O-21

AGE RELATIONSHIP WITH SEVERE PRE ECLAMPSIA PREVALENCE IN SUNDARI HOSPITAL MEDAN

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ABSTRACT

Preeclampsia and eclampsia is the leading cause of death after bleeding and infection. Pre eclampsia is a common severe and cause MaternalMortality Rate(MMR) ranges between 9.8% -25.5%. This study aims to determine the relationship of age with the prevalence of severe preeclampsia in Sundari Hospital Medan. This study was a cross sectional study design with quantitative study. Samples were 94 persons who had severe preeclampsia in Sundari Hospital Medan. Data were then analyzed with chi square test. The results of the study reported that the prevalence of mothers delivered with severe preeclampsia in Sundari Hospital, Medan is as much (24.5%).Bivariate analysis results obtained maternal age has a significant relationship with the occurrence of pre-eclampsia, while parity, gestational age and a history of preeclampsia did not show a significant association. Recommendation for pregnant women to antenatal least four times during pregnancy can prevent severe preeclampsia.

Keywords : maternal age and preeclampsia.

BACKGROUND

One indicator of the health of a country is the level of maternal and infant mortality, this was due to the mother and baby are groups that have a large degree of vulnerability to disease and death. MMR in Indonesia is still higher other ASEAN countries such as Singapore which is only 3 /100,000 live births (LB), Brunei Darussalam 24 / 100,000 LB, Philippines 99, Malaysia 29, Vietnam 59, Thailand 46. Even Indonesia is the highest in MMR compare countries poor Asia such as Cambodia, Myanmar, Nepal, Sri Lanka, India, Bhutan, Bangladesh and East Timor[1].

The mortality rate in Indonesia is still high compared to other ASEAN countries. Based on the survey Demographic and Health (IDHS) in 1997 the MMR of 373 per 100,000 LB and a decrease of 307 per 100,000 LB in 2003 and in 2007 the maternal mortality rate in Indonesia reached 228 per 100,000 LB and IMR 34 per 1000 LB. However this is not in accordance with the target to be achieved nationally in 2010, amounting to 125 per 100,000 LB[2].

While in North Sumatra province in maternal mortality in the last 5 years, which was in 2006-2010 showed a declining trend, consecutive years of 360 / 100,000 LB in 2002, 345, 330, 320, 315, 328/100 000 LB. This figure is estimated will not decline until 2013[3]

The main causes of maternal death there is no special surveys, but nationally is caused because of childbirth complications 45%, retained placenta 20%, rips through the birth canal or lacerations 19%, obstructed labor 11%, bleeding and eclampsia each - each 10% of complications during the postpartum 5% and 4% of puerperal fever[3].

Severe preekslampsi is a complication of pregnancy characterized by hypertension (170/90 mmHg), edema and protein urine. The cause severe preeclampsia is not known with certainty, but a predisposing factor for preeclampsia is the first pregnancy weight, age, pregnancy spacing, social status, hydatidiform mole, history of hypertension, diabetes

mellitus, kidney disorders, family history and obesity suffer from preeclampsi. The prevalence of preeclampsi is more common in the age <20 years[4,5].

Results of preliminary studies conducted in hospitals Sundari Medan, the prevalence of severe preeclampsia had increased which in 2011 amounted to 3.23% increase to 8.04% in 2012 and found cases of severe preeclampsia in all age groups. From these data the authors wanted to know the relationship of age with severe preeclampsia prevalence at Sundari Hospital, Medan.

Formulation of the problem the prevalence of severe preeclampsia in Medan Sundari Hospital showed an increase from 2011 to 2012 amounted to (4.81%), namely (3.23%: 8.04%) and severe preeclampsia cases found in all age groups. For that to know the relationship of maternal age with the prevalence of severe preeclampsia in Sundari Hospital Medan.

Methode

The research instrument used, namely sheet the identity of the subject of research and Quesioner. Study Design: This study is a cross sectional analytic approach. The population of this research is all mothers delivered in RS Sundari Medan, with a sample of 94 people.

Data obtained from the medical record of the patient using data collection forms medical record and interviews with respondents. After determination of survey respondents, then researchers explain the intent and purpose of the research and subject of research are asked willingness to become respondents, along with the signing of informed consent as evidence of a willingness to be respondent.

To find out the identity of respondents researchers conducted interviews with respondents. The results of the interview included in the sheet identity of respondents. Sheets respondents' identities were coded respondents to further facilitate researchers in the implementation of data processing. Data were then analyzed with chi square test.

RESULT

Table 1: Frequency Distribution of Severe Preeclampsia, Age, Parity, Age Preeclampsia in Pregnancy And History at Sundari Hospital, Medan

Variable	Frequency (%)	
PEB		
Yes	8	(25,5%)
No	84	(74,5%)
Age		
High Risk	27	(28,7%)
Low Risk	67	(71,3%)
Parity		
High Risk	60	(63,8%)
Low Risk	34	(36,2%)
Pregnancy Age		
High Risk	84	(89,4%)
Low Risk	10	(10,6%)
Severe preeclampsia History		
Yes	8	(8,5%)
No	84	(91,5%)

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The above table shows that mothers delivered with severe preeclampsia as much 25,5%, the proportion Severe Preeclampsia mostly inlow-risk age is 67 people (71.3%), high risk parity of 60 people (63.8%) with gestational