Group	Δ Mean CI 95%	P
	Mean \pm SD/ N (%)	Mean \pm SD/ N (%)		
Age	28,37 \pm 3,737	29,07 \pm 4,034	-0,700 (-2,710-1,310)	0,887
Parity	1,90 \pm 0,803	1,67 \pm 0,884	0,000 (-0,415-0,415)	1,000
Education				
Low	1 (0,3)	5 (17)		0,062
High	29 (96,7)	25 (83)		
Upper Arm Circumference	25,900 \pm 3,058	27,350 \pm 2,9716	-1,4500 (-3,0083-0,1083)	0,612
Antenatal Care Visit	3,77 \pm 1,755	5,33 \pm 1,863	-1,567 -2,502-(-631)	0,940
Hemoglobin Level Before Intervention	11,107 \pm 0,939	11,323 \pm 0,8807	-0,2167 (-0,6873-0,2540)	0,644

**Table 2. Result of Independent Sample T-test
Difference of Hemoglobin Level of Pregnant Women in Date Fruit Group and Iron Tablet Group**

Variable	N	Median CI 95 %	Hemoglobin Level Mean \pm SD	Δ Mean	T	P-value
Date Fruit Group	30					
Pre Test		11,300 (8,9-12,5)	11,107 \pm 0,9395			
Post Test		11,350 (9,7-13,0)	11,277 \pm 0,7951			
Iron Tablet Group	30			-0,2133	-0,992	0,160
Pre Test		11,400 (9,5-13,0)	11,323 \pm 0,8807			
Post Test		11,750 (10,0-13,0)	11,737 \pm 0,9091			

Table 3. Comparison of Noise Variable on Interversion Group

Variable	Date Fruit Group (n=30)	Iron Tablet Group (n=30)	P
	Mean \pm SD/ N(%)	Mean \pm SD N(%)	
Age	28,37 \pm 3,737	29,07 \pm 4,034	0,887
Parity	1,90 \pm 0,803	1,67 \pm 0,884	1,000
Education			0,062
Low	1 (0,3)	5 (17)	
High	29 (96,7)	25 (83)	
Antenatal Care Visit	3,77 \pm 1,755	5,33 \pm 1,863	0,940
Protein Intake (g/day)	78,27 \pm 13,419	82,63 \pm 25,465	0,001
Iron Intake (mg/day)	23,8 \pm 10,94	21,83 \pm 13,74	0,210
Folic Acid Intake (μ g/day)	504,57 \pm 173,12	549,3 \pm 225,37	0,214
Vitamin C Intake (mg/day)	84,67 \pm 22,85	79,63 \pm 24,49	0,678

Table 4. Model of Linier Equation on Hemoglobin Level of Pregnant Woman

Variable	Model 1 Regression Coefficient <i>p-value</i> CI 95%	Model 2 Regression Coefficient <i>p-value</i> CI 95%	Model 3 Regression Coefficient <i>p-value</i> CI 95%	Model 4 Regression Coefficient <i>p-value</i> CI 95%
Date Fruit	0,460 0,41 (0,019-0,901)	0,539 0,023 (0,77-1,001)	0,816 0,001 (0,329-1,303)	0,868 0,001 (0,388-1,347)
Education		0,476 0,259 (-0,360-1,312)	0,653 0,111 (-0,154-1,459)	0,639 0,110 (-0,150-1,428)
Antenatal Care Visit			-0,158 0,011 (-0,277-(-0,38)	-0,166 0,006 (-0,283-0,49)
Intake Vitamin C				0,008 0,65 (0,000-0,17)
Constant	10,817	9,785	9,750	9,051
R ²	0,054	0,59	0,148	0,186
N	60	60	60	60

The statistical test showed that the average increases of hemoglobin level in pregnant women in their second trimester in the date fruit group was 0,17 gr/dL while in the iron tablet group it was 0,41 gr/dL.

Statistically there was no significant difference in hemoglobin level before and after giving date fruit with *p-value* 0,160. It showed that giving date fruit is as effective as giving iron tablet in increasing the hemoglobin level of pregnant women. Therefore, date fruit can be an alternative to fulfill iron needs of women during pregnancy.

Similar study was performed by Zen et al in 2013. The study divides samples into 4 intervention groups. Group I is male rats wistar strain with standard diet and distilled water ad libitum for 21 days, group II is male rats wistar strain with low iron feed and distilled water ad libitum for 21 days, group III is male rats wistar strain with low iron feed and distilled water ad libitum for 21 days with 50% date palm juice from the 8th to 21st day, group IV is male rats wistar strain with low iron feed and distilled water ad libitum for 21 days with 100% date palm juice from the 8th to 21st day.

The research result showed that average hemoglobin level (g/dL) in Group I is 12,03, Group II 7,72, Group III 9,25, and Group IV 10,35. The result of Post Hoc LSD test shows significant difference between group I and group II, group III, group IV; group II and group III, group IV; group III and group IV. The conclusion is date fruit juice can increase hemoglobin level in male rats wistar strain with low iron (Fe) diet.

Another study was performed by Febriansyahin 2011. The study was conducted on 16-18 year old teens in Islamic Boarding School Ali Maksum Krapyak Yogyakarta. The hemoglobin level shows an statistically significant increase after giving date fruit and honey.

According to United States Department of Agriculture (USDA) Food and Nutrition Center, date fruit has several important components which can increase hemoglobin level. 50 grams date fruit contains 1,25 gram protein, 7,5 gram (12%) fiber, folic acid (2%) and iron (2%). Iron is a component of hemoglobin in red blood cells which determine the oxygen carrying capacity of blood and improve anemia.

Date fruit is a source of *non heme* iron which can be found in food made of plants. The bioavailability depends of supporting or inhibiting factors eaten with the food (Wibowo and Purba, 2006).

According to Arisman (2007) and Gibney et al. (2013) factors influencing iron absorption include food factor, factors which accelerate *non heme* iron absorption (vitamin C, meat, poultry, fish, seafood) and factors inhibiting *non heme* iron absorption (phytate and polyphenol bound by if consumed together). Other factors were food

interaction and host factor, which is iron status (iron stores) and health status (infection, malabsorption, speed of red blood cell production, iron usage for food metabolism. Therefore, food selection is important so that food absorption happens optimally.

CONCLUSION

Date fruit was an effective as iron tablet in increasing hemoglobin level of pregnant women with 0,160 significance.

SUGGESTION

Pregnant women can use date fruit as an alternative to increase hemoglobin level during pregnancy, especially pregnant women who don't want to consume medicines or have complaints when consuming iron tablet, such as gastrointestinal disorder, nausea, vomiting, constipation, diarrhea, etc. However, iron tablet administration in antenatal care service was still better.

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FAMILY CHARACTERISTICS AND QUALITY OF CHILDCARE HOME ENVIRONMENT IN IODINE DEFICIENCY DISORDER ENDEMIC AREA

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ABSTRACT

Background: Family as the first social environment had major influence for children development. Maternal care played very important role in defining successful child growth and development. Good quality of care is very crucial in critical stage of child development. Better quality of care could enhance children growth and development. Objective: This study aimed to analyze the relationship between family characteristics, especially child and maternal characteristic, with the quality of childcare home environment. Methods: This study conducted with cross sectional design, in Pituruh, Purworejo District. Total samples were 82 pairs of mothers and their preschool age children. Samples selected by randomized cluster sampling. Variables in this study were maternal characteristics included maternal education, maternal employment, and the number of children in the family. Child characteristics including gender and birth order. Family characteristics data was collected using questionnaires. Variables of childcare home environment quality were collected with observation and interview during 1 hour home visit using HOME inventory protocol. Assessing the aspects of learning materials, language stimulation, physical environment, parental responsiveness, learning stimulation, modeling of social maturity, variety in experience, and acceptance of child. Statistical analysis used in this study were t-test and regression. Results: The analysis showed that only 12.2% of women having more than junior high school level (basic education level). Bivariate analysis showed that the number of children in the family ($p < 0.05$) negatively correlate, while maternal education ($p < 0.05$) was positively correlate with childcare home environment. Mothers with higher education level (above junior high school) scored better in learning materials, language stimulation, modeling of social maturity, and variety in experience. Higher number of children negatively influenced language stimulation, acceptance of child, variety in experience, and total score of HOME. Boys and girls had the same childcare home environment quality, except in modeling of social maturity, with girl scored higher ($p < 0.05$). Maternal education, sum of children in the family, and child age contribute 15.5% in total quality of childcare home environment, with only maternal education correlate significantly. Conclusion: Maternal education is predominant factors in childcare home environment. Some aspect of childcare affected by sum of children and child gender. Effort in enhancing childcare quality could consider family characteristics and the specific aspects of these childcare home environment.

Keywords: Parenting, preschool children, maternal education, HOME inventory.

BACKGROUND

Early childhood is a critical period which has very important role in the individual's life. At this time, various kinds of stimulation from parents and their environment will be the foundation of growth and development of children. The family as the first and main social environment for children had major influence on the development of children, either physically or mentally (Somantri 2006 & Gerungan, 2004). Families especially fathers and mothers give basic formation of behavior, character, morals and education to children. Experience of interaction in the family will determine the pattern and children's behavior towards other people in their community. Good quality of care is very crucial in critical stage of child development. Better quality of care could enhance children growth and development. (Soetjiningsih, 2005).

Parenting is a process that involves reciprocal interaction of children and parents continuously to ensure the health and survival of children, prepare the children so that children become an independent adult, and become an adult to interact socially and behave impersonal positive (Martin & Colbert, 1997; Brooks, 2001). The task of parenting is generally dominated by the mother as the primary caregiver. Parenting is done on the basis of knowledge of mothers and influenced by the mother's education obtained in the past (Khomsan, 2002).

Parenting resources is a factor that relate the economic resources with environmental resources with the welfare of children (Engle, et al., 2000). At an early age, maternal education (Bangirana, et al., 2009) is a strong predictor of cognitive development compared with the father's education (Davies-Kean, 2005; Bradley & Corwyn, 2002; Chatoor, et al., 2004).

Children who live in iodine deficient disorders endemic area have intellectual disabilities. This condition is not only due to iodine deficiency factors. Iodine deficiency disorders endemic areas are usually located in the mountainous and rural areas with lack of access and limited infrastructure, including education and health issues (Kennedy, et al., 2003). Intellectual disabilities in children in IDD endemic areas also affected by the lack of cognitive stimulation and lack of parents education (Huda, et al., 1999). Research in developing countries showed that only 10-41% of parents who provide cognitive stimulation for children (Engle, et al., 2007)

The purpose of this study was to analyze the relation between characteristics of the family with the environmental quality of care in IDD endemic areas.

METHODS

This study conducted with cross sectional design. The research was located in Pituruh, Purworejo, Central Java. The research area were selected purposively, the area identified as an iodine deficiency disorder endemic area based on the results of surveillance GAKI.

The study was conducted in six selected villages to ensure the homogeneity of samples characteristic. Population was all children aged 4-5 years and their biological mother who living in IDD endemic areas. The inclusion criteria were children with ages 4-5 years, have a biological mother as the primary caregiver, mother and child lived in the study area in the last two years, willing to follow the research procedures. Exclusion criteria was children suffer from chronic illnesses or have a physical disability. The sample selection using randomized cluster sampling method. The number of samples obtained as many as 82 women and children.

Data collected includes family characteristics, child characteristics, and data childcare home environment quality. Data were collected by interviews and observations to fill out questionnaires. Characteristics of the family consist of mother and father education, mother's occupation, number of children in the family. Data child characteristics consists of sex and the order of children in the family. Data childcare home environment quality collected by item-item in HOME inventory instrument for pre-school aged compiled by Bradley & Caldwell (1984). This instrument has 55-items, which has eight aspects of each item with a value of 0 or 1. Aspects of HOME inventory are learning materials, language stimulation, physical environment, parental responsiveness, learning stimulation, modeling of social maturity, variety of experience, and acceptance of child.

The data were analyzed using SPSS software. Data processing included editing, coding, scoring, entering, and cleaning data. T-test was done to analyze the difference of aspect HOME inventory toward mothers and fathers education, aspects of HOME with the gender of the child and regression analysis to see the relationship between the family characteristics with childcare environment quality.

Ethical clearance was approved by Ethics Committee of National Institute of Health Research and Development, MOH No. KE.01.09/EC/598/2012. Mothers were selected as sample signed an informed consent as a sign of approval for the subject of research.

RESULTS AND DISCUSSION

The research was conducted in the District Pituruh, Purworejo, Central Java Province. Pituruh sub-district has 49 villages and six of them follow this study. These villages are Luweng Lor, Prapag Lor, Girigondo, Brengkol, Pekacangan, and Tasikmadu.

Family Characteristics

Based on education, subjects in this study was classified into education ≤ 9 year (ever studied at elementary or junior high school as boundary of basic education) and >9 years. Only 14.6% fathers had education >9 years meanwhile the mothers only 12.2%. Percentage of mothers who take on the role as a housewife was 68.3% and the rest of them are work as farmers, trader, and labors. The number of children in family was about one to seven. Most families have 1 and 2 children with percentage of 28% and 31.7%. This conditions indicate the risk of lack of family resources, includes parenting resources and economic resources.

The age of children in this study are between 44-67 months with the mean age is 52.78 months. Based on gender, the proportion of boys and girls is equal, 50%.

Childcare Environment Quality

Measurement of the childcare environment quality performed by instruments HOME Inventory which has eight aspects, i.e. physical environment (11 items), learning materials (5 items), language stimulation (7 items), learning stimulation (5 items), parental responsiveness (7 items), modeling of social maturity (5 items), acceptance of child (4 items), and a variety of experience (9 items).

Table 1. Mean of each HOME Aspect

Aspect	Min	Max	Mean \pm SD	Percentage of Mean Achievement
Physical Environment	1	7	5,01 \pm 1,338	71,57
Learning Materials	0	7	3,90 \pm 1,768	35,45
Language Stimulation	1	6	4,39 \pm 1,340	62,71
Learning Stimulation	3	5	4,50 \pm 0,724	90,00
Parental Responsiveness	2	7	4,28 \pm 1,542	61,14
Modeling of Social Maturity	0	5	2,85 \pm 1,198	57,00
Acceptance of Child	0	4	3,48 \pm 0,835	87,00
Variety of Experience	1	6	3,80 \pm 0,935	42,22
HOME Total	22	42	32,22 \pm 4,800	58,58

Based on the mean score in each aspect of HOME inventory, the availability of learning materials has lowest percentage, i.e. 35.35% and 42.22% of the variation experience. Meanwhile, the highest percentage of mean achievement is learning stimulation with 90%. Some items were measured from the aspect of learning materials include materials and tools available at home, such as toys that can be used as a media to learn about colors, numbers, letters, shapes and sizes, or books that appropriate for children. This aspect has a low percentage, which means the mothers still not enough to provide tools to stimulate children to learn and children also have less toys to learn through media audio / visual with more varieties, such as books or puzzles. This condition may happened because of economic limitations and also lack of parent's knowledge.

Aspects of learning stimulation is the highest mean percentage compared to other aspects. This aspect have items that assesses behavioral model of care that stimulates and directs children to do activities that support academic achievement such as teach to recognize alphabets and read simple words, teaching language by song, pray and poetry, teaching the numbers, spatial relation, and colors. It means that the mother is capable of implementing aspects of learning stimulation well.

Table 2. t-test HOME Aspect Based on Mother's Education

Variable	Mean \pm SD	P value
Physical Environment		
- Education \leq 9 years	4,92 \pm 1,36	0,083
- Education >9 years	5,70 \pm 0,95	
Learning Materials		
- Education \leq 9 years	3,65 \pm 1,69	0,000
- Education >9 years	5,70 \pm 1,25	
Language Stimulation		
- Education \leq 9 years	4,26 \pm 1,37	0,000
- Education >9 years	5,30 \pm 0,48	
Learning Stimulation		
- Education \leq 9 years	4,51 \pm 0,69	0,644
- Education >9 years	4,40 \pm 0,69	
Parental Responsiveness		
- Education \leq 9 years	4,22 \pm 1,56	0,362
- Education >9 years	4,70 \pm 1,42	
Modeling of Social Maturity		
- Education \leq 9 years	2,75 \pm 1,21	0,035
- Education >9 years	3,60 \pm 0,84	
Acceptance of Child		
- Education \leq 9 years	3,46 \pm 0,87	0,618
- Education >9 years	3,60 \pm 0,52	

Variety of Experience		
- Education ≤ 9 years	3,71 \pm 0,93	0,011
- Education > 9 years	4,50 \pm 0,71	
HOME Total		
- Education ≤ 9 years	31,49 \pm 4,63	0,000
- Education > 9 years	37,50 \pm 1,78	

t-test results showed that no significant difference in the mean value score HOME aspects, i.e. learning materials aspect, language stimulation, modeling of social maturity, and variety of experience between mothers with ≤ 9 year education and mothers with > 9 years education ($p < 0.05$). Analyze of HOME total score also showed a similar result, that is no difference in mean scores between mothers with ≤ 9 year education and educated mothers > 9 years ($p < 0.05$). It means, mothers with higher education are able to provide stimulation and learning materials more.

Tabel 3. T-test HOME Aspects based in Mother's Status

Variable	Mean \pm SD	P value
Physical Environment		
- Housewife	4,96 \pm 1,25	0,637
- Working Mother	5,12 \pm 1,53	
Learning Materials		
- Housewife	3,84 \pm 1,72	0,638
- Working Mother	4,04 \pm 1,89	
Language Stimulation		
- Housewife	4,57 \pm 1,11	0,126
- Working Mother	4,00 \pm 1,69	
Learning Stimulation		
- Housewife	4,54 \pm 0,71	0,516
- Working Mother	4,42 \pm 0,76	
Parental Responsiveness		
- Housewife	4,18 \pm 1,47	0,383
- Working Mother	4,50 \pm 1,70	
Modeling of Social Maturity		
- Housewife	3,00 \pm 1,25	0,105
- Working Mother	2,54 \pm 1,03	
Acceptance of Child		
- Housewife	3,48 \pm 0,95	0,918
- Working Mother	3,46 \pm 0,51	
Variety of Experience		
- Housewife	3,88 \pm 1,03	0,322
- Working Mother	3,65 \pm 0,69	
HOME Total		
- Housewife	32,45 \pm 4,94	0,533
- Working Mother	32,73 \pm 4,54	

Statistical analysis showed that there was no significant difference of mean scores of HOME aspects between housewife and working mothers ($p > 0.05$). The statistical test result of score HOME also showed that there was no significant difference in mean scores between housewife and working mothers ($p > 0.05$).

Table 4 . t-test HOME Aspects Based on Children's Gender

Variable	Mean \pm SD	P value
Physical Environment		
- Boy	5,15 \pm 1,46	0,367
- Girl	4,88 \pm 1,21	
Learning Materials		
- Boy	3,90 \pm 1,83	1,000
- Girl	3,90 \pm 1,73	
Language Stimulation		
- Boy	4,51 \pm 1,34	0,413
- Girl	4,27 \pm 1,34	
Learning Stimulation		
- Boy	4,44 \pm 0,78	0,449
- Girl	4,56 \pm 0,67	
Parental Responsiveness		
- Boy	4,20 \pm 1,54	0,619
- Girl	4,37 \pm 1,56	
Modeling of Social Maturity		
- Boy	2,41 \pm 1,24	0,001
- Girl	3,29 \pm 0,98	
Acceptance of Child		
- Boy	3,32 \pm 0,91	0,086
- Girl	3,63 \pm 0,73	
Variety of Experience		
- Boy	3,88 \pm 0,98	0,482
- Girl	3,73 \pm 0,89	
HOME Total		
- Boy	31,80 \pm 5,29	0,437
- Girl	32,63 \pm 4,28	

T-test conducted on the mean score based on children's gender showed that there is significant difference in modeling of social maturity aspect between boys and girls ($p < 0.05$). Test the HOME score showed no significant difference in mean scores HOME between boys and girls.

Modeling of social maturity is the different between boys and girls. Modeling of social maturity is a certain habituation behavior taught thought by parents to their children or the behavior that children want to imitated. Hurlock (1990) explained there are several reasons why gender is considered important in child's development. First, in every time, the children grow their understanding behavior of parents, peers, and people

around them which will affect their attitudes and behaviors which considered appropriate by the environment. Second, the learning experience is determined by individual gender. Third, attitude of parents and other family members related to child's gender. The desire of parents to have a child with a particular gender influence on their acceptance.

Characteristics of the relationship with the Environmental Quality of Care

Table 5. Linear Regression Test of Variable that Influenced HOME Score

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	26,873	5,683		4,728	0,000
Mother Education	5,376	1,507	0,393	3,808	0,000
Child Age	0,001	0,102	0,001	0,006	0,995
Sum of Children	-0,462	0,369	-0,129	-1,251	0,215

Results of regression analysis (Table 5) shows that the childcare environment quality can be predicted by mother education, where every increase of one unit of the mother's education, it will raise the childcare environment quality score of 5.376 points. Child's age and sum of children in the family did not correlate significantly in predicting the value of childcare environment quality. This model states that the childcare environment quality can be explained by 15.5% through the variable mother's education, child's age and number of children in the family. These results are consistent with other research showed that mothers with higher education tend to interact more frequently with children, involved children with more activity, and provide more stimulation and teaching in the home environment (Bradley & Corwyn 2002; Campbell & Parcel, 2010; Dearing & Taylor, 2007). Other study also suggested a similar result. Maternal education has a significant correlation with the childcare environment quality. Higher level of education will facilitate people to absorb the information and apply it in everyday life, which in this case is to make better parenting (Hastuti, et al., 2010).

Childcare environment quality can be enhanced by informal education. The other study stated that early child development can be improved through the intervention of care from parents to children. These interventions are expected to reduce the gap caused by poverty, poor nutrition, and limited opportunities which is owned by the family (Engle, et al., 2011).

Childcare environment quality is influenced by some factors, including social support to women, including the caregiver substitute, sharing the workload, and the support from communities (Engle, et al., 1996 & Oliviera, et al., 2006). Future research is expected to explore the factors that affect the quality of care, and is not covered in this research.

CONCLUSION AND SUGGESTION

Conclusion:

Some aspect of childcare affected by sum of children and child gender. Girls received higher behavioral modeling than boys, while equals in other childcare home environment factors. Children with higher maternal education received better learning materials, language stimulation, behavioral modeling, and variation in experience. When calculating general childcare home environments, maternal education is predominant factors in childcare home environment.

Suggestion:

Effort in enhancing childcare quality should consider family characteristics and the specific aspects of these childcare home environment. Risk in maternal low education could be improved with informal education like parenting programs. Future research could explore other factors like maternal and child psychological characteristic and external resources like social support and economic factors.

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THE EFFECT OF LISTENING AL QURAN THERAPY TO PREVENT POSTPARTUM BLUES ON POSTPARTUM WOMEN AT DR. SOETARTO HOSPITAL YOGYAKARTA

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ABSTRACT

Background: Postpartum blues occurrences in Asia are quite high and varied around 26 – 85%. Whereas, postpartum blues occurrences in Indonesia is around 50-70% of postpartum women. Several researches conducted in Jakarta, Yogyakarta, and Surabaya found postpartum blues occurrences are 11-30%. Another study mentions that postpartum blues occurrences at DKT Hospital Kota Baru Yogyakarta from June – December 2013 were 240 cases.

Objective: The objective of the study was to analyze the effect of listening Al- Quran therapy to postpartum blues on postpartum women.

Research Method: The study is a quantitative research with pre-experimental method and Intact Group Comparison Design, in which half group was used as control group and half other as experimental group. Sampling taking technique used accidental sampling in which samples were taken due to accidental meeting of the suitable respondents during the study being conducted. Total respondents of the study were 15 people for each group.

Result: The result in intervention group obtained 3 respondents (20%) without postpartum blues and 12 respondents (80.0%) with mild postpartum blues. The result in control group got 1 respondent (6.7%) without postpartum blues, 9 respondents (60%) with mild postpartum blues, 4 respondents (26.7%) with moderate postpartum blues, and 1 respondent (6.7%) with serious postpartum blues. Based on the result of data analysis with *mann whitney* test, the result got p value = 0.003 ($p < \alpha$). It means that listening Al Quran therapy had significant effect on preventing postpartum blues on postpartum mothers.

Conclusion: Listening Al Quran therapy has significant effect on preventing postpartum blues on postpartum mothers. It is expected to the respondents to find out information related postpartum blues and to do several positive activities like listening to Al Quran as a preventive way of postpartum blues during postpartum period.

Keywords : Listening Al Quran Therapy, Postpartum Blues

Introduction

Right after partum process, women will face some changes both physical and psychological change. Some of women can adapt with the changes, but others cannot adapt well. Even those who cannot adapt will be possible to have psychological disturbances that may be started by various syndromes which are usually called as postpartum blues (Irawati and Dian, 2014).

Postpartum blues occurrences rate in Asia is high enough, and it varies from 26% until 85%. Meanwhile, postpartum blues occurrences in Indonesia are 50-70% of postpartum women. The rate was previously predicted lower than the other countries (Janiwarty and Pieter, 2013). Some researches in Jakarta, Yogyakarta, and Surabaya found that postpartum blues occurrences are 11 – 30% (Elvira, 2006).

Postpartum blues condition is caused by the existence of some factors; one of them is the factor of psycho-social background which is a condition when people do not really get support from the closest people. The other obvious factors are experience factors during pregnancy and partum process and physical factor (Jayasima et. al., 2014).

If postpartum blues is not prevented or handled properly, it will bring further impact to women's psychological condition, and it can disturb the children's development. The research conducted by Indanah et al. (2015) mentions that there is correlation between postpartum blues history and development of children aged 1 year. it is caused by the absence or the lack of mothers – children interaction; attention and love that is not optimum can bring bad impact to children in their further development.

Indonesian government has stated policies which are suitable to health foundation on postpartum women through Health Department. Postpartum women should have at least 4 times checking up after the partum process. The first visit is 6-8 after partum process; the second visit is 6 days postpartum; the third visit is 2 weeks after postpartum; and the forth visit is after 6 weeks of postpartum (Suherni, 2008). In addition, in the Article 17 verse 2 about health service on postpartum

process including early detection from physical and mental disturbance as well as the prevention and the care done by health professionals.

Research Method

The study is quantitative research with pre-experiment method and Intact Group Comparison Design in which there are two research groups, a half for experimental group and a half for control group. Independent variable of the study was listening Al Quran therapy, and the dependent variable was postpartum blues prevention. The study was conducted to investigate the effect of listening Al Quran therapy to postpartum blues prevention on postpartum women.

The subjects of the study were postpartum women who had regular check up and had partum process at Dr. Soetarto Hospital Yogyakarta. Data collecting sample used questionnaire, and the study was conducted from May 15th, 2016 until June 25th, 2016. Sampling technique used accidental sampling with 30 respondents. Data scale of independent variable was nominal, and data scale of dependent variable was ordinal. Mann Whitney was used as the data analysis.

Listening Al Quran therapy was given to the respondents in intervention group during 3 days in a row with 15 minutes duration every day. The respondents chose varied verses from Al Quran like Al Mulk, Ar Rahman, and Yasin as the listening materials. After the next three days, *EPDS* questionnaire would be given to the respondents. The questionnaire consisted of ten questions related to respondent's feeling during three days listening Al Quran starting from the first day of partum process until the time when the study was conducted.

C. Result and Discussion

Univariate Analysis

Table 1.1
Frequency Distribution of Respondent's Characteristic at Dr. Soetarto Hospital
Yogyakarta in 2016 in Intervention Group

Characteristic	Frequency	Percentage (%)	PPB	
			Yes	No
Age				
< 20 year	2	13.3	1	1
20-35 year	10	66.6	8	2
> 35 year	3	20.0	3	0
Parity				
Primipara	7	46.6	5	2
Multipara	8	53.3	7	1
Education				
Junior High School	6	40.0	4	2
Senior High School	6	40.0	5	1
D3	1	6.6	1	0
S1	2	13.3	2	0
Employment Status				
Employment	2	13.3	2	0
Unemployment	13	86.6	10	3
Income				
IDR 1,300,000	8	53.3	6	2
> IDR 1,300,000	7	46.6	6	1

Table 1.1 shows that in intervention group, age majority of the respondents was in the range of 20-35 years old with 10 respondents (66.6%); parity majority of the respondents was *multipara* or having more than 1 child with 8 respondents (53.3%); the most dominant education of the respondents was junior high school and senior high school with 6 respondents (40%); the most dominant employment status was unemployment with 13 respondents (86.6%); and the most dominant income was family who had IDR 1,300,000 or as much as the Minimum Regional Wage with 8 respondents (53.3%).

Table 1.2
Frequency Distribution of Respondent's Characteristics at Dr. Soetarto
Hospital Yogyakarta in 2016 in Control Group

Characteristic	Frequency	Percentage (%)	PPB	
			Yes	No
Age				
< 20 year	3	20.0	3	0
20-35 year	7	46.6	7	0
> 35 year	5	33.3	4	1
Parity				
Primipara	4	26.6	4	0
Multipara	11	73.3	10	1
Education				
Junior High School	8	53.3	7	1
Senior High School	6	40.0	6	0
D3	0	0	0	0
S1	1	6.6	1	0
Employment Status				
Employment	3	20.0	3	0
Unemployment	12	80.0	11	1
Income				
IDR 1,300,000	10	66.6	9	1
> IDR 1,300,000	5	33.3	5	0

Table 1.2 shows that in control group, the most dominant age of the respondents was in the range of 20-35 year with 7 respondents (46.6%); the most dominant parity was *multipara* or having more than 1 child with 11 respondents (73.3%); the most dominant education of the respondents was junior high school with 8 respondents (53.3%); the most dominant employment status was housewife with 12 respondents (80%); and the most dominant income was family who had IDR 1,300,000 or as much as the Minimum Regional Wage with 10 respondents (66.6%).

Bivariate Analysis

Table 1.3 Mann Whitney Statistical Test

Group	N	Mean \pm SD	Mean Rank	Z	p Value
Intervention	15	3.53 \pm 2.74	10.80	-2.937	0.003
Control	15	7.80 \pm 3.84	20.20		

Based on Table 1.3 above, Mann Whitney analysis test obtained p value 0.003. Since p value was less than α (0.05), it shows that H_a is accepted. It means that there was effect of listening Al Quran therapy to postpartum blues prevention on postpartum women at Dr. Soetarto Hospital Yogyakarta in 2016.

Discussion

Postpartum Blues Occurrences on Postpartum Women in Intervention Group

Based on the result of the study in intervention group or in the group that accepted listening Al Quran therapy obtained 3 people (20%) who did not have postpartum blues, and 12 others (80%) had postpartum blues although it is in mild category.

According to Mansur (2009), postpartum blues is the disturbance of mental situation which can occur during 3 – 6 days after partum process. The disturbance usually happens in 14 first days after partum process, and it can be worse in the 3rd and the 4th day.

The role of listening Al Quran therapy can decrease stress hormones, activate endorphin naturally, improve relax feeling, and distract from fear, anxiety, and

stressful feeling. Besides, when listening to Al Quran blood pressure will decrease; heart beat, pulse rate, brain wave activity and respiration will become slower and deeper, so it can calm down the feeling to be better. It is supported by the research conducted by Ardiansyah (2014) stating that there is significant influence of giving *murrotal* therapy to the decrease of stress rate. It proves that listening Al Quran therapy can calm down people, so there will be stress relieve caused by relax feeling when listening Al Quran.

Postpartum Blues Occurrences on Postpartum Women in Control Group

Based on the result of the study, control group, a group that did not get the treatment of listening Al Quran therapy, obtained result that 1 respondent (6.7%) did not have postpartum blues, 9 women (60%) had mild postpartum blues, 4 women (26.7%) got moderate postpartum blues, and 1 person (6.7%) had serious postpartum blues. It shows that listening Al Quran therapy significantly helps postpartum women in preventing postpartum blues.

Although there was 1 respondent who did not experience postpartum blues, some other respondents had mild, moderate, and serious postpartum blues. It can also be influenced by the support of husbands, families, and close friends. It is supported by the research conducted by Fatimah (2009) mentioning that there is correlation between supports given by close people and postpartum blues. Besides, women who have light activities like walking around the hospital or sun bathing the baby under the sun will trigger oxygen to flow in the blood vessels and to distribute it to all part of the body, so it can bring impact to relax feeling (Ide, 2007).

The Effect of Listening Al Quran Therapy to Postpartum Blues Prevention

According to Lubis (2010), in the first three days after partum process, women can experience several phases related to the condition of adapting themselves to a new role of being mothers. During the first three days, mothers experience taking in and taking hold phases. In taking in phase, mothers still focus on themselves and tend to be passive. In taking hold, mothers are still sensitive; sometimes they have incapable feeling to take care of the baby. Thus, during this phase mothers are fragile to get psychological disturbance like getting easy to cry, changing the feeling easily, becoming anxious without any cause, becoming too much worried to the baby, feeling lonely, and getting emotional easily.

According to Heru (2008), *murrotal* (listening Al Quran) therapy can decrease stress hormones, activate natural endorphin hormone, increase relax feeling, distract fear, anxious, and stressful feeling, repair chemical system in the body that can decrease blood pressure, and slow down the respiration system, heartbeat, pulse rate, and brain wave activity. Respiration activity becomes deeper and slower, so it is good to trigger emotional control, deep thought, and better metabolism.

In the other theory, Pedak (2009) explains more detail that the impulse comes into the brain through auditory system when listening Al Quran. From the cochlea, the signals of Al Quran verses are continued to the thalamus and amygdale (emotion center) that becomes significant part of the system which influences emotion and behavior that is transferred to hippocampus (emotional memory center) and hypothalamus (autonomy control center), so the voice of Al Quran verses become the energy that positively influence the feeling condition.

Furthermore, based on the data analysis conducted based on statistical test using mann whitney in table 4.6, the result obtained sig or p value 0.003. Since $p < \alpha$, the research hypothesis (H_a) can be accepted. Thus, there is effect of listening Al Quran therapy to postpartum blues prevention on postpartum women. The success of preventing and decreasing postpartum blues occurrences is presented by Z value with -2.937 meaning that listening Al Quran therapy can decrease postpartum blues until 2.9 times more effective compared by those who did not get listening Al Quran therapy.

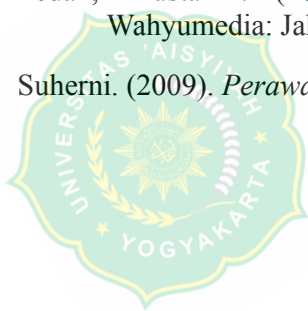
Conclusion and Suggestion

Listening Al Quran therapy has significant impact to prevent postpartum blues. It is supported by result of data analysis which obtained p value = 0.003 ($p < \alpha$). The success of prevention or effort of decreasing postpartum blues is presented by Z value table -2.937 meaning that listening Al Quran therapy can decrease postpartum blues until 2.9 times.

Based on the result of the study, it is expected that respondents can find information related to postpartum blues and can do several positive activities such as listening to Al Quran as an effort to prevent postpartum blues during postpartum period.

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THE CORRELATION BETWEEN MENOPAUSE PHASE AND ANXIETY RATE IN SEXUAL INTERCOURSE IN MENOPAUSAL WOMAN

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ABSTRACT

Abstract: The purpose of this study is to analyze the correlation of menopause phase and anxiety rate in having sexual intercourse. The method of this study is analytic-correlation with cross sectional approach. Respondents in this study were 30 women in menopause phase using simple random sampling. The data were analyzed by using Kendall Tau test. There is correlation between the menopause phase and anxiety rate in having sexual intercourse in Padukuhan Kuwon Sidomulyo Bambanglipura Bantul Yogyakarta, with value for significance (p) is 0,000 and correlation coefficient 0,619. It is expected that primary health centers are able to make a group of menopause women as a media to share their mind.

Keywords : menopause phase, anxiety, sexual intercourse

INTRODUCTION

Menopause is a natural process in line with the increasing age of women that is characterized by the cessation of menstruation. Menopause is due to declining production of female sex hormones, namely estrogen and progesterone in the ovaries that cause changes in the physical, psychological and sexual (Proverawati, 2010). Every woman will generally experience menopause at the age of 45-55 years. Stages of menopause phase consists of pre-menopausal, menopausal, and postmenopausal. Women perceived varieties of changes at each stage of menopause. During early menopause, women will experience anxiety one of which is in sexual intercourse. However, over time the anxiety tends to decrease even almost non-existent because the female body has achieved a new balance of hormones (Smart, 2010).

The research result showed that 75% of menopausal women will experience problems or disorders (Rostiana, 2009). Disorders that appear in menopausal women include irritability, fear, anxiety and petulance (90%); *hot flushes* (70%), depression (70%); headache (70%); fatigue, difficulty in concentrating, forgetfulness, lack of energy (65%); bone and muscle pain (50%); disorders (decrease) in libido (30%). Decreased libido is one of the menopausal phase disorders associated with

sexual activity. Decreased libido causes pain effects during intercourse that trigger menopausal women's anxiety in undertaking sexual relationships (Mulyani, 2013).

The frequency of sexual activity and satisfaction with sex life will tend to decline gradually between the age range 40-50 years (Papalia, 2009). Research in the United States in 2006 involving 32,000 female respondents aged over 40 years says that almost 40% of menopausal women experience sexual problems. Perceived sexual problems, among others, are 39% experienced a declined desire or arousal, 26% had problems with stimulation, and 21% complained of problems achieving orgasm (Perez, 2008 in Antasari, 2011). The results of a research conducted by Winarsih (2008), showed that 53.3% of menopausal women feel severe anxiety to the changes experienced which include changes in sexual intercourse. Sunthari's research (2012), also showed that 40% of menopausal women are more anxious and 35% are more depressed than women of reproductive age.

Some women think that after menopause, they could not provide sexual satisfaction for her husband. In fact, there is a presumption that menopausal women are not allowed to have sexual intercourse because it will lead to the emergence diseases. That presumption will lead to anxiety, so that postmenopausal women will tend to reduce or avoid sexual activity (Mulyani, 2013). The government and community's roles in addressing the problems of menopause, among others is in collaboration with the healthcare team including midwives through *Posyandu* for elderly activities as an effective place to provide information about premenopausal period, menopause, and post menopause. *Posyandu* for the elderly is one form of the Comprehensive Reproductive Health Care Package (PKRK) in tackling the problem of old age (menopause), including the problems of sexuality in menopause (MOH, 2008).

The results of preliminary studies conducted on May 20, 2016 in Kuwon Hamlet, Sidomulyo, Bambanglipuro, Bantul showed that the number of women in menopause who still have a husband is 162 people. The results of interviews with 12 respondents, three of them said that she had no sexual intercourse, 6 saying decreased sexual activity, and three people said they had sexual intercourse like before entering menopause.

RESEARCH METHODS

The research design is using correlational-analytic method with cross sectional approach. The population in this research were 162 women in the menopausal phase in Kuwon Hamlet, Sidomulyo, Bambanglipuro, Bantul, Yogyakarta. The sample used in this research is 30 respondents selected by simple random sampling technique. The research instrument used are observation sheets to determine the phase of menopause being experienced by respondents, and HARS questionnaire to determine respondents' level of anxiety in doing intercourse. The data analysis in this research is using *Kendal Tau* correlation statistical test.

RESULTS AND DISCUSSION

RESULTS

1. Characteristics of Respondents

Table 1 Characteristics of Respondents in Padukuhan Kuwon Sidomulyo Bambanglipura Bantul

No	Characteristics	Frequency(N)	Percentage(%)
1	Age		
	40-45 years old	7	23,3
	46-55 years old	13	43,3
	>55 years old	10	33,3
	Total	30	100,0
2	Education		
	Junior high school	13	43,3
	Senior high school	12	40,0
	Diploma	1	3,3
	Bachelor	4	13,3
	Total	30	100,0
3	Job		
	housewife	13	43,3
	civil servant	2	6,7
	private employe	3	10,0
	entrepreneur	2	6,7
	farmer	5	16,7
	labor	5	16,7
	Total	30	100,0

Table 1 shows that the majority of respondents were in the age range of 46-55 years are as many as 13 people (43.3%), most respondents are SMP (Junior High School) graduates, and most respondents' status is housewife (IRT), they are as many as 13 people (43.3%).

2. Data Analysis

a. Univariate analysis

1) Menopause Phase

Tabel 2 Menopause Phase Frequency Distribution in Padukuhan Kuwon
Sidomulyo Bambanglipuro Bantul

No	Menopause Phase	Frequency (f)	Percentage (%)
1	Pre Menopause	7	23,3
2	Menopause	13	43,3
3	Post Menopause	10	33,3
	Total	30	100,0

Table 2 shows that the majority of respondents in the category of menopause are as many as 13 people (43.3%), there are 10 respondents (33.3%) included in the post menopause category and 7 respondents (23.3%) in pre-menopausal category

2) The anxiety rate in having sexual intercourse

Table 3 The anxiety rate in having sexual intercourse Frequency
Distribution in Padukuhan Kuwon Sidomulyo Bambanglipuro Bantul

No	anxiety rate	Frequency (f)	Percentage (%)
1	Not anxiety	1	3,3
2	Mild anxiety	4	13,3
3	Moderate anxiety	8	26,7
4	Severe anxiety	14	46,7
5	Panic	3	10,0
	Total	30	100,0

Table 3 shows that most respondents experiencing severe anxiety as many as 14 people (46.7%), there are eight people (26.7%) having moderate anxiety, as many as four people (13.3%) experienced mild anxiety, as many as three people (10.0%) had a panic and 1 (3.3%) did not experience anxiety.

b. Bivariate Analysis

Table 4 Cross-tabulation menopause phase and anxiety rate in having sexual intercourse at Padukuhan Kuwon Sidomulyo Bambanglipuro Bantul

Menopause phase	anxiety rate in having sexual intercourse										Total	
	Not anxiety		Mild anxiety		Moderate anxiety		Severe anxiety		Panic		N	%
	N	%	N	%	N	%	N	%	N	%		
Pre Menopause	0	0	0	0	1	14,3	4	57,1	2	28,6	7	23,3
Menopause	0	0	0	0	3	23,1	9	69,2	1	7,7	13	43,3
Post Menopause	1	10,0	4	40,0	4	40,0	1	10,0	0	0	10	33,3
Total	1	3,3	4	13,3	8	26,7	14	46,7	3	10,0	30	100

Table 4 shows that respondents who are in pre-menopause as many as 7 people (23.3%). Most of them suffered severe anxiety as many as four people (57.1%), panic as many as two people (28.6%), and anxiety was one person (14.3%). Respondents who are in menopause were 13 (43.3%). Most of them suffered severe anxiety were 9 people (69.2%), moderate anxiety was 3 (23.1%), and panic as much as 1 (7.7%). Respondents who are in post menopause period as many as 10 people (33.3%). Most of them suffered moderate anxiety and mild respectively by 4 people (40%), and a small proportion experiencing severe anxiety and no anxiety respectively by 1 person (10%).

Table 5 Statistical test results using *Kendall Tau*

			Menopause Phase	anxiety rate
<i>Kendall's tau_b</i>	Menopause phase	<i>Correlation Coefficient</i>	1.000	.619**
		<i>Sig. (2-tailed)</i>		.000
		N	30	30
	anxiety rate	<i>Correlation Coefficient</i>	.619**	1.000
		<i>Sig. (2-tailed)</i>	.000	
		N	30	30

** . Correlation is significant at the 0,01 level (2-tailed)

Table 5 shows that a correlation coefficient to the amount of 0.619 and significant at 0.000 (*p-value* <0.05), it indicates that there is a strong relationship between the phase of menopause with anxiety rate in having sexual intercourse in Padukuhan Kuwon Sidomulyo Bambanglipura Bantul Yogyakarta.

DISCUSSION

The results showed that the majority of respondents in the category of menopause are as many as 13 people (43.3%). Menopause is a period of permanent cessation of menstruation resulting from the loss of *ovarian* follicles because of decreased production of estrogen and progesterone (Lestary, 2010). Menopause generally occurs in the age range of 45-55 years, because at this age range, reproductive function decreases, especially the decline in ovarian function (Smart, 2010). In this research, the majority of respondents were in the age range of 46-55 years are as many as 13 people (43.3%).

There are 10 respondents (33.3%) included in the post menopause category. Post menopause is the period which lasts 3-5 years after menopause. At this time, most of the respondents already felt comfortable with their condition. This is consistent with Smart's (2010) opinion, which stated that during post menopause, a woman usually has been able to adjust to her condition because her body has achieved a new hormonal balance.

While in pre-menopausal category, there are seven respondents (23.3%). Pre-menopause period occurs 4-5 years before menopause and begins at the age of 40 years. In this phase, there is a decrease in estrogen production and an increase in gonadotropin hormone (Smart, 2010). The decrease in the hormone production is felt by the majority of respondents in the pre-menopause category which is characterized by menstrual cycle becomes irregular, *hot flushes*, insomnia, sweating at night, as well as vaginal dryness.

1. The Level of Anxiety in Sexual Intercourse

The results showed that most respondents experience severe anxiety in sexual intercourse, they are as many as 14 people (46.7%). Anxiety is a subjective feeling regarding the disturbing mental tension as the general reaction to the inability to resolve a problem. Such erratic feeling is generally unpleasant which would cause physiological and psychological changes (Rochman, 2010). The results showed that most respondents experience severe anxiety, it means that the respondents thought that they will experience a lot of things or unpleasant incidents in their life during menopause period. Based on the results of the questionnaires, it is known that the majority of respondents experience the symptoms of anxiety such as feeling tense,

nervous, shaky, irritable and lethargic. In addition, most respondents also experience symptoms of fear, bad feeling, fearing their own inner thoughts, and irritability.

The level of anxiety in the severe category can be caused by women's lack of knowledge about menopause because education will affect their understanding and ease in receiving information. In this research, most respondents are SMP (Junior High School) graduates, they are as many as 13 people (43.3%). Education is the process of changing attitudes and code of conduct through the efforts of the teaching and training either in school or outside of school. The higher the education is, the more easily a person receives knowledge. The level of education also affects one's perception to be more receptive to ideas and new technologies as it can make a person more easily to make decisions and act (Irmayanti, 2007). This is consistent with a research conducted by Sari (2009), which states that there is a correlation between the levels of knowledge about menopause with the perception of menopause symptoms. According Kasdu (2008), education is one of the factors affecting the level of anxiety in facing menopause, women who are educated will understand more about menopause.

Other factors associated with the level of anxiety is the work environment. In this study, most respondents' status is housewife (IRT), they are as many as 13 people (43.3%). Soekanto (2006), explains that a person who works outside the house would have a broader social scope compared with those who do not work. Almost everything is considered, felt, survived dealing with others, language, eating habits, clothing, etc. are learned from the social and cultural environment including working environment. Women with housewives status spend more time, attention, and daily activities within the family to take care of all the needs of the household, so they do not have many opportunities to obtain sources of health information about menopause and tend to have high anxiety.

Although most respondents suffered severe anxiety, there are eight people (26.7%) having moderate anxiety, as many as four people (13.3%) experienced mild anxiety, as many as three people (10.0%) had a severe anxiety or panic and 1 (3.3%) did not experience anxiety. This means that the anxiety experienced by each woman is different in each phase of menopause. This opinion was supported by Lestary (2010), which states that anxieties in menopausal women are generally

relative, meaning that there are people who worry and be quiet again after getting the spirit / the support from people around them, but some are constantly worried even though the people around them have given support constantly. Nonetheless, there is also a menopausal women who did not experience significant changes in their lives.

The diversity and differences in the level of women's anxiety in the face of menopause can be caused by several factors. According Nugraha (2007), the levels of women's anxiety in the face of menopause are affected by psychic, family roles, information and culture. Psychic is negative thoughts about menopause that menopause is the beginning of deterioration entering old age, the loss of women's feminine and sexual quality. According Kasdu (2008), a woman's attitude and readiness to prepare for and cope with something that happens varies between individuals to one another, as does the readiness in facing menopause

2. The Relationship between Menopausal Phase And Anxiety Rate in Having Sexual Intercourse

Statistical test results obtained using *Kendall Tau* showed a correlation coefficient to the amount of 0.619 and significant at 0.000 ($p\text{-value} < 0.05$), it indicates that there is a strong relationship between the phase of menopause with the level of anxiety in sexual intercourse in Kuwon Hamlet, Sidomulyo, Bambanglipuro, Bantul. This is supported by a research by Hastuti (2008) which stated that with age, changes occur in women, both physical and psychological changes that affect a decrease in potency and sexual function at menopause. It also approved with Wiknjosastro (2012) who explains that the drop in estrogen levels in postmenopausal women body causes vaginal dryness, which in turn causes discomfort during intercourse and decreased libido. A research conducted by Udayani (2012) also stated that there is a relationship between menopause with the convenience of a married couple in having sex. The results of statistical tests is $P_{(value)}$ of 0.001 on α 0.05.

The results showed that most respondents experiencing severe anxiety in sexual intercourse are as many as 14 people (46.7%) and 9 (64.3%) of them are in the phase of menopause, 4 (28.6%) are in the phase of pre menopause, and 1 (7.1%) are in the postmenopausal phase. The results of this study are consistent with the

findings of Rostiana (2009), who found that the majority of menopausal women experience severe anxiety in the face of menopause. Menopause is a natural period faced by every woman. However, for some women, menopause is the saddest moment in life. There are many concerns that envelops the mind of a woman when entering this phase. Some studies show that 75% of women who experience menopause feel menopause as a problem or disorder, while 25% feel it does not matter.

The many menopausal women who experience anxiety in sexual intercourse in Kuwon Hamlet, Sidomulyo, Bambanglipuro, Bantul is due to lack of information about menopause and the support of the family. It is in accordance with Kaheksi study (2013), family and the husband's support also affects women's anxiety in facing menopause. In general, women receive less support and attention from the family, so they feel alone in facing menopause.

In addition, the high levels of women's anxiety in the face of menopause in Kuwon Hamlet, Sidomulyo, Bambanglipuro, Bantul is also caused by the assumption that women who experience menopause will lose sex appeal and decreased sexual activity. There are some women who think that after menopause, they cannot give sexual satisfaction to her husband, there is even a presumption that menopausal women do not do sexual intercourse because it will lead to the emergence of diseases. This raises the concern of a more complex conjugal problems.

This opinion is in accordance with the results of a research by Rostiana (2009), which states that changes in sexuality at the age of menopause may also be affected by anxiety when faced with menopausal age and the myths which are still circulating widely in the community stating that the sexual life of women has ended when the women entered menopause, This assumption often results in the husband being away from his wife who have undergone menopause. Even for some husband, menopause is used as an excuse to get married again because his wife is considered as no longer able to have sexual intercourse. On the other hand, the women feel unfit and unable to have sex after menopause. This fallacious assumption often gives bad impacts, such as the elderly couple divorced because of sexual problems.

The changes of sexuality perceived by women at every stage of menopause varies. During early menopause, women will experience anxiety for doing sexual intercourse. However, over time, the anxiety tends to decrease even almost non-existent because female body has achieved a new balance of hormones (Mulyani, 2013). This opinion was in accordance with the results of studies showing that at the time of post-menopausal period, women tend to experience mild anxiety and with the percentage of 40% each, or about four respondents feel the mild and moderate anxiety.

This can occur because at the age of menopause, especially during the post-menopausal period, women can enjoy sexuality as a whole without having to fear of pregnancy and the need for contraception to prevent pregnancy. In addition, women no longer feel charged with thinking about the needs of children who have grown up (Mulyani, 2013).

CONCLUSION AND SUGGESTION

Based on the results of research and discussion, it can be concluded that of the 30 respondents surveyed, there were 7 respondents (23.3%) were in pre-menopausal, 13 respondents (43.3%) were in menopause, and 10 respondents (33, 3%) are in the postmenopausal period. Most had severe anxiety in sexual intercourse as many as 14 respondents (46.7%), and 9 respondents (64.3%) of them are in menopause. There is a relationship between the menopause phase and anxiety rate in having sexual intercourse in Padukuhan Kuwon Sidomulyo Bambanglipura Bantul Yogyakarta with the strong relationship. This is evidenced by the results of statistical tests obtained Kendall Tau correlation coefficient of 0.619 and significant at 0.000 (p-value <0.05)

Based on this study, it is expected that women in menopause phases always foster positive attitudes and behavior in dealing with menopause so as to reduce the anxiety of facing menopause, especially in sexual intercourse. It is also expected that health centers can enhance the role of *Posyandu* to solve the problems faced by menopausal women, especially regarding the issue of sexuality and making a communication forum for menopausal women to exchange ideas related to the changes that occur in postmenopausal women so as to reduce the anxiety they have to face.

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ANALISED BULLYING TO SELF-ESTEEM FOR YUNIOR HIGH SCHOOL STUDENT

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Abstract: Bullying happens everywhere. Bullying doesn't choose age or gender, the victims are generally weak, shy, silent, and special (disability, closed, clever, beautiful, or have a certain body feature) who can be the subject of ridicule. This situation can make self-esteem descend, too shy, and school phobia. This research aims to identify relations bullying treatment with self-esteem in eighth grade students at Yunior High School 1 Porong. **Methods:** This research design was analytical correlation with cross-sectional. The population used by 45 students, sampling was probability sampling and simple random sampling technique with a sample of 40 students who've bullied. This research used statistical test of Spearman's rho. **Result:** The results on average bullying treatment mild can affect a child's normal self-esteem many as 22,5%, bullying medium can affect low self-esteem many as 25%, and bullying severe can affect low self-esteem many as 22,5%. From Spearman's rho test results that bullying treatment related to self-esteem. Obtained value $\rho=0.008$ ($\rho \leq 0.05$), so there is a relations bullying treatment with self-esteem in eighth grade students at Yunior High School 1 Porong. **Conclusions:** The implication of this research is that treatment of bullying can affect self-esteem. So parents, teachers, or health workers to better supervise the bullying, implement and educate strict sanctions for bully, increasing self-esteem for bullied, and creating an environment that is free from bullying.

Introduction

Bullying happens everywhere. Bullying does not choose the age or gender, the victims generally are weak child, shy, quiet, and special (handicapped, closed, clever, pretty, or have a certain body characteristics) that can be the subject of ridicule. The definition of bullying according to Ken Rigby (2005) in Astuti (2008: 3) is a desire to hurt. This desire is shown into action, causing a person to suffer. This action was done directly by a person or group that is more powerful, irresponsible, usually repetitive and done with feelings of pleasure. It can make someone in-bully feel inferior, do not want to socialize, lack of confidence, seemed worried when he went to school (school phobia), and asked to change schools (Sejiwa, 2008: 12). According to the observations found in the Yunior High School 1 Porong some children never feel bullying, like ridicule, threatened, slandered, beaten, and even ostracized by classmates. Causing the child being bullied in the feel insecure, afraid to go to school, often skipping school, and less able to hang out with

friends. Until now there is no research linking bullying treatment of the impact felt by students.

Although there is no data to load cases of bullying in each country, Detiknews (2010, in Fiftina, 2011) provides an overview of case data in schools, that is the International 23% in junior high schools and 10% in high school and in the UK around 27% occurred in the level of Yuniior High School and 10% in high school. NICHD in the Journal of the AMA in 2001, also mentions that more than 16% of schoolchildren in the US reported experiencing bullying by other pupils. The survey was conducted in 15 686 grade 6 to 10 in a variety of public and private schools in the US. The US Justice Department in 2001 reported that 77% of US students experience bullying is physical, verbal, or mental (Sejiwa, 2008: 10). In 2009 BPS Indonesia recorded of all reported cases of violence, 30% of which is done by the children, and 30% violence committed by children, 48% occurred in the school environment with varied motives and levels. Sejiwa Foundation in 2008 also conduct research on bullying violence in major cities in Indonesia, namely Yogyakarta, Surabaya, and Jakarta recorded the level of violence by fellow students 41.2% for junior high schools and 43.7% for the high school level to the highest category psychological violence in the form of exclusion, and verbal violence (ridicule) and last physical violence (hitting). The amount of violence in Yuniior High School Surabaya reached 59.8% (Wiyani, 2012: 18). Meanwhile, researchers conducted a preliminary study on a class VIII student at Yuniior High School 1 Porong, election VIII class because the students already know each other, sometimes conflicting so it is possible occur bullying and of a preliminary study on 10 students of class VIII Yuniior High School 1 Porong ever in-bully, who belongs to the category of bullying lightly there are 4 students, bullying were 5 students and bullying weight of one student, then 10 students are researchers measured self-esteem, students who show low self-esteem there are 5 students, self esteem normal 2 students, and high self-esteem there are 3 students.

Factors that cause the occurrence of bullying include: differences in grade (seniority), economics, religion, gender, ethnicity / racism, families who do not get along, the school situation is not harmonious or discriminatory character of the individual / groups such as resentment, envy (Astuti, 2008: 4). Bullying by someone resulting in reduced self-esteem, that a person's attitude towards him from very negative to very positive (Baron & Byrne, 2004: 173). Bullying can be linked to self-esteem. The impact of bullying is also

described by Priyatna (2010: 4) include: low self-esteem, anxiety, loneliness, low levels of social competence, depression, social withdrawal, physical complaints on health, running away from home. Therefore, if a child ever be bullied repeatedly, can cause feelings of depression, can experience physical pain and psychological, and declining self-esteem, but when the action of the bully can be stopped as well as the teachers and parents to give their full support to the children in -bully, probably will start to increase her self-esteem so that he can be more confident and be able to live his days with the spirit.

Combating bullying according to Astuti (2008: 43), among others, to do with the action of the formation of organizations or networks with guidance and consulting activities, training, and dissemination of information bullying. In addition, action should be taken the school to address bullying is to reduce or eliminate bullying (whether imposed or carried out by a student, teacher, or parent, look at the education system and school socialization, organize community networks effective schools. In addition to address the problem of bullying at home is by reducing domestic problems, to communicate openly with your spouse and children, if there are problems to discuss and solve the problem together, if children are bullies informed about the consequences, if the child is a victim then by taking children to strengthen themselves and more confident and dare to denounce the matter to the school and if there are injuries, consult a child to the doctor and psychiatrist. Moreover, according to Hidayat (2012: 243), how to improve self-esteem by giving attention, helping individuals to express ideas and feelings, as well as provide an opportunity for positive social activities and develop social skills by encouraging an optimistic attitude and participate in all activities. Meanwhile, the role of nurses in addressing bullying in schools (through UKS) is to maintain good communication with victims of bullying in order to be open and be able to tell the problems of bullying he was feeling, nurses also have to understand the condition and provide the motivation to keep going and not feel inferior themselves by digging capabilities that exist in a person ever be bullied, such as feelings of inferiority may have been transferred to the positive activities he could do and that pleased him. Because of the impact of bullying is not addressed early can create trauma in the future can even cause mental disorders (especially the self-esteem that are too low) on a person when the problem of bullying that received sustained. Based on the above description of the

problem, the researchers want to link bullying and self-esteem. The researchers want to conduct research on "Relationships Bullying with Self-Esteem in Class VIII at Yuniior High School 1 Porong".

Method

This study used a study design analytic correlation, because there is no intervention from the researchers, and simply connects between bullying and self-esteem in class VIII Yuniior High School 1 Porong with design chart cross-sectional study in which researchers conducted observations at the time and did not follow up. Researchers can search, describe a relationship, estimating, and testing based on existing theories. Data collection on May 4, 2013, then continued research data collection on June 8, 2013 at Yuniior High School 1 Porong.

The population in this study was a class VIII student at Yuniior High School 1 Porong ever in bully amounted to 45 students. Samples in this study were 40 students of class VIII Yuniior High School 1 Porong who meet the following criteria:

a. Inclusion criteria

1. Willing to be investigated
2. Ever in-bully

b. Exclusion criteria

1. Uncooperative
2. Who have physical disabilities
3. Who do not go to school either because permission, sick, or negligent in the day when the research.

Sampling in this study used probability sampling with simple random sampling technique sampling is done randomly, the way he put all the numbers of respondents were included in the population in the box, after all we take the new collected 40 numbers of respondents from a number of the population to be sampled.

In this research there were two variables are independent variables and the dependent variable. The independent variable in this research was the treatment of bullying in class VIII Yunior High School 1 Porong. The dependent variable in this study is the esteem (self esteem) in class VIII Yunior High School 1 Porong.

In this study, data collection was done by using a questionnaire. Questionnaire to determine bullying and self-esteem class VIII student at Yunior High School 1 Porong. Questionnaire included a disclaimer with the details: 18 statements about the conduct of bullying and 10 statements on self-esteem in class VIII Yunior High School 1 Porong.

a. Questionnaire bullying

There were 18 statements in accordance Adolescent Peer Relations Instrument. Bullying verbal contained in the statement number 1, 4, 7, 11, 13, and 18, for the physical bullying contained in the statement number 2, 5, 8, 10, 15, and 16, as well as for the social / psychological bullying contained in statement number 3, 6, 9, 12, 14, and 17.

b. Questionnaire esteem (self esteem)

There were 10 statements in accordance Rosenberg Self-Esteem Scale.

Once the proposal has been approved for the retrieval of data then the researchers took care of a letter of request from the data collection followed by administering licensing institutions to the principal of Yunior High School 1 Porong. As a first step the study, researchers selected respondents using random techniques and calculate the sample size by using the formula. After getting the desired respondent then the next step was to seek approval from survey respondents to provide a letter of approval of the respondents (Informed Consent). After obtaining the agreement of the respondent be giving questionnaires to class VIII student at Yunior High School 1 Porong, and asked to complete a questionnaire that was given.

Result and Discussion

1. Characteristicts Respondents by Gender

Table 5.1 Characteristics of respondents by sex class VIII Yunior High School 1 Porong on June 8, 2013 (n = 40)

<i>Gender</i>	<i>f</i>	<i>%</i>
<i>Male</i>	32	80
<i>Female</i>	8	20
<i>Total</i>	40	100

2. Characteristics Respondents by Age

Table 5.2 Characteristics of respondents by age class VIII student at Yuniior High School 1 Porong on June 8, 2013 (n = 40)

Age (years old)	<i>f</i>	%
12-13	8	20
14	26	65
15-16	6	15
Total	40	100

3. Characteristics Respondents by Religion

Table 5.2 Characteristics of respondents by age class VIII student at Yuniior High School 1 Porong on June 8, 2013 (n = 40)

Religion	<i>f</i>	%
Islam	37	92,5
Kristen	2	5
Hindu	1	2,5
Budha	0	0
Total	40	100

4. Characteristics Respondents by Live at

Table 5.4 Characteristics of respondents by staying at home to eighth grade students at Yuniior High School 1 Porong on 08 June 2013 (n = 40)

<i>Live at</i>	<i>f</i>	%
<i>Father and Mother</i>	35	87,5
<i>Father</i>	1	2,5
<i>Mother</i>	2	5
<i>etc</i>	2	5
<i>Total</i>	40	100

5. Characteristics Respondents by Son to

Table 5.5 Characteristics of respondents by birth order in class VIII Yuniior High School 1 Porong on June 8, 2013 (n = 40)

Son to	<i>f</i>	%
1	13	32,5
2	15	37,5
>2	12	30
Total	40	100

6. Characteristics Respondents by Pocket Money Every Day

Table 5.6 Characteristics of respondents based daily allowance class VIII student at Yuniior High School 1 Porong on June 8, 2013 (n = 40)

daily allowance	<i>f</i>	%
>Rp.10.000)	4	10
(Rp.6.000-Rp.10.000)	21	52,5
(Rp.1.000-Rp.5.000)	15	37,5
Total	40	100

7. Characteristics Respondents by Style Parenting Parents

Table 5.7 Characteristics of respondents based parenting style parenting class VIII student at Yuniior High School 1 Porong on June 8, 2013 (n = 40)

Style Parenting Parents	<i>f</i>	%
Otoriter	9	22,5
Democratis	21	52,5
Permisif	10	25
Total	40	100

8. Characteristics Respondents Based on Bullying

Table 5.8 Characteristics of respondents by bullying class VIII student at Yuniior High School 1 Porong on June 8, 2013 (n = 40)

Bullying	<i>f</i>	%
Soft Bullying	14	35
Median Bullying	17	42,5
Severe Bullying	9	22,5
Total	40	100

9. Characteristics Respondents Based on Self-Esteem

Table 5.9 Characteristics of respondents by self-esteem (self esteem) class VIII student at Yuniior High School 1 Porong on June 8, 2013 (N = 40)

Self Esteem	<i>f</i>	%
Low Self Esteem	24	60
Normal Self Esteem	13	32,5
High Self Esteem	3	7,5
Total	40	100

10. The Relationship between Bullying with Self-Esteem

Table 5.10 Cross Tabulation Bullying with Self-Esteem

Bullying	Self Esteem							
	Low		Normal		High		Total	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Soft	5	12,5	9	22,5	0	0	14	35
Median	10	25	4	10	3	7,5	17	42,5
Severe	9	22,5	0	0	0	0	9	22,5
Total	24	60	13	32,5	3	7,5	40	100
p = 0,008 (p ≤ 0,05)								

1. Bullying at Yunior High School

Based on Table 5.8 shows the results of 40 respondents class VIII Yunior High School 1 Porong showed that respondents who had received bullying were as many as 17 people (42.5%) with a median age of 14 years (32.5%), with the money pocket every day is pretty average (Rp.6.000-10,000) as much as 27.5%, while respondents who had received mild bullying as many as 14 people (35%) at an average age of 14 years (22.5%), with pocket money every day is pretty average (Rp.6.000-10,000) as much as 17.5% of respondents who had received severe bullying were 9 people (22.5%) at the age of 14 years by 10% and age 15-16 years by 10%, with less daily allowance (1.000-5,000) as much as 15%.

According to investigators, the respondents said they have to get bullying lightly because interpersonal relationships are still quite good, rarely involved in a conflict in school, when you get the bullying they rarely felt intimidated, while respondents who said that they had received treatment bullying was because often in trouble with their peers at school, when a friend stirred them tend to feel intimidated because they feel hurt and think it has hurt him, other than that of respondents who said very often get treatment bullying almost every day because they are often humbled by their peers, to feel as a party very weak, and felt very intimidated because of mistreatment do his friends. While from the schools themselves, the lack of regulations that includes about sanctions given to the perpetrators of bullying, conselor teachers was actually know about the treatment of bullying that has been happening in the Yunior High School 1 Porong, but they still consider it is something that is common and is not need to worry, even though the impact

of bullying victims are very diverse including decreased self-esteem, school performance declined, and sometimes they are scared to go to school, they worry about bullies will do the same as yesterday. The impact of bullying by Sejiwa (2008: 12), namely: shut up (school phobia), crying, asking changing schools, learning concentration decreases, academic achievement decline, do not want to play / socialize, like carrying certain goods (as requested "bully"), children become fearful, angry / irritable, restless, crying, lying, bullying behavior towards others, contusions / bruises, do not get excited, be quiet, easy-sensitive, be humble, be alone, be rough and revenge, wet, cold sweats, insecure, anxious, weepy (for the young), nightmares and irritability.

Judging from the general data by age, respondents who have received treatment mild bullying with an average age of 14 years were 9 people (22.5%), respondents who have received treatment bullying were an average age of 14 years as many as 13 people (32.5%) and the respondents that are subjected to severe bullying with an average age of 14 years and the age of 15-16 years as many as four people (10%). The most dominant age of respondents receive treatment bullying are 14 years of age due to the students of class VIII usually average age of 14 years and often gets better bullying from peers as well as class brothers, for it according to Frieden, et al. (2011: 44) age is best to measure the level of bullying is when a child is in school at least one year. Students who are 14 years old more often bullying of friends / senior who has a greater age than students aged 15-16 years were only a few ever get treatment bullying, this is because they tend to feel as seniors who make frequent bullying and rare among those who had received treatment bullying. Therefore, age is also one cause of treatment bullying which has the power imbalance where the actors who come from the student / student feel more senior undertake certain actions to the victim, the student / student more junior and they feel helpless because they can not resistance (Wiyani, 2012: 16). Therefore, the practice of bullying is hard to stop, because most people think it is fair without them knowing the impact that could occur when the practice of continuous bullying occurs. Nalini (2012: 11) argues that most victims of bullying become worse associated with self-esteem, scared, anxious, depressed, until heavier.

While the treatment is bullying when viewed in economic terms is of 40 respondents surveyed, respondents who have received treatment mild bullying consisted of 7 people (17.5%) with pocket money every day is pretty average (Rp.6.000-10,000), respondents

who have received treatment bullying was composed of 11 people (27.5%) with pocket money every day is pretty average (Rp.6.000-10,000), and respondents who have received treatment of severe bullying consisted of six people (15%) with pocket money every day on average less (1.000-5,000). From the results of research conducted by researchers, students have pocket money every day on average / considerably and lower more are subjected to bullying, researchers assume that they often got a mockery of their allowance, in addition to the students who get pocket money less inclined experience frustration due to the purchase of goods or foods also tend to be limited even afford to buy food whose prices above their allowance so that when there are friends who mocked about pocket money, they tend to feel intimidated. According to Baron & Byrne (2004: 220) that economic conditions may leave frustrated. In addition, students who are subjected to bullying in schools, as well as the possibility of getting treatment bullying in his own house, because in view of the terms of parents who have low income, can bring limited capabilities and limited facilities in educating children, make parents stress and will easily vent their emotions when getting into trouble in educating children. The stress of making parents commit acts of violence against children in the home (Wiyani, 2012: 95).

For the support of various stakeholders in order to prevent bullying is necessary, so that the treatment bullying does not happen everywhere, strict sanctions and educate is also very necessary to apply for the perpetrator of bullying in order not to repeat his actions.

2. Self Esteem at Yunior High School

In Table 5.9 shows respondents who have low self esteem as many as 24 people (60%), respondents with normal self-esteem as much as 13 people (32.5%), and respondents who have high self-esteem as much as 3 people (7.5%) ,

When viewed from the style of parenting parents, from 40 respondents surveyed, respondents who have low self esteem on average have a permissive style of parenting parents were 9 people (22.5%), respondents with self-esteem average normal style democratic parenting parents as many as 10 people (25%), and respondents who have high self-esteem have an average of parenting style patterns largely democratic as many as 3 people (7.5%). The biggest factor affecting the self-esteem of a child is a parent parenting styles (Fathi, 2008: 53). From these data the students who have low self-esteem

have an average style permissive parenting because of the style of parenting that implement free system, so that children feel no / less attention his parents, when there are problems in children, parents tend to be quiet and rarely communicates with his son, for him to applying the free system, the child will be unhappy because life no curb, but the child also needs attention and affection from parents. According Widyarini (2009: 11), parents who have parenting permissive try to behave accept and be positive impulses (impulse emotions), desires and behavior of their children, use little punishment, consult on children, few gave the household responsibilities and let the children set up its own activities and does not control, trying to reach the target particular by giving reasons, but without showing the power. Meanwhile, according to Surbakti (2009: 47) parents give full freedom to the child and permissiveness. Furthermore, children who have self-esteem of normal and high-dominant style parenting democratic because in the style of parenting demokratis implement free system but continue to monitor the child's development, style foster democratic style of parenting that promotes open communication, implement a free system that continually analyzes and can be justified, the child is given an understanding of the importance of sharing, cooperation, and with regard to the obligations and rights. According Surbakti (2009: 51), parenting style demokratis teaches that the rights and obligations of every individual must be respected. Uphold openness, recognition of the child's opinion, and cooperation. Children are given freedom, but freedom can be justified. Child entrusted to an independent but still monitored. Children will appreciate the others, is critical, and foster a sense of brotherhood and friendship.

Teens often have problems regarding self-esteem, they tend to be more concerned with his pride than his desire, but when he was having problems, for example with peers and touched on her self-esteem, the teenager will be easy to find that the price of her being abused and humiliated by their peers, the so often teenagers may experience changes in self-esteem is so fast, for example, someone who constantly bully her friends will be able to lower the price itself, it is usually cheerful, not fear, and confidence could turn into a silent, timid, low self-esteem, it will affect the psychological condition more severe if not handled, in Yuniar High School N 1 Porong often there are students who feel pride down due to frequent he treated bullying, but of the BK has been no attempt to improve the self-esteem of these students so that they will worsen and felt nothing helped to boost his self-esteem back, it is likely they will bring to a higher level after graduating from junior

high school, that condition would be very dangerous if left alone, the psychological condition will easily fragile and will live life with fear, and lack of confidence in his ability.

According to Stoppard (2010: 111), the key to the smooth journey of a child through adolescence is related to self-esteem. Without this, they can experience eating disorders, promiscuity involved, even hurt yourself. Many people do not just have a single idea about the price itself, but various views depending on where he is. A teenager can feel the current high esteem with his friends, who said he was cool. Price himself to be lower when with parents who thought he was lazy and irresponsible, and most low self-esteem when you are among strangers, because, according to the teenager, the stranger would see it as a fool.

3 Relationship between Bullying with Self-Esteem in Class VIII at Yuniior High School 1 Porong

The linkage between the treatment bullying and self-esteem (self esteem), as shown in the table correspond 5:10 Spearman's rho test results obtained value $\rho = 0.008 \leq \alpha = 0.05$, meaning that there is a statistically significant relationship bullying with self-esteem (self esteem) on class VIII student at Yuniior High School 1 Porong.

From these data indicate that the respondent amounted to 40 (100%), the mild bullying can affect children have low self-esteem as much as 5 people (12.5%), normal self-esteem as much as 9 people (22.5%), and self-esteem higher by 0 votes (0%). Treatment of moderate bullying can affect children have low self esteem as many as 10 people (25%), normal self-esteem as much as 4 people (10%), and high self-esteem as much as 3 people (7.5%). While the treatment of severe bullying can affect children have low self-esteem as much as 9 people (22.5%), normal self-esteem and high self-esteem as much as 0 respondents (0%).

Children who receive bullying continuously will affect her self-esteem, even when bullying is already making his pride was humbled, because bullying is done continuously to make someone intimidated, bullied find it difficult to overcome the problem and rarely talked about by people -people who love and support them, they tend to be quiet and save their own problems and therefore can cause a person to have low self-esteem, according to Sunaryo (2004: 34), low self esteem when children feel the loss of affection or love of

others, losing the respect of others, and poor interpersonal relationships. Treatment due to perceived bullying by someone resulting in reduced self-esteem (self esteem) (Baron & Byrne, 2004: 173). Bullying so that treatment can be linked to self-esteem. The impact of bullying is also described by Priyatna (2010: 4) include: low self-esteem, anxiety, loneliness, low levels of social competence, depression, social withdrawal, physical complaints on health, running away from home.

According Sejiwa (2008: 13), the treatment of bullying often occurs in the school environment, in places that are free from the supervision of teachers and parents. Teachers are aware of the potential for bullying to be more frequently inspect places such as classrooms, school hallways, cafeteria, yards, courts, restrooms at the moment that is not predicted by the students will be checking (should conduct regular monitoring but at erratic hours). Treatment of bullying also occurs in the wider region, such as the way to school and vice versa. Parents should be more active attention to their children to ensure they are free from the threat of bullying.

Conclusion

1. Bullying class VIII student at Yuniior High School 1 Porong average respondent been bullying being.
2. Self Esteem class VIII student at Yuniior High School 1 Porong average respondent had low self-esteem.
3. No relationship between bullying with self-esteem in class VIII Yuniior High School 1 Porong

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Seminar Minutes

Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta Building A. 4.02
Speaker/Presenter	Ayu Prawesti , Etika Emaliyawati, Titin Sutini & Mira Rahmawati
Title of Presentation	Academic Level of Resilience in Nursing Student at University of Padjajaran
Reviewer	Prof. Linda McGowan
Summary of Presentation	<ul style="list-style-type: none"> ✓ Resilience is a form of self-resistance ability to achieve success. Resilience is one factor that helps to achieve academic excellence. ✓ Learning process can be the source of stress for the students. ✓ The majority of the student become a resilient people, but still low on contextual aspects. ✓ The majority of nursing students of Padjadjaran University has become a resilient people, but still low on contextual aspects (cultural, education and spiritual). In order to increase resilience, efforts are needed to facilitate increased resiliency factors students by preparing students to develop problem-solving skills, especially providing a good academic environment and appropriate learning methode to support the learning process.
Summary of Discussion	<p>Reviewer:</p> <ul style="list-style-type: none"> • Is resilience included to the personality factor? • How can it be developed? <p>Presenters:</p> <ul style="list-style-type: none"> • Many factors can influence resilience, such as social support, age, and experience. <p>Reveiwer:</p> <ul style="list-style-type: none"> • Can you give the examples? <p>Presenters:</p> <ul style="list-style-type: none"> • Yes, there some students aged 18-20 years old had resilience.

Seminar Minutes

Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta Building A. 4.02
Speaker/Presenter	Agil Dhiemitra Aulia Dewi, Toto Sudargo, B.J. Istiti Kandarina & Yeni Prawaningdyah
Title of Presentation	Food Service Quality, and Patients satisfaction of food service in Dr. Sardjito General Hospital, Yogyakarta
Reviewer	Prof. Linda McGowan
Summary of Presentation	<ul style="list-style-type: none"> ✓ Food service contributes a major role in the satisfaction of patients. ✓ More than half of the respondents are unsatisfied with the food services. ✓ The subjects are 9.35 times more likely to feel unsatisfied by poor quality of food compare to good quality of food.
Summary of Discussion	<p>Reviewer: Did your research compare the people who have the normal appetite and less appetite?</p> <p>The presenter: I used deep interview to analyze about it.</p> <p>Reviewer: Is there any difference?</p> <p>Presenter: In general, there is a difference, but I didn't go further.</p>

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Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta, Building A 4.02
Speaker/Presenter	Istri Utami
Title of Presentation	The effect of post placental intra uterine insertion to the post partum duration
Reviewer	Prof. Linda McGowan
Summary of Presentation	<ul style="list-style-type: none"> Using <i>IUD post placenta</i> causes longer post partum period and painful feeling after the partum process compared with those who do not use IUD. The research can be used as the consideration of program evaluation of contraception service during post partum period, and it can also be used to form policies related to the program.
Summary of Discussion	<p>Reviewer:</p> <ul style="list-style-type: none"> How come the confidence p value not 4? <p>Presenter: (silent)</p> <p>Reviewer:</p> <ul style="list-style-type: none"> What might you do to solve the confidence value to reach 90%? <p>Presenter: (silent)</p> <p>Reviewer:</p> <ul style="list-style-type: none"> You should do further research.



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Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta, Building A 4.02
Speaker/Presenter	Suyani
Title of Presentation	The effect of early initiation breast feeding counseling toward knowledge in pregnant women
Reviewer	Prof. Linda McGowan
Summary of Presentation	<ul style="list-style-type: none"> • Successfull of EIB can improve exclusively of breastfeeding for 6 months and be continued until two years or more • The extension of the early initiation of breastfeeding can affect to increase knowledge. Test results obtained statistical p value of 0.000, it is concluded that there is a difference between knowledge singnifikan before and after the extension of the early initiation of breastfeeding counseling
Summary of Discussion	<p>Reviewer:</p> <ul style="list-style-type: none"> • Who assess the mothers' knowledge? And How? <p>Presenter:</p> <ul style="list-style-type: none"> • It is I. <p>Reviewer:</p> <ul style="list-style-type: none"> • Please, put it on the slide so that it will not cause confusion on the audience.

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Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Hafifah Wijayanti & Luluk Rosida
Title of Presentation	Correlative Factors of Chronic Energy Deficiency on Pregnant Women
Reviewer	Prof. Linda McGowan
Summary of Presentation	<ul style="list-style-type: none"> • Women who do not work at risk of CED as much as 5.55 times, compared to pregnant women who work. • One of the factors is the burden that the women have.
Summary of Discussion	<p>Reviewer:</p> <ul style="list-style-type: none"> • It's very clear slide • What else might you think as the factors causing the women do not want to work? <p>Presenter:</p> <ul style="list-style-type: none"> • The women have burden or lots of work at home. They don't have access to it, and they are difficult to get out of the house to get it. <p>Reviewer:</p> <ul style="list-style-type: none"> • I think you might consider psychological and social factors.



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Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Erlia Pratiwi and Dwi Prihatiningsih
Title of Presentation	Earthquake mitigation training improves the preparedness of red cross youth members
Reviewer	Prof. Linda McGowan
Summary of Presentation	<ul style="list-style-type: none"> • Earth quake preparedness is needed in Indonesia since this country is in ring of fire for the disaster • the schools' preparedness level is still low proven from some researches • There is an effect of the training towards the respondents • The disaster management training is effectively used to increase the RCY members preparedness.
Summary of Discussion	<p>Reviewer:</p> <ul style="list-style-type: none"> • The slide is very visual. • How do you think the further research could be likely to solve the problems. <p>Presenter: There will be five levels. All components in the school will be included.</p> <p>Audience: I was wondering why did you do the post test a week after the training?</p> <p>Presenter: I read on the book that we need to give several times to wait after the treatment given, so that the treatment really work to the respondents.</p> <p>Audience: I think It's better for you to have deep interview.</p>

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Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Dian Nurafifah
Title of Presentation	Bathing Baby (Sponging and Dyeing Method) and Umbilical Cord Care (Wet and Dry Method) to release rates of umbilical cord
Reviewer	Prof. Linda McGowan
Summary of Presentation	<ul style="list-style-type: none"> • Most of the respondents release when they use dry method. • There is no difference in the release rate of the umbilical cord on the baby bathing techniques using sponging method and dyeing method • There is a difference in the release rate of the umbilical cord on umbilical cord care using wet method and dry method
Summary of Discussion	<p>Reviewer: Make your slide into key point only!</p> <p>Presenter: Okay.</p> <p>Reviwer: Is there any data of the infection?</p> <p>Prsenter: No</p> <p>Reviewer: It's an interesting topic to be researched since there is only a few research about it.</p>

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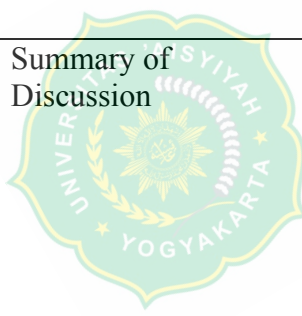
Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Dewi Rokhanawati & Arimbawati
Title of Presentation	The correlation between education and occupation and early marriage in Sleman Yogyakarta 2015
Reviewer	Prof. Linda McGowan
Summary of Presentation	<p>People with low education do more early marriage because they have less knowledge.</p> <p>The lack of education make women with less knowledge do early marriage.</p> <p>There was correlation between level of education and early marriage in Godean Sleman 2014.</p>
Summary of Discussion	<p>Reviewer: Are the research of stank and yunita from Indonesia?</p> <p>Presenter: Yes</p> <p>Reviewer: I am just wondering about the context. It's very good research.</p>

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Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Atik Nur Istiqomah, Mohammad Hakimi & Mufdlilah
Title of Presentation	The influence of date fruit on hemoglobin level of pregnant women in their second trimester in Sleman Yogyakarta
Reviewer	Prof. Linda McGowan
Summary of Presentation	<p>Date fruit can be the alternative to substitute iron tablet. Iron tablet can cause nausea.</p>
Summary of Discussion	<p>It's very important data since in the UK, maternal women have nausea and others problem in their pregnancy. It might be a good solution for them.</p>



Seminar Minutes

Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Dian Yunitawati and Leny Latifah
Title of Presentation	Family Characteristics and quality of childcare home environment in Iodine Deficiency disorder Endemic Area
Reviewer	Prof. Linda McGowan
Summary of Presentation	
Summary of Discussion	 <p>The method is quite hard to do. You have to think about the multiple factor</p>

Seminar Minutes

Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Maulita Listian Eka Pratiwi and Nur Azizah
Title of Presentation	The Effect of Listening Al qur'an Therapy to prevent postpartum blues on postpartum women
Reviewer	Prof. Linda McGowan
Summary of Presentation	<p>Postpartum blues occurrences in Indonesia is 50%-70% of post-partum women.</p> <p>Listening Alqur'an has significant effect to decrease postpartum blues.</p>
Summary of Discussion	<p>Reviewer: I think, we do need cultural sensitive intervention.</p>

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Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Dwi laely Mei Antika and Hanifa Andisetyana Putri
Title of Presentation	The correlation between menopause phase and anxiety rate in sexual intercourse in menopausal woman
Reviewer	Prof. Linda McGowan
Summary of Presentation	<p>The majority of menopausal women experience severe anxiety on menopause phase</p> <p>There is a strong correlation between menopause and the level of anxiety for having sexual intercourse.</p>
Summary of Discussion	<p>Reviewer:</p> <ul style="list-style-type: none"> - Did you measure the depression as weltel? <p>Presenter:{silent}</p> <p>Reviewer:</p> <ul style="list-style-type: none"> - Depression and anxiety have a relationship. - It is only a suggestion, you could correlate the depression and anxiety and psychological sides

Group B



The Influence of Type of Job, Income, Education and Religiosity to Vasectomy Acceptors' Quality Of Life

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Faculty Of Nursing And Midwifery Nahdlatul Ulama Surabaya University

Abstract

Introduction: in East Java in 2013, the percentage of vasectomy users was 0.12% .

Purpose: to investigate the influence of employment, income, education, and religiosity to vasectomy acceptors' quality of life.

Method: This research employed quantitative with past ex facto approached involved 30 population numbers. Purposive sampling technique and total sampling with rule of thumb were used. The instrument used a questionnaire with likert scale and WHOQOL questioner.

Results: There is significant influence of education and religiosity and no influence of work and income to the quality of life of vasectomy acceptors

Keywords: employment, income, education, quality of life, religiosity, vasectomy acceptors

INTRODUCTION

In Indonesia, the prevalence of family planning acceptors had increased of 7.71% in August 2015. The increase was dominated by the usage of non-long-term methods of contraception, which reach up to 80.53% while 19 % acceptors used long-term methods. Long-term methods mostly used by women, 93% of women used IUD, 9.45% used implants, 1.60% used tubectomy while vasectomy users were 0.14% (BKKBN, 2015)

Based on data from the BKKBN East Java province, in 2013 family planning acceptors were as many as 4327 users; 48.09% of users were injection acceptors, 13% were IUD users, 15.65% were using contraceptive pill, 9.75% of acceptors received tubectomy, 4.25% of male were using condom, Implant users were 2.94%, and vasectomy users were as many as 0.12% (BKKBN JATIM, 2013).

The low number of man's participation in using contraceptive method had been influenced by several factors, such as knowledge, perceptions about the effectiveness, social cultural factor, education level, belief, risks of contraception, family support/wife, limited access to family planning services for men and the myth of side effects of vasectomy, i.e.: vasectomy's acceptors will experience sexual dysfunction,

prostate disorders, confidence problem. These myths were believed can decrease the quality of life (Suherni, 2006; Azwar, 2006, Everret; 2007)

Quality of life is believed as the perception of the individual to live well towards their living condition (Kreitleir & Ben (2004) in Nofitri, 2009; Cohen & Lazarus in Larasati, 2012). Quality of life has four domains; physical area, psychological area, social and environmental area (WHO, 2012). The physical area consist of activity, rest, fatigue, consumption of medicines, pain and discomfort (Tarwoto and Wartonah, 2010; Sekarwiri, 2008). Psychological area include appearance, negative and positive feelings, thinking, memory and concentration, while social area involving encompasses of individuals, support, sexual activity, and an environment area consists of income, freedom from discomfort, recreation, self-actualization (Sekarwiri, 2008).

At this time, the government effort to improve participation of man in family planning through vasectomy method has not considered on a regular inspection of the quality of life. In fact, the results of examination of the quality of life of vasectomy acceptors can be used as basic information to promote vasectomy methods amongst male acceptors. Therefore, the researcher interested to know the influence of employment, education level, income level and religiosity towards the quality of life on vasectomy acceptors in Sawunggaling and Wonokromo Village in Surabaya, Indonesia.

RESEARCH METHODS

This research employed a quantitative approach using an ex-post facto design. The research was conducted in December 2015 to March 2016. Independent variables in this study are education level, income level, employment, religiosity and dependent variable is quality of life. The population in this research was 30 acceptors. The sampling method is purposive sampling and total sampling with rule of thumb. The inclusion criteria of sample are males who had a vasectomy procedure and the vasectomy had been done within more than three months when the research was done. The instrument used was a questionnaire with likert scale while quality of life questionnaire was measured using the adaptation of the WHOQOL BREFF (2012) which had been validated. Statistical tests of this research is multiple regression linier (Dahlan, 2014; Murti, 2013).

RESULT AND DISCUSSION

a. Result

1. Normality test with Kolmogorov- Smirnov

Based on the results of a test of normality by using the Kolmogorov Smirnov obtained $p = 0.77$ it is mean that data is normaldistributed with p value $0.05 >$

2. Frequency distribution

Table 1 Frequency distribution

Variabel	n	frequency	%
Quality of life	30		
Low		-	
Moderete	30		100
High			
Education			
Elementary school	15		50
Junior High School	15		50
Job			
Traders	14		46
Pedicap	16		54
Income			
1 million/month	22		73.7
>1 million /mounth	8		27.3
Religiosity			
Low	0		0
Moderete	30		100
High	0		0

Table 1 explains that most of the subject is on the moderate quality of life and the level of education in elementary school was 50% , respondents who had graduated from junior high school was 50%. 54% of them work as a pedicap driver and 73.7% of them have monthly income as many one million rupiahs. All of the respondents have moderate level of religiosity.

3. Univariate analysis

Table 2 The result of univariate analysis

Variabel	Mean	SD	N
Quality of life	76.9	0.84	30
Education	1.5	0.50	
Employment	1.46	0.50	
Income	1.26	0.44	
Religiosity	74.8	0.84	

Table 2 describes that the respondents have medium level of quality of life with (mean= 47.8).

4. Bivariate analysis

Table 3 Bivariate analysis

Variable	Quality of life Correlation Coefficient	p
Job	0.54	0.87
Education	0.57	0.003
Income	0.48	0.66
Religiosity	0.03	0.001

Table 3 illustrates that there is a positive significant influence the level of education and religiosity to vasectomy acceptors' quality of life. It means that the higher level of education and religiosity of the subject can improve the quality of life of vasectomy acceptors. However, the types of job and income level have no influence to vasectomy acceptors' quality of life.

5. Multivariate analysis

Table 4 Result of multiple regression linier

Variable	Coefficient Regression	p< 0.05
constant	46,9	
Education	-0.68	0.01
Job	0.07	0.70
Income	0.12	0.70
Religiosity	0.04	0.01
Adjusted R ² =		
0.428		
42.8%		
p < 0.05		

Table 4 describes that there is significant influence of the level of education and religiosity on quality of life of vasectomy's acceptors. However there is no influence of type of job and income level to participants' quality of life. The value of $R^2 = 0.428$

(rounded into 43) which means that independent variables may affect dependent variable of 43% while 57% were influenced by the other factors.

b. Discussion

The results of the research found that there were significant influence on education level and religiosity to the quality of life vasectomy's acceptors. Higher education level is in line with the increase of consciousness level. This opinion has been supported by Noghani, Asghapur and Safa (2007). They had concluded that educational level affect the quality of life because of it raised the awareness level. Similar statements with this result was confirmed by Mons, Marquetry, Buds and Dee Gees (2006).

Religiosity is considered as faith, believe and worship of obedience towards the religion. It may cause the internalisation process of the religion in a person (Diester in Risnawita and Ghufroon, 2011). Religiosity has five area; belief, religious practice, experience, practice, and knowledge (Glok and Stark in Repstad and Furshet, 2006). Religiosity affect individual quality of life because it is believed to be able to fix the physical and psychological wellbeing. If the individual has a good physical and psychological wellbeing, it will balance the physical, mental health, and good social welfare. (Brim in Hamburger, 2009). Type of job and monthly income level have no effect on vasectomy's acceptors quality of life because it may depend on respondent's awareness.

CONCLUSION

The level of education and religiosity influence the quality of life of vasectomy acceptors as many as 43%, however the types of jobs and incomes do not affect on the quality of life amongst vasectomy acceptors..

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THE CORRELATION BETWEEN WOMEN'S EDUCATION AND PARITY AND KNOWLEDGE ABOUT THE TREATMENT OF LOW BIRTH WEIGHT (LBW) BABIES AT WATES HOSPITAL

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Abstract: Background: Women's knowledge in giving treatment to babies with low birth weight (LBW) is the most significant foundation in supporting the success of baby treatment. LBW treatment in the hospitals is a complex issue, and it needs expensive infrastructure and well as high quality health professionals, so sometimes it often becomes disturbing experiences to the family. Long term impact of LBW can appear such as the disturbance of growth, eyesight (retinopathies), auditory, lungs chronic disease, low immune system, and frequency of genetic abnormality, and sometimes those disturbances need special treatment from the hospitals. Based on preliminary study conducted in Kulon Progo Regency during the last three years, the result found increasing incidents of LBW from 2012 until 2014.

Objective: The objective of the study was to investigate the correlation between education and parity and women knowledge on the treatment of babies with low birth weight at Wates Hospital.

Method: The study was correlative descriptive study using cross sectional approach. The populations used in the study were women who had babies with LBW. Quota sampling was used as sample taking technique with 60 respondents. Data collecting technique used questionnaires. Chi Square was used as the method of analysis test.

Result: The result of the study showed higher education level of the respondents could increase the knowledge on the treatment of babies with low birth weight. *Primipara* parity could increase the knowledge on the treatment of LBW babies. It is expected that women who have LBW babies to increase their knowledge about LBW treatment especially the knowledge about how to breast feed correctly.

Keywords : knowledge, LBW

INTRODUCTION

Low birth weight (LBW) babies are those who have birth weight less than 2500 grams. According to WHO (2003), low birth weight is divided into three groups, namely prematurity, Intrauterine Growth Restriction (IUGR), and both. Low birth weight (LBW) is often used as an indicator of IUGR in developing countries because of the unavailability of nutritional information. LBW is different from prematurity because

LBW is measured from the weight or mass, whereas prematurity is measured by the age of the pregnancy. LBW is not necessarily, while prematurity is also not necessarily LBW if the birth weight is more than 2500 gram. However, many cases of these two conditions occur together because the causes are related (Health Department of Lumajang, 2013).

According to research conducted by Chomitz et al in 2007, the factors that influence the occurrence of low birth weight are low maternal education, maternal age with less than 20 years old and over 35 years, low family income, smoking pregnant women, consuming alcohol during pregnancy, multiple birth, low maternal height, have a history of infertility, stress during pregnancy, weight gain, pregnant women are lacking, sexually transmitted diseases, pregnant women with a history of hypertension or diabetes, history of low birth weight in previous pregnancies, mothers with disabilities or anomaly, and unexpected pregnancies.

Mother's knowledge in treating LBW babies becomes fundamental and very important in supporting the success of baby care. However, with the existing limitations mothers often perform less supportive such as not being involved in the care of LBW. Mother's behavior who is not involved in the care of babies is indicated as the cause of several conditions such as unexpected, poor physical condition, and the ignorance of mothers towards the treatment of LBW (Levene et al, 2000).

The treatment of LBW babies is mostly suggested through Neonatal Intensive Care Unit (NICU), which has significant impact on the mother, and this can lead to long-term consequences on the family. The crisis of low birth weight and the stigma that occurs in severely ill infant's birth is aggravated by mother and baby separation due to the care in the NICU. It needs an effort to overcome the sadness and sense of loss experienced by parents responding to their questions optimally and facilitates their ability to adapt (Victor et al, 1997). Babies with low birth weight who are treated to the NICU have risk of *nosocomial* infections caused by the installation of tools that help the respiratory system and digestive system of the baby (Rimon et al, 2015). LBW care is complex and requires expensive infrastructure and experts with high expertise and capability, so it often disturbs the family (Mew et al, 2003).

Kangaroo care method is an effort to decrease the morbidity of infants with low birth weight. This method can meet the basic needs of infants with low birth weight which provide warmth, exclusive breastfeeding, providing protection from infection, stimulation, and increase the bonding between mother and baby. Kangaroo care method not only can replace the incubator's role in the management of infants with low birth weight but also can provide more advantages (HTA Indonesia, 2008). Kangaroo care method is one of the interventions to reduce mortality on babies with LBW in accordance with the Decision of the Minister of Health No. 203 / Menkes / SK / III / 2008.

LBW has very serious impact in the long term. The disturbances that can arise including developmental disorders, eyesight (retinopathy), auditory, chronic lung disease, the increase in morbidity and frequency of congenital abnormalities and low immune system. Direct complications that can occur immediately are hypothermia, fluid or electrolyte disturbances, *hyperbilirubinemia*, respiratory distress syndrome, patent *ductus arteriosus*, intra-ventricular hemorrhage infection apnea of prematurity, and anemia. The impacts that occur can be minimized by the provision of quality health care. However, costs, limited resources, and the high cost of high-tech treatments are needed for LBW (Nirmala et al, 2006).

Based on preliminary studies conducted, the data show that the incidence of low birth weight is the second highest in Yogyakarta happens in Kulon Progo district. In 2012 in Kulon Progo district, there were 317 (5.6%) infants with low birth weight; in 2013 there were 341 incidences (6.4%) of infants with low birth weight; and in 2014 there were 377 (7.1%) cases of infants with low birth weight (Yogyakarta Health Office, 2015).

RESEARCH METHODS

The research is descriptive correlation research that is used to determine the relationship between two variables (Arikunto, 2002). The study aimed to determine the correlation between education and mother's parity and knowledge about the treatment of low birth weight.

The data collection method is based on cross sectional approach in which data including independent variables and the dependent variable will be collected and measured at the same time (Notoatmodjo, 2002). The study took the data of the correlation between education and mother's parity and mother's knowledge about the treatment of low birth weight. The data collection is done at the same time at Wates Hospital in 2015.

The populations in the study were mothers who had babies with LBW. The samples of the study were mothers who had babies with low birth weight history and had visitation on 10th day until the 30th day to the Children poly at Wates Kulon Progo Hospital. Quota sampling method is a technique for determining the sample of the population that had certain characteristics to the number (quota) desired (Sugiyono, 2012). Calculation of the sample obtained samples of at least 59 respondents with the following criteria:

1. Mothers who had low birth weight infants who had visitation to children poly of Wates hospital
2. Mothers who are willing to be the subjects of research

The research instrument of the data collection instrument adapted to the purposes and objectives of researchers (Notoatmodjo, 2012). Data collection research used research instrument. Research instrument used was questionnaire or a list of questions relating to the recording and so forth (Purwanto and Sulistyastuti, 2007). The instrument used in this study is an instrument of mother's knowledge of LBW.

Data were collected by using a questionnaire. Before filling out the questionnaire, the respondents were described the procedures for filling and usefulness of the questionnaire, then signed the informed consent sheet. The questionnaires were distributed and would be filled by the respondent, assisted by investigators. Questionnaires to measure knowledge about the treatment of LBW consist of 43 questions divided into two categories: "right-wrong". Measuring tool that is used to measure the level of mother's knowledge about the treatment of LBW used the test.

After being conducted the validity test using the Product Moment correlation, the results for the questionnaire of mother's knowledge about the treatment on LBW used 43 item questions, but there were 5 items that could not be used. Those items were dropped or not used in the study, but rest of the questions could represent all the unused questions. Therefore, there were 38 valid questions that could be used. The reliability test used Cronbach Alpha on questionnaire of mother's knowledge about the treatment of LBW. The result of the instrument was reliable.

RESULTS AND DISCUSSION

Descriptive analysis was aimed to identify trends of mother's education level and mother's parity with the knowledge about the treatment of LBW infants.

A. Mother's Knowledge about the Treatment of LBW

The data of mother's knowledge rate about the treatment of LBW were taken from 38 questions. The category of mother's knowledge level of the treatment on LBW can be seen in the following table:

Table of Frequency Distribution of Mother's Knowledge Rate about the Treatment of LBW

No.	Category	Frequency	Percentage
1.	Low	0	0%
2.	Moderate	18	30%
3.	High	42	70%
Total		60	100%

Source: Primary Data, 2016

Based on Table 4.4 above it can be seen that the mother's level of knowledge on the treatment of LBW was mostly included in high category with 42 respondents (70%) and moderate category with 18 respondents (30%). Based on the data in the table, there was no respondents that could be included in low category.

B. Mother's Education

The data of mother's education was taken from data of respondent's characteristics. Mother's education is categorized into two categories: basic education and further education. The category of mother's education can be seen in the table below:

Table of Frequency Distribution of Mother's Education

No.	Category	Frequency	Percentage
1.	Basic Education	9	15%
2.	Further Education	51	85%
Total		60	100%

Source: Primary Data, 2016

Based on Table 4.6 above it can be seen if most respondents who had high education levels with 51 respondents (85%) and basic education with 9 respondents (15%).

C. Mother's Parity

The data of mother's parity was taken from the data of characteristics of the respondent to determine the mother's experience in treating the baby. Mother's parity is categorized into two categories: *primipara* and *multipara*. The category of mother's parity can be seen in the table below:

Table of Frequency Distribution of Mother's Parity

No.	Category	Frequency	Percentage
1.	<i>Primipara</i>	43	71.7%
2.	<i>Multipara</i>	17	28.3%
Total		60	100%

Source: Primary Data, 2016

Based on Table 4.7 above it can be seen if most respondents are in the first experience in caring LBW baby: the *primipara* with 43 respondents (71.7%) and *multipara* with 17 respondents (28.3%).

D. The Correlation between Knowledge about the Treatment of LBW

Table of Correlation between Education and Knowledge about the Treatment of LBW

No	Knowledge Level Education	High		Moderate		Total	
		f	%	f	%	f	%
1	Further	39	65	12	20	51	85
2	Basic	3	5	6	10	9	15
	Total	42	70	18	30	60	100

Source: Primary Data, 2016

Based on the table above it can be stated that Wates Hospital obtained mothers with good knowledge rate of the treatment of LBW and mothers with higher education were 39 people (65%), while the good level of knowledge on the treatment of LBW and mothers with primary education were 3 people (5%). In the present study, there was no respondent who had low knowledge rate.

To determine the relationship between education and the level of knowledge about the care of LBW babies, statistical analysis using Chi Square correlation test was conducted. The results showed the value of $p = 0.016$ is greater than 0.05 ($0.05 < 0.016$), so H_a is accepted, so it can be concluded that there is a relationship between mother's education level and the knowledge about the treatment of babies with LBW.

Based on the results, there is a relationship between the mother's education and the knowledge of mothers on the treatment of LBW babies. In accordance with research conducted by Puspaningrum and Setyorini in 2013, there is a relationship between level of education and the level of a person's knowledge. The higher level of education of people, the easier for them to receive information, so the more knowledge they have. Conversely, less knowledge will hinder the development of attitudes towards healthy life changes. Education forms a particular value to humans, especially in opening their mind and accepting new things and also how to think objectively.

The basic concept of education is a particular learning process in which there is a process of growth and development or a change towards more mature and better individual, group or community. The education level owned by women is not only

beneficial to the expansion of women's knowledge, but it also becomes contribution in caring for the family, especially children. Mother's education is the main capital in supporting the family economy, and it also plays a role in parenting and child care. The increase levels of education will facilitate a person to receive information including how to care babies in order to improve knowledge about baby care which will lead to a positive nature in the field of health.

Someone who has a high level of education will significantly have good knowledge. Mothers with higher education will respond rationally to the incoming information and will think the extent of the benefits that they will get. Therefore, mothers who have higher education will be more receptive to new things and will be able to receive information more easily.

E. Correlation between Knowledge about the Treatment of Babies with LBW

Table of Correlation between Knowledge about the Treatment of Babies with LBW

No	Knowledge Level Parity	Good		Moderate		Total	
		f	%	f	%	f	%
1	<i>Multipara</i>	16	26,7	1	1,7	17	28,3
2	<i>Primipara</i>	26	43,3	17	28,3	43	71,7
	Total	42	70	18	30	60	100

Source: Primary Data, 2016

Based on the above table it can be said that the data in Wates Hospital showed that mothers with good knowledge on the treatment of LBW and *primipara* mothers were 26 people (43.3%), while the moderate knowledge on the treatment of LBW and *multipara* mothers were 3 people (1.7%).

To determine the relationship between mother's parity and the level of knowledge about the treatment of LBW infants, statistical analysis using Chi Square correlation test was performed. The results showed the value of $p = 0.001$ is greater than 0.05 ($0.05 < 0.001$), so H_a is accepted, so it can be concluded that there is a relationship between mother's parity and the level of knowledge about the treatment of babies with LBW.

Based on the result, there is a relationship between *multipara* parity with knowledge of LBW treatment. The results of this study are consistent with a research conducted by Hastuti in 2015 mentioning about breastfeeding experience and breastfeeding process. The experience of breastfeeding has positive relationship between the duration of breastfeeding in the previous children.

This study is in line with research conducted by Mabud et al (2014) mentioning that there is a relationship between parity and breastfeeding. Parity is very influential on the acceptance of one's knowledge. The more experience the mothers, the easier their acceptance of knowledge. Something that people experience will add the knowledge that they obtain. Experience as a source of knowledge is a way to acquire the truth of knowledge repeating back the acquired knowledge in solving the problems faced in the past.

CONCLUSIONS AND SUGGESTION

Based on the analysis, it can be concluded that mothers with higher education can increase the knowledge about the treatment of babies with LBW. Mothers who have first experience of childbirth may increase the mother's knowledge about the treatment of LBW.

It is expected that respondents can improve their knowledge on the treatment of babies with LBW in particular about the knowledge of how to breastfeed correctly.

BIBLIOGRAPHY

STUDY ON CHILDREN'S NUTRITION STATUS AND OBESITY TRENDS AMONGST PRE-SCHOOL CHILDREN IN YOGYAKARTA

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ABSTRACT

Background: Obesity is now becomes a global problem. The foundation for lifelong good health is laid in childhood. Nutrition status is an important period in toddler's growth and development. In Indonesia The prevalence of malnutrition is still high and and in the same time obesity data is rising. Childhood obesity is related to numerous risk factors for Cardiometabolic disease that track from childhood into adulthood, Including high blood pressure and lipids and pycology problems. Schools have a rich opportunity to improve health and tackle youth nutrition's problem at the ideal point in time.

Objective: The objective of this study was to estimated the nutrition status and obesity trends amongst school children under 6 years of age.

Research Methods: This cross-sectional study was conducted on pre-school children between 5-6 age on Budi Mulia Dua (BMD) Seturan-Yogyakarta. The total number of pre-school children who participate in this study was 113, 41 females and 71 males. Samples were total sampling. A self-administered pre-coded questionnaire was used. Height and weight were measured and the weight-for-height index with the WHO-NCHS standard was used for assessing nutritional status. A questionnaire was used for measuring determinant status. Data was analyzed on SPSS version 11. Descriptive statistical analysis was performed. Chi square test with a P value <0.05, was used to compare the prevalence rates.

Results: The results showed most of the school children in normal nutritional status (44.2%). Prevalence of obesity and over-weight recorded were greater and higher in boys 22 (19,5%) compare to girls 18 (15,9%). Greater child's age were asociated with nutritional status in children of preschool age (P = 0.023). There were no significant relationship between sex (P = 0, 444), number of siblings (P = 0.682) and those person who live at home beside parent (P = 0360) with nutritional status in children of preschool age.

Conclusions&Suggestion: The study finds a higher prevalence of overweight than obesity amongstpre-school children. Boys were found more prevalent to obesity. There is an urgent need for intervention to prevent and control obesity and its consequences amongst children in Yogyakarta. These strategies can be initiated at home and in preschool institutions, schools or after-school care services as natural setting for influencing the diet and physical activity and at home and work for adults

Keywords: Nutritional Status, Pre-school children, WHO-NCHS standard, Obesity

A. INTRODUCTION

The highest prevalence rates of childhood obesity have been observed in developed countries, however, its prevalence is increasing in developing countries as well. Indonesia is facing a double burden (double burden) in the nutrition problem. That is the problem of malnutrition and overnutrition. The prevalence of children under five years old (toddlers) with the status of malnutrition of 17.9%. On the other hand prevalence of child overweight are 5% -25% as well as children in obese (Risksdas 2010). In Saudi Arabia, one in every six children aged 6 to 18 years old is obese. Furthermore, in both developed and developing countries there are proportionately more girls overweight than boys, particularly among adolescent

Childhood obesity can also lower due to the activity level of intelligence and creativity of children to decrease. Research of C.Bauer et al (2013) mention of obese children showed a decrease in the performance of the executive in neuropsychological evaluation, the findings contribute to the notion that there is a relationship between BMI, executive cognitive performance and brain structure (Pediatric Obesity Journal, 2012). Obesity clearly showed in every age, but most of showed in first year of age, 5-6 years and during teenager (Nelson, 2000).

Although the mechanism of obesity development is not fully understood, it is confirmed that obesity occurs when energy intake exceeds energy expenditure. There are multiple etiologies for this imbalance, hence, and the rising prevalence of obesity cannot be addressed by a single etiology. Genetic factors influence the susceptibility of a given child to an obesity-conducive environment. This will relate to family factors, the level of economic, social and cultural factors, education, and environment. A balanced diet and proper food material selection as well as the manner necessary to consume nutrition (Sulistyoningsih, 2011).

The population of Indonesia is going through a nutrition transition where customary and traditional food is being replaced by fast food which is usually high in fat, sugar and salt. Fried foods and carbonated drinks are now common edibles in the country (Young VR, 2001). More on child nutrition is also one of the triggers of obesity at age adults and at risk of suffering from degenerative diseases such as hypertension, diabetes, heart disease and so forth (Santoso, 2009).

Prevention may include primary prevention of overweight or obesity itself, secondary prevention or avoidance of weight regains following weight loss, and prevention of further weight increases in obese individuals unable to lose weight. "Healthy school program" is one program that is issued by the Government of the US in an effort to school health, namely, setting the standard of food provided to schoolchildren, canteens healthy, and make sure to eat healthy foods in accordance kabutuhan calories children need (Nutrition Journal, 2010). Nutrition education is a school-based nutrition education efforts are effective and efficient to achieve large segments of the population of school children, because most students spend their time at school. Very little information is currently available on obesity trends in childhood.

The monitoring program through monthly weighing the nutritional status of children under five on a regular basis. And record the results of school is always wary of nutritional development of their students. (Martorell, 2007). Subjects of this study were students of the pre-school children PG and TK Budi Mulia Dua Seturan (BMD) in Yogyakarta. Data were collected using a questionnaire to 114 students boys and girls PG & TK BMD Seturan in Yogyakarta. This study aims to estimated the nutritional status and trends of obesity and overweight of preschool children in Yogyakarta.

Research Methodology

This cross sectional study was conducted in boys and girls pre-school children in Yogyakarta age between 5-6 years. Subjects of this study were all class of pre-school children of the school PG and TK Budi Mulia Dua Seturan (BMD) in Yogyakarta. Anthropometry conducted to assess BB, TB school students. Nutritional status in this study is determined by using an index of weight for height (W / H) and use a standard table with a threshold NCHS Standard Deviation (SD) referral health ministers and WHO with the interpretation as follows:

- a. Overweight: $> +1 - < +2$ SD
- b. Obesity: $> +2$ SD
- c. Normal: > -2 s / d $+2$ SD
- d. Underweight: < -2 SD s / d -3 SD

Data were collected using a questionnaire to 113 students playgrup & TK BMD Seturan Yogyakarta. This study aims to identify the nutrition status and obesity trends of pre-school children in the PG and TK BMD Seturan Yogyakarta.

RESULTS & DISCUSSION

Table. 1. Distribution Frequency of Nutritional Status Pre-school Children PG and TK BMD-Yogyakarta Seturan 2014

Nutrition Status	<i>F</i>	%
Overweight	31	27.4
Obesity	28	24.8%
Normal	50	44.2
Underweight	4	3,6
Total	113	100

Source: Secondary data 2014

Most of children was in a normal nutritional status that as many as 50 children (44.2%), followed by as many as 31 children overweight (27.4%), 28 obese children (24, 8%), and underweight 4 children (3.6%). Differences in nutritional status has a different effect on each child's development. Normal nutrition status is the circumstances in which the intake of nutrients appropriate for the use of body activity. Reflection award is alignment between weight gain with age.

If the balanced nutrition that is consumed is not met, the achievement of growth and development of children, especially good motoric development will be hampered. Some of the things that cause the body's nutritional deficiencies are due to food consumed less or lower quality even both, addition of nutrients consumed fail to be absorbed and utilized by the body.

Overweight is a condition due to excess food consumption. This situation is related to the excess of energy and lack of physical activity. Excess energy in the body, is converted into fat and deposited in certain places. Research results show that the proportion of respondents who are obese ($> +2$ SD) of 24.8%. State 'obese' in children may be a significant risk factor for obesity in adulthood, other than that obesity in children can be medical and psychosocial problems. Even obesity in every facet of life as a result of genetic and environmental influences. obesity is a complex disease for which were related heredity, food choices, physical activity, influence of the media, the sensation of taste, availability for sports, race, and family and social influences. The

main risk factors that lead to obesity are behavioral factors namely unhealthy diet coupled with consumption of fiber (fruits and vegetables) are not supplicants, physical inactivity, and smoking.

Table 2: Distribution Frequency Characteristics of Children by Age, Gender, siblings, person who stayed at home beside parents in PG and TK in BMD Seturan Yogyakarta 2014

Variable	F	%
1. Child Age		
a. < 5 tahun	17	15
b. > 5 tahun	96	85
2. Sex		
a. Girls	41	36.3
b. Boys	72	63.7
3. Sibling		
a. little (< 4 persons)	104	92
b. More (> 4 persons)	9	8.2
4. Person who live at home beside parent		
a. Grand Mother	31	27.4
b. Care giver/ Nanny	54	47.8
c. Rellative	21	18.6
d. Mother in Law	7	6.2
Total	113	100

Source: Primary Data 2014

Table 2 illustrates that most of the school children was in age >5 years old; 96 children (85%) and classified as age of the children under 5 years as many as 17 children (15%). From 113 of schoold children, most of them was 72 boys (63.7%), follow it by 41 girls (36.3%). Greater children who had siblings in the category of small (<4 persons) 104 children (92%) and the number of sibling in catagory more (>4 persons) 9 children (8.0%). Most of children living with their caregiver/ nanny that as many as 54 children (47.8%) and least with the mother-in-law as much as 7 children (6.2%). Age factor is important to determine the nutritional status.

The results of the measurement of height and weight were accurately must be accompanied by precise age determination. To achieve good growth and development required adequate nutrition. Age is the measure of success in the fulfillment of nutrition for children are indicated by weight and height. Nutritional status is also defined as health status generated by the balance between the needs and nutrient input. The study nutritional status is a measure that is based on biochemical and anthropometric data and dietary history (Beck, 2000). This development continues after birth until the age of 4 or 6 years, the fastest period of the first 6 months of life. Thus the growth of brain cells lasts until the age of 6 years. Nutritional deficiency or excess nutrients in under 5 years will cause the brain cells was reduced 15% - 20%, so that the child later in life have the quality of the brain about 80% -85%. Gender take effect on nutritional status in children of preschool age. Obesity is more common in women, especially as children, this is due to endocrine factors and hormonal changes (Wayan, 1995). Several female hormones affect the growth of fat tissue under the skin, which is why women are more prone to fat than men.

Cross Tabulation Tabel.3 Relationship between Age, sex, number of siblings, person who live at home beside parents with nutritional status of preschool children PG and TK in BMD Seturan Yogyakarta, 2014.

Variabel	Nutrition Status										P _{value}
	Under weight		Normal		Overweight		Obesitas		Total		
	F	%	F	%	F	%	F	%	F	%	
1. Age											
a. <5 years old	1	0.9	13	11.5	3	2.7	0	0.	17	15.0	0.023
b. More >5 years	3	1.8	37	32.7	28	24.8	28	24.8	96	85.0	
2. Sex											
a. Boys	2	0.9	31	27.4	22	19.5	18	15.9	72	63.7	0.444
b. Girls	2	1.8	19	16.8	9	8.0	10	8.8	41	36.3	
3. Siblings											
a. little (<4 persons)	3	2.7	44	38.9	29	25.7	27	23.9	104	92.0	0.682
b. More (>4 persons)	1	0.	6	5.3	2	1.8	1	0.9	9	8.0	
4. Person who live at home beside parent											
a. Grand Mother	1	0.	15	13.3	6	5.3	9	8.0	31	27.4	0.360
b. Care giver/	1	0.9	22	19.5	15	13.3	16	14.2	54	47.8	
c. Rellatives	1	0.9	11	9.7	7	6.2	2	1.8	21	18.6	
d. Mother in Law	1	0.9	2	1.8	3	2.7	1	0.9	7	6.2	

Source: Primary data 2014

By age of group showed that every group status in the group aged > 5 years; normal nutrition as many as 37 children (32.7%), overweight 28 children (24.8%), 28 obese children (24.8%), and underweight was 4 children (3.6 %). Statistical test results there was a relationship between the child's age and nutritional status in children of preschool age ($P = 0.023$). Pre-school age children is growing at the speed of genetic respectively, with height differences are already apparent. There are some children who appear to be relatively shorter or higher. Or grow more slowly than their peers. Besides differences in children's growth can also be influenced by many factors such as diet, activity patterns. The body composition of children of school age are also beginning to change. The composition of the fat begins to rise after a 6 year old boy, which is required for the preparation of the pubertal growth spurt.

In boys, most of them in normal category as many as 31 children (27.4%), overweight as many as 22 children (19.5%), and obesity as many as 18 children (15.9%). And only 4 children (3.6%) malnutrition / under weight and bedada in women. Subjects in this study most is the group of men that is numbered 72 (63.7%). Seen that the tendency of overweight and obesity were in a group of men and malnutrition in women. Hypothesis test results stating there is no significant relationship between sex of the respondents to the nutritional status of preschool children ($P = 0,444$). The results of this study are consistent as that of the Proper et al. (2006) found that males were significantly more likely to be overweight or obese than women, because boys tend to spend more time to play games. Aiberli et al (2010) in Switzerland. Stating there were 6.2% boys were obese, and 4.2% of girls.

The number of sibling in category little (<4 persons). These results can be explained that the number of family members is not significantly associated with the nutritional status of children. that 29 children (25.7%) to overweight, as many as 27 children (23.9%) of obesity, as many as three children (2.7 %) malnutrition and 1 child (0.9%) malnutrition. Likewise, the results of research Jus'at (2009) which states different growth patterns of children with the number of siblings of children in the

family and the number of siblings only seen in less than 7 months of age or at the beginning of a child's life,

Matondang, M (2007) in his research put the number of siblings associated with nutritional status because of the number of siblings a lot and age range with relatives is not too far then in the presentation of the food and food intake is same, this could affect the nutritional status of children.

Children with normal nutritional status, obesity, overweight, most in the category of living with a caregiver as many as 22 children (19.5%), and least cared for by the mother-in-law, namely 1 (0.9%). Statistical test results obtained $P = 0360$ where there was no correlation between people who take care of at home in addition to maternal nutritional status in children of preschool age. In this case the possibility of persons who live at home beside parent in providing intake consumed by children will be the same as those who gives by parents (Ashley, 2012).

Hadi (2005) stated that working mothers have limitations in parenting, parenting done by a maid or a grandmother, which had a limited knowledge in the provide of balance food and physical activity needed. In addition to working mothers have a sense of guilt while they can not spend time with children, so that in every meeting seeks to fulfill his desires (eating in restaurants, buying food or drinks, watch movies and play the games favored by children.

CONCLUSION

Overweight children are more likely to have cardiovascular and digestive diseases in adulthood as compared with those who are lean. It is believed that both over-consumption of calories and reduced physical activity are mainly involved in childhood obesity. Apparently, primary or secondary prevention could be the key plan for controlling the current epidemic of obesity and these strategies seem to be more effective in children than in adults. A number of potential effective plans can be implemented to target built environment, physical activity, and diet. These strategies can be initiated at home and in preschool institutions, schools or after-school care services as natural setting for influencing the diet and physical activity and at home and work for adults

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THE COMPARATIVE STUDY: EFFECTIVENESS OF GINGER TEA AND GINGER SWEET TO TREAT EMESIS GRAVIDARUM

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ABSTRACT

Introduction: Ginger is one of the non pharmacological therapies to decrease nausea and vomiting.

Purpose: To find out the effectiveness of ginger tea and ginger sweet to overcome emesis gravidarum.

Method: Experimental research design (two group pre-post test design). 49 pregnant women were divided into two groups randomly. Data were analyzed using Paired T-test and Mann-Whitney Test at significance level 0.05.

Result: The ginger tea group, the average reduction in the scale of nausea was 2.79 ($p < .001$) and the reduction in the frequency of vomiting was 1.46 ($p < .001$). Whereas, the ginger sweet group, the average reduction in the scale of nausea was 2.64 ($p < .001$) and the reduction in the frequency of vomiting was 1.92 ($p < .001$). The comparison between two groups in lowering the nausea scale was ($p = .573$) and frequency of vomiting was ($p = .014$).

Keyword: Ginger Tea, Ginger Sweet, Emesis Gravidarum

INTRODUCTION

Every pregnancy will cause physiological and psychological changes in women's body. These changes result in disruption or inconvenience to the pregnant woman so they should receive a quality service that they can walk normally and comfortably. One of the inconveniences often occurred in the early pregnancy is nausea and vomiting. The number of that occurrence is very high, about 60-80% in primigravida and 40-60% in multigravida. Nausea and vomiting often occur early in the morning so it is known as morning sickness, but it can also occur during the day and night or even happen at any moment.

According to Tiran (2008), nausea and vomiting in pregnancy are influenced by some factors, such as the change of liver glycogen, the increasing of chorionic gonadotropin hormone and the alteration of estrogen hormone, the occurrence of allergies due to the influx of villi khorialis into the blood circulation, the change of metabolic system due to pregnancy, the declining of mother resistance, the ability of

coping to adapt the changes that occur during pregnancy as well as emotional or psychological factors.

Emesis gravidarum which is not treated properly can be more serious if nausea and vomiting occur continuously (hyperemesis gravidarum), this condition needs special treatment because it can give bad impacts on pregnant women and the fetuses. The mother can be dehydrated and the fetus will experience growth restriction (IUGR), premature birth, congenital anomalies, or even death while still in the womb (IUFD) and after birth (Wiknjosastro, 2006). About 5% of pregnant women experiencing nausea and vomiting required treatment for fluid replacement and correction of electrolyte imbalance (Supriyanto, 2009). Emesis gravidarum can be treated with pharmacologic therapies such as drug delivery antiemetic, antihistamine and vitamin B6 (Heinrich, 2009). Nonpharmacologic therapy is also effective for treating nausea and vomiting in pregnant women, among other herbs (ginger, peppermint), essential oil aromatherapy, relaxation therapy, and psychological therapy (Tiran 2008). According to Hunter (2005) and Tiran (2008), ginger which is processed into ginger sweet or hot ginger can help reduce nausea and vomiting during pregnancy. The ingredients of hot ginger have been proved that it has antiemetic which is effective. The power of these compounds lead to the wall of the stomach rather than the central nervous system. Beside being effective antiemetic therapy to prevent nausea and vomiting in pregnancy, ginger is also effective for preventing nausea and vomiting in reproductive tract or gynecological surgery. Antiemetic effects are comparable with metoclopramide (Wijayakusuma, 2007).

Three randomized controlled trial study proved that ginger is effective for nausea and vomiting in pregnancy. Smith C, et al (2004) reported the results of his research that the effectiveness of consuming 1.05 g of ginger is the same as consuming vitamin B6. The research of Biswas, S.C, et al (2011) compares the combination between ginger extract and doxylamin 10 mg and pyridoxin 10 mg which showed that there is no difference. Similarly, the research results of Vutyavanich T, et al (2001) showed that by providing oral ginger 1 g per day for 4 days as the experimental group compared to the control group (placebo), the result is that there is a significant decrease of nausea in the ginger group compared with the placebo group ($p=.014$) and also there is a significant decrease of vomiting in the ginger group compared with the placebo group ($p<.001$).

Ginger is safely to be consumed by pregnant women if it does not exceed 1 gram per day. Excessive dose may increase the risk of miscarriage. Although ginger is effective for nausea and vomiting in pregnancy, but in daily practice generally people using antiemetic drugs for the treatment of nausea and vomiting, there are only minimal of women that use herbs such as ginger. Researchs on ginger that were often held are by using the extract of ginger in capsule and kinds of beverage such as hot ginger. By the reasons mentioned before, the researcher is interested in conducting a comparative study about the effectiveness of ginger tea and ginger sweet to overcome emesis gravidarum. The results are expected to contribute information for health professionals and the general public to use ginger as a treatment for nausea and vomiting in pregnancy.

METHOD

This research used experimental research design (two group pre-post test design) with Randomized Control Trial approach. This research was conducted from January to June 2016 in the Midwifery Clinical Practice in Paciran - Lamongan.

The subject of the initial research was 50 pregnant women. One woman was dropped out because she was not regularly consumed ginger tea till the end of the research; therefore the subject was 49 pregnant women. The criteria of sample were they are primigravid and multigravida women, the pregnancy is held less than 20 weeks, there is no complaints of bleeding, they are not hypersensitive to ginger, they are dutifully of taking ginger accordance with SOP and not taking medicines that can reduce nausea and vomiting such as vitamin B6, antiemetic, antihistamine, and even complementary therapies. Samples were randomly divided into two groups, they are groups of ginger tea and ginger sweet. Each group got 3 times of therapy per day with a dose of ginger @250 mg during 3 days of treatment.

The variables observed in both groups were nausea scale and vomiting frequency. Observation was carried out 2 times. The first observation was a day before being given the therapy and the second observation was a day after being given therapy for 3 days. To measure the scale of nausea used visual analog scale, and to measure the frequency of vomiting used a checklist sheet. Data were analyzed using SPSS version 18.0 for windows in the level of significance of 0.05. The hypothesis testing of the effectiveness between ginger tea and ginger sweet to overcome nausea and vomiting

used paired T-test (normal data distribution), and to examine the differences in the effectiveness of ginger tea and ginger sweet to overcome nausea and vomiting used Mann-Whitney test since the data distribution was not normal.

RESULTS AND DISCUSSION

Table 1
The Differences of Nausea Scale Before and After Being Given Ginger Tea and Ginger Sweets.

Groups	The mean of nausea scale		The mean of decrease	p value
	Pretest	Posttest		
Ginger Tea	7.08	4.29	2.79	<.001
Ginger Sweet	7.72	5.08	2.64	<.001

The results of analysis using Paired t-tests in Table 1 showed a decrease of nausea scale before and after being given ginger. The mean of decrease in nausea scale of the respondents after being given ginger tea was 2.79 points with $p < .001$, and 2.64 points with $p < .001$ in respondents after being given ginger sweet. It means that the nausea scale of respondents fell significantly after being given ginger tea or ginger sweet (ginger tea and ginger sweet are effective to overcome nausea in pregnancy).

Table 2
The Difference of Vomiting Scale Before and After Being Given Ginger Tea and Ginger Sweets.

Groups	The mean of vomiting scale		The average of decrease	p value
	Pretest	Posttest		
Ginger Tea	2.42	.96	1.46	<.001
Ginger sweet	3.00	1.08	1.92	<.001

Table 2 was the result of analysis using Paired t-tests showing that the mean of vomiting frequency of the respondents after being given ginger tea reduced as much as 1.46 (1-2 times a day) with $p < .001$. The mean of vomiting frequency of the respondents being given ginger sweet decreased as much as 1.92 (almost 2 times a day), with $p < .001$. The decrease of vomiting frequency in both groups was very significant. It means that ginger tea and ginger sweet is effective to overcome vomiting in pregnant women.

Table 3

Test Results using Mann - Whitney: The Effectiveness Difference of Ginger Tea and Ginger Sweet to Overcome Nausea and Vomiting

Variable	Mean Rank		P value
	Ginger Tea (n=24)	Ginger Sweet (n=25)	
Nausea Scale	26.04	24.00	.588
Vomiting Frequency	20.46	29.36	.014

Table 3 explained that the decreasing of nausea scale in the group being given ginger tea and ginger sweet group had no significant difference ($p = .588$), whereas the decreasing of vomiting frequency in the group being given ginger tea and ginger sweet group had a significant difference ($p < .014$).

Ginger is a herbal treatment that has long been used in traditional medicine Phytotherapy in Europe and China because of its karminatif. According to Hunter (2005), ginger has many benefits such as to settle morning sickness. The compounds in ginger were proved to have potent activity of anti-vomiting so that ginger is effectively used in antiemetic therapy to prevent nausea and vomiting in pregnancy. For the purposes of treatment, ginger can be served in some processing, including hot ginger, ginger tea, ginger sweets or ginger biscuits.

This study used ginger tea and ginger sweet as the intervention being given to the two groups. The results showed that the group of pregnant women after being given ginger tea experienced reduction in nausea and vomiting. The mean reduction of nausea scale was 2.79 and vomiting frequency was 1.46. The decrease of nausea scale and vomiting frequency was very significant indicated by the score of $p < .001$. Groups of pregnant women being given ginger sweet were also able to decrease nausea and vomiting significantly where the mean of reduction in nausea scale was 2.46 and vomiting frequency was 1.92 with score of $p < .001$.

The results of this study are supported by several previous studies, including a study of Vutyavanich T, et al (2001) entitled "Ginger for nausea and vomiting in pregnancy: a randomized, double-masked, placebo-controlled trial", with respondents of pregnant women in less than 17 weeks. The results showed that there is a significant decreasing of nausea scale in the ginger group (2.1 ± 1.9) compared with the placebo group (0.9 ± 2.2 , $p = .014$) and also a significant decreasing of vomiting frequency in the ginger group (1.4 ± 1.3) compared with the placebo group (0.3 ± 1.1 , $p < .001$).

Saswita, et al (2011) in his research on the effectiveness of ginger to reduce morning sickness in pregnant women on the first trimester suggests that ginger is effective in reducing nausea and vomiting during the first trimester of pregnancy in which the average decrease nausea and vomiting before being given the intervention was 3.87 and after being given the intervention was 2.78 (p value=.014). A similar study by Hasanah U, et al (2014) that compares the experimental group (ginger) and control group (water and sugar) in pregnant women in the first trimester resulted mean difference of morning sickness frequency before and after being given intervention in the experimental group was -1.47 (decrease), while in the control group was 0.71 (increased) so that there are significant differences in the decrease of morning sickness frequency in both groups (p =.010).

Budhawaar (2006) says that ginger containing at least 19 compounds that are useful for the body, and one of them is gingerol. This compound is the main compound that has been shown to have potent antiemetic activity, its mechanism is by blocking serotonin so that the muscles of the digestive tract that contract will be loosened and weakened, and the positive impact was that nausea would be reduced. The process of vomiting begins with salivation and deep inspiration, at that time the sphincter esophagus will recharge, larynx and soft palate will be lifted and the epiglottis will be closed. Then the diaphragm will contract and decrease, the contraction of the abdominal wall will result in pressure on the stomach so that the content will be removed or thrown up (Lie, 2004). Thus, if the contraction of the abdominal wall weakens after being given hot ginger or ginger sweet, then in addition to reduced nausea, it will also reduce vomiting. Therefore, ginger can be used for the treating cases of morning sickness effectively.

CONCLUSION

Ginger tea and ginger sweets are effective to treating morning sickness (nausea and vomiting) in pregnancy. The effectiveness of ginger tea and ginger sweet to overcome nausea is not different. Otherwise, to overcome vomiting, ginger sweet is more effective than ginger tea.

The results of this research can be used as study materials of Pregnancy Care Learning, especially on the treatment of "nausea and vomiting" in pregnancy. For health workers, it is expected to use ginger as a treatment of non-pharmacologic therapy to

cope with morning sickness by improving health education to pregnant women experiencing nausea and vomiting to consume ginger tea or ginger sweet according to the dosage recommended in which not more than 1 gram per day.

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EFFECT OF CONSUMPTION OF GUAVA ON HEMOGLOBIN LEVELS AND FERRITIN LEVELS OF PREGNANT FE IN SAWIT II HEALTH CARE, BOYOLALI DISTRICT

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ABSTRACT

Background Anemia in pregnancy is a condition in pregnant women with hemoglobin levels less than 10.5 gr/dl and ferritin levels less than 10 ng/ml.

Objective To analyze the effect of the consumption of guava to changed levels of hemoglobin and levels of ferritin.

Research Method Quasy experiment non randomized pretest and posttest with control group design. Hemoglobin measurements using mutiple quick check and ferritin measurements using enzyme immunoassay.

Results This study was invited 26 respondents divided into the control group and the experimental group for 16 days. The average changes hemoglobin levels in pregnant women a control group of 0.25 gr/dl and a experimental group of 1.30 gr/dl. The average changes ferritin levels in pregnant women a control group of 6.90 ng/ml and a experimental group of 23.76 ng/ml. There was a significant influence consumption of guava and tablet Fe to change the levels of hemoglobin with *p value* 0.015 and levels of ferritin with *p value* 0.041. The provision of guava significantly affect change the levels of hemoglobin and levels of ferritin.

Keywords: *guava, hemoglobin levels, ferritin levels, pregnant women*

INTRODUCTION

Based on the results of Health Research (Riskesdas) in 2013, the prevalence of anemia among pregnant women in Indonesia about 37.1%. According to the Health Profile of Central Java province, the incidence of anemia among pregnant women is 57.7%.¹ Based on the survey results in 2012 in the district of Boyolali, number of pregnant women suffering from anemia was 56.7%.² The survey conducted by the Faculty of Medicine, from several Universities in Indonesia in 2012 found 50% -63% of pregnant women suffer anemia.³

Iron deficiency risked to mother and fetus, the fetus may occur disturbances of growth, death of the fetus in the womb, abortion, birth defects and low birth weight (LBW).⁴ A mother may occur bleeding, premature delivery, impaired childbirth, infections during nifas.⁵ According to the mother's health directorate (2012), the causes

of maternal mortality in Indonesia is caused by bleeding (30.1%), infection (5.6%), abortion (1.6%), and other (34.5%). While the causes of maternal mortality in 2012 in Central Java province is 16.44% hemorrhage, preeclampsia 35.26%, 4.74% infection, abortion, 0.30%, and the other 42.96%.⁶

According to the demographic and health survey of Indonesia (2012), the infant mortality rate in 2012 is lower than the IDHS 2007 IMR in 2012 was 32 mortality per 1000 live births. Based on the data obtained from Semarang City Health Office in 2012 found the death rate in LBW 28.7%, 33.1% asphyxia, neonatal tetanus by 0.44%, 1.3% sepsis, congenital anomalies 2,6%, 2.6% jaundice, and other of 33.62%.⁷

In 2012 the maternal mortality rate (MMR) in Indonesia reached 359 per 100,000 live births. ⁸ Based on data from the Health Office of Central Java Province, maternal mortality rate (MMR) in Central Java in 2012 was 675 per 100,000 live births.⁷ In 2013 the maternal mortality rate is recorded in the Work Area Health Office of Boyolali District is 14 people or MMR 95 / 100,000 live births. Data LBW (Low Birth Weight Babies) in 2012 reported 300 cases or 1.96% of the total 15 311 babies are born, while in 2013 in the district of Boyolali reported as many as 226 cases or 1.54% of the total of 14 689 babies are born so that there is a decrease in cases LBW in 2013.⁹

Government efforts to tackle iron deficiency anemia in pregnant women, is focused on the provision of additional blood tablet (Fe) in pregnant women, to distribute the iron tablets to pregnant women, one tablet each day consecutively for 90 days during pregnancy.⁶ Prevention of anemia during pregnancy can be done with giving the tablet Fe for 90 days at a dose of 60 MG.²

Government programs that have been carried out is shown in number of Fe tablets coverage to pregnant women in Indonesia in 2011 reached 83.3%, which almost reached the national target of 86%. From the coverage of 90 Fe tablets to pregnant women in Central Java province in 2012 was 91.77%, an increase compared to the year 2011 amounted to 89.39%.¹⁰

When viewed from the compliance of pregnant women consume iron tablet, based on the Basic Health Research (2013), shows that in Indonesia only 19.3% of pregnant women who do not obey the consuming Fe tablet distributed by the government area.¹¹

Based on research Yusnaini, absorption of iron is strongly influenced by the availability of vitamin C in the body of the mother. The role of vitamin C in the process

of absorption of iron which helps reduce ferric iron (Fe^{3+}) to ferrous (Fe^{2+}) in the small intestine so easily absorbed, the reduction process will be even greater when the pH is more acid in the stomach. Vitamin C can increase the acidity so as to increase iron absorption by up to 30%.¹² The factors inhibiting iron absorption is affected by substances which are mostly found in foods that come from plants. The most potent inhibitors are compounds such as tannins in tea polyphenols. Tea may reduce the absorption of up to 80% as a result of the formation of complex iron-tannat.¹³

METHOD

This kind of research is experimental. Quasy quasi-experimental research or experiment with the design of non randomized pretest and posttest with control group design is used to determine the effect of guava juice to changes in levels of hemoglobin and ferritin levels in pregnant women who received iron supplementation.

This study was to determine the effect of guava juice to changes in levels of hemoglobin and ferritin levels in pregnant women who received supplementation tablet Fe, calculation results obtained sample of 13 people in each group.

Sampling hemoglobin and ferritin sample

On the first day before the intervention, all pregnant women in the control group and the treatment group as many as 26 people have blood drawn to measure levels of hemoglobin and ferritin levels (pre-test). Furthermore, on the eighth day and the day to sixteen, 26 pregnant women from the control group and the treatment group performed a blood sample for re-examination of hemoglobin levels and ferritin levels (post-test).

Statistic analysis

In this study using univariate and bivariate analysis. Univariate analysis to calculate the mean levels of hemoglobin and ferritin levels. The bivariate analysis to see equality or homogeneity to study whether it is feasible than or see the variation of data from both the group and the comparison of levels of hemoglobin and ferritin levels before and after the intervention in each group using the parametric test paired sample t test. As well as a comparison of two groups of each phase changes in levels of hemoglobin and ferritin levels with statistical parametric test independent sample t test with p value $\leq 0,05$.

RESULT

Test homogeneity (equality test) was conducted for confounding variables (the bully), which is thought to affect each intervention group that included age, occupation, pregnant women, gestational age and consumption before the intervention tablet Fe and guava juice. Equivalence test results showed that no significant differences in age, occupation pregnant women, and gestational age and consumption respondents Fe tablets prior to the intervention.

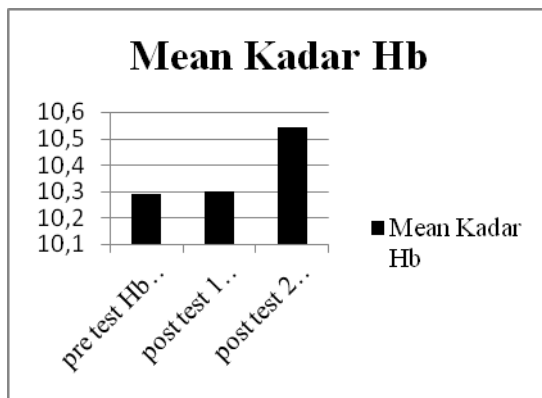
Table 1. Demographic information

Characteristic	Control		Intervention		Total		p-value
	n	%	n	%	n	%	
<u>Age</u>							1,00
High risk	2	15,4	2	15,4	4	15,4	
No	1	84,6	1	84,6	2	84,6	
	1		1		2		
<u>Gravida</u>							0,68
Primigravida	5	38,5	4	30,8	9	34,6	
Multigravida	8	61,5	9	69,2	17	65,4	
<u>Job</u>							0,68
Have a work	5	38,5	4	30,8	9	34,6	
Haven't	8	61,5	9	69,2	17	65,4	
<u>Age of pregnancy</u>							
Trimester II	1	76,9	1	84,6	2	80,7	0,62
Trimester III	0	23,1	1	15,4	1	19,2	
	3		2		5		
<u>Consumption of iron tablet</u>							0,66
First	9	69,2	1	76,9	10	73,0	
Advanced	4	30,8	0	23,1	4	26,9	
			3		3		

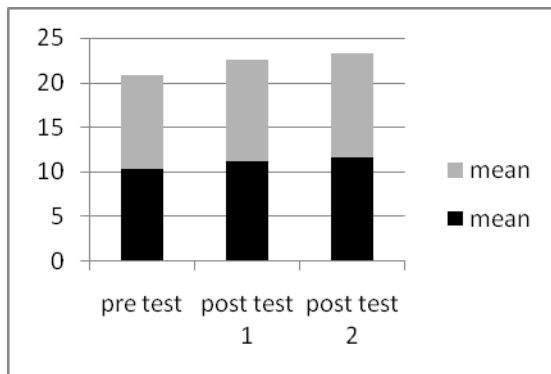
The value of the average levels of hemoglobin

Control group

Intervention group

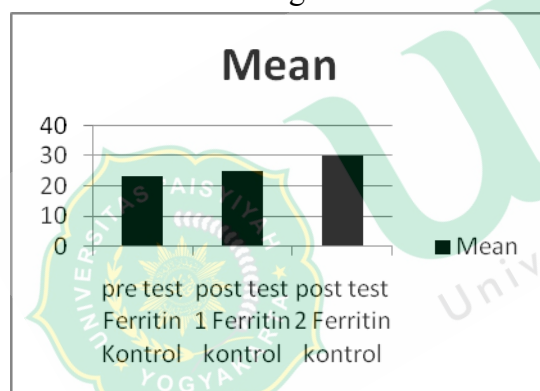


Picture 1. The levels of hemoglobin before and after the consumption of iron tablet at the day 8 to 16 in control group.



Picture 2. The levels of hemoglobin before and after the consumption of iron tablet at the day 8 to 16 in intervention group.

The value of the average levels of ferritin



Picture 3. The levels of ferritin before and after the consumption of iron tablet at the day 8 to 16 in control group.



Picture 4. The levels of ferritin before and after the consumption of iron tablet at the day 8 to 16 in intervention group.

Normality Test of Hemoglobin

From the result of normality test hemoglobin levels before and after the intervention (8 and 16 days) in the control group and intervention group with normal distribution.

Table 2. Normality test of hemoglobin levels in the control group

Control group	Mean	SD	Sig.
Before	10,29	1,44	0,092
After (8 days)	10,30	0,92	0,200
After (16 days)	10,54	0,93	0,068

Table 3. Normality test of hemoglobin levels in the intervention group

Intervention Group	Mean	SD	Sig.
Before	10,42	1,18	0,091
After (8 days)	11,2	1,02	0,087
After (16 days)	11,7	0,99	0,079

Normality Test of Ferritin

From the result of normality test ferritin levels before and after the intervention (8 and 16 days) in the control group and intervention group with normal distribution.

Table 4. Normality test of ferritin levels in the control group

Control Group	Mean	SD	Sig.
Before	23,30	7,75	0,200
After (8 hari)	24,88	11,00	0,193
After (16 hari)	30,20	14,05	0,100

Table 5. Normality test of ferritin in the intervention group

Intervention group	Mean	SD	Sig.
Before	36,696	17,99	0,200
After (8 hari)	48,597	21,17	0,200
After (16 hari)	56,371	23,63	0,200

The difference hemoglobin levels between control and intervention group

Table 6. The difference hemoglobin levels between control and intervention group

Variable	Control group	Intervention group	<i>p value</i> *
Hemoglobin levels			
Pre Test	10,29 ^{1a}	10,40 ^{2a}	0,814
Post Test 1	10,30 ^{1b}	11,20 ^{2b}	0,032
Post Test 2	10,54 ^{1c}	11,70 ^{2c}	0,006

*paired sample t test 1b-1a (sig.0,973), 1c-1a (sig. 0,384), 1c-1b (sig.0,139)

*paired samples t test 2b-2a (sig.0,010), 2c-2a (sig. 0,001), 2c-2b (sig.0,000)

According to the table 6 above can be seen that the significance of the group pre-test is greater than the alpha value then there is no difference in the average level of hemoglobin in the control group to the treatment group before the intervention. And the significant value in the post test group 1 (8 days) and the post test group 2 (16 days) is smaller than the value of alpha (0.05) then there is a difference in the average level of hemoglobin in the control group to the treatment group after the intervention (8 and 16 days).

The difference ferritin levels between control and intervention group

Table 6. The difference ferritin levels between control and intervention group

Variable	Control group	Intervention group	<i>p value</i> *
Ferritin levels			
Pre Test	17,6572 ^{1a}	36,6961 ^{2a}	0,099
Post Test 1	24,8115 ^{1b}	48,5972 ^{2b}	0,002
Post Test 2	33,0263 ^{1c}	56,3715 ^{2c}	0,002

*paired samples *t* test 1b-1a (sig.0,676), 1c-1a (sig. 0,223), 1c-1b (sig.0,239)

*paired samples *t* test 2b-2a (sig.0,014), 2c-2a (sig. 0,001), 2c-2b (sig.0,006)

According to the table 7 above can be seen that the significance of the group pre-test is greater than the alpha value then there is no difference in the average levels of ferritin in the control group to the treatment group before the intervention. And the significant value of the group post test 1 (8 days) and in the group of post test 2 (16 days) is smaller than the alpha value then no differences in average levels of ferritin in the control group to the treatment group after the intervention (8 and 16 days).

The difference of quarrel hemoglobin levels between control and intervention group

Table 8. The difference of quarrel hemoglobin levels between control and intervention group

Variable	Control group (n = 13)	Intervention group (n = 13)	<i>p value</i>
Quarrel of hemoglobin level			
Post Test 1 - Pre Test	0,0077	0,7538	0,036
Post Test 2 - Pre Test	0,2462	1,2615	0,015

According to the table 8. above it can be seen that the significance is smaller than the alpha value then there are differences mean difference in hemoglobin levels in the control group to the treatment group before the intervention with hemoglobin levels after the intervention (8 and 16 days). Differences in mean difference in hemoglobin levels in the control group amounted to 0.2385 ng / ml and the difference in the average differences in hemoglobin levels in the treatment group amounted to 0.5077 ng / ml.

The difference of quarrel ferritin levels between control and intervention group

Table 9. The difference of quarrel ferritin levels between control and intervention group

Variable	group		<i>p value</i>
	Control group	Intervention group	
Quarrel of ferritin level			
Post Test 1 - Pre Test	1,5646	14,5954	0,049
Post Test 2 - Pre Test	6,8838	23,7638	0,041

According to the table 9 above can be seen that the significance is smaller than the alpha value then there is a difference in the average differences in the levels of ferritin in the control group to the treatment group before the intervention with ferritin levels after the intervention (8 and 16 days). Differences in the average gap ferritin levels in the control group amounted to 5.3192 ng / ml and the average gap difference ferritin levels in the treatment group amounted to 9.1684 ng / ml.

DISCUSSION

This study was conducted on 26 pregnant women Trimester II and III were divided into 2 groups, 13 pregnant women in the control group who only consume iron tablets and 13 pregnant women in the treatment group who consumed tablet Fe and guava juice, to see a change in the level of hemoglobin levels and ferritin, the control group and the treatment group hemoglobin and ferritin levels checked before the intervention is given, and then after being checked (pretest), given intervention is the provision of tablets Fe in the control group and the provision of iron tablets with guava in the group treated for 8 days. On re-examination of eight levels of the hemoglobin and ferritin levels in the control group and the treatment group. Then given another tablet supply of iron intervention in the control group and the provision of iron tablets with guava in the treatment group until day 16, continued re-examination of levels of hemoglobin and ferritin levels in both groups.

This study uses a quasi-experimental research design with non randomized pretest and posttest design with a control group. In this study, the independent variable precedes the dependent variable is the provision of guava and tablet Fe intervention in the treatment group and the provision of iron tablets from the control group.

Based on the results of statistical tests to see differences in hemoglobin levels between the control group who consumed iron supplements with the treatment group taking supplements Fe and guava juice, showed that there were significant differences in hemoglobin levels in both groups.

The average level of hemoglobin in the control group who only consume iron tablets is lower than the average level of hemoglobin levels in the treatment group who drank guava juice and tablets Fe. After intervention by consuming Fe tablet on a regular basis for 16 days, the average hemoglobin level of the control group increased from 0.25 g / dl. The average level of hemoglobin treatment groups were taking iron tablets with peanut consumption on a regular basis for 16 days increased by 1.3 g / dl. Meanwhile, ferritin levels after the intervention for 16 days, the average level of ferritin in the control group was 6.9 ng / ml and the average level of ferritin in the treatment group increased 23.76 ng / ml.

During pregnancy, occurring physiological changes in hematology where the mother's blood volume began to increase during the first trimester, increased more rapidly in the second trimester and then increased by a slower pace in the third trimester of up horizontal on the last few weeks of pregnancy, hematologic changes are called hemodilution.¹⁵

Increased hemoglobin levels of pregnant women are not only influenced by Fe supplements but also supported by the consumption of foods containing substances that are required in the synthesis of hemoglobin. Guava contains vitamin C which is required in the synthesis of hemoglobin. Vitamin B6 and vitamin B12 is necessary for the synthesis of globin. Furthermore, the interaction between heme and globin to produce hemoglobin. Vitamin C is an organic acid that helps non-heme iron absorption by changing the form of ferric into ferrous form because it is more easily absorbed, in addition to vitamin C to form the iron group akorbat which remain soluble at higher pH in the duodenum.¹⁶

Fe absorption will be maximal when taken with vitamin C. The role of vitamin C in the process of absorption of iron which helps reduce ferric iron (Fe^{3+}) to ferrous iron (Fe^{2+}) in the small intestine so easily absorbed, the reduction process will be even higher when the pH in the stomach is getting asam.¹⁷ While the factors inhibiting the absorption of iron influenced by substances which are mostly found in foods that come from plants. The most potent inhibitors are compounds called polyphenols, such as tannins in tea. Tea may reduce the absorption of up to 80% as a result of the formation of complex iron-tannic.

CONCLUSION

There is the effect of guava juice to changes in levels of hemoglobin and ferritin levels of pregnant women who received supplementation iron tablet.

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FACTORS RELATED TO UPTAKE OF VISUAL INSPECTION WITH ACETIC ACID (VIA) IN BANTUL YOGYAKARTA PROVINCE

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ABSTRACT

The incidence of cervical cancer continues to increase and in second place after breast cancer. Cervical cancer can be prevented and detected earlier in case the women have a better knowledge, easy access of health center, and adequate support from her significant persons. A descriptive study was conducted to identify the factors related to limited uptake of cervical cancer screening using VIA. Thirty mothers who met with the criteria were recruited. Convenient sampling was used to draw samples from family planning participant at Banguntapan II Bantul Primary Health Center. Chi-Square test was applied for data analysis. Results showed that there was a significant correlation ($p=0.039$) between mothers' knowledge on VIA and awareness for VIA. The development of a VIA promotion program in order to increase mothers' perceived benefits and intention to aware in VIA was indicated. In addition, the promotion program should include the barriers and solution in VIA examination.

Keywords: VIA, knowledge, support

INTRODUCTION

The incidence of cervical cancer is 17 per 100,000 women. Furthermore, 13% of new cases were happened per year (Globocan, 2012). According to the data from Hospital Information System, in 2010 the statistic showed that the cervical cancer incidence was placed at second place after breast cancer that was 5,349 cases (SIRS, 2011).

The Indonesian Ministry of Health provided programs to increase the uptake of Visual inspection with acetic acid which is regulated in Indonesian Ministry of Health regulation No.34 in 2015. The priority of this program is reproductive age women between 30 to 50 years old participate in VIA in order to screen their risk of cervical cancer. The program is in line with WHO program which is delivered in 2013.

Based on the pilot study conducted by researcher, it was found that every Primary Health Center in Bantul District, Yogyakarta Province were provide VIA service as one of their services to increase the health status of their community. In 2015, the uptake of IVA in Dinas Kesehatan Bantul area is very low. The highest number visitors of VIA were reached at Banguntapan II Primary Health center were 337 compare with the lowest visits at Imogiri Primary Health Center were 2 visitors. Banguntapan II Primary Health Center was conducting health promotion on cervical cancer screening using VIA method. The health education was done by midwife and cadre in every village in their working area. However, the results showed that the health education program is not success yet according to the number of women who participate in VIA screening were 337 from 738 reproductive age women (43%).

RESEARCH METHOD

A descriptive correlation study was used to determine factors related to uptake of visual inspection with acetic acid among reproductive age women. The populations of this study are women who participate as family planning acceptors. Thirty samples were recruited using convenient sampling technique. The data were collected using questionnaires.

RESULT AND DISCUSSION

Characteristics of respondents

The characteristics of respondent are presented in detail in Table 1.

Table 1. Characteristics of respondents

Characteristics	Frequency	Percentage
Age		
30-39 years old	21	70
40-49 years old	9	30
Education attainment		
Primary School	12	40
High School	12	40

University	6	20
Working status		
Entrepreneur	2	6.7
Employee	7	23.3
No-working	21	70
Information resource		
Television	4	13.3
Newspaper	2	6.7
Internet	2	6.7
Health education	22	73.3

As shown in Table 1, majority of respondents were aged ranging from 30-39 years old (70%). Most of respondents attained high school level (40%) and did not work (70%). Regarding information resources related to VIA, most of respondents were get the information from health education (73.3%).

Table 2. Factors related to uptake of VIA

Variable	Frequency	Percentage
Level of knowledge		
High	26	86.7
Low	4	13.3
Distance to health center		
Near	29	96.7
Far	1	3.3
Husband's Support		
Support	16	53.3
No-support	14	46.7

As shown at table 2, most of respondents had high knowledge about VIA (86.7%). The majority of respondents were easy to get health center (96.7%). Furthermore, most of respondents had support from their husband/partner (53.3%).

According to the data of respondents' participation on cervical cancer screening using VIA technique, most of respondents had participated on the screening process (90%). The data analysis results showed that there was a significant correlation between the level of knowledge and mothers' participation on VIA test ($p=0.039$). However, there were no correlation between the distance of health center and respondents' home ($p=0.062$) and husbands' support with respondents participation on VIA test ($p=0.586$).

Regarding to Lymo and Beran (2012), education level was correlated with participation on cervical cancer screening. The higher education level makes more knowledge and maturity on the way of thinking. A high education woman is easier to accept the information related to cervical cancer and has more awareness to participate on cervical cancer screening in order to prevent and know the risk of cervical cancer.

Majority of respondents in this study were no-working women. Moreover, 70% of women who participate on VIA test were no-working women. It is assume that no-working women had more flexibility time to visit primary health center to get service on cervical cancer screening. Whereas, working women had limited time to visit primary health center related to the time of primary health center service for VIA is same with the time for working. It means that working women should ask permission from their work that may have effect with their work and salary.

CONCLUSIONS AND SUGGESTIONS

There was significant correlation between the level of knowledge on cervical cancer screening using VIA technique ($p=0.039$). The information about VIA was affecting women' awareness to participate on VIA screening. Most of respondents were had information about VIA from midwife who gave health education to their village. The development of an health education program in order to increase women knowledge, perceived benefits, and intention to participate on VIA test was indicated. In addition, the VIA barriers and solution should include as a part on health education program to increase the uptake of visual inspection with acetic acid

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LOW USE OF LONG-TERM CONTRACEPTIVE METHOD AMONG WOMAN IN GUNUNGKIDUL

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ABSTRACT

Long-term Contraceptive Method (LTCM) usage in Indonesia is very low. According to health believe model theory, lack of interest in the use of LTCM can be reviewed on the socio-demographic factors and the individual's perception of LTCM. This study aims to determine the factors associated with mother's low interest in using LTCM in Sri Romdhani Midwifery Clinic Semin Gunung Kidul. The research employed analytic survey approach with cross sectional method with 75 woman as respondents. The analysis of contingency coefficient showed that age, number of children, income, knowledge, sources exposure and individual perception were associated with low mother's interest in using LTCM.

Keywords : Family Planning, Long-Term Contraceptive Method, Interest,

INTRODUCTION

IUD and implant long-term contraceptive methods are the most effective methods of contraception which is durable, efficient, comfortable and relatively low cost compared to non-LTCM. LTCM failure rate in the first year is very low at 0.05% for implants and 0.1% to 0.8% for the IUD. LTCM is not dependent on the ability to remember the menstrual calendar or the obedience to take pills or injections visits to the doctor (Stoddard et al., 2011).

Unfortunately, LTCM gets less attention from the public. LTCM preferences coverage in Indonesia from 2009 to 2014 only ranged from 12.60% to 25.37%. The percentage of new acceptor of LTCM in 2014 for implant was 10.65%, 7.15% for IUD and MOW or MOP was 1.71% (Ministry of Health of Indonesia, 2015).

The low LTCM preferences also happened in the province of Yogyakarta Special Region (DIY). The lowest range of new acceptor of LTCM in Yogyakarta is in Gunung Kidul where LTCM the coverage reached only 27.1% namely 14.4% of IUD acceptors, 9% of implant acceptors, 0.3% of MOP acceptors and 3.4% of MOW acceptors. (Yogyakarta Health Office, 2015).

Nasution (2011) revealed that the low interest of LTCM influenced by education and low economic, the LTCM expensive price at the beginning and low knowledge of LTCM. Low knowledge LTCM can be seen from the persistence of the myth that the LTCM is terminating the pregnancy, as well as the myth of the side effects of uterine cancer and interfere with the quality of the marital relationship.

LTCM common myth is that IUD and implant can move to other place and IUD stem can be attached to the baby's head. Meanwhile MOW / MOP are believed decrease libido and MOP are also equated with castration method Oesman (2010). Russo et al. (2013) in his research also found LTCM myth that the IUD can cause cancer.

Health Belief Model (HBM) theory by Lewin (1954) in Notoatmodjo (2008) revealed that the low interest of LTCM is influenced by the individual's perception of the threat and cost-benefit considerations. Individual perception is affected by modifying factors such as age, education, knowledge, number of children, sources exposure and economic conditions. In connection with the theory of HBM, the current trend based on the research is that the LTCM tends to be chosen by less productive age mothers (> 30 years), highly educated mothers (high school and collage), mothers having more than 2 children, mothers who knowing about LTCM and mothers having above the Regional Minimum Wages income (Marikar et al., 2015).

Sri Romdhati Midwifery Clinic is located in Gunung Kidul regency which is the lowest in the LTCM coverage in Yogyakarta. In the region of Semin, the lowest LTCM prevalence is in Sri Romdhati Midwifery Clinic of 16.61%.

Internal data of Sri Romdhati Midwifery Clinic in 2015 showed the acceptor data of IUD 42 acceptor, implant 6 acceptors and MOW 3 acceptors of the whole patient. Interviews conducted on 10 patients with non-LTCM noted that patients do not choose LTCM because it was considered dangerous and the installation was sick. On this basis, the authors need to determine the factors associated with low mother's interest in the use of LTCM in Sri Romdhati Midwifery Clinic Semin Gunung Kidul.

RESEARCH METHODS

The research employed analytic survey approach with cross sectional design. Correlation studied was the correlation between the dependent variable (interest using

LTCM) and independent (maternal age, maternal education, number of children, maternal knowledge, sources exposure, economic conditions, individual perceptions).

The respondents consisted of 75 people with inclusion criteria of old patient of non-LTCM who have used non-LTCM method and the exclusion criteria were patients who medically meet the LTCM contraindicated. The respondents were taken by accidental sampling technique and the correlation between dependent and independent variables was analyzed using contingency coefficient.

RESEARCH RESULT

1. Univariate Analysis Results

a. Characteristics of Research Respondents

Table 1. Frequency and Percentage Distribution based on Characteristics of Respondents at Sri Romdati Midwifery Clinic Semin Gunung Kidul

Respondent's characteristics		Frequency (f)	Percentage (%)
Age	≤30 years	26	34,7
	>30 years	49	65,3
Education	uneducated	2	2,7
	Elementary School	7	9,3
	Junior High School	21	28,0
	Senior High School	40	53,3
	University	5	6,7
Number of children	1 child	26	34,7
	2 children	26	34,7
	>2 children	23	30,7
Income	High	5	6,7
	Medium	20	26,7
	Low	50	66,7
Non-LTCM contraceptive	Injection	62	82,7
	Pill	8	10,7
	Condom	5	6,7
Total (n)		75	100

Based on Table 1 it can be seen that most respondents were > 30 years old (65.3%), high school educated (53.3%), low income (66.7%) and the used injection contraceptives (82.7%). Meanwhile, according to the number of children, the majority of respondents are had 1 to 2 children with percentages respectively amounted to 34.7%.

b. Knowledge on LTCM

Table 2. Frequency and Percentage Distribution based on the Knowledge on LTCM at Sri Romdati Midwifery Clinic Semin Gunung Kidul

Knowledge on LTCM	Frequency (f)	Percentage (%)
High	38	50,7
Medium	37	49,3
Low	0	0
Total (n)	75	100

Based on Table 2, it can be seen that most respondents had high knowledge on LTCM (50.7%). No respondents had low knowledge on LTCM.

c. Sources exposure of Information

Table 3. Frequency and Percentage Distribution based on the sources exposure of Information at Sri Romdati Midwifery Clinic Semin Gunung Kidul

sources exposure of Information on LTCM	Frequency (f)	Percentage (%)
High	24	32
Medium	33	44
Low	18	24
Total (n)	75	100

Based on Table 3, it can be seen that most respondents got medium sources exposure (44%). Only 24% of respondents got low sources exposure on LTCM.

d. Individual perceptions

Table 4. Frequency and Percentage Distribution based on the individual perception of Information at Sri Romdati Midwifery Clinic Semin Gunung Kidul

Individual perceptions on LTCM	Frequency (f)	Percentage (%)
Positive	70	93,3
Negative	5	6,7
Total (n)	75	100

Based on Table 4, it can be seen that most respondents had positive individual perceptions about LTCM (93.3%). Only 6.7% of respondents had negative individual perception about LTCM.

2. Bivariat Analysis

Factors Associated with the interest of LTCM usage

Table 5. Correlation Test Results between Mother's Age and the interest to use LTCM at Sri Romdati Midwifery Clinic Semin Gunung Kidul

Independent Variable		Interest to use LTCM				Total		Correlation (p)	
		Not interested		interested					
		f	%	F	%	f	%		
Mother's Age	≤30 years	19	73,1	7	26,9	26	100	0,020	
	>30 years	22	44,9	27	55,1	49	100		
Education	uneducated	2	100	0	0	2	100	0,385	
	Elementary school	5	71,4	2	28,6	7	100		
	Junior High School	13	61,9	8	38,1	21	100		
	Senior High School	19	47,5	21	52,5	40	100		
	University	2	40	3	60	5	100		
	uneducated	2	100	0	0	2	100		
Number of Children	1 child	16	61,5	10	38,5	26	100	0,017	
	2 children	18	69,2	8	30,8	26	100		
	>2 children	7	30,4	16	69,6	23	100		
Income	Low	33	66	17	34	50	100	0,006	
	Medium	8	40	12	60	20	100		
	High	0	0	5	100	5	100		
Knowledge on LTCM	High			15	39,5	23	60,5	38	100
	Medium	26	70,3	11	29,7	37	100	0,007	
	Low	0	0	0	0	0	0		
Exposure on LTCM	High	8	33,3	16	66,7	24	100	0,015	
	Medium	19	57,6	14	42,4	33	100		
	Low	14	77,8	4	22,2	18	100		
Individual Perception on LTCM	Positive	36	51,4	34	48,6	70	100	0,035	
	Negative	5	100	0	0	5	100		

Based on Table 5, it can be seen that factors significantly positively associated with the interest of LTCM use were maternal age, number of children, income, knowledge on LTCM, sourcess exposure on LTCM and individual perceptions on LTCM. The level of education was not significantly associated with the interest of LTCM usage.

DISCUSSION

The study found relationship between mother's age, number of children, income, knowledge on LTCM, source exposure on LTCM and individual perceptions on LTCM and the mother's interest to use LTCM. Meanwhile, it was found that education has no relationship with the interest to use LTCM.

According to Manuaba (2008), level of education determines the pattern of family planning and basic patterns of contraceptive use and the improvement of the welfare of the family. Until now, family planning education has not been officially entered into the national curriculum. Therefore, the degree of education can not determine the uptake of information related to family planning, unless the respondents have higher education with specific backgrounds such as public health, nursing or midwifery. *SKDI* data in 2011-2015 also showed that knowledge on LTCM tends to be same at every level of education, except for those who are not in school (Indonesia Ministry of Health, 2015).

The fact that there is no relationship between mother's education level and the interest to LTCM can also be influenced by mother's age, number of children and an income level that become a confounder for the relationship between mother's education and the interest to use LTCM. The results of Permatasari *et al.* (2013) study which used primary and secondary data of *SKDI* 2007, also found that the level of education generally do not affect the LTCM usage patterns. The level of education can only influence the LTCM usage pattern until the junior high school level ($p = 0.000$). Meanwhile on the higher educational level than junior high school, the level of education is no longer an impact on the use of LTCM ($p = 0.866$).

Mother's age has a relationship with LTCM interest. Women are said to be of childbearing age or the best age for childbirth when she was less than or equal to 30 years (*BKKBN*, 2010). In the childbearing age, women strive to have children. The desire to obtain safe normal birth gets them to labor in the productive age. Therefore, women tend to prefer contraception with short power protection like implants and injection than LTCM which had power protection to years. The results of this study are consistent with the results of Nasution (2011) who also found a significant relationship between age and inclination of LTCM election. Mothers over the age of 30 years has a chance of 0.67 times more likely to tend to use LTCM.

The number of children has a relationship with LTCM interest. Mothers who have had 2 or more children tend to be interested in using LTCM because the mother started

to think to stop having children especially if the mother is not in productive age because the mother started to think about the risk of labor (*BKKBN*, 2010). The results of this study are consistent with the results of Pranita (2008). Pranita (2008), which used the secondary data of *SKDI* 2007 for Java-Bali also stated that there was a significant relationship between the number of children with the LTCM usage ($p = 0.000$). The interpretation is that by having less than 3 children, mother have a 7.5 times higher chance to choose non LTM compared with respondents who have children who are still alive more than or equal to 3 ($OR = 7.5$).

Income has a relationship with the interest to use LTCM. The cost of IUD type nova-T installation with 8 years power protection in Sri Romdati Midwifery Clinic is IDR. 350,000. While the cost of an implant with 3 years power protection is IDR 150,000.00. The amount of fees to be paid is certainly high enough for those who earn below the 1.5 million so that mothers who economically are not able to access the installation costs would not be interested to use LTCM. The results of this study are consistent with the results of Nasution (2011), which also found that the income level affects the LTCM usage ($p = 0.000$). Low-income mothers are more at risk of 0.73 times for not choosing LTCM ($OR = 0.73$). The government has actually eliminated the installation costs for all patients with *BPJS*. Unfortunately not all patients in Sri Romdhathi Midwifery Clinic is *BPJS* user.

Mother's knowledge on LTCM has a relationship with the interest to use LTM. Knowledge is the basis for behavior and perceiving things. True knowledge will enhance the desirability of using LTCM (Goldman et al., 2011). Joseph (2011) also found a significant association between the use of LTCM and the knowledge on LTCM in Tanjung Batu ($p = 0.001$). Mother who are high knowledgeable on LTCM are 2 times more likely to use LTCM compared to those who are low knowledgeable on LTCM ($OR = 2.00$).

Sources exposure of information on LTCM has a relationship with the interest to use LTCM. sources exposure of information is an indication of the extent of the knowledge that can be accessed by individuals. More and more sources exposure can be identified with the increasing number of individuals receiving health promotion (Rogers, 2008). The results of this study are consistent with the results of Marikar et al. (2015) that sources exposure of information related to the tendency of the use of *ADR*

in Tuminting Primary Health Center Manado ($p = 0.001$). In the study, it was also found that mothers in urban areas have a tendency to use LTM higher than those in rural areas because mothers in urban areas are more exposed to information about the LTCM from various sources.

Individual perceptions on LTCM has a relationship with the interest to use LTCM. Theoretically, there is a tendency that mothers who had positive perceptions on LTCM are interested in using tend LTCM. The perceptions include the safety (evaluation regarding the outcome) as well as the advantages and disadvantages (outcomes the behavior). If the mother has a negative perception by considering LTCM threaten their health as well as has more disadvantages, the mother is certainly not interested in using LTCM. The results of this study are consistent with the results of Imroni et al. (2010) that the mother's attitude toward the implant related to the tendency in using implant ($p = 0.03$). Like the perception, attitudes are also a response to the closed behavior (overt behavior) of information stimulus that underlies the behavioral tendencies including the desirability in using LTCM (Effendy, 2008).

CONCLUSIONS AND SUGGESTIONS

Conclusion

Factors associated with low interest in the mother on the use of long term contraceptive method in Sri Romdhati Midwifery Clinic Semin Gunung is the perception of the individual, age ($p = 0.020$), number of children ($p = 0.017$), income ($p = 0.006$) knowledge ($p = 0.007$) and sources exposure of information ($p = 0.015$) and individual perception ($p = 0.035$).

Suggestion

Midwives are suggested to give Communication, Information and Education (CIE) on LTCM primarily associated with *BPJS* service, myths, effectiveness and side effects of LTCM and to educate to join *BPJS* program to get free LTCM service.

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THE ROLE OF PEER GROUP IN INFLEUNCING BULLYING BEHAVIOR ON SCHOOL AGED CHILDREN

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ABSTRACT

The study was conducted to investigate the correlation between role of peer group and bullying behavior on school-aged children. The study employed quantitative method with descriptive correlative design by using cross sectional approach. Samples of the study were 111 respondents. The research result show that the role of peer group in influencing bullying behavior on school age children, ($p=0,002$; $p<0,05$). Suggestion to the school principal and teachers are expected to give explanation to the students that calling friends should use good names and to guide students not to mock one another.

INTRODUCTION

A school is the place for children to learn and develop knowledge as well as to build positive character among children. Violence often happens at school that was committed either by the teachers or other peers (Usman, 2013), it can be physically or psychological. Those kind of violences are usually committed by one or some groups of party that has more power than others; such behaviour can be called as bullying (Levianti, 2013).

Bullying is a violence type at school that commonly happens. The study conducted in countries shows that 8% to 38% students received bullying (McEachern et. al., 2005 in Karina et. al., 2013). Globally, there are around 10-27% students received bullying (Karina et. al., 2013). In Indonesia, 84% students experienced violence that committed by their peers (Felicia, 2015). The result of the research conducted by Sejiwa (2008) up to 1,200 students in Jakarta, Yogyakarta, and Surabaya and the data also shows that bullying cases in Yogyakarta reached 66.1%.

Bullying causes the absence of secure and comfortable feeling, creating fear, pressure, and threat. The victims might experience difficulties to focus on their study; they might withdraw from their communities; they might reluctant to go to school; they

got less academic achievement; they feel anxious, lonely, having low self esteem, depressed, having physical problem, running away from home, using drugs, drinking alcohol, and even can lead to commit suicide. Bullying does not only bring impact to the victims but also give effect to the others. They can often have fight with their friends, get injury in the fight, have destructive character, like to steal things, drink alcohol, become smokers, skip from the school, drop out from the school, bring restricted weapon, and even become criminals (American Association of School Administrators, 2009).

Indonesian government put more concerns to children by creating Government Law No 35 Year 2014 as the change of the previous Law No 23 Year 2002 about children protection article 54 mentioning that “Children inside and in the environment of education institution have to get protection from physical violence, psychological violence,, sexual violence, and the other violence that can be done by the educators, administrators, or the other students, or/and the other parties”. Thus, teachers especially Counseling/Counselor have to create great effort to develop the service and guidance as well as develop potential personal positive skill of the student’s, so they can stay away and can avoid in doing bullying. It is also stated in the Law No 35 Year 2014 article 2 that “Children’s protection is all efforts and activities to guarantee and protect children with their rights, so they can live, grow, develop, and participate optimally suitable to human dignity and human right as well as can get protection upon violence and discrimination”.

Bullying sometimes has lack of public attention because there is misunderstanding that it has no impact to students. Sejiwa (2008) explains that among teacher, there is (27.5%) mentioned that bullying is a normal action, and (73%) of them mentioned that bullying as a dangerous action to students. The researcher also conducted interview to 9 Nusupan’s community members; all of them mentioned that bullying on school-aged children cannot be ignored. Violence as the form of bullying (Sejiwa, 2008). It cannot be perceived as normal condition since students cannot study if they are in depressed and threatened condition.

One of important factor that has influence to the bullying behaviour is peers. Santrock in Usman (2013) mentioned that peers can be considered as outsider aspects that has significant contribution on personal building. Santrock also mentions that peers’

rejection could trigger loneliness feeling among children, so it is more likely influence mental health and also could lead criminal problem. Some of students has youngster gangs that could negatively impact the school and it is more likely that kind of groups could potentially trigger violence at school, skipping from the class, and having low respect to the friends and teachers. The rate of peer group role in children's life is caused by the need of children to be liked by their friends, and it makes them to do everything in order to get the acceptance from their peer groups (Santrock, 2007 in Karina et. al., 2013). According to Potter & Perry (2009), those who get positive respond will feel high self esteem. Those who often get failure are more likely feel inferior or unworthy that can lead self withdrawal from school environment and peer groups.

Based on the result of preliminary study conducted by the researcher at Muhammadiyah Mlangi Elementary School, Gamping Sleman Yogyakarta on November 13th, 2015 at 08.37, one of the grade IV teachers class explained that there was violence cases among children in the form of pushing each other and mocking each other until the students cried. When finding that cases, the school gave concern letter to the students. If they repeat the action, the parents will be called to discuss their children and to take alternative solution related to the problem.

Based on the background of the problem, it can be assumed that the role of peer group has significant correlation to bullying behavior, so the formulation of the problem is "Is there any correlation between peer group's role and bullying behavior on school-aged children at Muhammadiyah Mlangi Elementary School, Gamping Sleman Yogyakarta?". The study was conducted to investigate the correlation between peer group role and bullying behavior on school-aged children.

RESEARCH METHOD

The study employed quantitative method with descriptive correlative design. The study used cross sectional approach. The instrument used questionnaire that has been through the process of validity and reliability test. Validity and reliability test was conducted at Nogotirto Elementary School, Gamping Sleman Yogyakarta with 35 students as the respondents. The study was conducted on April 9th, 2016. The test result of instrument validity of peer's role was in the range between 0.353 – 0.799 (r table =

0.334) with reliability 0.772; and the result test of instrument validity on bullying behavior in the range between 0.408 – 0.772 with reliability 0.865.

The population of the study was students of Muhammadiyah Mlangi Elementary School, Gamping Sleman Yogyakarta with 127 students involving students in class IV A ie 30 students, class IV B ie 29 students, class V A ie 35 students, and class V b ie 33 students. Sample technique was employed a saturated sampling technique; it is a sample taking technique that involve all population members as samples of the study (Sugiyono, 2013). The samples of the study were 111 respondents because 16 students were absent when the researcher was doing data taking process. Kendall Tau was used as the analysis method of the study.

RESULT AND DISCUSSION

General Image

The study was conducted at Muhammadiyah Mlangi Elementary School, Gamping Sleman Yogyakarta which is located in Pundung, Nogotirto, Gamping, Sleman, Yogyakarta. The samples of the study were students in class IV and V Muhammadiyah Mlangi Elementary School, Gamping Sleman Yogyakarta. The elementary school was established in 1952 which was initially known as *Madrasah Muhammadiyah*, then it changed into an elementary school in 2003.

The numbers of the student in 2015/2016 were 376 students. The available facilities at Muhammadiyah Mlangi Elementary School, Gamping Sleman Yogyakarta were art room, computer room, school health room, mosque, library, and a wide football field in the school yard. Those facilities were used as intra-curricular and extracurricular activities of the students.

Univariate Analysis

Respondent's Characteristic

The respondents were characterized based on ages, sexes, and grades with this following result:

Table 1 Frequency distribution of respondent characteristics based on ages, sexes, and grades

No	Respondent's Characteristics	Frequency	Percentage (%)
1.	Ages		
	9 years	3	2.7
	10 years	56	50.5
	11 years	38	34.2
	12 years	14	12.6
	Total	111	100
2.	Sexes		
	Male	59	53.2
	Female	52	46.8
	Total	111	100
3.	Grades		
	IV	52	46.8
	V	59	53.2
	Total	111	100

Source: Primary Data processed in 2016

Based on Table 1, it can be known that the majority of the respondents were male (53.2%), aged 10 years old (50.5%), and grade IV (53.2%).

Frequency Distribution of Peer's Role

Table 2 Frequency Distribution of Peer's Role on School-Aged Children

No	Peer's Role	Frequency	Percentage %
1.	High	1	0.9
2.	Moderate	15	13.5
3.	Low	95	85.6

Based on Table 2, it shows that the dominant result was low role of peer group with 95 students (85.6%), and the less was high role of peer group with 1 student (0.9%).

The result of questionnaire answer can be seen in Table 3.

Table 3 Frequency Distribution of Questionnaire Answer of Peer's Role on School-aged Children

No	Statement	Answer			
		Yes		No	
		f	%	F	%
1	My friends never ask me to do bullying.	61	55	50	45
2	I never bully my friends because no friend has ever done that.	59	53	52	47
3	I bully my friend during rest time because my other friends ask me to do that.	24	22	87	78
4	I copy what my friends do by bullying the friends that I don't like.	21	19	90	81
5	I mock my friends because I have ever heard my other friends to mock them.	37	33	74	67
6	I bully my friends for the sake of friendship.	29	26	81	73
7	I don't bully the friends that I don't like because my other friends forbid me to do that.	72	65	39	35
8	I never do bullying together with my friends.	48	43	63	57
9	My friends never suggest me to do bullying in spending their free time.	59	53	52	47
10	I hit the friend who hit me because my other friends ask me to do that.	24	22	87	78
11	I never mock my friend because I never hear my friends to mock others.	51	46	60	54

Based on Table 3, it describes that frequency distribution of questionnaire answer of peer's role shows with the most 'yes' answer in the statement number 7 "I don't bully the friends that I don't like because my other friends forbid me to do that" with 72 respondents (65%). Besides, the most 'no' answer comes from statement 4 "I copy what my friends do by bullying the friends that I don't like" with 90 respondents (81%).

Frequency Distribution of Bullying Behavior

Table 4. Frequency Distribution of Bullying Behavior on School-Aged Children

No	Bullying Behavior	Frequency	Percentage %
1.	Moderate	15	13.5
2.	Low	91	82.0
3.	No Risk	5	4.5
	Total	111	100

Table 4 shows that there was no high bullying behavior, and the majority result shows low bullying behavior with 91 respondents (82.0%).

The result of questionnaire answer can be seen in this following table:

Table 5 Frequency Distribution of Questionnaire Answer of Bullying Behavior on School-Aged Children

No	Statement	Jawaban							
		Always		Often		Sometimes		Never	
		f	%	f	%	F	%	f	%
1	I push the friend that I don't like.	1	1	4	4	56	50	50	45
2	I kick my friend because I am angry to him/her.	0	0	6	5	52	47	53	48
3	I kick the friend that I don't like.	1	1	8	7	41	37	61	55
4	I slap a person that I don't like when I am together with my friends.	1	1	2	2	13	12	95	86
5	I hit the friend that I don't like in front of my friends.	2	2	5	5	20	18	84	76
6	I mock my friends by calling 'fatty/sissy/skeleton/bucktoothed'.	3	3	12	11	72	65	24	22
7	I call my friend's names with ugly names.	7	6	12	11	46	41	46	41
8	I scold the friends who laugh on my mistake.	1	1	4	4	35	32	71	64
9	I scold the friends that I don't like when they look at me.	1	1	4	4	34	31	72	65
10	I make my friends cry.	0	0	5	5	53	48	53	48
11	I don't care to the friends that I don't like.	5	5	3	3	35	32	68	61
12	I look cynically to the friends that I don't like.	4	4	5	5	39	35	63	57
13	I mock my other friends.	1	1	9	8	62	56	39	35
14	I mock my friends to make my other friends laugh.	2	2	12	11	45	41	52	47
15	I call my friends by mentioning their parents' names.	0	0	9	8	37	33	65	59

Based on Table 5, it can be explained that frequency distribution of bullying behavior of school-aged children shows the most 'always' answer coming from statement 7 "I mock my friends by calling 'fatty/sissy/skeleton/bucktoothed'" with 7 respondents (6%). Meanwhile, the most 'never' answer coming from statement 4 "I slap a person that I don't like when I am together with my friends" with 95 students (86%).

Bivariate Analysis

Table 6. Cross Tabulation of Peer's Role and Bullying Behavior

Bullying Behavior	Peer's Role			Total	Correlation (r)	Significance (p)
	Low	Medium	High			
Low	81	10	0	91	0.285	0.002
Moderate	9	5	1	15		
No Risk	5	0	0	5		
Total	95	15	1	111		

Table 6 shows that the highest tabulation result is the respondents who had low peer's role with low bullying behavior as many as 81 students. However, the lowest

cross tabulation result comes from the respondents who had high peer's role with low bullying behavior with no student.

Based on Kendall Tau test result to investigate the correlation of peer's role and bullying behavior on school-aged children, the result obtained correlation value 0.285 with significance p-value 0.002 ($p < 0.05$); it means that H_0 was rejected, and H_a was accepted. It can be concluded that there was correlation between peer's role and bullying behavior on school-aged children at Muhammadiyah Mlangi Elementary School, Gamping Sleman Yogyakarta. Based on the interpretation of kendall tau correlative coefficient, it is known that the correlation was in low category in the coefficient interval 0.200 – 0.400. The correlation direction was positive meaning that the higher peer's role, the higher bullying behavior.

The Correlation between Peer's Role and Bullying Behavior on School-Aged Children

The result of the study obtained data low peer's role with 95 students (85.6%). It shows that school-aged children had low peer's role. It shows that school-aged children had low peer's role. It indicates that the role of peer in doing negative attitude was almost zero. They do not make a particular group of friend's circle, so they can make friends to everybody at school. In addition, environmental factor which concerns on religious value will also bring significant influence to children behavior toward their friends. Children will keep themselves from the influence of their friends. This study has similar result to a study conducted by Andzarwati (2012) mentioning that the formation of attitude, behavior, and social action of the children is determined by environmental influence as well as peer's role. A study conducted Andzarwati (2012) also supports this study which finds that the role of group peer is in low category.

The result of the study also obtained data of low bullying behavior with 91 students (82.0%). It shows that school-aged children have low bullying behavior. It also indicates that among students have high tolerances. Peers, teachers, and school environment should be able to concern on religious value that has significant role in character building of the students. The result even shows that there were 5 students who did not have risk to do bullying. It is supported by a study conducted by Levianti (2013) mentioning that bullying will never happen if there is high control and ethics teaching

from the teachers, good discipline of the school, proper guidance, and consistent regulation of the school.

The study was conducted to investigate the correlation between peer's role and bullying behavior on school-aged children at Muhammadiyah Mlangi Elementary School, Gamping Sleman Yogyakarta. Based on Kendall Tau statistical test result, the correlative coefficient of $r = 0.285$ and $p = 0.002$. It shows that the significance value was smaller than 0.05, so the hypothesis in the study can be accepted. It represents that there is meaningful correlation between peer's role and bullying behavior on school-aged children at Muhammadiyah Mlangi Elementary School, Gamping Sleman Yogyakarta. Positive correlative coefficient value shows that the higher peer's role, the higher bullying behavior.

Table 6 shows that the result of cross tabulation represents that mostly respondents had low peer's role with low bullying behavior with 81 students, while the least tabulation result represents respondents who had high peer's role with low bullying behavior, high peer's role with no risk of bullying behavior, and moderate peer's role with no risk of bullying behavior. It can be explained that the higher peer's role, the higher bullying behavior. On the other hand, if peer's role is low, children will have low bullying behavior, and even they do not have the risk to do bullying. The study is also supported by Nation et. al. (2007, in Usman, 2013) stating that bullying behavior is caused by the pressure of peers in order to get acceptance in the peer group.

The study shows that expected role and behavior that is owned by the students is in good category. Some students even have zero risk to do bullying. When there is a friend bullying others by calling bad names (fatty, dummy), the other friends will remind him/her not to do that behavior. They can remind each other that calling friends with bad names is not a good behavior; it is not suitable to what the teachers have taught and not suitable to Islamic value.

The behavior of most students to remind each other and not to copy bullying will give positive impact to other students, so bullying behavior can be low. Most of bullying doers say that they mock the other students only because of following the other friends. However, when the other friends remind, forbid, and give good example by calling good names, students who previously bully the friends become shameful and realize that what they do is not right. It is supported by a research conducted by Karina

et. al. (2013) mentioning that generally children have close bounding with peer group that can be categorized as moderate and high.

The samples of the study were school-aged children from 9 until 12 years old. Respondents who were 13 and 15 years old were not included in the study since they had been in the stage of adolescence (teenagers) while the study focuses on school-aged children. Based on psycho-social stage stated by Erik Erikson, school-aged children (diligence vs inferiority) start to get out from their family environment to school environment, and they start to develop the attitude of diligence and inferiority. On adolescence stage (identity vs identity chaotic), teenagers start to search personal identity in wider environment. In school-aged, children start to get out from family environment to school environment, so all aspects have significant roles. As the examples, parents should support them; teachers have to give attention; and friends should accept their existence. Children have not tried to search their personal identity but start to create their character whether they will become diligent or have (incapable) inferior feeling.

Age difference between school-aged children and teenagers can also be possible to do bullying. It is caused by seniority phenomena. Seniority here is the interaction correlation among groups which have age gaps and different experience in the same environment. Sometimes senior students feel that they can do everything they want to the junior. Their desire becomes number one, but the junior's intention can be neglected. School bullying is the form aggressiveness among students to bring negative impact to the victims. Benbenishty (2008) argues that the phenomena can happen due to imbalance power in which children who do bullying feel more senior to do particular action to the victims who are more junior students. The juniors feel powerless since they cannot fight back to their seniors.

The study finds that bullying behavior that mostly happens on school-aged children is verbal bullying. Verbal bullying happens because students call their friend's names with bad names like calling fatty, dummy, or calling the parents name. Being called with bad names has dangerous impact to children. They will feel depressed and studying without concentration. It can also bring impact to children's psychology. Verbal bullying can also decrease student's interest and achievement, so they have under-pressured and uncomfortable learning situation. It is supported by a research

conducted by Siswati & Widayanti (2009) mentioning that bullying victims experience low psychological well-being in which victims will feel uncomfortable, afraid, unconfident, and shameful. The worst impact is that the victims have willing to commit suicide compared to the willing to fight the pressure in the form of mocking and punishment.

The other bad impact is status change; in the beginning the students become bullying victims, and then they can be the ones who do bullying. According to Benbenshty (2008), children can be the doers because the environment has formed them not based on the talent that they have. They do bullying because they have ever experienced violence, seen violence, and finally done violence to other people. In the beginning they are the victims; next they respond by doing bullying. The influence of bullying doers to do violence causes victims to participate to be the next bullying doers.

The study concludes that peer's role has correlation to bullying behavior. It is shown when children have low peer's role, it brings influence to them. Low closeness correlation in the study can be influenced by several aspects. They are peers, teacher's role, and good school environment to the children. Peers who have good behavior and attitude, never do bullying, and remind one other when somebody do bullying play significant influence to bullying behavior. School environment that concerns on Islamic values and teachers who teaches by inserting Islamic values also have important role to form the student's character. In addition, if there is problem among students, the teachers will help to finish it well with or without the involvement of the parents. It is supported by a study conducted by Mulyati (2014) mentioning that adult can manipulate the environment to facilitate children's success in a particular activity or capability.

Bullying behavior on children can be prevented by building children's character and create good cooperation among children. If they have empathy feeling and high bonding, they can have supportive and healthy friendship that can lead them to do positive activities. According to Potter & Perry, children who accept positive response will have high self esteem. However, those who often get failure can feel inferior or unworthy, so they want to stay away from the school or their friends.

CONCLUSION AND SUGGESTION

Conclusion

Based on the result of the study and the discussion of the study, it can be concluded that the role of group peers at Muhammadiyah Mlangi Elementary School, Gamping Sleman Yogyakarta could be categorized in low category. Bullying behavior on school-aged children at Muhammadiyah Mlangi Elementary School, Gamping Sleman Yogyakarta was in low category. Besides, there was significant correlation between the role of group peer and bullying behavior on school-aged children at Muhammadiyah Mlangi Elementary School, Gamping Sleman Yogyakarta.

Suggestion

It is suggested that students at Muhammadiyah Mlangi Elementary School, Gamping Sleman Yogyakarta can maintain their positive behavior to never do bullying like neither call their friends with bad names nor mock their friends. The school principal and teachers are expected to give explanation to the students that calling friends should use good names and to guide students not to mock one another. It is also expected that parents can actively participate to control and give good advice to their children to call their friends with good names. It is also suggested that further researchers can take data at the same time and can choose the most proper free time, so students can give the data optimally.

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THE USE OF GC-MS INSTRUMENTS TO DETERMINATION OMEGA-3 FATTY ACIDS LEVELS IN BREAST MILK

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Abstract

Omega-3 is an essential nutrient needed on the growth and development of the infant's brain. This study aimed to determine the levels of omega-3 fatty acids in breast milk using instruments Gas Chromatography-Mass Spectroscopy (GC-MS). This research method is experimental research using instruments of gas chromatography-mass spectroscopy. The results showed that omega-3 fatty acids can be identified. The relative levels of omega-3 fatty acids in breast milk by 16,43%. This study had shown that the determination of levels of omega-3 fatty acids in breast milk (ASI) was performed using instruments GC-MS.

Keywords: breast milk, GC-MS, omega-3 fatty acids

Introduction

Breast milk is a matchless compound created by Allah to meet the baby's nutritional needs and protect it against infection (Yahya 2005). Breast milk is a natural drink for all full-term infants during the first months of age (Nelson, 2000). It can be concluded breastmilk is the perfect food for the newborn. In addition, a woman's breast is used to produce milk (Chumbley, 2004).

Omega-3 fatty acids, especially EPA and DHA found in fish and lots of breast milk. The possibility of fatty acids omega-3 has played a role in the development of brain tissue in infants. Omega-3 fatty acids also influence the psychological functioning of the liver and the brain (Leaf, 2001). The physiological effect of fatty acids omega-3 had been studied in the health, such as hypertension, atherosclerosis, asthma, and prostate (Chayati, 1998). the Health perspectives', the higher the unsaturated fatty acid double in a food, the food is considered essential for the human body. This is because the human body can not synthesize fatty acids omega-3 unsaturated. Unsaturated fatty acids omega-3 one of which is obtained from the use of fish oils (Damongilala, 2008).

Determination of omega-3 fatty acids in breast milk requires a relatively complicated process. Breast milk contains other nutrients such as protein, carbohydrates, vitamins, enzymes and minerals. In the field of chemical analysis of fat in breast milk, other components that are not analyzed and contained in breast milk

should be separated beforehand. Separation of components that are not analyzed until called by the destruction of fat obtained.

After the fat separated from other components, and then to identify the fatty acids in breast milk samples can not be done directly using instruments Gas Chromatography-Mass Spectroscopy (GC-MS). The main requirement for the instrument samples can be analyzed by gas chromatography-mass spectroscopy is the substance to be analyzed is volatile.

Under the terms of the fat sample analysis, the fatty acids are high-boiling should be made of fatty acid methyl ester form so as to have a boiling point which is at operating temperature Gas Chromatography-Mass Spectroscopy (GC-MS). Experimental study is needed to identification of omega-3 fatty acids in breast milk, the necessary studies related to the identification method omega-3 fatty acids in breast milk using instruments Gas Chromatography-Mass Spectroscopy (GC-MS).

Methods

Mother's milk is taken as many as 50 ml put in a 250-ml Erlenmeyer flask. To the sample was added 50 mL Concentrated HCl concentration of 5 M. Shake for 15 minutes and then do ultrasonic treatment for 1 hour. Furthermore, the solution was extracted using the solvent n-hexane and aquabidest up oil solution to separate milk.

Taken oil milk by adding 50 mL of 1 M Na₂SO₄ then didekantir. Dairy oil extraction results were weighed weighing 0.1 grams put in a covered Teflon reaction tube. BF₃ 15% solution in methanol is added as much as 0.5 mL and then heated in a water bath with a temperature of 45 ° C for 30 minutes.

After the cold added to a solution of n-hexane as much as 0.2 mL to form two layers. The top layer of which is a fatty acid methyl ester was taken using a syringe and then injected into the instrument Gas Chromatography-Mass Spectroscopy (GC-MS).

Results and Discussion.

Oil extraction milk samples that have been analyzed in the form of ester content of omega-3 fatty acids by means of GC-MS. GC-MS combines Gas Chromatography (GC) and mass spectrometry (MS). Gas Chromatography (GC) serves as a separator, and

mass spectrometry MS function analyzes each peak (peak) of Gas Chromatography (GC).

Mass spectrometry (MS) used database and software that can predict the structure of the compounds of each peak (peak) so it is easier to predict which compounds exist through the group function and position of functional groups on the compound.

Qualitative data omega-3 fatty acids in mother's milk can be obtained by identifying the peaks that appeared on the chromatogram by predicting the group of compounds which appear in the mass spectrometer. While quantitative data levels of omega-3 may be obtained by reading the percent relative peak area as a percent of the component compounds being analyzed (Aryani, 2015).

The results of the analysis of breast milk fatty acids using instruments Gas Chromatography (GC) GC chromatogram form of data. Gas Chromatography GC chromatogram data on breast milk samples is shown in Figure 1.

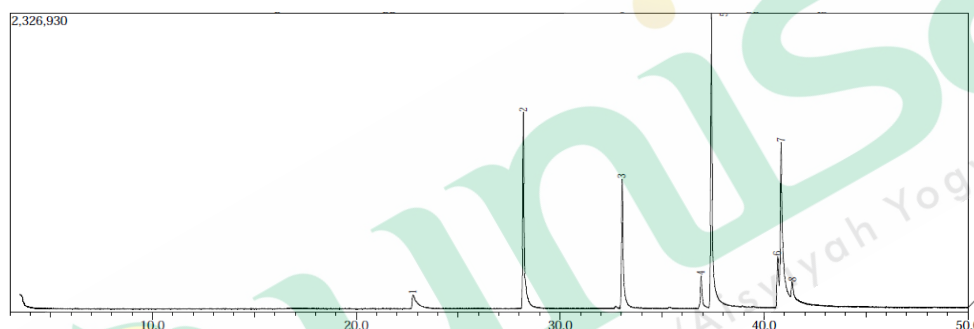


Figure 1. Chromatogram Gas Chromatography data on samples of breast milk (ASI)

The results of the analysis of breast milk fatty acids using instruments Mass Spectrometry (MS) in the form of compounds prediction of the results of chromatograms Gas Chromatography (GC) and the relative percent fatty acid content of breast milk (ASI). The identification of compounds based on data from instruments Mass Spectrometry (MS) shown in Table 1.

Table 1: Data Type Fatty Acids and Relative Percent of Total Fatty Acids Omega-3 in breast milk samples

No. Peak	Retention Time	Retention Time	Relative Levels of Fatty Acid (%)	Type Fatty Acids
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No. Peak	Retention Time	Retention Time	Relative Levels of Fatty Acid (%)	Type Fatty Acids
1	16,625	Methyl ester butanoic	1,85	Saturated
2	22,831	Methyl ester decanoate	6,37	Saturated
3	28,278	Methyl ester dodecanoate	26,85	Saturated
4	33,104	Methyl ester tetradecanoate	9,01	Saturated
5	36,977	Methyl ester 9-oktadecenoate	4,16	Omega-9
6	37,477	Methyl ester heksadecanoate	13,02	Saturated
7	40,784	Methyl ester 10,13-heksadecadienoate	16,43	Omega 3
8	40,784	Methyl ester 9-oktadecenoate	20,95	Omega-9
9	41,441	Metil ester oktadecanoate	1,36	Saturated
Percent relative to the amount of omega-3 fatty acids			16,43	

Figure 1 shows that the levels of omega-3 fatty acids in breast milk samples can be identified on the chromatogram peak number 6. Table 2 shows that the percent of relative levels of omega-3 at 16.43.

Conclusion: Determining levels of omega-3 fatty acids in breast milk (ASI) can be performed using instruments Gas Chromatography-Mass Spectroscopy (GC-MS).

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CORRELATION BETWEEN FAMILY SUPPORT and PREGNANT WOMEN'S ATTITUDE on EARLY INITIATION of BREASTFEEDING at JETIS PRIMARY HEALTH CENTER YOGYAKARTA

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ABSTRACT

Background: Early Initiation of Breastfeeding (EIB) has benefits to reducing the mortality rate, lowers the risk of hypothermia, lowering the incidence of diarrhea. Besides, maintenance temperature and cardiovascular stability in premature infants.

Objective: The aim of this study was to explore the correlation between supports with attitude of pregnant women about the EIB at health center.

Methods: This study was an observational method with cross sectional approach. This study was invited 86 respondents taken by accidental sampling technique. Chi square was applied to measure the correlation between two variables.

Results: The respondents most highly educated 62.8% and most have a positive attitude about the EIB amounted to 79.1%. Mothers who received the support from their family about the EIB at health center in Jetis Yogyakarta amounted to 62.8%. Support families with pregnant women attitude about the EIB at health center in Jetis Yogyakarta have a meaningful relationship with $p\text{ value} = 0.019$, $CI = 1.028$ to 2.308 , $PR = 1.541$. The attitude of pregnant women about IMD influenced by family support

Keywords: early initiation of breastfeeding, knowledge, family support

BACKGROUND

Breast milk is the best food for life and growth so that breastfeeding is essential to babies. Babies need breast milk because it has many benefits. Moreover, breastfeeding in the view of Islam is also a right that must be given to the babies. All babies, not only Moslem but also non-Moslem, have significance to get breast milk. Because of the importance of breastfeeding for babies, in certain circumstances when the mothers cannot breastfeed their babies, through consultation with their husband, mothers may choose to find a breast milk donor (*murdli'ah*). The religious support to breastfeeding is emphasized in the Quran, *Al Baqarah* verse 233.

Researchers in the past 30 years mostly conducted researches on the health benefits of breastfeeding. During the same period, the places of maternity have also encouraged mothers to breastfeed. There were a lot of mothers who chose to give birth in a hospital. There are still many health services that separate the mother and the baby in hospital which can lead to ineffective breastfeeding. The survey in UK showed that currently 76% of women initiated breastfeeding although there were also many of them who stopped breastfeeding because of the lack of information and support (Welford, 2011). The research revealed that early breastfeeding initiation, exclusive breastfeeding and breast milk complementary food can reduce the infant mortality rate to 27.6%. Breast milk complementary food is given after the baby is six months old (Edmond, et al., 2015). Early breastfeeding initiation has many benefits in addition to reduce mortality. Based on several studies, it also lowers the risk of hypothermia, lowers the incidence of diarrhea, and lowers the incidence of ARI in infants, as well as temperature and cardiovascular stability in premature infants. By determining the benefits of early breastfeeding initiation and the disadvantages if it is not done the early breastfeeding initiation, the Indonesian Government made the decision to support the policy of WHO and Unicef that recommends early breastfeeding initiation as an act of 'saving lives', because the early breastfeeding initiation could save 22% of babies who die before the age of one month (Tjahjo & Paramita, 2008).

The support is also implemented in the government regulations. The policy related to exclusive breastfeeding and implementation of the early breastfeeding initiation can be seen in the Indonesian Government Regulation No. 33 of 2012 on exclusive breastfeeding. The rules on the early breastfeeding initiation in particular contained in article 9 and article 10 (Adiningrum, 2014). The government regulation of the early breastfeeding initiation has been issued to ensure the implementation of early breastfeeding initiation program.

The level of implementation of early breastfeeding initiation is <1 hour. Based on the survey results of Basic Health Research, Indonesia had an increase on the implementation of early breastfeeding initiation from the year 2010 amounted to 29.3% and in 2013 reached 34.5%. Based on Basic Health Research survey results, the level of early breastfeeding initiation implementation of each area in Yogyakarta are as follow: Kulonprogo 63.5%, Bantul 58.7%, Sleman 51.4%, and Yogyakarta 43.1% (Lewis,

2013). Early breastfeeding initiation implementation is influenced by the level of mother's knowledge, the attitude of the mother, health facilities and health workers (Labbok, et al., 2013). According to Widiastuti (2009) and Siradjudin, early breastfeeding initiation depends on knowledge, attitudes, experiences, counseling and motivation of early breastfeeding initiation by midwives and family support.

According to Green & Kreuter (1991), the person's behavior is influenced by three factors: predisposing factors, enabling factors, and reinforcing factor. Enabling factors include the attitudes, knowledge, beliefs and values in society. The Green theory describes the linkages between knowledge, attitudes and behavior. It is said that the person's knowledge will influence his or her attitudes which will be reflected in a person's behavior. This is in accordance with Notoatmojo (2007), attitude is a closed behavior of a person.

Widiastuti (2009) stated that early breastfeeding initiation depends on knowledge, attitudes, experiences, counseling and motivation of IMD by midwives and family support. The early breastfeeding initiation training for health workers especially midwife is also very necessary, it is consistent with research of Mardiah, et al. (2012) who stated that the health workers undergoing training on the early breastfeeding initiation has four times bigger chances to convey information better about early breastfeeding initiation than health workers who never took part in the training. Factors affecting early breastfeeding initiation are also a factor for the formation of a person's attitude in accordance with the theory of Green that person's behavior was constituted by the attitude of the person.

The midwife's role in providing information in the form of counseling, education and motivation for the mother on early breastfeeding initiation has significant effect on the mother during labor to perform early breastfeeding initiation (Widiastuti, et al., 2009). The results of this study is different from the results of Kartini (2013) conducted in the primary health centers in the area of Yogyakarta. The Kartini research (2013) on 5 samples of primary health center in Yogyakarta revealed that the knowledge level of pregnant women about early breastfeeding initiation was 29.8% in bad category, 48.8% in less category, 19% in moderate category, and 2.5% in good category. In the 5 primary health centers were still found pregnant women who had poor, lack, moderate knowledge about the early initiation of breastfeeding. The Green Theory stated that if

the knowledge on early breastfeeding initiation of pregnant women is low, the mother's attitude has a tendency not to approve the early breastfeeding initiation. Because of mothers' attitude that does not support the early breastfeeding initiation; it will eventually be reflected in their negative behavior in the implementation of early breastfeeding initiation.

RESEARCH METHOD

The study employed qualitative design; a research which employs method to test particular theories by investigating the correlation among variables (Creswell, 2013). The design of the study used cross sectional approach. The populations of the study were trimester III pregnant women who had regular check up at Jetis Primary Health Center Yogyakarta. The numbers of the samples were 86 respondents taken by accidental sampling technique. Univariate data analysis was presented by using frequency distribution table; bivariate analysis data used chi square statistical test.

RESULT AND DISCUSSION

General Image of Research Location

Jetis Primary Health Center is located in Jetis Sub District which has border with Sleman Regency. The standard of the service which is used as the guidance of working system at Jetis Primary Health Center is the Indicator of Healthy Indonesia Program 2010, Minimum Service Standard based on Health Minister's Disclaimer Letter No.1457/Menkes/SK/IX/2003, and MDGs. Jetis Primary Health Center has two efforts of health activities namely compulsory program and developmental program. One of the efforts for developmental program is breast feeding consultation. Jetis Primary Health Center only has 1 breast feeding counselor (a doctor). However, the other health professionals like midwives had never followed any training of breast feeding counselor. The range of exclusive breast feeding in Jetis Primary Health Center was still under the national range with 84.00% namely Bumijo 79.26%, Cokrodiningratan 83.53%, Gowongan 76.83%, and total range of Exclusive Breast Feeding in Jetis Sub District was 79.62%.

Characteristic of the Respondents

The respondents of the study were trimester III pregnant women who had regular check up at Jetis Primary Health Center. The samples were 86 respondents. Table 4.1 explains the characteristic of the respondents who had regular check up at Jetis Primary Health Center; 88.4% of them in reproductive age under 35 years old; 69.8% with high education, 66.3% unemployment, and 60.5% *multipara* women.

Table 4.1 Frequency Distribution of Respondent's Characteristic

No	Respondent's Characteristic	Category	Frequency	Percentage (%)
1	Age	< 35 years	76	88,4
		≥ 35 years	10	11,6
2	Employment Status	Employment	29	33,7
		Unemployment	57	66,3
3	Mother's Education	High	60	69,8
		Low	26	30,2
4	Parity	<i>Primipara</i>	34	39,5
		<i>Multipara</i>	52	60,5

Sources: primary data in 2015

Research Result

Uni-variables Analysis

Univariate analysis used to describe the variables of the study can be seen in the following table:

Table 4.2 Frequency Distribution of Research Variable

No	Variables	Category	Frequency	Percentage (%)
1	Mother's attitude about early breast feeding initiation	Positive	68	79,1
		Negative	18	20,9
2	Family support	Supportive	54	62,8
		Not supportive	32	37,2
3	Mother's Education	High	60	69,8
		Low	26	30,2

Table 4.2 shows that majority of trimester III pregnant women who had regular check up at Jetis Primary Health Center mostly had high education with 60.8%. It is also found that positive attitude on early breast feeding initiation was 79.1% and trimester III pregnant women who had supportive family to do early breast feeding initiation was 63.8%.

Bivariate Analysis

Bivariate Analysis is the analysis used to identify whether the correlation between two variables namely dependent variable and independent variable exists or not. Statistical test used was chi-square and confident interval (CI) 95% and hypothesis test (p value). P value was used to investigate meaningful correlation statistically; if $p < 0.05$, it means that the study has meaningfully statistical correlation.

Table 4.2 shows that there was correlation between family support and pregnant women's attitude on early breast feeding initiation at Jetis Primary Health Center (p value = 0.004, CI = 1.070-1.890, PR = 1.422). PR between the variables was 1.422 meaning that pregnant women got family support 1.422 times having positive attitude on early breast feeding initiation.

Table 4.3. Correlation between Family Support and Pregnant Women's Attitude on Early Breast Feeding Initiation

Family Support	Pregnant Women's Attitude on Early Breast Feeding Initiation				<i>p value</i>	CI (95%)	PR
	Positive		Negative				
	n	%	n	%			
Supportive	48	88.9	6	11.1	0.004	1.070-1.890	1.422
Not Supportive	20	62.5	12	37.5			
Total	68	79.1	19	20.9			

Discussion

Generally the study aimed to investigate the correlation between family support and pregnant women's attitude on early breast feeding initiation at Jetis Primary Health Center Yogyakarta. Independent variable of the study was knowledge rate of the subjects.

Univariate Analysis Discussion

Based on the result of univariate analysis, pregnant women who had regular check up at Jetis Primary Health Center Yogyakarta mostly had high education with 69.8%. It is suitable with what has been stated by Dyson, et. al. (2005) that women with high education will be able to receive information easily. Well-received information is going to increase people's knowledge. Information will be able to be received by the women if it is given properly. Oberhelman et. al (2015) argues that comprehensive and

proper information giving process also has significant influence toward the knowledge, and finally it can bring impact to the attitude on breast feeding.

Jetis Primary Health Center Yogyakarta has developed a health program to improve pregnant women's knowledge related to breast feeding both about early breast feeding initiation and about exclusive breast feeding by providing breast feeding counselor. However, breast feeding counselor at Jetis Primary Health Center Yogyakarta was only one doctor, so not all pregnant women in their antenatal care could meet the counselor. It is suitable with the research done by Kornides & Kitsantas (2014) stating that transferring information related to breast feeding to women with proper way is able to increase the women's knowledge.

Good process of giving information will both increase the women's knowledge on early breast feeding initiation that can bring impact to women's attitude in supporting early breast feeding initiation and improving women's attitude in supporting early breast feeding initiation. In the study, positive attitude of pregnant women on early breast feeding initiation was 79.1%. It is similar to a research done by Larney & Aidam (2005) stating that good understanding about breast feeding will bring impact on pregnant women's attitude that in the end will give effect on breast feeding process to the baby.

Bivariate Analysis Discussion

The result of bivariate analysis of family support and pregnant women's attitude on early breast feeding at Jetis Primary Health Center Yogyakarta shows very meaningful correlation with $p\text{ value} = 0.004$, $CI = 1.070-1.890$, $PR = 1.422$. PR between variables was 1.422 meaning that pregnant women who got family support had 1.422 times chances to have positive attitude on early breast feeding initiation. It is similar to the previous study which stated that giving support to women in doing breast feeding is significantly needed. The support given is able to succeed breast feeding process and to minimize the women to give formula milk to the babies (Newby, et. al, 2015). Based on the study, less support can cause failure in giving exclusive breast feeding (Kimura, et. al, 2015).

Based on the result of the study, 37.5% subjects did not get family support and having negative attitude on early breast feeding initiation. The families who did not give support to pregnant women related to early breast feeding initiation did not get

sufficient information. Pregnant women who had regular check up at Jetis Primary Health Center were accompanied by the family members, but not all of them follow the subjects to meet the counselor, and some of them only had passive attitude when they accompanied the subjects to have antenatal care.

Family is important aspect to get involve in counseling process during antenatal care. It is suitable to a research conducted by Laantera, et. al. (2010) that involving husband during pregnancy counseling will form positive attitude on the husband about early breast feeding initiation to the baby. It is also strengthen by a research done by Kornides & Kitsantas (2014) that husband and family support is very significant in increasing the range of breast feeding process. Family support to women in doing early breast feeding initiation is very important since women who get family support will be motivated in doing early breast feeding initiation. It is similar to the research done by Shetty & K (2013) that giving support to pregnant women done by the husbands will increase pregnant women's attitude in doing early breast feeding initiation during partum process. Positive attitude of pregnant women in early breast feeding initiation can also be formed with the support of the other members of the family other than the husbands (Cox, et. al. 2015).

Family members who give support in breast feeding will support the women to struggle in giving exclusive breast milk to the baby (Hunter & Cattelona, 2014). Lartey & Aidam (2005) state that pregnant women who get family support to do early breast feeding initiation were 72.9% compared to those who did not get support from the family. the previous studies have proven that family support is very significant in pushing women's attitude to give positive attitude on early breast feeding initiation.

Pregnant women who did not get family support but had positive attitude in early breast feeding initiation were 62.5%, while those who got family support but had negative attitude were 11.1%. The attitude on early breast feeding initiation is also supported by health facilities. The subjects who did not get family support but got early breast feeding initiation facility during partum process might have positive attitude on early breast feeding initiation. On the other hand, if subjects got family support on early breast feeding initiation, but health facility did not support them, they would have negative attitude on early breast feeding initiation.

The study in Uganda shows that women who have partum process in hospitals have bigger chance to do early breast feeding initiation than those who have partum process at homes (Bbaale, 2014). International study shows that one of the factors influencing the success in breast feeding process is the intervention done in primary health center service i.e. giving the support to health professionals. The support done by health professionals is considered to be one of the efforts in completing the support given by the environment (Ingram, 2013).

CONCLUSION AND SUGGESTION

Conclusion

Based on the result of the study, it can be concluded that pregnant women attitude toward early breast feeding initiation at Jetis Primary Health Center Yogyakarta obtained 87.1%. Family support to pregnant women who had general check up at Jetis Primary Health Center Yogyakarta mostly got family support about early breast feeding initiation with 72.9%, and the correlation between family support and pregnant women's attitude about early breast feeding initiation at Jetis Primary Health Center Yogyakarta had practically and statistically meaningful correlation with p value 0.04.

Suggestion

It is expected that Jetis Primary Health Center Yogyakarta can follow the training of Breast Feeding Counselor and can involve the family when conducting antenatal care counseling. It is also expected that the Head of Primary Health Center can propose to Health Department of Yogyakarta to conduct the training of breast feeding counselor for all midwives at Jetis Primary Health Center Yogyakarta.

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EFFECT AUDIOVISUAL CONCEPTION AND NUTRIENTS COUNSELING TO THE NUTRIENT IMPROVEMENT MOTIVATION ON PREGNANT MOTHERS

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ABSTRACT

Research Background: Pregnant mothers at Girisubo 51.4% had KEK and 18.3% had anemia. The purpose to investigate the effect of audiovisual of conception and nutrients to the nutrient improvement motivation on pregnant mothers at Girisubo Gunungkidul in 2015.

Research Method: True Experimental Design with pretest posttest control group. Samples 30 people taken through simple random sampling. Analysis used Wilcoxon and Mann-Whitney U-test.

Research Finding: The result experiment group Wilcoxon test p value 0.000. and control group p value 0.001. There is an effect of audio visual of conception and nutrients to the nutrient improvement motivation on pregnant mothers at Girisubo Gunungkidul.

Keywords : audiovisual, conception, nutrients, and pregnant mothers

INTRODUCTION

Malnutrition is the highest health problem in the world especially in developing countries (FAO, 2009). Nutrition problem can be seen through nutrition status measurement indicator of pregnant women, from the monitoring result of the body weight during pregnancy with weight gain 10-12 kg and the measurement of Upper Left Arm Round with more than 23.5 cm. If arm measurement is less than 23.5 cm, it means that pregnant women experiencing chronic energy. The next step is to measure the rate of Hemoglobin (Hb) to detect the possibility of anemia in pregnant women with Hb rate ≥ 11 mg/dl.

The data from Survey Result of Household Iodine Salt Consumption, the prevalence of pregnant women who experience malnutrition in South Sulawesi 17.5%, West Java 14.30% including Cirebon 8% and Jakarta Capital Province 13.91 % (Riskedas, 2010). In Yogyakarta Special Province, the prevalence of pregnant women

with malnutrition in 2011 was 14.86%. Compare to the prevalence in 2010 with 14.41, it increased slightly. The highest rate was in Yogyakarta Municipality (22.86%) and in Gunungkidul Regency (15.44%). Girisubo Primary Health Center noted the rate of pregnant women with malnutrition or with Arm measurement < 23.5 cm from January to September 2014 was 73 cases (51.4%), and there were 26 cases (18.3%) of 142 total pregnant women with anemia Hb< 11 mg/dl in Trimester I and III (Malnutrition Data of Girisubo Primary Health Center, 2014).

Low nutrition intake during pregnancy can cause several bad impacts to pregnant women and the babies. One of the problems is that women give birth with low birth weight babies. The babies are born under 2,500 grams. Low birth weight babies have mortal possibility 35 times higher than the babies who are born with more than 2,500 grams (Mutalazimah, 2011). Low nutrition status is mainly influenced by low knowledge related to pregnancy and low status of social economy of the society.

The counseling given by health practitioners will be able to improve the society's knowledge. Counseling will be much more interesting if it uses media including audio, visual, and audio visual. According to Zakaria in Kumboyono (2011), the use of audio visual media in health counseling will help to clarify the information presented because it can be more attractive, interactive, resolving the limit of space, time and human senses. Thus, pregnant women will be motivated to fulfill their need of nutrition to help their fetuses to grow and develop well during their pregnancy period (Aryastuti, 2012).

Audio visual counseling in conception time and nutrition needed by pregnant women explains the process of the stages of fetus' growth and development in the womb during pregnancy period starting from the process of fertilization until labor. The audiovisual will also explain about the need of nutrition in every stage of fetus' growth and development, so pregnant women can be motivated to increase their nutrition need. Most of the societies in Indonesia still apply some traditional beliefs that can harm their health. It is proven by the interview result to several pregnant women in Girisubo when they came to have ANC. More than 50% pregnant women have less motivation in fulfilling their nutrition during their pregnancy because they are afraid to consume some particular food because they are afraid if their babies are born too big and causing difficult labor.

The importance of nutrition in pregnant women is significant both for the fetus' growth and development and for helping pregnant women to prevent some pregnancy and labor risks starting from pain until mortality because pregnant women will feel

uncomfortable in doing their activities, feel the heavy burden in their womb, and feel fatigue easily. It corresponds to Al Quran in Luqman verse 14 which means:

“We have enjoined man concerning his parents - his mother carries him in her womb while suffering weakness upon weakness and then weans him for two years - That's why We commanded him: "Give thanks to Me and to your parents, and keep in mind that, to Me is your final goal”.

From the above verse, it is obvious that pregnant and breastfeeding women suffer from weakness upon weakness because during pregnancy they will experience low Hb level. Therefore, if the problem is not intensively cured, pregnant women will face complication in labor process in the form of long laboring process, bleeding, etc. There should be support and attention from their closest family to improve their nutrition status by consuming health food and preventing from anemia. In addition, they also have to remind pregnant women to consume multi-vitamin during pregnancy regularly suitable to the required dosage (Maulana, 2010).

The government has developed particular programs to improve the health and nutrition of pregnant women and babies for the sake of pressing the rate of pregnant women's and babies' mortality. Those programs are enlisted in MDG's (Millennium Development Goals) consisting of 8 objectives and targets to realize Healthy Indonesia Program 2015. In order to support the programs, the government gives easy service and access to the society to check their health freely using insurance card and to widen health services in every area done by health practitioners especially midwives (Moeloek, 2014).

Based on the explanation above, problem formulation of the study is that “Is there any influence of audio visual counseling during conception time and nutrition toward the motivation of nutrition improvement to pregnant women in Girisubo Primary Health Center, Gunungkidul in 2015?” The objective of the study is to investigate the influence of audio visual counseling in conception time toward the motivation of nutrition improvement to pregnant women in Girisubo Primary Health Center in 2015. The hypothesis of the study is the influence of audio visual counseling in conception time and nutrition toward the motivation of nutrition improvement to pregnant women in Girisubo Primary Health Center, Gunungkidul in 2015.

RESEARCH SUBJECTS AND METHOD

The design of the study uses True Experimental Design and Pretest-Posttest Control Group Design. It also applied cross sectional time approach. The populations of the study were pregnant women who checked their health in Girisubo Primary Health Center from 2014 – 2015 with 35 total respondents. The researcher used random sampling in which sample taking was done randomly by taking a look at some particular criteria in the form of drawing lotteries, choosing the number from the list randomly. Some pregnant women checking their health in Girisubo Primary Health Center were given Audio visual counseling about conception time and nutrition (experimental group), and some other pregnant women got counseling about conception time and nutrition through leaflet (control group). Each group consisted of 15 people. Sample measurement was counted based on the number of population and following the requirement that experimental study using experimental group and control group have to consist of 10 until 20 respondents in each group (Sugiyono, 2010).

Independent variable in the study is audio visual counseling about conception time and nutrition, and the dependent variable is the motivation of nutrition improvement to pregnant women. The disturbing variables are: (1) uncontrolled desire; (2) uncontrolled knowledge; (3) education controlled by Junior High School as the lowest level; (4) family income controlled by choosing the amount income \geq Rp. 1,108,249 as the minimum wage in Gunungkidul Regency; (%) environment controlled by respondents' area which can still be reached by the researcher.

Operational definition of audio visual counseling about conception time and nutrition in to give information related to fetus' growth and development as well as nutrition need to pregnant women with the method of giving oral explanation and using audio visual as supporting method for experimental group. Giving oral explanation was done to control group. It was helped with leaflet as its media in 1 meeting during 1 hour.

Data scale was nominal. The motivation of nutrition improvement was a desire, spirit of pregnant women to fulfill their nutrition need during their pregnancy after given counseling of reading the leaflet. The data were obtained by using questioner measured with ordinal scale and categorized based on (Arikunto, 2010) : (1) good, if the obtained score is (61-80) 76% - 100%; (2) enough, if the obtained score is (41-60) 56% - 75%; and (3) low, if the obtained score is (1-40) < 55%.

The equipment to collect the data was questioner. Data analysis technique used the table of frequency distribution from the percentage. The data were analyzed using computerization help, ordinal data scale, and non normal distribution. Data analysis used for comparative test of two paired data was Wilcoxon test from the result data of the motivation of nutrition improvement in pregnant women both pre and posttest in each experimental group and control group. On the other hand, two unpaired data i.e. motivation difference of nutrition improvement in experimental group and control group used Man-Whitney U test.

RESULT AND DISCUSSION

Table 1. Frequency Distribution of Respondents' Characteristics Based on Education, Occupation, and Income in Experimental Group and Control Group in Girisubo Primary Health Center in 2015

Respondents' Characteristics	Experimental Group		Control Group	
	F	%	F	%
Education				
Junior High School	13	86.7	10	66.7
Senior High School	2	13.3	5	33.3
University	0	0	0	0
Occupation				
Housewives	12	80	4	26.7
Farmers	2	13.3	2	13.3
Private Employees	1	6.7	8	53.3
Civil Servants	0	0	1	6.7
Income				
a. Low (<1,108,249 /month)	13	86.7	5	33.3
b. Medium (1,200,000-2,000,000 /month)	2	13.3	3	20
c. High (> 2,000,000 /month)	0	0	7	46.7

Source: Primary Data Analysis (2015)

Table 2. Frequency Distribution of the Motivation of Pregnant Women Nutrition Improvement Before and After Audio Visual Counseling about Conception Time and Nutrition in Experimental Group in Girisubo Primary Health Center Gunungkidul in 2015

No	The Motivation of Nutrition Improvement in Experimental Group	Pre		Post	
		F	%	F	%
1.	Good	2	13.3%	12	80%
2.	Medium	11	73.3%	3	20%
3.	Low	2	13.3%	-	-
	Total	15	100%	15	100%

Source: Primary Data (2015)

Table 3. The Motivation of Pregnant Women Nutrition Improvement Before and After Audio Visual Counseling about Conception Time and Nutrition in Girisubo Primary Health Center Gunungkidul in 2015

The Motivation of Pregnant Women Nutrition Improvement	Mean		Asymp.Sig.(p-value)
	Before	After	
	70.80	83.47	0.000

Table 4. Frequency Distribution of the Motivation of Pregnant Women Nutrition Improvement Before and After Audio Visual Counseling about Conception Time and Nutrition in Control Group in Girisubo Primary Health Center in 2015

No	The Motivation of Nutrition Improvement in Control Group	Pre		Post	
		F	%	F	%
1.	Good	1	6.7%	7	46.7%
2.	Medium	13	86.6 %	8	53.3%
3.	Low	1	6.7 %	-	-
	Total	15	100%	15	100%

Source: Primary Data (2015)

Table 5. The Motivation of Pregnant Women Nutrition Improvement Before and After Audio Visual Counseling about Conception Time and Nutrition in Control Group in Girisubo Primary Health Center in 2015

The Motivation of Pregnant Women Nutrition Improvement	Mean		Asymp.Sig. (p-value)
	Before	After	
	65.80	75.80	0.001

Table 6. The Difference of Nutrition Motivation Improvement Before and After Audio Visual Counseling about Conception Time and Nutrition in Experimental and Control Groups in Girisubo Primary Health Center Gunungkidul in 2015

No.	The Motivation	N	Mean Before	Asymp.Si g (p- value)	Mean After	Asymp.Si g (p- value)
1.	Eksperimen	15	19.80	0.007	20.47	0.001
2.	Kontrol	15	11.20		10.53	

After analyzing the data and seeing the result obtained from the research, the influence of audio visual counseling about conception time and nutrition toward the motivation of nutrition improvement to pregnant women in Girisubo Primary Health Center, Gunungkidul Yogyakarta in 2015 can be seen in Table 1. Based on the data presented, the result shows that pregnant women proportion in experimental group and control group mostly graduated from junior high school (86.7%) in experimental group and 66.7% in control group. The most dominant occupation was house wives (80%) in experimental group and private employees (53.3%) in control group. The characteristic of the respondents in experimental group was that they had low income level (86.7%). On the other hand, the respondents in control group mostly had medium income > 2 million rupiahs (46.7%).

Based on the result of pretest, the result related to the motivation in experimental group shows that most of the respondents could be categorized as enough (73.3%). After being given counseling by audio visual, the motivation of the respondents increased to be good (80%). Besides, the result of the research in

control group shows that most respondents could be categorized in enough category (86.6%) and in good category (6.7%). After being given counseling with leaflet as the media, the result of the posttest shows enough category (53.3%) and good (46.7%).

Before being given audio visual counseling, respondents in experimental group had already had enough motivation in increasing their nutrition during their pregnancy. After being given the counseling using audio visual as the media, the motivation of most respondents increased to be good category (80%).

It caused by the characteristic of the respondents were mostly (80%) house wives, so they could manage all need of nutrition consumption suitable to their desire to fulfill their need of nutrition daily. However, pregnant women also need to understand what kind of nutrition that they have to consume during pregnancy period. Since most of the respondents were house wives, they had to do other activities other than cooking. Some jobs or some heavy activities could be the burden for pregnant women. It could influence the fetus' growth and development in the mothers' womb because the correlation of axis feto-placenta and the circulation of retro-placenta that becomes one unit. If there is disturbance in one of them, it can cause risk to malnutrition and anemia to pregnant women and low birth weight for the babies (Kusmiyati, et. al., 2009).

Based on the research result in experimental group, from 25 item questions there were 7 questions that could have improvement significantly. Here it is the example: respondents would consume the only available food although it was not food with complete nutrition like carbohydrate, protein, and vitamin because of economic factor. This item had pretest value 60% increasing 20% becoming 80% in posttest. It shows that before getting counseling, pregnant women were not motivated to fulfill their nutrition because they depended on economic factor. In experimental group, the average respondents had low economic level with $\leq 1,108,249$ rupiahs/month (86.7%). Financial limitation would cause the disturbance of clean water fulfillment, healthy food, and proper place of living. After being given the treatment together with the explanation using audio visual media, the respondents had motivation improvement. Motivation rise as he received information and knowledge encourage motivation to make efforts the improvement of nutrition good

for pregnant women in various ways. For example by plant fruits and vegetables healthy.

Respondents (66.6%) would consume rice, vegetable, side dishes, and fresh fruit everyday for their health and their fetus. After getting the treatment the number of group members increased to be 93.3%. In this case, the respondents felt more motivated because they realized that pregnant women had high risk toward pregnant complication especially anemia. Pregnant women who had anemia Hb < 11 mg/dl in experimental group were 7 women (46.6%). Since anemia can cause mortality, respondents felt afraid, so they would try their best to fulfill their nutrition need during their pregnancy following the information that they had got. Respondents also positively agreed to repair their eating habit and pattern which was only 2 times/day before the treatment to be 3-4 times/day after getting the treatment together with some snack and green vegetable, side dish, and fruit. It was proven by the result of pretest which obtained 73.3% increasing into 91.6% in the posttest.

Some of the respondents (56.6%) did not consume soy bean curd, tofu, or peanuts, and they preferred to choose egg, fish, beef, and milk because those food had bigger protein rate. It shows that some of the respondents had not known and understood what the best protein sources that could be good for pregnant women were. According to Arisman (2004) in Sulistyoningih (2012), the protein is needed as builder component of fetus' tissue (lack protein intake can obstruct the growth of the fetus). Based on the rate of nutrition fulfillment in 2004, pregnant women need additional protein 17 grams/day. The fulfillment of protein sourced animal is large rather than a necessity of vegetable protein, so that eggs, fish, meat, milk need more consumed than know, tempe and peanuts. After getting the treatment of audio visual counseling and explanation from the researcher, the posttest obtained 85%, so it shows that the respondents got more motivation to fulfill their protein intake.

The results of pretest (61,6 %) of respondents agreed to reduce portions eating if experienced nausea vomiting, although they realized that in pregnancy young it need nutrients more for growth and fetal development in the uterus. Results showing that the absence of efforts to meet nutritional requirements required to a fetus although in a state of nausea. Complaints nausea in a trimester I pregnancy is often experienced by most pregnant women. This complaint normal because of the hormone chorionic

gonadotrophin (HCG) during pregnancy 14-16 week or in some cases that undergoes them until the end of pregnancy. It can cause pregnant women lazy eat so experienced a lack of nutritional intake that can cause pregnant women limp, and anemia that can threaten safety the mother and the fetus. Having given counseling, of respondents were motivated with the results of posttest (85 %) to fulfill nutrisinya despite there is nausea vomiting by not reduce portions eat. Respondents can anticipate queasiness vomiting with consumed the food a little but often , consume menu additional and interludes, and consume multivitamin and medicine anti nausea of a midwife or a doctor .

Some of the respondents (46.6%) agreed to avoid some food that could make their fetuses becoming big. However, the posttest result shows that the respondents (71.6%) would not avoid the food that could make their fetuses big, and they would consult to the midwife/ doctors initially. The food that they previously avoided was sweet food, beef, and too many times to eat more than 3 times. Based on the information from the respondents, their reason to avoid those kinds of food was because they contain fat, and they could increase their appetite, so they tended to eat irregularly. The respondents were worried if the mothers were fat, and their fetuses were big, mothers would find difficulties in their laboring process. This incident had become people belief in Girisubo, so there were a lot of pregnant women in the area having malnutrition, or some babies were born with low birth weight. The society considered that pregnant women could not consume fishy food like fish, beef, egg, etc. Their reason was because fishy food would make their blood smelling fishy, and their babies would smell fishy too. On the other hand, those kinds of food are very significant for pregnant women and the growth of the fetuses because they contain high protein which can help the process of fetuses' growth and development. Pregnant women recommended to consuming it, especially in pregnancy a trimester I. Not to the a fetus born large or low birth, good during pregnancy always of visiting doctor to midwife / doctor to get monitoring at regular intervals. For when weight mother less allow for an infant born less than 2500 grams or it even happened miscarriage (Kristiyanasari, 2010). The results of pretest 55 % increased to 81,6 % in posttest. Iodine can be obtained from drinking water and a source of materials seafood. A deficiency of iodine for pregnant women will result in a fetus experienced hipotiroid next develop into with cretinism. Nerve damage as a result of hipotiroid can cause

retardation mental. Less iodine can also causing infant born dead, abortion, and lead to the death of infants and perinatal .

Pregnant women motivation did not increase both before and after getting audio visual treatment in respondents' respond related to nutrition fulfillment to their bodies during pregnancy when they had low income. The average score obtained for both pretest and posttest was 61.6%. This proved that of before get treatment, respondents already has a motivation that well is to meet nutritional needs in the body during pregnancy despite having economic sufficient in meet the needs of day.

Based on the research result in control group, there were 3 questions that had significant improvement with 61.6% of the respondents who agreed only to consume vitamin from their midwives to fulfill their nutrition during pregnancy, and they did not to consume health food because they thought that the vitamin had been enough for them. The result of the posttest shows that the respondents (80%) did not agree if they only needed to consume vitamin from their midwives. Beside the vitamin from their midwives, the need of nutrition intake from five important components in food. Nutrition need for pregnant women in a day should include additional calories 300 – 500 calories, protein 8 – 12 grams, same fat, Fe 2 – 4 grams, Ca 400 grams, Vitamin C 5,000 IU, Folic Acid 30 mg, and Vitamin A 400 mg (Kristiyanasari, 2010).

The results obtained pretest 51.6 % of respondents agree will not doing activities. And activity is useful to the smooth process of metabolism of the body. If metabolism smoothly, so the flow of blood to whole organs the body met and organs can work well, the body would be comfortable, healthy, and arising think happiness. While in posttest, the results (73,3 %) of respondents strongly disagree if not do any activity. Calories can be used as a source of energy, if not do activity, then the system metabolism will not run smoothly and have a complication as complaints pain, swollen, fatness even arising various kinds of diseases. With activities lightly or a gymnastic exercise pregnant the body would be comfortable, fit, a fetus healthy and will take the muscles that elastic so that it would ease the delivery process.

The research result from pretest and posttest was similar with 73.3% in control group showing that the respondents would not consume too much food and would concern nutrition need for pregnant women following the suggestion from their midwives and doctors in order to avoid obesity. Pregnant women had realized

to keep their food nutrition and eating pattern because they were afraid that they would bear big babies and would find difficulties in laboring process. In posttest of respondents were knows and understand that to keep baby do not have weight excess. But consumed the food to suit the needs of nutrition pregnant women who has advocated by experts nutrition and doctor.

The result of pretest and posttest could obtain similar result with 71.6% in control group showing that respondents would consume fruits and vegetables everyday because they realized that the need of vitamin C increased 5,000 IU, and the most reliable sources were fruits and vegetables. Respondents own motivation good in fulfilling vitamin C they consume fruits and vegetables every day. Respondents will consume milk every day. The results of pretest and posttest show the command of value 65 %. Based on these results respondents have realized that calcium very important to meet the needs of nutrition of pregnant mothers during pregnant, so that respondents totally agree to consume milk every day.

Based on the explanation above, data analysis using Wilcoxon test and Mann-Whitney U-Test, the result of Wilcoxon test shows that pretest and posttest result of experimental group got p-value = 0.000 with the initial mean 70.80 and the final mean 83.47, so it shows that there was a difference in motivation before and after being given the treatment of audio visual counseling. In control group, the result of pretest and posttest got p-value 65.80 and 75.80 respectively showing that there was motivational difference before and after being given leaflet as the treatment.

The calculation for two unpaired data used Mann-Whitney U-Test. The result of p-value = 0.001 shows mean value of posttest in experimental group with 20.47 and in control group with 10.53. it means that there was a significant influence in Audio Visual counseling about conception time and nutrition toward the motivation of pregnant women nutrition improvement in Girisubo Primary Health Center in 2015. It happened since information transfer using audio visual as the media was more acceptable compared to using leaflets.

Motivation is a tendency arising in the soul of one is conscious and unconscious perform the act of with a definite aim or efforts that causes someone or groups of people moved do things because they want to achieve objectives intended (Poerwodarminto ,

2006). Motivation will caused a change energy .So that would be related to the problem symptoms psychiatric, feelings and also emotion to then act and do something. All the urge because the existence of a purpose needs, and desire. The need for nutrition for pregnant women increased, this is because the high nutritional intake required by the mother and the fetus.

Incidence of pregnant women undernourished in Indonesia is still very high, it is triggered by the lack of knowledge and motivation intake about good nutrition. Incidence of pregnant women undernourished ever reached 20-80%, while in indonesia reach 16,7%. This can result in negative effects for the mother and fetus. The negative effects most frequently was the mother experienced anemia or a deficiency of iron so as to cause death. While to a fetus can lead to disability, the baby is born low and can be ending in death (Kristiyanasari, 2010) .

To satisfy nutritional intake during pregnancy, needs knowledge of the process of growth and fetal development and nutritional intake good to excite motivation pregnant women in raise the status of nutrition so that it can be created mother smart gave birth to a healthy and good. With the counseling audiovisual on the matter be proven to increased the motivation good for pregnant women in improving nutrition. An increase in the results of the counseling are defined as a result of counseling health by the audiovisual and followed with a discussion.

To research was used in the audiovisual media with the theme of the conception and nutrition for pregnant women until 18 minutes. This video explaining the pregnant mothers experienced a lack of nutrition, the process of a period of growth and development of the fetus in the uterus, and needs of the necessary for nutrition pregnant women.

The analysis result above is suitable to the result of the research done by Barr et al. (2010) with the title Effectiveness Of Educational Materials Designed To Change Knowledge And Behaviors Regarding Crying And Shaken-Baby Syndrome In Mothers Of Newborns: A Randomized, Controlled Trial. The research used booklet (11 pages) and DVD (12 minutes duration) for intervention group. The result of the research shows that the mean value of knowledge in intervention group was higher than the value of control group.

Another study conducted by Garini (2004) with the title “The Influence of VCD Intervention of Baby Treatment toward the Mothers’ Knowledge about Baby with Low Birth Weight in Ciawi Bogor Hospital” also supports this study. The researcher gave intervention by showing video and demonstration to the respondents. The result of the study shows that there was a significant correlation between VCD intervention and the knowledge rate ($p=0.05$).

According to Roesli in Adriani (2010), leaflet media can be used as a comparative media to deliver the counseling of health promotion because leaflet media also becomes an effective media to deliver messages in the form of verbal and written text. It is also supported by the result of the research conducted by Adriani (2010) showing that health promotion media through leaflet also becomes an effective way to increase human knowledge.

According to Rinik Eko Kapti (2010) in her study entitled “The Effectiveness of Audi-visual as Health Counseling Media toward Knowledge Improvement and Mothers’ Attitude in Caring Babies with Diarrhea in Two Hospitals in Malang City”, the result of the study shows that there was significant improvement of knowledge and attitude after the treatment between control group and intervention group improvement. The difference between those was knowledge with $p=0.01$; $\alpha 0.05$, and attitude= 0.36 ; $\alpha 0.05$. The study used Quasi Experiment with affectivity of audio visual media as the independent variable and mothers’ knowledge and attitude in caring babies with diarrhea as the dependent variable.

Another result of study which correlates to this study is the influence of health education with audio visual method about baby care toward behavioral change of new mothers in new born baby care (Suryani, 2008). The study was done by showing video once, and it used design one group pretest-posttest. The result of the study shows that there was a significant difference toward mothers’ knowledge, attitude, and skill before and after being given the treatment.

Based on the explanation above, it can be concluded that audio visual counseling in conception time and nutrition in this study has significant influence to increase the motivation as well as the knowledge of pregnant women in improving their nutrition during pregnancy. Audio visual media as an educational media in health sector can

effectively be used to give knowledge improvement and motivational improvement to pregnant women and to change women's behavior to be better.

The limitation of the study was that the researcher only investigated the issue about the motivation of nutrition improvement for pregnant women after being given the treatment. The researcher did not control in detail how big their effort to improve their nutrition intake.

The conclusion of the study is that there is motivation improvement in experimental group with mean value 70.8 in pretest becoming 83.47 in posttest with Wilcoxon test, $p\text{-value} = 0.000$. Respondents' motivation in control group in pretest was 65.8 increasing to be 75.8 in posttest with Wilcoxon test, $p\text{-value} = 0.01$. The influence of audio visual counseling about conception time and nutrition toward the motivation of nutrition improvement in pregnant women was with $p\text{-value} = 0.001$.

Based on the result of the study, advice in this research pregnant mothers in girisubo gunungkidul need to increase liveliness in following counseling to increase knowledge on health, help motivate self to be a healthy society, smart and safe. Health workers can providing information about education use choice media health promotion of health in accordance with their condition goals to services health education. Girisubo Primary Health Center having facility integrated services. The result of this research can be used to excite motivation pregnant women do not understand the conception and nutrition during pregnancy.

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THE CORRELATION BETWEEN TEETH-BRUSHING BEHAVIOR AND DENTAL CARIES CASE ON THE PRIMARY SCHOOL STUDENTS

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Abstract: The study was aimed at determining the correlation between teeth-brushing behavior and dental caries case on the students of states primary school 3 of Sedayu Bantul. The method used analytic survey with cross sectional approach. There were 88 students selected as the samples by stratified random sampling technique. The data analysis used chi square test. The result of chi square test showed that the significance value was 0.000 which was less than 0.05 ($p < 0.05$). The statistical results showed that there was a correlation between teeth-brushing behavior and dental caries case. It is expected that UKGS can maximize its programs in order to promote and demonstrate healthy life style especially on the teeth-brushing activity on primary school students.

Keywords: *teeth-brushing, dental caries, primary school students*

INTRODUCTION

Oral health is one of the important things for public health because a healthy mouth allows an individual to speak, eat, and socialize without experiencing pain, discomfort or embarrassment. The most common oral health problems experienced by people are dental caries. According to WHO (World Health Organization), almost 60-90% of school children have dental caries and almost 100% of adults have cavities.

Dental caries plays an important role on children dental problems. Teeth will rot from the inside and then enamel that functions as a protection will be broken when part of dentin are less resistant to bacterial invasion. As a result, the bacteria will be easy to get into the pulp on the nerve and it can cause pain on the teeth. Dental caries (tooth decay) is the enamel damage, dentin and cement that run progressively (Sodikin, 2011).

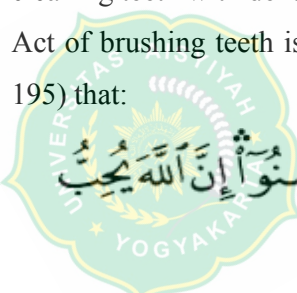
Based on the Health Research in 2013, the prevalence of dental caries in Indonesia was 29.3% of the national population, on the children aged 5-9 was 28.9%, and on the children aged 10-14 was 25.2% of the total children in Indonesia (Riskesdas, 2013). The age of 6-12 years is the age for primary school students. According to Wong et al (2008), the school-age starting from age 6 years to approximately 12 years old, which is began with the entry of children into the school environment. Potter and Perry (2005) explained that the school age begins when children enter elementary school around 6 years old and ended at the age of puberty around 12 years old.

If dental caries on the children is not treated properly, it will adversely affect the other healthy teeth. Then, the former caries will be fragile and easily broken. Complications occur when germs enter through the hole to the root of the tooth nerve. It will produce pus removed from the body through the surface of the fistula at the surface of the gum as a sign of inflammation. Chronic infection in one or more primary teeth can cause damage to permanent teeth developing below it. The children are predicted to feel the pain and inferior to their self image (Sumawinata, 2008).

General Director of Health Efforts on No. HK.02.04 / II / 963/2012 decree that the dental school program (UKGS) is more specific than health school program (UKS). The goal is to bring qualified and affordable oral health care. Thus, parents do not need to take time specifically to come to the health service. Assessment includes the behavior of teeth brushing to consider the means and media information, especially on the early age, because behavior is a habit that will be formed if it is done early (Guidelines UKGS 2013).

According to Wong (2008), good habit to brush teeth can participate in preventing dental caries, because brushing the teeth properly is the most effective way to prevent dental caries. The efforts can remove plaque or bacterial deposits that can eliminate soft bacteria that stick to the teeth which cause dental caries. That effort is strengthened by research conducted by Wahyu (2012) that there is a correlation between the behavior of cleaning teeth with dental caries case ($p < 0.002$).

Act of brushing teeth is a preventive action. It is explained in Al-Qur'an (Al-Baqarah: 195) that:



وَأَنْفِقُوا فِي سَبِيلِ اللَّهِ وَلَا تُلْقُوا بِأَيْدِيكُمْ إِلَى التَّهْلُكَةِ وَأَحْسِنُوا إِنَّ اللَّهَ يُحِبُّ
الْمُحْسِنِينَ

Meaning: And spend in the way of Allah and do not throw [yourselves] with your [own] hands into destruction [by refraining]. And do good; indeed, Allah loves the doers of good.

State Primary School 3 of Sedayu has big students' population. UKS activity is running but the incidences of caries still reach 82% of 64 students who were selected at the beginning of the school. Based on this problem, the researcher is interested in examining the correlation between preventive actions (teeth-brushing behavior) and the

incidence of caries on state Primary School 3 of Sedayu Bantul in order to determine the appropriate action to reduce the oral and dental problems, especially in the case of dental caries on primary school students.

RESEARCH METHOD

The research used quantitative correlation methods with cross sectional time approach undertaken at State Primary School 3 of Sedayu Bantul on June 14th and June 17th, 2016. The respondents were 88 students selected by Stratified Random Sampling technique based on inclusion criteria including their cooperativeness and willingness to be examined. The students were on the location during the research and willing to become respondent. Their ages range from 7-12 years old.

The independent variable was the behavior of teeth-brushing and the dependent variable was the case of dental caries on the age of primary school students. The instrument was closed questionnaire consisting of 23 questions compiled by researchers which have been tested for validity and reliability at State Primary School 3 of Sedayu Bantul. The data analysis used chi square to determine the correlation between the variables.

RESULTS AND DISCUSSION

Characteristics of respondents' age

Table 4.1 Distribution of respondents' characteristics frequency based on students' age at State Primary School 3 of Sedayu Bantul in 2016

No	Age	Frequency	Percentage (%)
1	7 years old	16	18.2
2	8 years old	13	14.8
3	9 years old	13	14.8
4	10 years old	17	19.3
5	11 years old	17	19.3
6	12 years old	12	13.6
	Total	88	100.0

Source: Primary Data in 2016

Age characteristic is respondents' age during the research. The results showed that there were 17 students (19.3%) aged 10 and 11 years old and 12 students (13.6%) aged 12 years old.

Characteristics of Respondents' Gender

Table 4.2 Distribution of respondents' characteristics frequency based on students' sex at State Primary School 3 of Sedayu Bantul in 2016

No	Age	Frequency	Percentage (%)
1	Male	46	52.3
2	Female	42	47.7
	Total	88	100.0

Source: Primary Data in 2016

The respondents' characteristics on this area are respondents' sex. From the table, it can be seen that there were 46 male students (52.3 %) and 42 female students (47.7%).

Characteristics of cariogenic food

Table 4.3 Distribution of respondents' characteristics frequency based on cariogenic food consumption at State Primary School 3 of Sedayu Bantul in 2016

No	Age	Frequency	Percentage (%)
1	Dislike	31	35,2
2	Like	57	64,8
	Total	88	100.0

Source: Primary Data in 2016

Characteristics of cariogenic food is the respondents' penchant to consume sweet foods such as syrup, raisins sugar, cakes, biscuits, sweets, puddings, jams, sweeteners, ice cream, and sweet cold drinks. Table 4.3 showed that there were 57 respondents (64.8%) like cariogenic food and 31 students (35.2%) dislike it.

Characteristics of teeth-brushing behavior

Table 4.4 Distribution of respondents' characteristics frequency based on teeth-brushing behavior at State Primary School 3 of Sedayu Bantul in 2016

No	Age	Frequency	Percentage (%)
1	Good	18	20,5
2	Poor	70	79,5
	Total	88	100.0

Source: Primary Data in 2016

Teeth-brushing behavior is children habit to clean their teeth measured from the time, manner, toothbrush shape, and toothpaste usage. The results showed that there were unfavorable 70 students (79.5%) had adequate behavior and 18 students (20.5%) had good behavior.

Characteristics of dental caries case

Table 4.5 Distribution of respondents' characteristics frequency based on children caries at State Primary School 3 of Sedayu Bantul in 2016

No	Age	Frequency	Percentage (%)
1	No caries	38	43,2
2	Caries	50	56,7
	Total	88	100.0

Source: Primary Data in 2016

The incidence of dental caries on the study was the observation of teeth discoloration to brownish or blackish conducted by inspections. There were 50 students (56.7%) had caries and 38 students (43.2%) had no caries.

Correlation between teeth-brushing behavior and dental caries case

Table 4.6 Correlation between teeth-brushing behavior and dental caries case on the students of State Primary School 3 of Sedayu Bantul.

No	Teeth-brushing behavior	Total		P value
		N	%	
1	Good	18	20,5	0
2	Poor	70	79,5	
	Total	88	100	

Source: Primary Data in 2016

The table above shows that there were 22 students (25.0%) had good habit on teeth-brushing, and 70 students (79.5%) had poor habit on teeth-brushing. It also shows the significance value (p value) = 0.000. After the correlation strength tested with coefficient contingency, the result showed 0.424 value which means the correlation strength is moderate.

Teeth-brushing on primary school students is influenced by caries. Students with dental caries mostly have poor teeth-brushing habit. Based on the observation, the caries was not only influenced by teeth-brushing behavior but also by the students' age which affected their independence and knowledge about oral health. Most of the students liked to consume cariogenic food. These two factors could also be the cause of caries on State Primary School 3 of Sedayu Bantul. Besides, this behavior was also influenced by

knowledge. During the research, the students showed poor knowledge on oral health care.

The students with milk teeth had more caries on their teeth. In such age, the children also had less attention on their oral health. They are lazy to brush their teeth regularly. Teeth-brushing is done before going to school. Yet, when they are going to bed they feel lazy to brush their teeth.

The results showed that 48 students (54.5%) had dental caries and poor behavior when brushing their teeth. Yet, there were 16 students (18.2%) with no caries and have good behavior when brushing their teeth. This proves that the higher ability and awareness of dental care behavior by brushing the teeth with respect to time, manner, toothbrush shape, and use of toothbrush, the lower the incidence of dental caries in primary school students to happen.

The analysis test result was $p = 0.000$ which means there was a significant correlation between the behavior of teeth-brushing and dental caries case on primary school students. Thus, it can be concluded that H_0 is rejected and H_a is accepted. In other word, there was a correlation between the behavior of teeth-brushing and dental caries case on primary school students. Then, the correlation strength test and coefficient contingency showed 0.424 which means the strength was moderate. That is because there are other factors that influence the occurrence of dental caries, not only the behavior of brushing teeth but also some other factors. Thus, the correlation strength of teeth-brushing behavior and dental caries case was in moderate category.

Behavioral problems of teeth-brushing according to Kemenkes RI (2013) showed that only 3.4% of 250 million of Indonesian population has brushed their teeth properly (considering the time, manner, and toothbrush shape, and the use of toothbrush), and the case of caries is high.

Health behaviors according to Notoatmodjo (2007) is a response of a person (organism) to the stimulus or object associated with illness or disease, the health care system, food and beverage, and environment. The ability to maintain self health in order to achieve an adequate level of oral hygiene is a condition to trigger the high and low oral health.

The significance results between teeth-brushing behavior and dental caries case on primary school students was according to research conducted by Wahyu (2012) that a

significant correlation between teeth-brushing behavior and dental caries case on primary school students ($p = <0.002$). Besides, Khotimah (2013) showed that there was correlation between teeth-brushing factors and dental caries case ($p = 0.014$). Also, Anitasari & Rahayu (2010) pointed out that there was correlation between teeth-brushing frequency and dental caries case ($X^2_{\text{count}} = 98.42$ and $X^2_{\text{table}} = 12.59$).

Teeth-brushing with good habit helps to prevent dental caries. Wong et al (2008) revealed that such habit is the most effective way to prevent dental caries. Brushing the teeth can remove plaque or soft bacterial deposits attached to the teeth that cause dental caries. Therefore, a good teeth-brushing habit can help to prevent dental caries.

Teeth-brushing is a preventive action against the caries occurrence. Since there was a correlation between teeth-brushing behavior and dental caries case, the precaution is advisable to do or learn early to decrease the occurrence of dental caries problem. As stated in Al-Qur'an on Al-Baqarah: 195.

.....
.....
Meaning: And spend in the way of Allah and do not throw [yourselves] with your [own] hands into destruction [by refraining]. And do good; indeed, Allah loves the doers of good.

CONCLUSIONS AND SUGGESTIONS

CONCLUSION

The result showed that there were 70 respondents (87.8%) of 88 respondents have poor behavior towards teeth-brushing. Besides, there were 50 respondents (56.7%) had dental caries. It was obtained that $p = 0.000$ which means H_0 was rejected and H_a was accepted. Thus, there was correlation between teeth-brushing behavior and dental caries case on the students of State Primary School 3 of Sedayu Bantul in 2016 with correlation strength was 0.424 which means moderate.

SUGGESTION

It is suggested to State Primary School 3 of Sedayu Bantul to maximize the existing programs in UGKS by cooperating with primary health center of Sedayu II to perform a demonstration on oral care in order to increase the students' awareness and to improve students' habit on oral health by adding picture display on teeth-brushing guidance.

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THE EFFECT OF CONSELING OF MATURATION AGE OF MARIAGE TO THE ATTITUDE OF EARLY-AGE MARIAGE DECISION

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ABSTRACT

The maturation age of marriage is one of the government programs to decrease the number of early-age marriages. However, the number of early-age married has increased dramatically in Bantul during 2008 to 2011. Quasi experiment with a cross-sectional approach by using a one-group pretest-posttest was applied in this study. A total sample of 80 students was involved in this project based on inclusion criteria. Kolmogorov-Smirnov test was calculated to test the data normality, and dependent t-test was applied to investigate the effect of counseling to the attitude of early-age decision at the student in senior high school class XI. The statistic result was Sig. (2-tailed) = 0.000 and t value = -39.606 p-value 0,000. In conclusion, there was a significant effect of counseling of maturity age of marriage to the attitude of early-age marriage decision.

Keywords: Maturation, Age Marriage, Attitudes, Early-age marriage, Decision

PRELIMINARY

Recently, early-age marriage become a phenomenon that actually repeated cycles and occur not only in a rural areas but also in urban area. This phenomenon occurs due to lack of awareness and knowledge. Besides, indirectly affected by the "role model" from the world of entertainment they watched. In fact, teens who decide to marry a young age are generally assumed that education for them is a mere formality (Astuti, 2011).

Currently, the point of view of marriage at an early age due to prior pregnancy might have become a common. A family with the daughter who become pregnant or son to impregnate before marriage is currently considered to be an ordinary and have no action from the parents as long as there are responsibilities. From ancient experience, unmarried pregnancy has to be measured as the as a disgrace in the family, moreover the couple excommunicated.

Based on the United Nations Development Economic and Social Affairs (UNDESA), Indonesia is the 37th country with the number of early marriages in the world. In

ASEAN, Indonesia is the second largest after Cambodia. Based on UNICEF, in 2010, there were 158 countries with a minimum legal age of marriage is 18 years and over, and Indonesia are still under of it (UNDESA, 2011).

Yogyakarta is a city famous as a city of students. Yogyakarta city is certainly a center of education with technological advances, especially in information technology that should the situation can improve the maturation of marrying age. In fact, marriage at an early age at Bantul district in Yogyakarta has increase rapidly from 2008 to 2011. Mostly couples get married because the girl has been pregnant. In 2008, the number of unmarried pregnant girl by 70 pairs, then in 2009 it was increase by 82 couples. Next in 2010, it was a significant increased by 115 pairs. Furthermore, just only the near end of year (October 2011) the number of unmarried pregnant girl was noted by couple that 135. During the year 2013 reached 119 cases, that number is higher than 2012, only 108 cases a year (Head Office of the Ministry of Islamic Guidance Religion Bantul, 2013).

Determining the minimum age of marriage is very important, because it does not directly affect the quality of household life. Age at first marriage as one the factor that affecting the maternal mortality rate (MMR) and infant mortality rate (IMR) has been identified. The lower age of first marriage, the greater the risks faced during pregnancy, childbirth and postpartum both the safety of the mother and her child. On the side of health view, early marriages lead to a higher occurrence of cervical cancer due to premature sexual behavior is one of the causes of cervical cancer (Initiative, 2013).

The government policy to decrease the number of early age marriage has been create. This policy has reform from Ministry of Religion and Population Family Planning Agency. Renewal Act starting from Act 1 of 1974, Article 7, paragraph (1) of the age of marriage. Harmonious family activity from Ministry of Religion and Family Planning Government Organization has been conducted.

Based on the preliminary study at Ministry of Religion in Bantul during one month (January 2014), from the entire number (119 cases), there was 21 cases found at Banguntapan district. Then, source data from Senior High School 2 in Banguntapan by using interview with the teacher found that there has been no counseling of the age maturation of the marriage at the school. In conclusion, based on that background, this research was conducted. Then, this research was aim to investigated the effect of counseling about maturity age marriage to the attitude of early age marriage decision.

RESEARCH METHODS

Quasi Experiment (quasi-experimental) design one group pretest-post test was applied in this project. A total sampling 80 students at the Senior High School (SMAN 2) Class IX was invited in this study. There were two tools used in this study. Kolmogorov-Smirnov test to analysis the normality of data was used and statistic analysis paired sample t-test was calculated.

RESULT OF RESEARCH

Table 1. The frequency distribution characteristics of respondents

No	Characteristic	Freq	(%)
1.	Age		
	16 year	15	18,75
	17 year	63	78,75
	18 year	2	2,5
	total	80	100,0
2.	Agama		
	Moslem	78	97,5
	Christian	1	1,25
	Chatolic	1	1,25
	total	80	100,0

Based on Table 1 shown that the characteristics of respondents by age is the highest in the age group of 17 years as many as 63 people (78.75%), the largest religion is Islam as much as 78 people (97.5%).

Table 2. Frequency Distribution Differences Student Attitudes About Early Marriage Counseling Before and after

Student Attitudes	Counseling			
	Before		After	
	n	%	N	%
Support	73	91,2	44	55
Doesn't Support	7	8,8	36	45
Total	80	100	80	100

Based on the frequency distribution table 2 schoolgirls different attitudes about marriage before and after being given Maturation Age Marriage counseling at SMAN 2 Banguntapan, shows that the attitude of students before being given counseling support by category shows that the highest number of 73 people (91.2 %) while the category was not conducive to early marriage of 7 people (8.8%).

The attitude of a student after being given counseling showed an increase with the acquisition results gesture support as many as 44 people (55%) and was not conducive to early marriage as many as 36 people (45%).

Table 3. Normality Test *One-Sample Kolmogorov-Smirnov Test*

		Attitude before counseling	Attitude after counseling
N		80	80
Normal Parameters ^a	Mean	42.50	47.12
	Std. Deviation	3.687	3.733
Most Extreme Differences	Absolute	.134	.120
	Positive	.105	.120
	Negative	-.134	-.094
Kolmogorov-Smirnov Z		1.195	1.072
Asymp. Sig. (2-tailed)		.115	.201

a. Test distribution is Normal.

Based on data in Table 3 described that the *p value* in attitude before the counseling was obtained for 0,115 greater than 0.05, which indicates that the data is normally distributed attitude before the counseling.

For attitude after the extension was obtained *p value* of 0.201 greater than 0.05 indicates the data after the extension attitude is also normally distributed.

Table 4. *Paired Sampel T-test* student attitudes about marriage before and after Maturation Age Marriage counseling at SMAN 2 Banguntapan, Bantul

		Paired Differences							
			Std.	Std.	95% Confidence Interval of the Difference				
		Mean	Deviation	Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair	Attitude before – after counseling	-2.362	.534	.060	-2.481	-2.244	-39.606	79	.000

Based on Table 4 the results of analysis with Paired samples t-test with significance 0.05, obtained sig. 0,000 less than $\alpha = 0.05$ ($0.000 < 0.05$) and t value is worth less than t table ($-39.606 < -2.145$). It shows that the research hypothesis is accepted, meaning that there are differences in attitudes about marriage before and after being given Maturation Age Marriage counseling.

DISCUSSION

1. Characteristics of Respondents

A person's attitude is influenced by personal experience, the influence of other people, the culture, the media, educational institutions and religious and emotional factors. Respondents who had an attitude was not conducive to early marriage certainly know about the importance of maturation age of marriage.

The results of the study the characteristics of respondents by age showed that most respondents aged 17 years as many as 63 people (73.75%) and 29 people have the attitude does not favor early marriage. The age of the respondents is at least 18 years of the two people (2.5%) and it also has a number of attitude does not favor early marriage. This in line with the previous study, Hurlock (2004) mentioned that maturity in age to have marriage will impact on the personal maturity. Besides, level of education and religion also influence the person's attitude. Respondents who had an attitude was not conducive to early marriage certainly know in religious teachings were not allowed to

perform marriage without any preparedness (early marriage). Based on the result, mostly the respondents are Moslem (97.5%) while Christians and Catholics just only 1.25%.

2. Based on the result, before treatment, mostly respondents shown the supportive attitude toward early marriage as many as 73 people (91.2%) and attitude does not support as many as seven people (8.8%). Student who has a supportive attitude towards early marriage, most answered question with answers hesitation in item questionnaire positive statement and answered agree on a negative statement item questionnaire so that the score obtained was below from the minimum score. Meanwhile only seven students who does not support early marriage on average answered agree on a positive statement item and did not agree on a negative statement items. Lack of information about religious marriage according to the law and received by students is one of the causes are still many students who favor early marriage. Or cognitive domain knowledge is very important for the formation of a person's actions, because of the experience and the study was the attitude and behavior based knowledge will be more lasting than that is not based on knowledge (Notoatmodjo, 2003). In the study Ardin Prima Massolo, M.Ikhsan and Rahma (2011) states that the provision of reproductive health education give rise to knowledge and attitudes about premarital sexual adolescents. Attitudes may change with the information that improve individual knowledge, knowledge can be gained from social media and formal and informal health education such as counseling / counseling (Notoadmodjo. 2003)

3. The attitude of students regarding early marriage counseling after being given the counseling at SMAN 2 Banguntapan, Bantul.

Based on Table 2 shows that the attitude of students regarding early marriages have increased as many as 44 people (55%) support marriage and as many as 36 people (45%) showed an attitude does not favor early marriage. In other words, reaction or response which was still closed from students who follow Maturation Age Marriage counseling is still included in the category of support against early marriage counseling after being given counseling.

Girls who support against early marriage in mind that there has been no improvement in answering questions, especially the question about the causes of early marriage and reproductive health problems. Apart from dealing with the causes of early marriage and reproductive health problems, another item that most students answered hesitation that the item on the impact of early marriage and reproductive health problems.

Judging from the response item that has not undergone improvements can be found some of the causes are still many students who favor early marriage. The first is a lack of understanding of the materials given student. Even some respondents did not notice when the extension was given counseling. Especially in the material according to the Law on marriage and religion as well as the importance of maintaining reproductive health. Both due to environmental conditions, environmental looked ordinary things against their child's relationship to pregnancy outside of marriage cause the formation of supportive stance of early marriage on children.

According to research conducted by Wirman Pesliko Wirman (2012) states that there are differences in the level of knowledge and attitudes of young women after marriage age socialization maturation program. The difference is quite significant on the level of knowledge, but to change the attitude of the maturation program socialization marriage age showed no significant difference. Results were consistent with the results in Table 2 frequency distribution attitude of students before and after being given counseling at SMAN 2 Banguntapan, Bantul.

4. Effect of counseling attitude towards early marriage XI about grader at SMAN 2 Banguntapan, Bantul

Student attitudes regarding early marriage counseling before granting most fit into the category of supporting as many (91.2%) and only 8.8% of students who have an attitude of not supporting the marriage. After counseling, an increasing number of girls with an attitude does not favor early marriage as much as 36.2% from 8.8% to 45%.

Based on Table 4 shows that sig is 0,000yang less than α ($0.000 > 0.05$) and t value is worth less than t table ($-39.606 < -2.145$). Based on the result, there was a significant difference between the attitude of students regarding early marriage counseling before and after treatment. It might be conclude that counseling will influence toward student's attitude to early-age marriage.

Supportive stance towards early marriage means that the individual has a high conviction that marriage at a young age is natural to live, with no losses obtained (Sa'diyah, 2013). As mentioned earlier if early marriage is one of the causes of poor reproductive health of women and increased MMR and IMR. Health care provider playing the important role to provides the information, counseling and education for the teenage regarding early-age marriage perception. Meanwhile, religious and education from the family or close family, will give impact on the society.

So it can be read that a good attitude can be formed from a good understanding. Knowledge gained from such health education counseling. This is consistent with the statement Hovland (2008), a change in attitude can be produced from a change of opinion, and it is highly dependent on the presence or absence of reward obtained by the object attitude. That means, the acceptance of a new idea depends on intensive granted by extension in the process of counseling.

Intensive health education can be a pretty good tool to improve students understanding of the importance of the maturing age of marriage. In accordance with the theory of the relationship between knowledge, attitudes, and behavior. Improved knowledge of the maturation of the marriage age after counseling also cause changes in attitude. Attitude maturation marriage age is closely related to religious teachings which state that sufficient readiness to start a family, like the words of the Prophet the following:

"O youth whosoever among you are already able or unable (istatho'a) to get married, immediately do the marriage, the marriage can actually maintain the eye, and can maintain the honor, and anyone who has not been able to get married then she should do fasting for fasting it is a fortress for him." (Hadith Bukhari and Muslim history).

Accordance with the hadith that has been described, implicitly Islamic law requires that people who want to do the wedding is completely capable. Such capabilities can be viewed in terms of physical, economic, mental, emotional and spiritual. Readiness marriage, physically demonstrated by age .Hal relates to students about early marriage. The attitude of students before being given counseling mostly supports early marriage up to 91.2%. But after being given counseling is expected to boost confidence siswiuntuk do maturation age of marriage in order to prevent early marriage.

Even though this study has obtained the aims of study, but the limitation has recognized. First, because of the time limitation, counseling well done during the

remedial subjects Religious Education, therefore the counseling less than the maximum time. Second, the time extension is also said to be less precise because of the concentration of students divided between the material extension to the preparation of subsequent remedial education so that the material cannot be understood students maximum.

CONCLUSION

1. Attitude grader XI regarding early marriage counseling before being given the counseling indicates that the attitude of most students is the category of supporting as many as 73 people (91.2%) with the acquisition value of the average score of 5.09.
2. Attitude grader XI on marriage counseling dinisetelah given counseling indicates that the attitude of most students is still the category of supporting as many as 44 people (55%) with the acquisition value of the average score of 7.45.
3. There is an effect Maturation Age Marriage counseling on the attitudes of students in class XI regarding early marriage, seen from the Paired samples t-test with sig. = 0.000

SUGGESTION

1. For students at SMAN 2 Banguntapan, expected student to improve the knowledge and understanding of the importance of the maturation of the marriage age, especially for students who still have a supportive attitude towards early marriage. Student can read books on female reproductive health or consult the Counseling Mentor (Bimbingan Konseling) teachers or health workers especially the material on the effects and reproductive health problems of early marriage.
2. For teachers SMAN 2 Banguntapan expected to provide the media information about the maturation of the marriage age, especially in the BK teachers in order to increase knowledge and understanding of students about early marriage. Teachers can work with the library for the procurement of books on reproductive health, especially the importance of the maturing age of marriage. Principals can cooperate with the local health clinic or office of religious affairs to fill the material importance of the maturing age of marriage, especially marriage material according to law and religion and reproductive health issues.

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**CORELATION BETWEEN PARENTS' ROLE AND TEMPER TANTRUM
AMONG
CHILDREN IN BENDUL MERISI
SURABAYA**

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ABSTRACT

Parents' role describes as the ways of how parents take care their children. Temper tantrum is an anger of children that occurs during toddler age. This research aimed to explore correlation between parents's role and temper tantrum of the toddler in Bendul, Merisi, Surabaya. Analytic correlative design with cross sectional approach was used. Population in this research is parents' who have children aged 1-3 years old in Bendul Merisi Surabaya RT 06 RW 12 ie 27 children. Non probability sampling ie total sampling was employed and questionnaires for data collection. Results shows that the parents' role were categorized as good (81,5%), and the temper tantrum were on average (48,1%). Spearman's rho test shows $\rho = 0,003$ ($\rho \leq 0,5$) and it means there is correlation of parents' role and temper tantrum of the children during toddler age.

Keywords: Toddler, the Role of the Parents, Temper Tantrum

PRELIMINARY

Golden period of child development occurs in the age range of 1-5 years, which, if at that time the child is having proper education and care, they would be significant factors for growth and development. Children begin to get acquainted and learn to deal with disappointment. A sense of disappointment, anger, sadness and so is a sense of a reasonable and natural, but they are some parents put efforts in many ways such as trying to entertain, distract, or scold order to stop the crying child. It actually makes children's emotions are not channeled off. If this continues, the consequences arising called emotional baggage. Emotional baggage that can later explode uncontrollably and appear as temper tantrums. This behavior usually reaches its worst point around age 18 months to three years, and sometimes still found in children aged five or six years, but it is highly unusual and will gradually disappear (Octopus, 2005). Temper tantrums are a strong explosions, accompanied by anger, aggressive attack, crying, screaming,

screaming, rolling, stomping feet and hands on the floor or ground, and hold your breath (Mandleco Potts, 2007). Parents usually are feeling anxious when the child cannot control his emotions well which called temper tantrums. Parents also cannot impose his will so that children can control their emotions as desired parents, because each child has a different way to control his emotions respectively. When a child has a temper tantrum, many parents who think that it is a negative behavior. Parents trying to stop temper tantrums of children in various ways, and even some parents who hit their children to child's temper tantrums stopped.

Tantrum behavior-related research has been done by some previous researchers. Research conducted by Mireault and Trahan (2007) concerning tantrums and anxiety in childhood which aims to get the early descriptions of tantrum behavior. The results showed that out of 33 respondents are 26 people (79%) reported the frequency of his tantrum in the category often happens, with details of 12 respondents reported tantrums occurred daily, and 14 respondents reported tantrums occur weekly. Seven other people reported the frequency of tantrums is very less, which happened less than once a month until never. Results of the study also found that 10 respondents reported the intensity of his tantrum behavior in a heavy category, 16 respondents with the moderate category and 6 respondents in the light category.

Research conducted by Subhan (2013), which conducts research on temper tantrums indicate that as many as 25 children (65.8%) had temper tantrums can be controlled and 13 children (34.2%) children have temper tantrums that cannot be controlled. A total of 28 people (73.3%) had a democratic parenting. While the authoritarian parenting applied by as many as 10 people (26.3%). From these results it can be said that there is a relationship between parenting model of a child with temper tantrums.

Based on the results of preliminary studies conducted by researchers with observation and interviews with 10 mothers in RT 06 RW 12 region Bendul Merisi Surabaya found that known to all children sometimes have tantrums, 3 children (30%) of them have children who have light frequencies intensity, 4 children (40%) often show tantrums in moderate intensity, while 3 children (30%) showed severe tantrum intensity if the desire is not fulfilled. After the interviews, one of the things that allegedly participated in the control or trigger temper tantrums in children is the role of parents. When a child has a temper tantrum, the parents who care for children will distract the child on other things,

while the parents are indifferent would let the temper tantrum done by children.

The family is an important element in providing care to children, given the child is part of the family. According to the WHO in Andarmoyo (2012) is a collection of family household members are interconnected through consanguinity, adoption or marriage. The purpose is to create a family culture, promote the development of physical, mental, emotional and social activities of each family member. A child's life can be influenced by the family environment, and therefore the family is very important in providing stimulus to the development of children. Families are very important for children. Family life does not only serve to guarantee food to children, thus only pay attention to the physical growth of the child, but also holds other functions that are important for the mental development of children (Notoedirdjo & Latipun, 2007). When children have tantrums, many parents who think that it is something negative, and at that moment the parents are not only acted inappropriately but also missed one opportunity most valuable for helping children cope normal emotions (anger, frustration, fear, annoyance) is reasonable and how to act in an appropriate manner so as not to hurt yourself and others when you're feeling the emotion. Children who are too spoiled and always get what they want, may have temper tantrums when his request was denied. For children who are protected and dominated by his parents, once the child can react against the domination of parents with behavioral tantrums. Father and mother who did not agree with each other, namely that one allow children and others prohibit child, the child can be a tantrum in order to get the desire and consent of both parents. The role of parents is one element that cannot be seen with the eye, because a child will succeed or fail in the formation of personality and potential future, never separated from the role of parents as teachers and educators first and foremost on the early development of children. Children's activities at the beginning of development, almost entirely involves the participation of parents. The role of parents is based on the basic needs that are divided into 3 foster care, compassion, and grindstones, so through three roles of parents can support children's growth and emotional development.

Children will also learn that they can control the environment, including the control of their parents or other adults around them. Worse temper tantrums will more often exceeded the limit proportional exceed the demands of the situation, meaning the child will become quickly show temper tantrums whenever things are not preferred, whereas

for others the situation was not enough to cause temper tantrums. Temper tantrums can also have an impact on the physical and psychic children, and children will be shunned because the emotions are not controlled, while the impact on the elderly are the emotions of parents will participate arising from temper tantrums of children, so the emotions of parents become uncontrollable, consequently the parents will stop temper tantrums by performing an act of child abuse. After seeing the negative impacts caused by temper tantrums, the necessary role of parents that can help the emotional development of children at toddler age, so the child can see and understand how to cope with emotions properly. Based on facts and research results about temper tantrums, this research focuses on the study of the role of parents with temper tantrums in children ages toddler in the RT 06 RW 12 region Bendul Merisi Surabaya. Parents are expected to know the conditions and what appeared tantrums in children and can find out how to prevent temper tantrums. For health professionals, especially community health worker ie, Posyandu, is expected to provide counseling to parents about child development toddler, as well as the role of parents in the emotional development of the child or when the child experience temper tantrums.

RESEARCH METHODS

In this study, researchers tended to explore relationships between the parental role with temper tantrums in toddler by using a correlative analytic study design with cross sectional approach. Cross-sectional research is a type of research that emphasizes the time measurement / observation of the data at only one at a time (Nursalam, 2013).

The population in this study were all parents of children aged 1-3 years in RT 06 RW 12 region Bendul Merisi Surabaya ie 29 people. The sampling technique used in this study is Non probability sampling technique total sampling. In this technique, each respondent who met the inclusion criteria:

- Children aged 1-3 years are taken care of his parents in RT 06 RW 12 region Bendul Merisi Surabaya
- Parents are willing to become respondents
- Parents with have no disabilities of reading and writing

The research was conducted on May 22, 2015 in the area of RT 06 RW 12 region

Bendul Merisi Surabaya. The instrument used in this study is set of questionnaires. Filling the questionnaire by respondents was done by using a check list. Independent variables: the role of parents using a questionnaire with 16 questions, how scoring is as follows: (a score of 75-100%) very good (score of 76-100%), (a score of 50 - 74%) good, (a score of 25-49%) is quite good, and (score <25%) are less good.

Ie temper tantrums dependent variable using the questionnaire were 18 statement, a way of scoring as follows: (score 55-72) high (score 36-54) moderate (score of 18-35) is low.

RESEARCH RESULT

General data

Characteristics of Respondents by Age Kids

table 5.1 Characteristics of respondents by age of the child in the area of RT 06 RW 12 region Bendul Merisi Surabaya May 22, 2015 (n = 27)

Children age	Frekuensi (f)	Prosentase (%)
12 – 19 months	10	37,0 %
20 – 27 months	7	25,9 %
28 – 36 months	10	37,0 %
Total	27	100 %

Table 5.1 obtained data from 27 respondents in the study found that the number of children aged 12 to 19 months is 10 (37%), while children aged 20 months to 27 months is 7 (26%), and children aged 28 months up to 36 months is 10 (37%).

Characteristics of Respondents by Gender Children

table 5.2 Characteristics of respondents by sex of the child in the area of RT 06 RW 12 region Bendul Merisi Surabaya May 22, 2015 (n = 27)

Children Sex	Frekuensi (f)	Prosentase (%)
Laki-laki	16	59,3 %
Perempuan	11	40,7 %
Total	27	100 %

Table 5.2 that the data obtained from 27 respondents have children mostly male sex which is 16 children (59.3%), and the female which is 11 children (40.7%).

Characteristics of Respondents by Number of Brothers

table 5.3 Characteristics of respondents by number of siblings in the RT 06 RW 12

region Bendul Merisi Surabaya

Siblings	Frekuensi (f)	Prosentase (%)
No one	2	7,4 %
1 sibling	1	3,7 %
2 sibling	14	51,9 %
>2 sibling	10	37,0%
Total	27	100 %

Table 5.3 Data found that 10 children (37%) have more than 2 siblings, a total of 14 children (51.9%) had two siblings, a child (3.7%) had one sibling, and 2 children (7,4%) did not have any siblings.

Characteristics of Respondents Based Positioning

table 5.4 Characteristics of Respondents Based Positioning in RT 06 RW 12 region Bendul Merisi Surabaya May 22, 2015 (n = 27)

Children	Frekuensi (f)	Prosentase (%)
First child	9	33,3 %
Second child	10	37,0 %
>more than 2	8	29,6 %
Total	27	100 %

Table 5.4 data obtained 9 children are first child (33.3%), 10 children (37.0%) as second child, more than two children is 8 children (29.6%).

Characteristics of Respondents by Education Father

table 5.5 Characteristics of Respondents by Education of Father in RT 06 RW 12 region Bendul Merisi Surabaya May 22, 2015 (n = 27)

Pendidikan Ayah	Frekuensi (f)	Prosentase (%)
Have no school	1	3,7 %
Primary school	6	22,2 %
Secondary school	7	25,9 %
High School	11	40,7 %
College/ Universities	2	7,4 %
Total	27	100 %

Table 5.5 education data obtained that 1 father (3.7%) did not complete primary school, 6 fathers (22.2%) completed primary schools, 7 fathers (25.9%) completed secondary school, 11 fathers (40.74%) completed high School, and 2 fathers (7.4%) completed college degree.

Characteristics of Respondents by Education Father

table 5.6 Characteristics of Respondents by Education Capital Territory RT 06 RW 12

region Bendul Merisi Surabaya May 22, 2015 (n = 27)

Pendidikan Ayah	Frekuensi (f)	Prosentase (%)
Have no school	3	11,1 %
Primary School	8	29,6 %
Secondary School	7	25,9 %
High School	6	22,2 %
College/ University	3	11,1 %
Total	27	100 %

Table 5.6 data shows that 3 mothers (11.1%) did not complete primary school, 8 mothers (29.6%) completed primary schools, 7 mothers (25.9%) completed secondary school, 6 mothers (22.2%) completed high school, and 3 mothers (11.1%) hold degree from universities.

Characteristics of Respondents by Age Dad

table 5.7 Characteristics of Respondents by Education of Father in RT 06 RW 12 region Bendul Merisi Surabaya May 22, 2015 (n = 27)

Fathers' age	Frekuensi (f)	Prosentase (%)
21 – 35 years old	18	66,7 %
36 t– 54 years old	8	29,6 %
>55 years old	1	3,7 %
Total	27	100 %

Table 5.7 data presents paternal age that 18 fathers (66.7%) aged 21 - 35 years, 8 fathers (29.6%) aged 36-54 years, and 1 father (3.7%) aged over 55 years.

Characteristics of Respondents by Age of Mother

table 5.8 Characteristics of Respondents by Age Capital Territory RT 06 RW 12 region Bendul Merisi Surabaya May 22, 2015 (n = 27)

Mothers' age	Frekuensi (f)	Prosentase (%)
21 – 35 years old	1	3,7 %
36 – 54 years old	6	22,2 %
Total	27	100 %

Table 5.8 data describes maternal age that 23 mothers (85.2%) aged 21 - 35 years, 4 mothers (14.8 %) aged 36-54 years old, and no one older than 55 years.

Characteristics of Respondents by Job Dad

table 5.9 Characteristics of Respondents by Job father in RT 06 RW 12 region Bendul

Merisi Surabaya May 22, 2015 (n = 27)

Fathers job	Frekuensi (f)	Prosentase (%)
Private sectors	8	29,6 %
Self employed	15	55,6 %
Government employed	4	14,8 %
Total	27	100 %

Table 5.9 presents that 8 fathers (29.6%) works for private institutions, 15 fathers (55.6%) have their own business, 4 fathers (14.8%) worked as government employees

Characteristics of Respondents by Job Mother

table 5.10 Characteristics of Respondents by Job Capital Territory RT 06 RW 12 region Bendul Merisi Surabaya May 22, 2015 (n = 27)

Mothers Job	Frekuensi (f)	Prosentase (%)
Housewives	21	77,8 %
Private sectors	1	3,7 %
Self employed	2	7,4 %
Government employee	3	11,1 %
Total	27	100 %

Based on the data obtained job table 5:10 mother, that most of mothers ie 21 people (77.8%) as housewives, 1 (3.7%) works in a private sector 2 mothers (7.4%) as self-employed / temporary employees, and 3 mothers (11.1%) as government employees.

Characteristics of Respondents Based on Income Dad

table 5.11 Characteristics of Respondents Based on Income of Father in RT 06 RW 12 region Bendul Merisi Surabaya May 22, 2015 (n = 27)

Fathers income	Frekuensi (f)	Prosentase (%)
1.000.000 – 1.500.000	14	51,9 %
1.500.000 – 2.000.000	8	29,6 %
2.000.000 – 2.500.000	2	7,4 %
2.500.000 – 3.000.000	3	11,1 %
Total	27	100 %

Table 5.11 earnings data about fathers' income that 14 fathers (51.9%) had income of 1,000,000 to 1,500,000, 8 fathers (29.6%) had income of 1,500,000 to 2,000,000, a total of 2 fathers (7.4%) had a total income of 2,000,000 to 2,500,000, 3 fathers (11.1%) had income of 2,500,000 to 3,000,000.

Characteristics of Respondents Based Capital Income

table 5.12 Characteristics of Respondents Based Capital Income in RT 06 RW 12 region Bendul Merisi Surabaya May 22, 2015 (n = 27)

Mothers income		Frekuensi (f)	Prosentase (%)
Have no income		21	77,8 %
1.000.000	–	2	7,4 %
1.500.000			
1.500.000	–	1	3,7 %
2.000.000			
2.500.000	–	3	11,1 %
3.000.000			
Total		27	100 %

Table 5.12 shows income data that most mothers do not have any income ie 21 mothers (77.8%), 2 mothers (7.4%) have incomes 1,000,000 to 1500.000, a mother (3.7%) has an income of 1,500,000 to 2,000,000, and 3 mothers (11.1%) had income of 2,500,000 to 3,000,000.

Characteristics of Respondents Based Parental Status

table 5.13 Characteristics of Respondents by Status of Parents in RT 06 RW 12 region Bendul Merisi Surabaya May 22, 2015 (n = 27)

Status Tua	Orang	Frekuensi (f)	Prosentase (%)
Mother and fathers parenting		26	96,3 %
Single parenting		1	3,7 %
Total		27	100 %

Table 5.13 data presents parental status that most of 26 (96.3%) are mothers and fathers parenthood while 1 (3.7%) was single parents.

Custom Data

The role of parents

table 5:14 Characteristics of Respondents by Role of Parents in RT 06 RW 12 region Bendul Merisi Surabaya May 22, 2015 (n = 27)

Peran Tua	Orang	Frekuensi (f)	Prosentase (%)
Very good		22	81,5 %
Good		2	7,4 %
Moderate		3	11,1 %
Total		27	100 %

At 5:14 table shows that the number of role of parents with excellent category is 22

people (81.5%), well as much as category 2 (2.4%), and the category is good enough for 3 people (11.1%).

Temper Tantrum

table 5:15 Characteristics of Respondents by Temper Tantrum Children in RT 06 RW 12 region Bendul Merisi Surabaya May 22, 2015 (n = 27)

<i>Temper Tantrum</i>	Frekuensi (f)	Prosentase (%)
High	4	14,8 %
Moderate	13	48,1 %
Low	10	37,0 %
Total	27	100 %

Table 5:15 shows that the temper tantrums of children with high category is 4 children (14.8%), moderate category is 13 children (48.1%), and low category is 10 children (37.0%).

The relationship between the role of parents with temper tantrums

table 5:16 The Relationship Between The Role of Parents with Temper Tantrum on Childhood Toddler in RT 06 RW 12 region Bendul Merisi Surabaya May 22, 2015 (n = 27)

Parents' Role	Temper tantrum						Total	
	High		Mode rate		Low			
	f	%	f	%	F	%		
Very good	1	5	1	5	1	4	2	100
			1	0	0	5	2	
Good	1	5	1	5	-	-	2	100
		0		0				
Moderate	2	6	1	3	-	-	3	100
		7		3				
Low	-	-	-	-	-	-	-	100
Total	4	1	1	4	1	3	2	100
		5	3	8	0	7	7	
Sig	0.003							

Table 5:16 shows that out of 27 respondents 22 people (81%) of them showed the role of parents with very good categories, one child (5%) with temper tantrums high category, 11 children (50%) with the medium category, and 10 children (45%) with low category. 2 parents (7%) showed the role of parents in both categories, 1 child (50%) with temper tantrums high category, and 1 child (50%) with moderate category. A total of three people (11%) of them showed the role of parents in good enough category, two children (67%) with temper tantrums high category and 1 child (33%) with moderate category.

DISCUSSION

The role of parents

Based on Table 5:14 shows that of the 27 respondents, it is known that the majority of

parents who have a parent role with excellent category is 22 people (81.5%), the role of parents in both categories by 2 people (22.4%), the role of parents in the category of pretty is 3 people (11.1%), and no role of parents who show less well in the category of research.

Based on research data obtained, factors that affect the role of parents is the parents' education, age of the parents, the work of parents, and parental status.

Parents who have the role of parents with excellent category when seen from the last study showed parents mostly completed high school, 8 people (36.4%) and for mothers is 6 people (27, 3%). Last education parents who have parental role with both categories showing one father (50%) did not complete primary school, and a father (50%) completed high school, while the recent education mother are 2 people (100%) completed primary school. Last Educational parents who have the role of parents with enough categories, is two fathers (66.7%) educated past high school, and as many as two mothers (66.7%) last elementary education. Family education is one important factor in the level of emotional development of children, because of the good education, parents can receive any information from the outside, especially on its role as a good foster parents, compassion, and grindstones (Nursalim, 2007). Based on the above data it can be concluded that parents' education affects the role of parents as more parents know about the insight or knowledge, parents can have better understanding about their role as parents so that the parents could have a role as a parent as well as possible to their children.

Based on research data of parents who demonstrate the role of parents with excellent category mostly fathers and mothers aged 21 - 35 years of the 16 fathers (72.7%) and 18 mothers (81.8%). Age of parents who demonstrate the role of parents in both categories, two fathers (100%) aged 36-54 years old and two mothers (100%) aged 21 - 35 years old, while the age of the parents who show role parents with enough categories, two fathers (66.7%) aged 21 - 35 years old and three mothers (100%) aged 21 - 35 years old. According to Potter & Perry (2010) early adulthood based psychosocial development is a period in which an individual begins foster home and become parents. Early adulthood is a period of adjustment to the new patterns of life and new social expectations. Individuals are expected to run their new roles as husband / wife, breadwinners, parents, and the other side can develop the attitudes, desires, and values according to the new

destination. According to the researchers that the age of the parents participated affect the role of parents in foster care, love and polish, but not all parents of young implement the role of parents is not good to her child.

Parents who have the role of parents with excellent category when seen from the work of parents showed 10 (45.5%) father worked as an entrepreneur / temporary employees and as many as 18 (81.8%) of mothers work as a housewife. Parents job who demonstrate the role of parents in both categories, two fathers (100%) working as an entrepreneur / employee is not fixed, as many as one mother (50%) work in the private sector and one mother (50%) work as an entrepreneur. The work of parents who indicate the category of the work as a self-employed father / temporary employees is as 3 fathers (100%) and three mothers (100%) as housewives. According Jaenudin (2000) employment status of parents influence the ways parents treat their children, but the other opinion says that parents who work constantly tend to hinder the development of the child because of lack of communication between parents and their children. According to Friedman, Bowden & Jones (2003) women are also have larger role in domestic life than men. This is because women use more intergenerational influence than men and women hold positions as family caregivers in most families. Women have abundant power to nurture, educate, decisive personality, values and beliefs of every human being in society. The role of parents by Setiadi (2008) was as a father and a mother. Father as head of the family has a role as breadwinner, educator, patron or protector, giving a sense of security for every member of the family as well as community members of certain social groups, while the role of the mother is a housekeeper, caregivers and educators of children, protective family and also as breadwinners and as a member of a particular social group communities. According Nurlela (2014) to parents who work the intensity of temper tantrums lower than parents who do not work, because while the parents work the children will be more independently and be able to control his emotions. The occurrence of temper tantrums by Octopus (2005) are not currently a child alone, but explosive tantrums usually require viewers. Temper tantrums are happening in front of their parents or someone they know, because temper tantrums would require at least two people. So it can be concluded that tantrums are interactive events not just reactive. According to the researchers that the presence of the parents can affect the occurrence of temper

tantrums, although the quantity of the role of parents who work less but the quality in terms of parenting, love and polish may be higher because of parents working will make best use of his spare time with the children.

The results of studies showing the role of parents with excellent category when viewed from the income of parents in mind that it is known that 10 fathers (45.5%) have income 1000000-1500000, 18 mothers (81.8%) have no income. Income parents who demonstrate the role of parents in both categories is two fathers (100%) income 1,000,000 - 1,500,000 a mother (50%) has income of 1,000,000 - 1.5000.000 and a mother (50%) has income 1500000-2000000. Income parents who demonstrate the role of parents in the category of moderate is two fathers (66.7%) has income 1000000-1500000 mother and 3 fathers (100%) had no income. According Soetjiningsih (2003) that an adequate family income will support the development of the child, because parents can provide all the needs of children, both primary and secondary. Economic status plays an important role in order to determine the quality requirements for the development of the child. According to the researchers that the majority of the income of parents in the area of RT 06 RW 12 region Bendul Merisi Surabaya ranged from 1,000,000 to 1,500,000, and it can be concluded that the incomes of parents in the category of high, but it does not diminish their role as parents, as people parents will strive to meet the needs of children in foster care, love and polish.

Based on research data of parents who demonstrate the role of parents with very good categories showed that the majority of parents with family status intact as many as 21 people (95.5%). Status parents who demonstrate the role of parents in both categories by 2 people (100%) of family status intact, while the status of the parents who demonstrate the role of parents with enough categories most parents with a family status intact as many as 3 people (100%) , According Soetjiningsih (2012) the stability and harmony of the household affects child development. Child development will be different in intact families, compared to single family. According to researchers that an intact family in giving affection to their children would be better served in an optimal than single family.

Temper Tantrum

According to the table 5:15 note that from 27 respondents, found the child having a temper tantrum category higher by 4 children (14.8%), while 13 children (48.1%), and

low in 10 children (37%). It shows that the level of temper tantrums in children ages toddler in the RT 06 RW 12 Sub sill Merisi Surabaya moderate.

According Zaviera (2012) some of the factors that led to temper tantrums in children, among other things: (1) obstruction of a child's desire to get something; (2) inability children express themselves; (3) unmet needs; (4) parenting parents; (5) children feel tired, hungry, or ill; (6) the child is stressed and feeling insecure. Based on research data obtained factors that influence the occurrence of temper tantrums are age, gender, as well as the position of the child.

At temper tantrums with high category as many as three children (75%) aged 12 months - 19 months, temper tantrums with category as many as six children (46.2%) aged 28 months - 36 months, while temper tantrums with a low category of 4 children (40%) aged 20 months - 27 months. According to Whaley and Wong (1999) temper tantrum is an endeavor of autonomy in which children ages toddler trying to deny the activity that is not preferred. Fatigue / exhaustion is a simple act as tolerance of frustration. Temper tantrums can occur during the toddler and it is a normal development environment. Sometimes temper tantrums can be a sign that leads to serious problems. According to the researchers that temper tantrums at age toddler is part of normal behavior because they constantly explore and learn the boundaries around them. Children will demonstrate a wide range of behaviors, such as stubborn and defiant as are developing a personality and autonomy.

The results of studies showing temper tantrums mostly occurs in boys, ie temper tantrums with high category as many as three children (75%) were male, temper tantrums with category as many as 7 children (53.8%) males and temper tantrums by category quite as much as 6 children (60%) were male. According Wardayati (2011) outbursts of anger on the child or on a rampage known as tempering tantrums. Anger or frustration is the main cause of temper tantrums. Each child must have gained experience frustrating. Among boys three times more often have temper tantrums than girls. According to the Octopus (2005) boys more often exhibit difficult behavior, psychologists referred to as external behavior. Such behavior is more dominant than girls and old people used to call "rogue". Such behaviors include aggression, defiant, and excessive physical activity. This can be explained that the boy is showing temper tantrums than girls, because boys more aggressive than girls, and temper tantrums

usually occurs in children who are active, energetic and stubborn, as evidenced in research conducted by researchers that most temper tantrums occur in boys than girls although comparative temper tantrums between boys and girls versus little.

Based on research data showing the child's temper tantrums with high category is 2 children (50%) in the second position, temper tantrums with category is five children (38.5%) in the second position, and temper tantrums by category quite is 4 children (40%) position of the first child. The position can also affect the child's emotional development of children, proven in research that has been conducted most of the respondents who have temper tantrums with high to moderate category of children at the second position. Based on the above data it can be concluded that children born in the first over the affection of both parents compared with the second child and so on, because the parents divide their attention with his siblings, so the position of a child affects the incidence of temper tantrums in children, as evidenced in research conducted by researchers that most temper tantrums occur in 2nd children and so on, while temper tantrums in children is not as bad as first on the second child onwards

The relationship between the role of parents with temper tantrums

Based on Table 5:16 found that out of 27 respondents in the RT 06 RW 12 Sub sill Merisi Surabaya, unknown 22 parents with parenting role very good category, and from 22 parent has a child with a category temper tantrums high, 5 parents have a child with a category temper tantrums moderate, and 10 parents have children with category temper tantrums low. In mature people with the parental role both categories as much as 2, ie one parent has a child with a category temper tantrums high, and one parent has a child with a category temper tantrums being. In older people with the parental role category quite three people, two parents have children with category temper tantrums high, and one parent has a child with a category of temper tantrums were whereas the role of parents in the unfavorable category was not found in the study.

In the study it can be concluded that the role of parents is very instrumental in the development of children's emotions. Parents who have the role of parents with excellent category indicates the category of temper tantrums low on his child, and vice versa parents who have the role of parents with enough categories show categories temper tantrums high in children. The results are supported by the theory put forward by Hasan (2011) that the way parents nurture children's role is to lead to tantrums .

In the development of children are critical times, in which the necessary stimulation or stimulation which allows the potential to develop, so it needs to get attention. Psycho-social development is strongly influenced by the environment and the interaction between children and their parents or other adults. Child development will be optimal when social interaction arranged according to the needs of children at various stages of development. Meanwhile, an environment that does not support would hinder the development of the child (Andriana 2011).

Character and personality, values and norms, and the child's knowledge of his family formed. Because it is all at once a person's behavior is a manifestation of his family situation. A conducive family must provide opportunities for children and their family members to flourish and manifested in their mental health. Conversely, barriers that occur in families at risk of poor mental health family members. Forms of social behavior of children, among others, his attitude toward other people and groups of people mostly from what he learned. This attitude is "derived" from the social adjustment, especially here the adjustment of children to the procedure of family life (Notoedirdjo & Latipun, 2007).

Children ages toddler is a child between the ages of 1 to 3 years. Experience and their behavior began to be influenced by the family environment and the environment in the community. The role of parents in providing stimuli to the child is very influential. According to Wong (1999) the relationship with the people who play an important role in the development of emotional, intellectual and personality, especially in the development of the emotional, intellectual and personality is not only the quality and quantity of contact with other people who make an impact on the developing child, but the extent of the range of important contacts for learning and healthy development.

Child development experts assess that temper tantrums are a relatively normal behavior and is part of a development process which will surely end. The positive thing that can be seen from the behavior of temper tantrums are a child wanted to show her independence (independency), express individuality, opinion, issued anger and frustration, and make adults aware that they are confused, tired, or sick, but it does not mean that the tantrum supported (encourage). If parents let tantrums ruling, meaning parents are encouraging, and set an example for children to be rude and aggressive. Parents will lose a good opportunity to teach children about how to react to the normal

emotions appropriately (Novita, 2007).

Having performed statistical tests Spearman rho obtained correlation coefficient of -0.544 with $p = 0.003$ which means that H_0 is rejected and H_1 accepted. It states that there is a relationship between role of parents with temper tantrums in toddler in the RT 06 RW 12 Sub sill Merisi Surabaya. In -0.544 correlation coefficient indicates it can be concluded that there is a significant negative relationship between the level of the role of parents and temper tantrums. The higher the category of the role of parents, the greater the low temper tantrums in children.

CONCLUSION

Based on the research that has been done and discussed in the previous chapter can be concluded as follows:

The role of parents in toddler in the RT 06 RW 12 Sregion Bendul Merisi Surabaya most of the role of parents with very good category.

Temper tantrums in children ages toddler in the RT 06 RW 12 region Bendul Merisi Surabaya more dominant with the category being compared with the high and low categories.

There is a relationship between the role of parents with temper tantrums in children ages toddler in the RT 06 RW 12 region Bendul Merisi Surabaya.

SUGGESTION

Based on the research findings, some suggestions submitted to the future research might involve bigger participants.

Parents as first educator and significant factor on children development and emotional growth should provide better quality in parenting, love and polish as well know how to prevent and cope with temper tantrums in children.

For Health Workers

This research can be basic data to initially concern on promoting specific program for parents who have children ages toddler. Activities that can be done such as dissemination of information through the implementation of seminars or counseling.

For Further Research

This research can be used as a basic data or information to carry out further research. Better sample categories by comparing the occurrence of temper tantrums at every level of the child's age. So that the categories of temper tantrums can be seen in each of the age levels

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Seminar Review

Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta, Room. A. 4.03
Speaker/Presenter	Elly Dwi Masita
Title of Presentation	The Influence of Type of job, Income, Education and Religiosity To Vasectomy Acceptors' Quality Of Life
Reviewer	Dr. Kuldip Bharj, OBE
Summary of Presentation	<ol style="list-style-type: none"> 1. The study was conducted to investigate the influence of type of work to quality of life 2. 30 samples was recruited using total sampling 3. WHOQOL scale was used as research instrument 4. Education and religiosity are factors related to quality of life
Summary of Discussion	No Discussion

Seminar Review

Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta, Room. A. 4.03
Speaker/Presenter	Sri ratnaningsih
Title of Presentation	The Correlation between education, parity and knowledge on the treatment of babies with LBW
Reviewer	Dr. Kuldip Bharj, OBE
Summary of Presentation	<ol style="list-style-type: none"> 1. The study was correlative descriptive study 2. 60 respondents was recruited 3. There is a correlation between mothers' education level and mothers' knowledge about LBW's treatment
Summary of Discussion	No Discussion



Seminar Review

Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta, Room. A. 4.03
Speaker/Presenter	Indriani
Title of Presentation	Study on Children's nutrition status and obesity trends amongst pre-school children in Yogyakarta
Reviewer	Dr. Kuldip Bharj, OBE
Summary of Presentation	<ol style="list-style-type: none"> 1. There was a high prevalence of overweight than obesity among pre-school children 2. Family should provide the activity and control the diet for their children
Summary of Discussion	No discussion



Seminar Review

Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta, Room. A. 4.03
Speaker/Presenter	Faizatul Ummah
Title of Presentation	The comparative study: effectiveness of ginger tea and ginger sweet to treat emesis gravidarum
Reviewer	Dr. Kuldeep Bharj, OBE
Summary of Presentation	<ol style="list-style-type: none"> 1. Ginger is one of non-pharmacology treatment to release emesis gravidarum 2. 49 pregnant women was recruited with GA<20 weeks as one of criteria 3. Visual analogue scale as instrument 4. Both intervention were significant effective to release nausea and vomiting 5. For the next research to develop the intervention using ginger with another method
Summary of Discussion	No Discussion



Seminar Review

Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta, Room. A. 4.03
Speaker/Presenter	Erinda Nur Pratiwi et all
Title of Presentation	Effect of Consumption of Guava on hemoglobin levels and ferritin levels of pregnant fe in sawit II health care
Reviewer	Dr. Kuldip Bharj, OBE
Summary of Presentation	<ol style="list-style-type: none"> 1. There are significant difference between intervention 2 groups 2. There are effects of giving guava juice
Summary of Discussion	1. How many doses that you gave to the respondents → based on information at introduction



Seminar Review

Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta, Room. A. 4.03
Speaker/Presenter	Fitria Siswi Utami
Title of Presentation	Factors Related to Uptake of Visual Inspection Acetat Acid in Banguntapan II Primary Health Center
Reviewer	Dr. Kuldip Bharj, OBE
Summary of Presentation	<ol style="list-style-type: none"> 1. There was a significant correlation between knowledge and uptake of VIA 2. The development of a health education program to increase women's knowledge, perceived benefits, and intention to have VIA is needed
Summary of Discussion	<ol style="list-style-type: none"> 1. The data collection process using in depth interview will give information deeply 2. The information related to barriers of visiting Primary Health Center is needed in order to prevent late detection of cervical cancer



Seminar Review

Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta, Room. A. 4.03
Speaker/Presenter	Evi Nurhidayati and Eminur Itri Sari
Title of Presentation	
Reviewer	Dr. Kuldip Bharj, OBE
Summary of Presentation	1. Factors related to low interest to use of long term contraceptive method are individual perception, age
Summary of Discussion	No discussion



Seminar Review

Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta, Room. A. 4.03
Speaker/Presenter	Titin Aryani
Title of Presentation	
Reviewer	Dr. Kuldip Bharj, OBE
Summary of Presentation	<ol style="list-style-type: none"> 1. Determining levels of omega 3 in breast milk can be performed using GC-MS 2. Content of Omega 3 in breast milk is 16.43%
Summary of Discussion	No Discussion



Seminar Review

Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta, Room. A. 4.03
Speaker/Presenter	Dwi Ernawati
Title of Presentation	Correlation Between family support and pregnant women's attitude on early initiation of breastfeeding at jetis PHC
Reviewer	Dr. Kuldip Bharj, OBE
Summary of Presentation	<ol style="list-style-type: none"> 1. Accidental sampling technique was used 2. Support for breastfeeding mothers is needed
Summary of Discussion	No discussion



Seminar Review

Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta, Room. A. 4.03
Speaker/Presenter	Anjarwati
Title of Presentation	The effect of counseling of maturation age of marriage to the attitude of early-age married decision
Reviewer	Dr. Kuldip Bharj, OBE
Summary of Presentation	<ol style="list-style-type: none"> 1. Based on the culture that early marriage is natural thing 2. Teachers can collaborate with health centers and religious affairs office to provide information in order to improve students' attitudes towards early marriage
Summary of Discussion	No discussion



Group C



Universitas 'Aisyiyah Yogyakarta

THE EFFECT OF STORY TELLING USING FINGER PUPPET TOWARD FINGERNAIL HYGIENE OF PRESCHOOLERS

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ABSTRACT

Nails need special attention to prevent infection, odors, and tissue injury. Often people are not aware of the problem nails until there is pain or discomfort. Storytelling is closely linked with the world of children, one of the media used in storytelling is using a finger puppet. This study aims to determine the effect of using a finger puppet storytelling to nail hygiene in pre-school children. This study was time series Quasi Experimental design with 40 childrens sampled. Statistical test results using Wilcoxon test showed the value of $\alpha = 0.000$, thus $\alpha < 0.05$, which means it is evident that there is the effect of storytelling using finger puppet to nails hygiene in the school-age children.

Keywords: Storytelling, Finger puppet, Hygiene of nails

INTRODUCTION

Health problems in the developing country of Indonesia is including infectious diseases.

The infectious disease is a disease that can affect all ages, including pre-school age children. One of the causes of infectious diseases, namely higyene or poor hygiene, environmental cleanliness and the good personal hygiene (Potter & Perry, 2005).

Infection by worms that are transmitted through the ground Soil Transmitted Helminiths (STH) is a serious health problem in developing countries. STH most types infect humans is *Ascarislumbricoides* and *Trichuris trichiura*. How infection *Ascarislumbricoides* and *Trichuris trichiura* through ingestion of undercooked eggs, one media transmission is through an intermediary dirt fingernail, if swallowed will grow into adult worms in the intestine of humans and cause disturbances in the digestive system (Irman, 2011).

When the period of pre-school children are usually already familiar with social life, already started to hang out with friendspeers, but is prone to health problems because they do not know where that dirty and which are clean, including tasks in health care nail. Nails need special attention to prevent infection, odors, and tissue injury. Often

people are not aware of the problem nails until there is pain or discomfort. Discomfort can lead to physical and emotional stress (Potter & Perry, 2005).

The prevalence of infectious diseases nail health in Indonesia is still relatively high in 2006, amounting to 32.6%, mainly in the segment of the population that is disadvantaged in terms of economy. The weak economic groups at high risk of contracting deworming for less their ability to maintain hygiene and environmental sanitation residence.

Based on the initial survey on preschool children in Aisyiyah Bustanul Athfal 2 Lamongan, from 10 respondents examined, 2 children, or 20% got long fingernails and clean, 4 children or 40% is obtained with long fingernails and dirty, one child or 10% hoofed obtained short and clean, 3 children or 30% obtained a short-toed and dirty. Of such data in get there preschool are not able to do nail health.

This situation can be affected by several factors, including the role of parents, environment, media, culture, education, knowledge. In this case the role of parent to nail care, such as the example they accustom clean life, which teaches cutting nails. Children will follow what is taught by parents. But if parents do not carry out their role, for example, parents are busy with work, parents do not know what is the best to their children, or children cared for by other people who do not understand about personal hygiene, including the health of the nail, then the child will tend to behave less clean, and will impact the onset of an infectious disease.

The main impact if a long nail and not clean, a lot of germs easily lodged in the nail. And if less clean nails risks debris might enter into the body or infection will occur. Worms are the most frequent illnesses caused by nails long and dirty. Besides long nails can lead to the onset of infection of the skin, paronychia is inflammation of the bottom / edge of the nail, nail fungus and worms. Worms is a disease that most frequently caused by long and dirty nails. (Hingky, 2011).

Efforts have been made by the government in overcoming nail health starts from a midwife and schools that perform actions nail care for the child. One effort that can be done is to improve nail health education, regular monitoring, and maintaining personal hygiene by cutting nails.

Parents and teachers are accompanying figure when children do daily life activities. Parents are given the extension of schools and parents is vital to the child. Their role is

very dominant and very decisive quality of life of children in the future. So it is important for them to know and understand the problems and health problems in preschool children is quite extensive and complex. Early detection of health problems preschool. Schools can prevent or reduce complications and problems resulting from becoming more severe. Increased attention to the health of preschool. The school, expected to create pre-school age children Indonesia bright, healthy and achievement. (Hendra: 2009).

Storytelling has close links with the world of children, can not be denied even fairy tales have a special attraction that can not be refused by the child. Storytelling is an activity that has the potential to support a constructive mental pertumbuhan for children, in addition to the child's thinking would be better, more critical and intelligent. Children also can understand things which need to be replicated and that should not be imitated. One of the media used in storytelling is using a finger puppet (Debora, 2011). From the description above, it was found that the problems there are still children who have not been able to keep nail hygiene which ultimately resulted in increased incidence of infection due to the long and dirty nails. For that, it takes the role of midwife to deliver health education on hygiene nails. One method to do this is with storytelling using finger puppet media. This method triggers the activity that has the potential to support a constructive mental growth and developing for children, in addition to the child's thinking would be better, more critical and intelligent. Children also can understand things which need to be replicated and that should not be imitated. The purpose of this study was to determine the Influence Storytelling using a finger puppet to the Hygiene nail on preschool children.

Through health education using a method using a finger puppet storytelling expected personal hygiene, especially hygiene of nail can be resolved so that midwives can apply. Midwives will be more creative in providing health education by using the method of storytelling using a finger puppet, henceforth taught both the teachers and parents and caregivers so that problems can be overcome nails hygiene.

METHOD

Design study uses Quasi Experimental type of time series design. The sample used in this study are some preschool children in Aisyiyah Bustanul Athfal (ABA) 2 Lamongan

included in the criteria for inclusion are 40 childrens. The instrument used in this study is a scenario that is used for storytelling using a finger puppet. As for nails hygiene used observation sheet. This study was conducted from November 2013 to September 2014, while for the data collection was conducted from February to August 2014. The instrument used in this study is a scenario that is used for storytelling using a finger puppet.

Collecting data in this study begins to submit a written request for early childhood research permit ABA 2 Lamongan by providing a letter of introduction from STIKES Muhammadiyah Lamongan. After getting permission, researchers determined according to the survey respondents inclusion criteria, further observations nail hygiene week 1st, week 2nd, week 3th to week 4th once that is done treatment by giving storytelling by using a finger puppet, just after it observed back for 4 weeks after treatment.

The data that has been processed to analyze the differences before and after the treatment given by the treatment given statistical test Wilcoxon test with a significance level $\alpha < 0.05$. If the statistical result showed $\alpha < 0.05$, statistical hypothesis (H0) is rejected and the research hypothesis (H1) is accepted, which means it is evident that there is the effect of storytelling using finger puppet to the hygiene of nail finger of preschoolers.

RESULTS AND DISCUSSION

Results of research on The Effect Of Storytelling Using Finger Puppet to The Hygiene of Nail Fingers of Preschoolers can be seen in the following table :

Table 1: Cross Tabulation The Effect Of Storytelling Using Finger Puppet to The Hygiene of Nail Fingers of Preschoolers

Story telling	Hygiene of nails				Total	
	Good		Bad		n	%
	n	%	n	%		
Pre	11	27.5	29	72.5	40	100
Post	25	62.5	15	37.5	40	100
	36	45.0	44	55.0	80	100

Table 1 shows the 40 preschoolers were observed nail hygiene before given a storytelling method mostly have poor hygiene nails total of 29 (72.5%), and nail hygiene in preschool children after Storytelling method given a large part of good hygiene nails up to 25 (62.5%).

Statistical test using the Wilcoxon test, showed the value of $\alpha = 0.000$, thus $\alpha < 0.05$ means proven that there is the effect of storytelling using finger puppet to the hygiene of nail fingers of preschoolers.

Nail Hygiene of Preschoolers Before the Given Method Storytelling Using Finger Puppet

Table 1 shows the 40 preschoolers were observed nail hygiene before given a storytelling method mostly have poor hygiene nails total of 29 (72.5%). The above phenomenon is influenced by factors including the role of the role of mother, caregiver or teacher. Mother as parents play an important role in maintenance of children at preschool age, because children at that age have not been able to make their own health care. The role of the mother as the parents themselves are not free from several factors, including age, According to (Nursalam and Siti Pariani, 2001) which states that the underage person's level of maturity and power of the people will be more mature in thinking and working. Young mother tends to instantly receive new information for granted without sufficient knowledge based. And also justified by the theory presented by Soekidjo Notoatmojo (2003) which states that the experience is a source of knowledge or experience that is a way to get the truth of knowledge, therefore, personal experiences can be utilized as a means to acquire knowledge, but not all personal experience can lead one to conclude smoothly it is necessary to think critically and logically.

According to the theory presented by (Nursalam, 2001) which states that the underage person's level of maturity and power of the people will be more mature in thinking and working. With increasing age one's mindset will be more mature in resolving a problem, so the possibility of the mother also can minimize or prevent nail bad hygiene.

In addition to age, education level also affects the role a mother in the care of hygiene nail. According Soekidjo Notoatmodjo (2003) education as all efforts are planned to influence others whether individuals, groups or communities so that they do what is expected by the educational actors. Secondary education will have an effect on parents to absorb the information received, with a secondary school education, information or knowledge to be unacceptable or if an extremely simple and limited in the end the

parents have not been able to apply the information or knowledge possessed. And vice versa with advanced knowledge or sufficient will give parents more receptive or select positive information about the health of their child's fingernails. The high maternal education will make the mother more attention to maintain hygiene of the child's fingernails.

Nail Hygiene Of Preschoolers After The Given Method Storytelling Using Finger Puppet

Nail hygiene in preschool children after the given method Storytelling large part of the nail hygiene is a good number of 25 (62.5%). This represents an increase compared before being given method of storytelling using a finger puppet. Health education regarding hygiene nail for preschoolers need to be done by giving an example of a good model and simple as possible. Delivery of health hygiene nails, according to Wong (2009) children can experience the progress of making judgments based on what they see (perceptual reasoning) to make judgments based on their reasons (conceptual thinking) without reducing the content of education.

Health education in children can be done with some how such a demonstration, audio-visual media, and storytelling. storytelling by Vivian Paley's (1988, 1990, 2004 in Wright, Bacigalupa, Black & Burton, 2008) is by telling a story can help teachers to better understand students who he taught, is more effective in children and the social needs emotional, as well as creating a curriculum that is more responsive to the needs and interests of children. Even Lenox (2000) describe other effects of storytelling is a very powerful tool to improve children's understanding of self and others surrounding.

When the story was read, sometimes the words were spoken not only to remember but also seemed to be depicted returned spontaneously, there is a spirit of performance, aided by the participation and interaction of the audience (Isbell, Sobol, Lindauer, and Lowrance, 2004). Where Roney (1996 in Isbell, Sobol, Lindauer, and Lowrance, 2004) explains that in the storytelling aspect that must be considered in order to work effectively is trying to be creative and have bidirectional communication (storyteller and listener). Besides eye contact with pendengarpun very important to note, if the child

sees eye contact storyteller, where they are doing gaze in the interaction, will ultimately make the experience becomes more personal than just a storyteller reading a story book (Zeece, 1997; Malo&Bullasrd 2000 in Isbell, Sobol, Lindauer, and Lowrance, 2004). Storytelling is used to improve the intelligence of children also be adjusted to the level Cognitive children. Where the pre-school age, cognitive level they are at kongrit operational (Piaget in Santrock, 2007). Thus the story provided must be kongrit and does not require a high reasoning power.

The Effect of Storytelling using finger puppet to the Hygiene of Nail Fingers of Preschoolers

Efforts have been made by the government in overcoming nail health starts from a midwife and schools that perform actions nail care for the child. One effort that can be done is to improve nail health education, regular monitoring, and maintaining personal hygiene by cutting nails.

Parents and teachers are accompanying figure when children do daily life activities. Parents are given the extension of the school and parents is vital to the child. Their role is very dominant and largely determines the quality of life of children in the future. So it is important for them to know and understand the problems and health problems in preschool children is quite extensive and complex. Early detection of health problems of children of preschool age could prevent or reduce complications and problems resulting from becoming more severe. Increased attention to the health of pre-school age children are expected to created preschool Indonesia intelligent, healthy and achievement. (Hendra: 2009).

CONCLUSION

Hygiene nail on preschoolers before storytelling methods it is mostly bad. Meanwhile, after the given method of storytelling. Most of the child's fingernails are good hygiene. The results of this study indicate There are storytelling methods influence on nail hygiene at preschool age children.

Suggestion for a place to study and respondents are expected to further improve the education of Health regarding hygiene nail by applying innovative methods such as the

method of storytelling, expected that the good cooperation between teachers and parents in health education regarding hygiene nail on preschool children so that raises awareness in children to maintain hygiene nail.

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THE ROLE OF PEERS AND PORNOGRAPHIC MEDIA EXPOSURE WITH SEXUAL BEHAVIOR AMONG ADOLESCENTS IN VOCATIONAL SENIOR HIGH SCHOOL TUNAS BANGSA SUBANG DISTRICT

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ABSTRACT

Adolescents reproductive health classified as one of public health issues in Indonesia. Adolescents health problem caused by negative sexual behaviour and fre sex increasing significantly. Peer role and pornographic media exposure influences might be contributed and related to adolescents permissive behaviour nowadays. The study was conducted to identify the effect of peer role and pornographic media expose and other factors on adolescent sexual behavior in SMK Tunas Bangsa in Subang district. Quantitative research with cross sectional design was used in this study. Sample consists of 117 Grade XI students selected using total sampling technique. Univariate analysis was done in each variable studied. Bivariate analysis used chi square test and multivariate analysis used logistic regression with 95% confidential level ($p < 0,05$). The result showed that peer role, high pornography exposure, self control, alcohol and drug adiction were related with adolescent sexual behavior. Result of logistic regression analysis proved that self control dominantly contributed adolescent sexual behaviour with (OR: 4,149 95%CI= 1,335-12,891). Negative peer role, high pornographic exposure, negative self control and effect and alcohol and drug related with adolescent sexual behavior. Adolescent with negative self control has chance four times to do sexual behavior than adolescent with positive self control.

Keywords: adolescent sexual behavior, peer role, media pornographic exposure

INTRODUCTION

Reproductive Health particular attention globally since the appointment of the issue at the International Conference on Population and Development, the International Conference on Population and Development (ICPD) in Cairo, Egypt, in 1994. Indonesia agreed definition of reproductive health since 1996 which is a state of complete physical, mental and social as a whole, not merely free of disease or infirmity in all matters relating to the reproductive system, as well as its functions and processes. But the breadth of the scope of reproductive health requires handling cross-program and

cross-cutting as well as the involvement of society organization, professional organization and all parties concerned. The scope of reproductive health include maternal and child health, family planning, prevention and control of sexually transmitted infections (STI) and reproductive tract infection (RTI).

Nowadays, reproductive health remains a public health problem that is quite large scale in Indonesia. It can be seen from the data and facts on some reproductive health components, one of which is the issue of reproductive health in adolescents. Adolescent reproductive health problems in addition to the physical impact, also can affect the mental and emotional state of the economy and social welfare in the long run. The long-term impact not only affects the teens themselves, but also to families, communities and nations.

Adolescent reproductive health issues can be grouped as follows: risk behaviors; lack of access to health services; lack of correct information and accountable; the number of incorrect access to information without strainer; IMS issues; Sexual violence, such as rape, sexual abuse and commercial sex transactions; pregnancy and childbirth, young age at risk of maternal and infant mortality; and unwanted pregnancies, which often leads to unsafe abortion and complications¹.

According to the World Health Organization (WHO) is the teenage population of men or women aged 10-19 years ^{1,2}. Adolescence is a critical period in the human life cycle. At this time, adolescents undergo a fundamental change in attitudes and behavior. Teens Indonesia is currently undergoing rapid social change from a traditional society to the modern society, which also changed the norms, values and lifestyles.

The National Population and Family Planning (BKKBN) rate, adolescent developmental issues especially adolescent behavior lately has been to indicate the direction of risky behavior. This is evident based on Adolescent Reproductive Health Survey (SKKR) in 2012 conducted by the BKKBN. Some of the behavior of unmarried teenage dating is very worrying. A total of 29.5 percent of boys and 6.2 percent girls ever touching or stimulating partner. A total of 48.1 percent of adolescent males and 29.3 percent among women never kissed lips. A total of 79.6 percent of boys and 71.6 per cent of young women ever held hands with her partner. Even in the survey also revealed, the age of first dating at most 15-17 years of age, ie at 45.3 percent and 47.0

percent of young men young women. From all over the age of 10-24 years surveyed, only 14.8 percent of the claimed not have been dating⁴.

5Preced-Proceed Model can explain human behavior is influenced by three factors: predisposing, reinforcing factors, and enabling factors. Predisposing factors are internal factors that consists of knowledge, beliefs, and attitudes. Reinforcing factors and enabling factors are external factors. Reinforcing factors derived from family, peers, etc. While the enabling factors are environmental characteristics that facilitate action and the skills or resources required to achieve certain behaviors which include accessibility, availability of facilities, etc.

Based on the interview when the preliminary study in January 2014 to one of the teachers at Senior High School 3 Subang and vocational counseling teacher (BK) Tunas Bangsa Subang district, obtained information that the student dating behavior today is quite alarming, they've not hesitate again holding hands and cuddling in public (general public). According to SMK Tunas Bangsa BK teacher, every year there are always some students who was forced out of school as a consequence of the sexual behavior, even in 2013, the number of female students increased by one hundred percent issued compared to previous years, reaching seven students. The results of the approach with two male students obtained the information that they've seen pornography content with friends via mobile phones and the Internet. Currently in Subang district recorded 634 people living with HIV-AIDS, most of whom were also teenagers who are still students⁸.

With the increasing number of teenagers and adolescents followed a very complex issue, especially the most prominent is the issue of adolescent sexual behavior, which is the earliest occurrence of adolescent reproductive health problems, the researchers are interested in doing research on the role of peer and media exposure to pornography on the sexual behavior of adolescents in the Tunas Bangsa Vocational Senior High School Subang district.

RESEARCH METHOD

This study is a quantitative study with cross-sectional design. Independent variables in this study is the role of peer and media exposure pornography, whereas dependent variable is adolescent sexual behavior. The populations in this study were

students of class XI Vocational Senior High School Tunas Bangsa. One hundred seventeen students of class XI were selected using total sampling technique. The data were collected in August 2014. Univariate analysis was done to see the distribution and proportion of each variable. Bivariate analysis using chi square test with 95% confidence level. Multivariate analysis used logistic regression.

RESULTS AND DISCUSSIONS

The results showed that the number of female respondents more than 65 people (55.6%) compared to male respondents 52 (44.4%). Most respondents aged ≥ 17 years (91.5%), and those aged < 17 years as much as 8.5%. Majority of respondents had high knowledge (59%), positive attitude (53.8%) and self-control positive (60.7%). Most of respondents are not addicted to alcohol and drugs (70.9%). Majority of respondents in religious obedience (64.1%), as many as 97.4% of respondents had some free time and more than half (57.3%) had low social economic status. Most of the 54.7% of respondents had negative role of peers and as much as 52.1% of respondents have a high exposure to pornography. As for the sexual behavior of adolescent, sexual behavior of respondents indicate that the majority (86.3%) are risky.

Table 1. Analysis of the relationship respondent characteristics, knowledge, attitudes, self-control, alcohol and drugs, religious observance, use of leisure time, social economy, the role of peers and media exposure to pornography on the sexual behavior of adolescents in Tunas Bangsa Vocational Senior High School Subang (n = 117)

Variable	Adolescent Sexual Behavior		P value	OR	CI (95%)
	Risky	Not a risk			
	n (%)	n (%)			
Knowledge					
Low	7 (14,6%)	41 (85,4%)	0,812	1,138	0,303-3,300
High	9 (13%)	60 (87%)			
Gender					
Male	10 (19,2%)	42 (80,8%)	0,118	2,341	0,790-6,941
Female	6 (9,2%)	59 (90,8)			

Age	15(14%)	92 (86%)	0,724	1,467	0,173-12,433
≥17 tahun	1 (10%)	9 (90%)			
<17 tahun					
Attitude					
Negative	11 (20,4%)	43 (79,6%)	0,051	2,967	0,96-9,171
Positive	5 (7,9%)	58 (92,1%)			
Self Control					
Negative	11 (23,9%)	35 (76,1%)	0,009*	4,149	1,335-12,892
Positive	5 (7%)	66 (93%)			
Alcohol & Drugs					
Adiction	9 (26,5%)	25 (73,5%)	0,010*	3,909	1,319-11,581
Not adiction	7 (8,4%)	76 (91,6%)			
Religious observance					
Disobedient	6 (14,6%)	35 (85,4%)	0,825	1,131	0,380-3,372
obedient	10 (13,2%)	66 (86,8%)			
Utilization of spare time					
Have time to spare	16 (14%)	98 (86%)	0,485	0,860	0,798-0,926
Not time to spare	0 (0%)	3 (100%)			
Socio economic					
Low	6 (8,8%)	40 (80%)	0,085	0,393	0,133-1,168
High	10 (20%)	61 (91%)			
Role of peers					
Negative	16 (25,8)	48 (75)	0,000	0,750	0,651-0,864
Positive	0 (0)	53 (100)			
Media pornography exposure					
High	12 (19,7)	49 (80,3)	0,049	3,184	0,962-10,538
Low	4 (7,1)	52 (92,9)			

The study found that adolescent males are more likely to have risky sexual behavior than female adolescents. The proportion of teenage boys have higher sexual behavior compared to adolescent girls. This is consistent with the statement stating that teenage boys tend to have aggressive sexual behavior, open, persistent and difficult restraint when compared with adolescent girls¹⁰. Teenage boys were more likely to consume pornography compared to adolescent girls. Approximately a quarter of young people in Brazil have had sexual intercourse and most often are teenage boys^{11,12}.

The differences between adolescent boys and girls in sexual behavior caused by biological factor and social¹³. Male biological factors are more easily aroused and get an erection and orgasm than women, where as social factors males tend to be more free than women. Even teenage boys tend to have more than one partner than adolescents girls¹⁶. Parents and society in parenting also tend to be more protective against adolescent girls. Adolescent girls better adherence to the rule of law which apply¹².

Respondents in this study mostly aged ≥ 17 years as many as 107 people (91.5%). This study found the result that the proportion of 17 year old adolescents are more likely to have risky sexual behaviors than adolescents aged less than 17 years. The results of chi-square test showed that there was no significant relationship between age and adolescent sexual behavior (p value 0.724). This is consistent with other research that states that there is no significant relationship between age teenagers behave risky sexual behavior and teens who are not sexually risk¹⁴.

Teen has a typical middle age related sexual development. Adolescents in this period had the courage to make physical contact with the opposite sex²¹. This is in contrast to the early teens where expressing sexual urges through masturbation²¹. The dating among teenagers were started holding hands, cuddling up to risky sexual activity. Lapsed at least adolescent sexual behavior is influenced by self-control teenagers in applying the values, norms, and religion¹⁸.

The role of peer respondents mostly negative (53%). negative role of peers who had 0.75 times greater chance to perform risky sexual behaviors than adolescents with positive peer role (OR = 0.750; 95% CI: 0.651 to 0.864). This suggests that the greater the negative influence of peers, the more teenagers have a tendency to sexual behavior risk. This finding is consistent with other results in Laos and Cambodia which suggests that the role of peers significantly influence sexual risk behavior in adolescents. The role of friend is the major predictor of risky sexual behavior. The role of peers as a source of reproductive health information contributed tendency agree adolescent attitude premarital¹⁹ about sexual intercourse.

Adolescents are more comfortable and openly discuss issues of sexual behavior with peers rather than parents. Peer is both for young parents in determining adolescent behavior, including adolescent sexual behavior²². One of the most important functions of the peer group is as a source of information about the outside world²⁰. Sexual

information from peers who have not known the truth can have negative impacts for adolescents. Peers generally get information only through the mass media impressions such as: movies, VCD, television and personal experience. Information gleaned from the media and their own experiences directly shared with friends without the correct information filtering and sorting information good. This of course can affect the knowledge and attitudes of adolescents about sexual acts that can be done to the spouse.

The results showed that the proportion of adolescents with high exposure to pornography has a greater chance of risky sexual behavior than adolescents with low exposure to pornography. Bivariate analysis showed that there is a significant relationship between exposure to pornographic media with sexual risk behavior in adolescents. Multivariate analysis showed that sexual risk behavior in adolescents with high exposure to pornography has a chance to 3.18 times greater than the adolescents with low exposure to pornography (OR = 3.184; 95% CI: 0.962 to 10.538). This is in line with research conducted Dewi (2012) which states that there is a significant relationship between mass media exploited youth in accessing pornography on the internet with adolescent sexual behavior, compared with those not utilizing mass media (p value = 0.00). Adolescents who received information from Internet pornography risky sexual behavior 12.2 times than teens who do not get the information.

In addition, research conducted Mirani (2010) on adolescent SMA Muhammadiyah X Depok stated that there is significant relationship between exposure to porn cyber (internet porn sites) against risky courtship behavior in adolescents. While the different results found in another study stating that the research does not show strong evidence of a causal relationship between exposure to pornography to sexual behavior of students / junior high school students in Mataram⁸.

Results of univariate analysis showed that most of the respondents' knowledge of high (59%). The proportion of adolescents with low knowledge tend to have higher sexual behaviors than adolescents with high knowledge. This is consistent with other research that states that adolescents who have low knowledge about reproductive health, have a higher tendency of pre-marital sexual intercourse as much as 53.6%²⁴.

The results showed that the proportion of adolescents with low knowledge have greater opportunities for risky sexual behavior than adolescents with high knowledge. The results of chi square test showed no significant association between knowledge of

respondents with adolescent sexual behavior. This is in line with other research stated that there was no significant association between sexual knowledge and sexual behavior adolescents. Likewise with other studies showing that there is no relationship between sexual knowledge with premarital sex behavior risk²⁶.

The study found that adolescents with negative attitudes are more likely to have risky sexual behavior than adolescents who have a positive attitude. Further analysis showed that adolescents with a negative attitude has a 0.33 times greater chance to perform risky sexual behaviors than adolescents with a positive attitude. This is in line with the results Sinaga (2012) stated that the attitude has a positive influence on the occurrence of high-risk sexual behavior with p value 0,010. People who are likely to be negative 2.81 times higher risk sexual behavior compared with people who are positive.

The results of this study showed that the proportion of adolescents with a negative self-control tend to have more sexual risk behaviors than adolescents with a positive self-control. Bivariate analysis showed that there was a significant relationship between self-control with risky sexual behavior in adolescents (p value= 0.009). Further analysis showed that adolescents with a negative self-control have the opportunity to perform risky sexual behaviors 4,14 times more likely than adolescents with a positive self-control (OR = 4,149; 95% CI: 1.335 to 12.892).

The results of this study showed that the proportion of adolescents who addiction to alcohol and drugs have risky sexual behaviors greater (26.5%) compared with adolescents who are not addicted to alcohol and drugs (8.4%). The results of the bivariate analysis showed that no significant association between alcohol and drugs with risky sexual behavior in adolescents. Further analysis showed that adolescents are addicted to alcohol and drugs have the opportunity to perform sexual behavior 3.9 times higher than youth with addiction to alcohol and drugs (OR = 3.909; 95% CI: 1.319 to 11, 581).

The results of this study showed that adolescents who have free time tend to have risky sexual behavior than teens who do not have time to spare. Bivariate analysis showed that there was no significant association between the use of leisure time with adolescent sexual behavior (p = 0.485). Further analysis showed that adolescents who have spare time potentially risky sexual behavior 0,86 times greater compared to teens who do not have the leisure time (OR: 0,860; 95% CI: 0,798 to 0.926).

Bivariate analysis showed that there was no significant association between socio-economic with adolescent sexual behavior. In line with the results of other studies stating that there was no relationship between socio economic status with pre-marital sex. Further analysis showed that adolescents with high socio-economic had a 0.39 times greater chance to perform risky sexual behavior compared with low socio economic adolescents (OR = 0,393; 95% CI: 0.133 to 1.168).

In the final multivariate model showed that clinically, the variables that contribute the greatest or most dominant related to the sexual behavior of teenagers in Tunas Bangsa Vocational Senior High School Subang district is variable self control with OR 4,149, which means teens with negative self control have risky sexual behavior four times higher than youth with positive self control. In accordance with the statement Sarwono (2011) fall on whether adolescent sexual behavior is influenced by self-control teenagers in applying the values, norms, and religion which believes sexual behavior is influenced by self-control in applying the values, norms, and religion which believes.

CONCLUSIONS AND SUGGESTIONS

There is a significant relationship between the roles of peers, media pornographic exposure, alcohol and drugs with adolescent sexual behavior in Tunas Bangsa Vocational Senior High School Subang district. The variables that contributed most dominant or associated with the occurrence of adolescent sexual behavior in Tunas Bangsa SMK Subang district is self-control variable. Adolescents with negative self-control tend to make risky sexual behavior. Training of peer educators in providing information about adolescent reproductive health to protect the reproductive health of adolescents is indicated.

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THE ASSOCIATION OF EARLY BREASTFEEDING INITIATION AND UTERINE INVOLUTION

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Abstract: Not all postpartum mothers breastfeed their babies though early breastfeeding initiation is one of the important things to accelerate or stimulate breast milk production and improve uterine contractions. The purpose of this study was investigating the association of early breastfeeding initiation to infants and uterine involution in normal postpartum women at day 7th. This study using an analytical study with cross sectional design. The population was normal postpartum mothers within August-September 2016, involved 32 respondents. Data collection was through palpation and observation. The result showed that X^2 analysis obtained the expected frequency <5 more than 20%, Fisher's Exact Test showed significant results $p = 0.000$ $p > \alpha$, which means that there is an association of early breastfeeding initiation and uterine involution.

Keywords: first breastfeeding, uterine involution

INTRODUCTION

Breastfeeding has many benefits, both for the baby and the mother. But it is sometimes abandoned, either because of a misperception as well as by an avoidable situation of current modernization (Soetjiningsih, 2007). Breastfeeding is also very beneficial for the mothers because when the baby sucking their mother's nipple, it stimulates to the posterior pituitary and as the result the oxytocin is released which serves to increase the contraction of smooth muscles around the alveoli Mammary glands. Subsequently the breast milk can be produced and stimulate smooth muscle of the uterus, thus it accelerates uterine involution (Manuaba, 2008: 195). Early breastfeeding can stimulate uterine contraction that lead to stop bleeding after childbirth, so the uterus will return to normal condition quickly.

The Central Bureau of Statistics (BPS) 2008 stated that the proportion of children who were breastfed on the first day and helped by doctors and midwife has no difference between those who give birth at home or in a health facility. The report stated that the prevalence of mothers who breastfeed exclusively was only 22.40%. Infants who started to be breastfed for the first hour after birth were 7.5% in the city and 8.6%

in the village. Compared to countries in Asia, this score is far below the Kyrgyzstan (53%) and the Philippines (42%). Research by PUSKA-UI in collaboration with PATH in 2002 in four districts in the province of East Java (Kediri, Blitar, Mojokerto, Pasuruan) and West Java (Cirebon, Cianjur and Karawang) indicated that early breastfeeding initiation after delivery ranged between 8.9 % -40% (PP-IBI, 2007: 204).

The decreasing of breastfeeding for the infants will cause bad effect for both mother and baby. Mothers who do not breastfeed are likely to suffer from breast cancer and postpartum hemorrhage than those who breastfeed their babies (Suradi, 2009: 19). The purpose of this research is to find out the association between early breastfeeding initiation with uterine involution in normal postpartum women at day 7th.

Breastfeeding is one and only way in providing ideal food for the growth and development of a healthy baby. It has a biological effect and a unique health of mothers and babies (WHO and UNICEF in Bennet& Brown, 2006). The early breastfeeding initiation is giving breastfeed immediately after childbirth (it is expected that after the first 30 minutes the baby succeed in breastfeed) (Padmavati, 2007: 77) Research showed that babies who are breastfed immediately after birth are rarely got infectious diseases and their nutritional status during the first year is much better compared to babies who were not breastfed or experienced delay (Syahlan, 2003). The women's breast is composed of 15-25 lobes. Each lobe consists of 20-40 lobules, then each lobule consists of 10-100 alveoli and each connected to milk ducts (the duct system).

After the baby born, during labor stage the blood vessel had contracted and retracted, it may become hard and could obstruct the large blood vessels that lead to the site of placental implantation. Uterine muscle is composed of three layers that of muscles that form the webbing so that blood vessels can close perfectly, and is therefore protected from postpartum hemorrhage (Manuaba, 2008: 192). Within 0-4 hours after the delivery, the fundal height increased to 2 cm above the center (12 cm above the pubic bone). Furthermore the fundal height decreased 1 finger (1 cm) per day. On the day 7th post partum, the fundal height cannot be palpated any more through the abdominal wall (Reeder, 2007: 668). After delivery of the placenta, uterus is an organ that should be felt hard, because the contraction and retraction of the muscles. The fundal height become 3 fingers below the center, for the next two days the size is not much decrease, but after the second day of the uterus become smaller rapidly, so by day

10th it's no longer palpable from the outside (Sastrawinata, 2003). The factors that affect the uteri involution are: nutritional status, parity, age, education, breastfeeding and mobilization. The consequences of slow involution may cause post partum hemorrhage and secondary postpartum hemorrhage, puerperal infection. The hypothesis of this study is there is an association of early breastfeeding initiation to the uterine involution in normal postpartum women at day 7th

METHOD

This research was conducted at post-partum ward at the Jemursari Islamic Hospital Surabaya in August-September 2016. It employed the analytical method with the purpose to analyze association between timing of first breastfeeding with uterine involution in normal postpartum women at day 7th. Cross-sectional approach was used thus every subject of study was observed once and the measurement is made based on the status of the character or variable subjects during the examination. The population was all normal postpartum mothers day 7th. Sampling inclusion criteria were: 1) postpartum mother day 7th. 2) normal postpartum mother. 3) postpartum mother who give breastfeeding. 4) Mothers who underwent postpartum rooming in. Total sampling was employed and 32 women involved in this study. Independent variable in this study is early breastfeeding initiation while the dependent variable is uterine involution. The technique of data collection was through observation of the respondents. The first phase of the research was observing the time of early breastfeeding. 7th day after the childbirth the researcher measured the fundal height through the palpation.

Data collection instrument in this study was using an observation sheet for monitoring the first time of breastfeeding and uterine involution. Observation sheet is a filling form and consists of four columns; the first column contains the number, the second column for the initials of respondents, the third column for the result of observation of the first time of breastfeeding written with a code, the fourth column for the result of physical examination of uterine involution.

RESULT

According to the data obtained from 32 respondents based on age criteria, 19 respondents (59.4%) are between 20-30 years; 7 respondents (21.8%) are >30 years;

and 6 respondents (18.8%) are >30 years. Based on educational background, 21 respondents (65.6%) were graduated from senior high school; 8 respondents (25%) were graduated from junior high school, 2 of them (6.3%) were graduated from elementary school; and 1 respondent (3.1%) was graduated from college. Based on early initiation of breastfeeding, 25 respondents (78.1%) have early initiation of breastfeeding, whereas 7 respondents (21.9%) do not have early initiation of breastfeeding. Moreover, 27 respondents (84.4%) are found with normal (good) uterine involution, whereas 5 respondents (15.6%) are found with less normal uterine involution.

Table 1
Frequency Distribution of uterine involution
in normal postpartum women in postpartum room of RSI Jemursari
in 2016

Uterine involution	Frequency	Percentage (%)
Normal (good)	27	84.4
Less normal	5	15.6
Total	32	100.0

Based on the data collection, it has been found that 25 women (100%) who having early initiation of breastfeeding had good uterine involution. Two women (28.6%) who did not have early breastfeeding initiation had good uterine involution, whereas five women (71.4%) who did not have early breastfeeding initiation were assessed to have less normal uterine involution. Furthermore, the statistic test had been done to find out the correlation between the first time to breastfeed and uterine involution in normal postpartum women on day 7 used Chi-square test (X^2) with probability level α : 0,05 and df: 1. After data analysis, 2 cells (50.0%) are found with expected frequency < 5 so that the data should be analyzed using Fisher's Exact Test with probability level α : 0.05. Using Fisher's Exact Test, the value of $p = 0.000$ is less than α : 0.05. Under the criteria of H_0 rejection, H_0 is rejected illustrating the correlation between the time of first breastfeeding and uterine involution in normal postpartum women on day 7 in postpartum room of RSI Jemursari.

DISCUSSION

The results of the study showed that most of postpartum women have breastfed their babies early. Breastfeeding newborn baby is very important because it affects the condition of both mother and her baby. Therefore, it is highly recommended. It is in line with Syahlan (2003) who found that immediate breastfeed newborn are rarely to experience infectious disease; and their nutritional status are much better than those who do not receive breast milk soon after being delivered.

The data of research shows that most of the normal postpartum women on day 7 have good uterine involution. This fact is based on the result of observation describing that the height of the respondents' uterine fundal is approximately as high as the midline central symphysis and in line with the statement from Mochtar (1998) that after childbirth, the height of uterine fundal will go back to normal size. On day 7 after childbirth, the height of uterine fundal is as high as the midline central symphysis. Thus, this fact is supported by the available theory stating that most of the postpartum women have good uterine involution as expected, even though some of them do not experience it.

The results of research shows that few respondents had less normal uterine involution. It may be affected by several factors, such as nutritional status, parity, age, education, breastfeeding, and mobility. According to Sediaoetomo (2006), women with lack of nutrition will experience disturbances, such as decrease of breast milk production, decreased process of growth, and low ability to maintain tissues to damaged internal and external genital cells due to pregnancy and childbirth, so that the return of reproductive organs to normal condition has problems. Activities also play important roles to accelerate involution as supported by Sastrawinata (2003) that early mobilization can make women healthier as well as better physiological intestines and urinary bladder that cause good uterine contractions. Uterine involution is not also often supported by cultural factors, such as food and activity abstinence as well as propaganda from formula milk manufacturers.

The result obtained from Fisher's Exact Test shows the correlation between the time of first breastfeeding and uterine involution. It is supported by the theory proposed by Ibrahim (2006) claiming that during breastfeeding, baby's sucking will stimulate the smooth muscles in nipples that are transferred to the brain by the nerves. The brain will

instructs the pituitary gland (hypophysis) to produce pituitary hormone delivered to the smooth muscles in breast so that they will have better contractions. Pituitary hormone influences the smooth muscles in both breast and uterus so that uterus has better contractions to accelerate uterine involution and support lochia discharge. Besides, Purwanti (2002) also claims that if the frequency of sucking decreases within 30 minutes of breastfeeding after childbirth, the production of hormone will also decrease to automatically slow down the process of uterine involution. Early research on the correlation between nutritional status and uterine involution shows that there is no correlation between them, It may happen because of the lack of respondents or other factors. The process of uterine involution is not only affected by one factor, but by some factors, namely: 1) nutritional status, 2) parity, 3) age, 4) education, 5) mobility, and 6) breastfeeding. Based on the fact, we know that those factors are correlated to one another in the process of uterine involution.

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PERCEIVED BENEFITS OF ACTION AND SITUATIONAL INFLUENCES OF NURSES/HEALTH WORKERS IN PMTCT

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Abstract: The Objective of this research is to find out the difference of Perceived Benefits of Action and Situational Influences between nurses who received training and without receive training. This research was a quasi-experimental, respondents were nurses/health workers. Anacova test was applied to analyze the data. *P Values* were 0,000 for benefits of action and 0,009 for situational factors. That there were different variables of benefits of action and situational influences between the group training and another group. Health promotion and education are the main way for achieving the community welfare. Need to integration between PMTCT, PITC, and health promotion.

Keywords: Health promotion and education, *behaviour-specific Cognition*, PMTCT

INTRODUCTION

Global HIV Epidemic report of the United Nations Programme on HIV-AIDS (UNAIDS) in 2012 shows that there were 34 million people with HIV worldwide. 50% of those were women and 2.1 million children under 15 years old. Residents in South and Southeast Asia, there are approximately 4 million people with HIV and AIDS. According to the HIV-AIDS Progress report from the WHO South-East Asia Region (SEARO), (2011) about 1.3 million people (37%) of women infected with HIV. The number of women infected with HIV each year has increased, along with the increasing number of men who have sexual relations is not safe, which in turn will infect their sexual partners (Kemenkes RI, 2012).

Due to HIV-AIDS increasing cases in mothers and children in Indonesia, the government issued Minister of Health Regulation No. 21 in 2013 on HIV and AIDS, and No. 51 in 2013 on PMTCT. It also established a specific program dealing with the prevention of HIV transmission from mother to child. The activities included: 1) the prevention of HIV transmission to women of childbearing age, 2) prevention of unplanned pregnancies in women with HIV, 3) prevention of transmission of HIV from

pregnant women with HIV to the baby, 4) the provision of psychological, social and treatment support to HIV-positive mothers, their children and their families.

Morton, et al (1995) state that health promotion and education are the specific activities associated with everyday life to improve healthy behaviors of individuals.

Green & Kreuter (1991) formulate health promotion as a combination of health educations and interventions related to economic, political, and organisational issues that are designed to facilitate conducive behavioral and environmental changes for public health. In addition, the Ottawa Charter defines that health promotion is a process to enable people to maintain and improve their health. Health promotion is the process of improving the ability of individuals to control and improve their health status (Talbot & verrinder, 2013).

PMTCT program is an alternative to break the chain of HIV transmission in order to minimize the level of HIV perinatal transmission.

The prevention of HIV transmission from mother to child is conducted by comprehensive activities involving four strategies, i.e.: 1) the prevention of HIV transmission in women of reproductive age (15-49 years), 2) prevention of unintended pregnancies in HIV-positive women, 3) prevention of transmission of HIV from pregnant women to their fetuses, 4) psychological, social and health care support for HIV-infected mothers, their infants and their families (Kemenkes RI, 2012).

RESEARCH METHODS

This research applied a quasi experimental design with nonequivalent control group. Respondents in this study were 20 nurses/health professionals who were members of health promotion of whom half were given training as treatment whereas another half were not. Data were obtained using a questionnaire of Perceived Benefits of Action and Situational Influences. Anacova test was applied to analyze the difference(s) of variables between the two groups. The objective of this sresearch was to find out the difference of Perceived Benefits of Action and Situational Influences between nurses who received training and those without training.

ETHICAL CELEARANCE

This research was tested and achieved ethical clearance by the ethics committee of Faculty of Nursing, Airlangga University on June 8, 2015. The principles of ethics applied in this study included the principle of beneficence, the principle of autonomy and the principle of justice and the principle of confidentiality.

RESULTS

The results of this research were presented in the following tables.

Table 1. General Characteristics of Respondents

No	Characteristics	Control		Interventi on	
		n	%	n	%
1	Age (years)	9	90	6	60
	a. <35	1	10	3	30
	b. 36-46	0	0	1	10
	c. >46				
	Total	1	10	1	10
2	Sex	0	0	0	0
	a. Men	2	20	2	20
	b. Women	8	80	8	90
	Total	1	10	1	10
		0	0	0	0
3	Working experience (years)	3	30	2	20
	a. <5	4	40	3	30
	b. 6-10	3	30	5	50
	c. >11				
	Total	1	10	1	10
		0	0	0	0

Table 2. Comparative test results of the health promotion and education on Perceived Benefits of Action and Situational Influences using anacova test

No	Variable	Group	Mea n	SD	P Value
1	Benefits of action	Control	8,50	0,850	0,000
		intervention	9,30	0,675	
		intervention	8,60	0,516	
2	Situational influences	control	8,30	0,483	0,009
		Intervention	9,20	0,422	

DISCUSSION

Description of general characteristics of respondents

In this research, the highest proportion of age was <35 years old, i.e. 9 respondents (90%) in the control group and 5 respondents (50%) in the intervention group. The lowest age in the control group was > 36-46 years old, i.e. 1 respondent (10%), and that in the intervention group was > 46 years old, i.e. 1 respondent (10%). Younger workers tend to be more creative and passionate in doing the job; by the help and cooperation with the seniors, they would have better working performance (Warr, 2001).

Women reached much higher frequency than men both in the control and the intervention group. The number of women was 8 (80%) in the control group and 9 (90%) in the intervention group. This was because according to the government policy in PMK No. 51 on PMTCT in 2013 which stated that the PMTCT program was integrated in Mother and Child Health (MCH) services (Kemenkes RI, 2013). Woman-to-woman fellowship would ease the communication so health complaints and problems are openly shared by clients/pergnant women. However, male health workers should also keep participating in the health promotion activities.

The longest working experience in the control group was 6-10 years, consisting of four respondents (40%) and whereas the shortest was only 2 respondents (20%) with <5 year experience. Meanwhile, the longest working experience in the intervention group was > 11 years, consisting of 5 respondents (50%), whereas the shortest was <5 years. The longer working experience will influence the workers' capability of quick adaptation in any environments, especially in the promotion and public health education. Experience and maturity would make them role models for their juniors so both the seniors and juniors could cooperatively work together and help each others.

Description of Specific Characteristics of Respondents

According to Pender (1987), human beings are unique and always try to do self reflection on their ability to carry out their tasks/jobs. In addition, individuals actively regulate their everyday life behaviors, including in the promotion and health education. Therefore, even though the nurses/health professionals involved in the control group were not trained as a form of treatment, they keep trying to fulfil the duty on their job in order to reach the expected target.

However, the data in Table 2 prove that the training contributed significantly in improving the skills of nurses/health workers in implementing health promotion and education, especially in terms of Perceived Benefits of Action and Situational Influences. This is similar to a study conducted by Ahmad (2014) which concluded that the training had a positive impact on the performance of nurses.

Based on the identification of each variable in Perceived Benefits of Action and Situational Influences before and after treatment by applying anacova test, the obtained significance values were 0,000 for situational factor and 0,009 for benefits of action.

Different conditions, goals and challenges of jobs will result in different responses as well. This is in line with the theory by Gatot & Adisasmito (2005) and Pender (1987), which suggest that the work environment affects working performance. Attitudes that influence will also vary, such as the emotions in every activity, their actions and the environment at the given time. These things lead to the conclusion that there are different benefits of action between the control group and the intervention group.

Somebody who gets a previously-known information for the second time will get additional, refreshed information which can enrich their understanding. In addition, they can also get motivated after receiving intervention. According to the *hope theory*, motivation is important to achieve results based on precursory experiences through learning, either directly or indirectly (Pender, 1987).

The obtained result by anacova test was P value=0.009 for situational factors. This value indicates that P Value was less than α (0.05), meaning that there was a difference of situational factors between the control group and the intervention group. Different targets with different service programs will provide a different atmosphere as well. In this research there were different types of respondents, i.e. those who served in the health promotion and education field, in the PMTCT services and also in the PITC services.

The limitation of this study was that the researchers had not been able to control the bias factor in the respondents. The researchers could not separate respondents who had received training or had not received the training. This happened because previously most nurses/health workers in health centers already had similar trainings.

CONCLUSION AND SUGGESTIONS

Conclusion: There was a difference of *Perceived Benefits of Action and Situational Influences* on pre and post test between the group which was given training and the other which was not.

Suggestions: 1) The Head of Puskesmas (Public Health Center) should increase training on the latest health science in order to give a positive effect on nurses/health professionals, especially on self-advancement and interpersonal factors. The targets can be classified based on their field of competence to support the implementation of health promotion and education. 2) Integration between PMTCT, PITC and health promotion and education services supported by the Maternal and Child Health (MCH) are also significantly required.

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EFFECTS OF HEALTH EDUCATION WITH DEMONSTRATION METHOD ON FIRST AID KNOWLEDGE OF FOOD POISONING¹

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Abstract

The study aims to explore the effect of health education with demonstration method on first aid knowledge in food poisoning. The study used pre-experimental method with one group pretest-posttest design. Twenty-five respondents were included with random sampling method. The questionnaire was used as the instrument in the data taking process. The results of pretest showed knowledge with low category 76.0%, medium 24.0%, and high 0.00%. On the other hand, the result of post-test showed knowledge with low category 24.0%, medium 20.0%, and high 56.0%. Paired t-Test analysis obtained the value of Asymp. Sig=0.000 ($p < 0,05$). There was a positive effect of health education with the demonstration method on the first aid knowledge of food poisoning in Sanggrahan Village Banjarharjo Kalibawang Kulon Progo. It is expected that nurses in primary health care can apply the demonstration method in giving health education related to first aid of food poisoning.

Keywords: First aid, food poisoning, knowledge, demonstration method

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Introductions

Food congenital disease which is known as "foodborne disease" has become community problem since the early period of human civilization. Variety, severity, and impacts of the disease caused by the food have changed during centuries, and it still varies among areas, countries, and societies (WHO, 2015). Data from the World Health Organization (WHO) shows the finding that that hundred millions of people are suffering from contaminated food. Globally, there are 35, 000 people die each year from food poisoning. (Sifferlin, 2015).

Meanwhile, in Indonesia the incidence of food poisoning is also quite common. Throughout 2014, total news of poisoning incidents are reported by various media with 186 (one hundred and eighty six) poisoning incidents occurred in various parts of Indonesia. Based on these data, a total of 135 incidents (72.5%) were incidents of food poisoning (BPOM, 2014). Meanwhile, throughout January to June 2015, total news of poisoning incidents reported 87 (eighty seven) poisoning incident occurred in various parts of Indonesia. A total of 75 incidents (65.2%) is food poisoning incident with casualties 2,033 people, and 18 of them died (BPOM, 2015).

According to Arisman (2009), severe poisoning may subside after a few days, weeks, or months. This situation even often leaves further symptoms such as cancer, congenital blindness (in infants whose mothers poisoned toxic substances during pregnancy), reactive arthritis, and meningitis. If this happens on high-risk groups, such as under-five children, elderly, or sick people, and it can lead to death (Apriyanty, 2007).

The Government of Republic of Indonesia has made some efforts to address the incidence of poisoning in Indonesia by establishing the Food and Drug Administration. The institution has made a program to address the problem of food poisoning, some of which are: training of human resources for the surveillance of food poisoning outbreaks, program of Vigilance and Prevention of Food Safety, and meetings / communication with institutions / agencies to strengthen coordination and coherence in the surveillance of food poisoning outbreaks.

Poisoning is a condition that can be threatening people's life if it is not handled properly and quickly by people around the victim. (Thygerson, 2011). However, when an emergency occurs, in general, people often become panic and hysteria since they are confused and do not know what to do about it. Doubts arise among them because of ignorance and fear of the consequences (Junaidi, 2010).

Health education is a beneficial experience influencing the habits, attitudes, and knowledge that has correlation with the health of individuals, communities, and nations (Wood, 1926 in Azwar, 1983 in Machfoedz 2008). To achieve the goal of health education, the health education needs to be presented as attractive as possible by using various methods of health education to avoid monotonous and boredom (Setiawati & Dermawan, 2008).

Demonstration is a method of learning by demonstrating an event with the help of tools and media to facilitate the information from the speakers. The method becomes more effective method to provide health education related to first aid in food poisoning when compared to the other health education methods. Demonstration method allows clearer, more interesting, and more active participants in delivering the information (Setiawati & Dermawan, 2008).

Based on preliminary studies conducted by the interview to the Head of Village in Sanggrahan Village, Banjarharjo, Kalibawang, Kulon Progo, it was found that there was once a mass food poisoning cases in May 2013 after eating lunch boxes given during an event in the area. In further, based on the results of interviews with 15 residents it showed that 100% of residents admitted they were panic, confused, scared, and did not know what to do in case of food poisoning. Based on these descriptions, the researcher is interested in studying the effect of health education with the demonstration method on first aid knowledge of food poisoning in Sanggrahan Village, Banjarharjo, Kalibawang, Kulon Progo.

Methods

The study uses a pre-experimental research design with one group pretest-posttest design. The design of the study is as follows:

Pretest	Treatment	Posttest
O1	X	O2
Research Design		

Information:

O1: The first measurement (pre-test)

O2: The second measurement (post-test)

X: Treatment (health education with the demonstration method)

The populations in this study were the people who lived in Sanggrahan Village, Banjarharjo, Kalibawang, Kulon Progo aged 20 to 50 years with at least having junior high school as the education background with 92 people. The sampling technique in the study employed probability sampling with simple random sampling. The determination of sample numbers was based on the Central Limit Theory. The theory states that the sample is called a large sample when the study uses ≥ 30 subjects, which will produce or approach normal distribution (Saryono & Anggraeni, 2013).

Based on the issue, the sample numbers were 30 taken by lottery. Drawing lottery was done by writing the numbers of the subjects of small paper, which consisted of one number for each paper. Then, the research rolled the paper and randomly took 30 rolls of paper. Thus, the rolls of paper that were picked became the subject of sample (Arikunto, 2013).

The instrument used in this study was a questionnaire. The questionnaire in this study was developed by the researchers based the theory in the book of Junaidi (2010), Krisanti, et al (2009), Mohamad (2005), Saubers (2011), Smith (2005), and Thygerson (2011). The questionnaire used Guttman scale consisting of a statement of "right" and "wrong" which consists of 14 items. The questionnaire in this study contains favorable statements (positive statement) and unfavorable statements (negative statement).

Validity test of the instrument used product moment correlation formula. Based on the validity test of knowledge conducted on February 13, 2016 against 31 respondents Jurang Village, Banjarharjo, Kalibawang, Kulon Progo, the data showed that there were 14 valid items and 11 invalid items of the questions. Furthermore, the reliability test was conducted on 14 valid items. Reliability test in this study used Kuder Richardson formula 20 (K-R 20) with the result of $r_{11} = 0.71$. Based on the result, it can be concluded that the instrument is declared as reliable.

This study used Shapiro-Wilk normality test with confidence level of 95%. Normality test is considered normal if sig. or p value > 0.05 , and it is abnormal if sig. or p value < 0.05 . The results of the normality test data obtained knowledge value sig. > 0.05 , so it can be concluded that the data is normally distributed. Thus, the data analysis used parametric test that is a bound t-test (dependent paired t-test).

Results and Discussion

The study was conducted at Sanggrahan Village Banjarharjo Kalibawang Kulon Progo and data collecting process was held on February 20 to 23, 2016.

Characteristics of Respondents

Respondents in this study were people at Sanggrahan Village Banjarharjo Kalibawang Kulon Progo. They were randomly selected using lotteries regardless the sex and position in the family that met the inclusion criteria between 20-50 years old and having Junior High School as their minimum education. The total of the respondents in this study was 25 people. Here it is the tabulation of data about the characteristics of the respondents in this study:

Table 1 Characteristic of Respondents

Variables	(F)	%
Age		
20-30 years	2	8.0%
31-40 years	5	20.0%
41-50 years	18	72.0%
Sexes		
Male	5	20.0%
Female	20	80.0%
Education		
Junior School	7	28.0%
Senior School	16	64.0%
University	2	8.0%
Total	25	100%

(Source: Primary, 2016)

Table 1 shows that the most dominant respondents were in the age group 41-50 years with 18 people (72.0%). The majority of respondents were female with 20 people (80.0%), while there were 5 males (20.0%). The last education level of the respondents was mostly Senior High School with 16 people (64.0%).

Results of Data Description Before and After the Treatment of Health Education with Demonstration Methods

Table 2 Results of Data Description Before and After the Treatment of Health Education with Demonstration Methods

Description	Pre-test Value	Post-test Value
Mean	5.48	9.92
Lowest Value	2	3
Highest Value	10	14

(Source: Primary, 2016)

Table 2 shows that before being given health education, the mean score of respondents was 5.48, and after being given health education value of the average score increased to 9.92. While the lowest score was obtained before health education with 2.0 and being given after health education the lowest score was 3. The highest score before health education was 10 and, the score after health education was 14.

Data Distribution Description of Questionnaire Answer Frequency on Knowledge during Pretest and Posttest

Table 3. Frequency Distribution of Questionnaire Answer on Knowledge of First Aid on Food Poisoning during Pretest and Posttest

No	Knowledge Aspect	Pretest Questionnaire Answer		Posttest Questionnaire Answer	
		B (%)	S (%)	B (%)	S (%)
1	Food poisoning patients are those who get sick with the symptoms and signs of poisoning caused by consuming food containing chemical substances	16.0	84.0	48.0	52.0
2	Food poisoning can cause burn symptom in the throat	24.0	76.0	68.0	32.0
3	Food poisoning victims will produce more saliva	46.0	54.0	92.0	8.0
4	Poisoning after eating has preservative can be categorized as food poisoning	36.0	64.0	68.0	32.0
5	Panic and running around when seeing poisoning victims is an appropriate attitude before giving the first aid	56.0	44.0	80.0	20.0
6	Move victims quickly from their place although there is no proper transportation	28.0	72.0	84.0	16.0
7	Conscious and dehydrated poisoning victims have to be treated at home	80.0	20.0	76.0	24.0
8	If the kind of food is unknown, give <i>norit</i> , white egg, milk, and water as much as possible	52.0	48.0	100	0.00
9	Whoever feels symptoms with nausea, vomiting, and diarrhea less than 20 hours can be treated at home	24.0	76.0	84.0	16.0
10	Give sugar water to poisoning victims to stop the diarrhea	64.0	36.0	84.0	16.0
11	Give water through the mouth for unconscious victims	24.0	76.0	64.0	36.0
12	If the victims do not breathe, position the victims in recovery position	24.0	76.0	32.0	68.0
13	Recovery position is useful for preventing the victims to vomit	12.0	88.0	56.0	44.0
14	Recovery position is safe for the victims who are not breathing	32.0	68.0	56.0	44.0

(Source: Primary, 2016)

Based on Table 3, it obtained the data that more than half of knowledge items were still low (≤ 50) when the pretest, which were in item (1), (2), (3), (4), (6), (9), (11), (12), (13), (14). After health education with the demonstration method there was an increasing on first aid knowledge of food poisoning.

Data Description of Knowledge on First Aid for Food Poisoning Based on the Pretest and Posttest

Table 4 Frequency Distribution of Knowledge on First Aid for Food Poisoning Based on the pretest and posttest

Knowledge	Pre-test Value		Post-test Value	
	(f)	(%)	(f)	(%)
Low	19	76,0	6	24,0
Medium	6	24,0	5	20,0
High	-	-	14	56,0
Total	25	100	25	100

Table 4 shows the knowledge of first aid in food poisoning before being given health education was in low category with 19 people (76.0%) and after health education, first aid knowledge of food poisoning in the poor category decreased to 6 people (24.0%), While moderate knowledge categories with 6 people (24.0%) decreasing to 5 people (20.0%). Knowledge with good categories was with 0 (0%) increasing to 14 (56%).

Hypothesis Testing on the Effect of Health Education with Demonstration Methods on First Aid Knowledge of Food Poisoning

Table 5 Parametric Test of Dependent Variable with Paired t-Test

Variable	T	Asymp. Sig. (2-tailed)
The effect of Health Education with Demonstration Methods on First Aid Knowledge	-6,989	0,000

Table 5 shows the results that Paired t-test obtained value of sig. or p value of 0.000 ($p < 0.05$), so it can be interpreted that H_a is accepted, and H_o is rejected. Based on the result, it can be concluded that there is significant effect of health education with the demonstration method on the first aid knowledge of food poisoning.

Discussion

Respondents Knowledge Before Being Given Health Education with Demonstration Methods

Based on the results of data processing, it can be seen that respondents' knowledge about first aid food poisoning before getting health education with the demonstration method showed that the respondents had low knowledge category with 19 respondents (76.0%), moderate category with 6 respondents (24.0%) and good categories with 0 respondents, or no respondent was knowledgeable with good

categories. It shows that public knowledge of first aid related to food poisoning was still low.

Low public knowledge of first aid related to food poisoning is also described in studies conducted Abbas (2013). Based on the research that has been conducted by Abbas (2013) related to the application of first aid at home by the mother to handle food poisoning in children found that most mothers do not have knowledge related to the procedures used to ambulance cases of food poisoning in children.

Based on the data in Table 4 of the frequency distribution of first aid knowledge on food poisoning, the pretest obtained data that the majority of respondents (76.0%) had knowledge with low category. This can occur due to several factors that can effect their knowledge. According to Notoatmodjo (2007), there are five factors that effect a person's knowledge; those are age, education, information, culture, and experience. Based on the theory, the factors that are likely to affect low knowledge of the respondent in this study was the age and information. This can be seen in Table 1 on the characteristics of survey respondents, the data found that 18 people (72.0%) of respondents were aged 41-50 years. According to the theory stated by Hurlock (2001), the age range of 41-50 years can be included as in the period of *praseenium* (middle-aged). The age range can affect respondents' knowledge. This is supported by the theory stated by Notoatmodjo (2007) mentioning that the age approaching elderly has limited capability to accept and memorize the information and knowledge.

Another factor influencing the respondents to have low category of knowledge is information factor. Based on the interview, the data showed that 100% of respondents never get information on first aid in food poisoning before getting health education through any media. The respondents had never been exposed by the information and did not take the initiative to seek information related to first aid of food poisoning. Thus, it affects respondents' knowledge related to first aid of food poisoning.

Based on table 3 of the frequency distribution of questionnaires responses to knowledge of first aid in food poisoning, it showed that most of the questions on the questionnaire items are not known by the respondents. Unknown item question (≤ 50) by the respondent were the items on the number (1), (2), (3), (4), (6), (9), (11), (12), (13), (14) which includes all knowledge items. This can occur because the questions are the questions that can be categorized into specific concepts related to first aid on food

poisoning, so that information and literature is needed to be able to know and understand it.

First aid knowledge is essential to the safety of the victims. According to Thygerson (2011), it is better to know the first aid and no need it than people need first aid but do not know how to perform it. Therefore, everyone should know about first aid. First aid knowledge of food poisoning is high (≥ 50) before being given health education is the attitude of the helper on the item number (5) and aid to the conscious victims in the item number (7), (8), and (10).

Some items of the questions can be answered by more than 50% of respondents because the questions can likely categorized in the general concept of first aid, so that people can be more easily to understand the concept of the questions. Besides, it is also likely caused by the respondents' experience and education. Some of the respondents have got experience related to food poisoning. Thus, some of the respondents had known some basic points. In further, the most recent educations of the respondents were mostly senior high school. It can also effect the respondent's knowledge.

Respondents Knowledge After Being Given Health Education through Demonstration Methods

After being given health education with the demonstration method, as presented in Table 4, respondents were considered to have low knowledge decreasing from 19 respondents (76.0%) to 6 respondents (24.0%). Respondents were categorized to have moderate knowledge decreasing from 6 respondents (24.0%) to 5 respondents (20.0%). The respondents were categorized to have high knowledge increasing to 14 respondents (56.0%). The results of this study showed significant changes after being given health education with the methods of demonstration.

Knowledge changes in respondents' after health education is supported by the theory given by Wood (1926) in Fitriani (2011) who states that health education is useful experiences in influencing the habits, attitudes, and knowledge of a person or society. Knowledge itself has a definition as the result of getting to know after people perform the sensing to particular objects in which most human knowledge is obtained through the eyes and ears (Notoatmodjo, 2012). Good knowledge about first aid in food poisoning is expected to influence attitudes and behavior community in addressing the

situation of food poisoning, if it happens in the society, the victims can be helped quickly and appropriately.

Table 3 shows that after health education with the demonstration method, most of the question items on the questionnaire that are known by the respondents increased. Question items on the questionnaire that was still low (≤ 50) was the item number (1) and (12) that included a definition of food poisoning and first aid to the victim of food poisoning on unconscious victims. It happens since the questions can be categorized as unfavorable statements (negative statement). Therefore, some of the respondents who do not observe carefully to the question cannot answered both items of the questions correctly. Besides, low knowledge of respondents (≤ 50) on the question items related to possibility definition happened because the material on the items can only be provided through a brief explanation.

Definition of food poisoning victim, according to the Ministry of Health (2013), is someone who is sick with symptoms and signs of poisoning caused by eating food suspected to contain biological or chemical contaminants. Based on Indonesia Act No. 18 Year 2012, food is everything that comes from biological sources of some products of agriculture, forestry, fisheries, livestock, and water, either processed or unprocessed which is produced as food or beverage for human consumption, including food additives, food raw materials, and other materials used in the preparation, processing, and / or manufacture of food or drink. The issues related to the definition of food poisoning should be understood since first aid in food poisoning and first aid in poisoning by other causes have particular differences.

Furthermore, the knowledge that still needs to be improved (≤ 50) is about the recovery position on the unconscious victim in the item number (12). Recovery position is the position to face the left which aims to prevent aspiration (inhalation) into the lungs when the victim is vomiting (Thygerson , 2011). According to Smith (2005), the recovery position is a safe position for victims who are not conscious but able to breathe. Thus, if the victim is not breathing, recovery position is not recommended to do.

The Effect of Health Education with Demonstration Methods on First Aid Knowledge of Food Poisoning

The results showed that the knowledge of first aid in food poisoning has increased after being given health education with the methods of demonstration. This can be seen in Table 2 which shows that before being given health education with the demonstration method, the average score of respondents was 5.48, and after the health education the average value score increased to 9.92. This shows that there is a difference between the value pretest before health education with the demonstration method and Posttest after health education with demonstration method with a difference of 4.44.

According to Henry (2010 in Ernawati, 2012) health education is one form of delivering information to the public either directly or indirectly to increase one's knowledge. Hypothesis test results Paired t-Test in Table 5 shows that there is significant effect after being given health education. It is proven from the results of statistical analysis showed that p value 0.000 on the knowledge. It shows a significant difference between the initial measurements to the final measurement. This is in line with the theory expressed by Wood (1926) in Fitriani (2011) mentioning that health education is useful experience in influencing the habits, attitudes and knowledge of a person or society.

Health education in this study was conducted by the demonstration method; it is steps demonstration. Step demonstration shows how to do something. This includes the materials used in the work that is being taught, showing what is being done and how to do it, and explain each step process (Suprijanto, 2008). According to Setiawati and Dermawan (2008), demonstration method has several advantages compared with other methods. In this method, the delivery is clearer, more interesting, and more active participants. This theory is in line with what is proposed by the Wibawa (2007) in his research stating that the demonstration method is more effective in increasing knowledge about Dengue Fever. It can happen because the demonstration group gets direct experience or concrete experience and leads to a more abstract experience. Learning will be more effective if it is supported by properties compared to learning without the help of properties. In line with this fact, Dale (1969 in Wibawa, 2007) states

that the more senses used to receive something, the more and the clearer is the understanding / knowledge acquired.

The results of this study are also supported by the study conducted by Stauri (2015). The results show there is different knowledge of the use of Personal Protective Equipment to the farmers before and after health education with the methods of demonstration.

Conclusion

Based on the results of research and discussion, it can be concluded that:

1. Knowledge of first aid on food poisoning before health education with demonstration method includes two categories: knowledge with low category was 76.0%, and moderate category with 24.0%.
2. Knowledge of first aid in food poisoning after health education with demonstration method includes three categories: knowledge with low category with 24.0%, moderate category with 20.0%, and good category with 56.0%.
3. There is the effect of health education with demonstration method on the first aid knowledge of food poisoning in Sanggrahan Village Banjarharjo Kalibawang Kulon Progo.

Suggestion

Based on the research that has been done, the researcher suggests:

1. For nurse of community

Nurses are expected to provide information to the public related to first aid on food poisoning through health education and may use the results of this study as the source or subject of study.

2. For the community

The results of this study are expected to provide clear and correct information about how to perform first aid on food poisoning. Thus, if the food poisoning occurs, the victim can be helped accurately and quickly.

3. For further research

- a. For researchers who want to conduct similar studies, it is suggested to use a control group in future studies in order to know the difference between the treatment group and the control group.
- b. Future studies are recommended to use other methods as well as to explore deeper the variables of food poisoning.

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THE CORRELATION BETWEEN NUTRITIONAL STATUS AND MENSTRUATION LENGTH WITH ANEMIA ON ADOLESCENT¹

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ABSTRACT

Anemia on teenage girls is common found since they have menstrual bleeding regularly. Mostly, these teenage girls have many activities but lack of nutrition. The study was aimed to investigate the correlation among nutritional status and menstruation duration with anemia occurrences on adolescent. This study used quantitative methods correlation with cross sectional approach. Sample taking technique used total sampling with 62 female adolescent as the respondents. The results of the analysis with chi square test revealed that there was correlation between nutritional status and anemia occurrence on adolescent. There was also correlation between menstruation duration and anemia occurrence on adolescent ($p = 0,02$ and $p = 0,002$).

Keyword : *nutritional status, menstruation duration, anemia*

INTRODUCTION

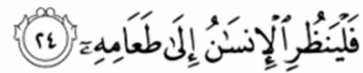
The tendency of nutritional problems in developing countries often become a threat to development of a nation. Currently, anemia is one of the main nutritional problem in Indonesia. Cases of anemia are very prominent teenage girls. Adolescent at high risk of suffering from anemia, because in this period there was an increase iron needs due to their growth and menstruation occurs every month followed by school activities such as organization as well as extracurricular will impact the existing pattern of irregular eating. Besides, eating habits that inhibit iron absorption will affect a person's hemoglobin level. Normal hemoglobin levels 12 g% / dl. If the hemoglobin level adolescents less than 12 g% / dl then it qualifies as anemia (Depkes RI, 2013).

The prevalence of anemia in an area said to be soft if it is below the 10% of the target population, the moderate category if 10-39% and critical if more than 39%. However, the category prevalence in Yogyakarta of anemia among adolescent girls is in the medium category (35%) (Dinkes, 2012).

Impact of anemia in adolescent girls is very harmful because it makes lethargic, lose enthusiasm for learning, and are vulnerable to disease. It can lower the learning achievement of girls in school. In adolescents with anemia, reduced oxygen absorption capability due to a lack of red blood cells. This will affect the strength of

cardiorespiratory so the ability of physical activity that is the body's resistance is reduced (Rosmalina, 2010).

Allah says in Surah 'Abasa verse 24:



Which means: "then let the man pay attention to food."

This verse explains that people should pay attention to food. Every adolescent should pay attention to the intake of the food they consume in order to iron in the body needs are met.

Adolescent anemia prevention efforts in Indonesia have three strategies, namely iron supplementation, nutrition education and food fortification. Supplementation program by the government is the Prevention and Treatment Anemia Nutrition Iron (PPAGB) with a target group of middle school students. Program for adolescent is done through promotions and campaigns through schools independently by means of iron supplementation dose of one tablet once a week for at least 16 weeks, and it is recommended to drink one tablet every day during menstrual period (Kementrian Kesehatan RI, 2011).

Based on preliminary studies conducted in Muhammadiyah 7 Yogyakarta high school, obtained information that every month there are 15-20 students who visited the School Health Unit (UKS) with complaints of weakness, light-headedness, especially during menstruation. There was about 8-10 (50%) students in class XI with suffer of fatigue and light-headedness, especially during menstruation is. Then checking Hb in 15 adolescent in class XI SMA Muhammadiyah 7 Yogyakarta. Based on investigation, 8 (53.33%) of adolescent experienced mild anemia and 2 (13.33%) of adolescent experiencing intermediate anemia. In addition, the obtained data is adolescent who experience long periods anemia > 6 days. Based on the above results and there has been no reduction of anemia in adolescent girls from the school, the writer interested to do research Relationships Nutritional Status and Menstruation Duration and Anemia Occurrence on adolescent in Muhammadiyah 7 Yogyakarta High School.

This study aims to determine the relationship of nutritional status and

menstruation duration with the anemia occurrence among adolescent girls in Muhammadiyah 7 Yogyakarta High School.

METHODS

In this study a quantitative method correlation with cross sectional approach was used. Population of 62 respondents, the sampling technique is total sampling and the sample was 62 respondents. The independent variables in this study are the nutritional status and duration of menstruation, the dependent variable in this study was the anemia occurrence. Univariate analysis using descriptive statistics to get in tabular form. The bivariate analysis using statistical test Chi Square with an error rate of 5% using Chi-Square in SPSS (Statistical Product and Service Solution) version 17.0 with an error rate of 5%.

RESULTS AND DISCUSSION

Nutritional status

Table 1 Frequency Distribution Characteristics of Respondents by Category Nutritional Status in adolescent at Muhammadiyah Yogyakarta 7 High School

Respondents Category		Amount	
		Frequency (N)	Presentage (%)
Nutritional status	Underweight	16	25,8
	Normal	36	58,1
	overweight	8	12,9
	Obese class I	1	1,6
	Obese class II	1	1,6
	Obese abnormal	0	0
Total		62	100

Source: primary data, 2016

From the measurement of nutritional status in 62 respondents in Muhammadiyah 7 high school data obtained 36 (58.1%) of respondents in the normal category.

Menstruation Duration

Table 2 Frequency Distribution Characteristics of Respondents According Category Menstruation Duration in adolescent at Muhammadiyah 7 Yogyakarta High School

Respondents Category		Amount	
		Frequency (N)	Presentage (%)
Menstruation Duration	< 4 days	0	0
	4-6 days	20	32,3
	>6 days	42	67,7
Total		62	100

Source: primary data, 2016

From interviews with menstruation duration in 62 respondents obtained the data that 42 (67.7%) of respondents longer menstrual > 6 days

Anemia

Table 3. Frequency Distribution Characteristics of Respondents by Category Anemia in adolescent at Muhammadiyah 7 Yogyakarta High School

Respondents Category		Amount	
		Frequency (N)	Presentage (%)
Anemia Occurrence	Not anemia	35	56,5
	Mild Anemia	24	38,7
	Intermediate Anemia	3	4,8
	Severe Anemia	0	0
Total		62	100

Source: primary data, 2016

From the measurement of hemoglobin levels in 62 respondents obtained the data that 35 (56.5%) of respondents are not anemic.

The Correlation Among Nutritional Status and Anemia Occurrences On Adolescent

Table 4. Cross Tabulation Occurrence Anemia Based on the Nutritional Status of Adolescent in Muhammadiyah 7 Yogyakarta High School

Respondents Category		Anemia Category				Amount		p	OR
		Anemia		Not Anemia				value	
		Anemia							
		N	%	N	%	N	%		
Nutritional Status	Abnormal	16	61,5	10	38,5	26	100	0,02	3,636
	Normal	11	30,6	25	69,4	36	100		
Total		27	43,5	35	56,5	62	100		

Source: primary data, 2016

Table 4 shown that there were 26 respondents who have anemia about 16 (61.5%). However, the 36 respondents have a normal nutritional status (69.4%). *Chi Square* test result shows the *p value* was 0.02 ($\alpha < 0.05$). It can be concluded that there was a significant relationship between nutritional status and anemia occurrence among adolescent at Muhammadiyah 7 Yogyakarta High School. Nutritional status of adolescent who are not at risk 3,636 times normal are anemic compared with adolescent who had normal nutritional status.

The Correlation Among Menstruation Duration and Anemia Occurrences On Adolescent

Table 5. Cross Tabulation of anemia based Menstruation Duration at adolescent in Muhammadiyah 7 Yogyakarta High School

Muhammadiyah / Yogyakarta High School											
Respondents Category		Anemia Category				Amount		P Value	OR		
		Anemia		Not Anemia							
						N	%				
		N	%	N	%						
Menstruation Periods	Abnormal	24	57,1	18	42,9	42	100	0,002	7,556		
	Normal	3	15	17	85	20	100				
Total		27	43,5	35	56,5	62	100				

Source: primary data, 2016

Based on the data obtained Table 5. that of the 42 respondents who menstruation duration abnormalities, 24 (57.1%) of respondents are anemic. Of the 20 respondents who menstruation duration normal, 17 (85%) of respondents did not have anemia. *Chi Square* test result shows the *p value* is 0.002 ($\alpha < 0.05$) and its OR value was 7.556. It can be concluded that there is a relationship between menstruation duration with anemia occurrence among adolescent in Muhammadiyah 7 Yogyakarta High School. Adolescent who are menstruation duration are not normal menstrual 7.556 times more at risk to develop anemia than youth who have normal menstrual duration.

Discussion

Nutritional Status

Based on this research, it was found that 58.1% of data nutritional statuses of respondents in this study are in the normal category and 1.6% of

adolescent in obese class II. Based on the results of an assessment of survey respondents in Muhammadiyah 7 Yogyakarta High School, which has a normal nutritional status, survey respondents take part in school sports such as basketball and martial arts. Every day survey respondents exercise less than 60 minutes both at home and at school. This is relevant with theory of Arisman (2014) who say that weight loss or prevention of weight gain can be done in about 60 minutes of physical activity a day.

Menstruation Duration

From interviews with 62 survey respondents obtained the data that 67.7% of adolescent have menstruation periods > 6 days and 32.3% of adolescent menstrual 4-6 days old.

Underweight can lead to menstruation duration become abnormal. Based on the results of the study, 43.8% of respondents underweight long research experience menstrual > 6 days. This is because in adolescents with low birth weight effect on fat cells of the body to produce the hormone estrogen. This is relevant to the theory of Djaeni (2012) which says that the imbalance of estrogen results in periods become normal.

Based on the assessment results of research respondents in SMA Muhammadiyah 7 long menstrual > 6 days, 50% of survey respondents claimed to have excessive activity. Respondents from the school at 07.30 am -14.00 pm, after the survey respondents must follow extra-curricular activities at school. In addition, survey respondents follow after school tutoring outside and at night they should be doing homework. This is relevant to the theory of Djaeni (2012) states that excessive physical activity may affect menstruation duration.

Anemia

Based on this research, the data found that 4.84% of adolescent suffer from anemia. This is consistent with the theory of Proverawati (2011) which says that adolescence is a period prone to iron deficiency anemia in adolescents. This is because adolescence is a time most use of iron for growth. Respondents are mid-teens to the age range of 17 years. At this age young people need a lot of iron to support growth. Iron requirement in adolescent as well as men to rise in

line with the rapid growth and increasing muscle mass and blood volume. In adolescent girls need more with their menstrual cycle each month.

Diets of adolescents are often uncertain which is one of the triggers of the problem of iron deficiency anemia. Typical features in adolescents are searching for identity, the efforts for independence and accepted the environment, concern for appearance, vulnerable to commercial issues and peer pressure group (peer group) and less concerned about health issues will encourage teens to diet erratic (Santrock 2010). Eating habits are often seen in survey respondents who are anemic in Muhammadiyah 7 Yogyakarta High School include eating snacks, skipping meals, especially breakfast, when not eating regularly, frequently eating fast foods, rarely eat fruits and vegetables or livestock products as well as poor diet. This resulted in food intake does not match the needs thus increasing the risk of iron deficiency anemia.

The Correlation Among Nutritional Status and Anemia Occurrences On Adolescent

Based on the results of cross-tabulations that the data obtained from 26 adolescent who have abnormal nutritional status, 61.5% of adolescent suffer from anemia. This is relevany to research Permaesih (2010) which showed that adolescent with normal BMI does not have 1,4 times the risk of suffering from anemia than adolescent with normal BMI.

Based on the results of cross-tabulation of the 36 survey respondents who had a normal nutritional status, 69.4% of respondents do not have anemia research. According to Thompson (2010) nutritional status positively correlated with hemoglobin concentration, which means that the poor nutritional status of a person, the lower the levels of hemoglobin. Someone who has a normal nutritional status, the growth and development will be optimal. This is consistent with the theory of Almatsier (2010) that a good nutritional status in adolescence will produce good health.

Chi Square test result shows the p value was 0.02 ($\alpha = 0.05$). It can be concluded there is a correlation between nutritional status and the anemia occurence among adolescent in Muhammadiyah 7 Yogyakarta High School.

In this study, the relationship between nutritional status and the incidence of anemia among adolescent in Muhammadiyah 7 Yogyakarta High School. This is according to research Hapzah (2012) which states there is a relationship with the nutritional status of anemia in adolescent in vocational Governmental Semarang ($p < 0.05$). Based on the assessment results of research respondents in Muhammadiyah 7 Yogyakarta High School, which has a normal nutritional status, in getting the information that the participants are staying at home with their parents. For a daily menu prepared by the mother survey respondents and 75% of the survey respondents bring lunch every day. The varied menu at lunch and comprise a source of carbohydrates (rice), protein (tofu, tempe, fish), fat, green vegetables and fruits. Therefore nutrition survey respondents met and survey respondents can avoid iron deficiency anemia. This is relevant to the theory of Lazzeri, et al (2012) which says that the mother plays an important role in providing nutritious food for the family, having an influence on the nutritional status of children.

The Correlation Among Menstruation Duration and Anemia Occurrences On Adolescent

Based on the results obtained cross-tabulation of data that of 42 adolescent in Muhammadiyah 7 Yogyakarta High School who have menstruation duration abnormalities, 57.1% are anemic. While the 20 adolescent who have long menstrual normal, 85% do not have anemia. This is consistent with the theory of Provereawati (2011) that menstruation is one of the causes of iron deficiency anemia in adolescent girls. This study is also consistent with studies of Yudiawati (2010) which states that there is a long-standing relationship with the incidence of anemia in menstruating adolescent at SMAN 1 Pundong Bantul ($p = 0.01$).

Chi Square test result shows the p value is 0.002 ($\alpha = 0.05$) and its OR value was 7.556. It can be concluded there is a correlation between menstruation duration with anemia occurrence among adolescent in Muhammadiyah 7 Yogyakarta High School. Adolescent who have menstrual duration are not

normal menstrual 7.556 times more at risk to develop anemia than youth who have normal menstrual duration. This is because adolescent with menstrual duration > 6 days spending will tend to have more blood. This is according to research Prastika (2011) which showed no relation between menstruation duration with the incidence of anemia in adolescent SMA Negeri 1 Wonosari ($p = 0.000$).

This is consistent with the theory put forward by Arisman (2014) states that girls who are already menstruating are at risk of iron deficiency anemia, due to the amount of blood lost during a menstrual period ranges from 20-25 cc, this number implies loss of substance iron of 12.5 to 15 mg / month, or roughly equal to 0.4-0.5 mg / day. If the amount is added to the basal loss, the total amount of iron lost 1.25 mg / day.

CONCLUSIONS AND SUGGESTIONS

Conclusion

It is known that out of 62 adolescent in class XI SMA Muhammadiyah Yogyakarta 7, 58.1% had a normal nutritional status, 67.7% menstrual duration abnormalities, 43.5% are anemic. There is a relationship between nutritional status and anemia occurrence among adolescent in SMA Muhammadiyah Yogyakarta 7 ($p = 0.02$). There is a relationship between menstruation duration anemia occurrence among adolescent in SMA Muhammadiyah Yogyakarta 7 ($p = 0.002$).

Suggestion

Adolescent are expected to take steps to prevent anemia of yourself by eating iron tablet during menstruation. School Health Unit Muhammadiyah7 Yogyakarta High School expected to improve school health services in adolescent girls, especially for the supply of iron tablet in collaboration with the department of health.

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THE CORRELATION BETWEEN KNOWLEDGE LEVEL AND PREVENTIVE BEHAVIOR OF PATHOLOGICAL LEUCORRHOEA AMONG SIXTH SEMESTER STUDENTS AT SCHOOL OF NURSING 'AISYIAH UNIVERSITY OF YOGYAKARTA

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ABSTRACT

Poor preventive behavior of leucorrhoea will generate various effects, such as less confident, pathological leucorrhoea, pelvic inflammatory of cervical cancer, sterility, and death. There are some obstacle factors to apply healthy life in preventing pathological leucorrhoea namely lack of knowledge and individual awareness about pathological leucorrhoea prevention. The research is conducted to investigate the correlation between knowledge level and preventive behavior of pathological leucorrhoea among sixth semester students at School of Nursing, 'Aisyiah University of Yogyakarta. The research used cross sectional approach with 92 respondents. The sample was taken by total sampling. The statistical analysis used Kendal Tau test. The data were collected by using questioner. The research shows that the majority of knowledge level was good enough (85.9%). The preventive behavior of pathological leucorrhoea was mostly good enough (66.3%). The result of Kendal Tau test showed that t values was 0.424 with the significant level is 0.001 ($p < 0.05$). There is a correlation between knowledge level and preventive behavior of pathological leucorrhoea on sixth semester students at School of Nursing, 'Aisyiah University of Yogyakarta since significant value of the analysis result is 0,001. It is suggested to students who are the research subjects to add information and increase the knowledge about reproduction health mainly about leucorrhoea such as how to prevent it quickly by reading books in libraries and browsing on the internet.

Key words : knowledge level, preventive, leucorrhoea

INTRODUCTION

Leucorrhoea is a situation that is normal (physiological) or may be a disease (pathological). Normal Leucorrhoea is usually colorless or clear, odorless, not excessive and does not give rise to complaints, whereas abnormal discharge usually yellow or grayish green, or foul smelling, copious amounts and cause itching (Kissanti, 2008).

Pathological or abnormal Leucorrhoea caused by infection or inflammation, due to unhealthy behaviors such as washing the vagina with dirty water, use a cleaning fluid

overload, how to wash the wrong sex organs, prolonged stress, smoking and alcohol use (Kusmiran, 2012).

How to maintain the health of the female reproductive organs when whiteness is to maintain the cleanliness of the female organs this can be done by cleaning the vagina using clean water and clean it from the front backward (vagina to anus) to prevent dirt or bacteria from the anus to the vagina and changing pads as often perhaps after full or no more than 6 hours and maintain moisture (Kusmiran, 2012).

Teen behavior aberrant because knowledge of adolescents about reproductive health is still low. The results showed that the frequency distribution of adolescent knowledge 51.1% in the high category, and 48.9% in the low category. the high percentage of adolescents who have low knowledge about reproductive health indicates that adolescents do not get sufficient reproductive health information (Muflih, 2015), so that healthy behavior prevention of pathological whiteness still need attention. Based on research Hidayatet al (2010) on reproductive health of 69 respondents, 52.17% good category 43.48% enough category, and 4.35% bad category and treatment of reproductive organs have a good category 25.86%, 67.24% enough category, and the bad category 6.8%.

The positive impact on young women who perform hygiene behavior at the time of discharge are to be protected from cervical cancer, to feel comfortable on the move everyday, confident, excited and not lazy when on the move. Meanwhile, if the discharge prevention behavior was not done because of lack of concern for the cleanliness of the reproductive organs, can be exposed to cancer of the uterus, Leucorrhoea pathological, and lack of confidence (Hutagaolet *al.*, 2013). Even lead to pelvic inflammatory disease, infertility, and even to death (Shadine, 2012)

The government has run a program as specified in Law number 36 on health through the National Population and Family Planning (BKKBN) is to open a place for the teens through the Adolescent Health Information Center (PIK-R). BKKBN explained that the purpose of the activity is to provide information PIK teen adolescent reproductive health, maturing age of marriage, life skills and skills that the interests and needs of adolescents (BKKBN, 2010).

There are several inhibiting factors for healthy behavior in the prevention of pathological Leucorrhoea them is the lack of knowledge and awareness of people about

the prevention of pathological Leucorrhoea. Knowledge is an impression, remember the result and the results out after the person doing the sensing against a specific object (Maulana, 2009).

Based on the background of the problem, the researchers are interested to know the relationship between knowledge with pathological Leucorrhoea prevention behaviors VI semester student of Nursing at the University 'Aisyiyah Yogyakarta.

RESEARCH METHOD

This research is an correlation analytic with cross sectional approach, between the independent and dependent variables only been observed and taken one course at a time when the research (Notoadmodjo, 2012b). Location of the study at the University 'Aisyiyah Yogyakarta. The population used in this study VI semester students of Nursing program, the number of samples of 92 respondents with total sampling. The instrument used was a questionnaire for the independent variable level of knowledge, and the dependent variable in the form of pathological Leucorrhoea prevention behaviors. Data collected in the study are primary data. This research analyzes using univariate and bivariate test Kendal Tau.

RESULTS AND DISCUSSION

1. Characteristics of Sample

Characteristics of respondents were observed in this study was age. Distribution of frequency and percentages can be seen as follows:

a. Age of students

Characteristics of respondents by age is presented in Table 1, as follows:

Table 4.1 Frequency Distribution characteristics of respondents by age students of sixth semester Nursing Program at the 'Aisyiyah University

No	Age	Frequency	Percentage
1	20 years	57	62,0
2	21 years	33	35,9
3	22 years	2	2,2
	Total	65	100.0

Source: Primary Data, 2016

Table 4.1 shows that the age of the sixth semester students of Nursing Program at the 'Aisyiyah University Yogyakarta. The highest number in the 20 years of age at 57 (62.0%), while the age group are at least 22 years of age ie 2 respondents (2.2%).

2. Univariate Analysis

a. Knowledge level

Characteristics of respondents by the level of knowledge is presented in the table, as follows:

Table 2: Frequency Distribution of Knowledge Level students of sixth semester Nursing Program at the 'Aisyiyah University

Knowledge level	Frequency	Percentage
Good	4	4,3
Enough	79	85,9
Less	9	9,8
Total	92	100

Source: Primary Data, 2016

Table 4.2 shows the level of knowledge is divided into three, are good, enough, and less. Respondents who have a good knowledge level 4 (4.3%), enough in 79 (85.9%) while as many as 9 (9.8%) had less knowledge.

b. Prevention Behavior of Pathological Leucorrhoea

Characteristics of respondents based prevention behaviors pathological Leucorrhoea are presented in the table, as follows:

Table 4.3 Frequency Distribution Prevention Behavior of pathological Leucorrhoea students of sixth semester Nursing Program at the 'Aisyiyah University

Prevention behaviour pathological Leucorrhoea	Frequency	Percentage
Good	13	14,1
Enough	61	66,3
Bad	18	19,6
Total	92	100

Source: Primary Data, 2016

Table 4.3 shows prevention behavior of pathological Leucorrhoea are grouped into three, are good, enough, and bad. Respondents who had good behavior as much as 13 (14.1%), enough as many as 61 (66.3%) while as many as 18 (19.6%) had bad behaviour.

Pathological Leucorrhoea students of sixth semester Nursing Program at the 'Aisyiyah University

Table 4.4 Analysis Result of Correlation Knowledge Level with Prevention Behaviour of Pathological Leucorrhoea students of sixth semester Nursing Program at the 'Aisyiyah University.

Variable 1	Variable 2	p value
Knowledge level	Prevention behaviour pathological Leucorrhoea	0.001

Contingency Coefficient 0,424

Source: Primary Data, 2016

Table 4.4 shows that the p-value less than 0.05, it can be stated hypothesis was accepted, and the results of the Contingency Coefficient of 0.424 that there was a relationship between the knowledge level with prevention behaviors of pathological Leucorrhoea students of sixth semester Nursing Program at the 'Aisyiyah University.

Knowledge is the result of out and going after people perform sensing of an object (stimulus) certain. Sensing occurs through the human senses, the senses of sight, hearing, smell, taste, and touch (Ariani, 2014).

Based on the results of statistical analysis using the Kendal Tau formula obtained $p = 0.001$ which indicates $p < 0.005$ so that H_0 rejected and H_a accepted with interpretation "There is a correlation knowledge level with prevention behavior of pathological Leucorrhoea students of sixth semester Nursing Program at the 'Aisyiyah University.

In this study discussed about the correlation between knowledge with prevention behavior of pathological Leucorrhoea, assuming students of sixth semester Nursing Program who has knowledge may affect the prevention behaviors of pathological Leucorrhoea. Analysis results obtained knowledge level about prevention behaviors of pathological Leucorrhoea is enough with prevention behaviors of pathological Leucorrhoea also enough.

Notoatmodjo (2010a) explained that the knowledge can be formed by the frequency of the information obtained. Maulana (2009) also mentions that health education is an appropriate method to give information to adolescents. Behavior based knowledge more durable than behavior that is not based on knowledge. Statistical Test

Results Kendal Tau obtained t of 0.424 between 0.40 to 0.599 means that there is a relationship between two variables are moderate. Thus the conclusion of this study there is a correlation knowledge level with prevention behavior of pathological Leucorrhoea students of sixth semester Nursing Program at the 'Aisyiyah University.

The level of the relationship is moderate in this study because the respondent has the right knowledge and information about preventive behavior Leucorrhoea. Respondents were already implementing preventive behavior of Leucorrhoea well in everyday life, such as washing the vagina from the front backward, the intensity of replacement pads more frequently and implementation of healthy lifestyles. Exposure to information can change a person's knowledge, attitudes and behaviors that are owned (Notoatmodjo, 2007). This is consistent with the theory of Potter and Perry (2009) that a person's attitude did hygiene individual behavior is influenced by several factors such as knowledge, body image, social practices, socio-economic status, habits, and physical condition.

According Notoatmodjo (2010) explained that the knowledge can be formed by the frequency of the information obtained. Maulana (2009) also mentions that health education is an appropriate method to give information to adolescents. Behavior based knowledge more durable than behavior that is not based on knowledge.

CONCLUSIONS AND RECOMMENDATIONS

Based on the results of research on the level of knowledge of almost all respondents have enough knowledge level in the prevention behavior of Leucorrhoea pathological, majority of respondents have pathological Leucorrhoea prevention behaviors is enough, and there is a correlation knowledge level with prevention behavior of pathological Leucorrhoea students of sixth semester Nursing Program at the 'Aisyiyah University.

From these results, it is expected that student at 'Aisyiyah University Yogyakarta add information or improve reproductive health knowledge, especially about Leucorrhoea, by reading books in the library and access via the Internet how to appropriately discharge prevention.

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THE EFFECT OF DYSMENORRHEA GYMNASTIC EXERCISE ON DYSMENORRHEA PAIN OF PHYSIOTHERAPY STUDENT

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Abstract: This research aim to determine the effect of dysmenorrhea gymnastic exercise on dysmenorrhea pain of Physiotherapy student at 'Aisyiyah University of Yogyakarta. This is an experimental study with pre experimental and one group pretest posttest design. The samples were 19 female students aged 19-22 years old. The research instrument used numeric rating scale (NRS) pain scale sheet. The data analysis used wilcoxon test with value $p=0,000$ the means there was the effect of dysmenorrhea gymnastics exercise on dysmenorrhea pain of physiotherapy students at 'Aisyiyah University of Yogyakarta.

Keywords: Dysmenorrhea Gymnastics Exercise, Dysmenorrhea, Female Students

INTRODUCTION

Menstruation is the process of exfoliating of endometrium that is accompanied by bleeding occurring repeatedly every month, except in the process of pregnancy. Bobak (2004) explains that the average duration of menstruation is five days or the range of three to six days, and the average amount of blood lost is 50 ml or in the range of 20-80 ml. Menstruation usually begins between ages 10 to 16 years, depending on various factors, including women's health, nutritional status and relative body weight to height (Anugroho and Wulandari, 2011).

One of menstrual disorders that can cause physical discomfort is dysmenorrhea. Dysmenorrhea is a menstrual disorder with the most dominant prevalence which is approximately 89.5% (M Cakir, 2007 in Sianipar, 2009). Dysmenorrhea or menstrual pain is painful sharp feeling in the lower abdomen. This occurs due to hormonal imbalance of progesterone in the blood resulting painful feeling during menstruation (Proverawati and Misaroh, 2009). Dysmenorrhea also can disturb daily activities (Laila.N.N, 2011).

The causes of dysmenorrhea experienced by women are endometriosis, pelvic infection (pelvic area), uterine tumor, appendicitis and abnormalities of the digestive

organs (Ernawati, 2010). Besides, the physical and psychological factors can also cause dysmenorrhea ranging from physical weakness, lack of exercise and stress. Dysmenorrheal pain is felt before and during menstruation that often go along with nausea, dizziness and weakness. The pain is very severe, forcing the patients to rest, and women often leave their job for a few hours or a few days (Wiknjastro 2007). Incidence rate of dysmenorrhea in Indonesia ranges to 64.25% to 54.89% of primary dysmenorrhea and 9, 36% of secondary dysmenorrhea (proverawati & Misaroh, 2009).

In 2010 in Manado, 98.5% Junior High School students experienced dysmenorrheal; 94.5% had mild, students experienced moderate or severe pain was 3.5% and 2%. The result of a research conducted by Mahmudiono in 2011 explained that the incidence of primary dysmenorrhea in aged 14-19 years in Indonesia is 54.89% (Desti et al, 2015). While in Yogyakarta the incidence of dysmenorrhea was 52% that experienced by women in reproductive age (Anonymous, 2008, in Agustina L, 2015). The evidence shows that short-term dysmenorrhea would disturb the patient's daily activities. While the long-term impact would cause late menstruation, undetected pregnancy, ectopic rupture, cyst rupture, uterine perforation from IUD and infections (Prawirohardjo, 2005).

Effective and appropriate treatments are needed to minimize the pain felt by some women in order not to disturb their activities. Prevention and care efforts related to dysmenorrhea can be considered such as therapies namely pharmacological and non-pharmacological. Some kinds of pharmacological ie analgesics, hormonal therapy, non-steroidal drugs prostaglandin, and dilatation of the cervical canal (Prawirohardjo, 2008). Meanwhile, non-pharmacological therapy are warm compresses, exercise, and relaxation. Dysmenorrhea gymnastic exercises can increase the production of endorphins (natural pain killers in the body) and can also increase serotonin levels. The exercise or the gymnastic does not require expensive cost, easy to do and certainly does not cause harmful side effects to the body (Sugani and Priandarini (2010). Dysmenorrheal gymnastics is also one form of relaxation that can be considered. The purpose of dysmenorrheal exercise is to reduce dysmenorrheal pain experienced by women in each month (Suparto, 2011).

Based on preliminary studies in physiotherapy student of the fifth semester in the 'Aisyiyah University of Yogyakarta, among 80 female students there were 50 people experienced dysmenorrhea. Based on the interviews with 15 people, there were 10 female students who experienced dysmenorrhea. Among 10 of those who were experiencing dysmenorrheal had various ways to overcome dysmenorrheal pain; 7 people only ignored the pain when experiencing dysmenorrheal pain; two people took medications; and 1 person did warm compress. In this preliminary study, nobody had ever tried to do dysmenorrheal gymnastic exercises.

RESEARCH METHOD

The study employed pre experimental research design; it is a design to assess a causal relationship involving only one group of subjects. The design used one group pretest posttest; it is the design in the pretest, before being given the treatment. Thus, the result of the study is more accurate because it can be compared to the situation prior to the treatment given and after the treatment is given (Sugiyono, 2010). In this study, numeric rating scale (NRS) is used as the scale measuring instrument.

The population in this study was the fifth semester student of Physiotherapy in 'Aisyiyah University of Yogyakarta totaling 50 people. The sampling technique in this research was non-random (non-probability sampling); it is the sampling technique that is not taken randomly, or sampling taking technique that is not based on the possibilities that can be taken into account, but solely based on the aspects of practicality alone (Notoatmodjo, 2010).

The sampling technique used purposive sampling method; it is sampling technique with a certain considerations made by researchers by defining inclusion and exclusion criteria (Notoatmodjo, 2010). The samples in the study were 19 people.

RESULTS AND DISCUSSION

This research was conducted on the students of Physiotherapy Study Program. Semester VI students of Physiotherapy study program in 'Aisyiyah University of Yogyakarta are dominated by women.

'Aisyiyah University of Yogyakarta was chosen as the study site because there are menstrual pain incidences (dysmenorrhea) experienced by the students. From the results of a preliminary study conducted by researchers obtained data from 90 female college students consists of 2 class there are 50 students who experience dysmenorrhea. Therefore, it can be used as a study and this location has never been done similar research. Thus, it is appropriate to University 'Aisyiyah of Yogyakarta to be selected as the location of research on the effects on the level of dysmenorrheal gymnastic exercises toward dysmenorrheal pain on semester IV Physiotherapy students at 'Aisyiyah University of Yogyakarta.

Table 1. The Characteristics Based on Age

Respondent's Characteristic	Frequency	%
Age		
19	1	5.3
20	10	52.6
21	6	31.6
22	2	10.5

Based on Table 1, frequency distribution of the characteristics by age get the result that the most dominant respondent's aged was 20 years with 10 female students (52.6%), and there was one student who was 19 years old (53%).

Table 2. The Characteristics based on Body Mass Index (BMI)

BMI	Number	%
18,5 – 19	6	31.6
19 - 22	11	57.9
22- 25	2	10.5
Jumlah	19	100

Based on Table 2, the frequency distribution of the characteristics based on a body mass index (BMI) showed that out of 19 respondents had normal BMI from the range of 19-22 with 11 students; and there were two female students within the range of 22-25.

Table 3 Intensity Distribution of Dysmenorrhea by Pain Category of before Being Given Dysmenorrheal Gymnastics Exercise

<i>Pretest</i>		
Dysmenorrheal Pain Rate	Number	%
No Pain	0	0
Mild Pain	2	10.5
Moderate Pain	13	68.4
Controlled Serious Pain	4	21.1
Uncontrolled Serious Pain	0	0
Total	19	100

Based on Table 3 of intensity distribution of menstrual pain based on the category of pain before being given dysmenorrhea exercises, from 19 respondents, there were 13 respondents had moderate pain (68.4%), and there were 2 respondents (21.1%) having mild pain.

Table 4 Intensity Distribution of Dysmenorrhea by the Category of Pain after Being Given Dysmenorrheal Exercises

<i>Posttest</i>		
Menstrual Pain Rate	Number	%
No Pain	0	0
Mild Pain	10	52.6
Moderate Pain	9	47.4
Controlled Serious Pain	0	0
Uncontrolled Serious Pain	0	0
Total	19	100

Based on Table 4 of intensity distribution of menstrual pain by category after being given dysmenorrheal exercises showed that out of 19 respondents, there were 10 respondents who experienced mild pain (52.6%), and there were 9 respondents having moderate pain (47.4%).

Table 5. The Results of Normality Test

Shapiro-Wilk				
	Statistic	Df	Sig	Information
Pre	.856	19	0.012	Abnormal
post	.933	19	0.194	Normal

Based on Table 5 of the Results of Normality Test on Pretest, it obtained significance 0,012 and obtained the significance of 0.194 for posttest. Therefore, in order to determine the impact of giving dysmenorrheal exercise training on dysmenorrheal pain on semester VI physiotherapy students at 'Aisyiyah University of Yogyakarta, Wilcoxon analysis was conducted.

Table 6. Results of Wilcoxon Test

Data	Mean	Asymp. Sign (2- tailed)	Information
Pre test	5.47	0.000	Significant
Post test	3.58		

Table 6 shows that the average value before being given dysmenorrheal exercises was 5.47, while the average value after the dysmenorrheal exercises was 3.58. The result of Wilcoxon analysis test obtained data that Asymp. Sign valued (two-tailed) for menstrual pain rate (dysmenorrhea) before and after the treatment was $0.000 < 0.05$, so it can be interpreted that H_a is accepted, and H_o is rejected. Based on this, it can be concluded that there is effect of dysmenorrheal gymnastic exercises toward dysmenorrheal pain.

DISCUSSION

The pain that experienced by every person is the most reliable indicator of the presence and intensity of pain associated with discomfort (Potter & Perry, 2005). Dysmenorrhea, or menstrual pain is normal, but can be more worst when got affected by

physical and psychological factors such as stress and the influence of the hormone prostaglandin and progesterone. Uterine that causes ischemia and cramps in the lower abdomen will stimulate the pain during menstrual period.

In this study, another factor affecting menstrual pain (dysmenorrhea) on the respondents is stress. Stress could appeared when people experienced situation of under pressure due to the demands within the individual and the environment. A research conducted by Okoro (2013) describes some risk factors of dysmenorrhea namely age, parity, menstrual duration, stress, physical activity, smoking habits and body mass index. One factor that becomes the closest to the students is stress. Stress is one of the human psychological factors in which factor can cause unwell blood supply that can trigger oxygen deficiency in the uterus, and it can increase the production and stimulate the secretion of prostaglandins (PGs) in the uterus (Silvana, 2012).

The changes in menstrual pain level (dysmenorrhea) on the respondents after being given dysmenorrheal gymnastics exercise is supported by the theory according to Sugani and Priandarini (2010) mentioning that body exercises conducted during dysmenorrhea can help strained muscles to become relaxed. The muscles of the uterus which experience tension during dysmenorrheal can become more relaxed after being given body practice or gymnastics focused on the pelvis, causing the strained muscles of the uterus to relax, and the pain can gradually reduce. When doing gymnastics, one becomes more comfortable, happy, and can accelerate the delivery of oxygen to the muscles.

Sallika, (2010) states that dysmenorrheal gymnastics can help to reduce dysmenorrheal pain that can be overcome by doing specific exercises that is dysmenorrheal gymnastics focused to help the stretch surrounding the abdominal muscles, pelvis and hips with exercises that can give relaxed sensation. Such effort can gradually reduce the pain since doing dysmenorrheal gymnastics can produce endorphins. Endorphins secreted relates to the theory of "gate control" mentioning that pain impulses are delivered when a defense is opened, and the impulse is inhibited when a defense is closed. One of the ways to close this defense mechanism is to stimulate the secretion of endorphins (natural pain relievers) which can inhibit the release of pain impulses.

The result of the study showed that the rate of menstrual pain (dysmenorrhea) decreased after being given dysmenorrheal gymnastic exercises. This can be proven by the results of data analysis before and after being given the dysmenorrheal gymnastics. The data indicate that before being given dysmenorrheal gymnastic exercises, the average score of respondents was 5.47, and after being given dysmenorrheal gymnastic exercises, the average score dropped to 3.58. This shows that there was a difference between the pre-test before being given dysmenorrheal exercises and post-test after being given dysmenorrheal exercises by a difference of 1.89.

Menstrual pain the pain that often is described as cramping pain in the lower abdominal that occurs during menstruation; sometimes it can disturb the daily activity. There are two categories of menstrual pain; those are primary and secondary pain. Primary menstrual pain is caused by higher endometrial prostaglandin production causing contraction of the uterus, uterine ischemia, and pelvic pain.

Prostaglandin F2 alpha is a strong stimulator of muscle contraction on myometrium and uterine blood vessels. It can worsen uterus hypoxia that normally occurs during menstruation, causing great pain (Corwin, 2008). According Proverawati and Misaroh (2009) menstrual pain (dysmenorrhea), or menstrual pain is a sharp pain felt in the lower abdomen and thighs; this occurs due to hormonal imbalance of progesterone in the blood causing pain arises. Almost all women including female teenagers must have experienced menstrual disorders such as menstrual pain at various levels, ranging from just a pain in the pelvis from the inside until severe pain. Generally, the usual pain felt below the stomach that occurs on the first and second day during menstrual period. If it is not overcome, menstrual pain may cause discomfort for women. Thus, it needs practical treatment and does not cause side effects, namely the handling of non-pharmacological form of exercise. Dysmenorrheal gymnastics is very effectively to reduce the pain experienced during menstruation, so women no longer feel discomfort. The pain will be reduced after quite a lot of blood coming out. To overcome menstrual pain, women can do pharmacological and non-pharmacological methods.

Non-pharmacological method is the method performed without medication. According to Potter & Perry (2005), it is a distraction, biofeedback, self-hypnosis, and

coetaneous stimulation. According to Sugani and Priandarini (2010), the method of dysmenorrheal gymnastics is also a non-pharmacological method of dysmenorrheal pain management. Dysmenorrheal gymnastics is one of the relaxation techniques or physical activity that can be used to reduce pain. When doing gymnastics, body will produce endorphins in the brain and spinal alignment. Higher endorphin hormone will reduce or alleviate the pain that one feels to become more comfortable, happy, and accelerate the delivery of oxygen to muscles.

CONCLUSIONS AND SUGGESTIONS

Conclusion

Based on research conducted at the 'Aisyiyah University of Yogyakarta, it can be concluded that the rate of menstrual pain (dysmenorrhea) before being given dysmenorrheal exercises was 5.47 in the category of moderate pain. Level of menstrual pain (dysmenorrhea) after being given exercises dysmenorrhea was 3.58 in the category of mild pain. Based on the result of Wilcoxon analysis test, the data obtained that there was the effect of dysmenorrheal exercise training on dysmenorrheal pain.

Suggestion

It is expected to Physiotherapy profession that the result of the study can add the knowledge of Physiotherapy study in overcoming menstrual pain (dysmenorrhea) non-pharmacologically. It is suggested for the next researcher to use more samples and use a control group for comparison.

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THE DIFFERENCES ON THE EFFECTS BETWEEN GIVING BRAIN GYM EXERCISE AND EDUCATIONAL GAME TOOLS TO INCREASE THE FINE MOTOR SKILLS OF CHILDREN AGED 4-5 YEARS¹

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Abstract

This study was to determine the differences on the effects between giving brain gym exercises and educational game tools in increasing the fine motor skills of children aged 4-5 years. The experimental pretest and posttest two group design, 30 kindergarter children were included by simple random sampling. The sample was divided into 2 groups which are group A gets brain gym exercises done three times a week for 3 weeks, group B gets educational toys done 10 times for 10 days. Denver Development Screening Test measurement tool was measured fine motor skills. Saphiro Wilk test for the normality test and Levene's test for the data homogeneity test. Wilcoxon test is used to determine the increase of fine motor skills for group A and B as well as the Mann-Whitney test to determine the effect of differet of intervention group A and B. The Wilcoxon test in group A results with $p=0.001$ ($p<0.005$) and group B with $p=0.000$ ($p<0.005$), indicating that there is intervention effect on fine motor skills. There is a difference in the effect of brain gym exercise and educational toys in increasing fine motor skills of children aged 4-5 years. Future studies is suggested to give additional time to reseacrh and control to ensure the seriousness of respondents.

Keywords: brain gym excercise, educational game tools, fine motor skills, denver development screening test

References: 56 items (2005-2015)

¹Title of undergratuante thesis

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BACKGROUND

Based on the Law No. 36 year 2009 about Health, it is stated that health is a state of well-being body, soul and social to enable productive people to live socially and economically. Thus, health is not only human right but also an investment (Ministry of Health, 2009).

In the National Long Term Development Plan (RPJP-N) 2005–2025, it is mentioned that in order to realize high qualified and competitive human resources, health, education and purchasing power of family/communities are the three main pillars to improve the quality of human resources and the Human Development Index

(HDI) of Indonesia. In the RPJP-N, it is also stated that national development in health sector was directed to raise the awareness, willingness and ability to live healthily for everyone in order to achieve the highest health status in the middle of social culture changing in the society (Ministry of Health, 2007).

Changes in socio-cultural order in the society are marked by the shifting of family role and function and one of the sign is many women who have children also function as breadwinner. Thus, they only have limited time to take care of and nurture their children. As a result, many children experience delays on their growth especially in the golden ages; that is under 5 years old. This is caused by the lack of stimulation and learning opportunity given by their parents (Sari, 2007).

Fine motor development in 4 years old children develops fast and even is almost perfect. However, these aged children still have difficulties in copying, cutting, forming something using *plastisin*, playing blocks and folding. In the age of 5, children is able to coordinate motor visual movement such as coordinate the movement of eyes and hands as well as body altogether (Silawati, 2008).

Monitoring children development by giving continuous stimulation and opportunities to children to learn are one of parents' efforts to prevent delays of development which impacts them in the future. Keeping our health is an obligation and the way of showing our gratitude for all blessings Allaah swt has given. Being healthy is not only because Allaah swt has given it to us freely but is also based on our effort as His decree on *Surah Ar-Ra'd* verse 11 :

لَهُ مُعَقَّبَاتٌ مِنْ بَيْنِ يَدَيْهِ وَمِنْ خَلْفِهِ يَحْفَظُونَهُ مِنْ أَمْرِ اللَّهِ إِنَّ اللَّهَ لَا يُغَيِّرُ مَا بِقَوْمٍ حَتَّى يُغَيِّرُوا مَا
بِأَنْفُسِهِمْ وَإِذَا أَرَادَ اللَّهُ بِقَوْمٍ سُوءًا فَلَا مَرَدَّ لَهُ وَمَا لَهُمْ مِنْ دُونِهِ مِنْ وَالٍ

For each (person), there are angels in succession, before and behind him. They guard him by the Command of Allah. Verily! Allah will not change the good condition of a people as long as they do not change their state of goodness themselves (by committing sins and by being ungrateful and disobedient to Allah). But when Allah wills a people's punishment, there can be no turning back of it, and they will find besides Him no protector. (*Qs. Ar – R'ad (13) : 11*).

Fine motor is the movement which only involves certain part of the body and is performed by fine muscles such as the skill to use fingers and correct wrist movement. Thus, the movement needs less energy but it needs eyes and hands accurate coordination. The better child's fine motor movement enables him to create something

such as cutting papers, drawing, coloring and plaiting. However, some children does not have the ability to master the abilities in the same stage (Alfiah, 2014).

Aquarisnawati et al, (2011) explained that the lack of stimulation or physical activities, especially fine motor skills at age 4-5 years will result in children to have concentration problems when the child is in elementary school. It is caused by fine motor immature. Children will also find some difficulties to perform daily tasks independently, such as writing, folding, assembling, buttoning clothes, sticking, tying shoes and cutting (Febrianingsih, 2014).

Based on the Bavarian Pre-School Morbidity Survey (BPMS) for pre school children whose ages are 4-5 years old from 1997-2009, there was a significant improvement in retardation of fine motor skill from 4.07% into 22.05% between 1997-2009 (Caniato, 2011). The research was conducted in Ekuador from 2003-2004, and there was 21.8% of children who experienced of fine motoric skill for 48-61 months children (Handal, 2007). Based on WHO, 5-25% from pre school children suffer from fine motoric disorder. From the Indonesia research journal that was taken from two hospitals in Jakarta, there were 11.3% children who suffer from the disorder of fine motor skill.

The disorder of fine motor in pre school period is estimated from 5-3% and 60% from the cases that are found spontaneously in children whose age are under 5 years old. The disorder in fine motor development causes obstacle in learning process at school. This problem will give bad effects such as: lazyness in writing, the decreasing of study interest and disorder in children personality. Children could feel inferiority and experience worries in facing environment (Nurlida, 2010). The development of fine motoric skill is influenced by several factors such as genetic, nutritiom, health, and stimulation (Fatoni, 2007).

The study result about the physiotherapy to improve the fine motor skill for 4-5 years old children was presented by Asni (2014). She stated that the educational games, maze is capable in improving the fine motor skill at children. Then, Sumini (2014) stated that educational games can help children learning process and parents are easier to teach their kids for writing and the children's interest for studying increases. Dewi (2014) stated that brain gym exercise can train the coordination between hands and it can also whet the brain itself. This hand practice will improve the fine motor skill.

Physiotherapy plays a role to prevent and decrease the complication that might happen to children who suffer from retardation of fine motoric skill. As has been stated in Ministry Law NO. 80/MENKES/SK/III/2013, physiotherapy is a health service that is for individu and /or group to develop, maintain, and restore the movements and body function with the manual treatment, movement improvement, equipment (physic, elektroterapeutis and mecanic), the function and communication practice. So, in order to improve the motor skills for 4-5 years old children, the physiotherapy can give the brain gym exercise and educational game tools.

Brain gym is body movement skill; it is body movement that is coordinated, so it can help to optimize brain function. Brain gym will facilitate right brain and left brain to work with balance condition. Lateral dimension is the part that gets right brain and left brain stimulation. Besides, in focus dimension brain gym also has impact on relaxing back part of the brain and front part of the brain. In focus dimension, the movement of brain gym will also trigger the system correlated to feeling or emotional which is middle brain (limbic system) and the biggest part of the brain. The application of brain gym consists of balance movement, muscle movement coordination, and fine motor skill (Saichudin, 2009).

Educational Games Tool is a term that refers to the props that were especially given to children in their early age, particularly between the ages of 0-5 years. The objective of educational games are to develop the concept drafter of self (self concept), develop creativity, develop communication, develop aspects of physical and motor skills, develop social aspects, develop aspects of emotional or personality, develop aspects of cognition, sharpen the sharpness of sensing, and develop skills in sport and dancing (Sumini et al, 2014).

This study was conducted to compare the effectiveness of the intervention groups with the goal of increasing the fine motor skills of children aged 4-5 years. Therefore, in further it can be used as the illustration of appropriate and effective intervention to deal with cases of fine motor delays.

Based on the above details, there are a variety of interventions that can be provided to improve fine motor skills, this study focused on interventions of brain gym exercises and educational games tools. The study uses of brain gym because brain gymnastics movements in will stimulate the formation of new synapses that connect

neurons in the brain. It can help the process of maturation and learning of children. The nerves that have reached maturation or maturity will stimulate the small muscles that have function to control fine motor along with the perception of visual motor development of children that rapidly grows, so the coordination of the hands and the eyes will increase resulting in fine motor increases. In addition, the tools of educational games is as a medium for maintaining and train the muscles of the hand as well as visual to give the impression of appealing to children and concrete experience, so children can easily make a straight, flat, curved, left / right, and circle lines, so the coordination between the eyes and hands of children will be formed properly. It is very useful for optimizing their fine motor

The study was conducted in ABA Mlangi Kindergarten Yogyakarta; among all the students totaled 94, there were 38 children aged 4-5 years experiencing fine motor delays. Lack of facilities and infrastructures in the kindergarten, not complete tool educational games, and no implementation of the brain gym exercise become the factors why there are many children who are still experiencing delays in fine motor development.

Based on the description above, the researcher is interested in conducting research on different effect between brain gym exercises and educational games tools to the increase of fine motor skills of children aged 4-5 years.

METHOD

RESULT

The research has been conducted at ABA Mlangi Kindergarten for 3 weeks using experimental study design. In the early research, it found 30 samples that could be fulfilled as inclusion criteria. They were divided into two groups, namely the Brain Gymnastics (Group A) for 3 weeks treatment and Educational Games Equipments (Group B) , each intervention group consisted of 15 samples: 15 children for Brain Gymnastics (Group A) and 15 children for Educational Games Tool (Group B).

The results of treatment in each group got the interventions of brain exercise for 10 minutes three times a week during 3 weeks, and educational games tools with duration 60 minutes for 10 days, and then the data were obtained for the analysis. The

data obtained were in the form of the physical characteristics of the samples that include gender, age, height, and weight.

General Overview of Research Sites: The study was conducted in classrooms A and B ABA Mlangi Kindergarten Yogyakarta. This room has fairly wide area, and convenient to study.

Characteristics of the Samples

Sample Distribution Based on Sex

In this study, the first group consisted of male students with 7 children (46.7%) and female sex as many as 8 children (53.3%). While group II treatment with the provision of educational games got samples with male sex as many as 8 children (53.3%) and female samples as many as 7 children (46.7%).

Sample Distribution by Age

Table 1. Sample Distribution Based on Age
at ABA Mlangi Kindergarten Yogyakarta
June 2016

Age	Group A		Group B	
	Frequency	%	Frequency	%
4	8	53.3 %	6	40 %
5	7	56.7 %	9	60%
Total	15	100 %	15	100 %

Information:

Group A = Brain Gym

Group B = Educational Games Tool

In the study, the treatment group I had samples consisting of children in the age of 4 years with 8 samples (53.3%), those in the age of 5 years with 7 samples (46.7%). While the treatment group II got samples of children aged 4 years with 6 samples (40%), those at the age of 5 years with 9 samples (60%).

Samples Distribution Based on Weight

Table 2 Sample Distribution Based on Weight
at ABA Mlangi Kindergarten Yogyakarta
June 2016

Weight (kg)	Treatment Group I		Treatment Group II	
	n=15	%	n=15	%
15	3	20	4	26.7
16	6	40	7	46.6
17	2	13	2	13.3
18	3	20	1	6.7
19	1	7	1	6.7
Total	15	100	15	100

Information :

Group A = Brain Gym

Group B = Educational Games Tool

In the study, the treatment group I got samples consisting of children having the weight of 15 kg with 3 samples (20%), 16 kg with 6 samples (40%), 17 kg with 2 samples (13%), 18 kg with 3 samples (20%) , 19 kg with 1 sample (6.7%). While the treatment group II got samples consisting of children weight 15 kg with 4 samples (26.7%), 16 kg with 7 samples (46.6%), 17 kg with 2 samples (13.3%), 18 kg with 1 samples (6.7%), 19 kg with 1 sample (6.7%).Therefore,
Samples Distribution Based on Height

Table 3. Samples Distribution Based on Height
at ABA Mlangi Kindergarten Yogyakarta
June 2016

Height (cm)	Treatment Group I		Treatment Group II	
	n=15	%	n=15	%
100	1	6.7	1	6.7
102	0	0	1	6.7
103	2	13.3	1	6.7
105	4	26.7	1	6.7
106	2	13.3	2	13.3
107	3	20	3	20
108	2	13.3	2	13.3
109	0	0	1	6.7
110	1	6.7	3	20
Total	15	100	15	100

Information :

Group A = Brain Gym

Group B = Educational Games Tool

In the study, the treatment group I had samples consisting of height 100 cm with 1 sample (6.7%), 103 cm with 2 samples (13.3%), 105 cm with 4 samples (26.7%), 106 cm with 2 samples (13.3%), 107 cm with 3 samples (20%), 108 cm with 2 samples (13.3%), 110 cm with 1 sample (6.7%). While the treatment group II got samples that had height of 100 cm with 1 sample (6.7%), 102 cm with 1 sample (6.7%), 103 cm with 1 sample (6.7%), 105 cm with 1 sample (6.7%), 106 cm with 2 samples (13.3%), 107 cm with 3 samples (20%), 108 cm with 2 samples (13.3%), 109 cm with 1 samples (6.7%), and 110 cm with 3 samples (20%).

Description of Research Data

The Value of Denver Development Screening Test (DDST) before and after the treatment in group I (Brain Gym)

Table 4.4: The Change of DDST Value in group I before and after the intervention at ABA Mlangi Kindergarten Yogyakarta
June 2016

Names	DDST Value Before Treatment	DDST Value After Treatment	Differences
AR	2	1	1
AS	2	1	1
AI	2	2	0
AT	3	2	1
AP	2	1	1
AU	2	2	0
DS	2	1	1
FF	3	2	1
HA	2	1	1
KY	2	1	1
LF	2	1	1
NG	2	2	0
SA	2	1	1
YS	2	2	0
ZH	2	1	1
Mean	2.13	1.40	0.73
DS	0.352	0.507	0.458

Table 4 shows the average DDST value in group I before the treatment with 2.13 and standard deviation value of 0.352. Meanwhile, after being given the treatment, the mean value was 1.40 and 0.507 standard deviations. Then the mean difference before and after the treatment in group A was 0.73 and the value of 0.458 standard deviations. The Value of Denver Development Screening Test (DDST) before and after treatment group II (Educational Games Tool)

Table 5: The Change of DDST Value in group II before and after the intervention at ABA Mlangi Kindergarten Yogyakarta
June 2016

Names	DDST Value Before Treatment	DDST Value After Treatment	Differences
AK	2	1	1
AN	2	1	1
AM	3	1	2
AC	2	2	0
AL	2	1	1
AA	2	1	1
AZ	3	1	2
FA	2	1	1
HF	2	1	1
KH	2	1	1
KA	2	1	1
MS	2	1	1
NA	3	1	2
QA	2	1	1
Mean	2.20	1.07	1.13
DS	0.414	0.258	0.352

Table 5 shows the mean of DDST value in group II before the treatment with 2.20 and value of 0.414 for standard deviations. Meanwhile, after being given the treatment, the mean value was 1.07 and 0.258 standard deviations. While the average difference between before and after being given the treatment was 1.13 and 0.352 standard deviation value.

Normality Test Results

Table 6 Normality Test of DDST Value Group I and II at ABA Mlangi Kindergarten Yogyakarta June 2016

Variables	P Value		Information
	Before Treatment	After Treatment	
Group I DDST Value	0.000	0.000	Abnormal
Group II DDST Value	0.000	0.000	Abnormal

Information :

Group A = Brain Gym Exercise

Group B = Educational Games Tool

Normality test data before and after treatment used Shapiro Wilk normality test. The result of normality test on group I before the treatment obtained $p = 0.000$ and after treatment the value of $p = 0.000$. Whereas in group II, the result before treatment got value of $p = 0.000$ and after treatment with a value of $p = 0.000$. Therefore, the p-value before and after both groups was less than 0.05 ($p < 0.05$), so the data distribution is abnormal. Therefore, it can be included as non-parametric statistics, and the statistical tests that would be used for hypothesis I and II were Wilcoxon.

Homogeneity Test Results

Table 7. Homogeneity Test of Group I and II DDST Value at ABA Mlangi Kindergarten Yogyakarta June 2016

	Lavene Test	
	P Value	
Pre DDST	0.345	homogeny
Post DDST	0.000	non-homogeny

Information

p = Probability

Results of homogeneity test data of DDST value used Lavene's test resulting that before treatment in both groups, p value = 0.345 and after treatment $p = 0.000$. Thus, the data are not homogeneous, because the p-value was less than 0.05 ($p < 0.05$).

Test Results of Hypothesis I

Hypothesis I was used to know the effect of brain gym toward the increase of fine motor on children aged 4-5 years. Testing of hypothesis H_0 is not rejected if p value > 0.05 , while H_0 is rejected when $p < 0.05$ and the test of hypothesis I used Wilcoxon.

Difference mean of DDST value before and after treatment in group I was 0.73 with standard deviation of 0.458. The result of Wilcoxon calculation got $p = 0.001$ ($p < 0.05$), which means that H_0 is rejected, so hypothesis I states that there is brain gym effect to increase fine motor skills of children aged 4-5 years.

Test Results of Hypothesis II

Hypothesis II was to determine the effect of educational games tool to increase fine motor skills on children aged 4-5 years. Testing of hypothesis H_0 is not rejected if p value is > 0.05 , while H_0 is rejected when $p < 0.05$, and the test of hypothesis II used Wilcoxon.

Difference mean of DDST value before and after treatment in group II was 1.13 with standard deviation of 0.352. The result of Wilcoxon calculation got $p = 0.000$ ($p < 0.05$), which means that H_0 is rejected, so the second hypothesis states that there is effect of educational games tool to increase fine motor skills on children aged 4-5 years.

Hypothesis III

Hypothesis III test is to determine different effect of brain gym and educational games tools to increase fine motor skills on children aged 4-5 years. Testing of hypothesis H_0 is not rejected if the value of $p > 0.05$, while H_0 is rejected when $p < 0.05$, and the test of hypothesis III used Mann-Whitney.

Results of Mann-Whitney for the comparability of DDST value after treatment in group I and group II was $p = 0.015$ ($p < 0.05$). This means that H_a is accepted, so that hypothesis III states that there is difference of brain gym and educational games tool to increase fine motor skills on children aged 4-5 years. Thus, the treatment given in group I and II had a significant effect on the differences in fine motor skills of children aged 4-5 years.

DISCUSSION

Based on Sample Characteristic

In this study, there are 30 samples that are divided into two groups. The first group consists of 7 boys and 8 girls and the second group consists of 9 boys and 7 girls.

Based on study that was conducted by Bajirani and Susilawati (2014), the study showed that the improvement in the fine motor skills are dominated by the girls who gets better score of the pre test and there is improvement in post test. However it also happens to boys. The fine motor skill that is owned by girls tends to be better than the boys. However boys tend to be better on gross motor skills.

In this study, the sample consists of 30 children whose age are between 4-5 years old. They are students of ABA Mlangi kindegarden and their fine motor skills decrease.

Based on the study that was conducted by Nurlita (2010) showed that fine motor skills in pre school period is estimated from 5-3% and 60% from the cases that are found spontaneously in children whose age are under 5 years old. The disorder in fine motoric development causes obstacle in learning process at school. This problem will give bad effects such as: lazyness in writing, the decreasing of study interest and

disorder in children personality. Children could feel inferiority and experience worries in facing environment.

The characteristics of the first treatment group are 3 samples whose weight are 15 kg (20%), 6 samples whose weight are 16 kg (40%), 2 samples whose weights are 17 kg (13%), 3 samples whose weights are 18 kg, 1 sample whose weight is 19 kg (6.7%). Thus, there are 15 children (100%) who receive brain exercise. While in the second treatment group, there are 4 samples whose weights are 15 kg (26.7%), 7 samples whose weights are 16 kg (46.6%), 2 samples whose weights are 17 kg (13.3%), 1 sample whose weight is 18 kg (6.7%), and 1 sample whose weight is 19 kg (6.7%).

From the study that was conducted by Kartikaningsih, it was explained that the less nutritioun will affect the body organ and system. The less protein in infant will affect the atrofi muscles and it will dissturb the strength of motoric muscle in doing the activity. The activity of fine muscle motoric can be seen through the capability of drawing, making lines, and cutting paper.

The characteristics of the first sample group are 1 sample whose height is 100 cm (6.7%), 2 samples whose height are 103 cm (13.3%), 4 samples whose height are 105 cm (26.7%), 3 samples whose height are 107 cm (20%), 2 samples whose height are 108 cm(13.3%), 1 sample whose height is 110 cm (6.7%). Thus, there are 15 children (100%) who receive the brain exercise. While the characteristics of the second group are 1 sample whose height is 100 cm (6.7%), 1 sample whose height is 102 cm (6.7%), 1 sample whose height is 103 cm (6.7%), 1 sample whose height is 105 cm (6.7%), 2 samples whose height are 106 cm (13,3%), 3 samples whose height are 107 cm (20%), 2 samples whose height are 108 cm (13.3%), 1 sample whose height are 109 cm (6.7%), 3 samples whose height are 110 cm (20%).

The sample characteristics which are based on height was explained in Solihinet al, (2013). The study stated that stunting can cause the development of motoric system obstructed and it can happen to normal children or children with certain diseases. The children with stunting who are exposed with HIV has lower motoric capability compared to normal children. The decreasing of fine motoric function in stunting children without disorder congenital is related to the low mechanic capability from surae tricep muscle. The late maturity of the function of this musclecause the fine motoric capability of stunting children are hung up.

Based on The Description of Research Data

The fist group experienced the changes in DDST value before and after the treatment with the mean of pre treatment was 2.13 and after the treatment was 1.40. While in the second group also experienced the changes in DDST value before and after the treatment which was 2.20 for pre treatment and 1.07 after the treatment. The different DDST value from group I and II with the mean of 0.73 and 1.13. Thus, in this study, it can be said that the influence of educational games are better that brain exercise toward the improvement of fine motor skill for children whose age are between 4-5 years old.

Based on The Research Test Result

The First Hypothesis Test Result: The treatment of brain exercise was done to respondents in the first group. Based on the result of DDST, before and after the treatment in group A with wilcoxon, the $p = 0.001$ ($p < 0.05$), thus it can be concluded that the brain exercise influence in improving the DDST value that related to improvement of fine motor skill for 4-5 years old children

This is supported by the study that was conducted by Sudiarto (2012) about the importance of stimulation in the beginning to enhance the nerves system. The more perfect the nerves system, the more perfect the brain development process thus it can improve the coordination of fine motor skill. The movement in brain exercise will stimulate the small muscles and expedite the blood circulation thus, the oxygen supply will run well. This has an important role in improving the fine motor skill.

The second Hypothesis Result: The educational games were given to respondents in the second group. Based on the result of DDST, before and after the treatment in the second group with wilcoxon, the result was p value = 0.000 ($p < 0.05$), thus it can be concluded that the educational games influence toward the improvement of DDST value that related with soft motor skill for 4-5 years old children.

This is supported by the research that was conducted to Pramono (2008). The influence that was given with the educational games is suitable with the stimulation that was given by the educational game itself to children. The educational games can give stimulation that is accepted by hands and eyes. After that the stimulation is sent to brain by the nerves system and is processed. There is improvement in eye and hand coordination that has important role in fine motor skill.

The Third Hypothesis Result: The result of mann-whitney for the difference value of DDST between pre and after the treatment in group I and group II is $p = 0.015$ ($p < 0.05$). It can be conclude that there is different effect between brain exercise and educational games toward the improvement of fine motor skill for 4-5 years old children. The treatment that is done for group I and II has different influence that is significant toward the improvement of fine motor skill for 4-5 years old children.

Based on the previous study by Sudiarto (2012), the importance of stimulation in the beginning can help in making the nerves system perfect. The more perfect the nerves system, the more perfect the brain growth process thus it can improve the fine motor skill coordination. The movement in the brain exercise will stimulate the small muscles and it can make the blood circulates well. This is very important in improving the fine motor skill. While the influence that is given by the educational games is suitable with the stimulation that is given by the educational games to children. The educational games can give the stimulation that is accepted by hand and eye and it will be sent to nerves system and it will be processed into the the improvement of eye and hand coordination that has an important role in fine motor skill.

Research Limitation: this research is the seriousness of children in following the research activities that are done. In order to control children, it becomes something

beyond of researchers' scope. It can happen because every child has different characteristic and so do the capability of the researchers'

CONCLUSIONS

Based on the results of research and discussion, it can be concluded that:

1. Giving brain gym can improve fine motor skills of children aged 4-5 years.
2. Educational games tools can improve fine motor skills of children aged 4-5 years.
3. There is different effect between giving brain gym and educational games tools to increase fine motor skills of children aged 4-5 years.

SUGGESTION

Based on the conclusions of the research result entitled difference effect of giving brain gym and educational games tools to increase fine motor skills of children aged 4-5 years, there are some suggestions that can be given by researchers as follows:

1. For Physiotherapists

Giving advice to physiotherapists to provide a form of brain gym therapy or therapy educational games tools to improve fine motor skill on children.

2. For Early Childhood

Giving the advice for children in order to continue to train hand-eye coordination with brain gym or educational games tools for improving fine motor skills that will play an important role in everyday life.

3. For Further Researchers

Providing the advice to further researchers to add more research time to get more maximum results and control as well as ensure the seriousness of the respondents.

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THE RELATIONSHIP BETWEEN MOTHER'S OCCUPATION AND DEVELOPMENT STIMULATION

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Abstract

Childhood period is the critical times in the health development. Inhibition of the development in toddlers has an impact on the health of intelligence. One factor developmental delay in toddlers was due to parent's occupation and stimulation. This study conducted to investigate the relationship between mother's occupation and stimulation at Umbulharjo Primary Care I. Observational and cross-sectional method were applied in the current project. Sixty-six respondents were involved by a consecutive sampling method in this study. Then, Chi-square analysis was calculated, and the result found there was no significant relationship between mother's occupations and stimulation in toddlers

Keywords: mother's occupation, development stimulation, children

Introduction

The achievement of the adult stage in a toddler should exceed several phases of growth and development through the process of learning about himself and the surrounding world. In line with the learning process, toddlers will experience growth and development within itself both physically and mentally. The development phase includes the aspects of motor, cognitive, language and social development (Hurlock, 1978) Nash cit Maimon et al., (2013) mentioned toddler or early childhood is a critical period in a child's development. Development and intelligence of a toddler depend on the psychosocial stimulation given. Brain synapses generated by the relationship between neuronal cells which grow and develop very rapidly in the first year of life will gradually undergo atrophy and disappear when no stimulus support.

Inhibition of development in toddlers will make health problems on intelligence. Michelson (2011) cit Ismail (2015) stated that 1-3% developmental delay was make disability on intelligence leads to the mental retardation. This condition can encumber with activities of daily life, for instance attention disorders, impaired memory and language disorders. Those can lead to barriers to the process of socialization and self-determination of infants and children. Children with troubles of intelligence be able to

reduce the process of brain development, lower academic achievement, life skills (life skills), behavioral, emotional and mental (Kepmenkes RI, 2009). In Indonesia, the number of delay development in toddlers has no reported. However, based on survey results conducted in The United States in 1997-2008 by Boyle, the prevalence of developmental delay toddlers obtained at 3.65% whereas data from the World Health Organization showed that the prevalence of intellectual disability children under ten years of age in 2010 in the world by 1,3% and in Southeast Asia totaled to 1.19% (Ismail, 2015). Rini (2015) reported the number of early development in Yogyakarta based on five region was 14,7% toddler with suspect. Denver II was used in her screening. Then, from this suspect, 89% of toddlers experience failure at school in their 5-6 years future (Soetjiningsih 1995). Community health centers (Puskesmas) is the frontline community health development and playing the important role to early detection of early childhood development. Health Center I Umbulharjo is a health center in the city of Yogyakarta, where in 2014 it was found that there are 3% of the entire babies have developmental test results are suspicious and distorted and would do referrals. Soetjiningsih (1995) explain that environmental factors is recognize as the one of the factors that influence childhood development after the infant is born. Furthermore, this environment can make optimal growth and development for the toddlers. Environmental factors include psychosocial factors consist of stimulation from parents, caregivers or her neighborhood. Regular stimulation and provide a conducive environment consequently will make children more quickly in accomplishing the task of development. Then, job is recognized as the one of factor that affecting the stimulation (Dewi, 2011). The children with mother's workers get lack of attention from their mother due to the mother will be more paid attention to their job. As a result, these children will lack of monitoring and stimulation of development from their mother (Guhardja, 1992; Martorell & Habicht, 1986; and Greg & Washbrook, 2003 cit Risma, 2009).

Method

Observational and cross sectional with quantitative approach was applied in current study. Then, variables in this study were mother's occupation, stimulation, level of education and level of income. A consecutive sampling among 0-36 month old children were invited in this research, and the setting was at Umbulharjo Primary Health Care I,

Yogyakarta. The criteria inclusions were considered to 66 respondents. There were two tools in this project, demographic questionnaire and stimulation development. The stimulation development tool consist of three author, first adopted from Rini (2015) which is produced stimulation development questionnaire for age 9-12 month old, 12-15 month old, and 15-18 month old. Second, adopted from Widayati (2016), which is produced stimulation development questionnaire for age 6-9 months old. Third, Guidelines Stimulation Detection and Early Intervention Growth in the level of Primary Health Care (2013), which is produced stimulation development for age 2-6 months old, 18-24 months old, and 24-36 months old. The validity to those instruments was established at Sardjito Hospital by experts. Statistical analysis Chi-Square to investigate the relationship between two variables has obtained. Ratio prevalence was calculated to explore the significance between two variables.

Results and Discussion

Umbulharjo Primary Health Care (PHC) 1 is located at Umbulharjo District in Yogyakarta. This PHC is supervising four districts; Warung Boto, Kelurahan Sorosutan, Kelurahan Giwangan, Kelurahan Pandean, which is has integrated service posts (posyandu) monthly. The facilities regarding early child development stimulation has well-provided. Then, screening activity has done monthly as a routine agenda for preschool age (4-5 years old) by using Screening Questionnaire for Development/SQD (KPSP). However, counseling for health assistance regarding stimulation has not provided properly, since it was focused on nutritional status improvement. Therefore, the health assistance rarely or never provide counseling stimulation should be done by parents.

Table 1. Demographic information

Demographics	n	%
Education level		
High	53	80,3
Low	13	19,7
Occupation		
Worker	18	27,3
No Worker	48	72,7
Family income (per capita)		
Enough	51	77,3
Less	15	22,7
Stimulation		
Irregularly	40	60,6
Regularly	26	39,4

Source: Primer information, 2016

Based on the table 2, regarding the education, almost the entire mothers have graduated from senior high school (80,3%), then, only 27,3% mothers have worker and 72,7% mother stay at home. Next, mostly the family income was enough (77,3%), and regarding the stimulation, up to 50% mothers have no give stimulation regularly.

Table 2. Bivariate analysis to explore the relationships between two variables

	Stimulation				RP	CI 95%	p
	Regularly		Irregularly				
	n	%	n	%			
Occupation							
Worker	16	33,3	32	66,7	0,6	0,338-1,066	0,100
No Worker	10	55,6	8	44,4			
Education level							
High	22	41,5	31	58,5	1,349	0,562-3,239	0,478
Low	4	30,8	9	69,2			
Family income (per capita)							
Enough	20	39,2	31	60,8	0,98	0,483-1,990	0,956
Less	6	40	9	60			
n= Sample	RP: Ratio Prevalensi		CI: Convidence Interval		p= p-value		

The first analysis was mothers' occupation has the correlation with the opportunity for time quality to their children in giving stimulation. However, the finding in this study that there was no significant relationship between mother's occupation and stimulation development. This result in line with the previous study (Dewi, 2011) mentioned if the mothers less paid attention to the children due to the mother's worker will spend more time to their work rather than monitor the progress of their children development. The other researchers has the same results with current research, Guhardja, Martorell & Habicht; Greg & Washbrook cit Risma, (2009) found if children with mother worker resulting in lack of attention the child care that affect the health, nutrition and a lack of time in stimulating the development of children so that the delay in the growth process of the child will occur.

Then, Agrina (2008) and Rini (2015) also mentioned the same findings, employment status parents, especially mothers, do not affect the status of the development of toddler (housewife) because it will depend on mother's capability on sharing their time for their children. Barros *et al* cit Rini (2015) stated that mothers who do not work less intensively in providing stimulation, but working mothers leave

their children at nursery so that the time left can be replaced by activities that can stimulate the development of children in group play so that the child's development even faster than mothers who do not work. Santrock (2007) explains, working mothers have a positive and negative effect on the development of children. Underpressure jobs could be widespread and harmful parenting is the Negative effect, but if mother develop a feeling of peace at work will produce positive parenting.

The second analysis was about the level of mother's education regarding the stimulation to the toddlers. In contrast, Tjandrajani, Dewanti, Burhany, & Widjaja (2012) mentioned that the level of education of parents, especially mothers affects the stimulation given to children, how to educate, nurture and how to solve a problem. Parents with higher education and high social status have a greater opportunity to obtain information and health care. In general, parent with higher education are more aware when there is a disruption in the development of their children. Education is an attempt to improve people's knowledge, and parents are one of the educators in education. Parents have a great responsibility in educating, guiding, caring and nurturing their children to be children who grow and develop optimally and noble (Aisyah, 2014). Campbell et al., (2003) also mentioned that low levels of education have an impact on the total lack of vocabulary or a mix of words given in children, consequently, this causing low stimulation especially in language development. Furthermore, low levels of education produce 2.86 times children with developmental delays in language. The low level of education also leads to a lack of perception related to maternal health care and inadequate nutrition.

The third analysis was related with family income to the stimulation. From analysis statistic above found there was no significant relationship between family income and stimulation to the toddlers. This finding was in contrast with the previous study conducted by Hastuti, Fiernanti, & Guhardja (2011). The study mentioned that family income indirectly influence the care procedure, with the result that if care is inadequate, the early childhood development would be too late. The other study also finding the same result, the higher the income, parents are better able to provide the facilities to support the development of their babies, then optimal early childhood development will be obtained (Freitas, Gabbard, Caçola, Montebelo, & Santos, 2013).

Conclusion: There was no significant relationship between occupation, level of education and family income to the early child stimulation development.

Suggestion: Health workers at Umbulharjo PHC I could give the counseling for mothers who has the early child for the stimulation development and future study is needed in this theme and different variables.

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RELATIONSHIP BETWEEN THE ROLE OF PEERS AND READINESS MENARCHE FOR STUDENT AT MUHAMMADIYAH KARANGWARU ELEMENTARY SCHOOL YOGYAKARTA

NurulKurniati

ABSTRACT

Background : Menarche is one of crisis period in life cycle of women, and must be both experienced and controlled by adolescent. According to data of Indonesia Government (Ministry of Health) almost 50% adolescent discuss about initial menstrual problem with her friends, and 37% with her mother. This study was to determine the relationship between the role of peers and readiness menarche.

Research Methode : Design of this study is a descriptive analysis with cross sectional approach. The population are all of student in Muhammadiyah Karangwaru Elementary School Yogyakarta, 69 respondents participated in this study. Data collection using questionnaire that has been validity and reliability. Data analysis using univariate and bivariate with *Kendall Tau*.

Research finding: The results indicate that there is a significant relationship between the role of peers and readiness of menarche ($p = 0.015$) student at Muhammadiyah Karangwaru Elementary School of Yogyakarta.

Conclusion : Readiness of menarche have correlation with the role of peers adolescent.

Suggestion: Teacher and staff at elementary school give actual information about reproductive healthy specially about adolescence and controlling information exchange about menstrual problem.

Keywords : role of peers, menarche

INTRODUCTION

Menarche is one of crisis period of women lifecycle, the crisis must be passed by the young women in their growth toward maturity and must be controlled. Often a young woman experiencing embarrassed, anxious, and afraid when they got the first period, there were also teenagers who perceive menstruation is something disgusting, dirty and restrict her movements so feel free to indulge. This is the psychological effect of menstruation. Right information can help teenagers overcome negative feelings associated with menstruation (Wahyudi, 2000). Peers (peer group) is teenagers on

consciousness, interests, and shared interests intentionally or unintentionally form a group and have as well as develop their own specific concepts about the environment they are open or closed (Syaifudin, 1999).

According to the Adolescent Reproductive Health Survey of 8,481 young women 18% never asked about the physical changes at puberty, source of knowledge on puberty in females 20.1% of the mothers, 3.3% of the fathers, 44.4% from friends, 30, 5% of teachers and only 1.7% of health workers. Nearly 50% of adolescents discuss menstruation before the first menstrual period with his friend, and 37% with the mother (IMOH, 2007).

Based on the preliminary study carried out in MuhammadiyahKarangwaru Elementary School against girls aged 10-12 obtained data from 69 girls who were not menstruating, of the amount taken 25 students to inquire role of friends in menarche, the result is 20 students said the role of peer greatest effect adolescent reproductive health education. Based on the above, it can be formulated problem is there a relationship role of peers in readiness menarche in girls at Muhammadiyah Karangwaru Elementary School. General purpose of research known role relationships peers in readiness menarche in adolescents in MuhammadiyahKarangwaru Elementary School.

RESEARCH SUBJECTS AND METHOD

Design of the study is quantitative research descriptive with *cross sectional* approach which the purpose to knows relationship role of peer group and readiness of menarche. The population in this study are all student at Muhammadiyah Karangwaru Elementary School Yogyakarta which are consist of 69 students. *Total sampling method* used to take sample of this research from the existing population are 65 respondents (Sugiyono, 2006).

Data collection instruments on this research is in the form of a structured questionnaire with covered questions for the role of peer group and for question about readiness of menarche. The validity and reliability test of questionnaire have done. This study was passed ethical clearance by ethics committee in Aisyiyah University of Yogyakarta.

Describe the characteristics of each of these variables was examined by using a frequency distribution and percentage of the each group. The next step, data shows by

tables and narratives. Identify whether the existence of a relationship between the variable statistical tests used are *Kendall Tau correlation test*. The results obtained is the value *t* and *p value* (Dahlan,2010).

Study setting, the respondent is grouping by age and they take the questionnaire and fill in the form of questionnaire suitable with her condition. Before answer of the question in questionnaire form, the student have to signing the informed consent form as agreement respondent.

RESULT AND DISCUSSION

Through analyse and processing each data, this research found that most respondents are in age 10 years old by as much as 36 person (52%). Description of the characteristics of respondents by age:

No	Characteristic of Respondent	Amount	Percentage (%)
1	10 years old	36	52
2	11 years old	28	41
3	12 years old	5	7
Total		69	100

Table 1. Frequency Distribution Characteristics of Respondents by Age

Based on research conducted peer role of data obtained as the role of peers :

No	Peergroup quality	Amount	Percentage(%)
1	Good	35	50.7
2	Moderate	21	30.4
3	Less	13	18.8
Total		69	100%

Table 2. Frequency Distribution Role of Peer

Based on the data it can be describe that 69 female students aged 10-12 years showed most of the role of peers in both criteria in sharing information related to menarche, the questionnaire showed almost all respondents have a role both as a source of information and a role model as many as 35 respondents (50.7%) who have a significant role by 21

respondents 18 (30.4%), while the least that the criteria 18 the role of peers is less, mainly as a communicator as many as 13 respondents (18.8%).

Based on research conducted readiness menarche data obtained as follows:

No	Readiness Menarche	Amount	Percentage (%)
1	Ready	37	53
2	Moderate	15	22
3	Less	17	13
	Total	69	100

Table 3. Frequency Distribution Readiness Menarche

Based on the data that the majority of students experienced a readiness menarche with criteria that as many as 37 respondents (53%), sufficient criteria of 15 respondents (22%), in response to the physical and psychological changes in adolescence. Cross tabulation of the role of peers in readiness menarche aims to provide a picture of the pattern of the relationship of these variables.

Based on the research results can be described as follows:

Table 5. The role of peers in readines menarche

NO	Readiness Menarche	The Role of Peers								τ	p
		Good		Moderate		Less		Amount			
		Σ	%	Σ	%	Σ	%	Σ	%		
1	Ready	23	33.3	12	17.4	2	2.9	37	53.6	0.236	0.015
2	Moderate	7	10.1	6	8.7	2	2.9	15	21.7		
3	Not Ready	5	7.2	3	4.3	9	13	17	24.7		
	Total	35	50.7	21	30.4	13	18.8	69	100		

The tables show that there are 23 respondents (33.3%) who are prepared for menarche with the role of peers was good and there were 2 respondents (2.9%) were prepared for menarche and the role of peers is less. Statistical test result p value of 0.015 ($p < 0.05$) showed no significant association between the role of peers in readiness menarche.

Sanjatmiko (2000) mentioned research by Boedhihartono in Bojong Jakarta concluded social environmental factors mainly influence peergroup have a relationship that is closely related to adolescent menarche status. Place of residence teens also have a role in preparing the maturity of adolescents facing puberty.

Readiness menarche dominated on the criteria prepared as much as 53%, while the criteria quite ready for 23% and 22% less prepared. That is because information about menarche have been obtained from various sources such as books or brief description of the teachers in the school. Provide clear and correct information is efforts to prevent early teen angst and unpreparedness to face menarche and the things that happen in puberty. According Purwinarsih (2005) mentions no significant relationship between the level of knowledge about menstruation menarche preparedness against 171 students at SD Muhammadiyah Yogyakarta Sokonandi with a correlation value of 0.264.

The results of this study support research qualitative study of menarche by Sanjatmiko (2000) to the peer group in around the metropolitan city of Jakarta on 147 girls named three socio-cultural environment to work simultaneously supporting the acceleration of age of menarche the family environment formal education and environmental peer group. Research by Sequeira et.al (2016) mentioned there is no association between the early menarche risk score and depressive symptoms or depression after age 14. It is provide evidence that the early menarche of adolescent not influence of depression.

Besides the role of peers, menarche also influenced by family conflict and father absence in childhood, it can be predicted an earlier age of menarche. These factors in combination showed evidence of influence on menarche. Age of adolescent girls can influence the readiness of menarche (Moffit,1992).

According to Yoo JH (2016) explains there is correlation between early menarche and psychosocial problems, the problems such as delinquency and risky sexual behavior, the physical health problems such as obesity, diabetes, cardiovascular diseases, and breast cancer throughout the lifespan of woman. Lee (2016) explains the timing of menarche in girls could be a marker for physical activity and sedentary after controlling for body mass index (BMI).

Limitations of this research is using questionnaires, and the student answer the questions while rest moment, so the answer less accurately because the time, so technically to filling the questionnaire have been mentoring by researchers.

Summary the study, there is relationship between the role of peers in preparedness menarche of students in Muhammadiyah Yogyakarta Karangwaru Elementary School.

Based on the results of the study, it is expected to give right information about menstruation or health reproduction information in order to the student can preparing their adolescent, and the teacher must controlling information exchange on peers group.

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MATERNAL CHARACTERISTICS ASSOCIATED WITH EXCLUSIVE BREASTFEEDING

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ABSTRACT

Scope of breastfeeding only in infants aged 0-6 months who called exclusive breastfeeding in developing countries and the poor countries is still low. In Indonesia, only 32% exclusive breastfeeding for infants aged less than six months, while 41% of exclusive breastfeeding for infants aged less than four months. The aim of this study to determine the correlation of maternal characteristics with exclusive breastfeeding in *Posyandu* working area of *Puskesmas Borobudur*, Central Java. This study used analytic survey with cross sectional study, conducted on 86 respondents consisted of mothers of infants aged 6-12 months, the mother works and does not work, come to *Posyandu*, do not have a history of engorgement, and a breast abscess. Insidental sampling technique was conducted during the period from June to July, 2013. Respondents fill kuesinoer about maternal characteristics with a number of exclusive breastfeeding 8 statement items with nominal category and second questions pemberian ASI statement with a yes-no. The results showed that there is a correlation between the mother's occupational status with exclusive breastfeeding with p value = 0.000 and medium level of correlation ($r = 0.472$). The correlation of maternal characteristics with exclusive breastfeeding was observed using the chi square test. The result of chi square test with p value > 0.05 indicates no correlation between the two variables. The results of these studies support the importance of knowledge improvement for working mothers to give exclusive breastfeeding for infants aged 0-6 months.

Keywords : occupational status, perception, exclusive breastfeeding

INTRODACTION

Exclusive breastfeeding is not only a national issue but also a global issue. One of the causes of malnutrition in children one of them with low exclusive breastfeeding in infants in the first six months of life (UNICEF, 2010)¹. Lack of employment agencies also make a significant contribution to low exclusive breastfeeding by working mothers, especially in the formal sector due to limited time and facilities for breastfeeding or expressing milk at work. Impact is a working mother was forced to switch to formula even to stop exclusive breastfeeding (Kemenkes RI, 2011)²

METHOD

This study used analytic survey with cross sectional study, conducted on 86 respondents consisted of mothers of infants aged 6-12 months, the mother works and does not work, come to Posyandu, do not have a history of engorgement, and a breast abscess. Insidental sampling technique was conducted during the period from June to July, 2013. Respondents fill kuesinoer about maternal characteristics with a number of exclusive breastfeeding 8 statement items with nominal category and second questions pemeberian ASI statement with a yes-no.

RESULT

Characteristics of respondents were observed in this study include, age, education, and employment.

Table 1. Characteristics of respondents

		Frekuensi	Persentase
1	Age		
	At risk (<20 th and >35 th)	13	15,1%
	Not at risk (20 th -35 th)	73	84,9%
	Total	86	100%
2	Education		
	Low	47	54,7%
	High	39	45,3%
	Total	86	100%
3	Occupation		
	Not work (housewife)	60	69,8%
	work	26	30,2%
	Total	86	100%

Table 1 shows that most respondents aged 20-35 years as many as 74 (86%), education level of low were 47 people (54,7%), and the most respondents as a housewife with 60 people (69.8%).

Correlation between maternal employment status with exclusive breastfeeding can dinalisis using chi square statistic test, with results :

Table 2. Maternal Characteristics Associated With Exclusive Breastfeeding

		Exclusive Breastfeeding				Chi Square	P Value
		Tidak		Ya			
		n	%	n	%		
Age	At risk ($<20^{\text{th}}$ and $>35^{\text{th}}$)	7	53,8	6	46,2	0,116	0,481
	Not at risk (20^{th} - 35^{th})	43	58,9	30	41,1		
Education	Low	26	55,3	21	44,7	0,339	0,359
	High	24	61,5	15	38,5		
Occupation	Tidak Bekerja	26	43,3	34	56,7	17,877	0,00
	Bekerja	24	92,3	2	7,7		

Uses a computerized calculation results obtained p value on the relationship of age and education with exclusive breastfeeding more than 0.05 so it does not show a significant relationship. While the relationship with the employment status of exclusive breastfeeding p value 0.00 shows the results, it showed a significant relationship.

DISCUSSION

Based on the results in table 2 show that age has no effect on exclusive breastfeeding. The average age of the respondents included in the group are not at risk as many as 73 people (86%), and are of reproductive age. Same with research conducted by Astuti (2012)³ showed that there was no correlation between maternal age with exclusive breastfeeding.

Research results in Table 2 of the relation between education and exclusive breastfeeding has a p value 0.359, this indicates that there is no significant relationship. This is consistent with the results of research conducted by Rahmawati (2014)⁴ which states that there is no relation between education and exclusive breastfeeding. The higher the level of education causes the respondents have good skills in receiving information relating to health. But the behavior of exclusive breastfeeding also influenced the local culture (Sulistyowati, 2014)⁵.

According to the table 2 result of research on the relationship between mother works with exclusive breastfeeding has a p-value of 0.00, this is according to research conducted by Pawenrusi (2011)⁶ that mothers work more exclusively breastfed

compared to working mothers. It is also consistent with the theory put forward by Roesli (2009)⁷ that the mother works mengalamidilema in giving exclusive breastfeeding the baby, even though they are aware of the benefits and superiority of breast milk, but difficult to practice. Working mothers have a higher tendency to Formula. Working mothers tend to have a little time to breastfeed her baby because of busy work. Many institution do not support breast-feeding program by not providing special space specifically for breastfeeding or pumping and storing breastfeeding (Roesli, 2009)⁷.

CONCLUSION

Working mothers are more likely to not provide exclusive breastfeeding although already know the benefits and his qualities This can happen because many institutions that do not support exclusive breastfeeding program

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THE RELATIONSHIP BETWEEN WOUND PERINEA CARE TO HEALING PERINEA AT POST PARTUM MOTHER IN RODLIYAH ACHID HOSPITAL PEMALANG

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ABSTRACT

Rupture on perineum has been declared as one of cause of mortality and morbidity. There was 11% death due to infections, however 22-25% from that case due to infection injury in the birth canal. The perineum wound care by using water betel leaf was applied in this research. This study was aim to explore the relationship between perineum wound care to the healing wound care of postpartum mother in the Muhammadiyah Rodliyah Achid Hospital, Pemalang. Crossectional method was used in this study. The population of this project was the postpartum mother with have the perineum neither wound due to neither episiotomy nor spontaneous rupture. A consecutive sampling 60 respondents was invited in this study. A Chi Square analysis was applied in this study. The result found p value= 0,00, RR= 5.97 ((95% CI : 1,81-19,6). That has mean if there was a significant relationship between perineum wound cares to the healing of wound care to postpartum mother. The recommendation was addressed to the next researcher to investigate the dosage for betel leaf water extract.

Keyword: *wound care, perineum care*

INTRODUCTION

One cause of maternal morbidity and mortality are on puerperal infection where the infection started from a ruptured perineum (Prawirohardjo, 2006). A total of 11% of maternal deaths are caused due to an infection where 25-55% of cases the infection is caused due to injury in the birth canal infection (Mochtar, 1998). Slow management of complications that can lead death in post-partum maternal physical condition is still weak (Manuaba, 1998). The period of post natal is a most vulnerable period for healthy mothers, because at the moment is when most mothers will prioritize care of newborn baby and ignore his own condition, in the period of post natal is the time most susceptible to infection (Boyle, 2009)

Perinea care is done to avoid infection due to conditions perineum strongly support the development of bacteria that lead to the emergence of complications of urinary tract infections and infections in the birth canal (Prawirohardjo, 2006).

The research problems is there a relationship between perinea care with maternal perinea wound healing post partum in Rodliah Achid Hospital Moga Pemalang?

The purpose of this study to determine the relationship between perinea care with maternal perinea wound healing post partum at Rodliah Achid Hospital MogaPemalang.

The benefits of this research are expected to contribute useful knowledge in the field of health, especially the health of puerperal women in the process of wound healing.

RESEARCH METHODS

This research method using cross sectional with a quantitative approach, where data obtained at one time. The number of samples using a calculation Yount (by percentage), a large population of between 101-1000 is 10%. The number of patients in 2014 to 576 perineum rupture, so that the sample taken is 57.6 which is rounded up to 60.

Sampling in this study using techniques Consecutive Sampling at 7 days post-partum mothers. The inclusion criteria of this study were 1) Mothers who give birth at Rodliyah Achid Hospital Moga Pemalang. 2) Willing to be a responder. 3) Do not have a history of chronic disease. The exclusion criteria of this study is the mother who give birth at Rodliyah Achid Hospital Moga Pemalang without rupture or episiotomy.

The tools used in the data collection sheet is in the form of questionnaires, observation sheets REEDA scale, weight scales and height measurement.

Methods of data collection is done by delivering questionnaires to respondents sheet to be filled before the respondents were given informed consent and explained about the purpose of research. As well as assessing the perinea wound healing using observation sheet REEDA scale.

Bivariate analysis is used to prove the existence of a relationship between two variables used statistical test Chi Square using a 95% confidence level with a degree of error when the value of $\alpha = 0.05$ $p < \alpha$ then there is a meaningful relationship, and if $p > \alpha$ then there is no relationship meaningful.

The study was conducted on post partum mothers who gave birth at the Hospital Rodliah Achid who re-visit on 7 day.

RESULTS AND DISCUSSION

Table 1 Table of frequency distribution perinea care with perinea wound healing

Variabel	Perineum wound				Amount
	Recover		Not recover		
	N	%	N	%	
<i>Perinea care</i>					
	22	61,1	14	38,9	36
Betel leaf water	5	20,8	19	79,2	24
Water					

The percentage of mothers who do perinea care by washing the perineum wound with betel leaf water more in the group of patients who experienced healing perinea wounds in the amount of 61.1% compared with the group of respondents who wound that has not healed perineum of 38.9%

Table 2 Relationship between perinea care with perineum wound healing

Variabel	Perineum wound healing				Amount	OR (CI 95%)	p-value
	Recover		Not recover				
	N	%	n	%			
<i>Perinea care</i>							
Betel leaf water	22	61,1	14	38,9	36	5,97	0,00
Water	5	20,8	19	79,2	24	(1,81-19,6)	

Based on the obtained statistical test p-value of 0.00, which means there is a significant relationship between perinea care and perinea wound healing. The results of the analysis obtained the value of RR was 5.97 (95% CI: 1.81 to 19.6), which means that mothers who have wash perineum with betel leaf water had 5.97 times higher perineum wound was healed compared with mothers who wash the wound with clean water.

This study supports research conducted by Celly Mutia (2010) that the respondent uses water betel leaves undergo wound healing perineum relatively quickly (day 3 - day 5), while respondents who use only the clean water wound healing of the perineum were

slow (more than a day to 7) as well as supporting research Nur Fitriana (2012) that 50.6% of respondents who use betel leaf water perinea wound-healing process is fast.

Use of water of red betel leaf perinea wounds heal faster compared to using clean water because the content chavicol makes boiled water betel leaves can be antiseptic (Manoi, 1997). Betel nutritious eliminate bacteria and fungi. Betel leaves are also resist bleeding, healing wounds (Sudewo, 2007). Karvakol on betel leaves are disinfectants, anti-fungal, so it can be used for antiseptic, eugenol can be used to reduce the pain, which makes the content chavicol boiled water betel leaves can be antiseptic (Manoi, 1997). The leaves are credited with wound healing property, The bioactive molecule thought to be responsible for anti-bacterial activity is sterol, which has been obtained in large quantities in betel leaf extracts, The leaf has also poses the antifungal activity against many fungal infections, The leaf has the great potency to act as natural antioxidant (Pradhan, Suri, Pradhan, & Biswasroy, 2013)

Through the betel leaf God has shown proof of his power, that everything he created to provide benefits for humans. It is stated in the Quran surah Al-An'am verse 99 that in creating plants through His power is to have benefits for humans.

And it is He who sends down rain from the sky, and We produce thereby the growth of all things. We produce from it greenery from which We produce grains arranged in layers. And from the palm trees - of its emerging fruit are clusters hanging low. And [We produce] gardens of grapevines and olives and pomegranates, similar yet varied. Look at [each off] its fruit when it yields and [at] its ripening. Indeed in that are signs for a people who believe

Use of betel leaf water for perinea wounds healing faster compared to using clean water because the content chavicol makes boiled water betel leaves can be antiseptic (Manoi, 1997).

CONCLUSIONS AND SUGGESTIONS

Conclusion

There is a significant relationship between tradition and perinea wound healing. The results of the analysis obtained the value of RR was 5.97 (95% CI: 1.81 to 19.6), which means that mothers who have a tradition of antiseptic wash with water perinea had 5.97

times higher odds perineal wound was healed compared with mothers who wash the wound with clean water.

Suggestion

The use of antiseptics fluid (water betel leaves) are very petrified perineal speed the healing of wounds in the post-partum mothers. Future studies are expected to investigate the best dosage betel leaves water as a liquid anti-septic safe for post-partum mothers

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ANALYSIS OF CARDIAC REHABILITATION FITNESS LEVEL OF PATIENTS POST PTCA

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Abstract

Cardiac problems will arise if there is obstruction or abnormalities in the coronary arteries. Before the total blockage of the blood vessels, the heart surgery patients for stenting via heart catheterization is usually called PTCA (Percutaneous Transluminal Coronary Angioplasty). Patients who had heart surgery performed PTCA required to undergo a cardiac rehabilitation program to improve fitness. Fitness is important for patients post PTCA such as cardiac rehabilitation. This study design is a pre-experiment. Primary data collected from the patient's cardiac rehabilitation Main Husada Hospital Surabaya. Repeated Measure Annova analysis with SPSS 16 software was employed. The results showed that the value of $p = 0.000$ ($\alpha = 0.05$), which means there is influence between cardiac rehabilitation (road 6 minutes) to increase the fitness of patients post PTCA.

Background

The heart is a vital organ in the human body. Heart problems will arise if there is obstruction or abnormalities in the coronary arteries. For example, if there is total blockage that occurs in the coronary arteries, potentially will result in a heart attack that may be followed by sudden death or heart failure. Therefore, before the total blockage of the blood vessels, the heart surgery patients for stenting via heart catheterization is usually called PTCA (percutaneous Transluminal Coronary Angioplasty). PTCA is useful to dilate the blood vessels narrow so that the blood vessels in the heart can be widened and it can improve the works. After the operation of cardiac catheterization, the patient will follow a cardiac rehabilitation (Perk, Joep, 2012).

Cardiac rehabilitation is an effort to help people with heart disease to restore physical health status, increase fitness, improve medical conditions, psychological, social, emotional, and sexuality. The rehabilitation program is done through activities that are comprehensive, including education and counseling, controlling risk factors, and physical education programs. (Rokhaeni, et al, 2011). Today has been known concept of cardiac rehabilitation are integrated by a team of cardiac rehabilitation,

involving various disciplines, namely medicine cardiac specialist, nutrition, physiotherapy, medical rehabilitation and psychology.

According to data recorded in of the Local Health Department of Surabaya in 2013 there were 3,480 cases of coronary heart disease, and in 2012 was 3,636 cases was occurred. Besides, the data recorded on the Main Husada Hospital Surabaya in 2013, there was 2,699 people with heart disease. Furthermore, in 2014 the number of patients with coronary heart disease was 3,025. There is fact need to be highlighted that the increasing incidence of heart disease, the increasingly high number of heart operations performed. Therefore, patients who had heart surgery performed PTCA required to take a cardiac rehabilitation program such as fitness. On average, during first time usually patients post PTCA performed less on cardiac rehabilitation fitness level, especially for the elderly.

Based on the description of the background above the important role of nurses in nursing care for patients post PTCA is to improve fitness. Patients need to be encouraged to attend cardiac rehabilitation exercise which is a program of exercise training in cardiac patients that are useful to restore the quality of life and improve physical fitness as well as physical, especially in the elderly. Therefore, there will be positive influence of the 6 minutes in a cardiac rehabilitation for elderly patients with post PTCA fitness level.

Research methods

The research design was pre-experimental design with pre and post measurements on a sample of post PTCA patients who followed the path 6 minutes. Which in this study, independent variable is (path 6 minutes in a cardiac rehabilitation) and the dependent variable is fitness level. Both variables will be analyzed if there would be any influences or not. This research was conducted in November 2015. The location of this research is the first space Cardiac Rehabilitation Hospital Husada Utama Surabaya. The population in this study were all patients post cardiac rehabilitation PTCA which were 35 people. The number of participation were decided from total number of patients post PTCA per year about ie 420, therefore every month it would be

35 on average. The sample in this study, a number of 35 samples. Sampling in this study are nonprobability sampling using purposive sampling. Data collected was analysed by using Annova repeted measure.

Result

General data research results is a picture of the characteristics of respondents that include gender, age, education, occupation, income and marital status.

1. Characteristics of respondents by sex

Tabel.1 Characteristics of respondents by sex post PTCA in elderly patients in cardiac rehabilitation

Gender	Frequency (f)	Percentage (%)
Man	22	68.8
female	10	31.3
Total	32	100

Table 1 shows about sex of the patients post PTCA. There was 22 male (68.8) and 10 (31.3%) female.

2. Characteristics of respondents by age.

Table. 2 Characteristics of respondents by age post PTCA in elderly patients in cardiac rehabilitation

Age (Years)	Frequency (f)	Percentage (%)
60 Years - 65 Years	20	62.5
66 Years - 70 Years	10	31.3
71 Years - 75 Years	2	6.3
Total	32	100

Table 2 presents that post PTCA patients aged 60 Years - 65 Years was 20 people (62.5%), 66 Years - 70 Years was 10 people (31.3%), and 71 Years - 75 year was 2 people (6.3%).

3. Characteristics of respondents by education

Table. 3 Characteristics of respondents by education post PTCA in elderly patients in cardiac rehabilitation

Last education	Frequency (f)	Percentage (%)
SMP	0	0
SMU / SMK	10	31.3
College	22	68.8
Total	32	100

Table 3 describes about level of education of patient with post PTCA which are 22 people (31.3%) completed college, 10 people (68.8%) completed high school, and there are no post PTCA patients with secondary school education.

4. Characteristics of respondents by job

Table. 4 Characteristics of respondents by job post PTC elderly patients in cardiac rehabilitation

Work	Frequency (f)	Percentage (%)
Retired Public Servant	15	46.9
Private employees	10	31.3
Traders / Self Employed	5	15.6
Housewife	2	6.3
Does not work	0	0
Total	32	100

Table 4 shows about patient's occupation 15 people (46.9%) were retirement, 10 people (31.3%) as private employees, 5 people (15.6%) as having their business, and 2 people (6.3%) as housewives, and nothing worked.

5. Characteristics of respondents by income

Table. 5 Characteristics of respondents by income post PTCA in elderly patients in cardiac rehabilitation

Income	Frequency (f)	Percentage (%)
<Rp.2.000.000		
Rp.2.000.000-	0	0
Rp 3,500,000	2	6.3
>Rp.3.500.000-	5	15.6
Rp.4.500.000	10	31.3
>Rp.4.500.000-	15	46.9
Rp. 5,000,000		
> Rp. 5,000,000		
Total	32	100

Table 5 shows that of the total sample of 32 respondents, there were 15 respondents (46.9%) earnings of > Rp. 5.000.000, -, 10 respondents (31.3%) earnings of > Rp. 4.500.000, - - Rp. 5.000.000, - 5 respondents (15.6%) had an income of > Rp. 3,500,000, - - Rp. 4.500.000, -, 2 respondents (6.3%) had revenue of Rp. 2.000.000, - - Rp. 3.500.000, - and no respondents whose income <Rp.2.000.000,-

6. Characteristics of respondents by marital status

Table. 6 Characteristics of respondents by marital status post PTCA in elderly patients in cardiac rehabilitation

Marital status	Frequency (f)	Percentage (%)
Married		
not Married	28	87.5
Married (Husband	0	0
Died)	2	6.3
Married (Wife	2	6.3
Died)		
Total	32	100

Table 6 describes about marital of participants, there were 28 people (87.5%) are married, 2 people (6.3%) was widowed.

Specific data to be displayed in tabular form the effect of 6 minutes in a cardiac rehabilitation on the level of fitness of patients post PTCA in Cardiac Rehabilitation Hospital Room Husada Utama Surabaya measured with each arrival of patients who run rehabilitation program.

7. Effect of Road 6 Minutes On The Level Fitness Post PTCA In Elderly Patients in Cardiac Rehabilitation hospital room Husada Utama Surabaya.

Table 7 Effect of Road 6 Minutes On The Level Fitness Post PTCA In Elderly Patients in Cardiac Rehabilitation hospital room Husada Utama Surabaya.

Measure: MEASURE_1

Within Subjects Effect	Approx.Chi-Square	df	Sig
TIME	47.305	2	0.000

Based on Table 7 explains that there is influence of the 6 minutes in a cardiac rehabilitation to fitness level post PTCA in elderly patients with repeted measure ANOVA test results that showed $p = 0.0000$ ($p < 0.05$).

Discussion

1. Respondents before the 6-minute program in cardiac rehabilitation

At first the elderly patients after PTCA surgery less fitness level before the 6-minute training in cardiac rehabilitation, so you will need to follow the program the way 6 minutes in a cardiac rehabilitation to improve his fitness. In accordance with the theory described cooper (2009) that for heart patients need special training to restore their quality of life as they are, therefore, specific exercises that are safe and healthy elderly patients for heart patients who have surgery is to follow the program the way 6 minutes into cardiac rehabilitation.

6-minute walking exercise in cardiac rehabilitation can improve fitness and improve quality of life of such patients before surgery and it is much better than before. Besides the advantage of the path 6 minutes program in a cardiac rehabilitation patients also need to be discuss with a nutritionist, medical rehab doctors and psychologists. Therefore, in addition to 6-minute walking exercise in cardiac rehabilitation, patients will be monitored for their nutritional status, the movement of walking and breathing exercises by doctors of medical rehabilitation. Psychological status after surgery will be seen and assessed by a psychologist.

From the results of the study, there is an evidence that previously patients have less performance on the 6-minute training in cardiac rehabilitation. Some of the factors affecting the level of fitness such as knowledge and lack of exercise. On average, patients with less fitness level is because they are in elderly. Therefore, their age influence their body function. Then the lack of knowledge about the factors healing process and good nutrition after surgery. On average patients after cardiac surgery have lack understanding related to the sport for heart health. That might be one of the reason on the less number of patient who participate in the rehabilitation.

There are many complex issues related to post PTCA in elderly patients before they took the 6-minute training in cardiac rehabilitation. Usually, elderly patients is very rare for the sport at home after heart surgery. Therefore, elderly patients usually need special supervision and special observations and special training such as by doing a 6-minute walking exercise in cardiac rehabilitation at the hospital main husada Surabaya. According Butland, stating that the road test for 6 minutes has the best mileage value and correlated with optimal functional ability in elderly patients. Measuring respiratory gas exchange during maximal exercise test is the preferred method for assessing the functional capacity. This measurement is required to adjust the intensity of the exercise and assess the effects of exercise during a cardiac rehabilitation program, especially in the elderly safe.

Several studies have shown that significantly the 6-minute test (6 MWT) is a submaximal exercise test that resembles everyday activities and was well tolerated with heart failure. Beside that running capacity is an important factor in assessing the quality of life for heart patients. 6 minute road test provides an objective indication of functional capacity and exercise tolerance because of the distance ambulation is shown in conjunction with a maximum of symptoms that arise due to limited oxygen consumption. And a road of test 6 minutes also show the results of clinical improvement in heart patients who had heart surgery PTCA and following cardiac rehabilitation program on a regular basis and measured in accordance doses of exercise done, this test is a test for the easy way to do, better tolerated and more describe activities of daily life.

2. Respondents after 6 minutes following the walking program in cardiac rehabilitation

After following the program of 6 minutes walking, there were more than 50% of respondents increased their fitness and health. If respondents were active in participating in a cardiac rehabilitation program they tend to have higher level of fitness.

Program 6 minutes walking in a cardiac rehabilitation exercise is the safest sport and good for the elderly who have heart surgery such as post PTCA. According to Cooper (2009), with the 6-minute exercise, the body will make a smooth blood circulation and the body would become healthier. Healthy lifestyle after surgery post PTCA is necessary because it will prevent re-blockage of the blood vessels in the heart. Physically and mentally healthy life reduces the risk of heart disease returned.

Sports in cardiac rehabilitation in the elderly consists of several steps that must be done. Stages include heating, exercises, drills road 6 minutes, and cooling. Heating should be performed within 5-10 minutes so that the heart rate increases gradually. Examples of walking, the slowly walking, stretching, performed for 5 minutes or later then heart gymnastics performed for 10 minutes and continued to practice the 6-minute recorded by means of telemetry for 6 minutes and then rest and cooling. If the stage is already done, the next step in order to evaluate the 6-minute walking exercise is further increased in accordance with the training program as a benchmark early next exercise. It is need to be highlight that the evaluation is important for a fitness component that shows signs of increase or decrease in fitness. But after the respondents joint the 6-minute exercise program, there is an increased of their fitness levels.

Several studies have shown significant that the 6-minute test (6 MWT) is a submaximal exercise test that resembles everyday activities and it was well tolerated with heart failure. Beside that running capacity is an important factor in assessing the quality of life for the patients. 6 minute walking test provides an objective indication of functional capacity and exercise tolerance because of the distance ambulation is shown in conjunction with a maximum of symptoms that arise due to limited oxygen consumption. And a walking test of 6 minutes also show the results of clinical improvement of the patients who had heart surgery. After participating in a cardiac rehabilitation program on a regular basis, there will be measurement of doses of exercise, this test is a easier way to do, better tolerated and more describe the activity everyday life.

After post PTCA, elderly patients do the path 6 minutes of exercise in cardiac rehabilitation, the state organs including metabolism in the body to function optimally, if at any time required. For example, when the body needs to move quickly to in anticipation of a situation, or perhaps the body needs to move along taxes your muscles and joints more severe, the heart has to pump faster, lung have to sift in maximum level through more air to produce oxygen more, then a fit body will be able to perform these tasks well and still have the energy reserves to enjoy time spare and still no power savings for unexpected needs.

Therefore the post PTCA in elderly patients are required to take a training of 6 minutes walking in a cardiac rehabilitation to improve their fitness as well as their quality of life. According to research I studied, post PTCA patients have better fitness level after following 6-minute walking exercise.

3. Effect of 6 Minutes Walking On The Level In Cardiac Rehabilitation Centre PTCA in Patients Post Cardiac Rehab Lounge Top Husada Hospital Surabaya

Effect of 6 Minutes walking in Cardiac Rehabilitation On The Level Fitness Patients Post PTCA in the cardiac rehabilitation hospital Husada Utama Surabaya can be analyzed using the Wilcoxon test with 32 respondents resulted that the influence of the 6 minutes walking in a cardiac rehabilitation to fitness levels and the probability value (r) 0,000 ($r < 0.05$), which means that there is the Effect of 6 Minutes walking in cardiac rehabilitation patient on the Level Fitness Post PTCA in cardiac rehabilitation hospital room Husada Utama Surabaya. Cardiac rehabilitation is a program that is expected to better health of patients optimally and promoting lifestyle changes in patients with CHD (Deaner, 2011). Rehabilitation in patients with PTCA is a necessary factor in helping of curing the patient in order to return quickly to the normal life or at least approaching the condition as previously (Rokhaeni, et al, 2011). The goal of cardiac rehabilitation is to reduce stress, improve quality of life, reduced mortality and morbidity, reducing the risk of re-infarction by modifying risk factors, and reduce the need for invasive procedures (Deaner, 2009). According Rokhaeni, et al (2011) on CHD cardiac rehabilitation to improve the physical, mental, social as well as improve the fitness of the patient as optimally as possible so that it can carry out activities. Currently cardiac rehabilitation not only contains the concept for recovering patients but it also

included secondary prevention efforts, so that rehabilitation is able to suppress the rate of morbidity and mortality. Cardiac rehabilitation program is a series of crucial conducted in patients with various forms of heart disorders such as heart attack/ myocardial infarction, coronary bypass surgery, chronic heart disease, post-coronary angioplasty, peripheral artery disease, congestive heart failure. The program is a multifactorial activities include physical exercise, education and counseling on a variety of efforts, including interventions that are integrated and comprehensive activity.

At the 6-minute exercise in cardiac rehabilitation has been shown to be effective in the elderly to improve their fitness by following a 6-minute walking exercise at the main hospital husada Surabaya. 6-minute walking exercise conducted in the elderly is very safe and well to assess the level of fitness. That starts with a warm-up exercise by physiotherapists and trained the movement of walking correctly in order to post PTCA in elderly patients understand how walking is good and right that are not easily tired, so the achievement of good results and maximum in 6-minute walk. After a 6-minute walk post PTCA in elderly patients trained for cooling so that the relaxation process of breathing and movement for flexing.

From the results of the evaluation and research in cardiac rehabilitation hospital room husada shows that the main 6 minutes of exercise is beneficial effect in doing breathing and movement, especially in walking. For example, more confident in walking as previously were walking slowly and it can improving performance of daily activities. It shows the influence of the 6 minutes walking in a cardiac rehabilitation to fitness level in elderly patients post PTCA.

From the above evidence it can be concluded that there is significant influence of the way 6 minutes walking for cardiac rehabilitation to fitness level post PTCA in elderly patients in cardiac rehabilitation hospital room main husada Surabaya. So it is advisable for patients post PTCA to improve his fitness and back in a healthy condition than before the illness.

Conclusion

Based on the meeting results of research and test results on the discussions held, it can be concluded as follows:

1. Before doing the path 6 minutes program in a cardiac rehabilitation 32 respondents were having less fitness level.
2. After doing 6 minutes walking in a cardiac rehabilitation, 32 respondent have increasing level of fitness.
3. There is the influence of the 6 minutes walking in a cardiac rehabilitation to fitness level in elderly patients post PTCA in the room is cardiac rehabilitation Husada Utama Hospital Surabaya

Suggestion

Based on the research findings, some suggestions submitted to the related parties are as follows:

1. For the patients.

After heart surgery, the patient should immediately follow the cardiac rehabilitation program to learn a good sport and a safe for your heart after cardiac surgery. Because cardiac rehabilitation can improve fitness and restore the quality of life of patients with better than before the illness.

2. for the Family

The family has a very important role in supporting and assisting their families who suffer a heart in order to run a program provided by a team of good health.

3. For instance (Hospital)

Nursing care should focusing on preventive measures and rehabilitation, especially for sports safe in patients post PTCA to be implemented properly, and cardiac rehabilitation program that is already in the hospital should be more activated and developed for better services

4. For further research

Future studies are expected to conduct research on "The Effect of Cardiac Rehabilitation Patient Anxiety Levels Against Post CABG".


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SEMINAR MINUTES

Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Ratih Indah Kartikasari
Title of Presentation	The Effect of Storytelling using Finger Puppet to Hygiene of Nail Fingers of Preschoolers
Reviewer	Dr. Janet Hirst
Summary of Presentation	 <p>Storytelling is an activity that has the potential to support a constructive growth and development of mental for children, in addition to the child's thinking would be better, more critical and intelligent, one of the media used in storytelling is using a finger puppet. The Aim of this study was to determine the effect storytelling using finger puppet to the hygiene of nail fingers of preschoolers. The design of this study uses Quasi Experimental of time design. The Sample used in this study were some preschoolers in Aisyiyah Bustanul Atfhal (ABA) 2 Lamongan included in the inclusion criteria are 40 Children, the instrument used in this study was a scenario that used for storytelling using a finger puppet, beside that observation sheet for nails hygiene and the data collection was conducted form February to Augst 2014. The data that has been processed was anayled to get the differences before and after the treatment being given. It usd Wilcoxon test with significan level $\alpha < 0.05$. The research theory by Lenox (2000) describes other effects of storytelling is a very powerfull tool to improve children's understanding of theirself and others</p>
Summary of Discussion	Afer getting permission, researchers determined according to the survey respondets inclusion criteria. Then, futher observations nail hygiene was held on one-four week between 40 child and with parents. The researcher teach the parents to using scenario before act, otherwise for reach the concistency, we build a good intervention, it means storytelling ascpet that must be considered in order to work effectively is trying to be creative and have bidirectional communication. So the result of this study show indicate that storytelling methods influence on nail hygiene at preschool age children

SEMINAR MINUTES

Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Rany Muliany Sudirman
Title of Presentation	The Role of Peers & Media Pornographic Exposure With sexual Behavior of Adolescents
Reviewer	Dr. Janet Hirst
Summary of Presentation	<p>The phenomenon happened in public during this shows that sexual behavior teenagers and sex juvenile pre marriage increase over the years. Data and surveys undertaken by BKKBN in 2010, it is known that as many as 51% of teens in Jakarta, Bogor, Depok, Tangerang and Bekasi (Jabodetabek), had sex. Surabaya was recorded 54%, Bandung, 47%, and 53% in Medan. The figure rose compared with previous years. The results of preliminary studies and interviews to guidance and counseling teachers, in getting information that in the year of 2013 there are seven students were released from the school because due to pregnancy outside marriage. The objective of the research to identify effect the role of peer and pornographic media expose and other factors an adolescent sexual behavior with quantitative research (cross sectional desgin)</p>
Summary of Discussion	<p>Result showed that peer role, high pornography exposure, self control, alcohol and drug adiction related with adolescent sexual behavior. Result of logistic regression analysis proved that alcohol and drugs adiction dominantly contributed adolescent sexual behaviour with OR 2.54 (95%CI: 0,799-8,115)</p> <p>Negative peer role, high pornographic exposure, negative self control and effect alcohol and drug related with adolescent sexual behavior. Adolescent with alcohol and drugs adiction has chance 3 times to do sexual behavior than adolescent without of alcohol and drugs adiction. For attention, sex educate and alchol holic is different think to adolesecent, presenter must be concern about sosial impact about to discuss matters relating to reproductive health and reproductive health taboo issue for the childern for not getting information from the envrioment and friends.</p>

SEMINAR MINUTES

Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Rizki Amalia, SST., MPH
Title of Presentation	The Association Of Early BreastFeeding Initiation & Uterine Involution
Reviewer	Dr. Janet Hirst
Summary of Presentation	<p>Postpartum mothers breastfeed (not all) their babies though early breastfeeding initiation is one of the important things to accelerate or stimulate breast milk production and improve uterine contractions. Research plan to investigate the association of early breastfeeding initiation to infants and uterine involution in normal postpartum women at day 7th.</p> <p>An analytical study with cross sectional design. The population was normal postpartum mothers within August-September 2016, involved 32 respondents. Data collection was through palpation and observation.</p>
Summary of Discussion	<p>X² analysis obtained the expected frequency <5 more than 20%, Fisher's Exact Test showed significant results $p = 0.000$ $p > \alpha$, which means that there is an association of early breastfeeding initiation and uterine involution. The result obtained from Fisher's Exact Test shows the correlation between the time of first breastfeeding and uterine involution. It is supported by the theory proposed by Ibrahim (2006). Claiming that during breastfeeding, baby's sucking will stimulate the smooth muscles in nipples that are transferred to the brain by the nerves. The brain will instructs the <i>pituitary gland</i> (hypophysis) to produce <i>pituitary hormone delivered to the smooth muscles in breast so that they will have better contractions</i>.</p> <p>The conclusion of this study is there is relationship between early breastfeeding initiation with uterine involution in normal postpartum women at day 7th. The existence of many factors that influence the dependent variable suggested to perform study of other independent variables and suggested to health care facilities, especially for postpartum mothers and puerperal to improve the application of the rooming system intensively as efforts to enhance maternal and child health.</p>

SEMINAR MINUTES

Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Edy Suprayitno, Suharto, Purwaningsih
Title of Presentation	Perceived benefits of Action & Situational Influences of Nurses/health Workers in PMTCT
Reviewer	Dr. Janet Hirst
Summary of Presentation	<p>The Data from UNAIDS (2012): 34 milion people with HIV/AIDS worldwide, which it 50% of those were women and 2.1 milion children under years old. Researcher focus to increasing number of men and women who have sexual relations is not safe. The prevention must be build in four step. (1) the prevention of HIV transmission in women of reproductive age (15-49 years) (2) prevention of unintended pregnancies in HIV positive women (3) prevention of transmission of HIV from pregnant women to their fetuses (4) psychological, social and health care support for HIV-infected mothers, their infants and their families. Research was quasi experimental, respondents nurses/health workers. Anacova test was applied to analyze.</p>
Summary of Discussion	<p>Respondens total is 20 (10 with control and 10 without control) Table 2 prove that the training contributed significantly in improving the skills of nurses/health workers in implementing health promotion and education. Based on the identification of each variable in Perceived Benefits of Action and Situational Influences before and after treatment by applying anacova test, the obtained significance values were 0,000 for situational factor and 0,009 for benefits of action. Suggestion, training contributed significantly in improving the skills of nurses/health workers in implementing health promotion and education. Integration between PMTCT, PITC and health promotion and education services supported by the Maternal and Child Health (MCH) are also significantly required.</p>



SEMINAR MINUTES

Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Eka Saptingrium & Widaryati
Title of Presentation	The Effect of Health Education With Demonstration Method on First AID Knowledge of Food Poisoning In Sanggarahan Banjarharjo, Kalibawang, Kulonprogo
Reviewer	Dr. Janet Hirst
Summary of Presentation	Food posioning is a side effect security and most often be a probelm categorized into foodborne disease outbreak. January-June was 75 incidents (65,2%) in indonesia about posioning food (on may 2013 in Sanggarahan, Kulonprogo). The health education needs to be presented as attractive as possible by using various methods (demonstration) . The study use pre-experimental method with one group pretest-posttest design for 80% people with probability sampling (25 people – random)
Summary of Discussion	There is the effect of health education with demonstration method on the first aid knowledge of food poisoning in Sanggrahan Village Banjarharjo Kalibawang Kulon Progo (independent variable = educate first aid, and the dependent variable is people consumption). The researcher explain that posioning food is very high in indonesia, government just focus in prvention, not treatmentt, in daily ilfe, people dont know what to do in first aid in food posioning. Suggestion for nurses is expected to provide information to public related to first aid on food poisoning through health education, for community expected to provide clear and coorct information about how to perform first aid on poisoning

SEMINAR MINUTES

Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Luluk Khusnul D
Title of Presentation	Correlation Between Nutritional Status & Menstruation Length With Anemia on Adolescent
Reviewer	Dr. Janet Hirst
Summary of Presentation	<p>Adolescent anemia prevention efforts in Indonesia have three strategies, namely iron supplementation, nutrition education and food fortification. The tendency of nutritional problems in developing countries often become a threat to development and the development of a nation. Anemia is one of the main nutritional problem in Indonesia. Supplementation program by the government is the Prevention and Treatment Anemia Nutrition Iron (PPAGB) with a target group of middle school students. Program for adolescent is promotions and campaigns to schools independently by means of iron supplementation dose of one tablet once a week for at least 16 weeks, and it is recommended to drink one tablet every day during menstrual period (Kemenkes RI, 2011). In this study, using a quantitative method correlation with cross sectional approach. Population of 62 respondents, the sampling technique is total sampling and the sample was 62 respondents. The independent variables in this study are the nutritional status and menstruation length, the dependent variable in this study was the anemia occurrence.</p>
Summary of Discussion	<p>In this study, the relationship between nutritional status and the incidence of anemia among adolescent in Muhammadiyah 7 Yogyakarta High School. This is according to research Hapzah (2012) which states there is a relationship with the nutritional status of anemia in adolescent in vocational Governmental Semarang ($p < 0.05$). Adolescent are expected to take steps to prevent anemia of yourself by eating iron tablet during menstruation. School Health Unit Muhammadiyah 7 Yogyakarta High School expected to improve school health services in adolescent girls, especially for the supply of iron tablet in collaboration with the department of health.</p>

SEMINAR MINUTES

Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Ilda Aprilia Anggraini
Title of Presentation	Correlation Between Knowledge Level & Preventive Behavior of Pathological Leucorrhoe Among Nursing Students
Reviewer	Dr. Janet Hirst
Summary of Presentation	<p>Leucorrhoea is a normal situation, but it can lead to pathological if hygiene bad behavior. Prevention behaviors unfavorable discharge will cause various effects, such as lack of confidence, pathological vaginal discharge, pelvic inflammatory disease, uterine cancer, infertility and death. The government has run a program as specified in Law number 36 on health through the National Population and Family Planning (BKKBN) is to open a place for the teens through the Adolescent Health Information Center (PIK-R). The research design uses a quantitative research with approach is cross-sectional.</p> <p>Based on the results of statistical analysis using the Kendal Tau formula obtained $p = 0.001$ which indicates $p < 0.005$ so that H_0 rejected and H_a accepted with interpretation "There is a correlation knowledge level with prevention behavior of pathological Leucorrhoea students of sixth semester Nursing Program at the 'Aisyiyah University.</p>
Summary of Discussion	<p>There is correlation between knowledge level and preventive behavior of pathological leucorrhoea in sixth semester student at school of nursing 'Aisyiyah University of Yogyakarta. The collect data design questioner for knowledge level and behavior level (scale ordinal with close questions).</p> <p>From these results, it is expected that student at 'Aisyiyah University Yogyakarta add information or improve reproductive health knowledge, especially about Leucorrhoea, by reading books in the library and access via the Internet how to appropriately discharge prevention.</p>

SEMINAR MINUTES

Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Sarwinati & Galuh Mahendra
Title of Presentation	The Effect of Dysmenorrhea Gymnastic Exercise On Dysmenorrhea Pain
Reviewer	Dr. Janet Hirst
Summary of Presentation	Menstruation is the process of exfoliating of endometrium that is accompanied by bleeding occurring repeatedly every month. In normal women, periodically every month they will experience a particular reproductive cycle called menstruation. One of menstrual disorders that can cause physical discomfort is dysmenorrheal. Based on preliminary studies in physiotherapy student, among 80 female students there were 50 people suffering from dysmenorrhea. The Research design uses pre exeperimental (one group pretest and posttest) with students of physiotherapy in 'Aisyiyah University of Yogyakarta (50 people) as population in purposive sampling (Wilcoxon text analysis)
Summary of Discussion	<div> </div> <p>Almost all women including female teenagers must have felt menstrual disorders such as menstrual pain at various levels, ranging from just a pain in the pelvis from the inside until severe pain. Generally, the usual pain felt below the stomach that occurs on the first and second day during menstrual period. If it is not overcome, menstrual pain may cause discomfort for women. Thus, it needs practical treatmnet and does not cause side effects, namely the handling of non-pharmacological form of exercise. Based on research conducted at the 'Aisyiyah University of Yogyakarta, it can be concluded that the rate of menstrual pain (dysmenorrhea) before being given dysmenorrheal exercises was 5.47 in the category of moderate pain. Level of menstrual pain (dysmenorrhea) after being given exercises dysmenorrhea was 3.58 in the category of mild pain. It is expected to Physiotherapy profession that the result of the study can add the knowledge. Physiotherapy study in overcoming menstrual pain (dysmenorrhea) non-pharmacologically.</p>

SEMINAR MINUTES

Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Siti Khotimah & Ratri Heta Kharisma
Title of Presentation	The Differences On the Effects Between Giving Brain Gym Exercise & Educational game Tools To Increase The Fine Motor Skills of Childern Aged 4-5 Years
Reviewer	Dr. Janet Hirst
Summary of Presentation	<p>Many mother who have children also serve as a breadwinner, Therefore they have little time to care for and educate their children. As a result children receive less stimulation and learning opportunities, and not a few children who have lateness in fine motorik skill. The study use Brain gym is body movement skill; it is body movement that is coordinated, so it can help to optimize brain function. Therefore brain gym will facilitate right brain and left brain to work with balance condition. Lateral dimension is the part that gets right brain and left brain stimulation. Besides, in focus dimension brain gym also has impact on relaxing back part of the brain and front part of the brain. Educational Games Tool is a term that refers to the props that were especially given to children in their early age, particularly between the ages of 0-5 years. Research design use experimental (randomized pre test & post test two group</p>
Summary of Discussion	<p>Limitations of this study is the seriousness of children in following the research efforts. To control each child are things beyond the reach of researchers. Because each child is different characteristics. In conclusion, there is a difference in the effect of brain gym exercises by means of educational toys to increase fine motor skills of children aged 4-5 years. For Further Research Providing advice on further research to supplement research time for the results obtained more leverage and control as well as ensure the seriousness of the respondents.</p>

SEMINAR MINUTES

Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Rosmita Nuzuliana
Title of Presentation	The Relationship Between Mothers Occupation With Development Stimulation At Umbulharjo Primary Health Care I Yogyakarta
Reviewer	Dr. Janet Hirst
Summary of Presentation	<p>In Indonesia, the number of delay development in toddlers has no reported. However, based on survey data from the World Health Organization showed that the prevalence of intellectual disability children under ten years of age in 2010 in the world by 1,3% and in Southeast Asia totaled to 1.19%. Environmental factors is recognize as the one of the factors that influence childhood development after the infant is born. Environmental factors include psychosocial factors consist of stimulation from parents, caregivers or her neighborhood. Regular stimulation and provide a conducive environment consequently will make children more quickly in accomplishing the task of development</p> <p>We use Observational and cross sectional with quantitative approach was applied in current study. The variables in this study were mother's occupation, stimulation, level of education and level of income. A consecutive sampling among 0-36 month old children was invited in this research, and the setting was at Umbulharjo Primary Health Care I, Yogyakarta. The criteria inclusions were considered to 66 respondents. There were two tools in this project, demographic questionnaire and stimulation development.</p>
Summary of Discussion	<p>The analysis show there was no significant relationship between mother's occupation and stimulation development. Second, there was no significant relationship between mother's educations level and stimulation development. Last, there was no significant relationship between family income and stimulation to the toddlers. In future research, Health workers at Umbulharjo PHC I could give the counseling for mothers who has the early child for the stimulation development in qualitative research (maybe find, puberty, pregnant, & more)</p>



SEMINAR MINUTES

Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Nurul Kurniati
Title of Presentation	Relationship Between The Role Of Peers and Readiness Menarche For Students
Reviewer	Dr. Janet Hirst
Summary of Presentation	<p>Adolescent Reproductive Health Survey of 8,481 young women 18% never asked about the physical changes at puberty, source of knowledge on puberty in females 20.1% of the mothers, 3.3% of the fathers, 44.4% from friends. In political concern, Regulation from Indonesia Government about Unit of Healthy School facility. Nearly 50% of adolescents discuss menstruation before the first menstrual period with his friend, and 37% with the mother (IMOH, 2007). So, the question is How the relationship role of peers in readiness menarche student of Muhammadiyah Karangwaru Elementary School ?. The research purpose is to know determine the relationships role of peers and readiness menarche for adolescents with quantitative research (Univariat and Bivariat analysis)</p>
Summary of Discussion	<p>Limitations of this research is using questionnaires, and the student answer the questions while rest moment, so the answer less accurately because the time, so technically to filling the questionnaire have been mentoring by researchers. The study can to generalize to other adolescence with amount 69 respondents.</p> <p>The research provide clear and correct information is efforts to prevent early teen angst and unpreparedness to face menarche and the things that happen in puberty. According Purwinarsih (2005) mentions no significant relationship between the level of knowledge about menstruation menarche preparedness against 171 students at Muhammadiyah Yogyakarta Sokonandi Elementary School with a correlation value of 0.264. In the future research, to give clear and correct information about menstruation or health reproductive information in order to the student can prepare their adolescent, and the teacher must controlling information exchange on peers group.</p>

SEMINAR MINUTES

Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Kharisah Diniyah
Title of Presentation	Maternal Characteristic Associated With Exclusive Breastfeeding
Reviewer	Dr. Janet Hirst
Summary of Presentation	In Indonesia, only 32% exclusive breastfeeding for infants aged less than six months, while 41% of exclusive breastfeeding for infants aged less than four months. Lack of employment agencies also make a significant contribution to low exclusive breastfeeding by working mothers. Exclusive breastfeeding is not only a national issue but also a global issue. Which it Scope of breastfeeding only in infants aged 0-6 months who called exclusive breastfeeding in developing countries and the poor countries is still low. The research uses method quantitative study analytic with cross sectional study, research subject use 86 respondents consisted of mothers of infants aged 6-12 months. The mother works and does not work, come to Posyandu, do not have a history of engorgement, and a breast abscess
Summary of Discussion	In this study, maternal characteristics such as age and education were not correlated significantly with exclusive breastfeeding as shown by p value 0.481 and 0.359, respectively. Type of occupation was found to associate with exclusive breastfeeding initiation, as shown by p value<0.05. Working mothers are more likely to not provide exclusive breastfeeding although already know the benefits and his qualities. This can happen because many institutions that do not support exclusive breastfeeding program. Otherwise, in large research must be concern about activity & profile to know how long the object have quality time for family.



SEMINAR MINUTES

Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Nuli Nuryanti Zulala
Title of Presentation	The Relationship Between Wound Perinea Care To Healing Perinea At Post Partum Mother in Rodliyah Achid Hospital Pemalang
Reviewer	Dr. Janet Hirst
Summary of Presentation	<p>The research problems is there a relationship between wound perinea care to healing perinea at post partum in Rodliyah Achid Hospital Moga Pemalang ?, with purpose that research to determine the relationship between wound perinea care to healing perinea at post partum in Rodliyah Achid Hospital Moga Pemalang. To have a good results the number of samples using a calculation Yount (by percentage), a large population of between 101-1000 is 10%. The number of patients in 2014 to 576 perineum rupture, so that the sample taken is 57.6 which is rounded up to 60. And for Consecutive Sampling at 7 days post-partum mothers. Bivariate analysis is used Chi Square using a 95% confidence level with a degree of error when the value of $\alpha = 0.05$</p>
Summary of Discussion	<p>The tools used in the data collection sheet is in the form of questionnaires, observation sheets REEDA scale, weight scales and height measurement. The percentage of mothers who do perinea care by washing the perineum wound with betel leaf water more in the group of patients who experienced healing perinea wounds in the amount of 61.1% compared with the group of respondents who wound that has not healed perineum of 38.9%. The use of antiseptics fluid (water betel leaves) are very petrified perineum speed the healing of wounds in the post-partum mothers. Future studies are expected to investigate the best dosage betel leaves water as a liquid anti-septic safe for post-partum mothers. For the record, the objective matters, not just bettel leaf water, lavender, honey & another equipment, with use the assisant to collect data, for assesment for paring with recycle.</p>

Group D



HEALTH BELIEFE MODELS ON MOTHER WITH HIV/AIDS IN PREVENTING PERINATAL TRANSMISSION RISK: A QUALITATIVE STUDY

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ABSTRACT

HIV Transmission from mothers to children occurs during gestation period, delivery period, as well as post partum period. The Research is conducted to determine health belief models on mother with HIV/AIDS in preventing perinatal transmission risk in Daerah Istimewa Yogyakarta Province. This study was descriptive Qualitative with an explanatory research. Data collected by in-depth interview with 10 mother who have experience with PMTCT program were collected by Snowball sampling. Result shown that knowledge of HIV AIDS provides women's self understanding for people living with HIV about the vulnerability of their immune system, PMTCT is program with the aim that their children are not infected, Perceived Severity: Severe, if not taking medication regularly could be getting worse, Perceived Susceptibility: If compliance can infect the baby, the mother cannot survive if it does not take ARVs, Perceived Benefits: prevented, the baby can be healthy not infected, Perceived Barriers: discrimination on female PLWHA, difficulty accessing health services, Cues to Action: Support from the midwives or the other health worker, husband support, and family support. Self-efficacy: Desire for a baby /child is not infected, a commitment to abide by the rules (take medication regularly and timely, safe feeding of infants, safe delivery election, prophylactic), want to live a healthy life for the sake of the children. Conclusion: Health Belief Models affects pregnant women with HIV to adhere to the PMTCT program.

Keyword: Health Belief Models, HIV transmission

INTRODUCTION

Prevention of mother to child Transmisson (PMTCT) of HIV or services prevention of HIV transmission from mother to child is a part of care, support and treatment for patients with HIV/AIDS. It is written in the third prong of PMTCT program is the prevention of HIV transmission from mother to unborn baby that is by providing antiretroviral drugs during pregnancy, deliveries safety in hospital who serve PMTCT, and give safe feeding in babies born and give ARV profylaksis (Mirkuzie *et al.*, 2010).

The risk of HIV transmission is not limited to sub-populations of high risk behavior, but also include their spouse, even their children. Without special efforts, it is predicted that by the end of 2016 there will be an accumulative HIV transmission in more than 26,997 children born to HIV-infected mothers. The mothers are mostly infected from their husband (MoH RI, 2013).

According Chinkode et al (2009) the large number of drop outs pregnant women of a whole series of PMTCT programs with a variety of reasons such as to avoid the disclosure of HIV status and reactionnegative of society, gender inequality, difficulty accessing care and treatment, and lack of support from her husband. According to theoretical Health Belief Model (HBM) in Glanz et al (2008) mentions that the perception of the individual in the mother that can affect compliance which are perceived susceptibility, perceived severity, perceived benefits, perceived barriers, self efficacy, and cues to action.

Theory Health Belief Model (HBM) was originally developed as a systematic method to explain and predict the behavior of preventive health. It is focused on the relationship of health behaviors, practices, and service utilization. In later years, HBM has been revised to include the motivation of public health with the aim to distinguish between disease and illness behavior of health behavior. This method is widely used in the last five decades to the study of health behaviors (Rapoff, 2010). HBM itself has six major elements to build that perception of severity, perceived susceptibility, perceived benefits, perceived barriers, self-efficacy, and support for action. However, the sixth element was also influenced by several factors that modify. Factors that modify includes knowledge and sociodemographic factors can affect health perceptions. While health beliefs include perceptions of severity, perceived susceptibility, perceived benefits, perceived barriers and self efficacy. Factors that modify earlier can affect health perceptions, as well as the incentive to act. A collection of individual beliefs that will affect a person's behavior (Glanz et al, 2008).

METHODS

This was a descriptive qualitative study with a narrative (exploratory) design conducted in Daerah Istimewa Yogyakarta Province. Once all aspects of the phenomenon had been successfully explored, the researchers wanted to describe the characteristics of the phenomenon completely and thoroughly with explanations and narrative sentences (Poerwandari, 2009). Our respondent was 10 mothers with HIV positive. They are found by snowball sampling. Triangulation analysis was used in this research by midwife, psychologist, and sociologist. I categorized the comment of respondent based on categorization of the similar theme found of the comment based on Health Belief models theory.

RESULT AND DISCUSSION

1. Modification Factors : Knowledge of HIV / AIDS and PMTCT good of informant

Knowledge of HIV / AIDS is less understood and considers that HIV is a disease that attacks the immune alone, and assumes that HIV / AIDS is the same. R5 very layman to understand this is because only learned of the disease when the test PITC time during their pregnancy as high risk (age 45 years) in health centers and HIV positive result. Here is an excerpt of the interview:

"Yes, viral disease that attacks the immune blood, AIDS difference at less know if I miss, but I think more severe AIDS mbak"(R2)

"...HIV and AIDS are the same to me... its terrible disease..."(R4)

"...Knew from the health center has not previously know. I am shock and very sad, supposing the layman know in pregnant condition so I am very sad..."(R9)

While R6 and R8 informant was able to distinguish between HIV and AIDS but have not yet understood that one HIV infection is when a pregnancy without following PMTCT program well. This can be seen in the following interview:

"...It attacks the immune system. The medicine should be taken regularly. If not relapse. If AIDS collection of diseases that have been attacked. If the newly infected HIV disease..."(R6)

"....From a syringe, of intercourse, lack of know that pregnant fit, I think only if you do not breastfeed definitely not contagious..."(R8)

Informants most understanding about HIV / AIDS and PMTCT are R1 and R3 are the NGOs and had experienced have a first child HIV so that the second pregnancy adhere to correct the program so that children are not infected, as in the following interview:

"...Ok, HIV was, uh ... a virus that attacks the human immune system. Then AIDS itself is a set of symptoms that arise because the immune system is damaged by HIV..." (R1)

"...So, uh ... what's it called prevention programs, eee ... transmission of HIV from mother to child. He'eh. ARV therapy through one, then a second election of birthing, eee prophylaxis third ... after births of the baby born.." (R3)

"...Yes start regularly and dutifully taking ARVs during pregnancy, childbirth safely in accordance with the recommendation of medical personnel, the baby is also given a prophylactic, and if possible be given breast milk but should be committed, not mixed feeding..." (R3)

2. Perceived Severity:HIV is a severe illness in which the stakes are lives if not obedient to take medication

All of the 10 informants, have the perception that HIV is a severe illness in which the stakes are lives if not obedient to take medication. Only R5 that consider illness was not severe because they can perform daily activities and have not been hospitalized in the hospital, it is appropriate snippet of the interview below:

"...Eeem ... if not obedient yes stakes lives, it's only that. He'eh, So what is it can be severe if not in compliance. But I tried for the first child for HIV-positive, I try to ya we can be friends with this disease. So, uh ... friend could be so evil if we are evil, can be a good friend if we are good. Eee ... control must be there. During obedient so everywhere must take ARVs, it will all be alright.." (R6)

".. not severe, yes my son was healthy thank God, I do not think,, because I can not complain anything and can still activity like before..dan I was not hospitalized...." (R5)

3. Perceived Susceptibility: if it does not comply will cause the severity of which can cause death and infect the baby

All of the informant coment that if them does not comply will cause the severity of which can cause death and infect the baby. Only a failed R4 have the perception of vulnerability during pregnancy and childbirth because closing their HIV status so that spontaneous delivery at health centers and managed to conceal their HIV status from health officials. After her second child aged 3 months of pain and frequent hospitalizations in the new hospital R4 admit that their HIV status. Thus, R4 now feel remorse. Both of the above are listed in the following interview snippets:

"...Which obviously does many bad effects, which is certainly the virus will attack the immune system, if for example not keeping up with other antiretroviral drugs or vitamins may support we will not survive yet again later can be transmitted to the baby..." (R9)

"...consequently will make our children in a pityage 3 months was three times hospitalized.."(R4)

4. **Perceived Benefit : by following the PMTCT program is useful for preventing the transmission of HIV from mother to baby so eager to have a healthy child from this program**

All informants coment by following helpful PMTCT program to prevent transmission of HIV from mother to baby so eager to have a healthy child from the program. Here are excerpts of the interview:

"...Relieved ... Yesterday test negative baby, tomorrow's already six weeks would test the baby may not be infected.." (R9)

5. **Perceived Barrier : Discrimination on female PLWHA and difficulty accessing health services**

Discrimination on female PLWHA and difficulty Accessing Health Services seen in the following interview:

"....Difficulties in my opinion as far, because it should PMTCT at Sardjito one Yogya although some hospitals are able to do CST but for PMTCT must Sardjito, Such as public Hospital of Bantul, Hospital of Morangan , all that PMTCT must be at Sardjito. Though they've been able CST..."(R8)

"...Fear of open status, because my son had discriminated against, set apart, eating set apart, thermometer disendiriin, other patients suspected what her son sick..."(R4)

6. **Self efficacy**

1) The desire to break the chain of transmission of both people and children who are born

Confidence all informants to participate in this program with a pronounced by all informants, because of their desire to have healthy children so they can have a healthy offspring. It is listed in the following interview :

"...Yes, for the sake of the children, named disease that can be eliminated, so respected, if people only buy cold medicine, especially diseases like that, if not taken what it would be, yes drunk..." (R5)

2) The desire to live a healthy life for the support of children and provide education for people in the vicinity

The desire to live healthy for the support of their children felt by R10, which is a widow with two children, where he became the backbone of the family. R10 thus feel compelled to obediently follow the PMTCT program is because R10 has 2 children who should be fulfilled the needs of his life. It is listed in the following interview:

"....Eummm..i have two children to be lived. If I was not healthy who want to give my children eat. Hihhi..so the hell's the point. Then we still have a lot of homework to provide education about HIV / AIDS. Education about HIV/AIDS in the community less...." (R10)

7. Cues to action :

Support from her husband received, support from family and society, support from health workers earned by all informants except R4 are still closing status, and support from NGOs obtained by all informants as seen in the following snippet of the interview:

"...Very supportive, I control every husband would participate, the daily also he is very reminds me to take medicine..."(R3)

"...in the house has its own alarm, amen amen amen alarm sounds, the second pregnancy routine to take medication, has its own alarm, each family member to remind each other, because yes it so as not perforated holes, at 6 am at 6pm the same child together, made the same hour.."(R1)

According to HBM theory that explains that knowledge is one of the factors that influence a person's perception modifications that would encourage someone to behave according to their knowledge (Glanz, *et al*, 2008). If someone knows that PMTCT is a program that aims to prevent HIV transmission from mother to baby then with her conscious mind that someone will behave in accordance with the knowledge, so it will encourage people to adhere to PMTCT programs. This is in line with the theory of rational thought by Coleman in Ritzer *et al* (2010) which revealed that people's actions led to a goal and a purpose (as well as the action) is determined by the value or selection (preference). In terms of social psychology, the process of acceptance and implementation of environmental information can be explained by the theory of social cognition. Social cognition is the way someone interpret, analyze, remember, and use of information about the social world (Baron & Byrne, 2002). In this case, the process of forming social cognition includes three stages, namely attention (attention), encoding (storage), and retrieval (rediscovery). Informants have each perspective in assessing the HIV/AIDS that they have suffered. Most informants argue that if HIV / AIDS they are experiencing are severe that they must take medication on a regular basis so that their condition is getting worse.

In addition to this theory, can be explained also with theory Health beliefs Models which states that the perception of severity, perceived susceptibility, perceived benefits, perceived barriers, urge to act, and self-efficacy individuals will influence individuals to behave (Glanz, *et al.*, 2008). Differing opinions about the condition of self-esteem can also be explained by the theory of self-perception. According to Bem (1972), a person trying to understand the behavior, emotions, and other circumstances in him by

observing his behavior that looks and or circumstances that underlie the emergence of such behavior.

The more benefits can be felt by the respondent, then they will be more confident to run the PMTCT program. This can be explained through the theory of self-knowledge. Self knowledge is accurate self-perception of how a person thinks, feels, and behaves, as well as awareness of how these patterns are interpreted by others (Vazire & Carlson, 2010). After obtaining sufficient information about the benefits of PMTCT, the informant was to process that information into itself through thoughts and feelings. Furthermore, they make an assessment about themselves as well as the effects of their behavior on others. They were finally able to decide to remain adherent to PMTCT because it was felt to benefit both themselves and others.

The next perception that self-actualization is also influential in people living with HIV in the social environment is self-esteem (McDonald, 2007) found that self-esteem is a reflection of one's feelings upon receipt of himself before others. Self esteem show the effect on confidence and social behaviors in interpersonal relationships. Low self esteem can interfere with interpersonal relationships (Asante, 2012). HIV-positive people with low self esteem would represent an unsafe way in protecting yourself. This then makes other people who interact with them also felt uncomfortable with the behavior that he showed in communicating. Low self esteem can be characterized by anxiety and fear while speaking.

Lyons (2010) revealed that social support plays an important role in alleviating depression in people with HIV/AIDS. Feeling supported by others makes a person could rise again. Similarly, the opinion Asante (2012) that the support of the people closest to such partner, friends and family are able to produce psychological wellbeing for PLWHA.

This is in line with research Byamugisha et al (2010) which states that male involvement in PMTCT programs is very low. It is also seen in this study, The level of self-efficacy of the respondents also determine their success in implementing PMTCT. Self efficacy is a person's belief in the ability to organize and execute actions that lead to the prospective situation. Self efficacy contributes to motivation in various forms, which determine the destination created man for himself, beliefs about what she could

do, the strength of the business he spends, the time it needed to survive in the face of adversity, as well as the durability in the face of failure (Bandura, 1995).

Difficult social acceptance by society against people with HIV can be explained by the thought Ervin Goffman called stigma or negative labeling. Goffman studied various structures that arise in the community and some of the effects that arise when there are things that disturb the structure. One which he pointed out is how stigma appears. In society there are three types of stigma (Ritzer et al, 2010).

Rational choice is in line with what is expressed by Coleman in Ritzer et al (2010) that the individual actions lead to a purpose and that purpose (as well as the action) is determined by the value or selection (preference). That is based on the methodology of individualism, an action intensional followed by assumption that a person's actions done rationally if he has a preference and make decisions based on the framework. Further support from the smallest social institution like families also factors that determine the success of a person in action, in this case the adherence to run PMTCT. However, the encouragement of the family did not move out to the structure of Society. It still considers PLWHA as someone who has a deviant behavior and stigmatize them. As a result, many of them covering HIV status for fear of being ostracized, discriminated against in access to health care with a ban pregnant, or have difficulty accessing proper health without pay. It is these factors that hinder people living with HIV achieve success in implementing PMTCT.

Obstacles in terms of the difficulty of access to health against PMTCT program is consistent with research Chinkode *et al* (2008) which mentions the difficulty accessing care and treatment are impediments to the success of the PMTCT program in Malawi. Another study discusses the limitations in accessing PMTCT services is mentioned also by O'Gorman *et al* (2008) which states that the limitations of PMTCT services is still a constraint.

CONCLUSSION

Health Belief Models affects pregnant women with HIV to adhere to the PMTCT program. Further research is needed with different approaches for example, by observation participants actively to follow daily activities informant and also it can be used in larger of respondent

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Empowerment of Women in Rural Area in Maluku, Indonesia

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Abstract

Poverty and mental health are two sides of a coin, which unfortunately were affected by violent conflict in Maluku, Indonesia. Long term conflict in Maluku had created vast poverty and mental health problems. Previous studies in Maluku indicated that women were more vulnerable to experience high distress level compared to men. Factors identified as to heightened distress level among women were poverty, unavailability access to health care and lack of economic opportunity. This is an action research study that focuses on the empowerment of women in Waralohi. The action research approach enable the researchers to understand difficulties of the women in their natural environment. Problems were identifies together by the reserachers and the women of Waralohi. Possession of data were collectively held by the researchers and the community. After several months of working together with the community, we have seen some positive changes among the women. Their confident level has increased and their understanding of the importance of quality of life has improved. Some potential community leaders were identified from the women and they were encouraged to further assist their community to obtain better access in health and economic opportunities.

Keywords: Women's vulnerability, economic empowerment, psychosocial empowerment, poverty, Conflict

Introduction

Waralohi village is a village from Kamariang. In general, the socio-economic condition of the Waralohi people has experienced downturn. One of the reasons of this downturn is the social conflict that occurred in the year 1999. This condition is made worse by the dictatorship and authoritarian style of leadership applied by the head of village. Their own leader has deprived the Waralohi people of many of their rights. This rights deprivation is what has denied the women of Waralohi access to improve the conditions in their own village. The women of Waralohi village are vulnerable to abuse and injustice. The efforts of the Waralohi people are often unfruitful. They have repeatedly reported the injustice they experienced to the Mother Village but have not received any response. The women and people of Waralohi have reached the point of giving up their efforts.

In March-April 2013, the appointment of a new head of Waralohi village was held without the knowledge of the Waralohi people. The new head of village was the son of the previous head of village. This upset the Waralohi people and made them feel that they were deprived of their right to determine their own leader. The appointment of the new head of village was suspected as a move made by the previous head of village so that he could still exercise control over Waralohi. At first, the women of Waralohi simply accepted what had happened, but, after being organized, their hope to rise and stand up for their rights was created. They gathered together and discussed about demanding a democratic election. Their efforts to demand a reelection failed, but nevertheless they still strengthened ties between women who dreamt of creating change in their village.

There were 200 families residing in Waralohi Village before the conflict occurred. After the conflict occurred there were merely 40 families residing in the village. Many of the people were afraid to return to the village due to experiencing trauma. Some returned to Waralohi Village because they did not have any other choice. Others stayed in their relatives' or friends' houses. They admitted that they were afraid of a conflict reoccurrence. Even though they sold *papalele*, they still didn't feel safe to sell.

In the fourth week of August 2012: Distribution of help to the victims of the conflict and refugees for Waralohi Village by Social Services. This distribution of help became an 'act' of the new head of Waralohi Village. With initiation from the head of village, he himself eventually distributed financial help. This disappointed the people of Waralohi because the financial help they received was cut.

April 2013: Waralohi Village awaits a new leader. They have committed to democratically electing their new leader. Again, their efforts failed due to the acts of their head of village. The Head of Waralohi Village forged the signatures of the people of Waralohi. He then presented these signatures to the King of Kamariang so that his own son would become the next head of village. Problems then arised when the people of Waralohi claimed to have not signed anything to support the election of this new head of village.

During the election for governor, the head of Waralohi village forced the Waralohi people to choose a certain candidate, but with initiation from the people of the area, they chose the candidates of their choice. The people of Waralohi became more critical and more willing to stand up for their rights.

One of the things assisted by Mrs. Fatma was the movement of the people willing to change their village. This movement began with the socialization of laws concerning the eradication of domestic violence and violence toward women issues. At first, the women of Waralohi were reluctant to share their stories and aspirations, but eventually they all agreed to set up service providing posts.

The women then held several meetings and discussions. Some of the things discussed in these meetings were the problems the women experienced, women's rights and violence etc. They also discussed the education in their village, and how to create fair change that would benefit common interest. The women then decided to set up posts which they named Inalohi. They also created a place for early childhood education, which they named Nailohi

In August 2012, there was flooding and the women complained of crop failure. They were asked to report in detail their farming necessities and it was then decided that there would be funding by LAPPAN for 10 people. This program of giving venture capital through women who were victims of conflict and marginalized, was conducted to support efforts in conflict transformation, to develop livelihoods of women and to help victims cope. The efforts made above were within the framework of developing women's critical awareness of acting for change on the level of family and community.

In April 2013, Waralohi village received socialization from Kairatu primary health care. The information socialized included issues related to respiratory tract infections, creating a village hygiene plan, clean beaches, inviting the people to defecate in public restrooms or if they must use the beach or garden, how they must dig a hole and cover it in order not to spread diseases to other people. The activation of secondary primary health care in Waralohi, encouraged the creation of *posyandu* because the women complained of walking a distance of 10 km to Pakarena. Several duties of the new head of village were also agreed on. These duties were to coordinate

with Kamariang Country and to request permission for the creation of *posyandu* in Waralohi village. While acting upon these duties, the head of village agreed to be assisted by several women, but until now this responsibility has not yet been fulfilled. This angered and disappointed these women because every time the women initiated something, the head of village would always hamper and suspect their ideas. The spirit of these women ignited by IbuFatma were steps that gave rise to a women-based movement in change initiation.

23rd of June, 2013: A meeting was held with the women of Waralohi economy group. There were 10 participants in this meeting. During this meeting, economic empowerment and sources of living for women were discussed. In general, women in Waralohi have double roles being domestic roles and roles as an additional breadwinner. The women have primary and secondary sources of living. The secondary sources are used if there are obstacles in the primary source. There are also non-formal jobs which are not continuous for additional money, but nevertheless these non-formal jobs only gain them about Rp. 5000-8000 in 2-3 hours. These efforts are made because the women's husbands do not earn a steady wage. Because of the declining economic condition, the women choose to become breadwinners.

The conditions before and after conflict experienced by the women of Waralohi, on average indicate that life before conflict was better. The women say that before the conflict, their economic life was better because they held a steady job. Several women say that life before and after the conflict was the same. The only difference is that the cost of living is more expensive after the conflict. The efforts made by the women of Waralohi right now are self recovery from conflict conditions, building social interactions naturally with other communities, even though this hasn't been maximal because the women still feel reluctant, scared, and don't feel comfortable or safe. Learning from conflict situations that haven't been completely resolved by the parties involved have made the people live in an environment of anxiety and suspicion.

Methods

This is a community based study using action research approach. The community understudy was the village of Waralohi. Waralohi is located in Seram

island, the biggest island in Maluku province. The number of participant for this study was about 100 persons, those were all of the inhabitants of Waralohi village that consist of women, children and men. Data were collected through qualitative method using interview, group interviews and focus group discussions. Observations were conducted throughout the whole process of the research.

Results and Discussion

These are some of the results from the action research study. The women were engaged in several empowerment activity that were initiated by the researcher.

24th of June, 2013: The researcher conducted a hearing, bringing a letter from the National Commission for Women to show to the district. This letter questioned the district's commitment to facilitate another meeting with all posts in the district of Kairatu. The district then agreed to commit to facilitate a meeting and encourage workshops together. The district also distributed the National Commission for Women's letter to all villages in the district of Kairatu and tried to support the building and strengthening of posts in order to obtain legality through a deed on the district level. During this time, LAPPAN met with the king of Uraur, Hatusua, Seruawan, Kamariang and Waipirit. The kings were willing to commit to immediately building posts so that the victims could be accompanied. Obstacles in the building of the posts were also discussed during this meeting, but all the kings or heads of village committed to building posts because the victims in their villages needed these posts. LAPPAN visited the homes of the victims' families in Seruawan Village. The conditions of the victims already improved; they were able to play and interact with their friends, return to school and receive support from their family, neighbors and teachers.

4th July, 2013: Mrs. Fatma, along with LAPPAN, conducted a hearing together the head of primary health care of Kairatu. The construction of *posyandu*, visum et repertum procedure for victims of violence, and helping the people understand healthy life styles. Later on the same date the women held a meeting with the Head of Criminology Unit of Kairatu. Several things were discussed during these meeting: criminal cases of raping disabled children, underage marriage and the ways to handle these criminal cases.

Conclusion

The women were more confident and active in the community events. Some economic initiatives managed to improve the social status of the women and some potential leaders were identified.

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The Association of Maternal-Fetal Attachment and Mother's Education Level Among Pregnant Women In Indonesia

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Abstract

Background: Maternal-fetal attachment has been known as the emotional tie between fetal and mother during pregnancy period. Education is an important former to increase the maternal and baby well being both during pregnancy period and after birth.

Purpose: To investigate the relationship between maternal-fetal attachments and mother's education level among pregnant women in Indonesia.

Method: The study used a descriptive correlation study on 130 pregnant women in the late stage of pregnancy (>29 weeks gestation), utilized a Muller's maternal-fetal attachment scale and Demographic Questionnaire as the instrument.

Result: There was no direct positive relation between maternal-fetal attachments and mother's education level.

INTRODUCTION

The importance of mainatining mothers and infants together and encouraging their interaction is supported by research studies (Brandon, Pitts, Denton, Stringer, & Evans, 2009; Cranley, 1981; Muller, 1993). This adaptation process begins during pregnancy and contributes to the development of child care behavior and feelings of pleasure in being a mother (Souise et al, 2010). Investigations have suggested that prenatal attachment motivates good health practices during pregnancy such as abstinence for tobacco, alcohol and illegal drugs, obtaining prenatal care, healthy diet, sleep habits, learning about pregnancy, and perhaps even serves as a protective factor against prenatal depression (Lindgren, 2001; Sandbrook, 2009).

In Indonesia, little has been known about the attachment between expected mother and the fetal. In addition, it did not emphasize on maternal- fetal attachment, much has

been focus on postnatal stage (Muti'ah, 2009; Zevalnkink et al., 1999). At the same time, when considering maternal attachment, much of the focus has been on the postpartum period (Gau., 1996). On the other hand, women consider pregnancy as an equally important period that initiates and leads into healthy maternal-child attachment after birth (Anand & Hima, 2012; Muller, 1996). However, a low maternal-fetal attachment is influenced by the level of education. Mothers who had graduated from the low level of education tend to be lack of ability to adopt the information regarding pregnancy.

METHOD

The study used a cross-sectional survey involved 130 pregnant women in two Primary Healthcare Centers in Yogyakarta (Jetis and Tegalrejo). Ethical approval for this study has been obtained from Dinas Perijinan Kota Yogyakarta.

During a routine antenatal visit at the Jetis and Tegalrejo Primary Healthcare Centers, pregnant women with gestational age of 29 weeks and above, aged between 20-35 years old, and had been diagnosed for not having any complication during pregnancy were invited to complete the questionnaires. This study utilized two instruments; Indonesian Version of Prenatal Attachment (PAI) and demographic questionnaire.

Indonesia Version of Prenatal Attachment Inventory (IPAI)

Initially, researcher adopted and adapted the English version of Prenatal Attachment Inventory through translation and back translation procedures. The original version was translated by first translator, and then the translation version was back translated by second translator. Appropriate background and criteria for two translators were considered. Then, committee review was conducted to found the discrepancies between two versions, this step was revised the Indonesian version of Prenatal Attachment in the terms.

Then, three experts were invited to give the judgment to the Indonesia version. Content validity Index (CVI) was used to guide the judgment. This procedure was through two rounds. The first round, researcher calculated the CVI, revised the item following the suggestion from experts. Then, the second round, involved the experts accepted the revision based on the first round. Furthermore, to establish the validity and reliability for new instrument, contrasted group validity was applied. During the pilot project, researcher was inviting 113 pregnant women from two contrast groups. The first group was pregnant women from early stage of pregnancy and the second group was pregnant women from the late stage of pregnancy. Finally, the internal consistency was .93 and pretty high to this new instrument.

RESULT AND DISCUSSION

The characteristic of respondents is as described as the table below:

Table 1.
Demographic information

Variable	Kategori	n (%)
Age	20-25 years old	50 (43%)
	26-35 years old	67 (57%)
Religion	Islam	117 (100%)
Occupation	Housewife	50 (43%)
	Worker	67 (57%)
Fetal movement	Experience	117 (100%)
	None	0 (0%)

The table showed that almost 50% of respondents were 20-25 years old, likewise, respondents were 26-35 years old also almost 50%. Then, the entire respondents are Moslem. Regarding the occupation, 43% mothers are housewives; meanwhile working mothers are as many as 57%. This current study invited normal pregnant women of late stage of pregnancy, and therefore all the mothers were experiencing fetal movement.

Table 2.
The relationship between level of education and IPAI

		Mother's education		Total	<i>p value*</i>
		Low education level	High education level		
Score IPAI	Low	4	12	16	>0.05
	High	27	74	101	
Total		31	86	117	

*Chi square

Table 2 has shown if *p value* was >0.05 which indicated that there is no significant relationship between maternal fetal attachment and mother's education level. This result in line with the previous study, Muller&Mercer (1993). They stated that education level did not relate to the level of maternal-fetal attachment. Meanwhile, some factors that related with the quality of attachment during pregnancy need to be investigated. Currently, maternal who have low education level could access the information related with pregnancy from many sources. Formal education for mother should not restrict the mother with low education level to have an access as mother who has graduated from high level of education.

Maternal-fetal attachment is recognized as the emotional tie between mother and their infant during pregnancy. This relationship was nurture come from the mother's thought, think and feeling to their fetus to protect from harm and express the love. Abasi, et. al (2012) also found the same result with current study. They also underlined that there was no significant correlation between maternal-fetal attachment and mother's education in their study.

CONCLUSION AND RECOMENDATION

This study has obtained the aim of research. However, some limitations study has been identified. There are some factors affecting the level of attachment during pregnancy need to be investigated in the next research. Then, complex method and different variables need to be applied for the next study. Based on the result, in conclusion, exploring prenatal attachment could assist health professionals to promote health practice during pregnancy without consider the education level of mothers.

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Family Support Relationships with school age Children's Nutritional Status at Meranti Island, Riau Province

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ABSTRACT

This research objective is to examine the relationship between peer support to school age Children's Nutritional Status. This research uses descriptive correlation research design with cross sectional approach. These samples included 90 respondents drawn based on inclusion criteria using purposive sampling techniques and chi square test. Instrument uses questionnaire that have passed validity and reliability test. Nutrition status was measured by Body Mass Index (BMI.) Statistical test shows there is a relationship between peer support and the school age children's nutritional status which obtain p value $(0.005) < \alpha (0.05)$ so that it can be concluded there is a significant correlation between family support to school age children nutritional status. The results of this study recommends that peer can be a support system to provide motivation and encouragement for school age children as well as to facilitate and provide information on the treatment of increasing nutritional status

Keywords: peer, support, school age children, nutritional status.

BACKGROUND

Good quality human resource in determining the success of national development of a nation. Qualified human resources are a resource that has the physical toughness, mental strength and good health in addition to mastery of the progress of science and technology (Jalal, 2008). Health development should include health oriented development, community development and family and ministry of health (Depkes, 2012).

Efforts to improve the nutritional status for the development of quality human resources in essence should be initiated as early as possible, one of which is a child of school age. Primary school children is a strategic objective in the improvement of public nutrition (Choi et al., 2008). This is important because school children are the future generation so it needs to be prepared with a good-quality, school-age children are experiencing growth both physically and mentally that is needed to support life in the

future, to support these circumstances, school-age children need optimal conditions, and it is necessary for good nutritional status (Depkes, 2005; Joshi, 2011).

School age children (6-12 years) is one of the groups vulnerable to nutritional problems in the form of protein-energy malnutrition. Basic Health Research in 2010 indicated that about 44.4% of school children, the level of energy consumption of less than 70% of the Nutrition Adequacy Score (AKG). A total of 59.7% of school age children protein consumption level of less than 80% by AKG. Riskesdas in 2010, showed the prevalence of nutritional status in Riau province that is very thin (7.6%), thin (6.3%), normal (75.2%) and obese (10.9%).

Based on the results of Riau Province in 2015 Riskesdas known nutritional status of school-age children in the District Meranti based on BMI / age, very thin variable 5.5% and thin 11.9%, whereas skinny nutritional status based on TB (height)/age, very short 10.1% and short 19.6%, Besides the feeding behavior of unhealthy foods such as instant noodles is high at 12.9%. This figure is quite high when compared to District / Other cities in Riau Province

District Meranti Island is one of the coastal areas in the province of Riau. The livelihoods in this coastal areas is majority of fishermen. This district is no supporting infrastructure such as transport, so that the distribution of food to the area is difficult. Because most people in the Meranti island working as a fisherman, so it also had an impact on the knowledge about nutrition. As a result, people are not much aware of nutrition and can occur lack of diversity of food consumed.

This area is also difficult to get clean water, because almost all Districts have the brownish water. According Almatsier (2006) diversification of food, consumption patterns and environmental sanitation are some of the factors affecting the nutritional problems in children of school age.

Research Saifah (2011) says that a powerful factor in shaping a child's nutritional behavior primary school age is the role of the teacher, the role of parents and the role of peers.

Parents are the primary responsibility in control over the process of the formation of character. The role of parents is very important to provide insight to the child as the main stock prior to interact with the social environment and for their development. The process mimics occurs when children see and follow what is being implemented by the

parents. Factors intimacy between parent-child makes support from parents can be a great motivation in an effort to change the behavior of health maintenance behaviors including child nutrition (Bobak, 2005).\

Factors influencing parental support including employment, income, education level, and number of children in the family. Work can affect the time they spend in the family and a source of revenue that could be used for child health (Hong Liu and Zhong zhao, 2011). Income parents can also affect the nutritional health maintenance. Income parents can relate to children's health because it affects the quality and quantity of healthcare acquired by them (Susan E.Mayer, 2002).

Education is the second largest factor of socio-economic factors that influence health status. Someone who has a high level of education will have a good knowledge and attitudes about health that will affect behavior for a healthy life, and vice versa (Lina Natamiharja, 2011). The number of children in the family will affect the attention and affection received by children, particularly because of health problems related to time to give attention to each child. (Hallet K B, P O'Rourke K, 2003). But these factors are rarely known and taken into account in the prevention and containment procedures nutritional problems.

Based on the above phenomenon, researchers interested in studying the relationship between family support with the nutritional status of primary school children in Meranti Island. The purpose of this research is to identify how the relationship between family support with the nutritional status of primary school children in Meranti Island.

METHOD

The research design was descriptive correlation with cross sectional approach. The population in this study are all elementary school students grades 2 and 3 at 4 primary schools in the districts of West High Cliff approximately 425 students. Samples are elementary school students who meet the inclusion criteria after randomization. Based on the sample formula for proportional cluster sampling in which researchers determined the proportion of good nutritional status was 0.06, alpha 0.05, 95% confidence level and precision of 5% and 2 design effect for cluster sampling, then obtained a total sample of 90 students. The inclusion criteria for the sample in this study are:

- a. Willing to become respondents
- b. Students in grade 2 and 3 and 4 at a public elementary school in the district of West Tebing Tinggi.
- c. Respondents could read and write.

Data taken with a questionnaire which tested the validity and reliability. While the nutritional status was measured by the Body Mass Index (BMI).

RESULT

Based on the research results obtained:

1. Univariate Analysis

Table 1

Distribution of Respondent Nutritional Status

Nutritional Status	n	%
Less Nutrition	33	36,7
Normal	51	56,6
Over Nutrition	6	6,7
Total	90	100

The table shows that from 90 respondent majority of nutritional status are normal with total 51 respondent or approximately 56.6%. Less nutritional status 33 respondent (36,7%) and over nutritional status 6 respondent (6,7%).

Table 2

Distribution of Respondent Characteristic

Respondent Characteristic	n	%
Gender		
– Male	52	57,8
– Female	38	42,2
Total	46	100

Table 2 shows that most respondent was male students as many as 52 people or about 57.8%.

2. Bivariate Analysis

Table 3. Relationship between family support and nutritional status

Nutritional Status	Family Support						P-value
	Good		Not Good		Total		
	n	%	n	%	n	%	
Less nutrition	13	14,4	20	22,2	33	36,7	0,005
Normal	38	42,3	13	14,4	51	56,7	
Over nutrition	3	3,3	3	3,3	6	6,7	
Total	54	60	36	40	90	100	

The table shows the relation between family support and nutritional status school-age children. Chi square test results obtained p value was 0.005 which mean there is a relation between family support and nutritional status school-age children.

Table 4. Relation between teacher support and nutritional status

Nutritional Status	Teacher support						P-value
	Good		Not Good		Total		
	n	%	n	%	N	%	
Less nutrition	16	17,8	17	18,9	33	36,7	0,603
Normal	23	25,6	28	31,1	51	56,7	
Over nutrition	4	4,4	2	2,2	6	6,7	
Total	43	47,8	47	52,2	90	100	

The table above shows the relationship between the teacher's role in the nutritional status of primary school students. Based on the Chi Square results obtained p value (0.602) > α (0.05), we can conclude there is no significant relationship between the teacher's role in the nutritional status of primary school students.

Table 5 Relationship between peer support and nutritional status

Nutritional Status	Peran teman sebaya						p-value
	Good		Not Good		Total		
	n	%	n	%	N	%	
Less nutrition	12	13,3	21	23,3	33	36,7	0,209
Normal	27	30,0	24	26,7	51	56,7	
Over nutrition	4	4,4	2	2,2	6	6,7	
Total	43	47,8	47	52,2	90	100	

The table above shows the relationship between the roles of peers in the nutritional status of primary school students. Based on the Chi Square results obtained p value (0.209) > α (0.05), we can conclude there is no significant relationship between the role of peers in the nutritional status of primary school students.

Table 6. *Relationship between gender and nutritional status*

Nutritional Status	Gender						<i>P-value</i>
	Male		Female		Total		
	n	%	n	%	N	%	
Less nutrition	15	16,7	18	20,0	33	36,7	0,124
Normal	32	35,6	19	21,1	51	56,7	
Over nutrition	5	5,6	1	2,6	6	6,7	
Total	52	57.8	38	42.2	90	100	

The above table illustrates the relationship between gender and nutritional status of primary school students. Based on the Chi Square results obtained p value (0.124) > α (0.05), we can conclude there is no significant relationship between gender and nutritional status of primary school students

Table 7

Relationships between parental income and nutritional status of primary school students

Nutritional Status	Parental Income						P-value
	>2.500.000		<2.500.000		Total		
	n	%	N	%	n	%	
Less nutrition	4	4,4	29	32,2	33	36,7	0,400
Normal	10	11,1	41	45,4	51	56,7	
Over nutrition	2	2,2	4	4,4	6	6,7	
Total	16	17,8	74	82,2	90	100	

The table above shows the relationship between parental income and nutritional status of primary school students. Based on the Chi Square results obtained p value (0,400) > α (0.05), we can conclude there is no significant relationship between parental income and nutritional status of primary school students.

Table 8

Relationship between chronic disease history and nutritional status.

Chronic disease history							
Nutritional Status	>3x a year		<3x a year		Total		P-value
	n	%	N	%	n	%	
Less nutrition	2	2,2	31	34,4	33	36,7	0,661
Normal	5	5,6	46	51,1	51	56,7	
Over nutrition	1	1,1	5	5,6	6	6,7	
Total	8	8,9	82	91,1	90	100	

The table above shows the relationship between the history of the chronic disease with nutritional status of primary school students. Based on the Chi Square results obtained p value (0.661) > α (0.05), we can conclude there is no significant

relationship between a history of chronic disease and nutritional status of primary school students.

DISCUSSION

1. Respondent Characteristic

Research conducted in 90 respondents to produce the majority of school-age children were male, and respondents who have a normal nutritional status is 51 (56.6%), malnutrition status 33 (36.7%) and overweight 6 (6, 7%).

Data from the Central Statistics Agency (BPS) in 2014 the percentage of the Indonesian population aged 7-12 who are in school are as much as 98.82%. Total population by province and sex of the BPS in 2013 in the province of Riau-sex as many men as women amounted to 51.37% and 48.63%.

Lintang research (2015), in Sungai Sembilan Kota Dumai obtained normal nutritional status of children as much as 73.9%. Yulni research (2013) in Makassar obtained normal nutritional status of children as much as 77.3%. Research Yoza (2015) in SD Metta Maitraya obtained with normal nutritional status of children as much as 59.52%. Indah research (2015) in Sub Bangko obtained normal nutritional status as much as 44.3%. Yesti research (2015) in Teluk Kiambang Indragiri Hilir normal nutritional status obtained a total of 36, 3%.

According Almatsier (2006) malnutrition is an unhealthy condition caused due to insufficiency of food needs required by the body. In the state of malnutrition will result in delays in the process of child development. Consumption of food affects the nutritional status of a person.

2. Relationship between family support and nutritional status

The test results using the chi square statistic shows that there is a relationship between the role of the family with the nutritional status of school-age children in the Meranti islands. While variable role of the teacher, the role of peers, sex, parental income, and a history of chronic disease has no relationship with the nutritional status of school-age children.

Parents are basically obligated to provide favorable conditions for growth and development for children. Likewise, in terms of meeting physical needs, in this case related to the fulfillment of nutrients in food consumed daily by children. Parenting form of attitudes and behavior of mothers or other caregivers in terms of proximity

to the child, feeding, caring, hygiene, give love and so associated with the nutritional status of children is also associated with the availability of family resources such as education and knowledge of mother, family income, mother working status, sanitation and health houses (Palupi, 2007)

Also associated with the foregoing, it is clear that the support of family, especially parents very significant role in creating a positive eating behaviors in children, including breakfast good behavior. Good eating habits in the family usually be passed down for generations and make a tradition for the child, so that even an adult or separated from their families, it is a habit that has been taught will remain. Family support is very likely to affect children's eating behavior.

Therefore, the family has a very important role because it is within the family becomes a place for children to maximize growth, as well as meet the nutrition. The family that owns the function of a good family and had a good emotional bond to support growth and development. (Almatsier, 2006)

According to research Gumawang (2016) the majority of respondents have a good nutritional condition of children and family functions both were 45 respondents (75.01%) and that have data on the nutritional status of the family is not good and unhealthy family functions with the percentage of 6, 65% and the p-value of 0.03 to obtain the value of $p < 0.05$, it means there is a relationship between family function and nutritional status of children.

According to research Grodner, Long and Walkingshaw (2007), which states that a child's behavior is influenced by the example of the behavior of the adults around them. The role of parents to always set a good example for children is needed to shape children's behavior, including eating behavior. In addition, according to UNICEF (2015), in general there are several factors that influence nutritional status, including the underlying cause, which originated from the economic structure, and social activities of a region, it affects the level of capital of a region, if the factor of social, economic and capital in the region is good, it participated in supporting a good nutritional status anyway. Related to the results of research is conducted on family income where the result obtained is no relationship between family income and nutritional status of children, this study is inversely related to the research Pahlavi (2012) which

showed the results of the analysis of the relationship of family income and nutritional status using chi square test values obtained p value of 0.0001 $p < 0.05$ so that there is a relationship between family income and nutritional status in children grades 4, 5 and 6 in the Ngesrep Elementary School 02 Banyumanik Semarang in 2011, with the average strength of the relationship.

Social influences on a person's food intake refer to the impact that one or more person will imitate the eating behavior of others, either directly (to buy food) or indirectly (learn or see other people's behavior). Patrick and Nicklas (2010) describes Although parents have a strong influence on children's behavior and health beliefs, but they are not the only one who became a model in feeding behavior.

Aisyah study (2015) showed a significant relationship between the influence of peers with election Child allowance for $p \text{ value} < \alpha$. This suggests that school-age children are easily affected by the surrounding environment, especially by a friend who later can have an impact on the selection of school-age allowance.

CONCLUSION

1. Conclusion

After doing research on family support and nutritional status of the 90 respondents in the district Meranti Islands obtained a category that has a normal nutritional status is 51 (56.6%), malnutrition status 33 (36.7%) and overweight 6 (6.7%) and the majority of respondents consisted of men as much as 57.8%.

The test results using the chi square statistic shows that there is a relationship between the role of the family with the nutritional status of school-age children in the islands Meranti. While variable role of the teacher, the role of peers, sex, parental income, and a history of chronic disease has no relationship with the nutritional status of school-age children.

2. Suggestion

- a. For parents the results of this study can be used to optimize the factors contributing factor in improving the nutritional status of primary school students in the coastal areas of the Meranti islands in order to improve their nutritional status so that it can generates qualified human resources in the future.

- b. For nurses to know the factors that influence nutritional status will facilitate the development of programs and strategies of nursing care can be done by nurses at the health center, the clinic or in the community related to nutrition in the form of primary prevention, secondary and tertiary.
- c. Educational institutions / health research results can also be used as basis for policy in increasing community empowerment, family and peers for improving nutritional status of primary school students.
- d. For the research world, this research may be basic data for further research in other studies on the nutritional status of primary school students.

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THE RELATIONSHIP BETWEEN THE LEVEL OF FAMILY SUPPORT AND PATIENT'S ACCEPTANCE LEVEL OF THE DIAGNOSIS OF DIABETES MELLITUS TYPE II IN NEGROS ISLAND

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The main purpose of this study was to determine the relationship between the level of family support and the patient's acceptance level of the diagnosis of diabetes mellitus type II. Furthermore, this study also intended to find out whether or not family support on a dietary requirement, medication compliance, exercise regimen, blood sugar monitoring, regular medical checkup, emotional needs were related to the patient's acceptance level of the diagnosis of diabetes mellitus type II. Quantitative correlational study was utilized. This study had seventy seven patients with diabetes mellitus type II who completed answering the questionnaires which assess their level of family support and their acceptance level of the diagnosis of diabetes mellitus type II. Overall, the respondents rated the level of family support as *supportive*. The level of family support in relation to medication compliance, blood sugar monitoring, regular medical checkup and emotional needs were also rated as *supportive*. While the level of family support in relation to dietary requirement was rated as *very supportive* but a little supportive on the level of family support in relation to exercise regimen. The result of the patient's acceptance level of the diagnosis of diabetes mellitus type II was rated as *has accepted*. Generally, there was no significant relationship between the patient's acceptance level of the diagnosis of diabetes mellitus type II and the level of family support. Specifically, similar correlational result showed the patient's acceptance level and the level of family support in relation to dietary requirement, medication compliance, exercise regimen, blood sugar monitoring, regular medical checkup, emotional needs. These findings led the researcher to recommend that nurses should consider the family as partner to support patients' diabetes management.

Keywords: Family Support; Patient's Acceptance, Diabetes Mellitus Type II.

Introduction

Non-communicable diseases, including Diabetes Mellitus is the cause of 309,000 deaths in 2010, 25% aged younger than 60 years old were part of these death. The data in 2010 show that Philippines is one of the top 15 in a worldwide survey for Diabetes Mellitus prevalence, with more than 4 million Filipinos citizen who have been diagnosed. Compared to DM I which occurs during childhood, teenage time and early adulthood, DM II is diagnosed in age over 30 years (ADA, 2002), usually with the obesity incidence.

According to the data from the World Health Organization (2013), there are 347 million people worldwide who have Diabetes Mellitus and more than 80% of Diabetes related deaths occur in low- and middle –income countries. Furthermore, the Diabetes Atlas of International Diabetes Federation (2015) data show that nowadays, 387 million people are living with Diabetes Mellitus worldwide with the prevalence of 8.3% and one person dies because of Diabetes Mellitus in every seven seconds. One in every 12 people is living with Diabetes Mellitus and one in two people does not know they have it.

Based on American Diabetes Association (2012), the prevalence of Diabetes type II increased from 19% in 2002 – 2005 to 22% in 2008-2009. The incidence of DM II is higher than DM I, as Walker and Rodgers (2010) said that 80% have Diabetes Mellitus type II. The Diabetes Atlas of International Diabetes Federation data in 2014 show that there is a slight increase of the number of people with Diabetes Mellitus in the Philippines: 3,256,000 people have been diagnosed in 2013 and 3,273,000 have been diagnosed in 2014. In addition, there is an estimated 1,743,000 Filipinos who have been undiagnosed with Diabetes Mellitus (International Diabetes Federation, 2014). The recent data in 2015 show that 415 million people have Diabetes Mellitus in the world and there are 3.5 million cases in the Philippines. The national prevalence of Diabetes in adults (20-79 years) is 6.1% from the total cases of 3,506,000 (International Diabetes Federation, 2015).

Aside from physical changes, there are psychological changes in patients affected by the diagnosis of Diabetes Mellitus before they accept their condition. Patients expressed feelings of depression, anxiety, anger, shame and guilt. A study focus on women's group with type II Diabetes Mellitus revealed that after being diagnosed, they struggled with changing health situation, such as they have to rearrange their plan to keep their blood sugar level under control. The women showed their anger within themselves along with their families, also were frustrated because they were not able to take a good care of their health, and felt that family did not have understanding about their condition (Penckofer, et al., 2007). Low social support (i.e. family) contributed as one of the factors that is related to the low level of patient's acceptance of diagnosis of Diabetes Mellitus type II in 46% respondents in Turkey (Besen & Esen, 2012).

Health care providers need to know about the patient's psychological changes. Thus healthcare provider could give suggestions and work with patient's family on the treatment process. The most important caregiver for patient with chronic illness is the family (Friedman, et al., 2003). The support of the family plays an important role

in the treatment process. Treatment for Diabetes Mellitus patients includes dietary, regular medication, exercise, blood sugar level test and regular medical checkup. A patient needs the family support to do the whole treatment.

The support from the family could be important because of a changing period in patient lives after being diagnosed with Diabetes Mellitus. Campbell (2000; as cited in Friedman, et al., 2003) said that “families are the primary caregiver for patient with chronic illness. The patient experienced psychological changes, the feeling of depression, anxiety, anger, shame and guilt after being diagnosed, and is only felt by the patient (Penckofer, et al., 2007). Thus the caregiver not only takes care of the physical, but also the psychological aspect. The researcher intended to know the relationship between the level of family support and patient’s acceptance level of the diagnosis of Diabetes Mellitus type II.

The main purpose of this study was to determine the relationship between the level of family support and Diabetes Mellitus type II patient’s acceptance level. Specifically, the study also intended to find out whether or not family support on dietary requirement, medication compliance, exercise regimen, blood sugar monitoring, regular medical checkup, emotional needs was related to the patient’s acceptance level of the diagnosis of Diabetes Mellitus type II. The study also aimed to find out the respondent’s profile.

This study uses several theories from Hills, Friedman, Pender, Sister Callista Roy and Kubler- Ross. Chronic disease itself is a part of unexpected event which triggers stress within the family as explained by Hills’s theory (Friedman, et al., 2003). A Family is a primary caregiver and has the important role for the patient with Diabetes Mellitus type II as stated by Friedman et al. (2003).

Patients with Diabetes Mellitus type II need to modify their lifestyles. Lifestyle modification is part of health promotion behavior by Pender. Pender describes that family support brings influences to patient’s effort in achieving well-being. As the primary caregiver and primary source of influences, a family provides support to the patient, specifically on the area of dietary requirement, medication compliance, exercise regimen, blood sugar monitoring, regular medical checkup and emotional support.

To reach acceptance, patients need to be able to adapt to their condition. Psychological responses that occur after being diagnosed of Diabetes Mellitus type II reflect the patients’ adaptation process before their acceptance. According to Kubler-Ross’s theory, acceptance is the replacement of denial and considered as an adaptive state where the person had reached a stage of peace. The ability to adapt and cope with the disease is the description of health, because health and illness could live together in a person at once as described by Roy’s theory. Patients with Diabetes Mellitus type II will live with their disease;; they need to adapt with the disease and accept it.

Method

A quantitative correlational study design was used in the study to investigated the relationship between the variables without any intervention from the researcher. This study was conducted at Silliman University Medical Center, Negros Oriental

Provincial Hospital, Holy Child Hospital and Silliman University Marina Mission Clinic. The sample was 77 from 91 diabetes mellitus type II patients with aged older than 18 years old, have been diagnosed for at least three months, have been receiving care from anyone who is considered as family.

This study collected data using two types of self-administered questionnaires and one page of profile data. The profile data consisted of initial name, age, caregiver, gender, civil status, highest educational attainment, occupation, family monthly income, and the number of years after having diagnosed of Diabetes Mellitus type II. The Diabetes Social Support Questionnaire – Family Version (DSSQ-Family) by La Greca and Bearman (2002) was used to measure the family support on the specific treatment for Diabetes Mellitus patient. And to measured patient's acceptance of diabetes mellitus, the questionnaire of Ideas About Diabetes-Revised (IAD-R) by Dion (1990) was used.

Findings

1. Profile of the Respondents

According to the profile of the respondents, most of the respondents are between 53 – 67 years old, have spouse as the primary caregiver, are female and, married, are with bachelor's degree, have a white collar job, and earn more than 20,001 pesos as the family monthly income. The number of years of being diagnosed with Diabetes Mellitus type II has similar finding in both category of 7 years and below, and 8 – 15 years.

Table 1. *Profile of the respondents*

Characteristic	Number of Respondents (n=77)	
	Frequency	Percentage (%)
Age (In Years)		
23 – 37	5	6.5
38 - 52	18	23.4
53 – 67	36	46.8
68 – 82	18	23.4
Gender		
Female	47	61
Male	30	39
Caregiver		
Spouse	39	50.7
Parent	13	16.9
Children	19	24.7
Other	6	7.8
Civil Status		
Single	19	24.7
Married	51	66.2
Widow	7	9.1
Level of Education		
Elementary School	6	7.8
High School	26	33.8
Bachelor's Degree	40	51.9
Master's Degree	2	2.6
Doctoral's Degree	3	3.9

Occupation			
	Blue Collar	10	13.0
	White Collar	38	49.4
	No Job	29	36.4
Family Monthly Income (Pesos)			
	Less than 5,000	13	16.9
	5,001 – 7,500	6	7.8
	7,501 – 10,000	8	10.4
	10,001 – 12,500	9	11.7
	12,501 – 15,000	1	1.3
	15,001 – 17,500	10	13.0
	17,501 – 20,000	8	10.4
	More than 20,001	22	28.6
Number of Years After Having Diagnosed of Diabetes Mellitus Type II			
	7 or below	29	37.7
	8 - 15	29	37.7
	16 - 23	15	19.5
	24 – 31	3	3.9
	32 – 39	1	1.3

2. The Level of the Family Support

Table 2 shows the The level of the family support as perceived by the Diabetes Mellitus type II patients in relation to dietary requirement, medication compliance, blood sugar monitoring, regular medical check up, emotional needs and overall family support was rated as “supportive” while for exercise regimen was rated as “a little supportive”.

Table 2. *The Overall Level of Family Support*

Respect to	Level of Support	
	Mean	Description
Dietary Requirement	80.2468	Supportive
Medication Compliance	28.1429	Supportive
Exercise Regimen	21.8442	A little supportive
Blood Sugar Monitoring	40.9870	Supportive
Regular Medical Check-up	31.0909	Supportive
Emotional Needs	20.0260	Supportive
Overall Level		Supportive

3. The Patient's Acceptance Level of The Diagnosis of Diabetes Mellitus Type II

Table 3 shows The patient's acceptance level of the diagnosis of Diabetes Mellitus type II was rated as “has accepted”.

Table 3. Respondents' Acceptance Level of the Diagnosis of Diabetes Mellitus Type II

Level		Number of Respondents (n-77)		Patient's Acceptance Level of the Diagnosis of Diabetes Mellitus Type II	
		Frequency	Percent	Mean Score	Interpretation
20.0 – 35.9	Strongly Refused to Accept	0	0	76.82	Has Accepted
36.0 – 51.9	Cannot Accept	0	0		
52.0 – 67.9	Slowly Accepting	12	15.6		
68.0 – 83.9	Has Accepted	49	62.3		
84.0 – 99.9	Has Fully Accepted	23	22.1		

Table 4 shows there was no significant relationship between patient's acceptance level of diagnosis of Diabetes Mellitus type II and the level of family support in relation to dietary requirement, medication compliance, blood sugar monitoring, regular medical check up, emotional needs and overall level of family support.

$$r_s = -0.104$$

$$p\text{-value} = 0.367$$

$$r_s = 0.028$$

$$p\text{-value} = 0.809$$

$$r_s = 0.042$$

$$p\text{-value} = 0.718$$

$$r_s = 0.003$$

$$p\text{-value} = 0.958$$

$$r_s = 0.020$$

$$p\text{-value} = 0.861$$

$$r_s = -0.48$$

$$p\text{-value} = 0.676$$

4. The Relationship Between the Level of Family Support and Patient's Acceptance Level of The Diagnosis of Diabetes Mellitus

Table 4. *Test for Significance of Relationship between the Level of Family Support and Patient's Acceptance Level Of The Diagnosis of Diabetes Mellitus Type II*

Paired Variables
Statistical Treatment
Interpretation at $\alpha = 0.05$

Level of family support on **dietary requirements**
&
Patient's **level of acceptance** of the diagnosis of Diabetes Mellitus type II

r_s = 0.060
p-value = 0.603

Not Significant

Level of family support on **medication compliance**
&
Patient's **level of acceptance** of the diagnosis of Diabetes Mellitus type II

Not Significant

Level of family support on **exercise regimen**
&
Patient's **level of acceptance** of the diagnosis of Diabetes Mellitus type II

Not Significant

Level of family support on **blood sugar monitoring**
&
Patient's **level of acceptance** of the diagnosis of Diabetes Mellitus type II

Not Significant

Level of family support on **regular medical check up**
&
Patient's **level of acceptance** of the diagnosis of Diabetes Mellitus type II

Not Significant

Level of family support on **emotional needs**
&
Patient's **level of acceptance** of the diagnosis of Diabetes Mellitus type II

Not Significant

Overall level of family support
&
Patient's **level of acceptance** of the diagnosis of Diabetes Mellitus type II

Not Significant

Discussion

1. Profile of the Respondents

Table 1 shows that the highest age bracket in this study was 53 – 67 years old (46.8%) followed by 38 -52 years old of age bracket and and 68 – 82 years old of age bracket with the similar percentage as 23.4%. This finding is parallel with the data from International Diabetes Federation (2015), in which about 7% Filipino adults 40 – 44 years old have Diabetes Mellitus type II, and the percentage is increased significantly to 17% among adults in 65 – 69 years old bracket. The data from Diabetes Australia (2015) indicate that people above 45 years old usually develop Diabetes Mellitus type II.

In addition, the study of American Diabetes Association (2012) stated that the percentage of American adult's age of 65 years old and older who have Diabetes Mellitus type II remain high at 25.9%. All of the data support the finding of this study that Diabetes Mellitus type II occurs and develops in middle age to older age group.

Generally, the respondent's primary caregiver is the spouse (50.7%) followed by children (24.7%), parent (16.9%) and grandchildren (7.7%). It could be related to the findings of civil status of the respondents. Most of the respondents' civil status is married (66.2%). The role of the spouse in the Philippines is very critical in regards to health. Their support and decision are really appreciated by the patients (Dixon, 2009).

Table 1 shows that majority of respondents were female (61%) compared to male (39%). This result is supported by the previous study of Jacalan (2010) about adults with Diabetes Mellitus type II which stated that out of 87 respondents, 50 were females (57.5%). Iglay et al. (2016) shows that there were 53% females out of 1,389,016 diabetic people. Hilawe et al. (2013) confirmed the same result that Diabetes Mellitus prevalence is higher among women (5.9%) compared to men (5.5%). A study of Bharati et al. (2011) in India indicated that out of 1370 diabetic adults, 60.3% were females and 39.7% were males.

All of the studies affirmed that the population of women with Diabetes Mellitus type II is higher than men. Majority of women in this study are those who

are middle aged which may have hormonal changes due to menopausal. After the menopausal, the changes of estrogen and progesteron can elicit the fluctuation in blood sugar level. In addition, the weight gain occurs during menopausal transition and after menopause can increase the need of insulin. The physical changes to women may impact their risk of the diagnosis of Diabetes Mellitus type II (Mayo Clinic, 2016).

Table 1 indicates that more than half of the respondents were married (66.2%), followed by 24.7% who were single and 9.1% who were widow. The study of Jacalan (2010) about the level of family support, acceptance of diabetes-self care behavior and quality of life in patients with Diabetes Mellitus type II in region 10 revealed similar finding, which showed that more than half of the respondents were married (65.5%). Majority of the respondents belong to the middle to older age category, which could be related to the finding of civil status. According to Erik Erikson's theory of growth and development, people in the middle age category are already settled down either in a relationship or have a family (McLeod, 2013).

The study showed that 51.9% of respondents have a bachelor's degree. This could be due to the fact that majority of the respondents of this study were those who are in the middle age bracket. Generally, people in the middle age category have already completed their education and have a full-time work (Berk, 2007). On the other hand, Filipinos are very appreciative of education, especially women. It is proven by the data from National Demographic and Health Survey of the Philippines in 2013 which reported that only 1% of women aged 15-49 years old have never been in formal school (PSA, 2014).

Majority of the respondents have a white collar job (50.69%), while 13% have blue collar job and 36.4% have no job. The no job category includes respondents who are retirees and housewives. The finding of 50.69% have a white collar job is related to the educational level of the respondents who have bachelor's degree. A white collar worker usually has a minimum bachelor's degree since he/she works as a professional in the office. Furthermore, this can be related to the family monthly income of the respondents; the highest range of family monthly income of the respondents is above

20,001 pesos (28.6%). This amount comes from their salary and from other family members who support their health management's cost. Most of the respondents were those in the middle age bracket which means that they have their family and have support from their family regarding their finances. The finding of family income is related to the finding of the majority of the respondents when they are still active in their white collar job. A white collar job refers to work in the area of office, cubicle, and administrative setting such as nurse, medical officer, government officer, and others. Blue Collar job refers to work with hourly rates of payment or fee, such as food service worker, plumber, electricians and janitor (OPM, 2014).

The number of years after having been diagnosed of Diabetes Mellitus type II on Table 1 shows an equal percentage of the respondents who had Diabetes Mellitus type II for 7 years or below and 8 to 15 years at 37.7%, followed by 16 – 23 years at 19.5%, 24 – 31 years at 3.9% and 32 – 39 at 1.3%. This finding is supported by the data from Centers For Disease Control and Prevention (2011) which revealed that 38.1% people in the United States had Diabetes Mellitus type II for 0 – 5 years and 37.8% people had it for 6 – 16 years. The average number of years after having been diagnosed of Diabetes Mellitus type II is 10.25 years.

2. The Level of the Family Support

Generally, level of the family support as perceived by the respondents was rated as “supportive”. Diabetes management is quite complex and needs to be adhered by the patient for a lifetime. Pereira et al. (2008) revealed that family support and environment bring the impact of diabetic's patient's adherence to the management of their diabetes. Family support is confirmed to have crucial role in relation to diabetes management of the diabetic patients in India (Bhandary, et al., 2013).

Social support and family support are crucial aspects of diabetes management (Miller & Dimatteo, 2013). Numerous previous studies within year 1948-2001 identified the correlational structure or function of social support, including the family, with patient's adherence to medical regimen; the adherence is higher for adult

with marital status or living with another person (DiMatteo, 2004). This result is related to the profile of the respondents in this study in which most of the respondents are married.

Majority of the respondents of this study are categorized as those people who are middle to older aged and are Filipino. The support from family to those who have ailment is common in the Filipino culture, especially support for the elderly. Filipinos are taught to have care, respect and love for parents and older family member (McBride, Stanford Geriatric Education Center, n.d.).

When the elderly in the family have an illness, the management of the illness will be discussed together with the family. Taking care of the elderly in the family is the filial obligation in the Philippines (Australian Institutes of Family Studies, 2016). The filial piety is strong in the Philippines; all the decision regarding the health issues will be discussed among the family, but the first decision maker is the spouse of the patient (Dixon, 2009).

The culture in the Philippines has its influence in this study which stated that the level of family support is categorized as 'supportive' with the majority of middle aged and older aged as the respondents. Majority of the caregivers of the respondents are the spouse (50.7%) followed by the children (24.7%) which confirms the culture explanation about filial obligation to taking care of other family member, especially for the elderly, more specifically taking care of the ill spouse and parent.

3. The Patient's Acceptance Level of The Diagnosis of Diabetes Mellitus Type II

The mean score of patient's acceptance level in this study is 76.82 and described as "has accepted". This finding is related to the duration of the Diabetes Mellitus of the respondents. The average number of years after having been diagnosed of Diabetes Mellitus type II is 10.25 years with a similar percentage of the category of 7 years and below and 5 to 15 years at 37.7%. The duration of the disease influences the patients' acceptance of their condition. Hood et al. (2009) describes that newly diagnosed people usually experience denial in their current time after being diagnosed and reached acceptance after number of years. The respondents of

Hood et al. (2009) study were those who have been diagnosed for approximately 20 years. Moreover, Kalkhoran's (2012) study about Iranian women with Diabetes Mellitus type II revealed that they were in shock when they learned of the diagnosis, but they reached acceptance after many years of having it. Furthermore, Chiu et al.(2013) stated that shorter duration of the disease indicates lower patient's acceptance of the diagnosis of stroke as a chronic illness.

In addition, the result of the patient's acceptance level of the diagnosis of diabetes mellitus type II also indicates that the respondents accepted their condition as diabetic, and this may be due to their educational level. Majority of the respondents of this study are those with bachelor's degree (51.9%). The level of educational attainment influenced the patient's acceptance towards their disease. The study of Richardson (2000) stated that educational level seems to be the important influential factor to the patients to accept their condition. Lower educational level indicates lower level of patient's acceptance among 300 patients with Diabetes Mellitus type II in Turkey (Besen & Esen, 2012).

There is no precise timeline to reach acceptance level for the patient. It could be from three months to three years (Weiman, 2008). However, as time passes by and the illness progresses, people may achieve self-acceptance and then back to other phases (Worth, 2005). This study confirms that patient's acceptance of the diagnosis of Diabetes Mellitus type II is influenced by the duration or length of the time of the diagnosis of the disease. The finding of this study shows that patients rated their condition as 'has accepted' although majority of the respondents are already having diabetes for more than 3 months to three years. It further proves that patient's acceptance level depends on the time and there is no precise time to describe the length of the disease needed to achieve the acceptance level.

4. The Relationship Between the Level of Family Support and Patient's Acceptance Level of The Diagnosis of Diabetes Mellitus

The family as the primary caregiver for all family members (Friedman, et al., 2003) is also shown in this study which presents the spouse and children as the major

main primary caregivers. However, Diabetes Mellitus type II is one of the stressors for the patient and the family member. The culture of the Filipino which teaches the caring, love, and respect among the family member, especially for older generation, plays an important role for the diabetic patient. Thus, it can be seen through the 'supportive' level of the family support in all subvariables except exercise regimen as 'a little supportive'. These findings of the study and the cultural influences of Filipino are able to exemplify Hill's theory that argues that families viewed diabetes as the stressor but they can find ways to manage the stressor and show their support to the family member.

The level of family support has no relationship with the patient's acceptance of the diagnosis of Diabetes Mellitus type II. The result is contrary to the previous study of Lager (2006) which stated that one of the crucial aspects of patient's acceptance is social support, such as family support. Pender's theory also stated that interpersonal relationship, includes family support, and contributes to the lifestyle changes and the process of the patient achieving well-being. Therefore, the support from the family may have influence the respondents during the process of accepting their condition. However, this study showed that patient's acceptance level is independent of the family support.

Several other factors could bring more explanations about the result of this study. The respondents having been with Diabetes Mellitus type II for years and have learned about their disease may have adapted to their condition. The theory of adaptation by Roy states that learning facilitates one's adaptation. Within the years, the respondents have been able to learn, and process the information about their health and and the psychological changes that go with it. Thus, the respondents have been able to adapt and accept their condition as diabetic.

Their tertiary education level also helped them in their way of thinking and helped them to adapt. Educational level is the crucial factor for patients to accept the disease (Richardson, et al., 2000). Another factor that contributes in the adaptation process is the self-concept. Social environment and culture could influence the self-concept. The fact that Diabetes Mellitus type II as a common disease among the

Filipinos may have influence the respondents' way to look at themselves and establish their self concept. Majority of the respondents are educated and have high awareness of their health which may have influence their acceptance of the diagnosis of Diabetes Mellitus type II.

Limitations

The number of respondents did not meet the sample target of the study. Not all patients with Diabetes Mellitus type II whom the researcher met at the clinics and hospitals were included as the respondents because they were newly diagnosed. Some of the respondents refused to participate because they were in a hurry to have another diagnostic test. The researcher also excluded the very old patient who are in the state of hypoglycemia, weak and has alteration in their thinking process related to aging. The collection of data of this study was conducted on March 1 to April 1, 2016. The national holiday and the day-off of the clinics due to attendance to conference by the doctors also affected the lack of respondents.

Conclusion and Recommendation

This study generally determined the relationship between the level of family support and the patient's acceptance level of the diagnosis of Diabetes Mellitus type II. Among the 77 respondents, the study indicates that patients with Diabetes Mellitus type II perceived a 'supportive' level of the family support, specifically the family support in relation to dietary requirement, medication compliance, blood sugar monitoring, regular medical check up and emotional needs. It is also note worthy that for family support in relation to exercise regimen, the level was rated as "a little supportive". The seventy-seven respondents in this study presented their acceptance level as "has accepted". However, there was no significant relationship between patient's acceptance level of the diagnosis of Diabetes Mellitus type II and the level of family support, including all the subvariables.

The findings of this study should be a reminder to the nurses about the important role of the family towards diabetes management. Involving the family in

the care of diabetic patients can enhance further the patient's compliance to medical managements not only to dietary requirement, medication compliance, but also in exercise regimen. The nurses should be able to explain the importance of exercise for the health of patients with Diabetes Mellitus type II and able to provide the right type of exercise suitable to the patient's age. The discussion and learning about Diabetes Mellitus with patients and families can facilitate patient's acceptance of the disease and encourage healthy lifestyle.

Patients with Diabetes Mellitus type II need to adapt to their condition by learning about the disease and its management. The family as the primary caregiver should take an active part to help the patient comply with the management of the disease. It may enhance the patient's adaptation to accept themselves as diabetics. Specifically, the family need to enhance support in the aspect of exercise regimen. Exercise may help patient to maintain their body weight and prevent the complications.

The health institution should support and develop the programs to empowering family as the primary caregiver, and to empowering patient's ability to learn more about diabetes. Group discussion among the family member as the caregiver may give them ideas about the problem faced by the caregiver and its solutions. Group discussion to patients or diabetic club allows for sharing the experiences of the clients, and the new recommendations about the diabetes management. It may enhance the newly diagnosed patient's acceptance and be a reminder that diabetic patients are having common problems to be faced and find out ideas to solve it.

Further research with the higher number of respondents and the specific year of the disease duration is needed to gather more findings about the level of family support and patient's acceptance level. The research can include the profile of the respondent, and the culture as another variable. It may seek the factors that influence the patient's acceptance level and the family support. The findings can be used to make a teaching plan for the diabetic.

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THE CORRELATION BETWEEN NUTRITIONAL STATUS AND THE INCIDENCE OF DIARRHEA IN UNDER-FIVE-YEAR-OLD CHILDREN

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ABSTRACT

Diarrhea was in the first rank of eleven major causes of morbidity and mortality in Indonesia. The study was conducted to determine the correlation between the nutritional status and the occurrence of diarrhea in under-five-year-old children at Temu Ireng Integrated Health Service Sorosutan. The research was correlational analysis with quantitative design and cross sectional approach. Population were children under-five-year-old and the total number of samples were total sampling method. The statistic test used Chi Square. The research result that there is correlation between the nutritional status and the occurrence of diarrhea in under-five-year-old children as $p\text{ value} > 0,05$ ie 0,115.

Key word : Nutritional Status, occurrence of diarrhea, under five year old children

INTRODUCTION

According the result of Indonesian Health Research in 2013 the national prevalence of malnutrition categories into severe and less among toddler is 23,708,844 to 4,646,933 (19.6%), there has been increased number from 2007 which amounted 18.4%. Based on WHO, malnutrition considered a serious public health problem when it has the prevalence between 20.0 to 29.0%, and is considered a very high prevalence when $\geq 30\%$. Indicators of nutritional status based index of W/A provides an indication of nutritional problems in general. Indicator of low W/A may be caused due to a short (chronic nutritional problems) or suffering from diarrhea or other infectious diseases (acute nutritional problems). To assess the nutritional status of under five year old children, the number of weight and height every under five year children will be converted into a standardized value (Zscore) using Toddler's anthropometry (Kemenkes, 2013).

Diarrhea is a disease when the form of feces concentration can be seen as mushy or liquid and with the frequency of more than five times a day. Diarrhea causes the reduction of body's fluid. The cause of diarrhea include infections (bacterial or viral) or food allergies (especially milk or lactose). Diarrhea in children should be treated immediately because if not it can lead to death (Pudiastuti,2011).

Adisasmito (2007) in his research entitled "Risk Factors Diarrhea In Infants And Toddlers In Indonesia: Systematic Review Academic Research Public Health", stated that the risk factors of diarrhea in under five year old children was the water infrastructure, personal hygiene, education, nutrition and exclusive breastfeeding. Results of a preliminary study in Posyandu Balita Temu Ireng RW IX, Sorosutan, Umbulharjo obtained the following data: the number of children aged 6 - 59 months in (Intensive Health Care) IHC Temu Ireng RW IX was 40 toddlers with the number of under five year old children with malnutrition status ie 4 toddler (10%), high nutrition ie 2 toddlers (5%) and normal nutrition ie 34 toddlers (85%), toddler who had suffered diarrhea was 13 infants (32.5%) with a ratio of malnutrition with diarrhea were 3 toddlers and toddlers with normal nutrition were 10 toddlers.

RESEARCH SUBJECTS AND METHOD

The research design used analytic correlational quantitative design (Sulistyaningsih, 2011). The research approach was cross sectional approach. The population in this study were 6-59 months in Posyandu Balita Temu Ireng RW Sorosutan Yogyakarta IX ie 26 toddlers. The sampling technique in this study used total sampling. The sample in this study amounted to 26 toddlers. Primary data were collected using questionnaires and calculations W/A. In this study, bivariate test was Chi Square test.

RESEARCH RESULT AND DISCUSSION

RESEARCH RESULT

1. Characteristics of Respondents

Table 4.1 Distribution's frequency characteristics of respondents nutritional status and the incidence diarrhea in Posyandu Balita Temu Ireng RW IX Sorosutan Yogyakarta.

No	Category	Frequency (F)	Percentage (%)
1	Clean Water's facility		
	PAM / Well	26	100 %
	No PAM / Well	0	0 %
	Total	26	100%
2	Mother's Personal Hygiene		
	Hand washing Behaviour	26	100%
	Not usual hand washing	0	0 %
	Total	26	100%
3	Toilet Facilities		
	Have latrines	26	100 %
	Do not have latrines	0	0 %
	Total	26	100%
4	Exclusive Breastfeeding		
	Exclusive breastfeeding	26	100%
	Not exclusive breastfeeding	0	0%
	Total	26	100%
5	Education Mother		
	Junior High School	7	27%
	Senior high school	13	50%
	D III	1	3,8%
	D IV/SI	4	15,4%
	Other	1	3,8%
	Total	26	100%

Sources: Primary data (2016)

2. Overview Nutritional Status Toddler

Table 4.2 Table of frequency distribution of nutritional status

No	Nutritional Status	Frequency	Percentage
1	Malnutrition	0	0
2	Malnutrition	5	19,2%
3	Nutrition normal	21	80,8%
4	Over Nutrition	0	0
Total		26	100%

Sources: Primary data (2016)

3. Overview of Incidence Diarrhea

Table 4.3 Table of frequency distribution the incidence of diarrhea

No	Incidence of Diarrhea	Frequency	Percentage
1	Diarrhea	8	30,7%
2	No diarrhea	18	69,3%
Total		26	100%

Sources: Primary data (2016)

4. Correlation of Nutritional Status with the Incidence Diarrhea In Toddler

Table 4.4 Cross tabulation of nutritional status correlate with the incidence of diarrhea in Toddler in Posyandu Balita Temu Ireng RW IX Sorosutan Yogyakarta 2016

Nutritional Status	Incidence of diarrhea				Total	
	Diarrhea		No diarrhea			
	F	%	F	%	f	%
Malnutrition	0	0	0	0	0	0
Malnutrition	3	11,5%	2	7,8%	5	19,3%
Nutrition normal	5	19,2%	16	61,5%	21	80,7%
Over Nutrition	0	0	0	0	0	0
Total	8	30,7%	18	69,3%	26	100%

Sources: Primary data (2016)

DISCUSSION

1. Characteristics of Respondents

Table 4.1 showed that the characteristics of respondents who had clean water facilities was 26 respondents (100%). Respondents with behavioral hygiene (washing hands with soap before and after eating was 26 respondents (100%). Respondents who had sanitation facilities at home for bladder and bowel is 26 respondents (100%). Respondents with exclusive breastfeeding was 26 respondents (100 %). Based on the characteristics of the respondent's educational level the highest respondent in the high school education was 13 respondents (50%) and the loer rank was DIII there was 1 respondent (3.8%).

2. Nutritional Status in Under Five Year Old Children at Posyandu Temu Ireng RW IX Sorosutan Yogyakarta

Based on Table 4.1 that explained above, the results obtained from the 26 respondents who carried out measurements of nutritional status with W/A, 21 respondents (80.8%) with good nutritional status and 5 respondents (19.2%) with malnutrition. These data indicate that the majority of under five year old children in Posyandu Balita Temu Ireng RW IX Sorosutan have good nutritional status. According to research Evayanti, et al (2014) suggested that the direct factors or indirect might be a driving factor of diarrhea, consisted of factors agent, host, environment and behavior. Host factors that caused increasing possibility for having diarrhea is not exclusively breastfed, malnutrition, measles and immunodeficiency. The dominant environmental factors were water supply and disposal were subject to influences human behavior. In Islam has been explained that Allah's mentioned that the human to keep the food, as described in Sura 'Abasa (80): 24: "Then let the man pay attention to food. The Ayat confirmed that Muslims should consume foods which kosher and clean as it can prevent people from health problems such as disease and malnutrition.

3. The incidence of diarrhea in infants in Posyandu Balita Temu Ireng RW IX Sorosutan Yogyakarta.

The results of this study indicated that there were 8 of 26 toddlers under five (30.7%) who had diarrhea in the last 6 months based the questionnaire, question number two: " toddlers ever defecate more than three times a day with liquid consistency in the last 6 months". Respondents who did not suffer from diarrhea within the last 6 months were 18 infants (69.3%). There are changes that in the form, increase in volume, dilution, and the frequency with or without mucus blood, such as more than 3 times / day and in neonates more than 4 times / day (Hidayat, 2008).

4. Relationship nutritional status and the incidence of diarrhea in children under five in Posyandu Balita Temu Ireng RW IX Sorosutan Yogyakarta.

Based on the results of analysis data used Chi Square test were obtained from 26 respondents indicated that H_0 is accepted and H_a is rejected, which meant there was no significant correlation between the nutritional status of children with the incidence of diarrhea in toddler in Posyandu Balita Temu Ireng RW IX Sorosutan Yogyakarta. The test results of data analysis shows that there is significant value 0.115 and p value > 0.05

so that it could be concluded that there was no relation between nutritional status and the incidence of diarrhea in infants.

The results of the study authors was supported by research conducted by Maharani and Yusiana (2014) about Less Personal hygiene on Mother Related with Incidence of Diarrhea In Toddler, it showed that bad mothers' personal hygiene would increase the incidence of diarrhea in toddlers. Every mother didn't not have good habits and not embedded the importance of health and hygiene herself because basically hygiene was the development of good habits to maintain the health. Mothers or caretakers of toddlers had poor hygiene habits then it could lead to the emergence of disease in children under five, especially diarrhea.

Research Pradirga, RP. Arsyad, DS. Wahiduddin (2014) concerned the incident Diarrhea : Risk Factors support this research with the statement that the habit of cooking water and complementary breastfeeding became risk factors for diarrhea in toddlers. Cooking water included in the maternal hygiene behavior related to toddler's hygiene on drinking or eating . In this study, only control of the behavior associated with maternal hygiene habits of hand washing before and after meals.

CONCLUSION

1. The nutritional status of 26 respondents based on nutritional status, the highest categories of nutritional status in normal nutritional status there were 21 respondents (80.8%) and malnutrition were 5 respondents (19.2%).
2. The incidence of diarrhea in toddlers showed that most respondents hand not experienced diarrhea was 18 toddlers (69.3%) and experienced diarrhea were 8 toddlers (30.7%).
3. There was no significant correlation between the nutritional status with the incidence of diarrhea in of children under five year old at Posyandu Balita Temu Ireng RW IX Sorosutan Yogyakarta. Based on the data analysis showed the p value > 0,05 as many as 0,115

SUGGESTION

1. For Mother

Mothers need to increase knowledge about the causes of diarrhea and how to prevent malnutrition among children under five and keep active in Intensive health care.

2. For Posyandu Balita Temu Ireng RW IX Sorosutan

Cadres are expected to cooperate with the clinic to conduct nutritional counseling or diarrhea to mothers of children under five to prevent malnutrition in toddlers and good nutritional status can be achieved by all toddlers.

3. For Midwives

Expected to work together with the Posyandu to do counseling related to nutrition in toddlers and prevention of diarrhea in toddlers.

4. For Further Research

Expected to be examined the incidence of diarrhea which is more dominant and have not been studied in this research as mother's hygiene behaviors and factors solids.

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EFFECTIVENESS OF WOUND CARE USING POVIDON IODINE AND CHLORHEXIDINE GLUKONATE FOR HEALING POSTPARTUM PERINEAL WOUND

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Abstract: Infection due to the perineal wound is one factor that may cause mother's mortality and morbidity.

Purpose: This study aimed to compare the effectiveness of povidon iodine and clorhexidine gluconate to the perineal wound recovery.

Method: Pre experimental design and static group comparison approach was used in this project. A purposive sampling of 30 postpartum mothers was employed in this study. The subjects were divided into two groups; povidon iodine treatment and clorhexidine gluconat. Mann-Whitney U-test was applied to calculate the statistic value (*p-value*. = 0,001).

Result: The result found *p-value*. < 0,05. Wound care of perineal using clorhexidine glukonate is more effective rather than using povidon iodine.

Keywords: Wound perineum, Povidon Iodin, Clorhexidine gluconat

INTRODUCTION

One cause of maternal morbidity and mortality is puerperal infection where the infection originated come from infected wounds perineum (Holmes and Baker, 2002). Perineal injuries can occur because of spontaneous or episiotomy based on indications, which includes: a big baby, perineum rigid, birth abnormalities, delivery using the instruments. If the episiotomy is performed not basedon the indication, then it may lead to increase the incidence and severity the perineum wound (Prawirohardjo, 2006). Eleven percents of maternal deaths are caused due to an infection in which 25-55% infection cases are caused due to the injury in the birth canal infection (Mochtar, 1998).

Perineal care is performed to avoid infection due to poor conditions of perineum that may support the development of bacteria that lead to the emergence of complications of urinary tract infections and infections in the birth canal. Injuries to the birth canal in average will heal within 6 to 7 days if there is no infection (Prawirohardjo, 2006).

Total deliveries in RSKIA Sadewa in 2015 were as many as 1.357 for vaginal birth, with an average of 123 deliveries per month of vaginal labor; 5% experiencing

perineal rupture, 92% got episiotomy and 2% had intact perineum. Perineal care in RSKIA Sadewa used two methods: one is using povidone iodine and using clorhexidine glukonate. In average, perineal wounds heal well on day 7 post partum and were evaluated during the postpartum visits. Based on the above condition, researchers interested in conducting research related to the differences in perineal wound treatment using povidone iodine and using clorhexidine glukonate in RSKIA Sadewa in 2015.

METHOD

The research design was pre-experimental comparison group with a static approach. Samples were divided into 2 groups: the experimental group who received perineal wound care treatment using clorhexidine glukonate and the control group who received perineal care treatment using a povidone iodine and are followed by a second measurement or observation at the 3th, 5th and 7th day postpartum.

The population in this research is all mothers who gave birth in RSKIA Sadewa in 2015. Thirty postpartum mothers with purposive technique sampling in January-February 2016 involved in this study. The criteria for the respondents were: women with vaginal birth, gave birth in RSKIA Sadewa and had no history of diabetes.

RESULT AND DISCUSSION

Tabel 1. Frequency Distribution of perineal wound healing

Category	Povidon iodin		Clorhexidin Glukonate	
	Frequency	%	Frequency	%
Late	13	86.7	1	6.70
Moderate	2	13.3	12	80.0
Fast	0	0	2	13.3
Total	15	100	15	100.0

Based on the frequency distribution table 1 86.7% of women with perineal wound healing in control group with the povidone iodine were categorized as having late wound healing and as many as 12 respondents (80%) in the second group (clorhexidine) heal the perineal wound moderately while 2 respondents (13.3%) are in fast category.

Table 2. Perineal wound healing with povidon iodine and clorhexidine glukonate.

	Median (Minumum- Maksimum)	Nilai p
Povidon Iodin	1,00 (1,00-2,00)	0.001
Clorhexidin	2,00 (1,00-3,00)	

Based on the statistical test result using the Mann-whitney, a p-value = 0.001. Because the p value <0.005, there is a difference between the treatment of perineal wound using a povidone iodine and clorhexidineglukonate in RSKIA Sadewa in 2015. This means that chlorhexidinegluconate is more effective than povidone iodine to heal perineal.

DISCUSSION

Rupture is an injury to the perineum caused by tissue damage naturally because the insistence of the fetal head or the shoulder at the time of delivery (Hamilton, 2002). Shape of rupture is usually irregular so that tissues are torn. Prawirohardjo (2006) wound perineum can occur due to a torn spontaneously or episiotomy perineal conducted on indications include: a large baby, perineum rigid, birth abnormalities layout, delivery using instruments.

According to the research the effectiveness of perineal wound healing using povidone iodine is not as effective using clorhexidineglukonate. The result of this study supported by a research conducted by Utami (2012) which found that 6 out of 26 respondents who receive iodine experienced the urinary tract infections (UTI) compared to 1 respondent who used clorhexidinegluconate and experienced the UTI.

Clorhexidine glukonate heal perineal injury faster compared to povidone iodine. It is believed that it because clorhexidineglukonate is a biguanide compounds which functioning as bactericide and fungicide. It is very effective for staphylococcus aureus, pseudomonas and proteus, and it does not stimulate the skin and mucosa. Clorhexidine glukonate is used widely for disinfecting because it has good antimicrobial properties against gram positive, gram negative, bacterial spores, viruses lipophilic. Clorhexidine glukonate used as a disinfectant to the skin prior to surgery, washing hands before surgery and also disinfecting medical devices mainly tools- operating tools (Darmadi, 2008).

Milstone et al (2007) mentioned that clorhexidine is a topical solution that has been used since 1954. It is used in adults and children and noted to be safe for hand washing, antiseptic skin before surgery, treatment of gingivitis and vaginal antiseptic. Clorhexidine is a water-soluble compound and binds negatively charged cell walls of bacteria, changing the osmotic balance, broad spectrum of bacteria and against gram-positive and gram-negative facultative aerobic and anaerobic bacteria, yeast but has no effect on spores.

The results of this study can be used as a recommendation for treatment of perineal wound. In addition, using clorhexidine gluconate can accelerate the healing of wounds perineum because clorhexidine gluconate is bactericidal and fungicidal.

CONCLUSIONS

Treatment of wounds perineum with clorhexidine gluconate is more effective to heal perineum wound amongst postpartum women with 13.3% treatment in categories as quickly (recovered on day 3); 80% was in moderate category (cured > 7 days).

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THE EFFECT OF SITTING DURATION TO NECK PAIN OF UPPER *TRAPESIUS* MUSCLE ON STUDENTS

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ABSTRACT

The study entitled the effect of sitting duration to neck pain of upper *trapezius* muscle on students objectives to investigate the effect of sitting duration to neck pain complain of upper *trapezius* muscle on students. The subjects of the study were semester 4 and semester 6 students of Physiotherapy Program of 'Aisyiyah University of Yogyakarta.

Data collecting method of the study used survey method with cross sectional approach. The instruments of the study were questionnaire and pain examination with SPADI scale. Independent sample T test with sig. 0.05 was used as the data analysis.

Based on data analysis by using independent sample T test, it can be known that there was effect of sitting duration to neck pain complain on semester 4 and semester 6 students of Physiotherapy Program of 'Aisyiyah University of Yogyakarta with percentage of higher SPADI value on semester 6 students than semester 4 students. However, the difference of pain rate between semester 4 students and semester 6 students was not significant (sig. 0.758 < 0.05).

Keywords : Neck Pain, Upper *Trapezius* Muscle

Introduction

Neck pain or pain in the back part of the neck is the pain experienced by many people, including students. Huldani (2013) states that neck pain is a common problem that can be generally found. Two out of three people will experience this problem throughout their life.

This pain can be caused by many factors, such as wrong sleeping position, working for too long in front of a computer or laptop, and wrong neck posture due to too long bowing or looking. Huldani (2013) explains further that neck pain is pain resulted from a complex interaction between the muscles and ligaments as well as factors related to posture, sleeping habits, working position, stress, muscle fatigue

chronic, adaptation postural of other primary pain (shoulder, *temporo mandibular* joints, crania-cervical), or degenerative changes of the cervical discs and joints.

Samara (2007) mentions that there are some jobs that can lead to neck pain including too long working with computers or working in the front of the desk with bending position for long periods. Lifting, pushing or carrying goods, dancers and public transport drivers are those who usually experience the problem.

Samara (2007) also implies that the neck pain on workers in general is more often caused by musculoskeletal disturbance where there is tension and stretch the muscles and ligaments around the neck. A study showed that the prevalence of musculoskeletal pain on the neck in the community for a year got result 40%, and the prevalence is higher in women.

Prevalence occurrences which explains that women have more risk for neck pain is also supported by Huldani (2013) mentioning that the prevalence of pain in the neck area to workers ranges 6-76%, and in fact women have higher prevalence than men.

Health Department of the Republic of Indonesia (2004) states that the activities of abundant work will cause effects to workers, such as complaints on the muscular system (musculoskeletal) in the form of complaints of pain, soreness, aches and other muscular systems (musculoskeletal) like tendons, blood vessels, nerves and others caused by working activities. Based on the location, the complaints that often arise in the workers are back pain, neck pain, pain in the wrist, elbow and foot.

Center of Occupational Health states three main considerations of neck disturbance during working time, namely (1) the burden on the structure of the neck for a long time associated with high demands of the job and the need for stabilization of the neck and shoulder during the working process, (2) psychologically, the work with high concentration, quality and quantity demands that generally affect the muscles of the neck, (3) discus and joints in the neck that often get degenerative changes in which prevalence increases with age (Department of Health, 2004).

The lightest level until the heaviest level of the pain is able to disturb the concentration at work, to cause fatigue and ultimately to lower the productivity. It

requires an effort to prevent and minimize the incidence of musculoskeletal complaints in the workplace because prevention will provide more benefits such as cost savings, increasing productivity, improving quality of work, health, and job satisfaction of the employees (Davied, 1991).

Based on the explanation that has been described above, the researcher was interested in having a study on the effect of sitting duration to neck pain complaints of upper trapezius muscle on students of 'Aisyiyah University of Yogyakarta, so in further there will be prevention steps that can be faced by students of 'Aisyiyah University of Yogyakarta.

Based on the description above, the formulation of the problem that was proposed by the researcher was: Does sitting duration have effect on neck pain complaints of upper *trapezius* muscle on students of 'Aisyiyah University of Yogyakarta?

Research methods

The method used in this study was a survey with case control approach. This study is study design to compare between the case group and control group to determine the proportion of the incident based on the presence or absence of historical exposure. The design of the study is known as the retrospective nature which is the construction draft by looking at the historical record of a particular occurrence and the pain incident studied.

The independent variable in this study is the activity of sitting duration on the students. While the dependent variable in this study is neck pain on the upper *trapezius* muscle.

The populations in this study were all students of semesters 4 and 6 Physiotherapy Program of 'Aisyiyah University of Yogyakarta. The sampling technique used in this research was purposive random sampling with the following criteria; 1) The subjects are semesters 4 and 6 students of Physiotherapy Program of 'Aisyiyah University of Yogyakarta, 2) The complain of neck pain that can be missing and appearing, 3) Sitting activities at least 2 hours a day continuously.

The data collection instrument used in this study was questionnaire or closed questionnaire and pain examination with SPADI scale. The collected data was then analyzed using independent sample T test with sig.0.05.

Result

The subjects of the study were students of Physiotherapy Program, 'Aisyiyah University of Yogyakarta batch 2012- 2013 and 2013- 2014. The numbers of subjects from batch 2012 – 2013 were seven students, and from batch 2013 to 2014 there were 13 people. Thus, the total numbers of the subjects were 20 students. The sample consisted of male and female students of semester 6 and semester 4. The experiment was conducted in December 2014. Here it is the overview of respondents that were taken as research objects.

Table 1. Respondents' Distribution Based on Sexes

Sexes	Treatment group 1 for semester 6 students		Treatment group 2 for semester 4 students	
	Numbers	Percentage (%)	Numbers	Percentage (%)
Male	4	57.14	6	46.15
Female	3	42.86	7	53.85
Numbers	7	100	13	100

According to table 1 in group 1, the numbers of students consist of 4 male students with percentage of 57.14% and 3 female students with the percentage of 42.86%, total of 100%. Similarly, in the treatment group 2, there were 6 male students with the percentage of 46.15% and 7 female students with percentage of 53.85%, total of 100%.

In this study, the researcher used a statistical test to test the hypothesis. The statistical tests used the Independent T test. The test is a parametric test that normality test and homogeneity test become the requirement.

Table 2. Normality Test

		<i>Kolmogorov-Smirnov^a</i>		
		Statistic	Df	Sig.
Pain Rate	Semester 6	.162	10	.200*
	Semester 4	.185	10	.200*

Data obtained from *Kolmogorof* test is to determine whether the data is normal or not. Based on the Kolmogorof test, it can be seen that the normal distribution of data in both groups because the significance value is greater than 0.05.

Table 3. Homogeneity Test

		<i>Lavene</i> Statistic	df1	df2	Sig.
Pain Rate		.003	1	18	.958
		.006	1	18	.938
		.006	1	16.805	.938
		.002	1	18	.969

Data obtained from *Lavene* tests is to determine whether the data was homogeneous or not. Based on the homogeneity test above, it can be seen that the data was homogeneous because its significance is greater than 0.05.

Table 4. Independent T test

		N	Mean	Std. Deviation
Pain Rate	Semester 6	10	26.80	5.095
	Semester 4	10	26.10	4.932

Table 4.6 above shows that the average value in group 1 was 26.80, and group II was 26.10. This indicates that the level of pain on sixth semester students was greater than the fourth semester students.

The test result of independent sample test also shows significant value 0.958, so H_0 is accepted. It can be concluded that there was difference between the pain level of 6 semester compared that in semester 4, but the difference was not significant.

Discussion

There was effect of sitting duration No effect of prolonged sitting on the complaint of pain in students, but the difference of sitting duration effect on the complaint of pain among semester 6 and semester 4 students was not significant.

No significant difference could be caused by the differences in student routine itself. Semester 4 students still had lots of theories during the lectures; as a consequence the fourth semester students will follow the lectures in the classroom with longer duration of time. While the 6th semester students have a lot of activities outside the classroom with the majority of the lectures was practical work.

Although the difference was not significant, but the results still indicated that there was influence of sitting duration on the complaint of neck pain on the students. The influence can be seen from the mean value at the level of pain on each subject.

Health Department of the Republic of Indonesia (2004) states that the activities of too abundant work will cause effects to workers, such as complaints on the muscular system (musculoskeletal) in the form of complaints of pain, soreness, aches and other muscular systems (musculoskeletal) including tendons, blood vessels, nerves and others caused by working activities. Based on the location of complaints, the problems that often arise in the workers are back pain, neck pain, pain in the wrist, elbow and foot.

According to Richard (2006), there are currently 80% of living people that after they become adults, they will experience pain in the back of the body (back pain) due to various reasons, and because of this back pain, 40% of people do not come to work. A particular design of the seat/chair should be attempted in such a way so that the weight is refuted by the sitting bones distributed in a wide area. The most appropriate seating foundation can meet those needs. It should also be attempted that the subject who was sitting on the seat can adjust the position or posture to relieve the discomfort. Based on this case, proper anthropometric data are needed to be able to determine the exact measurements and clean distance.

Samara (2007) adds that workers who work with a static position for a long duration or with extreme position of the body that correlates to the neck can increase the risk of the pain on the neck.

Neck pain also causes high level of morbidity that result in decreasing of work productivity and daily activity. Different types of work can lead to neck pain, especially while working with the wrong body position which makes the neck staying in a certain

position in the long period. The examples are the workers who just sit all day working with computers and workers who often have heavy burden.

The Center of Occupational Health states three main considerations of neck disturbance during working performance, namely (1) the burden on neck structure for a long time associated with the high demands of the job and the need for stabilization of the neck and shoulder performance, (2) psychologically, the task with high concentration, quality and quantity demands that generally affects the muscles of the neck, (3) discs and joints in the neck often face degenerative changes with increasing prevalence following the age increase (Department of Health, 2004).

MTrPs distinctive sign is the pain that appears suddenly; it is clinically associated with Trigger Point in the muscle. If Trigger Point can be inactivated, the pain will decrease, and the power of the muscles will be restored. It may happen due to the inhibition of reversible motor components, and it is derived from the level of medulla spinalis (Gerwin, et al, 2004).

MTrPs establishment in upper *trapezius* muscle in Physiotherapy profession covers anamnesis, inspection, flat palpation and pincer palpation, knock, basic motion test, special tests, Range of Motion (ROM), and the assessment of pain and functional activity in the case of neck pain can be measured by the Neck Pain and Disability Index Questionnaire in which it is a measurement of 10 sections that include pain intensity, personal care, lifting activity, reading, headaches, concentration, working, driving, sleeping and recreation with each section consisting of 5 questions with the score of 50 (Fryer & Hodgson, 2005).

Conclusions and Suggestion

Based on the analysis of data obtained, it can be concluded that there was effect of sitting duration on the complaint of neck pain in semester 4 and 6 students of Physiotherapy Program, 'Aisyiyah University of Yogyakarta with percentage of SPADI value showing that semester 6 got higher rate than that semester 4 students of 'Aisyiyah University of Yogyakarta, but the level difference of pain between semesters 4 and 6 was not significant (sig. 0.758 >0.05). Based on the research results, the suggestions proposed by the researchers are as follows:

- 1) The students are expected to do light activity every 30 minutes to relax the body from stiffness.
- 2) The Institutions should provide flexible table or chair if it is possible. Those are the tables/ chairs that can be height adjustable, so it can be repositioned, so students can sit comfortably.

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“VEE DOUGH” EDUCATIONAL TOYS THAT SAFE AND AFFORDABLE FOR CHILDREN

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ABSTRACT

Problems: Toys plasticize is liked by children. They can express their creativity through the creation of visualization imagination and shape, and stimulate motor nerves. Products on the market, namely play dough is expensive. Other similar products are sold freely in stores sometimes make parents hesitate to quality and safety reasons for children and also its ingredients which is toxic and harmful. The solution is to make the toy itself, named "VEE Dough". Its advantages are safe for children; do not contain lead, paint and poisons if they swallow it.

The aim: Make children creative in making their toys, learn to recognize different kinds of letters, numbers, shapes and colors.

Method: Qualitative Research, conducted in Tegal Rejo and Geblagan Village. Data was taken by observation and deep interview in July 2016. The population was 37 people of 3 to 7 years old children with triangulation and univariate analysis.

The results: Children can make their toys, namely in mixing the dough, choose a color, create shapes in accordance imagination, and motivated to tell with homemade props. They also looked happy and enthusiastic.

The conclusions: Introduction of the safe toys, increasing creativity, imagination, literacy, and good moral education embedded in children.

Keywords: *Vee, dough, toy, children*

INTRODUCTION

Problem often encountered parents in introducing prior knowledge related to reading and writing for children is their wits to make children learn with fun and interesting. There are so many toys that offering educational games, but sometimes less attention to the safety and health of children. One example of popular children's toys is plasticized toy, as colorful and can be formed into objects

that are funny, but may be they can eat the toy that should not be consumed because of harmful ingredients. Based on the search Activists Association of Educational and Traditional Toys Indonesia (APMETI) 2007, it is known that a cheap toy contains 80% of lead and toxins. Lead is often mixed with colored substance. Its function is to bind the dye molecules in the material to be coated. As a result, if played in the long term, lead will be inhaled into the respiratory tract. This effect will occur after the lead settles in the body which is when the child is entering school age, in the form of blood and brain disorders, autism, respiratory illness, asthma, and weak concentration (Surabaya pagi.com, 2010).

The Plasticized toy is liked by children.

It can express their creativity through the creation of visualization imagination and shape, and stimulate motor nerves. It is often sold in stores, for example "Play dough", easily played and loved by children because it can express creativity through visualization imagination, shape and stimulate motor nerves. However, outstanding price for the quality of the original is still expensive because it is imported from abroad. Other similar products are sold freely in stores sometimes make parents hesitate to quality and safety reasons for children and also its ingredients which is toxic and harmful. The solution is to make the toy itself, named "VEE Dough". Its advantages are safe for children; do not contain lead, paint and poisons if they swallow it. The solution is to make theirs own toys. VEE Dough is toy from flour and foodstuffs like "Play Dough". In Tegalrejo and Geblagan village, there are lots of children aged 3-5 years who are still using a toy factory that quality is not necessarily safe and affordable. Children in the village tend to be active so we want to introduce VEE Dough and education as a means for parents to children is safe and affordable.

METHOD

Descriptive qualitative research, conducted in Tegal Rejo and Geblagan Village. Data was taken by observation and deep interview in July 2016. The population was 37 people of 3 to 7 years old children. The data was collected from observation and interview using vee dough playing. Analysis data use triangulation and univariate analysis.

RESULT AND DISCUSSION

The event was done in two separate villages. At the time of playing together, the average child ages 3 to 7 years old in attendance ranges from 18 children (Tegal Rejo village) and 11 children (Geblagan village). They were very happy and enthusiastic when making the Vee dough together. They can choose a color and also learn to recognize the current color while mixing the dough, especially for toddler.



Figure 1: Making Dough Together

After making dough, children can make their toys to create shapes in accordance imagination, and motivated to tell with homemade props. Various shapes of animals, numbers, and objects made according to the imagination of each child. One of the children says (Respondents A): *"I love playing with the dough and I've never made it home"*. Another respondent said (Respondents F): *"Although I ever played this before, this game is still interesting and I loved playing with this"*. This game is actually already there in kindergartens and primary school books, but rarely practiced.



Figure 2: Making Shapes



Figure 3: Dried Vee Dough

The next day after making various shapes, then the work of children dried using the oven and used to tell story about the shape they make.



Figure 4: Story Telling with Vee Dough

Play that children do is a reflection of the physical, intellectual, emotional and social. Play is also a good medium for learning, when the children's play, they will speak (communicate), learn to adjust to the environment, doing what they does, and about time, distance and voice (Wong, et al, 2008). From research conducted by the scientists concluded that play has great benefits for children's development. Playing a very useful learning experience for the child, such as gain experience of building relationships with peers, increase vocabulary, and to channel feelings of distress (Tedjasaputra, 2001). Play, invite children to talk, and compassion is 'food' that is crucial for a child's development, as

well as the need to eat for body growth. Play for children is not just a pastime, but through play children learn to control and coordinate the muscles, involving feeling, emotions, and thoughts. So with playing children received a variety of life experiences, besides when stiffened with his parents relationship of parents and children become increasingly familiar and parents will soon find out if there's disruption to early child development. Playing a "school" that are valuable to the child so that optimal intellectual development (Kania, 2006). Vee dough is made to be able to develop various aspects of child development, physical, motor, social, emotional, personality, cognition, sharpness, sensing, and skills.

In physical aspect, the child gets the opportunity to do activities that involve movement of the body, so that will make the child's body to be healthy. The muscles of the body will grow strong. Besides, members of the body get a chance to be moved. Children can also conduct their energy so it does not feel anxiety (Tedjasaputra, 2001). In making the dough, vee dough required enough power for mixing the constituent ingredients, it makes the children to use the muscles of the body and exert their energy. The social aspect will also be trained through play activities. Psychosocial stimulation for growth is as important as food for physical growth. This is most dramatic at the toddler's age. Interaction with people is becoming increasingly important (Martin, 1995 in Wong, et al, 2008). In preschool children, they enjoy a game of associative-game group with the same activity but without organization or rigid rules (Wong, et al, 2008). Playmates in the same age, the child will learn to share the property, using toys in rotation, do activities together, maintaining the already established relationship, and looking for ways of solving the problems faced by his playmates. For the emotional development of children, play can release the tension they experienced because of the many restrictions that are experienced daily, so it will feel more relaxed. Children will learn how to act and behave in order to work together with friends, to be honest, knight, generous, sincere, and so forth (Tedjasaputra, 2001).

Through play, children will develop the ability to regulate behavior. Kids will also learn to recognize his ability and compare it with others and test his ability to

try new roles and determine the impact of his behavior on others. For example, if the child takes his toy so the theme is crying, the child will learn to develop himself that his behavior hurt friends. In this

case the important role of parents to inculcate moral and ethical values, particularly in relation to the ability to understand the positive and negative effects of their behavior on others (Erfandi, 2009). When using vee dough, children learn to work together when mixing the material so that it becomes dough, dough sharing, and also take turns wearing prints that have been provided.

At preschool age children are expected to master a variety of concepts such as color, size, shape, direction, magnitude as the foundation for writing, language, mathematics, and other sciences.

Knowledge of these concepts much more easily obtained through play activities. Pre-school age children have a limited attention and still unruly or still difficult to learn seriously. But if the introduction of the concept is carried out while playing, then the child will feel happy, and without realizing it turned out he had a lot to learn. Acuity or visual and hearing sensitivity is very necessary to be developed because it will help children to be more easily learn to recognize and remember the forms or certain words that will ultimately facilitate the child to learn to read and write in the future (Tedjasaputra, 2001).

Vee dough game activities can introduce children about colors, shapes, names of objects, and others are fun, so they do not realize that it is learning a variety of things with a cheerful heart. Some of the statements of children, when they were asked: "Is this fun?" And in unison they replied: "Very nice.... sister". At the end of the game there are storytelling sessions using forms that have been created by each child. And they seemed to enjoy the story that flows spontaneously. This is in line with research conducted Alfiyanti, 2007 that play therapy take effect on anxiety levels preschoolers.

CONCLUSION

Introduction of the safe toys, increasing creativity, imagination, literacy, and good moral education embedded in children. VEE Dough can be a safe play

facility for children and can also be an educational tool for parents to introduce letters, numbers, shapes, colors, and so on to their children. This toy can train children's creativity as the basic material used

is flour, so that children can be creative by changing its shape as he wishes. With materials that are easily available and affordable for parents in the village, they can make their own toys at home, so parents need not worry about the security level of their children's toys.

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CARE FOR CHILD DEVELOPMENT (CCD) TRAINING ON CADRE CAN IMPROVE THE NUTRITIONAL STATUS ON CHILDREN

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ABSTRACT

Developmental disorders and growth of children less than five years is still one important child health problem in the world. This can occur as a result of poverty, health care is still bad, poor nutrition, and psychosocial stimulation is lacking. Care for child development training (CCD) to cadres, could be one of the efforts to overcome it. The study was conducted to assess the effect of CCD on cadre training to the nutritional status of the children. A quasi experimental design with non-equivalent control group with pretest and posttest was used in this study. The data collecting process was done from July to November 2015. Cadre and children 6-60 months in Puskesmas Mantrijeron and Kotagede II, Yogyakarta were included in this research. Cadres of intervention group were given CCD training for two days, while the control group were given seminars socialization. CCD module for cadres and facilitators, video, and counseling cards were used as instruments. Nutritional status of childrens measured a week before and three months after the training CCD. Bivariate data analysis using Mann whitney and Marginal homogeneity test. 27 cadres and 116 childrens were enrolled in this study. The results showed that 12 childrens had an increase in nutritional status. There was 1 child (1.7%) very thin nutritional status becomes non-existent. Likewise, originally there were 14 childrens (23.3%) underweight to five (8.3%) after given intervention. There were significant differences in the nutritional status between the intervention and control groups ($p < 0.05$). CCD training on cadre followed by counseling by the cadres to the mothers can improve the nutritional status of childrens.

Keywords: CCD training on cadres, the nutritional status of children

INTRODUCTION

More than 200 million children around the world (39%) are not able to achieve their growth and development at the age of 5 years (WHO, 2012). Poverty that occurs primarily in developing countries be a contributing factor (Engle *et al.*, 2007). It occurs as a result of poverty, health care is still bad, poor nutrition, and psychosocial stimulation less (McGregor, 2007; Walker, 2011 & WHO, 2012)

Basic health research in 2013, shows that nationally prevalence of weight-less in 2013 was 19.6%, consisting of 5.7% malnutrition and 13.9% less wight. When compared to the national prevalence rate in 2007 (18.4%) and in 2010 (17.9%), then the number of malnutrition has increased. Changes especially in the prevalence of malnutrition, from 5.4% in 2007, 4.9% in 2010, and increase 5.7% in 2013. Likewise, the prevalence of short toddler increased compared with previous years. Nationally, the number of short toddlers in 2013 was 37.2%. This shows an increase compared to 2010 (35.6%) and 2007 (36.8%). Prevalence short of 37.2% is consist of 18.0% very short and 19.2% short (Public Health Minister of RI, 2013).

The impact of nutritional disorders are one day they will have low education because of an inability to think, low-income, have many children, and unable to care for the child properly. Of them that are contributing to the growth and development disorders in the next generation (McGregor, 2007). Therefore, it is necessary to do an act to overcome. One of them is the training of CCD (care for child development) on cadres. CCD is an intervention program that supports parents' ability to care for children (WHO, 2012).

After getting the training, cadres were expected can provide counseling to caregivers about parenting, child care in order to optimize the growth and development of children. Program parenting (parenting programe) is regarded as the appropriate strategy to address the problem (Engle *et al.*, 2007). Modifications of care practices can address issues and problems stunt growth stimulation (Walker *et al.*, 2007). Sensitivity, responsiveness and actions of the caregiver psychosocial stimulation is an important factor in a child's development. Children stunted by extra food does not have the same development with children with measures of stimulation (Mc Gregor *et al.*, 2007).

RESEARCH METHOD

This study is a quasi-experimental research design with non-equivalent control group with pretest and posttest. The subject of this research is the cadre and childens 6-60 months of age in Primary health care at Mantrijeron and Kotagede II, the city of Yogyakarta. This research was conducted in July-November 2015. The subject of the research, cadres taken by using cluster sampling, while the childrens was taken using purposive sampling technique. Subjects were divided into two groups, the intervention

group was 13 cadres and 60 childrens, while the control group amounted to 14 cadres and 56 childrens. Cadre in intervention group was given CCD training for two days, while the control group were given socialization seminars for two hours. The instruments used during the training were: CCD module for cadres and facilitators, video, and counseling cards. Growth measurement instruments are baby weight scales.

RESULTS AND DISCUSSIONS

1. Respondent Characteristics

Table 1. Characteristic of posyandu's cadre

Cadre's characteristics	Intervensi group (n=13)	Control group (n=14)	Value p
Age (Mean± SD)	43.69 ± 5.45	40.79 ± 7.02	0.164
Education Level			
ES (n, %)	0 (0.00)	0 (0.00)	0.346
JHS (n, %)	0 (0.00)	1 (7.10)	
SHS (n, %)	11 (84.60)	12 (85.80)	
University (n, %)	2 (15.40)	1 (7.10)	
Duration become cadre			
1 -10 years (n, %)	10 (76.90)	10 (71.40)	0.812
11-20 years (n, %)	2 (15.40)	4 (28.60)	
21-30 years (n, %)	1 (7.70)	0 (0.00)	
Training			
Never (n, %)	10 (76.90)	9 (64.30)	0.118
Ever (n, %)	3 (23.10)	5 (35.70)	

There were 27 cadres were recruited in this research. Cadre of intervention group mostly have been becoming cadre for one up to ten years, they have senior high school degree so have the cadre of control group. The number of cadres who followed training is more than in the control group namely five people, while the intervention group consists of three people. Characteristics of cadres which include: age, education level, the old cadre and trainee were all homogeneous (p-value for each characteristics > 0.05).

There were 116 childrens were included in this research. Childrens intervention group were 60 and there were 56 childrens of control group. Homogeneity test results

also showed that the variables of age, gender, breast status, education level, income level were homogeneous (p-value for each of these variables > 0.05).

Table 2. Characteristics of childrens and family

Children's characteristics	Intervention group (n= 60)	Control group (n= 56)	Value p
Children's age (Mean \pm SD)	19.92 \pm 11.14	24.78 \pm 14.22	0.056
Gender children			
Male (n, %)	32 (53.30)	36 (64.30)	0.010
Female (n, %)	28 (46.70)	20 (35.70)	
Level education			
High (n, %)	46 (76.70)	46 (82.10)	0.117
Low (n, %)	14 (23.30)	10 (17.90)	
Income level			
\geq UMK (n, %)	29 (48.30)	27 (48.20)	0.231
< UMK (n, %)	31 (51.70)	29 (51.80)	
Genesis Pain			
The sickness is in the last month (n, %)	25 (41.70)	14 (25.00)	0.011
Lanjutan sakit in the last month (%)	35 (58.30)	42 (75.00)	
Breastfeed Status			
Exsclusive	46 (76.70)	43(76.80)	0.117
Non exclusive	14 (23.30)	13(23.20)	

2. The results of pre-test ratings nutritional status on the intervention and control group as a prerequisite test

Table 3. Differences between the pre-test for children's nutritional status with the control group intervention

		Intervention (n = 60)	Control (n = 56)	Value p
Nutritional status before CCD training	Very thin (n, %)	1 (1.70)	4 (3.40)	0.910
	Thin (n, %)	14 (23.30)	25 (21.60)	
	Normal (n, %)	45 (75.00)	87 (75.00)	

Mann Whitney test

The results showed that p value was 0.910. It means that there was no statistically significant difference between the results of the control group pretest nutritional status of childrens with intervention group.

3. Effect of CCD training toward the nutritional status of childrens

There were 12 childrens who experienced an increase in nutritional status. Tables show the significance of the p-value of 0.001 (p value < 0.05), which means there was a significant difference in nutritional status between the posttest (after treatment) and pretest (before treatment).

Table 5. Differences between the childrens nutritional status between pretest and posttest

	Nutrition status after CCD training			Total	Value p
	Thin	Normal	Fat		
Nutritional status before CCD training	Very thin (n, %)	1 (100)	0 (0.00)	0 (0.00)	0.001
	Thin (n, %)	4 (28.60)	10 (71.40)	14 (100)	
	Normal (n, %)	0 (0.00)	44 (97.80)	45 (100)	
	Total (n, %)	5 (8.30)	54 (90.00)	60 (100)	

Marginal homogeneity test: 0 childrens has under nutritional status, 12 childrens rose and 48 childrens are constant.

Table 6. Differences in the nutritional status of childrens at posttest between the intervention group and the control group

		Intervention (n = 60)	Control (n = 56)	Value p
Nutritional status after CCD training	Very thin (n, %)	0 (0.00)	1 (1.80)	0.001
	Thin (n, %)	5 (8.30)	13 (23.30)	
	Normal (n, %)	54 (90.00)	42 (42.00)	
	Fat (n, %)	1 (1.70)	0 (0.00)	

Mann Whitney test.

Tabel 6. shows the significance of the p-value of 0.001. The results showed that there was a statistically significant differences between the control group and the intervention group. Mann Whitney test results also showed the intervention group had an average rank better (63.56) than the control group (53.08). This means that the children group intervention is likely to experience renewed nutritional status as compared to the control group.

Improvement of childrens nutritional status after the CCD training on cadre

The result of the difference in nutritional status between the intervention group childrens before and after the CCD training on cadres showed there were 12 childrens whose nutritional status was better than before the intervention and no decrease than before the intervention. From the test also concluded there was a significant difference (p value < 0.005). From the results of the univariate analysis of the status of childrens nutritional status seen that initially there was 1 children (1.7%) was very thin nutritional status becomes non-existent. Likewise, originally there were 14 childrens (23.3%) the nutritional status of children underweight to five (8.3%) after given intervention.

Improved nutritional status in intervention childrens can occur because the parents or caregivers had been receiving counseling from the cadre related parenting child development. Counseling parenting child development showed how to feed in accordance with the age of the child, to train parents to be sensitive or sensitive to the messages given when children were hungry and responsive, while knowing their children were hungry. Caregivers who had received counseling from the cadres were likely to have a sensitivity and responsiveness as well as provide food to suit the child's age. Aboud (2013), stated that the parenting program is an action that is not directly to the child, but is done by changing the behavior of caregivers, so they were more responsive to children. The research resulted Aboud showed caregivers who participate in parenting programs will gave you eat a more diverse kinds and nutritious than caregivers who did not participate in parenting programs. Walker (2007), stated it was appropriate parenting programs to address nutritional issues and lack of stimulation, in which both of these are the causes of the emergence of the problem of child development.

CCD training on cadre was one of the appropriate interventions to address the growing problem of children. Care for child development (CCD) was a program of WHO and UNICEF in order to integrate the development of children in nursing care sustainable, community-based and family in order to improve the ability of parents in the care of neonates and childrens. CCD helps families build strong relationships with their children and help them in overcoming the problems that arose during child care (WHO, 2012). CCD advised families to play and to communicate with children, so that they learn to understand and be sensitive to the child's needs and can respond to the

needs of the child. Basic was what makes children healthy, grow and develop optimally (UNICEF, 2013).

2. Effect on the CCD training of cadres to the nutritional status of childrens

Results of the analysis showed that before intervention/when the pretest, there were no differences in the nutritional status of childrens between intervention and control groups (both homogeneous group). After the intervention, there was improvement or increase in the nutritional status of childrens. There was also a significant difference between the results of post-test status children intervention group with the control group children status. This showed that there was an influence of the CCD training program on cadres of the status of nutritional of childrens. On the status of nutritional there were 12 childrens who ride its nutritional status. Nutritional Status higher improvement intervention group compared to the repair status updates to the control group ($p = 0.048$).

The improvement of nutritional status of childrens in the intervention group could not be separated from their influence on the CCD training of cadres. Cadres who had been trained would have knowledge and skills in preparation to conduct counseling to caregivers. Parenting Counseling of child development shows how to feed in accordance with the age of the child, to train parents to be sensitive to the messages given when children were hungry and responsive, while knowing their children were hungry. It also taught caregivers to communicate and conduct games which appropriate with child's age. Caregivers who had received counseling from the cadres were likely to have a sensitivity and responsiveness as well as provide food to suit the child's age. Aboud (2013), stated that the program parenting was an action that is not directly to the child, but it was done by changing the behavior of caregivers, so they were more responsive to children. The research results Aboud showed caregivers who participated in parenting programs would give you eat a more diverse kinds and nutritious than caregivers who did not participate in parenting programs (Walker, 2007).

Implementation and assessment of the use of modules care for child development (CCD) in Central Asia that was integrated with the implementation of the Integrated Management of Childhood Illness showed positive results, which obtained a score of development was higher in childrens in the area of application of the CCD

compared to childrens in the area which was not done CCD implementation. Some research also suggested training of parenting (parenting intervention) support the interaction between parents and children to improve parents' ability to react/responsiveness when children were hungry, improve bonding, enhance play activities with children, and raise awareness and ability to solve problems associated with developmental disorders of children, Ties that have developed between parent-child and parent awareness on the needs of children was closely related to the development of children (Engle *et al.*, 2011).

Care for child development (CCD) is a program of WHO and UNICEF in order to integrate the development of children in nursing care sustainable, community-based and family in order to improve the ability of parents in the care of neonates and childrens. CCD helps families build strong relationships with their children and help them in overcoming the problems that arose during child care. CCD advised families to play and communicate with children, so that they learn to understand and be sensitive to the child's needs and can respond to the needs of the child. This basic is what made children's healthy, grew and developed optimally (UNICEF, 2013).

CONCLUSIONS AND SUGGESTIONS

Based on the purpose of research, data analysis and discussion were done, it can be deduced that the CCD training on cadres, followed by counseling by a cadre of the mothers can improve the status of nutritional of childrens. Responsible for mother and child health programs in Puskesmas is expected to support both morally and materially their child development parenting counseling activities carried out by the Posyandu, so that these activities can continue counseling and get better again.

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THE CORRELATION BETWEEN KNOWLEDGE LEVEL AND PARITY TOWARD REGULAR ANTENATAL CARE VISITS ON PREGNANT WOMEN

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ABSTRACT

Antenatal care is an assessment done by healthcare staff to pregnant mother and her baby periodically to monitor mother's health and fetus growth and development. The purpose of this study was to investigate the relationship between level of knowledge, parital status and ANC visits on pregnant mothers. This study was an analytical survey with cross sectional approach. The samples were taken through incidental sampling with 65 respondents. Data analysis used Chi Square. The result showed that most of respondents 95.4% have high knowledge level, 66.7% have multiparas status, and 59.1% do regular ANC visits. There is low corelation between knowledge level and regular ANC visits and there is no correlation between parity and regular ANC visits.

Keywords : knowledge level, parity, regular ANC visits

INTRODUCTION

Antenatal Care (ANC) is a program that is planned in the form of observation, education, and medical treatment in pregnant women, to obtain a process of pregnancy and childbirth safe and satisfied. Objective of Antenatal Care (ANC) is to keep staying healthy during pregnancy, childbirth and postpartum, cultivate healthy babies born, watching the possibility of a high risk of pregnancy is expected to do as well as early treatment can reduce morbidity and mortality of mother and fetus (Hutahaeen, 2009 ; & Mufdlillah, 2009).

Coverage of antenatal care was monitored through a new service visit pregnant women K4 and K1 to antenatal care according to standards at least four times (K4). Coverage in Indonesia (K4) of pregnant women in 2013 amounted to 86.85% decline in 2014 is 86.70%, the national strategic plan has not achieved the target of the Ministry of Health in the amount of 95% (Profile Ministry of Health, 2014). The range of indicators ANC Bantul Regency of Yogyakarta Province in 2014 has K1 and K4 coverage is low. Bantul Regency has a number of 100% coverage of K1 and K4 89.4%, thus still has not

reached the national target (DIY Health Office, 2015). The above data illustrates that compliance is still low ANC.

At first, the expected normal pregnancy can develop into a pregnancy pathology. Then the need to improve primary health care for pregnant women to improve the ANC is complete and standards-compliant.

A result that occurs when did the ANC in an irregular manner can cause problems that occur in the mother's pregnancy, are at risk of physical and mental health of mother and fetus, complications may occur during pregnancy, did not prepare for childbirth term, difficult delivery, stillbirth, increased maternal morbidity and mortality, even a severe impact on maternal and infant mortality (Purwaningsih, 2010).

The government has established maternal and child health programs included in Safemotherhood and the Millennium Development Goals (MDGs), aim to improve maternal health with the target of reducing the Maternal Mortality Rate (MMR) by reducing the MMR. It has been established also in the Minister of Health of the Republic of Indonesia No. 2562/MENKES/PER/XII/2011 explained that the minimum ANC 4 times during pregnancy.

Regularity ANC are influenced by several factors, parity, age, knowledge, attitudes, economic, social, cultural, geographic, and support the husband. Factors knowledge is one very important factor in the ANC visit, because it can detect early signs and symptoms of pregnancy complications and diseases that accompany pregnancy that a pregnant woman may ANC visit regularly. Parity is also a factor influence the ANC. Mothers who have higher parity, the higher the risk of maternal death, and therefore pregnant women are motivated to check or ANC visit regularly.

Based on the background of the problem, the researcher interested to know the correlation between knowledge and parity status with the regularity of visits Antenatal Care (ANC) for pregnant women in Panembahan Senopati Hospital Bantul.

RESEARCH METHOD

This research is analytic survey with cross sectional approach that is independent and dependent variables only been observed and taken one course at a time when the research (Notoadmodjo, 2012). The location of research in Panembahan Senopati Hospital Bantul. The study population was post partum mothers who were treated at the

Ward Alamanda of Panembahan Senopati Hospital Bantul, sample of 65 respondents using Incidental Sampling. The instrument used was a questionnaire for the independent variable level of knowledge and parity status, and the dependent variable studied from books KIA mother. Data collected in the study are primary data. Analysis of this study used univariate and bivariate with Chi Square test.

RESULTS AND DISCUSSION

1. Characteristics of Sample

Characteristics of respondents were observed in this study included age, education, and occupation of respondents. Distribution of frequency and percentages can be seen as follows:

a. Age of mother

Characteristics of respondents by age is presented in Table 1, as follows:

Table 1. Frequency Distribution of Respondents by Age Group in Panembahan Senopati Hospital Bantul

No	Age	Frequency	Percentage (%)
1	20-25 years	19	28.8
2	26-30 years	20	30.3
3	31-35 years	26	39.6
	Total	65	100.0

Source: Primary Data, 2016

Table 1 show the age group of post-partum mothers in Panembahan Senopati Hospital Bantul. At most that amount age 31-35 years as 26 respondents (39.6%), while the age group least of 20-25 years were 19 respondents (28.8%).

b. Education of mother

Characteristics of respondents by education is presented in Table 2, as follows:

Table 2. Frequency Distribution of Respondents by Education in Panembahan Senopati Hospital Bantul

No	Education	Frequency	Percentage (%)
1	Elementary	12	18.2
2	Junior	21	31.8
3	Senior	25	37.9
4	Diploma/Sarjana	7	10.6
	Total	65	100.0

Source: Primary Data, 2016

Table 2 shows that the majority of respondents education is Senior High School graduated of 25 (37.9%) and least Diploma/Sarjana graduated of 7 (10.6%).

c. Occupation

Characteristics of respondents based on the occupation presented in Table 3, as follows:

Tabel3. Frequency Distribution of Respondents by Occupation in Panembahan Senopati Hospital Bantul

No	Occupation	Frequency	Percentage (%)
1	Labor	4	6.1
2	Housewife	19	28.8
3	Farmer	11	16.7
4	Entrepreneur	29	43.9
5	Government employe	2	3.0
	Total	65	100.0

Source: Primary Data, 2016

Table 3 shows that job most respondents as the Entrepreneur which 29 (43.9%) while the least as PNS 2 (3.0%).

2. Univariate Analysis

a. Knowledge level of mother

Characteristics of respondents by the knowledge level of mothers are presented in Table 4, as follows:

Table 4. Frequency Distribution of Respondents by Knowledge Level of Mother About Pregnancy in Panembahan Senopati Hospital Bantul.

No	Knowledge level	Frequency	Percentage (%)
1	Medium	3	4.6
2	High	62	95.4
	Total	65	100.0

Source: Primary Data, 2016

Table 4 shows the knowledge level is divided into two, medium and high. Respondents who have medium level of knowledge were 3 (4.6%), while 62 (95.4%) have high knowledge.

b. Parity Status

Characteristics of respondents by parity status are presented in Table 5, as follows:

Table 5. Distribution of Respondents by Status Parity in Panembahan Senopati Hospital Bantul

No	Parity Status	Frequency	Percentage (%)
1	Primiparous	21	31.8
2	Multiparous	44	66.7
	Total	65	100.0

Source: Primary Data, 2016

Table 5 shows the parity status are grouped into two categories, are primiparous and multiparous. Category primiparous if maternal first time, of the 65 respondents who have the status of primiparous were 21 (31.8%). While the category of maternal multiparous if more than one time, as many as 44 (66.7%).

c. Regularity Antenatal Care (ANC) Visit

Characteristics of respondents based on the regularity of ANC are presented in Table 6 as follows:

Table 6. Distribution of respondents by Regularity ANC visits in Panembahan Senopati Hospital Bantul

No	Visit	Frequency	Percentage (%)
1	Regular	39	59.1
2	Irregular	26	39.4
	Total	65	100.0

Source: Primary Data, 2016

Table 6 shows respondents who regularly visits Antenatal Care (ANC) 39 (59.1%), while respondents who do not regularly visit Antenatal Care (ANC) were 26 (39.4%).

3. Bivariate Analysis

- a. Result Analysis Relationship of Knowledge Level with regularity ANC on Pregnancy in Panembahan Senopati Hospital Bantul

Table 7. Result Analysis Relationship of Knowledge Level with the Regularity ANC on Pregnancy in Panembahan Senopati Hospital Bantul

Variable 1	Variable 2	p value
Pregnant mother's knowledge	Regularity of ANC	0.030
<i>Contingency Coefficient 0,269</i>		

Source: Primary Data, 2016

Table 7 shows that the p-value less than 0.05, it can be stated hypothesis was accepted, and the results of the Contingency Coefficient at 0.269 that there is a weak relationship between the knowledge level of pregnant women with regularity ANC visits in Panembahan Senopati Hospital Bantul.

- b. Results Analysis Relationship of Status Parity with the Regularity of the ANC on Pregnancy in Panembahan Senopati Hospital Bantul

Table 8. Results Analysis Relationship of Status Parity with the Regularity of the ANC on Pregnancy in Panembahan Senopati Hospital Bantul

Variable 1	Variable 2	p value
Parity Status	Regularity of ANC	0.290

Source: Primary Data, 2016

Table 8 shows that the p value greater than 0.05, it can be stated hypothesis is rejected, there is no relationship between parity status with regularity ANC in Panembahan Senopati Hospital Bantul.

Discussion

- a. Relationship of Knowledge Level with the Regularity ANC on Pregnancy in Panembahan Senopati Hospital Bantul

Knowledge is the result of out and going after people perform sensing of an object (stimulus) certain. Sensing occurs through the human senses, the senses of

sight, hearing, smell, taste, and touch (Ariani, 2014). Knowledge of pregnant women about pregnancy ANC is a visit that includes understanding, purpose, benefits, execution time, result or impact if not done regularly visits

Based on the results of statistical analysis using Chi-Square formula obtained by value $p = 0.269$ which indicates $p < 0.005$ so that rejected H_0 and accepted H_a with interpretation "There is a relationship level of knowledge with regularity visits Antenatal Care (ANC) for pregnant women in Panembahan Senopati Hospital Bantul".

In this study discussed the relationship the level of knowledge with regularity of visits Antenatal Care (ANC) in pregnant women. Assuming a pregnant woman who has knowledge of Antenatal Care (ANC) will affect the regularity of visits Antenatal Care (ANC). The results of the analysis conducted on the level of knowledge acquired Antenatal Care (ANC) was high with inspection visits Antenatal Care (ANC) regularly.

Results of statistical test Chi Square got value p of 0.269 between 0.20 to 0.399 means there is a low correlation between the two variables. Thus the conclusion of the study there is a relationship level of knowledge with regularity visits Antenatal Care (ANC) for pregnant women in Panembahan Senopati Hospital Bantul.

Low level of coefficient correlation in this study can occur because of a job. Respondents who mostly have a high level of knowledge about Antenatal Care (ANC) can be caused by job status. Respondents in this study were mostly working as entrepreneur as many as 29 (43.9%). Sebagaimana the majority of respondents worked as a entrepreneur so that the respondent had a busy time or a little to find the information as much as possible rather than as a housewife, who have more free time (Notoadmodjo, 2007).

b. Relationship of Status Parity with the Regularity of the ANC on Pregnancy in Panembahan Senopati Hospital Bantul

Parity is the number of children born to mothers either alive or dead. Parity is not safe for pregnant and giving birth is a first pregnancy and high parity (over 3), 2-3 parity is the most secure parity terms of the maternal mortality (Fitriana, 2009).

Based on the results of statistical analysis using Chi-Square formula obtained by value $p = 0.290$ which shows $p > 0.005$ so that rejected H_0 with interpretation "There is no relationship between parity status with the regularity of visits Antenatal Care (ANC) for pregnant women in Panembahan Senopati Hospital Bantul. This is due to the proportion of pregnant women who use antenatal care with parity status multiparous regularly (44.6%) is not much different from the parity status primiparous regularly (15.4%) This is due to the proportion of pregnant women who use antenatal care with parity status multiparas regularly (44.6%) is not much different from the parity status primiparas regularly (15.4%). Likewise, the proportion of pregnant women with irregular status multiparous (23.1%) is not much different from the parity status primiparous irregular (16.9%) with the regularity of visits Antenatal Care (ANC) for pregnant women in Panembahan Senopati Hospital Bantul.

CONCLUSIONS AND RECOMMENDATIONS

Based on the results of research on mother's level of knowledge of almost all respondents have a high level of knowledge in the regularity of visits Antenatal Care (ANC), The majority have a status multiparous, regularly visits Antenatal Care (ANC), there is a low relationship between the level of knowledge with regularity of visits Antenatal Care (ANC) for pregnant women in Panembahan Senopati Hospital Bantul, and there is no relationship status parity with the regularity of visits Antenatal Care (ANC) in pregnant women in Panembahan Senopati Hospital Bantul.

From these results, it is expected that health workers to improve the provision of information to pregnant women about the importance of the implementation of the ANC during pregnancy regularly.

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Relationships nutrition behavior to nutrition status of school age children in Meranti Island, Riau Province

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Abstract

This study aims to identify the relationship of nutrition behavior to nutrition status of school age children in Meranti Island, Riau Province. This research is descriptive correlation research with cross sectional approach. This study is conducted on 90 school age children from 3 elementary school in Meranti Island which is taken by using purposive sampling based on inclusion criteria. Measuring instrument uses questionnaire with 21 statements to nutrition behavior variables that have passed validity and reliability test. Nutrition status was measured by Body Mass Index (BMI). The analysis used univariate analysis to determine the frequency distribution and bivariate analysis using Chi Square test. The results indicate 0,024 p value <alpha of 0.05, which means that there is a relationship between nutrition behavior to nutrition status of school age children. Based on the results of this study suggests that health practitioners should improve further nursing care in Students Health Unit (UKS) primarily related to school age children motivations to increase adaptive nutrition behavior so met with good nutrition.

Keywords : Nutrition Behavior, Nutrition Status, School Age Children

PENDAHULUAN

School-age children are an asset of nation. School-age children need optimal growth and development so it can produce quality human resources. Nearly a third of the population of Indonesia is estimated to school-age children (MOH, 2007). The high number of school-age children was the asset for the creation of qualified human resources in Indonesia. School-age children are children who are still in the stage of growth and development and have risk in a variety of health problem, one of the health problems is the issue of nutrition. Nutritional factors influence growth and development of school-age children (Mandel, 2010). Nutritional problems in school children will lead to impaired growth and development as well as the effect on cognitive development and academic achievement of children in school (Cook, 2012; Allender and Spradley, 2010). The problem of malnutrition has bad consequences on children. Children will experience irritability, lack of energy and difficulty concentrating that impact on the academic achievement and decrease the achievement of basic skills in school age

children such as reading and arithmetic. In addition, malnutrition also result in physical growth is not optimal, posture tends to be short and not active. The condition will certainly disrupt the learning process so that it will have a direct impact on the quality of human resources that will come. Research Lamtiur, Hasanah and Huda (2015) in Pekanbaru said that school-age children who have nutritional problems are less likely to concentrate on the lessons that directly affect the child's learning achievement.

Based on the results of household health survey in 2004 showed 18% of school children are nourished less. Results Health Research (Riskesdas) (2013) data obtained nutritional status of school age children based on body mass index/age is 13.2% prevalence of underweight children. While short posture on the prevalence of school-age children was 30.7%. In Riau province, increased in the prevalence of malnutrition is generally from 9.4% in 2007 to 9.8% in 2010.

Increased prevalence also occurs in malnutrition prevalence at 3.0% in 2007 to 4.3% in 2010. Results of Riskeddas (2013) prevalence of underweight children and very thin was 13.9%. This figure is quite high compared to other provinces and could threaten the quality of Indonesian human resources in the future.

District Meranti Island is one of the districts in Riau province. Consisting of 3 Big Island, namely Merbau Island, Tebing Tinggi Island, and Rangsang Island. Geographical conditions consist of islands made Meranti community relies heavily on seafood as a primary food source. The expensive transportation costs make the food that comes from outside the island is very expensive and less affordable for the people who are generally middle and lower-class society thus affecting consumption patterns of society. In Meranti islands District environmental sanitation is also a major problem because of the difficulty of clean water and healthy latrines obtained, whereas these three things (food diversification, consumption patterns and environmental sanitation) are some of the factors that influence the nutritional problems in children of school age (Almatsier, 2006).

Nutritional problems in school age children are influenced by various both factors, including environmental factors, socio-economic, lifestyle factors, cognitive factors, behavioral factors and health status factors (Brown et al, 2005). Factors affecting the nutritional status directly are the daily food consumption patterns, physical activity, health status, parental income, parental education and behavior child's eating habits.

Saifah (2011) says that a powerful factor in shaping a child's nutritional behavior primary school age is the role of the teacher, the role of parents and the role of peers. Therefore, these factors should be considered and optimized so that the nutritional problem in children does not happen again. But unfortunately this factor rarely known and taken into account in the prevention and managements of procedures nutritional problems.

Based on the above phenomenon researchers interested in studying the relationship between nutrition behavior with nutritional status of school-aged children in Meranti Island. Purposes of this research is to identification relation nutrition behavior (knowledge, attitude and practice) of primary school students to the nutritional status of children in primary school students in the coastal areas of the Meranti island.

METHODS

The study design of this research is descriptive correlation with cross sectional approach. The population in this study are all elementary school students grades 2nd and 3rd at 4th primary schools in the districts of West Tebing Tinggi that approximately 425 students. Samples are elementary school students who meet the inclusion criteria after randomization. Based on the sample formula for proportional cluster sampling, researchers determined the proportion of good nutritional status was 0.06, alpha 0.05, 95% confidence level and precision of 5% and 2 design effect for cluster sampling, then obtained a total sample of 90 students.

The inclusion criteria for the sample in this study are:

- a. Willing to become respondents
- b. Students in grade 2 and 3 and 4 at a public elementary school in the district of West Tebing Tinggi.
- c. Respondents could read and write.

Data taken with a questionnaire which tested the validity and reliability.

RESULT

Based on research obtained the following results:

1. Univariate Analysis

Table 1

Characteristics of Respondents' Gender

Group	Total	Percent
Male	52	57,8
Female	38	42,3
Total	90	100

Table 1 show that most respondent is male students as many as 52 people or about 57.8%.

Table 2

Characteristics based on parental income and a history of chronic disease

Characteristics of respondents	Total	
	N	%
Parental Income		
a. > UMR	16	17.8
b. < UMR	74	82.2
History of Chronic Disease		
a. Suffer chronic illness	8	8.2
b. Not suffer chronic illness	82	91.8

Table 2 shows that from 90 respondents, parental income whose below of UMR (Regional Minimum Wage) are 74 respondents or approximately 82.2% and as much as 81 respondents or approximately 91.8% had no history of chronic illness in the last three years.

Tabel 3

Distribution of respondent nutritional status

Nutritional Status	Total	
	N	%
Malnutrition	33	36.7
Normal	51	56.6
Over nutrition	6	6.7
Total	90	100

Table 3 shows that majority of nutritional status are normal with total 51 respondent or approximately 56.6%.

2. Bivariate Analysis

Table 4

Relation between nutritional status and nutritional behavior. (with chi square test)

Nutritional Status	Nutritional Behavior				Total	p value
	Mal-adaptif		Adaptif			
	n	%	n	%	N	
Less	5	5.55	28	31.11	33	0.024
Normal	35	38.89	16	17.79	51	
Over	3	3.33	3	3.33	6	
Total	43	47.77	47	52.23	90	

Table 4 shows that p value was 0.024 that mean there is a relation between nutritional behavior and nutritional status (p value $0.024 < \alpha (0.05)$)

DISCUSSION

1. Characteristic of Respondent

Research conducted on 90 respondents obtained data that the average school-age children were male and their parents' income is below the minimum wage.

Data from the Central Statistics Agency (BPS) in 2014 the percentage of the Indonesian population aged 7-12 who are in school are as much as 98.82%. Total population by province and sex of the BPS in 2013 in the province of Riau-sex male as much as 51.37% while women amounted to 48.63%.

Number of poor in Indonesia until March 2016 amounted to 28005.41 thousand inhabitants, while in Riau province alone the number of poor is 515.40 thousand inhabitants to division of 162.45 thousand inhabitants of urban communities and rural communities 352.95 thousand inhabitants (Central Bureau of Statistics, 2016). According to research Handini, Ichsan, & Nirlawati (2013) found an association between the level of family income with the nutritional status of children in the region Puskesmas Kalijambe

2. Relation between nutritional behavior and nutritional status

The results showed that there is a relationship between nutrition behavior (knowledge, attitude and practice) elementary school students and the nutritional status of children in primary school students in the coastal areas of the Meranti islands (p value $< \alpha$).

According to research Mulyani, Mustikawati, Hand, & Rumana (2014) there is a relationship of knowledge with balanced nutrition behavior ($P < 0.05$) but did not find any relationship with the attitude of balanced nutrition behavior ($p > 0.05$). Meanwhile, according to research Semito (2014) shows that knowledge has a relationship with the nutritional status wherein 0.020 p value of < 0.05 . Growth and development in children occurred rapidly and is influenced by many factors. One of the factors that support the growth process optimal child is enough nutrients from food daily (Andriani & Wirjatmadi, 2012).

Nutritional problems in children can be caused by several factors such as an unbalanced diet and infectious diseases, food security in the family inadequate, such as the ability of poor families to feed the entire family, both in quantity and nutrition. Nutritional problems are also caused by the ability of poor families to provide time, attention and support to children in order to grow and develop as well as possible both mentally, socially and physically (National Development Planning Agency, 2010).

Other causes of nutritional problems by Adriani and Wirjatmadi (2012) is the consumption habits that are not good, for example, children are too much to drink milk so it lowers the interest of children to eat other foods, consuming less vegetables, as well as the imbalance between energy entering and energy out.

Another factor that could affect the nutritional status is the feeding behavior of parents. According to research Grodner, Long and Walkingshaw (2007), which states that a child's behavior is influenced by the example of the behavior of the adults around them. The role of parents to always set a good example for children is needed to shape children's behavior, including eating behavior.

CONCLUSION

1. Conclusion

After doing research on the behavior of nutrition and nutritional status of the 90 respondents in the district Meranti Islands, the researcher found the majority of respondents consisted of men as much as 57.8%, the income of parents most is below the minimum wage with a percentage of 82.2%, and the majority do not have a chronic disease in 3 years last as much as 91.8%.

Based on the Chi Square test, there is a relationship between nutrition behavior (knowledge, attitude and practice) and nutritional status of children in primary school students in the coastal areas of the Meranti islands with 0.024 p value of <0.05.

2. Suggestion

- a. For parents, the results of this study can be used to optimize a contributing factor in improving the nutritional status of primary school students in the island Meranti in order to improve their nutritional status so that it can generate qualified human resources in the future.
- b. For nurses, know the factors affecting the nutritional status, it will facilitate the development of programs and strategies of nursing care can be done by nurses at the health center, the clinic or in the community related to nutrition in the form of primary prevention, secondary and tertiary.
- c. Educational institutions / health, the results of this study can also be used as basis for policy in increasing community empowerment, family and peers for improving nutritional status of primary school students.
- d. For the research world, this research may be basic data for further research in other studies on the nutritional status of primary school students.

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RELATIONSHIP OF PREPAREDNESS IN SELF CARE AND STRESS LEVEL AMONG STROKE PATIENTS

Merina Widyastuti

Lecture in STIKES Hang Tuah Surabaya

ABSTRACT

Paralysis is the most common disability experienced by patients with stroke and paralysis may also occur in various parts of the body. Some stress conditions will influence the attitudes and behavior of stroke patients to improve self-care, this study aims to determine the relationship of stress levels by increasing the readiness of self-care in stroke patients. This study used an observational analytic method of "cross-sectional" by measuring levels of stress and improve self-care preparedness research conducted in the stroke unit Ramelan Surabaya hospital. The population was stroke patients since October to November 2015 and sample was 23. Data were analyzed with chi square test with significance level $\alpha < 0.05$. The results showed that the level of stress in patients with stroke are categorised to mild stress while increasing the readiness of self-care in patients with stroke are sufficient and less. Statistical analysis showed $p = 0.768$, it can be concluded there is no relationship with the stress level of readiness improve self-care in patients with stroke in stroke unit.

Keywords: Stroke, stress, readiness

INTRODUCTION

Stroke is a disease that strikes anyone with sudden occurrence and is one cause of death and major neurological disability in Indonesia (Tarwoto, Wartonah & Suryati, 2007). Paralysis is a defect most commonly experienced by patients with stroke, characterized by paralysis on one side of the body (hemiparesis) and may also occur paralysis in various parts of the body, from the face, hands, feet, tongue and throat (Lingga, 2013). Stroke patients are no longer able to do any physical activity, all the activities and needs help from others and being dependant to someone who cared for him (Lingga, 2013).

Some stress conditions will influence the attitudes and behavior of stroke patients to improve self-care, lack of knowledge about the disease will result in people with stroke with less perform on independent activities and also can contribute to other complications of the disease.

The level of stroke patients are very diverse, can be recovered perfectly, recovered with mild disabilities, cured with disabilities and may experience moderate or even severe disabilities, especially in patients with over the age of 45 years (Junaidi, 2011). The initial attack usually be a disturbance of consciousness, unconsciousness, headaches, difficulty concentrating, disorientation or in other forms. Disturbance of consciousness can be appeared in other forms such as the feeling of wanting to sleep, hard to remember and blurred vision. In the next few hours disturbance of consciousness will continue to the decline in muscle strength and coordination, stroke patients will have difficulty to arrange the words or unable to perform their daily work such as standing, walking, or taking / holding cups, spoons and forks. Other disorders such as inability to control urination, lost the ability to feel, have difficulty swallowing and breathing (Junaidi, 2011).

Stroke patients will be dedendent on those around him, including the family and others. Restrictions on activities during the acute phase, is the cause of the patient becomes dependent on others to do the activity on their day living. Once past the acute phase, patients should increase physical activity, modifying the diet and orderly in consuming drugs in order to support the recovery process. Stroke patients who are not able to improve self-care it is possible to run a deficit of self-care and disease complications (Goldszmidt and Caplan, 2013: 84).

Being doing activities independently among stroke patients is critical in accelerating the recovery process, not only ease the burden on surrounding areas but also can improve the willingness to be recovered (Lingga, 2013). Research that examines how the relationship between stress levels by increasing the readiness of stroke patients in self-care has never been done, so the researchers are interested to be conducted and the purpose of basic human needs can be met as before the stroke even with all the limitations experienced by stroke patients.

METHODE

Design of study was obervasional research with cross sectional design. Where researchers take data of stress levels by increasing the readiness of self-care in patients with stroke in dr. Ramelan Hospital Surabaya This research was carried out in January 10, 2016 until January 20, 2016.

The population in this study were patients with stroke which was 24 patients in the during January 2015 to May 2015, using a sample of Probability sampling technique, there was 23 respondents included. Inclusion criteria were hospitalized stroke patients in Space Nerves Rumkital dr. Ramelan Surabaya, willing to become respondents in this study. Exclusion criteria Patients stroke in the second attack, stroke patients who had experiences on surgery and is still installed drainage., Stroke patients without accompanied the family. Variable in the study was the readiness of patients in self-care as measured using Denyes Self Care Activity Instrument (DSCAI) and stress levels were measured by using the instrument DASS. The hypothesis is there are significant research with patient readiness Health education in self-care and health education there is the influence of the stress

RESULT AND DISCUSSION

RESULT

Research result

General data

1. Characteristics of respondents by age

Age	f	%
50-55	5	21,7
56-60	2	8,7
61-65	11	47,8
66-70	5	21,7
Total	23	100%

2. Characteristics of respondents by sex

Sex	f	%
Male	8	34,8%
Female	15	65,2%
Total	23	100%

3. Characteristics of respondents by education

Education	F	%
SMP	9	39,1%
SMA	14	60,9%
Total	23	100%

The results of measurements of stress levels in stroke patients stroke unit in navy hospital Dr. Ramelan Surabaya.

Skor tingkat stres	f	(%)
Normal	0	0
Light	13	56,5
moderate	4	17,4
Weight	6	26,1
Very heavy	0	0
Jumlah	23	100

Results of the readiness of self-care in stroke patients in navy hospital Ramelan Surabaya

Score	f	%
Good	1	4,4
Enough	11	47,8
Less	11	47,8
Jumlah	23	100

Relations with the stress level of readiness self care on stroke patients in navy hospital Ramelan Surabaya

Level of stres	the readiness of self-care			
	Good	Enough	less	total
Normal	1	5	7	13
Light	0	2	2	4
moderate	0	4	2	6
Total	1	11	11	23
P = 0,768 ; α = 0,05				

DISCUSSION

The results of the measurement of stress levels stroke patients in navy hospital Ramelan Surabaya

Stress begins with an imbalance between demands and resources owned by the individual, the higher the gap occurs, the higher the stress levels and will feel threatened. Stress is a reaction to physical, mental, and chemicals from the body of the situation of being scared, surprising, confusing, dangerous, and worrying someone (Mc Nerney, 1984). Stress is a condition that is created when the transaction is someone who is experiencing stress and things considered stressful to make people concerned see a

mismatch between the state or condition and system resources is biological, psychological and social (Hardjana, 1994).

The term stress and depression cannot be separated from one another. Any issues that related on the life of a person (psychosocial stressors) can lead to impaired function / organ physiology. The reaction of the body (physical) called stress, and when the function of organs get disturbed then called distress, psychological reactions are related to stress is anxiety. When the demands on oneself surpass it, then such a state can be called distress. According to Fortuna (1984) response of physical disorders could increase risk of emotional, people experience stress will show a decrease in concentration, attention, and memory deterioration. This situation can cause errors in problem solving and decrease their ability. Influence on cognitive and emotional promotes behavior changes among people with prolonged stress. These changes included less interest in activity and decreased energy. Stress among stroke patients is related to the fear of death and could not continue the plans of life, changes in self-image, confidence, change in social role and lifestyle as well as issues related to the financial and physical impact on the nature of the disease and treatment procedures were performed (Konginan, 2008).

Results of the readiness of self-care in stroke patients in navy hospital Ramelan Surabaya

Researchers expect the stroke patients were able to perform self-care when they have a better knowledge about health. The role of nurses as nursing therefore helps to maximize the capabilities of the implementation of the self-care of stroke patients by running health education in order to improve their ability or independence as implementation of self-care (self care agency). Besides can also minimise self-care needs of stroke patients (self care demand), such as the ability to havet the basic needs, mobilization and personal hygiene.

There was 11 people (47.8%) with aged 61-65 and had a flat, and five people (21.7%) 50-55 years as many as five people (21.7%) aged 61-65. There is only 2 people (8.7%) aged 56 -60 years. Readiness of self care is also available based on experience. Self-care is done by repeating the experience gained in solving problems in the past.

However, it is need to be highlighted that not all personal experience can lead one to draw conclusions from the experience with the absolutely necessary critical thinking and logical (Ahmad, 2014: 27).

Education of stroke patient also affect the readiness of patients where the patients with higher levels of education will be able to receive education and running the programs, the present study found majority patients with completed high school was 14 people (60.9%) and completed secondary school were 9 people (39 , 1%). Changes in behavior with education will produce effective change, health knowledge as the basis of their behavior gained a steady and deeper and eventually obtained a reference behavior for the behavior of others (Notoatmojo, 2014: 90).

The level of stroke are very diverse, it could be recovered perfectly, recovered with mild disabilities, cured with disabilities may experience moderate or even severe disabilities, especially in stroke patients over the age of 45 years (Junaidi, 2011: 55). The initial attack stroke could be a disturbance of consciousness, unconsciousness, headaches, lack of concentrating, disorientation or in other forms. Disturbance of consciousness can appear in other forms such as the feeling of wanting to sleep, hard to remember and blurred. In the next few hours disturbance of consciousness will continue the decline in muscle strength and coordination, stroke patients will have difficulty to arrange the words or unable to perform their daily work such as standing, walking, or taking / holding cups, spoons and forks. Other disorders such as inability to control urination and large, lost the ability to feel, have difficulty swallowing and breathing (Junaidi, 2011: 24).

Stroke patients will then become depend on the people around them, including the family and others. Restrictions on activities during the acute phase, is the cause of the patient becomes dependent on others to do the activity on their day living. Once past the acute phase patients should increase physical activity, modifying the diet and arrange their drugs consuming in order to support the recovery process. Stroke patients who are not able to improve self-care will have less of the possibility of self-care deficit.

Relations with the stress level of readiness self care on stroke patients in navy hospital Ramelan Surabaya

Results shows that among 23 respondents, the 13 respondents with mild stress levels, 7 of them have the readiness score less, 5 score enough readiness and preparedness 1 score well. Furthermore, from 6 respondents with severe stress, 4 of them have a score of readiness self sufficient and 2 readiness and last less than 4 respondents with moderate stress, 2 respondents have a self-sufficient readiness and preparedness 2 respondents have less. From the chi square test obtained sig (2-tailed) of 0.768. So it can be concluded there is no relationship between the level of stress the readiness of self care on stroke patients in navy hospital Ramelan Surabaya

The reason of why there is no relationship when in theory we agree that stress begins with an imbalance between demands and resources owned by the individual, the higher the gap occurs, the higher the stress levels. Stress begins with an imbalance between demands and resources owned by the individual, the higher the gap occurs, the higher the stress levels and will feel threatened. Stress is a reaction to physical, mental, and chemicals from the body of the situation of being scared, surprising, confusing, dangerous, and worrying someone (Mc Nerney, 1984). Stress is a condition that is created when the transaction is someone who is experiencing stress and things considered stressful to make people concerned see a mismatch between the state or condition and system resources is biological, psychological and social (Hardjana, 1994).

Another thing that affects also the the knowledge. Patients and families are better to be able and increased knowledge about self-care is demonstrated by the increase in knowledge about health, mood, attention to health better use of energy that is not too great in performing self-care.

Measures patient health as determined by the knowledge of the person or people concerned, availability of facilities, the behavior of health workers to the health and strengtened will also support the formation of an action such as an increase in the readiness of self-care. Patients who did not experience an increase in self-care could be because the patient did not know the importance of self-care. Another cause may be due to officials or other people around them that never providing education on self-care.

Theory Lowrence Green, as quoted by Notoatmodjo (2014: 76), analyzing the human attitude of soundness. The health of a person or community is influenced by two main factors, namely the attitude factor and factors beyond attitude. Furthermore, the behavior itself is determined or formed from three factors: predisposing factors, enabling factors, and factors driving. It was concluded that a person's attitude or public health is determined by knowledge.

Two-thirds of stroke survivors are those aged 65 years. The aging process of cells as age and illness experienced by parents increase the risk of stroke in old age. In the beginning of 50 years old, the risk of stroke becomes double and every 10 years of age would be increased (Lingga, 2013: 21). Number of age also affect the behavior in people with stroke, behavioral health of a person or society is determined by the intentions of the health of the object, the presence or absence of support from the community surroundings, whether there is information about the health, the freedom of individuals to make decisions, and situations in which a person behaves or not (Notoatmojo, 2014: 78). The forms of individual behavior change one of them is a willingness to change, occur when there is innovation in society, which often happens is that some people are very quick to accept the change and partly slow to accept change (Notoatmojo, 2014: 89). A person with old age would be difficult to accept the changes

Damage to physical mobility in stroke patients will experience a decrease in self-care needs that require post-stroke patients become dependent on others, at least for the time until the physical and mental condition improves. Stroke patients with limited physical mobility requires the help of others to do the activity day living that can not be done alone (Lingga, 2013: 93). The role of care as educators should be optimized to provide health education to patients and families in order to improve the readiness of improving self-care.

Limitations

Limitations of the weaknesses and barriers in research. In this study, some of the limitations faced by researchers are:

1. In filling the questionnaire, respondents are likely to know that he was being assessed, so that answers can be changed does not correspond to reality.

2. The instrument used is an adaptation of a foreign language so that many respondents were confused, so need assistance in filling out the questionnaire.
3. Many of the respondents who have difficulty in deciding vote on each question.
4. Variations in the characteristics of respondents due to the clinical manifestations of the disease.
5. Calculation results are also experiencing difficulties due to lack of literature and journals in guiding calculation DCSAI questionnaire.

Conclusions

The level of stress in stroke patients are subjected to mild stress and improve self-care preparedness largely sufficient and less and no association with the stress level of readiness improve self-care in patients with stroke in stroke unit in navy hospital. Ramelan Surabaya.

Suggestions

1. Stroke patients are expected to perform self-care so that no further complications.
2. Especially in the field of nursing, is expected to further develop health education and discharge planning.
3. For further research is expected to conduct research and study more about the analysis of the factors affecting the level of preparedness in improving self-care.

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Seminar Munutes

Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Sri Wahyuni, Etika khoiriyah ²
Title of Presentation	Health Beliefe Models On Mother With HIV/AIDS in Preventing Perinatal Transmission Risk : A Qualitative Study
Reviewer	Porntip Cananub
Summary of Presentation	<p>Background: Mothers with HIV have a big chance to infect their babies</p> <p>Method: deskriptif Qualitative with an explanatory reaearch. Data collected by indepth interview with 10 mother who have experience with PMTCT program.</p> <p>Finding: Health Beliefe Models affects pregnant women with HIV to adhere to the PMTCT program</p>
Summary of Discussion	<p>How do you take the samples? Because people with HIV has right to be classified. It's the ethic of research. Do you make their identity classified? Speaker: I came to a person who is in the NGO and that person meet me with the participants</p>

Seminar Minutes

Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Endang Koni Suryaningsih
Title of Presentation	The Association Maternal-Fetal Attachment And Mother's Education Level Among Pregnant Women In Indonesia
Reviewer	Porntip Cananub
Summary of Presentation	<p>The background of this study is due to mother have poor fetal attachment. It would lead to negative influence for her baby and the poor behavior would abuse their children.</p> <p>Purpose Explore the characteristics of the respondents.</p> <p>Method: Cross-sectional</p> <p>Findings: Exploring prenatal attachment could assist health professionals to promote health practice during pregnancy without consider the education level of mothers</p>
Summary of Discussion	When you modified the instrument. You should explain what parts you modify and how you modify the instruments.

Seminar Munutes

Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Safri, Nurul Huda
Title of Presentation	Family Support Relationships With School Age Children's Nutritional Status At Meranti Island, Riau Province
Reviewer	Porn tip Cananub
Summary of Presentation	<p>Background: The nutritional status of school age children in Riau province is very low</p> <p>Purpose: to identify how the relationship between family support with the nutritional status of primary school children in Meranti Island</p> <p>Method: descriptive correlation with cross sectional approach.</p> <p>Finding: there is a relation between family support and nutritional status school-age children. there is a relation between nutritional behavior and nutritional status</p>
Summary of Discussion	<p>It's a good research. But would be better if you could follow this up by giving the family education about the nutritional status and how to make use the nature to give the children nutrition. Meaning what can the parents get from their surroundings for their children</p>

Seminar Munutes

Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Febtian Cendradevi Nugroho S.Kep, Ns, MSN Tita Q. Dumalag, MAN
Title of Presentation	The Relationship Between The Level Of Family Support And Patient's Acceptance Level Of The Diagnosis Of Diabetes Mellitus Type II In Negros Island
Reviewer	Porntip Cananub
Summary of Presentation	<p>Background: 415 million people have Diabetes Mellitus in the world. There were 3.5 million cases in the Philippines (IDF, 2015).</p> <p>Purpose: To determine the relationship between the level of family support and Diabetes Mellitus type II patient's acceptance level.</p> <p>Method: Quantitative Correlational Study</p> <p>Finding: the study indicates that patients with Diabetes Mellitus type II perceived 'supportive' level of the family support, specifically the family support in relation to dietary requirement, medication compliance, blood sugar monitoring, regular medical check up and emotional needs. It is noted that for family support in relation to exercise regimen, the level is rated as "a little supportive". The 77 respondents in this study presented their acceptance level as "has accepted". However, there is no significant relationship between patient's acceptance level of the diagnosis of Diabetes Mellitus type II and the level of family support, includes all the subvariables.</p>
Summary of Discussion	<p>How do you take the population/ samples?</p> <p>You should consider their economic, social status, and background study.</p>

Seminar Munutes

Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Evi Wahyuntari
Title of Presentation	Effectiveness Of Wound Care Using Povidon Iodine And Chlorhexidine Glukonate For Healing Postpartum Perineal Wound
Reviewer	Porntip Cananub
Summary of Presentation	<p>Background: 11% of maternal deaths are caused due to an infection where 25-55% of cases the infection is caused due to injury in the birth canal infection.</p> <p>Purpose of the study: to compare the effectiveness of povidon iodine and clorhexidine gluconate to the perineal wound recovery</p> <p>Method: experiment</p> <p>Finding: Clorhexidine glukonate heal perineal injury faster compared to povidone iodine</p>
Summary of Discussion	<p>What do the hospitals in Indonesia usually use?Because Clorhexidine glukonate is generally used in my country even most countries in the world.</p> <p>Indonesia usually use povidone iodine.</p> <p>Suggestion: you should consider other aspects influencing the healing process such as disease, genetic, etc.</p>

Seminar Munutes

Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Veni Fatmawati
Title of Presentation	The Effect Of Sitting Duration To Neck Pain Of Upper Trapezius Muscle On Students
Reviewer	Porntip Cananub
Summary of Presentation	<p>Background: Neck pain or pain in the back part of the neck is the pain experienced by many people, particularly students</p> <p>Purpose: To Investigate the effect of sitting duration to neck pain complain of upper <i>trapezius</i> muscle on students.</p> <p>Method: a survey with case control approach</p> <p>Finding: It can be concluded that there was difference between the pain level of 6 semester compared that in semester 4, but the difference was not significant, because Semester 4 students still had lots of theories during the lectures; as a consequence the fourth semester students will follow the lectures in the classroom with longer duration of time.</p>
Summary of Discussion	<p>What instruments do you use to measure the pain? SPADI scale</p> <p>Please consider other aspects instead of sitting that might influence the neck pain such as students activities, sleeping habits, etc.</p>

Seminar Munutes

Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Eka Oktavianto, Rina Triasih, Fitri Haryanti
Title of Presentation	The Correlation Between Knowledge Level And Parity Toward Regular Antenatal Care Visits On Pregnant Women
Reviewer	Porntip Cananub
Summary of Presentation	<p>Malnutrition number of children in Yogyakarta is still under the national target.</p> <p>Training on Cadre of CCD is necessary.</p> <p>The purpose of this study is to assess the effect of CCD on cadre training to the nutritional status of the children.</p> <p>Findings:</p> <p>There were 27 cadres and 116 childrens enrolled in this study.</p> <p>13 cadres and 60 childrens at Mantrijeron as intervention group.</p> <p>14 cadres and 56 childrens at Kotagede as control group.</p>
Summary of Discussion	<p>How do you collect the data?</p> <p>We do pre-test and post-test in terms of children weight.</p> <p>You should think about other aspects. I mean, Does the CCD really influence or other aspects.</p>

Seminar Munutes

Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Enny Anggraeni
Title of Presentation	The Correlation Between Knowledge Level And Parity Toward Regular Antenatal Care Visits On Pregnant Women
Reviewer	Porntip Cananub
Summary of Presentation	<p>ANC visit is important. However, the ANC visit target of Bantul District is not reached. The national target is 93%. The effect can lead problem in pregnancy because they do not know their pregnancy progress.</p> <p>The purpose of this study: investigate the relationship between level of knowledge, parital status and ANC visits on pregnant mothers</p> <p>Finding: there is no relation between level of knowledge and ANC visit</p>
Summary of Discussion	<p>How do you take the samples?</p> <p>How do you collect the data?</p>



Seminar Munutes

Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Nurul Huda, Safri
Title of Presentation	Relationships nutrition behavior to nutrition status of school age children in Meranti Island, Riau Province
Reviewer	Porntip Cananub
Summary of Presentation	<p>The background of this study : Malnutrition of children in Riau place the fifth rank in Indonesia.</p> <p>Malnutrition in children can lead to decrease the academic achievement, effect on cognitive development, impaired growth and development, and Disrupt learning process.</p> <p>The purpose of this study is to identify the relationship between nutrition behavior (knowledge, attitude and practice) of school age children to the nutritional status of children in primary schools</p> <p>The findings: there is relationship between knowledge, attitude and practice and malnutrition</p>
Summary of Discussion	<p>Use word "among" instead of "between"</p> <p>You put too many variables. Why don't you just investigate one variable?</p> <p>When you investigate one, it would be easier for you to give them solution</p>

Group E



FACTORS RELATED TO THE QUALITY OF LIFE OF ELDERLY

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ABSTRACT

Age, gender, nutrition and physical activities are important factors that are associated with quality of life. The objective of this study was to determine factors that associated the quality of life of the elderly such as age, gender, physical activity and nutritional status. This is a descriptive correlation research by cross sectional approach. The sample of this research were 31 elderly people who are active in Geriatric Integrated Health Service (Posyandu Lansia) at Sidomoyo Godean Sleman. The results were analyzed by Spearman Rho. Results show that there was correlation between physical activity and age with quality of life of the elderly ($p < 0.05$).

Keywords : quality of life, the elderly

INTRODUCTION

The success of the elderly can be seen from many dimensions of health, including physical, functional, social and psychosocial well-being. Maintaining the quality of life of the elderly is a growing problem in the field of public health today (Acree *et al.*, 2006).

World Health Organization Quality of Life (WHOQOL) defines quality of life as an individual's perception of life in society in the context of culture and value systems that exist relating to the goals, expectations, standards and attention (Reno *cit* Yuliati *et al.* 2014). In general, elderly people face weaknesses, limitation and disability, so that the quality of life in elderly patient was decreased (Demartoto *cit*. Yuliati *et al.*, 2014).

There are many factors that influence the quality of life of the elderly. Factors that affect the quality of life are physical activities, social, demographic, economic, health, gender, age, income, educational qualifications, employment status, ethnicity, marital status, smoking, drinking, area of residence, general health status, BMI and social welfare (Anokye *et al.*, 2012).

Physical activity is an important factor affecting the quality of life. Several studies shown that physical activity has many benefits, including providing beneficial effects

for patient with depression (Chai *et al.*, 2010), patient with organ dysfunction (Pavey *et al.*, 2011), and patient with coronary disease (Bize *et al.*, 2007).

Age was an important factor that determining the quality of life of the elderly. At the age of 50 years, the quality of life continue to rise and will reach its peak at the age of 68 years, and after that it will start to decline (Netuveli and Blane, 2008).

Anokye *et al.* (2012) found that sex is also a factor that affects the perception of quality of life. However, Schnurr and Lunney (2008) found the overall quality of life for women and men there is no differences.

Several studies have shown an correlation between nutritional status and a person's quality of life. That is because the physical health and psychological well-being are the primary domains in quality of life (Drewnowski and Evans, 2001).

A preliminary study in Posyandu Lansia in Dukuh 04 Sidomoyo Godean Sleman, found the number of elderly people that are active in Posyandu Lansia are about 53 people. Quality of life of the elderly in the village has not been studied. The majority of the elderly are still active in society. The purpose of this research is knowing the factors associated to quality of life of the elderly people in Posyandu Lansia Dukuh 04 Sidomoyo Godean Sleman.

RESEARCH METHODS

This study was an observational study with cross sectional approach. The population in this study were all elderly people who are members of Posyandu Lansia (53 people). The samples in this research is the elderly who are present at the time of the research and willing to become respondents (31 people). Samples were taken by total sampling method.

The data resources for age and gender are KTP, instrument for measuring the nutritional status are weight scale, microtoice and BMI table. Instrument for measuring the physical activity of elderly is 24-hour physical activity recall (PAR). Instrument for measuring quality of life is the SF-36 questionnaire.

Data were taken by the researchers with the help of two assistants who have been given an explanation of the instruments to be used. Researchers collected the data when

Posyandu Lansia was performed. The method of data collection involved face-to-face interviews.

Data were analyzed with SPSS version 19 for Windows, p value <0.05 considered statistically significant. The associations between age, sex, nutrition status, physical activity with quality of life were tested by Spearman rho.

RESEARCH RESULT

Table 1. The Gender of Respondents

Gender	Frequency (f)	Percent (%)
Men	10	32
Women	21	68

According to the table 1, the numbers of women respondents were 21 respondents (68%) and the numbers of men respondents were 10 respondents (32%).

Table 2 The Age of the Respondents

Body Mass Index	Frequency (f)	Percent (%)
60-74 years	26	84
75-90 years	5	16
>90 years	0	0

According to the table 2, the majority of respondents aged 60-74 years (84%). However, no respondent had age >90 years.

Table 3 Nutritional Status

Body Mass Index	Frequency (f)	Percent (%)
< 18.5 (under weight)	5	16
18.5-24,9 (normal)	13	42
25-29.9 (overweight)	11	36
≥30 (obese)	2	6

According to the table 3, the majority of respondents had normal nutrition (42%) and minority respondents had obese (6%)

Table 4 Physical Activity Level

Physical Activity Level	Frequency (f)	Percent (%)
1.20-1,39 (very light)	6	19
1.40-1.69 (light)	15	49
1.70-1.99 (moderate)	6	19
2.00-2.40 (vigorous)	4	13

According to the table 4, the majority of respondents had light physical activity (49%) and minority respondents had vigorous physical activity (6%)

Table 5 Quality of Life

Variable	Mean±SEM	Median	Minimum	Maximum
Quality of Life	3054.2±103,4	3285	1180	3500

According to the table 5, mean±SEM score quality of life of elderly is 3054,2±103,4. Medium score is 3285, minimum score is 1180 and maximum score is 3500.

Table 5 Bivariate Analysis

	Correlation	<i>p</i>	Coefficient correlation (<i>r</i>)	Conclusion
Age	Quality of life	0.04*	-0.498	Significant Correlation
Gender	Quality of life	0.853	0.035	Not Correlated
Nutrition Status	Quality of life	0.122	0.284	Not Correlated
Physical activity	Quality of life	0.037*	0.376	Significant Correlation

*= $p < 0.05$

According to table 6, based on Spearman rho test, there is a correlation between age and quality of life of the elderly ($p < 0,05$) with coefficient correlation is -0.498 and there is a correlation between physical activity and quality of life of the elderly people ($p < 0.05$) with coefficient correlation is 0.376.

DISCUSSION

Moons *et al.* (2004) and Dalkey (2002) in (Nofitri, 2009) found that age is one of the factors that affect quality of life. This is consistent with the results in this study were age

related to quality of life of the elderly, with $p < 0.05$ and a correlation coefficient is - 0.498. Based on research conducted by Ryff and Singer (1998) (Nofitri 2009), adult individuals express higher welfare at middle age. Research conducted by Rugerri *et al.* (2001) in Nofitri (2009) found the contributions of old age factors on quality of life is subjective.

However, other studies have previously been opposed to this research. The study got a result, the age of the respondents in relation to the quality of life through statistical tests showed no significant correlation, but if you see the value of the average quality of life in respondents aged > 80 years can be summed lower when compared with younger age, its points to the link between age and quality of life if this would be the average value (Sayhrul, 2013). Such results may differ, possibly associated with a sample of the research, research methods and other factors that are not controlled.

Gender is one of the factors that affect quality of life. Bain *et al.* (2000) found there is a difference between the quality of life between men and women, where the quality of life of men tend to be better than the quality of life of women (Nofitri 2009 *cit.* Chaerani, 2013). The results contradict to the results of the research, namely research Ryff and Singer in 1998 which found that the quality of life for women was higher than men (Nofitri 2009 *cit.* Chaerani, 2013).

However, these results do not correspond with previous studies because it gets results that gender-related to quality of life with a value of $p > 0.05$. This study is in line with Vaganas (2004), that found there is no difference in quality of life between men and women. This can happen due to many factors that influence the quality of life of the elderly, and not all confounding variables were controlled.

There is a significant correlation between the quality of life of the elderly with nutritional status. That is because the nutritional status of elderly in general is influenced by food intake, and lack of knowledge of the importance of good nutrition. While quality of life is affected by the four domains, one of which is physical health including the nutritional status (Astuti, 2012).

The results of this study showed an association between age and quality of life of the elderly. This happens because at an older age, decreased function of the body's

increasingly prominent and aging alter certain aspects of the elderly such as a decrease in the function of the digestive system which impact on the nutritional intake so that it can affect the quality of life of the elderly.

Elderly is often related to malnutrition, it is because the elderly functions body decreased ability of the senses such as smell and decreased sense of taste, decrease in gastrointestinal function and intestinal function, all of which cause deterioration of appetite thereby affecting nutritional status. Malnutrition can lead to limitations in physical activity that causes inability to perform daily activities and it is affect the quality of life of the elderly (Amarantos, 2001). Other studies on nutrition and quality of life of the elderly found correlation between nutritional status and quality of life of elderly. This study describes the importance of the role of nutrition in the life of the elderly decreased body functions related to the increasingly older age (Agustina, 2007). Impaired nutritional status of the elderly is caused by many factors, including the physical disturbance, sensory, mental then it could have an impact on the lives of the elderly, resulting from the disturbance can cause the elderly do not enjoy their old age (Darmojo, 2010).

However, these results do not correspond with previous studies, in which the research had no relationship with the nutritional status of quality of life for the elderly, with a value of $p > 0.05$. This is likely due to the number of samples in this study were too small and can be analyzed from the components of the overall quality of life. Components of the overall quality of life is very complex, while nutrition is only one component of physical aspect. The results of this study did not differentiate between each component.

Other studies have previously found results that some respondents were classified in the category of good nutrition but have quality of life is lacking. This happens because the nutrients are not the only things that the indicators used to measure quality of life. There are many factors that affect the quality of life among the data characteristics previously described, in addition to their complaints and diseases also affect the quality of life. despite good nutrition, but he was already very old, no school, no job and income, living alone and had many complaint and the disease, then the quality of life tend to be worst (Agustina, 2007).

The results are consistent to the research that conducted by Burhan *et al.* (2013). Burhan *et al.* found there is no correlation between nutritional status and quality of life. The big difference in the results with the existing theories due to normal nutritional status of respondents there who have a low quality of life in the domain of psychology and environmental domain and anyone has the quality of life being on the physical health domain and the domain of social relations. This causes the quality of life of respondents to be low and moderate, and no relation to their nutritional status because no respondents who have a good quality of life. There are four aspects of the domain on the quality of life of the elderly, the physical health domain, psychological domain, the domain of social relations, and environmental domains. (Skevington *et al.*, 2004). In the study, the four domains are combined, so that the results obtained by 50% of respondents have a low quality of life and 50% of respondents have moderate quality of life. Physical health domains related to the nutritional status of the respondent, and the domain of social relationships associated with social interaction respondents (Skevington *et al.*, 2004).

Gill *et al.* (2013) found physical activity affect the positive health status and quality of life. In the domain of quality of life, physical activity affect the physical domain. However, from the Gill research results obtained, in addition to affect the physical domain, lively activity also affects all domains in quality of life, the results are most numerous in the domain of physical health and emotional / mood. Respondents stated that physical activity will reduce more stress.

The results are consistent with the theory above, in which physical activity affects the quality of life for the elderly with a value of $p < 0.05$. There are factors that are very important for the elderly affecting life satisfaction. Three important things are activity, dependence and adaptation. Elderly life satisfaction is higher in the elderly who are still active (Pernambuco *et al.*, 2012). Results of another study also found that physical activity impacts on physical health domain and have an impact on the level of the quality of life of the elderly. Immobility is an important component in supporting the happiness of the elderly (Kuan-Langet *et al.*, 2005).

Physical activity can affect the quality of life for physical activity are thought to increase the participation thus enhancing social interaction because of the time spent

outdoors, improve self-esteem because the elderly have a positive perception of competence self and physical abilities, and their biological mechanisms in which the physical activity dialkukan increases the levels of endorphins (Anokyeet *al.*, 2012).

The age factor is a factor that will affect the quality of life of elderly people from the entire domain. Although it is subjective, many elderly who perceive their quality of life is getting better when increasing age. It is associated with psychosocial satisfaction of the elderly to the journey of life which he experienced.

Physical activity is also a factor that affects all dimensions of the quality of life. In addition to physical activity, the elderly will be affected by physical health. Physical activity can increase social interaction because of the time spent outdoors, improve self-esteem because the elderly have a positive perception of competence self and physical abilities and the existence of biological mechanisms by which physical activity will increase endorphin levels (Anokyeet *al.*, 2012).

CONCLUSIONS AND SUGGESTIONS

There was correlation between physical activity and age with quality of life of the elderly, and there was no correlation between gender and nutritional status with quality of life.

For the next researcher to conduct similar research by increasing the number of research samples and analyze the factors that affect the quality of life with every domain quality of life. For the elderly is expected to optimize their physical activity so as to achieve optimal quality of life, always consider the family's physical activity of old age.

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THE CORRELATION BETWEEN RELATIONSHIP STATUS AND ATTITUDE TOWARD FREE SEX ON TEENAGER AT ALUN-ALUN KIDUL YOGYAKARTA

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ABSTRACT

This research method was analytical survey with cross sectional approach. The respondents in this study were all teenagers who came to *Alun-Alun Kidul* (South City Square) Yogyakarta during the time of the study. The average of teenagers visiting *Alun-Alun Kidul* (South City Square) in a week was 102 teenagers. The respondents of this research were 50 teenagers. The respondents who met the inclusion criteria were taken using incidental sampling technique. The data analysis used was chi square with <5% significant values. From the total respondents, 19 (38%) teenager were educated, 24 (48%) teenager were about 15-20 years old and 29 (58%) teenager were girls. It was also found that 26 (52%) teenager were in dating relationship and 27 teenagers (54%) have negative attitude toward free sex as. The results of chi square obtained p-value 0.044 ($p < 5\%$). The conclusions of the research was there were correlation between Relationship status and free sex attitude in teenager at Alun-Alun Kidul (South City Square) Yogyakarta.

Keywords : Status, Dating, Attitude, Free Sex, Teenager

INTRODUCTION

Entering the era of globalization that increasingly shifting normative culture, causing its own concerns related to the world of teenagers. Because, in this phase teenagers do not have the exact places. They are not children category but it cannot accept as adult category. Therefore, either physic or psychology, teenagers have not been able to function maximally especially in receiving the changes and shifts of globalization that is happening.

This was also confirmed in a book written by Sarwono (2015) that teenager is that teenager is the restructuring of awareness on mental development and future improvement of cognitive development (awareness and integration) and the development of moral and sexual development.

According to World Health Organization (WHO) in 2014 estimated teen group is amount 1.2 billion or 18% of total world population. In Indonesia itself, according to

Badan Pusat Statistik (2014) there are groups of teenagers aged 10-24 years, amount of 26% of the total population of Indonesia, consisting of 51.1% boys and 48.9% of female teenagers.

Miftah (2011), wrote that the teenagers are the main victims of the shift in cross-reality communication technology and globalization, which led to the norms of society and religious norms displaced by cultural values. One of the effects of cultural influences that have successfully adopted by young people is the attitude of free sex. Free sex attitude in this case may be the intention, feeling or imagination in the form of awareness and the power of a person to create a picture that is both mental and concealed associated with free sex. In general, the attitude is often born of a learning process as a result of the private experience of people with a particular object in the form of objects or the form of the event by connecting the object with other experiences in which a person has to have an instinct alone on the learning process or a particular experience (Wawan dan Dewi, 2011).

In California, the research has done by Felsher (2015) wrote that teenagers have a bad attitude toward free sex that have an impact of free sex behavior of teenager itself. In his research, most of teenagers assumed that free sex among teens is the common thing. Another thing that surprised by the research, there is significant value of presumption of teenagers regarding free sex which is based on a close relationship in the form of courtship is a very common thing ($p\text{ value} = 0,00$). This is confirmed by the research of Syahrani (2013) that western culture indeed ratify that there is a phase of heterosexual relationship in human life before marriage, such as puppy love, dating, going steady, and engagement.

Relationship status is defined as a relationship between unmarried heterosexual individuals, with the aim to know each other to see the fit between both of them (Irianto, 2014). While Rakhmat (2011) in his book, specifically explains that the status be considered as a factor the birth of attitude, it is seen by the proximity of the theory of interpersonal attraction and interpersonal relationships were able to predict the flow of communication going on, in his book also explained that this proximity theory is able to bring joy to others, so that proximity can form an attitude and charm, which generally make people we like to be significant for us.

Relationship status as one kind of interpersonal relationship, apparently express free sex attitude, this is confirmed by Felsher (2015) in his research that involves a close relationship of the teenagers with free sex. It has a very significant value, where teens assume that sex with a partner is a way to strengthen their relationship. Mustein in Waston, 2004) states that when individuals in a relationship, they would show such an attitude like; a feeling of want to be alone with her boyfriend, feel comfortable and free when they are in a quiet and dark place, great desire to give love intact against the couple, there is a desire to prove affection with excessive sacrifice. (Naeili, 2014).

Based on the relationship status that express free sex attitude, so there will be a great propensity for teenagers to behave sexually, which has been researched by Samino (2011) that teenager sexual behavior has become a serious problem, related to free sex. The research result showed that the risky of teenager sexual behavior (44,5%) and not at risk (55,5%). One of factor that related to the teenager sexual behavior is relationship status. There are 66.4% of teenagers who have boyfriend of girlfriend (53,4% of them have risky toward the behavior) and teenagers who have no boyfriend of girlfriend (Potentially on sexual behavior as much as 27.0%).

Sri Pujiati et al (2013) has prove it, by showing the percentage of each type of activity in steady dating which is an indicator of the occurrence of free sex, with 72 respondents teenagers dating, among of them, kissing 51 teenagers (70,8%), necking 55 teenagers (70,8%), and petting 60 teenagers (83,3%).

In Indonesia Health Profile (2009) recorded surprising data is related to the health problem of teenagers reproduction, which is dominated by abortion case as much as 24%, risk of pregnancy outside of marriage with a young age between 15-24 years were 48% of which 2% are teenagers 15-18 years old, infected with sexually transmitted infections (IMS) as much as 28% which is not described in the specific type of infection, and written also that 4% of teenagers who experienced IMS has died.

As the government's efforts in tackling the problem of IMS, since 2007 has implemented a National Condom Week (PKN) was initiated by the Ministry of Health and conducted by the National AIDS Commission (KPAN). PKN formed as a reminder of the dangers of effort HIV / AIDS and condoms is a medical device not trigger promiscuity. PKN also intended as effort to socialize about sexual and reproductive health that is expected to prevent and control the growth of patients with Human

Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS) (Kemenkes RI, 2009).

Based on the data Indonesia Population Projection 2010-2035, the estimated population of teenagers in the city of Yogyakarta from year to year continues to increase. It can not be separated from the background of the city of Yogyakarta as Education City, and dominated by learners teenagers between the 10-24 years of age. Therefore Yogyakarta is fulfill the criteria of sampling sites to see the correlation between relationship status and free sex attitudes in teenagers.

In addition, the tourism statistics of Yogyakarta in 2013 noted that the city of Yogyakarta to the diversity of tourist attractions, became one of the recommendations of places to vacation, where it was noted that the average visitor town square Yogyakarta are young people, without mentioning specifically the square by the number 86% percentage of young visitors.

Therefore the researcher conduct the research under the title "The correlation between relationship status and free sex in teenager at Alun-Alun Kidul Yogyakarta".

RESEARCH METHOD

This research is an analytic survey research using quantitative research design was descriptive correlative, in order to determine whether or not the relationship between the relationship status and free sex attitude in teenagers. Time approach used in this research is cross-sectional.

The population in this research were all teenagers who Alun Alun Kidul Yogyakarta when the research was conducted on August 4, 2016. The samples in this research use incidental sampling with the inclusion criteria (Teenagers who came in Alun Alun Kidul Yogyakarta at the time of research, teenagers who are willing to become respondents, teenagers aged 10 to <25 years, teenager who has a girlfriend, teenagers who does not have a girlfriend and teenagers who are able to read) and exclusion criteria (teenagers who have limitations such as deaf or blind and aged between 10 and <25 years old and have been married).

Measurements to assess the independent variable is the relationship status use a statement enclosed with alternative answers "Yes" or "No" while the measurement of the dependent variable is the attitude of free sex using a Likert scale.

THE RESULT AND DISCUSSION OF THE RESEARCH

1. The Result

The results of the research says that that there is a relationship between relationship status with an attitude of free sex with teenagers in Alun-alun Kidul of Yogyakarta. With the results of univariate and multivariate analysis as follows:

Table 4. 1 Distribution Frequency of Characteristics Respondents by Education

Educational Characteristic	Frequency (f)	Percentage (%)
SD	3	6,0
SMP	10	20,0
SMA	18	36,0
Perguruan Tinggi	19	38,0
Total	50	100

Table 4. 2 Distribution Frequency of Characteristics Respondents by Age

Characteristic of Age	Frequency (f)	Percentage (%)
10 - < 15 age	8	16,0
15 - <20 age	24	48,0
20 - < 25 age	18	36,0
Total	50	100

Table 4. 3 Distribution Frequency of Characteristics Respondents by Gender

Characteristic of Gender	Frequency (f)	Percentage (%)
Male	21	42,0
Female	29	58,0
Jumlah	50	100

Table 4. 4 Distribution Frequency of Characteristics Respondents by Relationship Status

Characteristic of Relationship status	Frequency (f)	Percentage (%)
No	24	52,0
Yes	26	48,0
Total	50	100

Table 4. 5 Distribution Frequency of Characteristics Respondents by Free Sex Attitude

Characteristic of Free Sex Attitude	Frequency (f)	Percentage (%)
Positif	23	46,0
Negatif	27	54,0
Total	50	100

Table 4.6 Cross Tabulation The Correlation between Relationship Status and Free Sex Attitude in Teenagers at Alun-Alun Kidul of Yogyakarta

Relationship status	Free Sex Attitude				Total		<i>R value</i>	<i>P value</i>
	<i>F</i>	%	<i>f</i>	%	<i>f</i>	%		
No	7	29,2	17	70,8	24	100	4,042	0,044
Yes	16	61,5	10	38,5	26	100		
Total	23	46,0	27	54,0	50	100		

Source: Data Primer diolah 2016

2. Discussion

Based on the research result shows that out of 50 respondents indicate the status of teenagers courtship dating category were 26 (52%) of respondents. It supports research conducted by Samino (2011) which shows that teenagers most have a boyfriend. Teenagers who have a girlfriend, is mostly a middle teenagers aged 15-20 years. One of the characteristics of the middle teenagers are starting to need more friends, happened increasing the potential for socializing with other people or other groups. Socialization in this phase will usually provide a solid bond, or even to the special relationship especially to the opposite sex (dating), but has not at the stage of serious (Sarwono, 2015).

The results also known teenagers who have been no relationship status as many as 24 people (48%). Teenagers do not have a boyfriend is a teenager with age > 20 years or included in the category of late adolescence, where growth in the late teens to be more ideal both in attitude and thinking, they began discussing social issues, politics, and religion is no longer about the opposite sex / girlfriend. Additionally cause late teens can not have a girlfriend because most teenagers is a student where they started thinking to become a better person in creating a bright future by studying it in focus and more active in learning.

Also based on the research result shows that 50 respondents attitude free sex as much as 27 (54%) of people in the negative category. The results show that most teenagers have sex negative attitudes. The results support the research conducted Pawestri, et al (2013) showed that the majority of students' attitude on the negative category (54.4%).

Free sex teenagers attitudes with positive categories as many as 23 (46%) of people. These results indicate that there are some teenagers who have enjoys attitude

or approach in relation to sex. In this case the gesture may be the intention, feeling or imagination in the form of awareness and the power of a person to create a picture that is both mental and hidden associated with free sex.

In view of the terms of the relationship between the two variables in this research indicate a relationship of calculation Chi Square significance value p -value of 0.044 ($p < 5\%$) so that it can be stated there is a relationship between relationship status and free sex attitude in teenagers in Alun-Alun Kidul of Yogyakarta.

CONCLUSION

1. Relationship status in attitude toward free sex is known majority of which are courting as many as 26 people (52%).
2. Free sex attitude in teenagers mostly have a negative attitude as many as 27 people (54%).
3. There is a relationship between relationship status and free sex attitude in teenagers in Alun-Alun Kidul of Yogyakarta with p -value 0,044 ($p < 5\%$).

SUGESSTION

Seeing the results of research showing that there is a relationship between relationship status and free sex attitude in teenagers in Alun-Alun Kidul of Yogyakarta, it is recommended for that matter young people to maintain an environment of friendship in the association as well as more active in positive activities, so that the activities are not useful as it relates to dating can be avoided.

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CORRELATION BETWEEN ELECTRONIC MEDIA USAGE AND PREMARITAL SEX BEHAVIOR AMONG TEENAGERS

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ABSTRACT

Premarital sex behavior on teenagers is a matter. One of the factors increasing premarital sex on teenagers is information about sexual matters through electronic media. The research is aimed to determine correlation between electronic media usage and premarital sex behavior on teenagers in Muhammadiyah vocational high school 1 of Tempel in 2016. It used analytic correlation with cross sectional approach. The population was 91 people and samples were 74 people who were selected by proportionate stratified random sampling. The bivariat analysis used product moment correlation. The analysis showed that from product moment correlation was $p = 0.000 < 0.05$. That means there was correlation between electronic media usage and premarital sex behavior on teenagers in Muhammadiyah vocational high school 1 of Tempel.

Key words : Electronic media usage, premarital sex behavior.

INTRODUCTION

Based on the survey of Indonesia Health Demography in 2012, 3.7 (9.3%) million teenagers have ever involved in pre-marital sex. Furthermore, the result from *SKRRI* in 2007, there were 3 million (7%) teenagers have involved in pre-marital sex. From the data mentioned above, in 2007-2012 there was an increasing number of teenagers who have involved in pre-marital sex for 2.3%.

The case of pre-marital sex can be seen through the high amount of the unexpected pregnancy case among teenagers. The is data mentioned in 2013 showed that there were about 80 million pregnancies in the world or 38% in a year, which categories in 34 million are unexpected pregnancy and 46 million were the abortion case. While in Indonesia, the data from *PKBI (Perhimpunan Keluarga Berencana Indonesia)*, there were about 584 cases (10-24 years old) who accessed the service for unexpected pregnancy in *PKBI*. While the case of unexpected pregnancy that was experienced by teenagers whose age from 15-19 years old was about 334 cases (*KISARA*, 2014).

Based on the survey that was done by Youth Center Pilar Yogyakarta Special Province in 2011, the result was about 14.1% and in 2012 there was 18.18%. It showed that from 2011 until 2012, there was an increasing number for 4.08% (PKBI, 2012).

Based on the Social and National Economic Survey data from Statistic Bureau of Yogyakarta Special Province in 2009 showed that teenagers who got married in 17-18 years old in Sleman regency about (7.49%), while in 2011-2012 there was about (13.59%). Thus, from 2009 until 2012 there was increasing number in teenagers aged 17-18 years old who got married at Sleman regency for (6.1%). There is also evident that number of couples who got married because of pregnancy or unexpected pregnancy is increasing (BPPM, 2013)..

The facts of unexpected marriage was that occurred due to lack of awareness related to reproduction health rights among teenagers. Besides, the attitude is related to teenagers' behavior which is triggered by negative influence. Based on the planning behavior theory, the attitude can influence the intention to behave, thus it can cause certain attitude (Azwar, 2009).

The attitude can be embodied into agreement or refusal to premarital sex. The individual who agrees to premarital sex tends to have positive attitude toward premarital sex. In contrast, individual who does not agree toward premarital sex will have negative attitude toward premarital sex (Afiah, 2012).

The attitude has relation toward the human behavior which is in equity and becomes response toward the stimulus from social environment. Based on the planning behavior theory, attitude can influence the intention to cause certain behavior (Azwar, 2009). Based on the study conducted by Fitriana (2012), teenagers who have positive attitude toward the premarital sex have risks 1.9 times higher for having sexual activities compared to teenagers who have negative attitude toward premarital sex. Teenagers who have positive attitude toward premarital sex tend to do sexual activities from holding hands until having intercourse. While, teenagers who have negative attitude toward the sexual behavior tend to not engage sexual behavior.

Suyatno stated that the desire of having sexual activities increases because of the pornography that could easily accessed by teenagers from electronic media. It can be considered as one of the negative influence of technology development especially internet that enable easy access to pornography and porn action.

Premarital sex is a problem that must be anticipated because it can cause negative impacts for teenagers. One of the negative impacts that could appear is the unexpected pregnancy that triggers teenagers to get forced married. It potentially they are not ready to engage marriage in terms of mentally, economically, and socially. Other negative impacts that might appear are dropout from school, abortion that could cause death, and suffering from illness such as HIV/AIDS especially for teenagers who easily change partners or have intercourse with prostitute (*Depkes RI, 2010*).

Government through National Family Planning Coordinating Board has improved the socialization program called Preparation of Married Life for Teenagers as the prevention strategies of the increasing number of free sex behavior among teenagers. Nationally, the amount of Information Central and Teenagers Health until December 2011 has been formed up to 15.049 (*BKKBN, 2011*).

Based on the previous study that was done on April 2nd 2016 by the researcher, through direct interview with headmaster of Muhammadiyah vocational high school 1 of Tempel, the case of unexpected pregnancy from 2014-2015 was 1 case. Based on the explanation from that case, the researcher is interested to conduct a study which is entitled “The Correlation Between Electronic Media Usage and Premarital Sex Behavior on Teenagers in Muhammadiyah vocational high school 1 of Tempel. The research is aimed at determining the correlation between electronic media usage and premarital sex behavior on teenagers in Muhammadiyah vocational high school 1 of Tempel in 2016.

RESEARCH METHOD

The design of this study was the analytic correlation which is a study that aims to explain the relation between independent and dependent variable through hypothesis test without intervention or artificial from researcher. The cross sectional time is an approach by measuring or observing at the same time between risks factors or explanation with illness.

Population is the generalization area that consists object or subject that has quantity and certain characteristic that is assigned by the researcher to be learned and concluded. The population in this study is 91 students of grade 9th.

Sample is part from the amount and characteristic which is owned by population. The *slovin* formula was used to determine the sample amount. There were 74 students who became sample for this research. The sampling technique that was used was proportionate stratified random sampling. Method for collecting data used primary and secondary data. The analysis test used moment product correlation.

RESULT AND DISCUSSION

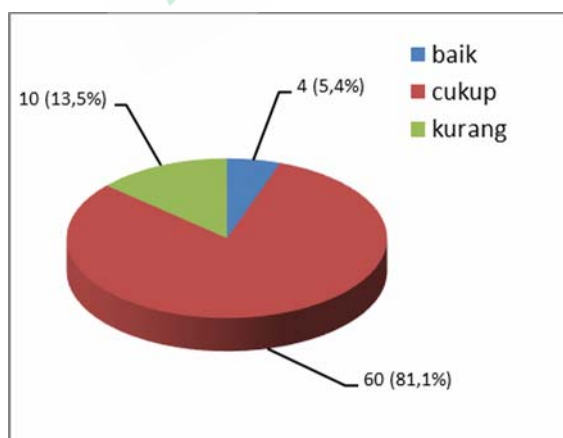
1. Respondent Characteristic

Table 4.1. Distribution of Teenager Characteristic Frequency at Muhammadiyah vocational high school 1 of Tempel

Characteristic	Frequency (fx)	Percentage (%)
Age		
15 years old	5	6,8
16 years old	49	66,2
17 years old	18	24,3
18 years old	2	2,7

Based on table 4.1. it can be seen that from 74 students, mostly they are 16 and 17 years old. There are 49 students whose age are 16 years (66.2%), 18 students whose age are 17 years old (24.3%), 5 students whose age are 15 years old (6.8%) and 2 students whose age are 18 years old (2.7%).

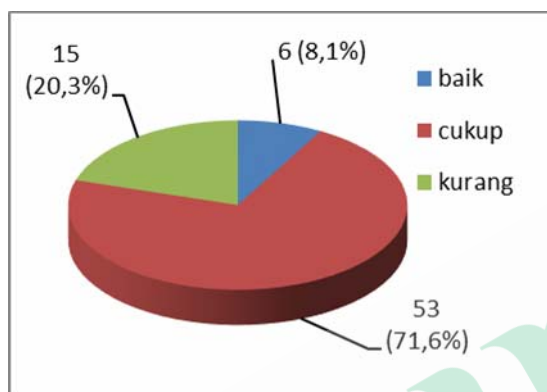
2. Electronic Media Usage in Teenagers of Muhammadiyah vocational high school 1 of Tempel



3. Picture 4.1. Electronic Media Usage in Teenagers of Muhammadiyah vocational high school 1 of Tempel

Picture 4.1. shows that most of respondents use electronic media for finding information about sexuality fairly. There are 60 respondents (81.1%) who find the information about sexuality fairly. While there are only 4 people who use media electronic to find about information about sexuality in a good way (5.4%)

4. Premarital Sex Behavior in Teenagers of Muhammadiyah vocational high school 1 of Tempel



Picture 4.2. Premarital Sex Behavior in Teenagers

Picture 4.2., shows that there are 53 respondents who show fair attitude toward premarital sex. While there are only 6 people who show good attitude toward premarital sex.

Tabel 4.4. Correlation between Electronic Media Usage and Premarital Sex Behavior on Teenagers in Muhammadiyah Vocational High School 1 of Tempel in 2016

Usage	Fair						Amount of		p-value
	Good		Attitude		Less		F	%	
	F	%	f	%	f	%			
Good	0	0	4	5,4	0	0	4	5,4	0,000
Fair	6	8,1	47	63,5	7	9,5	60	81,1	
Less	0	0	2	2,7	8	10,8	10	13,5	

p value $0,000 < 0,05$

Source : Primary Data 2016

Table 4.4. shows that there are 47 respondents (63.5%) who use media electronic in a fair way and shows fair attitude toward premarital sex. While there are 2 respondents who use media electronic less and show fair attitude toward premarital sex (2.7%).

Then, in order to reveal the relation between those two variables, the statistic test was done by using product moment correlation test. Before the product moment correlation test was taken the normality test was taken first in order to reveal whether the data distribution was normal or not. From the normality test, the result is bigger than 0.05 (0.232 for variable of electronic media usage and 0.117 for variable premarital sex). Thus data is distributed normally. After that, the product moment correlation test was taken because data has been distributed normally.

Table 4.5 Product Moment Correlation Test

		Media Usage	Premarital Sex Behavior
Media Usage	Pearson Correlation	1	.575**
	Sig. (2-tailed)		.000
	N	74	74
Premarital Sex Behavior	Pearson Correlation	.575**	1
	Sig. (2-tailed)	.000	
	N	74	74

From the product moment test, the value was 0.000 for the significant level. In order to determine whether there is relation or not between those two variables the significant level (p) compared to error level was 5% (0,05). If p is bigger than 0.05 so there is no relation between those two variables and if p is smaller than 0.05 there is relation between those variables. The result of the research was $p = 0.000$ ($p < 0.05$) so in this case H_0 was denied and H_a was accepted. So it can be concluded that there is relation between electronic media usage and premarital sex behavior in students of Muhammadiyah I vocational school of Tempel in 2016.

DISCUSSION

1. The Electronic Media Usage in Students of Muhammadiyah I Vocational School of Tempel

Based on picture 4.1., it shows that most of respondents use electronic media for finding information about sexuality fairly. There are 60 respondents (81.1%) who find the information about sexuality fairly. While there are only 4 people who use media electronic to find about information about sexuality in a good way (5.4%).

Electronic media is a media that deliver certain thing in an electronic form. Respondents who use electronic media for finding sexuality fairly is related with the education character of Muhammadiyah I vocational school of Tempel that applies Islamic basic education. As Muhammadiyah student, respondents are taught for not doing behavior that are not suitable with Islamic teaching and value. It also includes not accessing porn movies from electronic or printed media. Islamic teaching firmly forbids its followers to do any behaviors that belong to adultery.

Based on information from counseling guidance teacher of Muhammadiyah I vocational school of Tempel, it is stated that as an effort to anticipate the escalation premarital sex behavior, school inculcates the religion value through student daily recitation and obligation that students must wear proper clothes that cover their body. All of these are applied to improve the students' understanding of premarital sex that is forbidden by the religion.

The minimum information about sexuality helps respondents to control themselves so they will not get trapped in doing premarital sex. Sarwono (2010) stated that the teenagers' ability to control themselves can avoid them from premarital sex behavior. Self-control is related with how individuals control their emotion and also urge in themselves. In teenagers phase, there are hormonal changes that can increase sexual desire (sexual libido). The escalation of sex desire needs certain sexual activities. So if individuals do not control themselves, it will increase the premarital sex case.

This study also shows that there are 4 students who use electronic media for finding the information about the sexuality well. This can happen because the easiness to access materials that related with sexuality such as: internet, vcd/dvd and television. Sarwono (2010) explains that the tendency for premarital sex violation improves because of the information spread from sophisticated media electronic which is unfortunately misused such as: video, internet, Video Compact Disc (VCD), handphone, and etc. Bungin (2001) in Sekarrini (2011) explained that the characteristic of media information contains benefit value but it can also indirectly spread the new value in community. The media electronic has an important role in giving the sexual information. Teenagers who have not known and understood about sexuality matters completely, could try and imitate what they hear and watch.

Respondents who use electronic media well for accessing sexuality tend to do the premarital sex behavior. Suyatno (2011) explained that the tendency of teenagers' sexual behavior escalates because of the information spread and sexual stimulus through electronic media which can be easily accessed by teenagers. One of the negative effects of internet is the easiness to access pornography and porn action.

2. Premarital Sex Behavior in Students of Muhammadiyah I Vocational School of Tempel

Picture 4.2., illustrates that 53 respondents (71.6%) show fair behavior toward premarital sex and 6 (8.1%) respondents show good attitude toward premarital sex.

This research shows that most of respondents show fair attitude toward premarital sex. This can happen because the respondents' awareness. They realize

that in this phase there are many changes that are difficult to be controlled. Thus they will not involve in violation behavior especially premarital sex behavior.

Those attitude probably caused by the right information about premarital sex which is gotten by the respondents and its impacts that might appear. Respondents who show fair attitude give idea that respondent do not want do premarital sex because they realize it belongs to adultery. *Sarwono* (2010) stated that by following the religion norm where someone forbids to do intercourse before marriage, teenagers can control themselves to not do premarital sex.

This study also showed that there are 6 students who show good attitude toward premarital sex. Respondents who show good attitude caused by the ability of respondents to control the changes in themselves. *Sarwono* (2010) the good attitude of premarital sex caused by teenagers can control emotion and also urge in themselves because in teenagers phase, there are hormonal changes that can increase sexual desire (sexual libido). The escalation of sex desire needs certain sexual activities.

3. The Relation Between Electronic Media Usage and Premarital Sex Behavior in Students of Muhammadiyah I Vocational School of Tempel

Table 4.4., shows that respondents mostly use electronic media fairly and 47 respondents (63.5%) show fair attitude toward premarital sex. While there are 2 respondents (2.7%) who use media electronic less and show fair attitude toward premarital sex.

Based on table 4.5., it shows that the result of product moment test is 0,000 is the for significant value extent with $r = 0,569$. Thus it can be concluded that there is relation between media electronic usage and premarital sex behavior in teenager of Muhammadiyah I vocational school of Tempel.

The result of this research shows that the media electronic usage can establish the teenager attitude mainly in premarital sex matter. Respondents who utilize the media electronic fairly to access sexuality have tendency to show fair attitude toward premarital sex by avoiding the premarital sex behavior.

Azwar (2011) stated that one of the factors that establish someone's attitude is the mass media and electronic media is one of the form of mass media. In newspaper or radio or other communication media, the news that should be factual, delivered objectively. This can influence its consumer attitude.

Based on study that was conducted by Savitri (2015), factors that influence the premarital sex in teenagers is the pornography media expose with significant value for 0,373. Other factors that influence the premarital sex case is the influence of friends of the same age, teenager knowledge and self-control. While Saputri (2015) stated factors that influence the premarital sex attitude in teenager are knowledge, friends of the same age role, and parents' supervision.

Nursal (2008) in his research stated that respondents who are exposed pornography through electronic media has chance 3.06 higher to behave risky sexual attitude compared to teenagers who are not exposed with pornography attitude through electronic media. Information spread and sexual stimulus through electronic media that is easily accessed by teenagers lead escalation of premarital sex behavior in teenagers.

Sarwono (2012) stated that the tendency of sexual behavior in teenagers increases more because the spread of information and sexual stimulus through media electronic that is easily accessed by teenagers. Media that is often used by teenagers such as: porn sites, video, porn film, and smart phone. Suyatno (2011) added that the technology improvement can be beneficial in one side but in other sides it can be dangerous. One of the negative impacts of the internet is the easiness to access pornography and action porn.

Fitriana (2012) in her research stated that the behavior of premarital sex which is less happens because most of the teenagers get the information from the internet. The wrong information about sexuality can easily be accessed by teenagers and anything that has pornography characteristic will dominate teenagers' thought. The incomplete information will not only push teenagers to try but it can mislead them.

Rachman (2009) explained that the use of pornography for long time can cause the behavior imitation that is explicitly contained in pornography content. The behavior imitation can be the behavior of sexual relation from basic form such as:

kissing, hugging, until serious form such as: having intercourse. The behavior imitation can cause unwanted pregnancy or infectious sexual disease.

In this study, the result is respondents use the electronic media for accessing sexuality fairly but they show good attitude toward the premarital sex. The respondents attitude can be caused by the ability of respondents to control themselves thus they will not involve in doing violation sex behavior. In order to control their desire as the impact of sexuality exploration through electronic media, the improvement of religion understanding is needed. So, they will not commit adultery. Azwar (2011) stated that one of the factors that influence attitude is religion. The moral concept and teaching from education and religion institute really determine the belief system so those concepts will influence the attitude.

CONCLUSIONS AND SUGGESTIONS

Conclusion

Based on the results of research and discussion, it can be concluded that most of the students at Muhammadiyah 1 Tempel Sleman Vocational High School can use electronic media to find information about sexuality in moderate result with 53 people (71.6%), while the least numbers of respondents who took advantage of the electronic media to find information about in high result with 6 respondents (8.1%). While students of Muhammadiyah 1 Tempel Sleman Vocational High School showed moderate attitude toward premarital sex with 62 people (83.8%), and the respondent who showed high attitude was 1 (1.4%).

Based on the result of analysis and discussion, the conclusion can be drawn that there is correlation between the use of electronic media and the attitude of premarital sex among teenagers bat Muhammadiyah 1 Tempel Vocational High School in 2016 (p value = 0.000).

Suggestion

Teenagers are expected to increase their knowledge about reproductive health and the impact of deviant behavior on teenagers by using electronic media, so that teenagers can avoid premarital sex to prevent unexpected pregnancy.

'Aisyiyah University of Yogyakarta is expected that the results of this study can be used as a source of data or information for further midwifery research development, especially related to the use of electronic media on the attitude of premarital sex among teenagers.

Muhammadiyah 1 Tempel Vocational High School is expected to collaborate with relevant agencies in providing health information to improve knowledge of reproductive health on teenagers. Therefore, there will be some efforts to prevent the incidence of premarital sex among teenagers.

Midwives are expected to use of electronic media to provide information to teenagers, especially about premarital sex attitudes and its impact

Further research is expected to continue the research using different methods such as interviews and observations that can be known directly about premarital behavior on teenagers.

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THE RELATIONSHIP BETWEEN MOTHER'S KNOWLEDGE AND DEVELOPMENTAL STIMULATION BEHAVIOR AGED 3-5 YEARS AT KAMBOJA MOTHER AND CHILD HEALTH SERVICE IN KALONGAN VILLAGE, MLATI SLEMAN

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ABSTRACT

In the age of 3 -5 years old, children have a huge potential to grow. One of the cause of children development delay is the lack of parent's active stimulation to their children due to the lack of knowledge about the importance of development stimulation. This study was to investigate the correlation between mother's knowledge and stimulating children development behavior aged 3 – 5 years old behavior at Kamboja Children and Maternity Clinic in Kalongan village of Mlati Sleman. The study used correlational method with cross sectional time approach. *Kendall Tau* and the coefficient contingency was used in this research. The samples of the study were 32 respondents. The findings show that 17 respondents have sufficient knowledge (53,13%) and 15 respondents implement stimulating children development behavior (46,80%). The statistical test shows that $p = 0,000$ and coefficient correlation is 0,644. There was a correlation between mother's knowledge and stimulating children development behavior aged 3 – 5 years old behavior at Kamboja Children and Maternity Clinic in Kalongan village of Mlati. It is expected that the cadres of Kamboja Children and Maternity clinic build a coordination and cooperation with Mlati II Children and Maternity clinic to hold a counselling and stimulation, detection and early intervention of child development (SDIDTK) program routinely.

Keyword : *mothers' knowledge, stimulating children development behavior*

INTRIDUCTION

Development is a series of skills and functional capacity improvement (Suriadi, 2006). Children of 3-5 years old have a great potential to develop quickly. This potential will thrive in some conditions for example the opportunity to conduct some trained activities or they use their potential in accordance with their development (Rohman U, 2011). It means that when the children are in 3-5 years old and their brains do not get the maximum stimulation, they will not develop optimally (Suyadi, 2009).

One of the problems that occur in children development is children developmental delay. Based on a research conducted by Lauren E in 2012 found that the motoric delay such as gross and fine motor usually detected in 3-5 years-old-children. Of the 200

million children under 5-years-old in developing countries, more than one third of them do not their potential for their own development (UNICEF, 2006). UNICEF unveilsthat there are 165 million children worldwide are stunted both in physical and brain development. The incidence of stunting development in the United States is 12-16%, in Thailand is 24% and in Argentina is 22% (Hidayat, 2007). According to the Ministry of Health of Indonesia (2006), there are 16% of children experiencing developmental disorders including gross motor and fine motor development, hearing loss, less intelligence and speech delays. In 2007 there are approximately 35.4% of irrelevance developments including irregularities of gross motor and fine motor development and emotional mental disorders. In Yogyakarta, there are 11.03% children under five experiencing developmental delays.

According to Soetjiningsih (2012), one causeof the development delays in children is the less active behavior of the parents in providing stimulation to the child and parents' ignorance on the importance of stimulating growth. However, some parents do not understand this, especially parents who have low motivation to stimulate their child according to the child's development age. Parents' less active behavior arises because there are still many of them who think that giving stimulation to their children is not important because by the time coming, the children will learn the stimulation by themselves. In fact, parents must understand the stimulation knowledge (Arip M., 2008). A mother needs to know the stages of child development and stimulation in order to optimize the child development. When the mother knows there are delays in the child developmentand the delays are because of the less active mother in providing a stimulus, then the main factors that must be changed is parents' behavior in giving stimulation (Christi A. Y., 2013).

Based on preliminary studies conducted in Primary Health CenterMlati II, 11 toddlershave developmental disorders. 18% of them are toddlers from Kamboja Mother and Child Health Service at KalonganVillage in MlatiSleman. The researcher conducted interview with 10 mothers of children under five years old as the respondents. The question was about the stimulation of child development including the definition, characteristics, and basic needs of child development and the stages of child development. The result of the interview shows that 30% of the respondents answer the question well and 70% of the respondents cannot answer the question

correctly, even some of them are left silence. The next question is about the stimulation of child development of their children such as mothers' consistency to play with their children, giving orders to the children, standing on one leg, throwing the ball and wearing clothes. The result shows that 40% of the respondents state that they have done such actions and 60% of the respondents have not done such action to their children.

RESEARCH METHOD

This study employed correlational method. This research method involved data collection to determine the correlation and the level of correlation between two or more variables (Sukardi, 2008). This study was conducted to determine the correlation between the independent variable that is mothers' knowledge and the dependent variable that is developmental stimulation behavior for children of 3-5 years at Kamboja Mother and Child Health Service in Kalongan Village, Mlati Sleman. The research employed cross sectional approach, where the data concerning to both variables, independent and dependent were collected at the same time. Each research subject was observed once and the measurements carried out on the character status or a subject variable during examination (Notoatmodjo, 2010).

Population is the generalization zone consisting of the objects or subjects that have certain qualities and characteristics defined by the researcher to be learned and then be drawn the conclusions (Sugiyono, 2010). The populations in this study are 32 mothers of children in 3-5 years old at Kamboja Mother and Child Health Service. This research was conducted on 18 January 2016. The samples of the study were taken using saturation sampling technique (total sampling), where all the members of the population were used as sample (Sugiyono, 2010). The samples of the study were 32 people. The data collection technique used was questionnaire on mother's knowledge variable and questionnaire on developmental stimulation behavior for children of 3-5 years. The data were analyzed using univariate and bivariate analysis with Kendal tau.

RESULT AND DISCUSSION

1. Respondents' Characteristics

Table1. Respondents' Characteristics

No	Respondents' Characteristics	Frequency (N)	Percentage (%)
1	Age		
	<20	0	0
	20-35	25	78,12
	>35	7	21,87
2	Education		
	Elementary School	2	6,25
	Junior High School	7	21,87
	Senior High School	19	59,37
	College	4	12,5
2	Occupation		
	Housewife	26	81,25
	Private Employer	4	12,5
	Teacher	2	6,25
4	Child's order		
	1 st	12	37,5
	2 nd	15	46,87
	≥ 3 rd	5	9,37

Based on Table 1, 25 (78.12%) of the respondents were 20-35 years old, 19 (59.37%) of them were graduated from senior high school, 26 (81.25%) were housewives, and 15 (46.87%) have 2 children.

2. Univariat Analysis

a. Mothers' Knowledge

Table 2. Mothers' Knowledge Distribution

No	Mothers' Knowledge	Frequency (N)	Percentage (%)
1	Good	6	18,75
2	Sufficient	17	53,13
3	Less	9	28,13
	Total	32	100

Based on Table 2, 17 (53.13%) respondents have sufficient knowledge, 9 (28.13%) respondents have less knowledge and 6 (18.75%) respondents have good knowledge.

Knowledge is the result of the act of knowing and it occurs after a person senses a specific object. Sensing occurs through the five senses, that are sight senses, hearing

senses, smell senses, taste senses and tactile senses. Most of the sensing are obtained from the eyes and ears. Knowledge or cognitive is a very important domain to form one's actions (overt behavior) (Notoatmodjo, 2012). The result of the research on maternal knowledge at Kamboja Mother and Child Health Service shows that 17 (53.13%) respondents have sufficient knowledge.

The research concludes that sufficient knowledge of the mother at Kamboja Mother and Child Health Service are influenced by several factors such as education, age, experience, and occupation. The respondents' characteristics obtained from the questionnaire shows that 19 (59.3%) respondents graduated from senior high school. According Imanah (2013), the higher education level will allow a person to understand information easier and implement them in daily life. If the person has lower education, s/he feels it is difficult to understand the information. If a mother has good knowledge, she will be more active in seeking information to improve her skills in parenting (Hastuti, 2010). From the research, there are some respondents who has sufficient knowledge. However, the items analysis of the questions shows that there are 17 (53.13%) respondents answered them incorrectly. The incorrect answers are related to the lack understanding on child development, such as do not know how to pin the nut, to write, to draw 2.5 cm straight line which is an aspect to know whether it is smooth motion or not. There are 18 (56.2%) respondents do not understand whether throwing a ball straightly to mother's stomach or chest from 1.5-meter distance is the ability of coarse motion or not. Then there are 19 people (59.3%) who do not know that putting together 4 cubes one by one on top of another cube without dropping by 2.5 cm cube size relates to the aspects of smooth motion or not. In the aspects of child developmental stages, there are 18 people (56.2%) who do not understand whether the statement of being able to say two or a few words is the development in the aspects of speech and language or not. This shows that although the knowledge is sufficient, it is still necessary to give an enlightenment to the mothers about some things that are still wrong so they can provide maximum stimulation to their children development.

Another factor which influences is the age. The majority of the respondents are still young who are 20-35 years of age i.e. 25 people (78.12%). Someone who is on the productive age (young) can receive knowledge easier than those in unproductive age because they have got a lot of experience that affects the mindset which is difficult to

be changed (Notoatmodjo, 2012). The number of children also affects the mother's knowledge. Most of the mothers have two children i.e. 15 people (46.87%). This indicates that the mothers have already experienced in raising children, especially in monitoring the development of children. Middlebrook in Azwar (2011) states that the absence of any experience at all about a psychological object will tend to form a negative attitude towards the object. The formation of a response to the object is a complex process within the individual that involves the individual himself, the situation in which the responses are formed, and it is objective if the personal experience occurs in the situation involving emotional factors where the appreciation of the experience deeper and longer lasting (Azwar, 2011).

The higher a person's knowledge, the more positive his behavior towards a particular object will be. Through a good knowledge and understanding about child development and how to give correct stimulation, the parents can stimulate their children according to the age levels in order to achieve optimal development. When the mother knows there are delays in the development of children, if it is caused by the mother who is less active in providing a stimulus, then the main factor that must be changed is the parents' behavior in giving the stimulation (Christi A.Y., 2013).

b. The Behavior Of Stimulating Children Development Aged 3-5 Years Old

Table 3. The Frequency Distribution of the Behavior of Stimulating Children Development Aged 3-5 Years Old

No	The Behavior of Stimulating Children Development Aged 3-5 Years Old	Frequency (N)	Percentage (%)
1	Good	7	21,87
2	Adequate	15	46,80
3	Less	10	31,25
	Total	32	100

Based on table 3, it can be seen that there are 15 respondents (46.80%) stimulating children adequately, 10 respondents (31.25%) stimulating less, and 7 respondents (21.87%) stimulating well.

Behavior is all human activities which can be observed directly or cannot be observed by outsiders. If the reception of the new behavior or behavior adoption

through such a process is based on the knowledge, awareness, and a positive attitude, then the behavior will be long lasting (Notoatmodjo, 2012).

The result of the research on the behavior of stimulating child development shows that there are 15 respondents (46.80%) stimulating children adequately. Based on that result, the adequate stimulation on the development of children's behavior are caused by several factors, one of which is knowledge. According to Wawan's theory (2011), a person's knowledge of an object contains two aspects: positive and negative aspects. Both of these aspects will determine the action (practice) of a person. The more positive aspects of an object is known, the more positive the attitude towards the object. This means that the better someone's level of knowledge, the better their behavior is. Mother's behavior in stimulating the development of children based on the research results indicates the category of adequate. However based on the analysis of items there are some things that are lacking. Based on the result of the mother's behavior in developing fine and gross motor skills, there are 18 people (56.2%) who rarely perform activities which can train a child's motor skills, such as not stimulating the child with the game throwing the ball straight to the stomach or the mother's chest from a distance of 1.5 meters. Then there are 17 people (53.13%) mothers also do not pay attention to the fine motor by never making a straight line down the length 2.5 cm and ask children to draw a line. In addition, there are 18 people (56.2%) who have never tried to draw a circle and children imitate, and 17 mothers (53.13%) do not stimulate the child with the game 8 cubes the size of 2.5 cm - 5 cm and then one by one arranged like towers. Some of the things that respondents are less in terms of knowledge is less impact on behavior in giving stimulation to children.

The study by Heckman and Masterov in 2007 notes that if the stimulation is not done during the first few years of life, it will have a negative impact during adolescence and adulthood, such as IQ (Intelligence Quotient) and low academic achievement, an increase in antisocial behavior and lower earnings in the future adult. In line with the research conducted by Black, M.M. et al in 2008, it is stated that the lack of stimulation in the early days of a child's life will stunt the emotional, social, physical and cognitive development.

The behavior in the stimulation of child development is the stimulation / arousal in children aged 3-5 years according to a questionnaire pre screening development so that

the child's development will grow optimally. The influence of maternal behavior in stimulating a child development in monitoring, educating, giving attention, rules, discipline, reward and punishment, as well as the response to his desire. Consciously or not, all of it will be impregnated and then become a habit for children that will affect the subsequent development (Fatimah L., 2012).

3. The Relationship of Mothers' Knowledge and the Behavior in Stimulating Development of Children Aged 3-5 years old in Posyandu Kamboja

Tabel 4. The cross tabulation of the relationship between the mothers' knowledge and the behavior in stimulating development of children aged 3-5 years old

Mother's knowledge	The behavior in stimulating development of children aged 3-5 years old						Total		P. Value	Correlatuon Coef.
	Good		Adequate		Less		N	%		
Good	4	12,5	2	6,25	0	0	6	18,75	0,000	0,644
Adequate	3	9,34	11	34,4	3	9,4	17	53,13		
Less	0	0	2	6,25	7	21,9	9	28,13		
Total	7	21,87	15	46,8	10	31,25	32	100		

Based on Table 4, it showed that there are 4 respondents (12.5%) who are knowledgeable and stimulate children well and 2 respondents (6.25%) stimulate adequately. There are 3 respondents (9.34%) who are knowledgeable enough and stimulate children well, 11 respondents (34.4%) who are knowledgeable enough and stimulate children adequately, 3 respondents (9.4%) who are knowledgeable enough and stimulate children less, and 7 respondents (21.9%) who are less knowledgeable and stimulate children less. It is known that most of the respondents are knowledgeable enough and deep enough to stimulate their children. Based on Kendall Tau test, it is obtained p.value of 0.000 with a correlation coefficient of 0.644. This makes the H_0 rejected and H_a received thus it can be concluded that there is a relationship between the mothers' knowledge and the behavior stimulating the development of children aged 3-5 years with strong category.

The results of cross tabulation shows that there is a significant relationship between mother's knowledge and the behavior of stimulating development of children

aged 3-5 years at Kamboja Mother and Child Health Service in Kalongan Village Mlati Sleman. Thus, if the mother's level of knowledge is good, the respondents will stimulate the development of children well. Conversely, if the level of knowledge is less, then the respondent will act less.

Knowledge influencing the behavior of stimulating a child's development can be seen from the results of the cross tabulation of research that mothers whose behavior is less i.e. 21.8% have less knowledge than mothers whose knowledge is good and adequate. Meanwhile the mothers whose behavior is adequate i.e. 34.4% have knowledge which is quite good compared to mothers whose knowledge good and less. The results are consistent with the research conducted by Sari in 2013, getting the result that the mother whose knowledge is adequate i.e. 43.3% and doing the behavior in stimulating the development of the child adequately by 48.3%. Reinforced by Komang's research in 2013, with the results of 44.6% of women who are poor knowledgeable, 62.5% of whom practice bad stimulation. The results of Christi's research in 2013 states that knowledge plays a very important in the formation of a person's behavior. The higher a person's knowledge, the more positive person's behavior towards a particular object will be. Through knowledge, a good understanding of child development and how to give correct stimulation, the parents will stimulate children according to age levels in order to achieve optimal development. The lower the level of mothers' knowledge of the stimulation, the child will be at risk by 4.9 times to experience developmental delays allegations.

This study is in line with the research conducted by Komang in 2013 with statistical test results obtained 0,000 with the value of $\alpha < 0.05$ so that H_0 is rejected. It can be concluded that there is a relationship between mother's knowledge about stimulation with stimulation practices. Supported by a study by Sari in 2014 with the results of statistical test $p = 0.000$, it can be concluded that there is a significant relationship between the mother's level of knowledge with maternal behavior in the stimulation of child development.

Wawan (2011) states that a person's knowledge of an object contains two aspects: positive and negative aspects. Both of these aspects will determine a person's action (practice). The more positive aspects of an object is known, the more positive his/her attitude towards the object. This means that the better the level of knowledge, the better the person's behavior is.

Someone's knowledge will affect the ability to think. The higher the person's level of knowledge is, the easier it will be to think rationally and capture new information, including the outlining of new problems. If the acceptance of new behavior or adoption behavior through such a process is based on the knowledge, awareness is positive, then the behavior will be long lasting. Conversely, if the behavior is not based on the knowledge and awareness then it will not last long (Notoatmodjo, 2012). A mother who has a good knowledge of child development will affect the action in stimulating the development of children because she will be easier to think rationally and capture new information to solve her problems.

The results of testing the hypothesis by using Kendall Tau correlation showed that p-value 0,000, so it can be concluded that there is a relationship between mother and behavioral knowledge in stimulating the development of children aged 3-5 years. The relationship of this research with a correlation coefficient of 0.644 is in the strong category.

CONCLUSION AND SUGGESTION

There was a significant association between maternal knowledge and behavior of stimulating the development of children aged 3-5 years based on Kendal Tau test results with a p value of 0.000 <value = 0.05. The correlation coefficient of 0.644 indicates the relationship in the strong category.

It is expected that the midwife in the health center Mlati II can improve counseling in Mother and Child Health Service about the health of mothers and children, especially in stimulating the development of children properly so that knowledge of the mother increases and can apply behaviors stimulating the development of children well. The representative of Posyandu Kamboja can coordinate with Mlati II health center for the holding extension and stimulation program, Detection and Early Intervention Growth (SDIDTK) routine childhood in Posyandu. It is also expected that mothers can add information about stimulating the development of children so that knowledge increases and can apply behaviors stimulating the development of children aged 3-5 years well and can regularly follow Posyandu activities.

THE INFLUENCE OF *SADARI* COUNSELLING TOWARDS THE KNOWLEDGE LEVEL AND ATTITUDE OF EARLY DETECTION OF BREAST CANCER

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Abstract

Background: The failure of early detection of breast cancer can happen because of insufficient knowledge and information regardless the fact that it can be done through self-breast examination (*SADARI*).

Purpose: To determine the influence of *SADARI* counseling towards the knowledge level and attitude of early detection of breast cancer amongst women

Method: Quantitative approach with pre-experimental design and one group pretest-posttest design.

Result: The findings showed that all women have fairly level of knowledge and attitude before *SADARI* counseling. After a counseling session, women's level of knowledge and attitude had improved. 43.8% of women had good level of knowledge and 81.2% of women had good attitude towards *SADARI*.

Keywords: Health promotion, detection, breast cancer

INTRODUCTION

Cancer is an illness that is not an infectious but it can assail the body system. It also can assail the women's reproduction organs such as: breast, uterus, and vagina (Mardiana, 2004). According to Mumpuni (2013) the breast cancer (*Carcinoma Mammae*) is an illness that can occur when the dangerous cells appear abnormally and attack the breast system. The breast cancer is a type of cancer that is commonly

found and become the main cause of women's death (Indonesian Health Department, 2009).

Based on the latest data from the American Cancer Society on 2011, there were 64,640 breast cancer cases. There were around 61.3% of women who die every year because of cancer (Chen et al., 2010). Besides, based on estimation from *Globocan*, International Agency for Research on Cancer (IARC) 2012, the breast cancer incident can assail 40 women from 100,000 women.

Data from Indonesia Ministry of Health shows that prevalence of breast cancer reached 4.3 compared to 1000 cancer sufferers. The previous data showed that the prevalence point was only 1 compared to 1000 cancer sufferers. From both of the data, it can be concluded that the rate of cancer sufferers keeps increasing (Gondhowiardjo, 2014). Sutjipto (2013), a cancer surgeon at Dharmas Cancer Hospital states that the breast cancer sufferers in Indonesia reach 100 from 100,000 people. Around 60-70% of the cancer sufferers visit the hospital when they are already in the third stage, and their conditions are getting worse (Indonesian Health Department, 2013). Based on data from Hospital Information System in 2009, the breast cancer is on the first place for the hospitalized patients at all hospitals throughout Indonesia, or it is around 21.69%.

Based on the survey from Basic Health Research of *Riskesdas* (2013, in Chadorie, 2014), the numbers of breast cancer sufferers in Yogyakarta are the highest among other provinces in Indonesia. The head of health department at Yogyakarta Special Province said that the prevalence number is 4.2 from 1000 residents. In 2009, the percentage of breast cancer sufferer was 1.91%. In 2014, from January to April, there were 29 cases of breast cancer. The breast cancer sufferers are from women whose age is 25-64 years old. But from another data, the breast cancer case is also found in young teenager whose age is from 15-24 years old.

The breast cancer sufferers who come in three hospitals at Yogyakarta at surgery unit (Sardjito Hospital, PantiRapih Hospital, and Patmasuri), most of them have been in the third stage (33.86%) and in the fourth stage (7.1%). From that case, many breast cancer sufferers who do not know the early signs of breast cancer

(Andaryanto, 2007). Based on data from Health Department in Bantul 2013, there are 34% of breast cancer sufferers with the new case and the old case with 63.31% breast cancer sufferers, most of them are the women whose age are from 20-44 years old. 33.85% are the breast cancer sufferers with the new case.

The early failure of detecting breast cancer can happen because the limited information or knowledge that is received by people. In fact, the early cancer detection can be done easily by self-breast examination (*SADARI*). The *SADARI* method unfortunately has not been socialized well so many people have not known the *SADARI* method.

Based on research (Ismarwati, 2011 and 2013), it has been known that health promotion of early detection of cervical cancer can improve the knowledge and awareness of people towards cervix cancer among of women who join recitation. The Health Department through Primary Healthcare Center has already had health promotion. In this program, the information about health reproduction is also given. However this health promotion is still general. There has not been a specific action such as self-breast examination (*SADARI*). The target of this health promotion is not only for society, but it can also be done to groups that exist in society such as women who join social activity (*PKK*) and recitation group.

Based on information from one of the committee in Aisyiyah Banguntapan at Banguntapan, Bantul, Yogyakarta Special Province from 5 years ago, there were 9 cancer cases suffered by women. Six out of nine women suffered from breast cancer (2 of them died and 4 of them had medical treatment), 1 woman suffered from lung cancer, and 2 women suffered from cervix cancer.

Based on the problems that have been explained, the research will focus on “Can the health promotion of breast cancer improve the awareness and the knowledge of early cancer detection by *SADARI* (self-breast examination) method among women who are member of ‘Aisyiyah Banguntapan, at Banguntapan Bantul’” This research aims to investigate the influence of health promotion about breast cancer in improving the knowledge and the awareness of early breast cancer detection by *SADARI* method. Another target that hopefully can be reached is to make this

research published in scientific journals handbook for midwifery teaching especially midwifery care at community.

RESEARCH METHOD

This chapter is about the structured information that related with method, approach, research location, population, sample, data collecting process, and data analysis. Other parts can be added based on research need such as research procedure, the procedure of collecting data, and the procedure of data analysis.

The research plan used quasi method experiment with pre experimental design and one group pretest-posttest design. The research was done among women who join Aisyiyah Banguntapan at Banguntapan, Bantul, Yogyakarta Special Province. The population of this research is 96 people. The sample is taken by simple random sampling, the number is 20 people. The data was collected through questionnaire before the counseling given (pretest) and after the counseling given (posttest). In order to prove H_a is accepted or rejected, the t calculated was compared with t on the table with freedom degree $ord.b = n-1$ and the significant rate is 5%. If t is calculated $\geq t$ table, then H_0 is rejected and H_a is accepted. If it is stated not normal, so it will use non parametric test by using Wilcoxon Match Pairs Test for matched data. This test will use significant rate of 5% and if p value is smaller than t table ($p < 0.05$), so H_a is accepted and H_0 is rejected.

RESULT AND DISCUSSION

Women Knowledge in Early Detection of Breast Cancer using *SADARI* Method

The knowledge of women in early detection of breast cancer with *SADARI* method, before and after the test given can be seen through this table:

Table 1. Pretest and Posttest of Knowledge

Knowledge	Pretest Score		Posttest Score	
	(f)	(%)	(f)	(%)
Poor	-	-	-	-
Fair	16	100%	9	56.2%
Good	-	-	7	43.8%
Total	16	100 %	16	100 %

Before the health information of *SADARI* all women had fairly level of knowledge. While after they had been given the *SADARI* counselling, self -breast examination practice, their knowledge had improved into 48.3%. Based on Health Department, the health counseling is an activity and chance that based on learning principals to reach a condition where individual, family, group, or society live a healthy life and know the way and can do certain things if they need the help (Effendy, 1998). What has been explained is suitable with the research that has been done by Simanullang (2012) at Namorambevillage. He conducts a research and he finds that the people knowledge at that village about *SADARI* is still low. There are 26 people who belong to this category (52%).

The less information or knowledge of the importance of breast cancer detection is influenced by several factors. Ariani stated that there are two factors that influence this condition: internal and external factors. Knowledge, age, experience, and occupation are several internal factors and economy, social, cultures, information, are the external factors that cause this condition. If we see the characteristic of respondent, most of them are 41-65 years old (68.8%). Most of them are senior high school graduates (43.8%) and only few of them are graduated from post graduatelevel (6.7%). Besides all factors that have been stated, the education level also plays a role (Surajiyo, 2007). Someone who gets higher education can receive the information easier. Because most of respondents in this research are senior high school graduates, so it will not be too difficult to improve their knowledge of *SADARI*.

The economy factor is one of the factors for less information about *SADARI*. This is suitable with Effendy and Kurniasih said in their research. If the economy level is too low, they will not pay attention to health information that has been given to them. They only focus on their daily needs. However, the economic factor had not been identified as the influencing factor of poor knowledge of *SADARI*. The role of Primary Healthcare Center in improving the health information to society is good enough through the Elderly Health Center. But the information about early detection of breast cancer has not been optimum.

The more information or knowledge that has been received by someone, the wider knowledge that she or he will get. However, not all information that is received is true based on the facts. Setyarini (2014) said that the knowledge of the health is an important role in enriching person's knowledge and understanding. When the Primary Healthcare Center contributes well in giving information about *SADARI* to the women, the knowledge will be improved and they will get right information about *SADARI*.

The knowledge of *SADARI* method is very important to be known by the respondents. The more important thing is to give the right way in doing the *SADARI* method because this method is very important in detecting breast cancer. The high rate of death caused by breast cancer in Indonesia is influenced by the late treatment that they receive. They come to the hospital when they are already in the late stage. Because of this condition, giving the health promotion to women can improve the knowledge of women about *SADARI*. They can do the self-breast examination and this will decrease the probability from suffering of breast cancer. This explanation is suitable with research that is done by Saputri (2014). There is a significant relation between the health education with audio visual and lecture method toward the knowledge of *SADARI* as an attempt to detect the early breast cancer at Baki resident, Sukoharjo.

Experience also influences person's knowledge. The lesser knowledge, the higher laziness, shame, and fear in doing *SADARI* method. The research done by Ismarwati(2011) showed that women have a good knowledge of *SADARI* method, but they feel shameful to do early cervix cancer detection. They also feel afraid to check

their health because they are worried if they suffer from cervix cancer. Thus, good knowledge is an important thing to motivate people especially women to behave on certain things. In this case, women are expected to behave positively in early detection of breast cancer.

Women Attitude As an Attempt to Detect Breast Cancer with *SADARI* Method.

Here it is the table of women attitude as an attempt to detect breast cancer with *SADARI* method.

Table 2. pretest and posttest attitude

Attitude	PretestScore		Posttest Score	
	(f)	(%)	(f)	(%)
Bad	1	6.2 %	-	-
Fair	15	93.8%	3	18.8%
Good	-	-	13	81.2%
Total	16	100 %	16	100 %

Based on the result, there were 15 people (93.8%) who had fair knowledge, and 1 person who had poor attitude (6.2%) before the health counseling was given. This is suitable with the research done by Prihatmawati (2013). She conducts a research about the influence of health education through small group discussion about uric acid in group of women whose age is 30-50 years old at Jatisari Village SawahanPonjongGunungkidul. From the research, it is known that there were 13 people who had fair knowledge, and 1 person who had poor knowledge.

The poor attitude owned by women can influence the behavior in doing *SADARI*. Based on Azwar, one of the factors that influence someone's behavior is other's influence that is regarded as an important thing. People around are one of the social components that also influence. In this case, the health professional is an aspect that can influence the behavior in doing *SADARI*. When the health professional can give true and good information about *SADARI*, the society will do *SADARI* in a better way.

At cognitive indicator dimension, there were 16 (14.3%) items that do not totally agree and 12 (14.3%) item that do not agree. According to Rosenberg (see Secord & Backman, 1964) in Azwar (2013), the understanding of cognitive in attitude do not only cover the knowledge that related with attitude object but it also covers the belief of the attitude objects itself with value system that has already been settled in each individual. In affective aspect there are 23 (24%) items that do not totally agree and 34 (35.4%) items that do not agree. The respondent answer that shows poor attitude is disagreement in doing early detection of breast cancer. The affective aspect is the feeling that appears in someone that influences his or her attitude. It can be positive or negative attitude. It can be influenced by several factors such as emotional and culture aspect.

The *SADARI* method aims to know the changes that occur in breast, and to decrease the laziness and ignorance toward the changes that arise in breast. In culture aspect, there are several myths that influence people not to self-examination. The laziness that appears caused by fear and also being ashamed if they suffer from this illness. They tend to have low self-esteem; do not pay attention to their breast health so they just keep their negative emotional. When they see *SADARI* in a positive perspective, they will do *SADARI* as an important thing and will not see this method as a negative thing. A lack of knowledge that is owned by respondent also influence them for not doing *SADARI*.

The conative aspect is a component that related with tendency for doing action toward the attitude object. From the research, there are 29 items (22.7%) that do not totally agree and there are 36 items (28.1%) that do not agree. From this finding, it can be concluded that respondents still have negative attitude because many of them do not agree to do *SADARI* method. It is probably caused by several factors like self-experience. They do not suffer and see breast cancer sufferers directly. They also do not know the characteristics of breast cancer and how it feels so they do not pay attention with the attitude that they should do to prevent the breast cancer in early step. However, it will be different if we experience and see the breast cancer by ourselves. It will shape and influence our appreciation toward social stimulus.

Middlebrook (1974) states if someone has no experience toward psychology object, it will shape negative attitude toward that object (Azwar, 2013).

The result of posttest at respondents after they are given the counseling, there is an improvement in attitude for early detection in breast cancer. There are 3 people (18.8%) who have fair knowledge and 13 people who have good knowledge. This research goes well with Saptaningrum (2013), that there are differences between pretest and posttest after giving the *SADARI* counseling. There is an improvement toward the attitude in early detection of breast cancer for women whose age are 15-45 years old at Krinjing Village 4Jatisarono Nanggulan Kulon Progo.

Based on Purwanto(1998) in (Azwar, 2013)the characteristic of attitude is not brought since birth naturally. But the attitude is shaped and learnt as long as the development is still related with the object. From this statement, it can be concluded that attitude can be shaped and renewed into positive or negative way. The influence can be stimulated by several factors like the source of message that is delivered to the respondents. If the source it trusted, people will give more attention to message that is delivered. This condition can be realized if there is a health counseling of *SADARI* with two ways communication. It can be given through phantom, leaflet, and video so respondent will trust and understand more about *SADARI*.

The exact target also influences the result of this research. The target of this research is women who should know and apply *SADARI* in a right way and on time so the health of reproduction system can be maintained well. The researcher in delivering the material speaks in language that can be understood easily by the respondents so they will understand, feel interested, and believe that the material that is delivered is true.

The influence of health promotion in improving the knowledge and early detection of breast cancer with *SADARI* method based on the analysis of Wilcoxon test can be seen through this table:

Table 3. Wilcoxon Test

		N	Median (minimum- maximum)	P
Knowledge counseling	before	16	15 (13-17)	0,008
Knowledge after counseling		16	17 (15-20)	
Attitude counseling	before	16	56,5 (41-60)	0,000
Attitude after counseling	after	16	71,5 (58-81)	

The result from the analysis shows that there is influence between counseling and attitude in doing *SADARI* among the women in Aisyiyah, Banguntapan, Bantul. This can be seen through the wilcoxon matched pair test. The significant of knowledge is gotten through this test for $p=0.008$ (<0.05) and at attitude for $p=0.000$ (<0.05).

This research is suitable with Zamahsari (2014) which entitled *Pengaruh Penyuluhan Tentang SADARI Terhadap Motivasi Melakukan SADARI Pada Remaja Usia 17-21 tahun di Dusun Puron Kelurahan Trimurti Kecamatan Srandakan Kabupaten Bantul*. This research shows that there is significant influence between giving the counseling and motivation in doing *SADARI*. In average, the motivation of respondent improves after they receive information from the counseling. In Setyarini's (2014) research, there is influence in health education of *SADARI* toward the early detection of breast cancer at pills contraception acceptor at Bangunkerto Turi Sleman.

The health counseling is an activity that the education activity is done by spreading the message, building the trust so the society do not only aware but they want and able to apply the suggestion that related with the health problems. The counseling is given by mastering the material and delivering the material to respondents with language that is easy to be understood. In delivering the material about *SADARI*, the researcher should identify the knowledge of respondents about *SADARI*. The researcher

should be able to give strong evidence and source about *SADARI* so the respondents will not be misled. The researcher should also show warm attitude to respondents so they want to know more about *SADARI* and follow the counseling seriously. In this research, it is found that the respondents still do not understand what *SADARI* is, the benefit and how to do *SADARI*.

From the pretest result it is found that respondents had poor knowledge (40%) and poor attitude (30%) from total respondents that had been decided. After the health counseling given, there are differences in attitude and knowledge of respondents. Their knowledge (55%) and their attitude (40%) were getting better. The improvement in knowledge and attitude at women in fertile period will become the beginning of attitude changing especially in keeping their health reproduction organ which is breast by doing the early detection of breast cancer.

The counseling of early detection of breast cancer aims to know the influence that *Sadari* counseling toward the knowledge and the attitude of early detection of breast cancer among women who join 'Aisyiyah Banguntapan, Bantul. The health counseling about *SADARI* is important to be given to all women in Indonesia especially for women who have risk in suffering from breast cancer. If the counseling is given, women who have risk in suffering from breast cancer or women who do not have the possibility in suffering from breast cancer will understand the clinic symptoms such as bump in breast; bleeding can be treated in earlier, and have a good understanding in breast cancer.

Early detection is an attempt that should be done, so the breast cancer will not be late in receiving the treatment. For women in fertile period should do *SADARI* for once in a month. Intervention such as counseling or course is needed to improve the knowledge and attitude about *SADARI*. However in Indonesia, there has not been a special program that is done to improve the *SADARI* attitude for women especially those who are in fertile period and fragile to breast cancer.

CONCLUSION

After the research has completed, it is known that the counseling can give the knowledge of women about breast cancer and *SADARI*. It can be seen through pretest result from fair category into good category. This counseling can also change people attitude, it is known from the attitude measurement of women who join Aisyiyah Banguntapan, Bantul. There have been changes before the counseling given and after the counseling given because there have been differences in pretest from fair category (93.8%) into good category (81.2%) in posttest. The counseling has influence toward the knowledge changes (0.008) and attitude (0.000) at $p < 0.05$.

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THE RELATIONSHIP BETWEEN EDUCATION LEVEL AND THE CHOICE OF BIRTH ATTENDANT ON TRIMESTER III IN LENDAH 2 PRIMARY HEALTH CENTER, KULONPROGO YOGYAKARTA

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Maternal Mortality Rate in Kulon Progo in 2014 increased from 2013 from 52.6% of 100,000 living birth to be 131.53 of 100,000 living births. Generally, the main direct cause of maternal mortality is bleeding (28%), eclamsia (24%), and infection (11%).

The study aims to investigate the correlation between education level and the choice of birth attendant on trimester III pregnant women in Lendah 2 Primary Health Center, Kulon Progo Yogyakarta.

The study was analytical survey method with cross sectional approach. The population of the study was all TM III pregnant women in Lendah 2 Primary Health Center Kulon Progo Yogyakarta. The sample used total sampling technique with 34 respondents. The tool used was multiple choice questioners. Data analysis used Chi Square test.

Most of pregnant women chose midwives as their birth attendant with 31 respondents (91.2%). Chi square coefficient value was $4.405 < \text{Chi Square table } (5.911)$ and $p\text{-value } 0.111 (P > 5\%)$, so it can be stated that there was no correlation between education level and the choice of birth attendant on TM III pregnant women in Lendah 2 Primary Health Center Kulon Progo.

There was no correlation between education level and the choice of birth attendant on TM III pregnant women in Lendah 2 Primary Health Center Kulon Progo. The next researchers are expected to continue the research in order to follow the patients until the time they give birth, so the result of the questioners filled by the respondents is accurate.

Keywords: *trimester III pregnant women, education, birth attendant*

INTRODUCTION

Maternal mortality is one of the health problems that kept the attention of the world community. Millennium Declaration puts the maternal mortality as a priority that must be addressed through a systematic effort and real action to minimize the risk of mortality, ensuring healthy reproduction and increased quality of life for mothers or women (Khotijah, 2010).

Based on the WHO (World Health Organization) throughout the world, there are maternal deaths per 500,000 inhabitants occur mainly in developing countries by 99% (Manuaba, 2012). Conditions degree of public health in Indonesia, especially women

today still cause for concern, among others, marked by persistently high Maternal Mortality Rate (MMR) of 208 / 100,000 live births (Susena, 2010).

Yogyakarta in 2012 the number of maternal deaths as many as 40 cases of maternal mortality rate in Kulon Progo 2014 again experienced an increase of 131.53 / 100,000 KH (Dinkes Kulon Progo, 2015). In general, the main causes of maternal deaths are directly is bleeding 28%, 24% eclampsia, and infections 11%. The indirect causes are anemia 51%, was too young to become pregnant (<20 years) of 10.3%, was too old to get pregnant age (<35 years) 11.0%, too many children (> 3) 19.3% , too close distance (<24 months) 15% (Depkes, 2013).

To overcome this problem, the government of Indonesia through the Ministry of Health has issued a policy approach to health services for mothers and newborns of quality to the community through the Making Pregnancy Safer (MPS). MPS One of the targets set for 2010 is to improve the coverage of births attended by skilled health personnel to 90%. One strategy to achieve the above targets is to improve access to and coverage of maternal health and newborn quality-cost-effectiveness and based on the evidence (Depkes RI, 2009).

Percentage of births assisted medical personnel in Yogyakarta in 2013 amounted to 92.02%. These achievements can meet the target of the strategic plan in 2013 which amounted to 89% (Kemenkes RI, 2013). Coverage of births attended by skilled health personnel in 2014 were the highest in Bantul Regency of 100%, followed by Sleman 99.99%. Coverage of births attended by skilled health personnel in Gunung Kidul amounted to 99.93%, followed by the city of Yogyakarta at 99.89%. Coverage of births attended by skilled health personnel in 2014 was the lowest in Kulon Progo which amounted to 99.14%.

Lendah 2 Primary Health Center, Kulon Progo Yogyakarta is a health center with the lowest birth attendants by Health Workers as many as 331 (98.2%) of people and help the shaman as much as 6 (1.8%).

Socio-cultural community, particularly pregnant women, about birth attendants by healers, among others, due to the tradition of the people who still believe in shamans and affordability are also influenced by the geographical factor. Complications and maternal and neonatal mortality often occurs in the period around the time of delivery.

Therefore, interventions focused on the safe delivery assistance activities, namely by health (Depkes RI, 2009).

Predisposing factors underlying the birth attendant election one of which is the knowledge of formal education. According to Wawan & Dewi (2011), the guidance given education means a person against another person moving towards the development of certain ideals that define men to do and filling life to reach salvation and happiness. Education is needed to obtain information, for example the things that support health so as to improve the quality of life.

Other studies have also been conducted by Reuben Kwasi Esena, Mary-Margaret Sappor (2013) showed that the mother's education, employment and household income are factors related to the utilization of skilled health workers to help with the delivery that significant value of 0.000.

Based on preliminary studies conducted by researchers, is not found in maternal deaths in Lendah 1 Primary Health Center, Kulon Progo Yogyakarta 2014 and in Lendah 2 Primary Health Center, Kulon Progo Yogyakarta also no maternal mortality. The number of deliveries in Lendah 1 Primary Health Center, Kulon Progo Yogyakarta of 2014 as many as 212 people. Birth attendant coverage by health personnel at Lendah 1 Primary Health Center, Kulon Progo Yogyakarta for 211 (99.5%) votes in favor by a shaman and 1 (0.5%) people. The number of deliveries in Lendah 2 Primary Health Center, Kulon Progo Yogyakarta in 2014 as many as 337 people. Maternity coverage of births attended by skilled health personnel as much as 331 (98.2%) of people and help the shaman as much as 6 (1.8%) of people with criteria and educational background of different mothers.

Based on these data the researchers are interested in examining the relationship between level of education and birth attendants elections in third trimester pregnant women at Lendah 2 Primary Health Center, Kulon Progo Yogyakarta

RESEARCH METHOD

This research is analytic survey research that describes the independent variables and the dependent variable, and then performs a correlation between the two variables that can be known contribution of the dependent variable for the presence of independent variables. Time approach is cross sectional study the dynamics of the

correlation between risk factors and effects by collecting data simultaneously at any one time (Notoatmodjo, 2010).

Variables that affect the level of education third trimester pregnant women and variables that influenced the selection of birth attendant.

The study population was all pregnant women TM III which makes a visit in Lendah 2 Primary Health Center, Kulon Progo Yogyakarta as many as 34 pregnant women, while the sample in this study as many as 34 people a sampling technique using total sampling.

In this study the tools and methods of data collection using a questionnaire to determine the level of maternal education and birth attendant election. The questionnaire used form of multiple choice. Data obtained from the collection can be presented in a frequency distribution table which in the end resulted in a percentage form.

To determine the relationship between the variables education level of pregnant women with birth attendants elections correlation chi square test was used because this research is to find and test the relationship of two variables, and the data and the nominal and ordinal shaped sample size of more than 30 people.

RESULT

1. Overview Location Research

Lendah 2 Primary Health Center, Kulon Progo Yogyakarta is located at Dusun Ledok, Sidorejo, Lendah, Kulon Progo. Lendah 2 Primary Health Center, Kulon Progo Yogyakarta is Gulurejo Village, and Village Sidorejo Ngentakrejo. Environmental Health Center is located in the hamlet Lendah 2 Sidorejo, located close to residential and Puskesmas Lendah 2 is very easy to reach by the citizens. Lendah 2 Primary Health Center, Kulon Progo Yogyakarta cooperating with 3 pustu namely Sidorejo, Gulurejo and Ngentakrejo.

Pustu Sidorejo located about 5 km from Lendah 2 health centers and among shelter residents and the lowland rice fields. Pustu Gulurejo about 6 km from clinics Lendah 2 are among shelter residents with distant mountains and surrounding structures are pustu Gulurejo 2 and 1 Private Practice Midwife Clinic Larashati.

Pustu Ngentakrejo about 8 km from the health center Lendah 2 are in people's residences and close to midwives private practice. So to the people living in the area Puskesmas Lendah 2, sub Sidorejo, sub Gulurejo and sub Ngentakrejo who want during their pregnancy and who would give birth to very easily affordable health services so that all pregnant and about to give birth would choose employment health because of the affordability of the health service

2. Univariate Analysis

a. Characteristics of respondents

Overview of the distribution of survey respondents in the third trimester pregnant women at Lendah 2 Primary Health Center, Kulon Progo Yogyakarta based on age, parity, employment and income can be seen in the table below:

Table 1. Frequency Distribution Characteristics of Respondents in Lendah 2 Primary Health Center, Kulon Progo Yogyakarta

Characteristics	<i>F</i>	%
1. Age		
20 – 35 years	32	94,1
> 35 years	2	5,9
2. Paritas		
1	12	35,3
2	13	38,2
3	6	17,6
4	3	8,8
3. Occupation		
IRT	27	79,4
Swasta	6	17,6
Wiraswasta	1	2,9
4. Family income		
< UMR	21	61,8
> UMR	13	38,2
Total	34	100

Source: Primary Data 2016

Based on table 1. it can be seen most of the mothers age 20-35 years as many as 32 people (94.1%). Most pregnant second child as many as 13 people (38.2%). Mother occupation IRT majority are as many as 27 people (79.4%). The majority of family income <UMR many as 21 people (61.8%).

- b. Research variable
1) Education level

Distribution of maternal education can be seen in the table below:

Table 2. Frequency Distribution Education Level On Trimester III Pregnant Womenin Lendah 2 Primary Health Center, Kulon Progo Yogyakarta

Education	<i>F</i>	%
Primary (Elementary-junior high school)	17	50,0
High (High school)	14	41,2
University (Diploma-Bachelor)	3	8,8
	34	100,0
Total		

Based on table 2. seen that most mothers have primary education as many as 17 people(50.0%).

- 2) Choice of birth attendant

Distribution choice of birth attendant on trimester III pregnant women can be seen in the table below:

Table 3. Distribution Frequency Choice Of Birth Attendant On Trimester III Pregnant WomenIn Lendah 2 Primary Health Center, Kulon Progo Yogyakarta

Choice Of Birth Attendant	<i>F</i>	%
Unskilledhealth personel	0	0
Skilledhealth personel	34	100,0
	34	100,0
Total		

Based on Table 3. obvious that all mothers choose health workers as helpers confinement as many as 34 people (100.0%).Selection of birth attendance by skilled health personel detailed in the table below.

Table 4. Distribution Frequency Choice Of Birth Attendant On Trimester III Pregnant Women In Lendah 2 Primary Health Center, Kulon Progo Yogyakarta by skilled health personel

Skilled health personel	F	%
Midwife	31	91,2
Obstetrician	3	8,8
Total	34	100,0

According to the table 4. it appears that the majority of pregnant women choose a midwife as a helper childbirth (91.2%).

3. Analysis Bivariat

Results of cross tabulation maternal education with labor companion elections can be seen as follows:

Table 5. Cross tabulation Education Level And The Choice Of Birth Attendant On Trimester III Pregnant Women In Lendah 2 Primary Health Center, Kulonprogo Yogyakarta

Education	Choice Of Birth Attendant								Coefisient <i>Chi Square</i>	<i>Chi Square Table</i>	P Value
	Unhealth worker		Health worker				Total				
			Midwife		Obstetrician						
	<i>f</i>	<i>%</i>	<i>F</i>	<i>%</i>	<i>F</i>	<i>%</i>	<i>F</i>	<i>%</i>			
Primary (Elementary- junior high school)	0	0	17	100	0	0	17	100			
High (High school)	0	0	12	85,7	2	14,3	14	100	4,405	5,911	0,111
University (Diploma- Bachelor)	0	0	2	66,7	1	33,3	3	100			
	0	0	31	91,2	3	8,8	34	100			
Total	0	0									

According to the table 5. showed that women with primary education entirely choose midwives as birth attendants as many as 17 people (100%). Mothers with secondary education mostly also choose midwife people (85.7%). Mothers with higher education most choose midwives as birth attendants 2 (66.7%). The results of the analysis proved that the coefficient chi square of 4,405 < Chi Square table (5.911) and p value of 0.111 ($P > 5\%$), so it can be stated there was no relation between education and election birth attendants in the third trimester pregnant women at Lendah 2 Primary Health Center, Kulonprogo Yogyakarta. Mothers who choose birth attendant midwife due to easier access in obtaining

services at midwife. While mothers who choose birth attendants by an obstetrician because of their history of pathology in the previous delivery.

DISCUSSION

1. Education Level On Trimester III Pregnant Women in Lendah 2 Primary Health Center, Kulon Progo Yogyakarta

The survey results revealed the majority of third trimester pregnant women have primary education as many as 17 people (50.0%). These results illustrate that most mothers have education among elementary school to junior high school. The results of the study support previous research conducted by Masita, et al (2014) investigated the factors that influence the selection of birth attendants showed that of 250 samples in Kragilan Primary HealthCenter, Serang District in October 2010, most expectant mothers have primary education or lower 214 (85.6%).

Basic education is education that underlies secondary education. Basic education in the form of Elementary School (SD) and Islamic Elementary School (MI) or other equivalent forms and Junior High School (SMP) and MTs (MTs), or other equivalent form. According to the UU SISDIKNAS No.20 (2003), the early education level for 9 (nine) the first year of school children that underlie secondary education. Competence is to be achieved impartial competences between the attitudes, skills and knowledge, in addition to a holistic way of learning and fun. The learning process emphasizes the cognitive, affective, psychomotor through portfolio-based assessment tests and complementary.

Education is needed to obtain information, for example the things that support health so as to improve the quality of life. Changes or actions of maintenance and improvement of health generated by this health education based on knowledge and awareness through a learning process, so that the behavior is expected to be a long (long lasting) and sedentary (lasting) as constituted by consciousness (Notoatmodjo, 2010).

Relation to pregnancy and childbirth, mothers with low education leads to lack of their understanding of the dangers that can afflict mothers

especially in the case of emergencies, pregnancies and childbirth. The results also show as many as 3 people (8.8%) had higher education. Higher education is an education after secondary education includes diploma's, bachelor's, master's, specialist, and doctoral organized by the college.

Maternal education can support in improving the mother's knowledge. This is based on the opinion of Notoatmodjo, (2010) that the more educated a person will have a broader knowledge compared with low education levels (Notoatmodjo, 2010). Education will also make a person compelled to wonder, gain experience, so that the information received will be knowledge (Anwar, 2006).

Based on the results of this research is that the majority of pregnant women in the third trimester Lendah 2 Primary Health Center have education primary. Education is needed to obtain information, for example the things that support health so as to improve the quality of life. Mothers with higher education will have a broader knowledge compared with low levels of education, including in the case of pregnancy and childbirth.

2. Choice Of Birth Attendant On Trimester III Pregnant Women In Lendah 2 Primary Health Center, Kulon Progo Yogyakarta

The results of research known throughout the third trimester pregnant women choose health personnel as an auxiliary labor. Based on the answers the mother is known that most mothers choose a midwife as a helper confinement of 31 people (91.2%), while choosing attended by obstetricians as many as 3 people (8.8%).

Birth attendant is one that can do much to help the mother during labor. The presence of a birth attendant has meaning because it can do much to help the mother during childbirth presence of a birth attendant has meaning because it can do much to help the mother during childbirth (Musbikin, 2007). The process of birth attendants conducted by health workers is one of the indicators in the MSS (Maximum Service Standards) in health districts / cities as stipulated in the decision of the Minister of Health No. 741 / Menkes / SK / IX / 2008.

The results showed that all pregnant women choose health personnel as a birth attendant. It certainly can support the increase in the coverage of delivery by health personnel and minimize the risk of delivery complications due to professional workforce helped by the midwife. The midwife is a health worker who has an important task in guidance and counseling to pregnant women, childbirth, postpartum and attending births with its own responsibility, as well as provide care to newborns (Winkjosastro, 2008).

The results also known to choose assisted by obstetricians as many as 3 people (8.8%). Mothers who choose an obstetrician as birth helpers can be constituted by a problem during pregnancy and also because of the history of pathology in the previous delivery.

Based on this research, it is known that all pregnant women in the third trimester Lendah 2 Primary Health Center choose the health workers as a midwife birth attendant. It certainly can support the increase in the coverage of delivery by health personnel and minimize the risk of birth complications since helped by professional workforce.

3. Factors Affecting Interests Choice Of Birth Attendant On Trimester III Pregnant Women In Lendah 2 Primary Health Center, Kulonprogo Yogyakarta

The results of research known throughout the third trimester pregnant women choose health personnel as an auxiliary labor. Based on the answers the mother is known that most mothers choose a midwife as an auxiliary labor. The factors that may affect the mother in choosing a birth attendants including economic factors, factors ease of access to health services and factors of labor history terhadapulu.

The tendency election as a midwife birth attendant is based on economic factors. Results of cross tabulation shows that 95.2% of pregnant women who have an income <UMR prefer a midwife to help her labor because labor costs are cheaper compared to the obstetrician. According Darsa (2009) factors that affect birth attendants one of which is the socio-economic factors. High socioeconomic level can encourage someone to do penolongannya to his wife

during childbirth. Family economic status also plays a role for a person to make decisions, acts including actions related to health (Darsa, 2009).

Their easier access in obtaining services at midwife compared with other health services is also one of the factors that cause mothers choose health personnel. Research Irasanty (2008), on the prevention of delays in referral maternal in Majene, found that geographic factors, distances and road infrastructure is very influential on people's access to referral, especially for people who live in remote areas and they have to use traditional transportation for referral maternal health facilities. Furthermore, the previous labor history is also a factor that causes mothers choose health personnel especially obstetrician.

4. Education Level And The Choice Of Birth Attendant On Trimester III Pregnant Women In Lendah 2 Primary Health Center, Kulonprogo Yogyakarta

Based on the calculation of the significant value of chi square p-value of 0.111 ($p > 0.05$). This means that there is no relationship with the mother's education election birth attendants in pregnant women in the third trimester Lendah 2 Primary Health Center. It supports research conducted by Lumi (2010) which shows that there is no connection with the use of maternal education level of service delivery by health personnel.

Results showed mothers with primary education entirely choose a midwife as an auxiliary labor. Mothers with secondary education and higher education is known mostly as an auxiliary midwife also chose her labor. The results showed no difference in birth attendant election both mothers with basic education, medium and high.

Things underlying it is the easier access in obtaining services at midwife compared with other health services. According to research conducted by Nara (2014) found no significant relationship between access to health services with adequate utilization of maternity facilities. This means that access to health services by a factor of maternal no influence in deciding the utilization of adequate maternity facilities in the delivery process.

Lendah 2 Primary Health Center has made efforts to increase deliveries by skilled health personnel, especially midwives performed by applying a referral system for mothers of a community health clinic to the Lendah 2 Primary Health Center. Mothers who give birth can also be directly referred to the Hospital. Puskesmas 2 Lendah Kulon Progo cooperate with three community health clinic that Gulurejo Health Center, Health Center and Health Center Ngentakrejo Sidorejo. It is a factor of pregnant women tend to choose a midwife as an auxiliary labor.

The results also show that as many as 2 (14.3%) of mothers with secondary education choose a doctor as an auxiliary labor. A total of 1 mothers (33.3%) with higher education choose an obstetrician as a birth attendant. Mothers with high level of education tend to have a better insight into the thinking compared with mothers with low education. Therefore, high perpendidikan mothers will have better knowledge; especially regarding aid delivery is best for him. So with this knowledge can influence the behavior one of them is to choose a birth attendant's best for her that is fed by a specialist (Masita, 2014).

Based on the results of research, theory and prior studies can be stated that there is no relation between education and women with birth attendants election. Mothers with primary education, secondary and higher health professionals tend to choose a midwife as an auxiliary labor. Based on the assumption of researchers, it could be due to economic factors, and ease health care midwives in Puskesmas 2 Lendah Kulon Progo.

Based on the results of research, theory and previous studies the researchers explained that the majority of pregnant women in the third trimester Puskesmas Lendah 2 Kulonprogo first primary education because parents of respondents who could only send their children to primary education level. Most of the third trimester pregnant women choose a midwife as birth attendants because private midwives are within easy reach and good services so that they are more comfortable to give birth to a midwife and a few women who choose an obstetrician as birth attendants due to factors that previous labor history.

CONCLUSIONS AND SUGGESTIONS

Based on the results of research and discussion, it can be concluded as follows:

1. The education level of third trimester pregnant women at health centers Lendah 2 Kulon Progo known mostly in the category of low education.
2. Election of birth attendants in the third trimester pregnant women at health centers Lendah 2 Kulon Progo entirely unknown selecting health personnel. The majority of women choose a midwife as an auxiliary health worker labor.
3. There is no relationship between the level of education of pregnant women with birth attendants elections in third trimester pregnant women at health centers Lendah 2 Kulon Progo. This is because all pregnant women choose health personnel as an auxiliary labor.

Based on the above conclusions, the suggestions can be given as follows:

1. For Health Center midwife particular

Based on the research, the health center midwife especially recommended for preserving its role as an auxiliary labor in pregnant women as well as improve the performance and participation in determining the policy to continue to assist the mother in labor.

2. For Pregnant Women Trimester III

Pregnant women preparing for childbirth is expected to increase knowledge and understanding with regard to the selection of birth attendants in accordance with their needs so as to minimize the occurrence of complications of labor caused delays in treatment by health personnel.

3. For 'Aisyiyah University of Yogyakarta

The results of this study can be used as additional literature as a means of ensuring that science readers, especially students regarding the selection of auxiliary labor in pregnant women.

4. For next researchers

This research can be used as a relay for further research so that this research can be developed more widely. Researchers then expected to continue research to be able to follow the patients until the time of

delivery so that the results of questionnaires filled respondents accurate results with selected birth attendants.

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PREMENSTRUAL SYNDROME CARE AMONGST FEMALE TEEGANERS

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ABSTRACT

Background: Premenstrual syndrome is syndrome accumulation of physical and emotional symptoms happening before menstruation.

Purpose: The study was conducted to investigate premenstrual syndrome care on teenagers.

Research Method: The study employed qualitative method with phenomenological approach. Purposive sampling was used as the sampling collecting technique. There were 4 subjects with in depth interview and 4 supporting subject triangulation. Thematic analysis was used as the data analysis.

Result: The result showed premenstrual syndrome occurrences before, at the time, and after menstruation with A, C, and H types. The risk factors of premenstrual syndrome were stress, lack of exercise, and eating pattern.

Keywords : Teenagers, Pre-menstruation, Care

INTRODUCTION

Adolescence is a transition period from childhood into adulthood. This transition requires a process of change, physical aspect sexual, emotional, religious, moral, social and intellectual (Hurlock, 2013). Starting from adolescence to adulthood, usually every woman will experience a menstrual period or menstruation in her life. Each month they called menstrual bleeding (Khomsan et al, 2008).

Menstruation experienced by women every month and there are various grievances felt like cramps, dizziness at the time before menstruation or so-called symptoms of premenstrual syndrome. There is some impact caused by premenstrual syndrome is decline in productivity of 436 people suffering from premenstrual syndrome, such as difficulty concentrating, decreased enthusiasm, forgetfulness, irritability, and lability of emotions, and the declining ability of coordination, reduced work productivity over 50% and higher incidence terganngunya interpersonal relationships and social activities, school work in groups of patients with premenstrual syndrome (Suparman, 2012).

63% of patients with premenstrual syndrome in Asia Pacific, never went to the doctor because they think that premenstrual syndrome was reasonable and should be

lived (Elvira, 2010). While in high school students in Indonesia found that premenstrual syndrome is the most widely experienced (75.8%) of the various types of menstrual disorders (Sianipar et al, 2009).

According to Saryono & Sejati (2009) the exact cause of premenstrual syndrome is unknown but a possibility related to hormonal factors, genetic, social, behavioral and psychological. Some factors that increase the risk of premenstrual syndrome, one of which is stress. Stress is a reaction to one's responsibilities, both physically and psychologically because of the change. Humans will be fast enough to recover from the effects of stressful stimuli in the form of experience, in many ways (Hawari, 2008).

UU no 36 /2009 on the sixth part of Article 71 paragraph 3 mandates that reproductive health is conducted through promotive, preventive, curative and rehabilitative. Midwives as one of the health workers perform preventive efforts as set forth in Decree No. 369 / Menkes / SK / III / 2007 by the standards of the profession midwife 9th midwives able to perform midwifery care to women or women with reproductive system disorders.

Factors that resulted in risk of premenstrual syndrome were related to the character of the woman herself. Every individual has a different biographical characteristics that can affect the physical, psychological and social person. Premenstrual syndrome often occurs in women of childbearing age by the amount of 70-90%. This condition is more common in women aged 20-40 years (Wulandari, 2012).

Yogyakarta is a university town, thus many dormitory areas sprung up inhabited by female students from various regions. Adolescents in the dorm were aged between 18-23 years are also experiencing the same thing with teens in general, it potentially has a number of psychological conflicts such as stress as a consequence of a period or a phase transition in the natural (Hawari, 2008).

Adolescent transition to dorm exposes adolescents to changes and new demands. Such changes are environmental lectures and dormitories, teachers and new friends, the rules and rhythms of life dormitories and other changes as a result far from parents. While the demands that must be faced by female students are the demands on academic independence and responsibility. Dorm life filled with non-academic and academic demands can be met in one dormitory Women in the city of Yogyakarta.

Preliminary study on adolescent daughter hostel in the city of Yogyakarta Jl. Bintaran Kidul conducted on January 23, 2016 there were 34 students who came from West Kalimantan. The results of the interviews on 10 female students, 7 of them said that they experienced symptoms of fatigue, lethargy, sweating, headache, quickly bored, insomnia, weight change accompanied by abdominal cramps, breast tenderness, acne, increased appetite by the time of menstruation, during menstruation and after menstruation and three female students did not experience.

When experiencing abdominal pain and breast tenderness they were taking antihypertensive medication or herbal drink. If there are pimples that appear most of them would squeeze and there are let, and when symptoms of headache, fatigue and lethargy they sometimes they take the time to rest. From the description above, the authors are interested in doing research to determine how the handling of premenstrual syndrome in adolescents in Dormitory daughter Yogyakarta City?

METHOD

This study used a qualitative method with phenomenological approach. Phenomenology is a view of thought that emphasizes the subjective human experiences and interpretations of the world (Maleong, 2015). Using purposive sampling techniques, 4 subjects with in-depth interviews, triangulation 4 subjects support, data analysis with thematic analysis.

RESULTS

- a. The incidence of premenstrual syndrome in subjects 1 occur before and during menstruation, subjects 2 occurred before, during and after menstruation, 3 subjects occur before and during menstruation and 4 subjects occurred before, during and after menstruation.
- b. Type of premenstrual syndrome in subjects first experienced a type H and A, two subjects experienced types A, C, H, 3 subjects experienced types A, C, H and 4 subjects experienced types A and C.
- c. Premenstrual syndrome risk factors in subjects 1,2,3 are stress, lack of exercise and diet. Subjects 4 is diet and lack of exercise.

- d. Handling of premenstrual syndrome on one subject, namely communication with friends, sports and spiritual approach. Subjects 2 communicate with friends, sports and spiritual approach 3 sports subjects. Subjects 4 communicate with friends and sports

DISCUSSION

According Saryono and Sejati (2009), the symptoms of premenstrual syndrome lasted a few hours or up to 10 days, these symptoms occur during menstruation until after menstruation for some cases. Premenstrual symptoms is a collection of symptoms usually occur 1-2 weeks before menstruation begins. Several studies have shown that the symptoms most often occur in the majority of women are psychological complaints such as irritable. (Hillegas, 2006). Premenstrual syndrome often associated with decreased work productivity due to the disruption of activities in the workplace. Women's labor productivity declined during 7- 10 days, which means 84-120 days per year. The figure is quite significant to the quality of life and personal social (Emilia, 2008).

Premenstrual syndrome is a group of physical and psychological symptoms that regularly occur during the luteal phase and ends when the menstrual cycle ends. The symptoms that occur in the form of physical complaints (headaches, back pain, abdominal pain), psychological disorders (irritability, anxiety, mood swings) and behavior disorders (fatigue, sleeplessness). (Devi, 2014). Premenstrual syndrome type H (hyperhydration) have symptoms of edema (swelling), abdominal bloating, pain in the chest, swelling of the hands and feet, increased weight before menstruation. Premenstrual syndrome type A (Anxiety) is characterized by symptoms such as anxiety, sensitivity, nervousness, mood lability. Some women experience mild to moderate depression when the period not yet to come. Premenstrual syndrome type C (craving) is characterized by the urge to consume sweets (usually chocolate) and simple carbohydrates (usually sugar). (Saryono & Sejati, 2009)

Risk factors for the occurrence of premenstrual syndrome in teens from Girl's Hostel in Yogyakarta is stress, which is in line with the theory of Suparman (2012) premenstrual syndrome experienced by vulnerable populations of women who suffer from stress. Teens tend to experience stress in daily life is also associated with the

frequency of symptoms of premenstrual syndrome. Stress causes irregularities in the production of beta-endorphin, which may cause some of the symptoms of premenstrual syndrome. Endorphin controls the various physiological functions such as pain transmission, emotions, control your appetite and hormone secretion. Changes in rates, endorphin effect on mood and vital behavior (Andrews, 2009)

Factors such as eating habits in high sugar, salt, coffee, tea, chocolate, soft drinks, dairy products, processed foods, aggravate the symptoms of premenstrual syndrome. The lack of nutrients such as B vitamins (especially B6), vitamin E, vitamin C, magnesium, iron, zinc, manganese, and linoleic acid (Saryono & Sejati, 2009). There is a relationship between physical activity such as sports events of premenstrual syndrome. Women who regularly exercise of premenstrual syndrome who experienced less than women who did not regularly exercise. Lack of exercise and physical activity lead to more severe premenstrual syndrome. (Nashruna, Maryatun, et al, 2012)

Exercise increases sympathetic stimulation, which is a condition that lowers the heart rate and reduce the sensation of anxiety. The benefits of exercise can be stronger when the exercise carried out sufficient. Regular exercise, that is done 3-5 times a week for 20-60 minutes and reaches the ideal heart rate is the minimum amount needed. If sports do less than the proportion amount, the benefits from the exercise are also perceived less. (Tania, 2007).

Women with symptoms of premenstrual syndrome should discuss the problem with someone close, a good partner, friends, or family. Sometimes confrontation or argument can be avoided if couples or friends to understand and identify the cause of the condition is unstable woman. For most women, exercise can reduce the symptoms of premenstrual syndrome, which reduce fatigue, stress and improve health. Exercise increases sympathetic stimulation, which is a condition that lowers the heart rate and reduce the sensation of anxiety. (Saryono & Sejati, 2009)

Islam provides guidance and education to people to be able to deal with various issues through Al-Qur'an. Ibnu Katsir in his tafsir book stated that the Quran is the medicine (cure) and a mercy to those who believe. When someone is having doubts, anxiety and irregularities found in the heart, then Al Quran is a cure for it. In addition, Al-Qur'an is a blessing that gives goodness and encourage to do so.

CONCLUSION AND RECOMENDATION

Conclusion

Treatment for premenstrual syndrome is to communicate with friends, doing sports and spiritual approaches.

Recommendation

It is expected that the teens add insight about premenstrual syndrome, so that complaints can be addressed appropriately.

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FACTORS RELATED TO THE ATTENDANCE OF MOTHERS WHO HAVE UNDER FIVE CHILDREN TO INTEGRATED HEALTH SERVICE

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ABSTRACT

Background: Integrated Health Service holds important role for health community status. The preliminary study in Public Health Center of Umbulharjo I showed that the lowest percentage of the children attendance was 53.8%. **Aim:** The research is aimed at determining the factors affecting the attendance of children under five to Integrated Health Service in Warungboto village Umbulharjo Yogyakarta. **Method:** The research used analytical survey method with time cross sectional approach. The research was conducted in Warungboto village. The samples were 79 people taken by cluster sampling technique. The analysis used Kendal Tau test. **Result:** Result showed that the respondents who had irregular attendance were 45 respondents (57%), and the respondents who had regular attendance were 34 respondents (43%). The result of Kendal Tau tests on mothers' age showed p value = 0.007; knowledge showed p value = 0.110; education showed p value = 0.747; occupation showed p value = 0.000; income showed p value = 0.433, and the number of children showed p value = 0.001. **Conclusion and Suggestion:** There was a correlation among maternal age, occupation, number of children and maternal attendance to Integrated Health Service of Warungboto. On the other hand, there was no correlation among knowledge, education, income and their attendance to the health service. It is suggested to mothers to take their children to health services every month in order to monitor their children growth and development.

Key words : attendance, mother of children under five, integrated health service

References : 40 references (2006-2015), 8 internet sources, four journals

Number of pages : xiv, 73 pages, 13 tables, 2 pictures, 9 appendices

BACKGROUND

Malnutrition is still a problem in Indonesia. Malnutrition rate in Yogyakarta on 2013 is 4%. One effort to improve the society nutritional state is through the Family Nutrition Improvement Program which most activities are held in posyandu. Community participation in the weighing in Posyandu are illustrated in the comparison of weighed infants (D) with a whole number of infants (S). The higher participation in Posyandu weighing in, the better the data that can describe the nutritional status of children (Ministry of Health, 2012).

Posyandu existence in society plays an important role, but there are still many peoples who do not take full advantage. One of the decline in community health measures participation can be seen from the utilization posyandu by families with under five children, which is the proportion ratio between the numbers of toddlers who were taken to posyandu (D) with the number of toddlers within the scope of posyandu (S) is still low. DIY Health Department survey results indicate that D / S in 2012 (84%), increase compared to 2011 (70-79%).

Results from the survey in posyandu on 2014 showed that the percentage of toddlers who come and weighed at posyandu is around 80%. Yogyakarta is region with the lowest percentage (77.52%). As for Gunung Kidul, Bantul and Sleman region it is coverage evenly. The minimum service standards for D / S was 80% (MOH, 2005). Coverage of a toddler's weight (D / S) is very important because it is an indicator associated with infant nutritional care coverage, coverage of basic services, especially immunization and the prevalence of malnutrition. The higher the coverage D / S, the higher the coverage of vitamin A and the higher immunization coverage (Yogyakarta Health Office, 2015).

Efforts to improve the mother's participation in monitoring the growth and development of toddlers can be done through Bina Keluarga Balita (BKB) program. In addition, growth monitoring continuously improved through family nutrition improvement program (UPGK). These activities can be carried out through PKK, KB, and Posyandu (Puspitasari, 2015)

The results of the preliminary study shown that lowest toddlers visits to neighborhood health center was in Puskesmas Umbulharjo I that is equal to 62.43%. There are four villages around Puskesmas Umbulharjo I which are Giwangan, Pandeyan,

Sorosutan, and Warungboto. Among these four villages, the lowest coverage for toddlers visit to the posyandu is in Warungboto village that is equal to 53.80%. Therefore researchers interested in conducting research on the factors related to the attendance of mothers with under five children to integrated health service of Warungboto, Umbulharjo, Yogyakarta.

METHODS

The research used analytical survey method with time cross sectional approach. The research was conducted in Warungboto village. The samples were 79 people taken by cluster sampling technique. The analysis used Kendal Tau test.

RESULTS

Bivariate Analysis

a. Relationship between mother's ages with mother attendance to Posyandu in Warungboto Village, Umbulharjo

Relationship between mother's ages with mother attendance to Posyandu in Warungboto Village, Umbulharjo can be described as follows:

Table 4.2 Relationship between mother's ages with mother attendance to Posyandu in Warungboto Village, Umbulharjo

Attendance	Toddler Attendance				Total		τ	<i>P-value</i>
	Regular		Irregular					
	F	%	F	%	F	%		
Age	F	%	F	%	F	%		
< 20 yo	0	0	1	1,3	1	1,3	0,306	0,007
20-29 yo	24	30,4	16	20,3	40	50,6		
30-49 yo	10	12,7	28	35,4	38	48,1		
TOTAL	34	43,0	45	57,0	79	100		

Source: Primary Data, 2016

Based on the test results using Kendal Tau correlation above, the coefficient results is 0,306 and p value (0,007) < (0,05) which means H_0 is rejected and H_a accepted which is indicating that there is a relationship with a medium closeness between mother's age with the mother attendance to posyandu in Warungboto Village, Umbulharjo, Yogyakarta.

b. **Relationship between knowledge with mother attendance to Posyandu in Warungboto Village, Umbulharjo**

Relationship between knowledge with mother attendance to Posyandu in Warungboto Village, Umbulharjo can be described as follows:

Table 4.3 Relationship between knowledge with mother attendance to Posyandu in Warungboto Village, Umbulharjo

Attendance	Toddler Attendance				Total		τ	<i>P-value</i>
	Regular		Irregular					
	F	%	F	%	F	%		
Knowledge								
Bad	1	1,3	6	7,6	7	8,9	0,181	0,110
Good	33	41,8	39	49,4	72	91,1		
TOTAL	34	43	45	57	79	100		

Source: Primary Data, 2016

Based on the test results using Kendal Tau correlation above, the coefficient results is 0,181 and p value (0,110) > (0,05) which means H_0 is accepted and H_a rejected which is indicating that there is no relationship between knowledge with the mother attendance to posyandu in Warungboto Village, Umbulharjo, Yogyakarta.

c. **Relationship between educational levels with mother attendance to Posyandu in Warungboto Village, Umbulharjo**

Relationship between educational levels with mother attendance to Posyandu in Warungboto Village, Umbulharjo can be described as follows:

Table 4.4 Relations of education with mother attendance to Posyandu in Warungboto Village, Umbulharjo

Attendance	Toddler Attendance				Total		T	P-value
	Regular		Irregular					
Educational Levels	F	%	F	%	F	%		
Elementary School	3	3,8	3	3,8	6	7,6	0,036	0,747
High School	27	34,2	39	49,4	66	83,5		
College	4	5,1	3	3,8	7	8,9		
TOTAL	34	43,0	45	57	79	100		

Source: Primary Data, 2016

Based on the test results using Kendal Tau correlation above, the coefficient results is 0,036 and p value (0,747) > (0,05) which means H_0 is accepted and H_a

rejected which is indicating that there is no relationship between educational level with the mother attendance to posyandu in Warungboto Village, Umbulharjo, Yogyakarta.

d. **Relationship between jobs with mother attendance to Posyandu in Warungboto Village, Umbulharjo**

Relationship between jobs with mother attendance to Posyandu in Warungboto Village, Umbulharjo can be described as follows:

Table 4.5 Relations of job with mother attendance to Posyandu in Warungboto Village, Umbulharjo

Jobs	Attendance				Total		τ	<i>P-value</i>
	Toddler Attendance							
	Regular		Irregular					
	F	%	F	%	F	%		
Unemployment	19	24,1	7	8,9	26	32,9	0,425	0,000
Working	15	19	38	48,1	53	67,1		
TOTAL	34	43	45	57	79	100		

Source : Primary Data, 2016

Based on the test results using Kendal Tau correlation above, the coefficient results is 0,425 and p value (0,000) $< (0,05)$ which means H_0 is rejected and H_a accepted which is indicating that there is a relationship between jobs with the mother attendance to posyandu in Warungboto Village, Umbulharjo, Yogyakarta.

e. **Relationship between incomes with mother attendance to Posyandu in Warungboto Village, Umbulharjo**

Relationship between incomes with mother attendance to Posyandu in Warungboto Village, Umbulharjo can be described as follows:

Table 4.6 Relations of salary with mother attendance to Posyandu in Warungboto Village, Umbulharjo

Warungboto Village, Embanarjo								
Incomes	Attendance				Total		τ	P-value
	Toddler Attendance							
	Regular		Irregular					
	F	%	F	%	F	%		
< Rp 1.500.000	4	5,1	3	3,8	7	8,9	0,089	0,433
\geq Rp 1.500.000	30	38	42	53,2	72	91,1		
TOTAL	34	43	45	57	79	100		

Source : Primary Data, 2016

Based on the test results using Kendal Tau correlation above, the coefficient results is 0,089 and p value (0,433) $> (0,05)$ which means H_0 is accepted and H_a rejected.

rejected which is indicating that there is no relationship between incomes with the mother attendance to posyandu in Warungboto Village, Umbulharjo, Yogyakarta.

f. **Relationship between child number with mother attendance to Posyandu in Warungboto Village, Umbulharjo**

Relationship between child numbers with mother attendance to Posyandu in Warungboto Village, Umbulharjo can be described as follows:

Table 4.7 Relations of child number with mother attendance to Posyandu in Warungboto Village, Umbulharjo

Warungboto Village, Umbulharjo							τ	P-value
Attendance	Toddler Attendance				Total			
	Regular		Irregular					
Child Number	F	%	F	%	F	%		
≤ 2	31	39,2	25	31,6	56	70,9	0,388	0,001
>2	3	3,8	20	25,3	23	29,1		
TOTAL	34	43	45	57	79	100		

Source : Primary Data, 2016

Based on the test results using Kendal Tau correlation above, the coefficient results is 0,388 and p value (0,001) <(0,05) which means Ho is rejected and Ha accepted which is indicating that there is a relationship between child numbers with the mother attendance to posyandu in Warungboto Village, Umbulharjo, Yogyakarta.

Discussion

1. Relationship between mother's ages with mother attendance to Posyandu in Warungboto Village, Umbulharjo

Based on the test results using Kendal Tau correlation above, the coefficient results is 0,306 and p value (0,007) <(0,05) which means Ho is rejected and Ha accepted which is indicating that there is a relationship with a medium closeness between mother's ages with the mother attendance to posyandu in Warungboto Village, Umbulharjo, Yogyakarta.

This study relevant with theory that suggests that age is one of the factors that influence social participation in adulthood, mature woman will be active in social life like participating in Posyandu (Hurlock, 2013). Where mothers in the age between 20-29 years are more regularly carrying their toddler into posyandu than mothers in the age between 30-49 years. Mothers in the age between 30-49 are less regular in participating posyandu activities because some factors, such as part-time working so most of mothers time

will be spent outside the home and can't manage their time between family and jobs.

2. Relationship between knowledge with mother attendance to Posyandu in Warungboto Village, Umbulharjo

Based on the test results using Kendal Tau correlation above, the coefficient results is 0,181 and p value (0,110) $> (0,05)$ which means H_0 is accepted and H_a rejected which is indicating that there is no relationship between knowledge with the mother attendance to posyandu in Warungboto Village, Umbulharjo, Yogyakarta.

According to Effendy (2007), increased knowledge does not always lead to behavior change. Based on Table 4.3 that mothers who have good knowledge does not always attend to posyandu. It was influenced by several factors: education, experience, and information. Knowledge is closely linked to the level of education, where it is expected that with higher education then that person will be more knowledgeable.

3. Relationship of educational levels with mother attendance to Posyandu in Warungboto Village, Umbulharjo

Based on the test results using Kendal Tau correlation above, the coefficient results is 0,036 and p value (0,747) $< (0,05)$ which means H_0 is accepted and H_a rejected which is indicating that there is no relationship between educational levels with the mother attendance to posyandu in Warungboto Village, Umbulharjo, Yogyakarta.

Education is a very important factor to provide the ability to think, analyze, and understand information with more rational consideration. A good education will give a good ability as well in making decisions about the health of the family (Hastono, 2009). Highly educated people have a good mindset either in the receive and absorb information about posyandu that delivered through health education, as well as through the mass media.

4. Relationship between jobs with mother attendance to Posyandu in Warungboto Village, Umbulharjo

Based on the test results using Kendal Tau correlation above, the coefficient results is 0,425 and p value (0,000) $< (0,05)$ which means H_0 is

rejected and H_a accepted which is indicating that there is a relationship between jobs with the mother attendance to posyandu in Warungboto Village, Umbulharjo, Yogyakarta.

This study relevant with theory that suggests that the socio-economic aspects will affect the people's participation in posyandu. All mothers who work either at home or outside the home, both of them would still leave the children for most of the time (Neil Niven, 2006). Therefore, a working mothers tend to difficult in allocating time for family, which one of them is bring their toddler to Posyandu.

5. Relationship between incomes with mother attendance to Posyandu in Warungboto Village, Umbulharjo

Based on the test results using Kendal Tau correlation above, the coefficient results is 0,089 and p value (0,433) $>(0,05)$ which means H_0 is accepted and H_a rejected which is indicating that there is no relationship between incomes with the mother attendanceto posyandu in Warungboto Village, Umbulharjo, Yogyakarta.

This illustrates that the socio-economic status of the respondents are in a high economic level. In the statistics test, there is no significant correlation between socio-economic statuses with presence of toddler to posyandu. This is caused bythe toddler presence to posyandu is part of a government programwhich is free. But, posyandu itself was formed as a result of non-governmental organization, especially mother'sorganization, so there is some small participation which is voluntary that does not charge the community.

6. Relationship between child numbers with mother attendance to Posyandu in Warungboto Village, Umbulharjo

Based on the test results using Kendal Tau correlation above, the coefficient results is 0,388 and p value (0,001) $<(0,05)$ which means H_0 is rejected and H_a accepted which is indicating that there is a relationship between child numbers with the mother attendanceto posyandu in Warungboto Village, Umbulharjo, Yogyakarta.

Mothers with ≤ 2 toddlersmore often went to posyandu because they are more concerned with their children. While mothers of children >2 would be

too busy to take care all of their children because of the growing need so they inattentive to them. According Notoatmodjo (2010) there is a tendency of mothers with a lower number of children, will have more attention to family health than mothers who have more children.

CONCLUSIONS AND RECCOMENDATIONS

CONCLUSIONS

There is a relationship between mother's ages with the presence of mothers to Posyandu, which is shown by p-value of 0.007. There is a relationship between mother's ages with the presence of mothers to Posyandu, which is shown by p-value of 0.007. There is a relationship between job with the presence of mothers to Posyandu, which is shown by p-value of 0.000. There is no relationship between salaries with the presence of mothers to Posyandu, which is shown by p-value of 0.433. There is no relationship between knowledge with the presence of mothers to Posyandu, who demonstrated p-value of 0.110. There is a relationship between the numbers of children with the presence of mothers to Posyandu, which is shown by p-value of 0.001.

RECCOMENDATIONS

It is recommended for mothers to bring their toddler once a month into posyandu, so that the growth and development of the toddler can be monitored every month. Because based on monthly data from posyandu in the Warungboto Village, Umbulharjo, Yogyakarta, the coverage of D / S recorded only at 53.80%.

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EFFECT OF IRON SUPPLEMENTATION ON HEMOGLOBIN LEVELS IN ADOLESCENTS

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ABSTRACT

Results of household health survey reported that the prevalence of anemia in adolescents and women of childbearing age are high. This study aims to determine the impact of Fe tablet supplementation on the hemoglobin level of adolescents. Quasi-experimental were used in this study with nonrandomized pre-test post test control group design. Two groups of sample consisted of 15 respondents in each experiment and control group. The result showed that there was a significant improvement on the level of hemoglobin in experiment group that the control group with p value of 0.001 (<0.05).

Keywords: Adolescent, Hemoglobin, Iron Supplementation

Introduction

Adolescence is a stage where a person experiences a transition to adulthood. Adolescent is a stage that comes after the age of childhood ended, marked by rapid physical growth. Young people in society is known by various terms which indicate the age group that does not include a child but not too mature. Rapid adolescent growth related to nutrition or consumption of adolescents consume food any substance or substances are satuya iron consumption. Consumption of iron can cause anemia less in adolescents. In general, anemia is more common in women and girls as compared to men. Most people do not know or do not realize this is very unfortunate, even when the idea is still regarded as a trivial issue anemia (Yusuf, 2011).

Anemia is a medical condition in which the hemoglobin level is less than normal. Normal hemoglobin levels in young women is > 12 g / dl. Adolescent girls are said to anemia if Hb < 12 g / dl (Proverawati, 2011). Anemia is one of the nutritional problems in developing countries, including Indonesia. The incidence of anemia in adolescent girls is more common than in children and adults, this is because girls menstruate, food intake is low, the process of accelerated growth (growth sput) and make the process of

limiting foods so the body is experiencing a shortage of essential nutrients such as iron. Young women have a higher risk of anemia than young men. The first reason is because every month in adolescent experience menstruation. A woman who experiences menstrual many for more than five days are feared to lose iron, thus requiring replacement of iron more than women who are menstruating only three days and a bit. The second reason is because young women often keep up appearances, the desire to stay slim or thin that dieting and eating less. In adolescence, particularly in girls very concerned about her figure, so much to limit their food consumption. Even many who berdiit without the advice or supervision of a health and nutrition, so that their consumption patterns so violates the rules of nutritional science. Many abstinence or taboos are determined based on the hearing of his incompetent in the matter of nutrition and health, causing a variety of symptoms and complaints are actually a symptom of nutritional disorders (Achmad Djaeni, 2000, pp 241).

According to the Word Health Organization (WHO) the prevalence of anemia in adolescent girls in developing countries 53.7% of all young women due to state of stress, menstruation, or a late meal. (WHO, 2010). Based on actual survey data globally by 2010 it is known that the prevalence of anemia among school-age children, pregnant women and nonpregnant women in the world globally row as follows 47.4%, 41.8% and 30.2%. The rate of anemia in Yogyakarta province 35% (DHO DIY, 2013) while the rate of anemia teenagers in Gunung Kidul Regency by 22% (DHO Gk, 2015) this figure is high enough so that the government adopted a policy to conduct screening anemia at secondary school level first level and secondary, for the next administration of iron tablets to children in school that will begin in 2016.

According to the MOH (2000), long-term consequences of anemia in adolescent girls is when teenage girls will get pregnant, then he will not be able to meet the nutrients for themselves and also the fetus in the womb and during pregnancy anemia can increase the frequency of complications, the risk of maternal mortality, the rate of prematurity, low birth weight and perinatal mortality rate (Conservation, 2010). So as to prevent anemia, the girls need to be equipped with knowledge about anemia and food intake patterns teens themselves (Kathleen Tan, et al, 2012)

Based on preliminary studies conducted from december until January 2016 were conducted in SMK N I Ponjong Gunungkidul SMK N I Ponjong consists of three levels,

namely the class X consists of 6 classes, Class XI consists of 6 classes and XII consists of 6 classes. Number of female student in class X as many as 65 students, the number of female student in class XI 60 students, the number of female student of class XII 50. Of the 65 students of class X were examined hemoglobin contained 17 (29%) female student anemia (hemoglobin levels less than 12gr / dl).

RESEARCH METHODS

This research is a quantitative designs were used in this study Quasi experiment. This research use non-randomized control group Pretest - Post test was conducted at SMK Design. Penelitian N I Ponjong Gunung. Research using Curvet Hemocue instrument for measuring hemoglobin levels before and after treatment. Respondents in this study were 30 respondents drawn with quota sampling technique then divided into two groups of 15 experimental group and 15 groups). By giving tablet fe intervention and counseling and leaflets. Scale data used ordinal adalalah by giving categories on anemia and nominal administration fe. Analisa tablet is used for membuaat univariate frequency distribution table with the Wilcoxon test depending untu know the average rise Sedangkan dengn Bivariat analysis using Mann Whitney formula

RESULTS AND DISCUSSION

1.		Univariate		Analysis	
Table 4.2 Hb before and after consuming Fe tablet in the experimental group					
Anemia	f	Before	%	f /	After
Heavy	0	0	0	0	0
Average	0	0	0	0	0
Lightweight	15	15	15	7	46.6
Not anemia	0	0	0	8	53.3
Total	15	100	100	15	100

Source: Primary Data (2016)

Based on Table 4.2 it appears that prior research subjects consuming Fe tablet of 100% in the category of mild anemia as many as 15 people. increase in Hb levels after consuming Fe tablet most are in the category of not anemic (Hb> 12gr%) as many as 8

respondents (53.3%), while those in the category of moderate anemia (Hb 8,9-12gr%) by 7 respondents or 46.6%.

Table 4.3 Hb Before and After Awarded Counseling and Leaflet On Control Group

Anemia	Before		After	
	f	%	f	%
Heavy	0	0	0	0
Average	0	0	0	0
Lightweight	15	15	13	86.6
Not anemia	0	0	2	13.3
Total	15	100	15	100

Based on Table 4.3 shows that the leaflet before being given counseling and 100% are in the category of mild anemia as many as 15 people. The increase in Hb levels after being given counseling is as much as 2 respondents or 13.3% in the category are not anemic and 13 respondents, or 86.6% remained in the category of mild anemia.

2. Analysis Bivariat

Table Giving	4.4	Differences increase in Hb Before Control	And After Group
Before Source:	counseling and Primary	counseling After this Data	leaflet and leaflet (2016)
variable	Mean ± SD	p value	N
	11.2 ± 0.42	0.173	15
	11.3 ± 0.42		15

Based on Table 4.4 Value p value = 0.173 < (0.05). So we can conclude there is no difference in Hb levels before and after being given counseling in the control group. A gain of 0.1, where the average value is given counseling before 11.2 ± 0.42 and after being given counseling to 11.3 ± 0.42.

Table 4.5 Differences increase in Hb levels before and after administration of the tablet Fe Experiment Group

Variable	Mean ± SD	p value	N
Before taking the tablet Fe	11.1 ± 0.39	0,001	15
After taking a tablet Fe	11.8 ± 0.47		15

Source: Primary Data (2016)

Table 4.5 Differences increase in Hb levels before and after administration of the tablet Fe Experiment Group

Variable	Mean \pm SD	p value	N
Before taking the tablet Fe	11.1 \pm 0.39	0,001	15
After taking a tablet Fe	11.8 \pm 0.47		15

Source: Primary Data (2016)

Table 4.6 Comparison of the difference in the increase in Hb levels after intervention in the control group and Experimental Group

Group	N	After Intervention	p- value	p- value		
Mean	SD	Wilcoxon	ManWhitney			
Control	15	11.3	0.42	0.1	0.173	
Experiments	15	11.8	0.47	0.7	0.001	0.000

Source: Primary Data 2016

Based on the Mann Whitney test results in table 4.6 in the control group (given counseling and leaflets) and the experimental group (drink tablets Fe) was obtained p-value of 0.000 (<0.05) indicate that there is a difference between counseling and the provision of the tablet Fe increased levels of hemoglobin in which the average increase in Hb levels in the control group was 11.3. The increase occurred in six (6) respondents, two (2) respondents were not anemic, four (4) mild anemia. Hb levels remained eight (8), down one.

(1) of the students, while the modest improvement in the experimental group average of 11.8. Improvement occurred in 14 respondents, eight (8) becomes anemic, six (6) mild anemia Hb down one (1) respondent.

DISCUSSION

Hemoglobin Before And After Giving Tablet Fe In Group Experiments

Based on table 4.2 results of research that has been done on SMKN I Ponjong for the intervention group who received tablet Fe, get that 100% of respondents experienced mild anemia as many as 15 people. Based on the research that has obtained an average age of respondents was 16-19 years old with a minimum age of 16 years and maximum 19 years. Teen age limit according to WHO (2010) is the age of 12-24 years. According to the MOH (2008, p 45) aged between 10 -19 years old and unmarried. Teens have a higher risk of experiencing anemia due to iron deficiency. This is because in this phase of adolescents experienced rapid growth accompanied by a variety of hormonal changes before the maturity phase. Teens need a large amount of nutrients, especially iron that is used to transport oxygen. Insufficient iron trigger anemia.

Hemoglobin Before and After Awarded Counseling and Leaflet In the Control Group

Based on Table 4.3 Hb levels before being given counseling on all control group subjects experienced mild anemia as many as 15 respondents or 100%. Anemia is a term that indicates a low red blood cell count and hemoglobin and hematocrit levels below normal. Anemia is not a disease, but a reflection of the state of a disease or disorders. According to the WHO in 2008 Tarwoto and Wasnidar Anemia is a condition with hemoglobin levels lower than the normal value. Anemia also means a condition when there is deficiency of size or number of erythrocytes or hemoglobin. Iron anemia is anemia caused by lack of iron in the blood, meaning that the concentration of hemoglobin in the blood is reduced by disrupting the formation of cells - red blood cells due to lack of iron levels in the blood. To know a child has anemia or not, we can see the limits of his hemoglobin levels. Based on Table 4.3 levels of Hemoglobin

30 days after receiving counseling in the control group was almost the same as before as many as 13 respondents, or 86.6% is still in the category of mild anemia and 2 respondents or 13.3% increase her hemoglobin levels to normal or not anemia. Hb level

was also influenced by the menstrual pattern and food consumption patterns of the respondents.

Menstruation is the periodic and cyclic bleeding from the uterus with the release (desquamation) endometrium (Sarwono, 2011, pp 103). While menstruation by Savitri Ramaiah (2006, p 19) is a discharge from the vagina at regular intervals during the reproductive age. The amount of blood that comes out during menstruation difficult to quantify, it is estimated based on the number of napkins used per day. The use of pads up to five per day is considered normal (Savitri Ramaiah, 2006, hlm19).

Based on the results in Table 4.1 average experience menstruation / period for 3-7 days as many as 13 people (86.66%) on the control group and 8 (53.33%) in the experimental group. When the menstrual blood volume in the control group more that 3-5 dressings as many as 14 people (93.33%) and the experimental group were 9 people (60%). This is because the selection of the respondents by researchers with long menstrual selecting respondents is less than 15 days. According to Guyton and Hall (2014) Excessive menstrual discharge is a frequent cause of iron deficiency in women. In young women, with their meal that is often chaotic and that many and frequent menstrual irregularities, a growth spurt of puberty can lead towards a balance of iron deficiency. A decrease in the number of red blood cells stimulate the bone marrow to increase the release of red blood cells are abnormally small and deficient hemoglobin. Hemoglobin is a protein that is rich in iron. Has an affinity (affinity) to oxygen and the oxygen it forms oxihemoglobin in red blood cells. By going through this function, the oxygen is carried from the lungs to the tissues (Evelyn, 2009, p 103). According to Sunita Almatier (2009, p 252) estimated that only 5-15% of food iron is absorbed by adults who are in good iron status. In a state of absorption iron deficiency can reach 50%. Many factors affect the absorption of iron. Forms of iron in the food effect on absorption. Based on the results in Table 4.1 rate of consumption of drinking tea after eating 100% consumption of tea, which is one of the factors that interfere with the absorption of iron.

Based on the pattern of food consumption day - most days eating three

(3) times a day in the experimental group there were 14 (93.33%) in the control group 3

(86.66%). Do not keep your diet or irregular eating will affect the level of intake of food or substance gisi are needed by the body for growth for adolescents. Wilcoxon statistical test results obtained by the result of the value of $p = 0.173$ ($p < 0.05$) with the difference between the mean Hb level before with hemoglobin levels after 30 days of respondents were counseled by 0.10. These results indicate that there is no difference in Hb levels before and after counseling in the control group

. Factors Affecting Anemia In Young Women

Consumption of foods containing Iron.

Based on research results that have been obtained in diet and food consumption in adolescent anemia vegetable consumption is only consumed by five (5) of 33.3%, in addition to the consumption of vegetable protein consumed 100% more than animal protein. In foods there are 2 kinds of haem iron include iron (40%) and non-haem iron. Non-haem iron is the main source of iron in the diet. There are in all kinds of vegetables like green vegetables, beans - beans, potatoes and cereals as well as some types of fruit. In adolescence, particularly in girls often limit food consumption with a reason to keep the shape of the body. Even many who berdiit without the advice or supervision of a health and nutrition, so that their consumption patterns so violates the rules of nutritional science. Many abstinence or taboos are determined based on the hearing of his incompetent in the matter of nutrition and health, causing a variety of symptoms and complaints are actually a symptom of nutritional disorders (Achmad Djaeni, 2000, pp 241). Many young women are often missed two consecutive meals and prefer snacks. Though most of the snack is not just empty calories, but it also contains very few nutrients, but can interfere (eliminate) the appetite. Additionally especially young teenagers increasingly fond of junk food that is very little (in fact there is none at all) in calcium, iron, riboflavin, folic acid, vitamin A and vitamin.

menstruation

Based on the research that has been obtained -rata average respondent experience menstruation for 3-7 days as many as 13 people (86.66%) in the control group of 8 people, long menstrual 8-15 days more experienced by the experimental group is 7 people (46 , 6%) the amount of blood loss during menstruation is difficult to measure, it

is estimated based on the number of napkins used per day. The use of pads up to five per day is considered normal (Savitri Ramaiah, 2006, p 19). Excessive menstrual discharge is a frequent cause of iron deficiency in women. In young women, with their meal that is often chaotic and that many and frequent menstrual irregularities, a growth spurt of puberty can lead towards a balance of iron deficiency. A decrease in the number of red blood cells stimulate the bone marrow to meningkatkan pelepasan red blood cells are abnormally small and deficient hemoglobin (Guyton and Hall, 2014, p 446).

drug consumption.

Based on the research results have been obtained during menstruation all respondents (100%) in the experimental group or the control group never consumed drugs added blood during menstruation. The importance of this iron to someone who is affected by iron deficiency anemia and no interference absorption then in 7-10 days Hb levels rise could happen to consume iron tablet of 1.4 mg / day (A. Harryanto Reksodiputro 2006, p 114). In a state of excessive bleeding or normal menstrual bleeding, iron loss due to bleeding must be replaced. Because the average menstrual bleeding 60 ml per month, equal to 30 mg of iron, women need an extra one milligram per day to be absorbed in order to balance maintained (MOH, 2008, p 56). supplements iron should be consumed at night, due to the effects of iron supplements can cause nausea. Number supplements provided idiperkirakan can meet the needs of women. The need for iron 3000 s / d 5000 mg in the body, which is excreted body every day Consumption of tea after a meal.

Based on the research it has been found that all respondents (100%) drinking tea every day after supper. According to Sunita Almatsier (2009, p 252) estimated that only 5-15% of food iron is absorbed by adults who are in good iron status. In a state of absorption iron deficiency can reach 50%. Many factors affect the absorption of iron. Forms of iron in the food effect on absorption. The influence of the end of the absorption of iron is usually positive. Vitamin C in an amount sufficient to resist most of the influence of the factors that inhibit the absorption of iron. Polyphenols and

tannins that are present in tea, coffee and some types of vegetables and fruits also inhibit the absorption of iron by binding. When the iron body is not too high, you should not drink tea at mealtime. Calcium supplements in high doses inhibit the absorption of iron, but the mechanism is not known with certainty. Babies can absorb more iron from the mother's milk than cow's milk.

Difference Increase in Hemoglobin After Giving Counselling and Tablet Fe Against Increased Hb.

Based on Table 4.9 it can be seen an average increase in Hb after treatment in the control group was 0.10, while the intervention group was 0.70 with a p-value $0.001 < (0.05)$ so that it can be concluded that H_0 refused H_a accepted. It can be concluded there is a significant difference between counseling and the provision of iron tablet to increase Hb levels. Rank Mean changes in hemoglobin levels to greater intervention group amounting to 21.27, while the control group only amounted to 9.73, meaning that the provision of more effective Fe tablet to increase hemoglobin levels compared with a group given counseling.

Hemoglobin is a protein complex, which is composed of the protein globin and a compound is not a protein called heme. Hemoglobin in red blood cells serves to bind oxygen (O_2). With the amount of oxygen that can be tied up and carried by the blood, the presence of hemoglobin in red blood cells, oxygen supply to various places throughout the body, even the most remote and isolated even will be achieved (Mohammad sakidin, 2006, p 17).

According to Arthur C. Guyton and John E. Hall (2014, p 445), the synthesis of hemoglobin begins in proerythroblasts and then continued until the level of reticulocytes, because when reticulocyte leave the bone marrow and into the bloodstream, the reticulocyte hemoglobin still form over the next few days, Stage basic chemical formation of hemoglobin is the first, succinyl-CoA, which is formed in the Krebs cycle. Glutamate binds to form molecules pyrrole. Furthermore, four pyrrole compounds unite to form protoporphyrin compounds, which then binds with the iron to form haem molecules. Finally four haem molecule binds to one molecule of globin, a globulin is synthesized in endoplasmic reticulum ribosomes, forming hemoglobin. There are some

minor variations on the chain subunits of hemoglobin are different, depending on the composition of amino acid polypeptide section. Types of chains called alpha chain, beta chain, chain gamma and delta chains.

CONCLUSIONS AND SUGGESTIONS.

Based on data analysis and inteprestasinya, it can be concluded study the effect of iron tablet to increases Hb levels are as follows..

1. There were no differences in the rise in Hb levels just before and sesudah given counseling in the control group with a p-value of 0.173.
2. There are differences in Hb levels rise on the respondents before and after Fe tablets given in the experimental group with p value of 0.001.
3. There are differences in the increase in Hb level between the control group and experimental group with a p-value of 0.000.

Based on the results of this study can be submitted several suggestions as following :

For health professionals.

Health workers, especially midwives order to provide services related to the management of anemia with the prevention of anemia in pregnant women through the provision of iron supplementation in adolescents daughter as mothers, education about anemia, and the importance of eating foods that contain iron.

For Government

The results of this study in order to be used as input to be used as the evaluation of maternal and child health programs and youth that have been implemented, as well as a material consideration to be able to make the wisdom / strategy in an effort to reduce the number of anemia in adolescent daughter and a woman of fertile age.

For Schools.

In order to provide health promotion efforts to the student and parent or guardian as well as issues related to anemia or adolescent health issues.

For further research.

In order to conduct another study to consider all the other factors that affect hemoglobin levels were not examined in this study, such as factors of chronic diseases such as gastritis, ulcers pepticum and worm infections.

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THE CORRELATION BETWEEN MOTHER'S OCCUPATION AND EXCLUSIVE BREAST FEEDING ON MOTHER'S WITH 6-12 MONTHS OLD BABIES AT DANUREJAN I YOGYAKARTA PRIMARY HEALTH CENTER IN 2016¹

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ABSTRACT

Background : As a way to decrease the Rate of Baby's Mortality and Sickness, United Children's Fund (UNICEF) and World Health Organization (WHO) recommend that babies have to get exclusive breast milk during 6 months of their first life. The range of exclusive breast feeding in Yogyakarta Special Province is 70.8%, and the lowest is in Yogyakarta Municipality with 54.9%. The achievement has not reached the government target with 80%. Danurejan I Primary Health Center is a primary health center with the lowest range of exclusive breast feeding in Yogyakarta Municipality with 38.57%.

Objective : The study aimed to analyze the correlation between mother's occupation and exclusive breast feeding on mothers with 6-12 months old babies at Danurejan I Primary Health Center Yogyakarta in 2016.

Method : The study employed analytical survey method with cross sectional approach. Sample taking used cluster sampling method with 60 respondents. Data instrument technique used questionnaire. Chi square and contingency test were used as the analysis technique.

Result : The result of univariate analysis showed more working mother (55%), and most of them did not do exclusive breast feeding (51.7%). The result of bivariate analysis with chi square test obtained significance value 0.10 ($p < 0.05$), showing that there was correlation between mother's occupation and exclusive breast feeding at Danurejan I Primary Health Center Yogyakarta in 2016 with contingency coefficient value 0.315 showing low category correlation.

Conclusion and Suggestion : There was correlation between mother's occupation and exclusive breast feeding at Danurejan I Primary Health Center Yogyakarta in 2016. It is expected that midwives can increase education and counseling about exclusive breast feeding on mothers who have not given exclusive breast milk and can give counseling about pumped breast milk and how to keep it.

Keywords: Mother's Occupation, Exclusive Breast Feeding

INTRODUCTION

Infant Mortality Rate (IMR) is one of indicator of the community health and welfare level. IMR in Indonesia based on Indonesian Health Demography Survey was 32 per 1.000 live births in 2012 (SDKI, 2012). That achievement is still behind from the Sustainable Development Goals (SDG's) 12 per 1.000 live birth (*Department of Economic and Social*, 2016).

In order to reduce the morbidity and infant mortality (IMR), the United Nations Children's Fund (UNICEF) and World Health Organization (WHO) recommend that the baby should be fed only breast milk for at least six month (exclusive breastfeeding) (ASI bulletin, 2014). Exclusive breastfeeding means that mother gives only breast milk to the infant in the first 6 month of life without other liquid and other food (Wiji, 2013).

Rate of exclusive breastfeeding in the developing country is 39% (UNICEF, 2013). In ASEAN countries, the breastfeeding in India is 46%, Indonesia is 33,6%, Philippines is 34 %, Vietnam is 27% and Myanmar is 24%. These figures, however, were still far below the Government goal's of 80% exclusive breastfeeding in 0 – 6 month (ASI Bulletin, 2014).

Mother's occupation is one of the factor that influence the success and failure of exclusive breastfeeding. The Central Statistic Agency (BPS) in 2014 states that the number of women worker's participation in exclusive breastfeeding has increased from 48,63% to 49,52 % (BPS, 2014). Pawenrusi (2011) states that working mothers do not give exclusive breastfeeding and choose commercially-prepared infant formula milk. The reason is that they are busy to work outside home. Weber et al (2011) states that return to work is the main reason to stop breastfeeding, from 60% of women intending to continue breastfeeding only 40% giving breastfeeding.

The exclusive breastfeeding numbers in Yogyakarta (DIY) is 70,8 % and the lowest is in Yogyakarta city by 54,9% (DIY Health Profile, 2014). This achievement is still lower than the Strategic Goals of Yogyakarta Health Office by 60% and the exclusive breastfeeding participation target is 80%. Danurejan Public Health Centre (Puskesmas) I is the lowest exclusive breastfeeding participant in Yogyakarta by 38,57% (The Yogyakarta City health Office, 2014).

According to that data, the authors are interested to conduct the research on “The relationship between mother’s occupation with exclusive breastfeeding mother of infants age 6 – 12 months in Danurejan Public Health Centre I Yogyakarta in 2016.

OBJECTIVES

The purpose of this study was to discover the relationship between the mother’s occupation with the exclusive breastfeeding of mothers of infants 6 – 12 months in Danurejan Public Health Centre (Puskesmas) I in 2016.

METHODS

The research design was analytical survey using descriptive correlative with a cross sectional approach.

RESULT

According to table 1, it can be seen that almost half of the mother’s infant of 6 – 12 month in Danurejan I Health Centre Yogyakarta City in 2016 age 20 – 35 years old is 47 respondents (78,3%), the highest paritas in multiparas is 37 respondents (61,7%), which most of them have education level as Senior high school of 29 respondents (48,3%). The data showed that almost all respondents were achieved Midwife’s support of 55 participants (91,7%) and most of the respondents were achieved husband’s support of 49 participants (81,7%).

Table 1. Characteristic frequency distribution working mother of infant 6 – 12 month in Danurejan Public Health Centre (Puskesmas) I in 2016

Respondents’ characteristics	Frequency (f)	Percentage (%)
Age		
< 20	3	5%
20-35	47	78,3%
> 35	10	16,7%
Total	60	100%
Parity		
Primiparas	23	38,3%
Multiparas	37	61,7%
Total	60	100%
Education level		
Elementary school	5	8,3%

Junior high school	8	13,4%
Senior high school	29	48,3%
Diploma/Bachelor	18	30%
Total	60	100%
Midwife support		
Less support	5	8,3%
Support	55	91,7%
Total	60	100%
Husband's support		
Less support	11	18,3%
Support	49	81,7%
Total	60	100%

It can be seen from table 2, the participants were a working mother and a housewife. The working mothers (33 participant = 55%) were higher than the housewife (27 participants = 45%). The participants giving exclusive breastfeeding were 31 respondents (51,7%) and non exclusive breastfeeding mother's were 29 respondents (48,3 %). It means that the exclusive breastfeeding respondents were higher than non exclusive breastfeeding respondents.

Table 2. Univariate analysis mother's occupation and exclusive breastfeeding participation in Danurejan I Health Centre, Yogyakarta City in 2016

No	Variable		%
1.	Mother's occupation		
	Housewife	27	45%
	Working mother	33	55%
2.	Exclusive breastfeeding		
	Non Exclusive breastfeeding	31	51,7%
	Exclusive breastfeeding	29	48,3%

Table 3 showed that housewife who did not give exclusive breastfeeding were 9 respondents (15%). The housewife who gave exclusive breastfeeding was 18 respondents (30%). However the working mother who did not give exclusive breastfeeding was 22 respondents (36,7%) while the exclusive breastfeeding working mother was 11 respondents (18,3%).

Table 3. The relationship between mother's occupation with an exclusive breastfeeding participation to mothers with infant 6 – 12 month in Danurejan I Health Centre, Yogyakarta City in 2016

Pemberian ASI Eksklusif \ Pekerjaan Ibu	Pemberian ASI Eksklusif				Total		X ² hitung	p-value	C
	Tidak ASI Eksklusif		ASI Eksklusif						
	F	%	F	%	F	%			
Tidak Bekerja	9	15%	18	30%	27	45%			
Bekerja	22	36,7%	11	18,3%	33	55%	6,607	0,010	0,315
Total	31	51,7%	29	48,3%	60	100%			

According to chi square test, it was shown that the X² score was 6,607 with significant level (p-value) 0,010. The p-value of 0,010 ($p < 0,05$) showed that hypothesis was there was a relationship between mother's occupation with exclusive breastfeeding participation can be accepted. It means that there was a relation between mother's occupation with exclusive breastfeeding participation of infant 6 – 12 month's mothers in Danurejan I Health centre, Yogyakarta City in 2016. The level of relationship between two variables can be seen from Contingency coefficient (C). from the chi square result, it was obtained C value of 0,315 which means the level of the relationship between two variables is low (Sugiyono, 2015).

DISCUSSION

The result showed that most of respondents in Danurejan I Health Centre, Yogyakarta City of 33 respondents (55%) was working mother. They work in house and outside house and do not leave the child ≥ 8 hours of 20 respondents (33,3%). The respondents who works outside home and leaving the child ≥ 8 hours were 13 respondents (21,7%). The housewives was 27 respondents (45%). It means that the mothers are more likely to have activities or jobs both inside and outside home.

The working woman was facing more challenge and consequences compared to housewife women. The working women can never relinquish her status as a housewife. Before and after work, the women will return to her duty taking care of her husband, children and household activities. The working mother has to be able balancing her work and her duties as housewife. It requires high awareness and patience from mother

or family to fulfill both tasks. The family support especially her husband influence and is very important for mother who take the roles as career woman and housewife.

The woman who work to support the family economy is many. The strict regulation working hours, the location of home away from working place, or no private vehicles are known to interfere the exclusive breastfeeding practice. The other factors are that working mothers are physically bound to be tired, the feeling low energy to give breastfeeding and also there is no breastfeeding pumping facilities in work place (Damayanti, 2010).

EXCLUSIVE BREASTFEEDING

Among the data collection, the respondents who are not exclusively breastfed were 51,7%, while the exclusive breastfeeding was 48,3 %. It showed that the percentage of exclusive breastfeeding is still below the national goals of 80%, so the achievement in Danurejan I Health Centre does not meet the national goals. To achieve the goals of breastfeeding, Danurejan I Health Centre conducts the breastfeeding support group, counseling about breastfeeding benefit during Posyandu (Children service) and promotes exclusive breastfeeding to pregnant woman in order to know the benefit of exclusive breastfeeding.

The failure of exclusive breastfeeding is influenced by many factors. There are several factors which are important and often found in internal mothers. There were the age regarding her experience can influence the behavior of breastfeeding practices. According Wawan and Dewi (2010), the age is individual age since born. Increasing the age, level of maturity and person thinking and working will be better.

The result showed that most mothers who fail to provide to provide exclusive breastfeeding was at age < 20 years. It may be because at this age, they have less experience so they are facing difficulties in breastfeeding and the mother will tend to give foods to their babies. Most of the mothers who give exclusive breastfeeding were at the age of 20 – 35 years. This is because mother of this age is at healthy reproduction life so they are able to face their problems with mature, especially pregnancy, childbirth, postpartum and caring their babies. This is in line with Conita (2014) that there was a relationship of the effect of maternal age on exclusive breastfeeding.

Another factor is the support of midwives and husband. The support of her husband and midwife have a major contribution to the mother's desire to breastfeed. This study supports Hafni research (2013) that the husband's support is very closely related to exclusive breastfeeding. The result showed that mothers supported by her husband were likely to give exclusively breastfeed compared to who didn't support by her husband, the result value of $p = 0.000$. This showed a big significant which breastfeeding mother supported with her husband have changed to give exclusively breastfeed of 19,160 times higher compared to mothers who did not get enough support from their husband.

This result is in line with Dewi's research (2009) that showed the husband social support has a significant relationship with exclusively breastfeed. Malau (2010) found that there is a significant relationship between husband supports to the mother's willingness to breastfeed their child. It means that the more husband support the more mothers willingness to give exclusive breastfeeding.

In hence, the exclusively breastfeed is influenced by the support of midwife. According to Notoadmojo (2010) the support from midwife is important not only for baby but also for breastfeeding mother. The support for breastfeeding will influence the behavior of breastfeeding because the support influences the action of the health of individuals, groups or communities. Midwives with good counseling skills will be more trusted by the public. This belief will lead to midwives confident in supporting the success of exclusive breastfeeding so midwife can able to communicate well and can be easily accepted by the respondent. In addition, a skilled midwife would feel to have a good ability to provide support.

THE RELATIONSHIP BETWEEN WORKING MOTHER WITH EXCLUSIVE BREASTFEEDING

According to the research, analyzing the data using Chi Square test with p value of 0,010 ($p < 0,05$) indicated that the hypothesis of relationship between mother's occupation with exclusive breastfeeding is accepted. It means that there was relationship between mother's occupation and exclusive breastfeeding in Danurejan I Health Centre, Yogyakarta City.

The occupation in this research was an activities conducted mothers who have babies in order to obtain income. Pawenrusi research results (2011) states that working mothers do not exclusively breastfeed and choose giving the formula milk because they are busy to work purside home. This make mother difficulties to give breastfeeding. Working mother choose formula milk due to its can be left with milk bottle anytime. When they are working, they leave their children to their parents (grandmother).

Indrawati (2012) showed the relation between employment status with exclusive breastfeeding of infant age 0 – 6 month, only 14,3% of 28 working mothers giving exclusive breastfeeding, and 75% housewife giving exclusive breastfeeding. It is in line with Weber research (2011) showed that the return to work is the main reason for stopping breastfeeding, 60% of women intending to continue breastfeeding but only 40% were done breastfeeding. Journal of Health (2010) said that working mother may be stressed at work and unable to struggle it and it will influence on milk production. A little milk production will make mothers thinking to provide additional food and milk to their baby.

Working mother is a problem for giving breastfeeding although the working mother has been advised to pump their breast milk as the milk stock during for their baby their working hour (Roesli, 2009). This is in line with research conducted by Rahmawati (2010) that the dominant influencing factors is a mother's occupation of $p = 0,004$ showed that housewife mother have a good change to give exclusive breastfeeding four times higher than working mother.

CONCLUSION AND SUGGESTION

Conclusion

Based on the data taken, most of the respondents (55%) in Danurajen I Health centre, Yogyakarta city is working mother, inside home or outside home. There was correlation between mother's occupation and exclusive breast feeding at Danurejan I Primary Health Center Yogyakarta in 2016. The respondents giving exclusive breastfeeding was 48,3%. There is a correlation between mother's occupation with exclusive breastfeeding in Danurejan I Heath Centre, Yogyakarta City 2016 with p-value $0,01(p<0,05)$. The contingency coefficient number was 0,315 showed the low relationship.

It is expected that midwives can increase education and counseling about exclusive breast feeding on mothers who have not given exclusive breast milk and can give counseling about pumped breast milk and how to keep it.

Suggestion

Midwife in Health Centre

It is expected that midwife in health centre can increase the people participation of exclusive breastfeeding, provide education and counseling on breastfeeding to mother who has not given exclusive breastfeeding, counseling on breast milk and the storing.

Breastfeeding mother

Breastfeeding mother is expected to be more active in accessing information about the importance of exclusive breastfeeding for the baby, so the mother will be motivated to behave well for exclusive breastfeeding to their babies.

Next researcher

The next researcher is expected to conduct further research to determine other factors that may affect exclusive breastfeeding such as deep studies about the reason of working mother do not give exclusive breastfeeding to their babies.

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THE EVALUATION of MOTHER'S ABILITY TO BREASTFEED AFTER EARLY INITIATION of BREASTFEEDING

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ABSTRACT

The early initiation was the golden moment both for mother and baby in the early attachment. This moment will impact on mother's ability to breastfeeding baby in the forward time. This study was aim to explore the mother's ability to breastfeed their baby after 1-2 days post partum in PKU Muhammadiyah Yogyakarta Hospital.

A qualitative design and phenomenology was used in this study by using in-depth-interview. This study was found some theme; 1) Patient ability for giving mother's milk after IMD is good, the giving mother's milk for day 1-2 of treatment was done smoothly, the implementation of giving mother's milk by midwife guidance; 2) the role of the midwife in giving mother's milk implementation after IMD was running smoothly although not maximum yet because there are some patient's complaints which is not solved yet ; 3) the obstacle of giving mother's milk after IMD appear from the patient's family, they concern that the mother's milk is not produced yet on day 1-2, the obstacles of giving suck is feeling painful because the wound of surgical operation; 4) giving mother's milk after IMD is the beginning of giving exclusive mother's milk implementation in this research is resulted that the patients will continue for giving mother's milk until 6 months with family support especially their husband. The suggestion is needed for midwife activate improvement for supporting giving mother's milk after IMD.

Key words: *The implementation of giving mother's milk, IMD*

INTRODUCTION

The number of neonatal mortality in Indonesia is pretty high due to the hypothermia. Otherwise, this number could be prevented by giving skin to skin contact and early initiation. However, in 2009, based on the SDKI survey there was only 34.3% babies (aged 0-1 month old) that have skin to skin contact after birth. The initiation of early breastfeeding (IMD) can develop the baby instinct and reflection on one hour after they were born. The skin to skin contact between mother and their babies can established

body temperature of the baby so they can be prevented from hypothermia. The skin to skin contact gives psychology effect for mother and the baby. Besides, on first hour of instinct and baby excitatory to suckle then will up and down after 40 hours. This method has many advantages for the baby and their mother who gave birth (Roesly 2008).

The succeed of IMD will be effected by the behavior of the health workers (doctor, midwifery and nurse) which first help mother as the process of give birth. Besides, husband's support, family, health worker and society also have the same effect. The other issues were, the socialization and the central and regency government politic is important for the succeed of the program IMD and the exclusive mother milk. All this time the support that is given from the WHO, the central and regency government to the breastfeeding improvement of exclusive mother milk has adequate (Siregar, 2004). However, the political concern from government has been created on the GNPP-ASI in 1990, the assignment of the Indonesian health minister's decision No. 450/MENKES/IV/2004 about exclusive breastfeeding the Indonesian babies that include 10 steps to succeed breastfeeding.

Muhammadiyah Hospital of Yogyakarta has been done PONEX and has had ASI counselor that is support the breastfeeding process in hospital. In January 2015, there were 42 labor, and among them there were 34% patients (80,9%) was done IMD. Then, on the following month, there were 38 labor and among them, there were (78,9%) done IMD. Next to, January 2015, there were 4 post partum with breast inflammation and should be done incisions. Furthermore, there were 2 post partum patients in the second day the baby was given formula milk to the baby without health worker permission. In that condition the writer wants to observe about the evaluation on breast feeding the postpartum patient at the first and second day that have done IMD.

RESEARCH METHOD

A qualitative design and phenomenology was used in this study. In-depth interview was established to collect the data and since this study was qualitative, therefore triangulation has conducted. Three childbearing mothers were invited in this study (normal or SC delivery).

RESULT AND DISCUSSION

In this study, there some theme was found that could be describe as bellow.

1. *Knowing mother's ability in breastfeeding after IMD*

Mother described that could give the breastfeed well. According the statement bellow:

"...I always give breast milk every my baby cries, even though my stomach was pain..(R1, August 15th, 2015).

The same think also described other respondent:

"...Yes im breastfeed my baby, sometimes when he has breastfeed I saw the small mucus in his mouth..." (Respondent 2, August 20th, 2015)

" ... There has no big deal, I breastfeed my baby with lying down ..." (Respondent 3, Augusts 22th, 2015)

Based on the result of the interview with the informant, the researcher can conclude that in breastfeeding after IMD was run well. In management support for giving breastfeeding that is stated in director decree. The previous research conducting by Aprilia (2010), the breastfeeding implementation after IMD need a health worker as a motivator in breastfeeding after IMD so the respondent has good ability in breastfeeding after IMD, the worker ability in giving motivation 2 the respondent in giving breastfeeding after IMD.

Giving mother milk exclusively is a government program which is ruled in the legislation about breastfeeding exclusively is ruled 128 UU No.36, 2009. Breastfeeding implementation after IMD in PKU Muhammadiyah Yogyakarta Hospital is assigned in the decree PKU Muhammadiyah Yogyakarta about rooming in No.0/86/SK.3.2/1/2011 state that rooming in PKU Muhammadiyah Yogyakarta Hospital. The patient in sakinah ward was done a rooming in by the worker support.

2. *Knowing midwifery's role play in giving breastfeeding in hospital after IMD*

One of the factors that influence to the IMD implementation and giving exclusive mother milk is the health worker attitude factor especially a midwife in motivate to mothers in IMD implementation and breastfeeding continuity after IMD. The support from Midwife could be described as bellow:

“..... in the very beginning I feel difficult to give breast milk for my baby, but then the midwife help me to found the comfort position to breastfeed. For now I could do by myself without her help..Alhamdulillah she very helpful.. “(Respondent 1, August 15th, 2015)

“As far as I knew, to breastfeed a baby should have sit because this is my first experience to have SC so I could not found the comfort position when I was lying down. But then the midwife assisted me to found the comfort one and she taught me how to breastfeed by lying down... “(Respondent 3, August 22th, 2015)

The support which was given by the health worker can rise the mothers confidence to make breastfeeding decision their baby. The information about breast care in pregnancy, session the long breastfeeding and the advantages of breastfeeding, the initiation of breastfeeding are health worker support for the succeed an exclusive breastfeeding (Aprilia, 2010). The role of the midwife or the worker in breastfeeding implementation after IMD in sakinah room of PKU Muhammadiyah Yogyakarta hospital can be seen from the informant statement that states the worker give health or education when the informant do breastfeeding. This result was in line with the previous research (Roesli, 2008) that found the same theme.

3. Knowing problem that appear in breastfeeding after IMD

The respondents stated some problem when have the breastfeed the baby as bellow:

“ Until this now there has no big problem, but I still felt pain on my stomach when I have to holding the baby... “ (Respondent 3, August 22th, 2015)

“ the health care provider provide the appropriate information about the position, when have to give the breastmilk, and also they explained how to store the squeeze breastmilk, because I work in the factory “ (Respondent 2, August 22th, 2015).

This result found there were no obstacles that related with the implementation of IM. Besides the midwifery or health care provider always ready to help, also the policy in the hospital in line with the IMD program.

4. The pre succeed analysis implementation of exclusive breastfeeding

The successfully to giving breastmilk also sneed support from husbnd or other relatives. As like bellow statement:

“ My husband always companying me when I have SC. When I have breastfeed he also always beside me to give a support and help when I have difficult to hold the baby. He also helps me often to change the diaper...” (Respondent 1, August 15th, 2015)

“.... Yes, there were my husband and my family belong to me to support, but I still have no idea about the continuity of the breastmilk because I have to go to works. Otherwise I just live in with my husband..” (Respondent 2, August 20th, 2015)

“yes , my husband always helps me when my baby cries and im really worry when my baby is crying...” (Respondent 3, August 22th, 2015)

IMD implementation is hoped the begin of the succeed of the exclusive breastfeeding implementation, the succeed of breastfeeding on the first day after IMD is the first good step to continuing giving exclusive breastfeeding, the attitude alteration, understanding and ability in accompany breastfeeding process from the family as a part of breastfeeding implementation also need attention on the breastfeeding implementation principles after IMD (Roesly, 2008).

CONCLUSION AND SUGGESTION

Postpartum mother day 1-2 while in hospital has given breastfeeding actively to mother partum as neither Section Caesar nor normal. Then, the midwife ruled while giving breastfeeding after IMD. Midwife or health worker in sakinah room of PKU Muhammadiyah Yogyakarta hospital has given education and guidance in IMD patient and breastfeeding after IMD. PKU Muhammadiyah hospital 2015 includes human sources as midwife before all can deliver the education of breastfeeding after IMD well done. The first succeed analysis of breastfeeding implementation in sakinah room PKU Muhammadiyah Yogyakarta hospital state that the breastfeeding implementation after IMD has been done well, the worker and respondent family especially the husband have given support to the respondent in giving breastfeeding in hospital is hoped can be the begin in exclusive breastfeeding implementation.

This study was suggested to the can give socialization to all health worker, guidance to education implementation worker and guide them optimally. Then for the next researcher to conduct the research about breastfeeding implementation after IMD more specifically.

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**THE EFFECT OF GREEN GRASS JELLY (*CYCLEA BARBATA* MIERS)
ON THE BLOOD PRESSURE OF MENOPAUSE WOMEN
WITH HYPERTENSION**

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ABSTRACT

The purpose of this study to determine the effect of green grass jelly on blood pressure in hypertensive menopausal women in Sleman 3 village Triharjo Sleman Yogyakarta. The research method using Quasi Experiment with Time Series Design. Samples in this study as many as 12 people by using purposive sampling method. The result of Wilcoxon test showed the value of systolic blood pressure test was asymp sig (p) 0002 and the result of paired t-test showed diastolic blood pressure values was sig (p) 0000 ($p < 0,05$), which means that there is the effect of green grass jelly on blood pressure in hypertensive menopausal women in Sleman 3 village Triharjo Sleman Yogyakarta. The average reduction of systolic and dastolik blood pressure was 22.08 mmHg and 12.50 mmHg.

Keywords: menopause, hypertension, green grass jelly

INTRODUCTION

Hypertension or high blood pressure occur along with the increasing of age, it is because of the elastic properties of blood vessels is reduced and the walls of the arteries become stiffer with age, causing constriction of the blood vessels and the decrease of blood flow to tissues and organs (Gray et al., 2005).

Prevention and control of hypertension is necessary. In principle, there are two kinds of therapy, namely pharmacological and non-pharmacological therapies. Nonpharmacologic therapy can be done using traditional herbs plants. One plant that is widely used by the people of Indonesia island of Java in hypertension are plants green grass jelly or *Cyclea barbata* Miers (Shadine, 2010).

According to Katrin et al. (2012) green grass jelly plant is rich in flavonoids and alkaloids active substances. Lokesh and Amitsankar (2012) states that the active substance content of flavonoids showed a real connection as an anti-hepatotoxic, anti-HIV-1, anti-tumor, anti-inflammatory and vasodilating effects on blood vessels that helps protect the heart function. Another study conducted by Haber and Gallus (2012)

proved that flavonoids in dark chocolate can increase blood flow in the brachial artery. Results of research Sundari (2014) showed that green grass jelly can lower systolic blood pressure by an average decrease of 20-25 mm Hg and diastolic blood pressure reduction with an average decrease of 14-15 mmHg.

Related to hypertension, a Hadist mentioned that every disease has its antidote, including hypertension or high blood pressure.

مَا أُنْزِلَ اللَّهُ دَاءً إِلَّا أَنْزَلَ لَهُ دَوَاءً

"Every disease has a cure. If the medicine meets the disease, it will bring healing, with the permission of Allah ". (HR. Muslim)

The results of a preliminary study conducted on 12 to 28 February 2016 in Sleman 3 Triharjo Sleman Yogyakarta, found that the number of hypertensive patients were as many as 49 people (56%) consisted of 35 women (40%) and 14 men (16%). From the total as many as 49 people with hypertension four of them experienced complications such as stroke. In addition, it obtained the fact that the majority of patients with hypertension in Sleman 3 used pharmacological medicine in controlling blood pressure and have not been taking non-pharmacological medication of green grass jelly to control blood pressure. Moreover, green grass jelly with the kind of love-shaped leaves are easily available and widely preferred and consumed by the people in Sleman 3. Based on the problems, researcher was interested in conducting a research on the effect of green grass jelly or *Cyclea barbata* Miers on the blood pressure of menopause women with hypertension in Sleman 3 Triharjo Sleman Yogyakarta.

This study aimed to investigate the effect of green grass jelly or *Cyclea barbata* Miers on the blood pressure of menopause women with hypertension in Sleman 3 Triharjo Sleman Yogyakarta.

RESEARCH METHODS

This study used a quasi experiment design method with time series design that was conducted in Sleman 3 Triharjo Sleman Yogyakarta starting on June 8th to June 22nd, 2016. The respondents in this study were menopause women with hypertension a many as 12 people who were taken using purposive sampling method based on the

inclusion criteria aged 45-55 years, 12 months of amenorrhea, the people of Sleman 3 Triharjo Sleman Yogyakarta, willing to become respondents by signing an informed consent, not taking hypertensive medication, willing to consume 1 glass (150cc) of green grass jelly twice a day for a one-time consumption for 7 days, not eating watermelon, bananas and cucumbers during the research, not exercising regularly, BMI <25, no history of smoking and alcohol consumption, and not suffering from diabetes mellitus.

The independent variable in this study was green grass jelly giving and the dependent variable was the blood pressure of menopause women with hypertension. The instruments were the observation sheet assessment of blood pressure in patients with hypertension, the Standard Operating Procedure (SOP) of the green grass jelly giving and blood pressure checks. The data were analyzed using statistical test of Wilcoxon test for systolic blood pressure and a statistical test Paired T-Test for diastolic blood pressure by doing the normality test first using one sample Shapiro-Wilk test.

RESEARCH RESULT

Characteristics of Respondents

Table 1

Table of frequency distribution characteristics of respondents by age

No	Age	Frequency	Precent
1	45-50	7	58.3
2	51-55	5	41.7
Total		12	100.0

Source: Primary Data June 2016

Based on Table 1 above shows that in terms of the age of respondents, the highest percentage was dominated by respondents aged 45-50 years as many as 7 people (58.3%) and respondents with the lowest age is the age of 51-55 years as many as five people (41, 7%).

Systolic Blood Pressure Before and After Intervention.

Table 2

Table systolic blood pressure just before and after administration of green grass jelly

Responden	systolic blood pressure		Gain score
	before	after	
1	160	130	30
2	140	120	20
3	140	110	30
4	160	140	20
5	210	170	40
6	150	130	20
7	140	110	30
8	145	130	15
9	170	160	10
10	150	140	10
11	140	120	20
12	150	130	20
Total	1855	1590	265
Mean	154,58	132,50	22,08

Source: Primary Data June 2016

Based on Table 2 above shows that the average systolic blood pressure before giving the green grass jelly is 154.58 mmHg, while the average systolic blood pressure after the administration was 132.50 mmHg green grass jelly. Difference in average systolic blood pressure before and after the administration of green grass jelly as much as 22.08 mmHg.

Diastolic Blood Pressure Before and After Intervention

Table 3

Table diastolic blood pressure just before and after administration of green grass jelly

Responden	diastolic blood pressure		Gain score
	before	After	
1	100	80	20
2	80	70	10
3	80	70	10
4	90	90	0
5	120	100	20
6	90	80	10
7	80	70	10
8	100	80	20
9	110	90	20
10	100	90	10
11	90	80	10
12	90	80	10
Total	1130	980	150
Mean	94,17	81,67	12,50

Source: Primary Data June 2016

Based on Table 3 above shows that the average diastolic blood pressure before giving the green grass jelly is 94.17 mm Hg and the average diastolic blood pressure after administration of green grass jelly is 81.67 mmHg. The average difference in diastolic blood pressure before and after the administration of green grass jelly as much as 12.50 mmHg.

Effect of Green Cincau Against Respondents Systolic Blood Pressure

Table 4

Wilcoxon statistical test table Test systolic blood pressure before and after administration of green grass jelly

Sistole Pre – Sistole Post	
Z	-3,089 ^a
Asymp. Sig. (2-tailed)	,002

Source: Primary Data June 2016

Wilcoxon Test Statistical test results showed systolic blood pressure before and after the administration of green grass jelly Asymp values obtained. Sig. (P) 0.002 with a standard error (α) 0.05. The p-value $<\alpha$ (0.002 $<$ 0.05), so there is the effect of giving the green grass jelly on systolic blood pressure in hypertensive postmenopausal women Hamlet 3 Triharjo Sleman Sleman, Yogyakarta.

Effect of Green Cincau Against Respondents Diastolic Blood Pressure

Table 5

Table statistical test Paired T-Test diastolic blood pressure before and after administration of green grass jelly

		t	df	Sig. (2-tailed)
Pair 1	Diastole Pre – Diastole Post	6,966	11	,000

Source: Primary Data June 2016

Statistical test results Paired T-Test showed diastolic blood pressure before and after the administration of green grass jelly obtained the Sig. (P) 0,000 standard error (α) 0.05. The p-value $<\alpha$ (0.000 $<$ 0.05), so there is the effect of giving the green grass jelly to the diastolic blood pressure in hypertensive postmenopausal women Hamlet 3 Triharjo Sleman Sleman, Yogyakarta.

DISCUSSION

Characteristics of the Respondents

The results showed that in terms of the age of respondents, the highest percentage was dominated by respondents aged 45-50 years as many as 7 people (58.3%) and respondents with the lowest age were 51-55 years old as many as five people (41.7%). This is consistent with the theory expressed by Lany (2006), who found that naturally

blood pressure tends to increase with age, and this is because at the age of 45 years, there are thickening and stiffness in the artery wall due to the buildup of collagen in the muscle layer, so that the veins will gradually narrow and becomes rigid. Moreover, at the age of 50 years, there has been a calcification or blockage in blood vessels, the heart work harder to pump blood and consequently the blood pressure increases. Sudoyo, et al (2007) added that a systolic blood pressure increases with increasing age, but the diastolic pressure increases with systolic blood pressure until the age of 55 years.

Effect of Green Cincau against Women Menopause Blood Pressure Patients with Hypertension

The systolic blood pressure of respondent before being given the green grass jelly reached by an average of 154.58 mmHg and after being given the green grass jelly reached by the average of 132.50 mmHg. There was a decrease in the average of systolic blood pressure before and after being given the green grass jelly namely 22.08 mmHg. While the average of diastolic blood pressure of the respondents before being given the green grass jelly amounted to 94.17 mmHg and after being given the green grass jelly the average of diastolic blood pressure of respondents was 81.67 mmHg. There was a decrease in the average of diastolic blood pressure before and after being given the green grass jelly namely 12.50 mmHg. The statistical test results using Wilcoxon Test and Paired T-Test showed that the p-value <0.05 , so there was an effect of green grass jelly or *Cyclea barbata* Miers on the blood pressure of menopause women with hypertension in Sleman 3 Triharjo Sleman Yogyakarta.

This research was conducted in Ramadan month. All respondents were fasting, thus the green grass jelly was given to the respondent adapted to schedule of iftar/ break fasting and supper/sahur as much as 2 servings for 2 times consumption at the time of break fasting 150 cc and supper 150 cc. During the research, it was conducted regular blood pressure measurements every day to all respondents to observe and control the blood pressure. From the blood pressure checks, there were 4 respondents whose blood pressure has reached 120/80 mmHg in the 5th blood pressure check and in the 6th day green grass jelly consumption. To avoid a drop in the respondents, the green grass jelly consumption was reduced to 1 portion for once consumption at the time of break fasting

as much as 150 cc.

In addition, there was a respondent who experienced a decrease in systolic blood pressure that reached to 40 mmHg. This is because the respondent consumed watermelon during the research process. The respondents still did not understand fully what has been described by researchers that the respondent was not allowed to consume watermelon, banana and cucumber during the research because it can lower the blood pressure. During the study, a respondent experienced an increase in systolic blood pressure to 10 mmHg in the 5th day of blood pressure checks and green grass jelly consumption, but then fell back to 10 mmHg in blood pressure checks in the 6th day of green grass jelly consumption. There was a respondent who did not experience a decrease in diastolic blood pressure during the study and 2 respondents who only decreased the systolic blood pressure by 10 mmHg during the study. This happens due to the stress factors that are not controlled by the researcher.

The decrease in systolic and diastolic blood pressure of respondents was due to the influence of the compounds contained in green grass jelly. In its role to lower hypertension, bioactive compounds in the grass jelly green role in three ways, namely: (a) as Angiotensin Receptor Blocker (ARB), (b) a compound which helps accelerate the formation of urine (diuretic), (c) and also as an antioxidant in the process of oxidative stress. In addition, a decrease in systolic and diastolic blood pressure was caused by the synergy of potassium, fiber, and flavonoids active compounds from green grass jelly drink that is consumed every day (Setyorini, 2012).

Bobby and Widyaningsih (2014), states that the flavonoids in green grass jelly can increase urination and remove electrolytes through its effect on glomerular filtration rate (GFR) in the Bowman's capsule. Flavonoids functions like potassium that absorbs the electrolyte ions liquid such as sodium present in the blood of intracellular to extracellular heading into the renal tubules. High Glomerulus Filtration Rate (GFR) due to the activity of flavonoids causes the kidneys (in the proximal tubules as much as 65% and ansahele as much as 25%) were able to put out waste products from the body quickly. Otherwise it may cause all fluids can be filtered and processed by the kidneys all the time every day and be able to adjust the volume and composition of the body fluids quickly and accurately.

Lakhanpal and Rai (2007) state that the flavonoids contained in medicinal plants

has the advantage of improving health including increase the cardiovascular health, eye diseases, allergies, and cancer. Moreover, Setyorini (2012) revealed that besides bioactive compounds, phenol compounds in green grass jelly also plays an important role in decreasing blood pressure. This is supported by the research of Iraz et al in 2007 that one of the derivatives of phenol compounds (caffeic acid) plays an active role in decreasing blood pressure through a mechanism of *simpatolitik*.

According to the research of Katrin et al. (2012), the activity of the most powerful antioxidants found in green leaves of grass jelly is component of many alkaloids and flavonoids found in the chlorophyll of green grass jelly leaf. According to research of Nurdin et al. (2007), the highest chlorophyll content is found in the leaves of green grass jelly (*Premna oblongifolia* Merr.) compared to gotu kola leaf, *katuk* leaf, and mulberry and can be used as prevention of atherosclerotic disease. In the healing process of atherosclerosis, the role of active substances on green grass jelly chlorophyll can repair blood vessels and can lower the blood cholesterol levels. The decrease of cholesterol in the blood can reduce the occurrence of atherosclerosis, so that the elasticity of blood vessels will be increased and the vascular resistance will be decreased and the blood pressure decreases.

CONCLUSIONS AND SUGGESTIONS

The results of blood pressure check before being given the green grass jelly obtained the respondents' average systolic blood pressure of 154.58 mmHg, while the average diastolic blood pressure of respondents was 94.17 mmHg. The blood pressure check after being given green grass jelly obtained an average systolic blood pressure of 132.50 mmHg, while the average diastolic blood pressure was 81.67 mmHg. There were differences in the average systolic blood pressure before and after green grass jelly consumption amounted to 22.08 mmHg, and the average difference in diastolic blood pressure before and after green grass jelly consumption was 12.50 mmHg. He statistical result of the Wilcoxon Test showed that the systolic blood pressure before and after being given the green grass jelly was Asymp. Sig. value (p) of 0.002, while the statistical result of Paired T-Test showed that the diastolic blood pressure before and after being given the green grass jelly obtained the Sig. (P) 0.000. The statistical test results of Wilcoxon Test and Paired T-Test showed p-value <0.05, so there is an effect

of green grass jelly or *Cyclea barbata* Miers on the blood pressure of menopause women with hypertension in Sleman 3 Triharjo Sleman Yogyakarta.

The health professional should provide information regarding the treatment of high blood pressure, not only limited to the use of pharmacological medication but also the use of non-pharmacological medication with green grass jelly since it can lower blood pressure as well as can minimize the effects of pharmacological treatment.

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THE CORRELATIONS BETWEEN NUTRITIONAL STATUS AND OBEDIENCE TO TAKE FE TABLET AND ANEMIA IN 3rd TRIMESTER PREGNANT MOTHER AT PLERET PRIMARY HEALTH CENTER BANTUL¹

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ABSTRACT

Background: Bleeding is one of the main causes of maternal death. One of bleeding cause is low hemoglobin levels or anemia. Most of anemia in pregnant mother is caused by malnutrition and lack of Fe.

Objective: This research was to determine the correlations between nutritional status and obedience to take Fe tablet and anemia in 3rd trimester pregnant mother at Pleret Primary Health Center Bantul in 2016.

Methods: The research was quantitative method. It employed analytical survey with cross sectional study approach. The population was 43 pregnant mothers in their 3rd trimester who came to the primary health center at Pleret, Bantul in January to June 2016. The sample was 39 pregnant mothers. The sampling technique used was purposive sampling.

Results: There was significant correlation between nutritional status and anemia in 3rd trimester pregnant mother at Pleret Primary Health Center Bantul in 2016. The P value was (0.033) < α (0.05). There was significant correlation between obedience to take Fe tablet and anemia in 3rd trimester pregnant mother at Pleret Primary Health Center Bantul in 2016. The P value was (0.014) < α (0.05).

Conclusions and Suggestions: There was correlation between nutritional status and obedience to take Fe tablet and anemia in 3rd trimester pregnant mother at Pleret Primary Health Center Bantul in 2016. It is expected that pregnant women to consume nutritious foods and take Fe tablet regularly since pregnant mothers need more nutrition.

Keywords : Nutritional Status, Obedience, Fe tablet, pregnant women

BACKGROUND

Anemia in pregnant women is associated with mortality and morbidity of the mother and baby, including risk of miscarriage, death birth, prematurity and low birth weight. Anemia during pregnancy is considered as potential harm to mother and child. Therefore, anemia requires serious attention from all parties who are involved health aspect. Further observation shows that most people suffered anemia is due to Fe

deficiency, malnutrition, close distance of pregnancy and childbirth, with education and low socio-economic level (Manuaba, 2010).

Anemia in pregnant women may increase the risk of low birth weight (LBW) babies, the risk of bleeding before and after childbirth, and it can even cause death of mothers and babies. This could definitely contribute to maternal mortality and babies mortality rate, which is based IDHS 2007 mortality rate is still quite high, and the maternal mortality rates (MMR) were 228 per 100,000 live births, and the infant mortality rates (IMR) were 34 per 1,000 live births (Health Department of Indonesia, 2009). Lack of public awareness of anemia causes around 4.5 billion people around the world experiencing a shortage of Fe, and 1 of 3 suffers from anemia or severe blood shortage (*PAPDI*, 2013).

Based on the Health Profile of Indonesia in 2010, prevalence of anemia among pregnant women was 24.5%. Basic Health Research (2013) reported the prevalence of anemia among pregnant women in Indonesia until 37.1%, and the prevalence is almost the same among pregnant women in urban areas (36.4%) and rural areas (37.8%). It shows that the rate approaches severe public health problems with prevalence limit of anemia is more than 40% (*BPPK*, 2014). The incidence of anemia in Yogyakarta in 2012 was 24.33% (Health Office of Yogyakarta, 2012).

Public health problem faced by Indonesian society today is the high rate of maternal and babies mortality. Malnutrition and food problem is a fundamental issue because it directly determines the quality of human resources and the improvement of health status. Nutritional problem in Indonesia is not resolved; one of those is a problem of anemia on women. Anemia becomes problem on women in Indonesia as a result of Fe deficiency (Tarwono 2007). Nutrition on pregnant women should be a concern because it can be the trigger of various problems. One of the risks of experiencing anemia is able to trigger the bleeding. It can improve the risk if the anemia on pregnant women is experienced by those in trimester III. Prevention program of anemia in pregnant women can be cured by providing Fe supplements as many as 90 tablets during pregnancy. Administration program of giving Fe tablets to pregnant women as many as 90 tablets divided into three periods.

According to the Health Office of Bantul, Pleret Primary Health Center noted the incidence of anemia among pregnant women with > 50% precisely 51.36%. and the average prevalence of pregnant women with Chronic Energy Deficiency (CED) in Bantul was still below target at 15.5%. However, there are other four health centers with high CED; those are Kasihan I Primary Health Center (21.9%), Jetis II Primary Health Center (20.2%), Jetis I Primary Health Center (17.5%) and Srandakan Primary Health Center (15.7%). Primary Health Center with the prevalence of CED below the target was Pajangan Primary Health Center (14.6%), Sanden Primary Health Center (12.8%), Sewon Primary Health Center (11.7%), Banguntapan I Primary Health Center (11.4%) and Pleret Primary Health Center with prevalence of CED 11.0% (Bantul Health Office, 2014).

RESEARCH METHODS

This research is a quantitative research method with analytical survey; it is a research which is done to determine whether there is a relationship between two variables (Sugiyono, 2006). Time approach used cross sectional approach; it is the research conducted to study the dynamics of the correlation between risk factors and effects, the way of collecting data simultaneously at a time (Notoatmodjo, 2012). The populations in this study are all trimester III pregnant women who visited Pleret Bantul Primary Health Center totaling 43 people. The samples of study were 39 people using Accidental Sampling techniques. Chi Square test is used in this study.

RESULT

Table 4. Frequency Distribution of Respondent's Characteristics Based on Age

No	Age	Frequency	
		n	(%)
1.	46.2 %	20-29 year	18
2.		30-39 year	19
3.	48.7 %	> 39 year	2
	5.1 %		
	Total	39	100 %

Table 4 shows the frequency distribution of respondents characteristics by age; it is known that pregnant women aged 20-29 years were 18 respondents (46.2%), pregnant women aged 30-39 years were 19 respondents (48.7%) and pregnant women aged > 39 years by 2 respondents (5.1%).

Table 5. Frequency Distribution of Respondent Characteristic Based on Education

No	Education Rate	Frequency	
		n	(%)
1.	Elementary School	1	2.6 %
2.	Junior High School	11	28.2 %
3.	Senior High School	24	61.5 %
4.	University	3	7.7 %
	Total	39	100 %

Table 5 shows the frequency distribution of respondent's characteristics by education. It is known that pregnant woman who had elementary education was one respondent (2.6%); pregnant women who had junior high school education were 11 respondents (28.2%); pregnant women who had senior high school education were 24 respondents (61.5%); and pregnant women who had college education were 3 respondents (7.7%).

Table 6. Frequency Distribution of Anemia Incidents on Trimester III Pregnant Women Visiting Pleret Bantul Primary Health Center

No	Anemia Incidents on Trimester III Pregnant Women	Frequency	
		n	%
1	Not anemia	21	53.8
2	Mild Anemia	15	38.5
3	Moderate Anemia	3	7.7
	Total	39	100

Table 6 shows the frequency distribution of anemia incidents on trimester III pregnant women. It is known that pregnant women who were not anemia were 21 respondents (53.8%); pregnant women who had mild anemia were 15 respondents (38.8%); and pregnant women experienced moderate anemia were 3 respondents (7.7%).

Table 7. Frequency Distribution of Nutritional Status on Trimester III Pregnant Women Visiting Pleret Bantul Primary Health Center

No	Nutritional Status	Frequency	
		n	%
1	Low	2	5.1
2	Normal	32	82.1
3	High	5	12.8
	Total	39	100

Table 7 shows the frequency distribution of the nutritional status of trimester III pregnant women; it is known that pregnant women who had low nutritional status were 2 respondents (5.1%); pregnant women who had normal nutritional status were 32 respondents (82.1%); and pregnant women who had high nutritional status were 5 respondents (12.8%).

Table 8. Frequency Distribution of Obedience in Taking Fe Tablet on Women Visiting Bantul Primary Health Center

No	Obedience in Taking Fe Tablet	Frequency	
		n	%
1	Obedient	11	28.2
2	Not Obedient	28	71.8
	Total	39	100

Table 8 shows the frequency distribution of obedience in taking Fe tablet; it is known that pregnant women who were obedient were 11 respondents (28.2%), and pregnant women who were not obedient were 28 respondents (71.8%).

Table 9. The Correlation of Nutritional Status with Anemia Incidents on Trimester III Pregnant Women at Pleret Bantul Primary Health Center

Nutritional Status	Anemia Incidents						P value
	Not Anemia		Mild Anemia		Moderate Anemia		
	N	%	n	%	n	%	
Low	2	(5.1%)	0	(0%)	0	(0%)	0.033
Normal	18	(46.2%)	13	(33.3%)	1	(2.6%)	
High	1	(2.6%)	2	(5.1%)	2	(5.1%)	
Total	21	(53.8%)	15	(38.5%)	3	(7.7%)	

Table 9 shows that the respondents who had low nutritional status were 2 respondents (5.1%) without anemia. The respondents who had normal nutritional status were 18 respondents (46.2%) without anemia; there were 13 respondents (33.3%) who experienced mild anemia; and there was 1 respondent (2.6%) who had moderate anemia. Furthermore, the respondents who had high nutritional status, there was 1 respondent (2.6%) without anemia; there were 2 respondents (5.1%) who experienced mild anemia; and there were 2 respondents (5.1%) who had moderate anemia.

The results of statistical tests which was analyzed using chi square test obtained P value = 0.033 at the significance level of 5%. Since the P-Value <0.05, then Ho is rejected and Ha is accepted. It can be concluded that there is significant relationship between nutritional status and the incidence of anemia among pregnant women in the third trimester at Pleret Bantul Primary Health Center.

Table 10. The Correlation of Obedience in Consuming Fe Tablet and Anemia Incidence on Trimester III Pregnant Women at Pleret Bantul Primary Health Center

Obedience in Consuming Fe Tablet	Anemia Incidence						P value
	Not Anemia		Mild Anemia		Moderate Anemia		
	n	%	n	%	n	%	
Obedient	10	(25.6%)	1	(2.6%)	0	(0%)	0.014
Not Obedient	11	(28.2%)	14	(35.9%)	3	(7.7%)	
Total	21	(53.8%)	15	(38.5%)	3	(7.7%)	

Table 10 indicates that respondents who consumed Fe tablet obediently were 10 respondents (25.6%) without anemia; there was 1 respondent (2.6%) who had mild anemia and no respondents who experienced moderate anemia. While the respondents who took Fe tablet were 11 respondents (28.2%) without anemia; there were 14 respondents (35.9%) who experienced mild anemia; and there were 3 respondents (7.7%) who experienced moderate anemia.

The results of statistical tests done by using chi square test obtained P value = 0.014 at the significance level of 5%. Because the P-Value <0.05, then Ho is rejected and Ha is accepted. It can be concluded that there was significant correlation between

the obedience of consuming Fe tablet with the incidence of anemia among pregnant women in the third trimester at Pleret Bantul Primary Health Center.

DISCUSSION

1. Anemia Incidences in Pregnancy

The results of the study on anemia cases among trimester III pregnant women at Pleret Bantul Primary Health Center showed that pregnant women who did not have anemia were 21 respondents (53.8%); pregnant women who had mild anemia were 15 respondents (38.8%); and pregnant women with anemia were three respondents (7.7%). There were some pregnant women who still had anemia, especially mild anemia caused by pregnant women who often forget to take Fe tablets.

Anemia which is often found in pregnant women in this study is anemia caused by Fe deficiency. It can be called as "potential danger to mother and child", and it has great influence on human resources. Therefore, Fe deficiency anemia requires serious attention by all parties involved in the health services, especially health services in Indonesia (Manuaba, 2010).

The results are consistent with research conducted Yuli Rahmawati which showed 46.3% of respondents had incidence of anemia during their pregnancy. The result is also similar to the results of research done by Agustia Sandra (2010) which states that the number of pregnant women who have anemia was 74.4%.

In this study, no pregnant women had severe anemia. It happens because pregnant mother are obedient in consuming Fe tablet. It is also consistent with the results of research that the majority of respondents who were obedient to take Fe tablets have lower risk of anemia. In addition, anemia in pregnant women happens due to the increasing need for Fe during pregnancy and low nutrient intake, so it cannot meet the needs of nutrients in the body. Anemia in third trimester pregnant women occurs in conditions of pregnant women with hemoglobin levels less than 11 g% (Prawiroharjo, 2008).

2. Nutritional Status

The results of research on the nutritional status of pregnant women in the third trimester at Pleret Bantul Primary Health Center showed that pregnant women who had low nutritional status were 2 respondents (5.1%); pregnant women who had normal nutritional status were 32 respondents (82.1%); and pregnant women who had high nutritional status were 5 respondents (12.8%). Pregnant women who suffer from malnutrition had BMI <18.5 , so it can be categorized as low. On the other hand, pregnant women who had high nutritional status owned BMI ranging from 25.1 to 27.0.

In this study, the most of pregnant women have normal nutritional status. The result of this study is supported by the research conducted by Dyah Permata Sari (2013) in Wonoayu Pilangkeceng Madiun which shows that the majority of pregnant women in the third trimester at Hj Sri Sulasmia, S, ST midwifery clinic had good nutritional status. Good nutritional status is influenced by mature age of the women, quite high education, low number of parity, and occupation

According to Triwidiyanti, et al (2011), there are several factors that affect the nutritional status of pregnant women. Those are external factors which include occupation, income and education. Without occupation and with poor education, of course, there will be no income, so pregnant women will have less attention to their nutritional status. Low economic level and low education influence pregnant women to their nutritional status. Sometimes they do not know the impact of the lack of nutrition during pregnancy. The internal factors affecting the nutritional status of pregnant women are age, physical condition and infection. Pregnant women with too young or old age, supported by unfavorable physical condition can cause inadequate nutrition supply or lack of appetite, so they can suffer from anemia. Pregnant women conditions which can be one indicator of getting the risk of anemia are especially pregnant women who do not have good nutritional status. Therefore, pregnant women should get enough nutritious food because good nutrition of pregnant women will prevent them from anemia that can cause bleeding, prolonged partum process, shock, infection and other impacts as a result of anemia on pregnant women and partum process.

According to Aritonang (2010), in the third trimester, pregnant women need enough support of energy. It is not only for the supply of energy to overcome the increasingly heavy burden but also for energy reserve for later partum process. Thus, balanced nutrition fulfillment cannot be ignored both in quality and in quantity. Fetal brain growth will occur rapidly during the last two months before partum process.

3. Obedience in Consuming Fe Tablet

Results of research on the obedience of consuming Fe tablet in third trimester pregnant women at Pleret Bantul Primary Health Center showed that pregnant women who are obedient were 11 respondents (28.2%) and pregnant women who were not obedient were 28 respondents (71.8%). Obedience is an action related to a person's behavior (Mulyono, 2003). Pregnant women who are obedient consuming Fe tablet, including the obedience in number of tablets consumed, the way in consuming tablet Fe, and the time in consuming Fe tablet. Pregnant women who are obedient in consuming Fe tablet is influenced by good knowledge of pregnant women about Fe tablet. High level of knowledge on women can form positive attitudes towards obedience in consuming Fe tablet. Without the knowledge of consuming Fe tablet, they find it difficult to be obedient in consuming Fe tablet.

Pregnant women who are not obedient in consuming Fe tablet is caused by pregnant women who are often late and forget to take the tablet in accordance with the suggestion of medical practitioners. Moreover, it can be affected by uncomfortable side effects felt by the women when consuming Fe tablet, such as nausea, vomiting, and heartburn. This is consistent with the statement Arifin (2008), mentioning that the Fe supplements can cause nausea, vomiting, stomach cramps, heartburn, and constipation. However, the degree of nausea depends on the amount of Fe element absorbed. The dose of Fe above 60 mg can cause side effects that are unacceptable in pregnant women resulting in non-compliance in the use of drugs.

Pregnant women need to consume Fe tablet during pregnancy, because Fe needs of pregnant women increases during pregnancy. Fe tablet is iron salts in the form of tablets / capsules that can increase the number of red blood cells when it is consumed regularly. Pregnant women experience thinning red blood cells that require iron

supplements to increase the number of red blood cells and for fetal red blood cells (Rasmaliah, 2004).

4. The Correlation between Nutritional Status and Anemia Incidents on Trimester III Pregnancy at Pleret Bantul Primary Health Center

From the analysis result of crosstab between nutritional status and the incidence of anemia among pregnant women in the third trimester at Pleret Bantul Primary Health Center, it is known that pregnant women who had normal nutritional status but experienced mild anemia were 13 respondents (33.3), and with moderate anemia was one respondent (2.6%). This happens because pregnant women often do not comply in consuming Fe tablet including the time, manner and dosage. In addition, low level of education among pregnant women also causes pregnant women to have anemia although they have normal nutritional status.

Poor nutritional status is the greatest predisposing factor of anemia occurrences (Atikah, 2009: 77). The effect of low nutritional status on pregnant women will become anemia and fetal growth failures, low birth weight, premature, death birth, congenital defects and miscarriage, while the influence of anemia in pregnant women during pregnancy, partum process and postpartum will occur abortion, premature parturition, prolonged labor, postpartum hemorrhage, infection and anemia, and fetal death, perinatal death, premature, birth defects, less Fe reserves on infants (Purwitasari, 2009: 82).

Results of statistical tests using chi square test and obtained P value = 0.033 at the significance level of 5%. Because the P-Value <0.05, then H_0 is rejected and H_a is accepted. It can be concluded that there is significant correlation between nutritional status and the incidence of anemia among pregnant women in the third trimester at Pleret Bantul Primary Health Center.

The results are consistent with a research (Dyah Permata Sari, 2013) which showed that the Spearman rank test results with $\alpha = 0.05$ obtained $r_s = 0.666789$ meaning that $r_s \text{ count} > 0.364$. Therefore, H_1 is accepted meaning that there is a correlation between nutritional status and the incidence of anemia among pregnant

women in the third trimester at Hj Sri Sulasmia S. ST Midwifery Clinic in Wonoayu Village Pilangkeceng Madiun.

5. The Correlation between the Obedience in Taking Fe Tablet with Anemia Incidences on Trimester III Pregnancy at Pleret Bantul Primary Health Center

From crosstab analysis of the obedience in consuming Fe tablet with the incidence of anemia among pregnant women in the third trimester at Pleret Bantul Primary Health Center, it is known that pregnant women who consume Fe tablet obediently but experienced mild anemia was 1 respondent (2.6%). It happens because there are several factors that can affect pregnant women's Hb rate. According to Silalahi (2007), the factors that influence the occurrence of anemia in pregnant women are the obedience to consume Fe tablets, maternal age, parity, distance among pregnancies, knowledge, education, chronic disease, parity index, and the adequacy of nutrient consumption. Nugraheni (2009) states that anemia can be caused by malnutrition, lack of iron in the diet, mal-absorption, blood loss and many labors in the past and chronic diseases.

Anemia can be prevented by consuming nutritious food, managing the age of the mother during pregnancy, spacing between pregnancies, increasing the supply of food which contains Fe, folic acid and vitamin B12. According Nugraheny (2009), there are many factors that influence the occurrence of anemia in pregnancy, so that if pregnant women are not obedient to consume Fe tablets, but they have good nutritional status, always consume foods that contain iron, have no history of chronic disease, are still in the reproductive age healthy, then the women can have healthy pregnancy without experiencing anemia. Therefore, pregnant women are encouraged to consume foods that can form red blood cells such as liver, anchovies, red meat, beans, green vegetables, egg yolks, and fruits. In addition, pregnant women should take vitamin C, chicken and fish to facilitate the absorption of Fe (Subroto, 2010).

In this study, the level of education affects the incidence of anemia, the higher the level of education the lower the risk of anemia, because the level of education also determines whether or not a person is easy to absorb and understand the nutritional knowledge they have acquired. The level of education is closely related to the level of

understanding about the tablet Fe and the awareness in consuming Fe tablet for pregnant women. The state of iron deficiency in pregnant women is determined by many factors; one of those is women's education. Low level women education affects the reception of information so that knowledge of Fe is limited, and it brings impact on the occurrence of iron deficiency. The better the education of pregnant women, the better to absorb the information, especially on the benefits of Fe tablet. This affects the obedience of pregnant women in consuming Fe tablet, so pregnant women know the benefits of Fe tablet for pregnant women (Arisman, 2007).

The results of statistical tests used chi square test and obtained P value = 0.014 at the significance level of 5%. Because the P-Value was <0.05 , then H_0 is rejected and H_a is accepted. It can be concluded that there is a significant relationship between obedience in consuming Fe tablet with the incidence of anemia among pregnant women in the third trimester at Pleret Bantul Primary Health Center. Therefore, it is expected that every third trimester pregnant women can regularly consume Fe tablet, so they can avoid anemia during pregnancy since Fe is significantly needed for the growth and development of the fetus.

The result is consistent with a research conducted by Mandariska (2012) which shows that the statistical test result obtained P value = 0.035 ($P < 0.05$), which means that there is a relationship between obedience in consuming Fe tablet with anemia trimester III pregnant women Kalikajar I Wonosobo Primary Health Center.

CONCLUSIONS AND SUGGESTIONS

Conclusion

1. The result of statistical test showed that P value (0.033) $< \alpha$ (0.05), then H_0 is rejected and H_a is accepted. It can be concluded that there is significant correlation between nutritional status and the incidence of anemia among pregnant women in the third trimester at Pleret Bantul Primary Health Center.
2. The result of statistical analysis shows that P value (0.014) $< \alpha$ (0.05), then H_0 is rejected and H_a is accepted. It can be concluded that there is significant relationship

between obedience in consuming Fe tablet with the incidence of anemia among pregnant women in the third trimester at Pleret Bantul Primary Health Center.

Suggestion

It is expected that pregnant women should often consume food that is rich of nutrition because the need for nutrients in pregnant women increases compared to the previous condition. It is also expected that they can regularly take Fe tablets because the need for Fe in pregnant women also increased dramatically, so pregnant women need additional Fe supplement to fulfill the needs of the body and the growth and development of the fetus.

BIBLIOGRAPHY



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THE CORRELATION BETWEEN INDUCED PARTUM, PROLONGED PARTUM, AND MACROSOMIA BABIES WITH POSTPARTUM HAEMORRHAGE AT PANEMBAHAN SENOPATI PUBLIC HOSPITAL BANTUL

A. PRELIMINARY

Maternal deaths due to complications during pregnancy and childbirth is most prevalent in developing countries. Approximately 80% of the major causes of maternal deaths are haemorrhage, infection, pre-eclampsia, and unsafe abortion. Developing countries have maternal mortality ratio (MMR) by 25%. Maternal deaths are caused by postpartum hemorrhage. Accounting for over 100,000 deaths maternal or per year (WHO, 2013). Based on the Report Routine Program Maternal Health Provincial Office in 2012, the causes of maternal mortality in Indonesia is still dominated by bleeding (32%), pre-eclampsia (25%), followed by infection (5%), obstructed labor (5%), and abortion (1%). In addition to the cause of obstetric, maternal mortality due to other causes (non-obstetric) of 32% (Ministry of Health, 2013).

Efforts to reducing maternal mortality by the government continues on the expansion of quality health care and comprehensive obstetric care, improving family planning services and dissemination of communication, information and education to the community. Provision Neonatal Emergency Obstetric Care facilities komperhensif (PONEK), Neonatal Basic Emergency Obstetric Care (PONED). To ensure the health of the mother during pregnancy is necessary antenatal care (ANC), it is also done to ensure mothers weeks to deliver at health facilities by providing antenatal care that is Antenatal Care (ANC) at least 4 times. The role of the midwife in preventing postpartum hemorrhage that reduce risk factors with early detection of risk factors, provide counseling to the mother to arrange a healthy reproductive life of the mother (20-35 years), parity (2-3 children), spacing pregnancies > 2-5 years, HB control levels during pregnancy (≥ 11 g%), and give the ANC examination at least 4 times (TM I = 1 time, TM II = 1 time, and TM III = 2 times) (Ministry of Health, 2013)

Based on data from the Central Bureau of Statistics (BPS) D.I Yogyakarta in 2012 the number of maternal deaths dropped to 40 cases amounting to 87.3 per 100,000 live births (DHO DIY 2013). Audit Results Maternal Perinatal (AMP) Bantul concluded that the cause of maternal death in the year 2013 were Pre Eclampsia (PEB) 23% (3 cases),

hemorrhage by 46% (6 cases), and 8% due to infection (1 case) , Poisoning as much as 8% (1 case) and Other 15% (2 cases) (Bantul Health Office, 2014).

After an initial survey in Panembahan Senopati Bantul Hospital in 2015 than in 1318 40 were spontaneous birth mothers experience postpartum hemorrhage. In 2014 there were 30 cases of bleeding in hospitals Panembahan Senopati Bantul and in the year 2014 to 2015 there were four maternal deaths were 3 of them caused by postpartum hemorrhage. Based on the background and the phenomenon the authors are interested in conducting research to analyze factors related to the incidence of postpartum hemorrhage in Panembahan Senopati Bantul Hospital in 2014-2015.

RESEARCH METHODS

Methods that are used in this research is analytic survey method case control sample in this study amounted to 114 respondents, consisting of all the mothers who have postpartum haemorrhage in hospital Panembahan Senopati Bantul ie 57 respondents as the case group and 57 women giving birth are not bleeding as the control group. The control group was randomly selected using a simple random sampling

RESULTS AND DISCUSSION

A. Research

1. Univariate Analysis

Based on the results of research conducted in hospitals Panembahan Senopati Bantul on July 12-August 5, 2016, it was shown as follows

Overview occurrence frequency induction, prolonged labor and macrosomia babies with severe postpartum hemorrhage in women giving birth in hospitals Panembahan Senopati Bantul 2016

Table 4.1 frequency induction events, prolonged labor and macrosomia babies with severe postpartum hemorrhage in women giving birth in hospitals Panembahan Senopati Bantul 2016

No Variable N% a case control study

F% F%

1 Induction

Induction 32 56.1 14 24.6 46 40.4

Not Induced 25 43.9 43 75.4 68 59.6

2 Partus Lama

Parturition Lama 30 52.6 11 19.3 41 36

Not Partus Lama 27 47.4 46 80.7 73 64

3 Weight Infants Macrosomia

Macrosomia 8 14 1 1.8 9 7.9

Not Macrosomia 49 86 56 98.2 105 92.1

Source: RM Hospital Panembahan Senopati Bantul

Based on Table 4.1 it was shown in the case group the incidence of induction of labor in hospitals Panembahan Senopati Bantul total of 32 respondents (56.1%) of the 57 sample cases. While the control group there were 14 (24.6%) of respondents who experienced labor induction and 43 (75.4) others are not induced.

Overview incident prolonged labor that can be read from Table 4.2 is that there are mothers who have prolonged labor in case group of 30 respondents (52.6%) and 27 (47.4%) did not experience prolonged labor. While in the control group were 11 (19.3%) respondents had experienced prolonged labor of total respondents 57 control samples.

Based on table 4.1, it was shown the incidence of macrosomia infants in the case group deliveries in hospitals Panembahan Senopati Bantul much as 8 respondents (14%) of the 57 sample cases. While the control group there were 1 (1.8%) of respondents birth mothers with infant macrosomia and 49 (98.2%) others not macrosomia.

Analysis Bivariat

The bivariate analysis using Chi-square test, test research hypotheses based on a significance level of 5% and confidence Interval (CI) of 95%.

- a. Relationship of maternal postpartum hemorrhage with more labor induction can be seen in table 4.2 below

Table 4.2 Relationship to Mother Maternity Postpartum Hemorrhage with Genesis Induction of Labor in hospitals Panembahan Senopati Bantul

No	bleeding	Induksi		Not Induksion		<i>P-value</i>	OR
		F	%	F	%		
1	Yes	32	56,1	25	43,9	0,001	3,931
	No	14	24,6	43	75,4		

Seen in the table that the Chi-Square test results obtained significant values (p-value) 0,001 since p-value <0.05 the decision is to accept Ha, that there is a correlation with maternal hemorrhage in labor induction. ODS results obtained ratio is 3.931.

- b. Relationship of maternal postpartum hemorrhage with prolonged labor can be seen more in table 4.3 below:

Table 4.3 Relationship to Mother Maternity Postpartum Hemorrhage with Genesis Partus Lama in hospitals Panembahan Senopati Bantul

No	bleeding	Partus Lama		Tidak Partus Lama		<i>P-value</i>	OR
		F	%	F	%		
1	Yes	30	52,6	27	47,4	0,00	4,646
2	No	11	19,3	46	80,7		

Seen in the table that the Chi-Square test results obtained significant values (p-value) of 0.00 for p-value <0.05 the decision is to accept Ha, that there is a relationship of maternal bleeding with prolonged labor. The results obtained are 4.646 OR

- c. Relationship of maternal postpartum hemorrhage with more labor induction can be seen in table 4.4 below

Table 4.4 Relationship to Mother Maternity Postpartum Hemorrhage with Genesis Weight Infants at Hospital Maternity Macrosomia Panembahan Senopati Bantul

No	Bleeding	Berat Bayi Makrosomia		Berat Bayi tidak Makrosomia		<i>P-value</i>	OR
		F	%	F	%		
1	Yes	8	14,0	49	86	0,032	9,143
2	No	1	1,8	56	98,2		

Seen in the table that the test results obtained significant values (p-value) of 0.032 for p-value <0.05 the decision is to reject H_0 and accept H_a , that there is a relationship of maternal postpartum hemorrhage in infants with macrosomia birth weight. OR Results obtained was 9.143.

Discussion

1. Bleeding Relations with Labor Induction

The proportion of induction events in hospitals Panembahan Senopati Bantul total of 32 respondents (56.1%) of the 57 sample cases of mothers who have PPH. While the control group there were 14 respondents who experienced induction. Induction of labor is labor effort that began before or after a full-term pregnancy to induce his way. (Saifuddin, 2010).

Of the studies that have been conducted showed that there is a relationship between maternal postpartum hemorrhage in the induction of labor. These results are consistent with research journals according Khireddine (2013) in the journal entitled "Induction of Labor and Risk of Postpartum Hemorrhage in Low Risk Parturients" said that induction can be high risk for the occurrence of PPH if the induction of labor made on the situation womb unfavorable, Several hypotheses explain postpartum hemorrhage can occur because of a drug used to induce labor may have a direct effect on the muscles of the uterus and also fatigue in the muscles of the myometrium, causing an atonic and may PPH (Postpartum Haemorrhage).

Based on table 4.2, the calculation results odds ratio (OR) in the induction of labor with the incidence of postpartum hemorrhage was 3.931. These values indicate that birth mothers with labor induction have 4 times greater risk of bleeding compared with birth mothers without induced. These results can be seen that out of 46 (100%) of respondents who induced 32 (69.5%) of them suffered postpartum hemorrhage.

According Oxorn (2013) The risk of induction of labor that may occur include excessive uterine contractions resulting in uterine muscle fatigue highly at risk of postpartum hemorrhage. In the study Khireddine (2013) states that birth mothers are induced at risk 1:28 times higher than normal birth mothers. Induction can be at high

risk of postpartum hemorrhage if the induction of labor performed on the content of an unfavorable situation. Several hypotheses explain postpartum hemorrhage can occur because of a drug used to induce labor may have a direct effect on the muscles of the uterus and myometrium muscle fatigue factor in causing an atonic and may PPH

2. Relations with Partus Lama Postpartum Hemorrhage

The incidence of prolonged labor in women giving birth in hospitals Panembahan Senopati Bantul in 2016 was 30 (52.6) of respondents from the group of cases of birth mothers with postpartum hemorrhage. Labor had lasted 12 hours or more, the unborn child. Cervical dilatation in the right line of active labor alert (Saifuddin 2010).

The result showed that there was a relationship between postpartum hemorrhage at birth mothers with prolonged labor. Oxorn (2013) stated that the effects of prolonged labor is the failure of the myometrium contract which is the main cause of postpartum hemorrhage. The main predisposing factors are prolonged labor, which is the biggest cause atonic. The harmful effects caused by prolonged labor is resulting in fatigue tends to contract the uterus so that the uterus is weak (atonic). In women who experienced prolonged labor will experience fatigue, so that he is less able to withstand blood loss which can then lead to death.

Based on Table 4.3 Odds Ratio values that have been obtained in the calculation is 4.646. These values indicate that birth mothers with prolonged labor had a four times greater risk of bleeding compared with birth mothers are not obstructed labor. Of the 41 (100%) of the respondents who experienced prolonged labor 30 (73%) experienced a postpartum hemorrhage.

The main predisposing factors bleeding is prolonged labor, which is the biggest cause atonic. The harmful effects caused by prolonged labor is resulting in fatigue tends to contract the uterus so that the uterus is weak (atonic). In women who experienced prolonged labor will experience fatigue, so that he is less able to withstand blood loss which can then lead to death.

3. Relations with Postpartum Bleeding Baby Weight Macrosomia

The proportion of incidence of macrosomia babies in hospitals Panembahan Senopati Bantul much as 8 respondents (14%) experienced a postpartum hemorrhage of 9 women giving birth with a baby macrosomia. Infant macrosomia is a birth weight more than normal or more than 4000 grams (Cunningham, 2013).

From the results, the relationship between postpartum hemorrhage at birth mothers with babies makrosomia. Berat birth weight more than normal or that in this study is called macrosomia can lead to postpartum hemorrhage due to uterine overstretch and resulting in weak contraction that can occur postpartum hemorrhage. This condition is due to undergo overdistention uterus so that the experience hypotonia or atonic uterus after childbirth. As some circumstances overdistention uterus can also cause an atonic ie a multiple pregnancy and hidramnion (Cuningham, 2013).

The results of this study reinforced by research conducted by Supa (2012) which membutikakn that there is a relationship with the baby's weight macrosomia postpartum hemorrhage. In the study of 16 women giving birth with macrosomia, 10 of them suffered postpartum hemorrhage.

Based on Table 4.5 Odds Ratio values that have been obtained in the calculation is 9.143. These values indicate that maternal weight babies with macrosomia has a nine times greater risk of bleeding compared with maternal weight infant macrosomia. Looked at the results of 9 infant macrosomia, 8 of them resulted in maternal postpartum hemorrhage with an average birth weight was 4000 grams. Bleeding occurs due to excessive stretching resulting from the size of the fetus resulting in weak contractions (uterine inertia) so that the uterus can not contract and postpartum bleeding occurs (Cunningham, 2013)

CONCLUSIONS AND RECOMMENDATIONS

1. There is a relationship between the induction of labor, prolonged labor and heavy baby with macrosomia incidence of postpartum hemorrhage in Panembahan Senopati Bantul District Hospital in 2016.
2. The number of maternal induced bleeding was 32 (56.1%).

3. The number of mothers who have prolonged labor and bleeding were 30 (52.6%).
4. The number of maternal postpartum hemorrhage with an infant macrosomia berjumlah 8 (14%).
5. There is a relationship of maternal postpartum hemorrhage in the induction of labor, with the result p-value 0.001
6. There is a relationship of postpartum hemorrhage at birth mothers with prolonged labor, with the result p-value 0.00
7. There is a relationship of maternal postpartum hemorrhage on the weight of the infant macrosomia with p-value 0.032
8. Mother induced labor have risk factors 3.9 times more likely to experience postpartum hemorrhage dibandingkan with normal birth mothers. Mothers who experienced prolonged labor with risk factors 4.6 times more likely to experience postpartum haemorrhage compared to women giving birth without prolonged labor.

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**DURATION OF USE CONTRACEPTIVE INJECT 3 MONTHS RELATED TO
DESCRIPTION of LIBIDO'S ACCEPTORS at BPS YAYUK ISMAIL
SIDORESMO JAGIR SURABAYA**

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ABSTRACT

Depreciation of libido happens caused by effect progesterone especially containing 19-norsteroid impact to the condition of dry vagina so that causes not pleasant taste when having intercourse. This study was aim to detect duration of use KB inject 3 months with depreciation of libido in acceptor KB inject 3 months.

Observational analytic was used in this study. A purposive sampling was invited 32 respondents.

The results showed mostly of acceptor KB inject 3 months used at 13-24 months (52.6%). Mostly of acceptor KB inject 3 months that experience depreciation of libido (43,8%). Result of statistics Spearman's Rank Correlation test showed $p = 0.015$ and $r = 0.425$, that there is long connection of use KB injects 3 months with depreciation of libido in acceptor kb inject 3 months at BPS Yayuk Ismail, Surabaya. This finding suggested for midwife to socialize to acceptor about side effects due to long term usage of injection contraception.

Keyword: *Used Duration KB inject 3 months, Libido Depreciation*

Introduction

Contraceptive injection Depo Medroxyprogesterone Acetate (DMPA) is a hormonal contraceptive use increased over time. Contraceptive use DMPA injections in a long time would cause sexual dysfunction such as decreased libido (Saroha, 2008). Decreased libido acceptor injectables three months on long-term use may arise due to hormonal changes, drying of the vagina that causes pain and discomfort during intercourse and ultimately reduce sexual desire.

The WHO estimates that nearly 380 million pairs run family planning, in developing countries 66-75 million people using hormonal contraception. The results obtained up to 2006, the use of contraceptive DMPA 12 million of the 100 million users worldwide. Until November 2010 already exceeded the target by the number of family planning acceptors Injectable contraceptives amounted to 130.256 acceptor (BKKBN 2010).

Injectable contraceptives is one way to prevent pregnancy through hormonal injections (Arfiah, 2009). Contraceptive injections containing 150 mg DMPA (Depo Medroksi Progesterone Acetate) which is given every three months by injection intramuscular (in the buttocks) (Ari S, 2013).). The side effects of giving injections of 3 months ie amenorrhea, spotting (spotting), weight changes, depression, acne, hair loss, on a long-term impairments can also cause vaginal dryness, lowered libido, emotional disturbance (rarely), headache , nervous, or acne. In this case the most discussed is the main side effects of injections of 3 months with decreased libido.

Decreased libido occur due to the effects of progesterone, especially containing 19-norsteroid cause a state of vaginal dryness, causing discomfort during intercourse.

Methods

In this study, using the correlation design with cross sectional approach. Cross Sectional research is research that emphasizes data collection time measurement or observation data is the independent variable is the acceptor injections 3 months and the dependent variable is decreased libido only one at a time (Nursalam, 2011).

The population in this study are acceptor injections 3 months as many as 35 people in BPS Yayuk jagir sidoresmo Ismail in the village, Surabaya. The sampling technique used in this study is the probability sampling that each subject in the population has a chance of being selected or not selected as sample by purposive sampling technique Sampling (Nursalam, 2011). In this technique, each respondent who meet the criteria for inclusion and exclusion criteria. Inclusion Criteria are acceptors injections 3 months aged 20 to 35 years and acceptors injections three months came to re KB, acceptors injections 3 months willing to become respondents. Exclusion Criteria is acceptors injections 3 months are advised to replace another KB.

Result and Discussion

General data research results is a picture of the characteristics of respondents that include maternal age, BB and TB, the number of children, education, occupation, religion, long married, the menstrual cycle, activity beyond the daily activities, age of husband, husband's occupation, reason for using injectables , duration of use KB.

1. Characteristics of Respondents by age of mother

The data shows that out of 32 respondents obtained an average age of 26-35 years were 22 respondents (68.8%), respondents aged 36-45 years by seven respondents (21.9%), respondents aged 18-25 years as many as three respondents (9.4%).

2. Characteristics of Respondents by BB and TB

32 respondents obtained an average maternal weight 56-70 kg were 18 respondents (56.2%), respondents with a body weight of 40-55 kg by 9 respondents (28.1%), respondents with 76-85 kg body weight by 5 respondents (15.6%). 32 respondents obtained an average height of 150-160 cm mothers were 24 respondents (75%), height 161-170 cm by 8 respondents (25%).

3. Characteristics of Respondents based on the number of children

Research data showed from 32 respondents obtained an average number of children a mother with two children as much as 16 respondents (50.0%), respondents with the number of children one child as much as 9 respondents (28.1%), respondents with the number of children 3 children by 7 respondents (21.9%).

4. Characteristics of Respondents by education

Research data showed out of 32 respondents obtained an average mother with a high school education were 17 respondents (53.1%), respondents with secondary education levels as much as 6 respondents (18.8%), respondents with education level Higher Education as 6 respondents (18.8%), respondents with elementary education level by 3 respondents (9.4%).

6. Characteristics of Respondents by occupation

Research shows the data from 32 respondents obtained an average occupation of respondents is as IRT many as 13 people (40.6%), as private as many as 12 people (37.5%), as the Self of 4 people (12.5%) , as civil servants as much as 3 people (9.4%).

7. Characteristics of Respondents by religion

Research shows the data from 32 respondents on average were converted to Islam by 30 respondents (93.8%), and the Christian religion as much as 2 respondents (6.2%).

8. Characteristics of Respondents by old married

Research shows the data from 32 respondents obtained an average old married mother with 1-10 years as many as 19 people (59.4%), mothers who are married 11-20 years as many as 13 people (40.6%).

9. Characteristics of Respondents by the menstrual cycle

Research shows the data from 32 respondents obtained an average mother with irregular menstrual cycles as much as 22 respondents (68.8%), women with regular menstrual cycles as much as 10 respondents (31.2%).

10. Characteristics of Respondents based activity beyond the daily activities

Research shows the data from 32 respondents obtained an average mothers who have activities outside of daily activities such as gathering as many as 15 respondents (46.9%), school children dropping as much as 12 respondents (37.5%), recitation of 4 respondents (12.5%), sports as much as one respondent (3.1%).

11. Characteristics of Respondents by husband's age

Research shows the data from 32 respondents obtained an average mother who has a husband by the age of 31-40 years as many as 23 respondents (71.9%), 20-30 years of age husband as much as 6 respondents (18.8%), 41-50 years as many as 3 people (9.4%).

12. Characteristics of Respondents by husband's work

32 respondents obtained an average mother who has a husband with the husband's work as private as many as 21 respondents (65.5%), as a civil servant by 7 respondents (21.9%), as a self-employed as many as four respondents (12.5%).

13. Characteristics of respondents by reason for using injectables

32 respondents obtained an average wear reasons mothers in KB Inject 3 months is more practical as much as 28 respondents (87.5%), ease of use as many as three people (9.4%), few side effects as much as 1 respondents (3.1%).

Custom Data Research

1. Characteristic respondents by duration of used KB inject 3 months

Data showed from 32 respondents obtained an average mother with the use of KB of 13-24 months old were 19 respondents (59.4%), duration of use KB 1-12 months as many as 11 respondents (34.4%), duration of use KB > 24 months 2 respondents (6.2%).

2. Depreciation of Libido

Research showed that data of 32 respondents who experienced decreased libido as much as 14 respondents (43.8%). Respondents who did not experience decreased libido as much as 18 respondents (56.2%).

3. Relationship duration of use injections of 3 months with depreciation of libido acceptor KB injections 3 months

Research result showed that 9 mothers who use injections of 1-12 months did not experience decreased libido (81.8%), and women who experience decreased libido 2 mothers (18.2%). Of the 19 mothers who use injections of 13-24 months as many as 10 women who experience decreased libido (52.6%) and those who did not experience decreased libido as much as nine mothers (47.4%). Of the two mothers who use injections > 24 months all decreased libido (100%).

This study was designed to provide long relationship research results using injections of 3 months with decreased libido acceptor injections 3 months in BPS Yayuk Ismail Surabaya. Duration of use injectables 3 months in BPS Yayuk Ismail Surabaya. The results using a questionnaire on 10 April-14 July 2015, from 32 respondents obtained an average duration of use birth mother with 13-24 months amounted to 19 respondents (59.4%), and women with long usage KB 1-12 months a total of 11 respondents (34.4%), while women with long usage KB > 24 months amounted to 2 respondents (6.2%).

Acceptors injections of 3 months with the use of 13-24 months old received the highest percentage in the study, totaling 19 respondents (59.4%). Acceptors injections of 3 months with the use of 13-24 months old when seen from the number of children, the highest percentage is to have two children who totaled nine respondents (56.2%) of

the total 16 respondents (100%). According to the researchers assumptions affect the number of children use family planning because the respondents planned to the number of children in the family, the mother is also likely in the productive age so she planned to give the distance between the two birth of his child. Supported by the opinion (Saifuddin, 2006) which states that the family planning is the distance between two births should be 2-4 years. And also one indication of injectables is the mother requires the use of long-term contraception and has a high effectiveness or have many children, but do not require tubal ligation.

Acceptors injections 3 months with duration of use of 13-24 months with the number of children one child who totaled six respondents (66.7%) of 9 respondents. Assumption of researcher the number of children 1, respondents gave spacing between the first and second child, or the respondent was prioritizing development of the child first, so that the respondents use the injections because it can be used long term and can prevent pregnancy. (Sulistyawati, 2013) states that the long-term contraception are also included hormonal contraceptive mechanism of action is to prevent ovulation by blocking the LH surge in the middle of a cycle. And according to (Saifuddin, 2006) in family planning is the distance between two births should be 2-4 years.

Acceptors injections of 3 months with the use of 13-24 months old when viewed from a percentage of the number of children, the lowest percentage is 3 children who are 4 respondents (57.1%) of 7 respondents. With duration of use injections of 13-24 months the number of children 3 children, the possibility of the respondents felt quite have three children in the family but respondents do not want to tubal ligation so that the respondents decided to use a 3-month injections, because according to the respondent 3-month injections are very effective and well can be used as a long-term contraception. (Saifuddin, 2006) that one indication is the capital injections require the use of long-term contraception and has a high effectiveness or have had many children, but do not require tubal ligation. (Prawirohardjo, 2007) said that the effectiveness of the use of injectable contraceptives are highly effective 0.1-0.4 pregnancies per 100 women. The failure rate with NET-EN is slightly higher, but generally remain below 1 per 100 years- women.

Acceptors injections 3 months with duration of use of 1-12 months showed 11 respondents (34.4%) of the 32 respondents. When viewed from the reasons to choose

injectables, totaling 9 percentage of respondents (81.8%) of the 11 respondents with a more practical reason. According to the assumptions of researchers acceptors who choose injectables 3 months with more practical reasons deemed more efficient than other types of birth control because acceptor should not be afraid to forget their use, and also do not need to store injectable drugs but just keep in mind the time back to get the next injection to medical personnel. And can also newly married respondents had had only one child so that the respondents choose to use contraceptive injections 3 months of pregnancy the long term, because the respondents would like to leave a distance between two births that are planned in the form of small family happy. (Saifuddin, 2006) that one indication is the capital injections require the use of long-term contraception.

Acceptors injections of 3 months with the use of 1-12 months old by reason of the use of easy to use and few side effects of each acquired one respondent (9.1%) of the 11 respondents. According to the assumptions of researchers acceptors have never bothered about side effects will be the respondents experienced, other than that in terms of its usage acceptor should not be afraid to forget their use, and also do not need to store injectable drugs but just keep in mind the time back to get a shot next to power medical.

Acceptors injections 3 months with duration of use > 24 months, totaling 2 respondents (6.2%) of the 32 respondents. If seen from the percentage of age, obtained the age category of 26-35 years amounted to 2 respondents (9.1%) of the 22 respondents. At the age category of the mother was having a productive age in adding child / baby so that the use of injections into contraceptive choice. And also for those respondents who had 35 years of age usually terminate a pregnancy, in other words have not wanted more children. (Saiffudin, 2006) states that the best pregnancy and birth, meaning that the lowest risk for the mother and child is between 20-35 years. And according to (Hartanto, 2004) which states that the age of 35 years is a phase of terminating a pregnancy.

Depreciation of Libido

The results of the study through a questionnaire on 10 April-14 July 2015, from 32 respondents, acceptors decreased libido total of 14 respondents (43.8%), and which does not experience decreased libido were 18 respondents (56.2%).

The results of family planning acceptors syringes decreased libido when seen from the highest percentage age is 26-35 years of age were 10 respondents (45.5%) of the 22 respondents. According to the assumptions of researchers aged 26-35 years are productive age in terms of adding a baby, to the possibility of respondents chose hormonal contraceptives are injections that can prevent pregnancy long term, so that the respondents have been using the hormonal contraception. The side effects of hormonal contraception one of which can decrease libido. Decreased libido was due to a decrease in the hormone estrogen can cause vaginal dryness that respondents feel pain during intercourse. In support of the theory (Andrews, 2010) which states that the hormones in contraceptive use can lead to decreased libido / desire, vaginal dryness, decreased stimulation. The results of family planning acceptors syringes decreased libido when seen from the percentage of the age of 36-45 years a number 2 respondents (28.6%) of 7 respondents. The age of entering the premenopausal age at which the age of respondents who experienced a decline due to decreased libido hormone can occur with menopause. (Andrews, 2010) most women experience a decrease in sexual desire after menopause. cause quite a lot, ranging from a decrease in estrogen hormone so that the condition of the vagina becomes dry and causes penetration becomes painful.

While the views of the percentage of 18-25 year number 2 respondents (66.7%) of 3 respondents. The age where childbearing age for each respondent may also respondents in that age a couple of new families who had had only one child and the new using injections of 3 months, for the respondent to delay pregnancy long term. As in the 26-35 year age criterion that the possibility of respondents chose injectable hormonal contraceptive that can prevent pregnancy long term, so that the respondents have been using the hormonal contraception. The side effects of hormonal contraception one of which can decrease libido.

The yield on the acceptors decreased libido due to vaginal dryness and pain during intercourse so as acceptors are reluctant to have sexual intercourse with a partner. Supported by the opinion (Windhu, 2009) about the factors influencing the feelings that

decreased libido is reluctance in giving sexual response is a reflection of the woman to sexual contact with a man who does not interest him. Lack of sexual desire can also be caused by a lack of attention from men as sexual partners. Women find it as an object to obtain sexual gratification of men. Lack of tenderness or expression of love from a spouse can make a woman to stop responding.

The results of family planning acceptors injection or decreased libido number of 18 respondents (56.2%), when seen from the percentage of long-married obtained 9 percent of respondents with 1-10 year old married and 9 respondents with 11-20 years old married. The results of family planning acceptors injection or decreased libido in married 1-10 years old category number 9 respondents (81.8%) of the 19 respondents. According to the assumptions of researchers from 1-10 years old married where the age of first marriage usually partner's sexual needs are still met each other mutually. It happened until the second year of marriage, in which the second year is usually the couple has begun to adjust to become prospective parents. After having one child, most likely married couples are already planning for second pregnancy, so in this case the intensity in sexual intercourse more frequently. Therefore in this case the acceptor does not experience decreased libido. Supported (Tribune, 2015) Some of the major bones of contention in the first year of marriage is also possible due to the husband and wife were trying to adjust to his new role. "Outside be a husband or wife, the couple also act as a daughter and a new section of the neighborhood partner."

The results of family planning acceptors injection or decreased libido in married 11-20 year old category number 9 respondents (69.2%) of the 13 respondents. Possibilities in the age category of the wedding couples still want to add a baby because the couple are still in their productive age. Thus, in the intensity of sexual needs are still met each other mutually. Therefore acceptors do not experience decreased libido. Supported (Tribune, 2015) The problem that arises in the tenth year is usually a problem that can not be resolved or even has not been discussed during previous crises. In the seventh year of marriage, some couples find it is enough to spend time together to decide that the marriage relationship is not as hopeless. "Or, there are habits that they can tolerate in the beginning of the wedding, but now it can not be tolerated any longer. Relation of used duration injections of 3 months with decreased libido acceptor injections 3 months at BPS Yayuk Ismail Surabaya.

The result of the calculation using statistical tests Spearman's Rank Correlation values obtained $\rho = 0.015$ and $r = 0.425$, this proves that there is a significant relationship between duration of use injectables with decreased libido result showed that nearly all respondents decreased libido seen in Table 5:16 namely from 32 respondents total respondents decreased libido as much as 14 respondents (43.8%), and the total is not decreased libido as much as 18 respondents (56.2%), the details of the results, the 10 respondents who experienced a decrease in libido with duration of use KB 13-24 months, 2 respondents with duration of use > 24 months, and 1-12 months for long usage as much as 2 respondents.

Respondents who did not experience a decrease in libido is 9 respondents with 1-12 months duration of use, and 9 respondents with duration of use of 13-24 months for use of > 24 months no respondents. Hormonal contraceptive injections 3 months is a highly effective contraceptive, that is used by many acceptors when compared with other types of birth control. Possible respondents chose injectables due to the effectiveness of its use. Boosted opinion (Prawirohardjo, 2007) that the effectiveness of the use of highly effective 0.1-0.4 pregnancies per 100 women. The failure rate with NET-EN is slightly higher, but generally remain below 1 per 100 women.

The use of injections 3 months with long-term will affect serum estradiol levels which can affect the libido decrease, which can cause vaginal dryness sehingga will feel pain during sexual intercourse. (Agustina, 2012) that use of DMPA 2 years are at great risk to the effects of low levels of serum estradiol can be loss of bone mass, prolonged amenorrhea and sexual dysfunction such as low sexual desire that affect one's sex life. As it is supported also by the opinion Sulistyawati (2013) that one of the disadvantages of the use of injectables is on long-term disorders can also cause vaginal dryness, lowered libido, emotional disturbance (rarely), headache, nervousness or acne. Meanwhile, according to (Suratun, 2008) decreased libido occurred because of the effects of progesterone, especially containing 19-norsteroid cause vaginal dryness circumstances.

Long-term use of injectables also greatly affect the pattern of menstruation, the endometrial growth is getting smaller and occur hypermenorrhea or atrophic endometrium. Boosted by opinion (Andrews, 2010) that the factors influencing the depreciation in libido one of them is the menstrual cycle disorders are symptoms of not

having periods (amenorrhea), bleeding in the form of droplets / spots (spotting), bleeding cycled menstruation (metrorrhagia / breakthrough bleeding), and menstrual bleeding that is longer or more than usual (menorrhagia). The reason for their hormonal imbalance thus histology endometrial changes. The state of amenorrhea due to endometrial atrophy.

Acceptors experiencing menstrual cycle disorders are usually more sensitive due to hormone changes, in the sense usually respondents often angry, easy emotion, mood not like the symptoms of PMS (Pre Menstrual Syndrome). In this case the change of mood also affects the libido decline. As the opinion (Windhu, 2009) about the biological factors that influence the decrease in libido is the basic instinct rooted in rhinecephalic and limbic system that is affected is modulated by hormones and mental, particularly mood and direction of neurochemical substances. Hormone interplay is complex to control the intensity of libido and sexual behavior. Contributions estrogen appears in the secondary sex characters in the central and peripheral to women against sexual desire. Estrogen affects sexual desire and arousal central. Androgen hormones also affect a woman's sexual desire. Estrogen and androgens regulate sensory organs that are the targets and define sexual libido.

One side effect of the use of injectables is an increase in body weight, weight gain is likely to occur because the hormone progesterone easy change of carbohydrates and sugars into fat, so that the fat under the skin increases, in addition to the hormone progesterone also cause increased appetite and lower physical activity, resulting in the use of injections can cause weight gain. In this case the weight gain affect libido decrease, as it will make the respondents are less confident. As a psychological factors according to (Andrews, 2010) in influencing a decrease in libido is lack of self-confidence that makes a woman a loss of libido. Example: because it is not satisfied with the condition of the body (overweight or underweight), so it is not convenient to present themselves what their front pair and consequently did not feel excited when a couple invites for sex and do not enjoy the activity.

Acceptors syringe gained weight since been using injections of 3 months usually have a desire to go on a diet, so the body ideal back as before. But if the diet was unhealthy diet can affect a decrease in libido. Supported by (Irianto, 2014) which describes one of the physiological factors that influence decreased libido that diet is

often done by women to lose weight, but the diet is done without supervision and not in accordance with the condition of the body can actually make the body weak and sick , When the body is weak and undernourished automatically decreased sex drive. If a diet balanced with exercise, a person will be more excited. Sports should not be heavy enough regular jogging or cycling, blood flow will be smooth, as well as the body's hormone production. Exercise makes a healthy body and sexual health

Conclusion

The results of the research that has been done in BPS Yayuk Ismail Surabaya on 10 April- July 14, 2015, it can be deduced as follows most acceptor injections 3 months using injections with usage of 13-24 months old, A large part of acceptors decreased libido, and there is a relationship duration of use injections of 3 months with decreased libido acceptor injections 3 months in BPS Yayuk Ismail Surabaya on 10 April-14 July 2015

Suggestion


For the Respondents, to prospective acceptors of family planning to come and look for information that clearly before using one of the methods of contraception. To acceptors to always identify the physical changes of psychological connection contraceptive use. For Agencies, providing information about the side effects of birth control that will be used by the acceptor.

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Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Lutfi Nurdian Asnindari & Suryani (1)
Title of Presentation	Factors Related To Quality Of Life Of The Eldery
Reviewer	Ery Khusnal, MNS
Summary of Presentation	 <p>Maintaining the life quality of the elderly is important problem in the public health center today. There are many factors that influence the life quality of the elderly, such as physical activities, social, demographic, economic, health, gender, age, income, educational qualifications, employment status, ethnicity, marital status, smoking, drinking, area of residence, general health status, BMI and social welfare. Purposes this research are to search correlation between gender, age, nutrition status and physical activity with the life quality of the elderly in Posyandu Lansia Dukuh 04. Research design that be used was observasional study with cross sectional approach. Sample for this research are 31 elderly people who are present at the time of the Posyandu Lansia and willing to become respondents. Data collections was analyzed with SPSS version 19 for Windows. Majority gender of the elderly that came to the Posyandu Lansia is woman (68%) at the age of 60-70 years old (84%). Thirteenth of elderly people (42%) have normal body mass index for the nutrition status. Almost of the elderly have light physical activity level (49%). Based on data analysis, age and physical activity have significant correlation with life quality of the elderly in Posyandu Lansia Dukuh 04, but not with gender and nutrition status.</p>
Summary of Discussion	No question for this session.

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Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Nurfitri & Andri Nur Sholihah
Title of Presentation	The Correlation Between Relationship Status And Attitude Toward Free Sex On Teenager At Alun-Alun Kidul Yogyakarta
Reviewer	Ery Khusnal, MNS
Summary of Presentation	 <p>In 2013-2015, there are increasing relationship status, boyfriends and girlfriends, at teenagers. The most problem is pregnancy outside of marriage (48%). Relationship status, it's mean boyfriends or girlfriends relationship, have risk for free sex. South of town square in Yogyakarta is one of the location was used for many activity for teenagers. The aim for this research is to seek correlation between relationship status and free sex in teenagers at South Town Square of Yogyakarta. Quantitative research methods correlation with cross sectional approach was used for design method. Research samples were 50 teenagers between 10-25 years old. Most of the teenagers in South Town Square is collage student (38%), and then senior high school student (36%). Almost teenagers was female (58%) between 15-20 years old (48%). Fourty eight percent sample (26 people) have relationship status with their couple. Free sex attitude in teenagers mostly have a negative results as many as 27 people (54%). Data analysis show that p value less for 0,05. So, there are have correlation between relationship status and free sex attitude in teenagers at South Town Square of Yogyakarta.</p>
Summary of Discussion	<ol style="list-style-type: none"> 1. First question by Mr. Ery Khusnal : What's mean of free sex in author opinion? Author answer : Based on author opinion, free sex are the behavior of unmarried couple, including kissing, necking, and petting. So, free sex not only about intercouing, citated in Pujiati dkk, 2013. 2. Second question by Mr. Raditya : Is free in author research mean unmarried relationship? Author answer : Yes, it is. Free in this research refers to the relationship of unmarried couple.


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Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Dwi Muyassaroh & Herlin Fitriana Kurniawati (3)
Title of Presentation	Correlation Between Electronic Media Usage And Premarital Sex Behaviour Among Teenagers
Reviewer	Ery Khusnal, MNS
Summary of Presentation	<p>Based on demography 2012, 9,3% teenagers have ever involved in pre-marital sex. In 2007-2012, there are increasing cases in pre-marital sex for 2.3%. In Indonesia, there are 584 cases for unwanted pregnancy, one of the result of pre-marital sex for teenagers. The aim are to searching correlation between electronic media usage and premarital sex attitude on students of vocational senior high school of Muhammadiyah 1 Tempel. The design of this research was analytic correlation, with cross sectional time approach. There were 74 students who became sample for this research. Proportionate stratified random sampling was used for the sampling technique. Most of students was 16 years old (66,2%) and most of respondents use electronic media for finding information about sexuality issue (81,8%). About behavior of pre-marital sex, there was 71,6% respondents have adequate attitude toward premarital sex. Based on the result of analysis and discussion, there was have correlation between the use of electronic media and the attitude of premarital sex among students at vocational senior high school of Muhammadiyah 1 Tempel in 2016.</p>
Summary of Discussion	<p>Question from Mrs. Menix sridayanti :</p> <p>Why do you choose vocational senior high school of Muhammadiyah 1 Tempel for your research?</p> <p>Answer :</p> <p>Based on data of government, sleman regency have the highest unmarried pregnancy cases in students. There are increasing cases of that every years in vocational senior high school of Muhammadiyah 1 Tempel. Spiritual approach did not have effect to prevent that case.</p>

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Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Lusi Yunita Sari & Herlin Fitriani Kurniawati
Title of Presentation	The Relationship Between Mother's Knowledge And Developmental Stimulation Behavior Aged 3-5 Years At Kamboja Mother And Child Health Service In Kalongan Village, Mlati, Sleman
Reviewer	Ery Khusnal, MNS
Summary of Presentation	<p>Based on a research conducted by Lauren E in 2012, the motor delay, such as gross and fine motor, usually detected in 3-5 years old. In developing country, more than one of third of them potential in motor delay. In Yogyakarta, there are 11,03 % cases of motor delay. Research method was used correlation method and cross sectional approach. Sample for this research are 32 mothers of 3-5 years old in Kamboja Mother and Child Health Service. Based on results, most of sample mothers (78,12 %) were 20-35 years old, with sufficient knowledge (53,13%). Education have impact for people to understand information about her children development. 46,80% of sample can stimulate her children adequately. So the conclusion, there are significant relationship about mother knowledge with her behaviour to stimulate development of their children (3-5 years old) at Kamboja Mother and Child Health Service in Kalongan Village Mlati Sleman</p>
Summary of Discussion	No question for this session.

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Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Ismarwati & Indah Puji Astuti (2)
Title of Presentation	The Influence Of Sadari Counseling Towards The Knowledge Level And Attitude Of Early Detection Of Breast Cancer
Reviewer	Ery Khusnal, MNS
Summary of Presentation	 <p>In 2013, there are 64.640 breast cancer cases in woman and 61,3% of them died every year. Yogyakarta have the highest case of breast cancer if compared with other province in Indonesia. One of the reason are the lack of knowledge and not recognize about breast cancer. Purposes of the research are to investigate the influence of health promotion on breast cancer with increasing the knowledge and woman attitude as the effort of breast cancer detection early through Sadari method in member of 'Aisyiyah Branch at Banguntapan, Bantul district. The research method was used quasi experiment method with pre-experimental design using one group pretest-posttest design. Twenty sample was taken using Simple Random Sampling in 96 people. Data was analyzed using Wilcoxon Match Paired Test. Before sadari health promotion, all of the woman in sufficient knowledge category (100%). Many patients do not recognize the sign of breast cancer early. There are increasing knowledge at good category as much as 43,8% after counselling. The pre-test result show that 93,8% of samples in sufficient attitude. Health promotion also changes woman attitude in this place. There are increasing woman attitude at good level as much as 81,2%. Based on data analysis, there are significant influence between counselling of Sadari health promotion with knowledge and attitude.</p>
Summary of Discussion	No question in this session.

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Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Diyah Ambarini & Menik Sri Daryanti
Title of Presentation	The Relationship Between Education Level And The Choice Of Birth Attendant On Trimester III In Lendah 2 Primary Health Center, Kulonprogo, Yogyakarta
Reviewer	Ery Khusnal, MNS
Summary of Presentation	<p>Maternal mortality is one of the problem in the world. In Kulon Progo, there are 40 cases of maternal mortality in 2012, and increase every 131.53/100.000 km in 2014. Lendah 2 Primary Health Center in Kulon Progo, Yogyakarta is a public health with the lowest birth attendants. Research method were used cross sectional approach with chi square test. Total respondents were 34 pregnant woman in trimester III. Most of mother have primary education, as many as 17 people (50.0%). All off mother were choose health workers as helpers confinement (100.0%). It was 31 choose in midwifery and 3 people in obgyne. p-value for this data analysis was 0.111 ($P>5\%$). So, there was no correlation between educational level with choice of birth attendant.</p>
Summary of Discussion	<p>Question of Mr. Ery Khusnal, MNS: How much p-value for this this research? Higher or lower than 0,05?</p> <p>Answer: It was 0,111; higher than 0,05.</p>

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Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Elviati & Laily Nikmah
Title of Presentation	Premenstrual Syndrome Care Among Female Teenagers
Reviewer	Ery Khusnal, MNS
Summary of Presentation	<p>Pre-menstrual syndrome was various of physic and emotional indication that occur before menstruation. 75,8% of high school student in Indonesia had ever pre-menstrual syndrome. Based on observation in woman dormitory of Yogyakarta, seven woman had ever pre-menstrual syndrome in 10 total respondents. The aim of this research was to investigate handling of pre-menstrual syndrome in adolescence woman. Qualitative method with phenomenological approach was used in this research. There was 4 subject for interview about pre-menstrual syndrome. Pre-menstrual syndrome occurs at pre, post and when menstruation. Risk factor from pre-menstrual syndrome was stress, lack of physic activities and eating pattern. It was four type of pre menstrual syndrome; A, H, and C. There was different way for handling it, depent on type of pre-menstrual syndrome. For example communication with friends, take exercises, or spiritual approach. Teenagers can improve their knowledge about pre-menstrual syndrome to know how to solve it.</p>
Summary of Discussion	No question for this session

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Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	‘Aisyiyah University of Yogyakarta
Speaker/Presenter	Retno Mawarti & Rekina Endi Firmaningrum
Title of Presentation	Factors Related To The Attendance Of Mothers Who Have Under Five Children To Integrated Health Cervice
Reviewer	Ery Khusnal, MNS
Summary of Presentation	<p>Case of malnutrition in Indonesia, especially Yogyakarta was 4% in 2013. Umbulharjo have lowest malnutrition value in Yogyakarta. One of solution to solve it was incerase by elucidation in Posyandu. The aim of this research was to investigate factors that influence presence of toddler in Posyandu. Survey analytic and cross sectional approach was used in this research. Samples was 79 mothers of toddler at Warungboto’s Posyandu in Umbulharjo. Most of mothers was 20-29 years old, and 34 mothers always bring her toddler to Posyandu regularly. 33 people of that have good knowledge about healthy of her toodler and Posyandu. Most of mothers have graduated in senior high school, and be a carier woman with salary over Rp 1.500.000,- (42 people). 20 mothers just haver 1 child. Based on data analysis, there was no correlation between knowledge of mothers, level of education, mother’s salary with her attendance in Posyandu. But, there was correlation between ages of mothers, mother’s occupation and amount of children with attendance.</p>
Summary of Discussion	No question in this session

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Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	‘Aisyiyah University of Yogyakarta
Speaker/Presenter	Fitri Giyanti & Sri Wahtini
Title of Presentation	Effect Of Iron Supplementation On Hemoglobine Levels In Adolescents
Reviewer	Ery Khusnal, MNS
Summary of Presentation	<p>Amount of anemia prevalency, especially in Yogyakarta, was 35% in 2013. Based on Health Ministry, long period effect of anemia occurs at pregnancy because fetus will be malnutrition. Quantitative method with Quasi analysis, and non randomized approach was used in this research. Thirty teenagers at 1 Ponjong Vocasional High School, Kulon Progo Regency will be samples for research. Samples can be divided into two groups, control (leaflet) and experiment (tablet of fe). There was significant difference hemoglobin between control and experimental treatment, as much as 40% in control and 93,3% in experimental group. Result of p-value test from experimental treatment was 0,001. It's means distributing of Fe tablets have correlation with increasing of hemoglobin.</p>
Summary of Discussion	<p>Question from Mrs. Retno Mawarti: The title is not suitable with contents.</p> <p>Answer: It will be input for the author.</p>


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Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Tri Wahyuning Pujiastuti & Rolita Efriani
Title of Presentation	Relation Work With Mother In Exclusive Breastfeeding Infants 6-12 Months In Health Center Danurejan I Yogyakarta City Year 2016
Reviewer	Ery Khusnal, MNS
Summary of Presentation	<p>Based on UNICEF, exclusive breastfeeding in developing countries only 39%. Scope of exclusive breastfeeding in Yogyakarta by 70.8% and the lowest was in Yogyakarta City as much as 54.9%. Health Center of I Danurejan is a health center with the lowest exclusive breastfeeding in the city of Yogyakarta. The aim was to investigate relation of mother's occupation with exclusive breastfeeding in Health Center of I Danurejan. Methods of research were analytic survey and correlative description approach. Sixty mothers of infant with age 6-12 month were used as sample for research. Most of mothers in this research were 20-35 years old (78,3%), with 48,3% graduated at senior high school. Respondents did not work outside at home, didn't look for money and didn't leave her children over than 8 hours as much as 27 respondents (45%), while 13 respondents work outside at home, look for money and leave her children over than 8 hours (21,7%). Most of mothers have support exclusive breastfeeding from her husband and midwife. Respondents who did not give exclusive breastfeeding as much as 31 respondents (51.7%), while exclusive breastfeeding as much as 29 respondents (48.3%). Based on test of p-value, there was a correlation between mother's occupation with exclusive breastfeeding in Health Center of I Danurejan.</p>
Summary of Discussion	<p>Question from Mrs. Menik Sri Daryanti:</p> <ol style="list-style-type: none"> 1. Why use mother's occupation as a free variable for this research? In fact, there are a lot of career mother give her infant exclusive breastfeeding. 2. What basis of time occupation division? <p>Answer:</p> <ol style="list-style-type: none"> 1. It is because most of mothers in Danurejan graduated in senior high school, and most of them have less information about exclusive breastfeeding. 2. It is used journal article, and usually time of occupation for employmen is 8 hour every day.

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Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Siti Istiyati
Title of Presentation	The Evaluation of Mother's Ability to Breastfeed After Early Initiation of Breasfeeding
Reviewer	Ery Khusnal, MNS
Summary of Presentation	Breastmilk is important nutrition for newborn babies. Health Ministry in theirs decision explain about ten steps for breastfeeding successfully. Aims for this research were to investigate mothers ability in early initiation of breastfeeding, midwife nvolvevement in early initiation of breastfeeding, obstacle in early initiation of breastfeeding, and analysis of successful early initiation of breastfeeding in PKU Muhammadiyah Hospital. Qualitative method and phenomenological approach was used in this research, with three mother in Sakinah Room as sample. Third of sample have early initiation of breastfeeding successfully and midwife help it, although act of midwife was not maximum. Obstacle was occur because their anxiety if breastmilk didn't came and painful because surgery trace. Early initiation of breastfeeding was initial process in breastfeeding. Third mothers will continue to doing breastfeeding for six months later.
Summary of Discussion	<p>Question from Mrs. Ismarwati: What's method to get data from sample?</p> <p>Answer: Method to get data from sample is interview with sample informant. Informant was used have variable condition to investigate effectively early initiation of breastfeeding in various cases of birth.</p>

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Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Siti Zakiah Zulfa & Eka Fitriyanti
Title of Presentation	The Effect Of Green Grass Jelly (<i>Cyclea Barbata</i> Miers) On The Blood Pressure Of Menopause Women With Hypertension
Reviewer	Ery Khusnal, MNS
Summary of Presentation	 <p>Hypertension occur along with increasing of ages. Prevention of hypertension is necessary, by pharmacology or therapy methods. Non pharmacology (therapy) method can be done using traditional herbs plants. One of plant that widely used by the people in Indonesia, especially island of Java to prevent hypertension are green grass jelly (<i>Cyclea barbata</i>, Miers). The aim of this study was to investigate effect of green grass jelly or <i>Cyclea barbata</i>, Miers on the blood pressure of menopause women with hypertension in Sleman 3 Triharjo Sleman Yogyakarta. This study was used a quasi experiment method with time series design (Ramadhan and didn't). Respondents in this study were menopause women with hypertension, a many as 12 people who were taken using purposive sampling method based on the inclusion criteria. Data was analyzed using statistical test of Wilcoxon test for systolic blood pressure, and a statistical test Paired T-Test for diastolic blood pressure. Most of respondents have ages between 45-50 years old, means of systolic blood pressure was 154,58 mmHg and 92,15 mmHg for diastole blood pressure. After consuming green grass jelly, decreasing blood pressure occurs in respondent blood pressure. It was 132,50 mmHg for systolic and 81,67 for diastolic blood pressure. At Ramadhan, there was decreasing blood pressure to 120/80 mmHg in the 5th blood pressure check and 6th day green grass jelly consumption. The statistical test results of Wilcoxon Test and Paired T-Test showed that p-value less from 0.05. So, there was an effect of green grass jelly or <i>Cyclea barbata</i> Miers on the blood pressure of menopause women with hypertension in Sleman 3 Triharjo Sleman Yogyakarta.</p>
Summary of Discussion	<p>Question from Mr. Ery Khusnal, MSN. How to check systolic and diastolic blood pressure in respondents?</p> <p>Answer: It was checked 4 times of blood pressure before and after treatment, and then have average of it.</p>

Seminar Minutes

Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Hartati Himawan & Fathiyatur Rohmah
Title of Presentation	The Correlation Between Nutritional Status and Obedience to Take Fe Tablet and Anemia In 3rd Trimester Pregnant Women
Reviewer	Ery Khusnal, MNS
Summary of Presentation	<p>Anemia in pregnancy woman is related with mortality in mother and baby, including risk of abortion, premature, and low height baby born. Based on Health Department in Pleret Public Health Center, Bantul, Yogyakarta, evidence of anemia in pregnancy woman still over 50% (51, 36). Method in this research was used analytic survey method, with cross sectional approach. Sampling technique was used accidental sampling in thirty nine pregnancy woman, with chi square test for data analyses. 48,7% respondents was 30-39 years old. Most of respondent have graduated in senior high school (61, 5%). Twenty one respondents (53,8%) didn't have anemia, but 38,8% and 7,7% have light and moderate anemia, respectively. Most of respondents have normal nutrient status as much as 32 people, but 14 people of them have anemia, including light and moderate anemia. Based on punctual of Fe tablets consumption, twenty eight people didn't consumption punctually. There was significant correlation between anemia with nutrient status and punctual of Fe tablets consumption, based on p-value test.</p>
Summary of Discussion	<p>Question from Mr. Ery Khusnul, MNS: Can we summarize from p-value test if height of A variant followed by height of B variant? Answer: Yes, we can.</p> <p>Feedback from Mr. Ery Khusnal, MNS: Actually, no, we can't. Because p-value test just showed there are any correlation or not of two variants.</p> <p>Question from Mrs. Tri Wahyuning PA: Are all of correspondent in this research was pregnant woman in third semester? Answer: Yes, we are. All of correspondent in this research was pregnant woman in third semester.</p>

Seminar Minutes

Seminar Date	20 October 2016
Seminar Name	International Conference on Maternal, Child and Family Health 2016
Seminar Location	'Aisyiyah University of Yogyakarta
Speaker/Presenter	Sholaikhah Sulistyoningtyas
Title of Presentation	The Correlation Between Inducted Partum, Prolonged Partum, And Macrosomia Babies With Postpartum Haemorrhage At Panembahan Senopati Public Hospital Bantul
Reviewer	Ery Khusnal, MNS
Summary of Presentation	<p>Eighty percent of maternal deaths are caused by haemorrhage, infection, pre-eclampsia, and unsafe abortion. Based on the Report Routine Program Maternal Health Provincial Office in 2013, causes of maternal mortality in Indonesia is still dominated by bleeding (32%), pre-eclampsia (25%), infection (5%), prolonged labor (5%), and abortion (1%). In 2014, there was 30 cases of hemorrhage in hospitals Panembahan Senopati Bantul. Arround in 2014 to 2015, there was four maternal deaths and 3 of them was caused by postpartum hemorrhage. The aim of research was to analyze factors related to incident postpartum hemorrhage in Panembahan Senopati Bantul Hospital in 2014-2015. The study employed analytical survey with case control method. The samples of the study were 114 respondents consist of all partum mothers who had postpartum haemorrhage at Panembahan Senopati Public Hospital Bantul, with 57 respondents as case group and 57 postpartum mothers without haemorrhage as control group. Based on the analyzed samples of 57 (100%) haemorrhage respondents, 32 (56%) of them got mild induction, 30 (52%) respondents had prolonged labor, and 8 (14%) respondents had macrosomia babies. There was correlation among inducted partum, prolonged partum, and macrosomia babies with postpartum haemorrhage cases at Panembahan Senopati Public Hospital Bantul based on p-value test.</p>
Summary of Discussion	<p>Question from Mr. Ery Khusnal, MNS: What's microseome? What are relation between hemorrhage with induced partum, prolonged partum, and macrosomia babies?</p> <p>Answer: Newborn baby's weight is over than 4000 gram. Relation between hemorrhage with induced partum, prolonged partum, and macrosomia babies are induced partum, prolonged partum and macrosomia babies can causing hemorrhage.</p>



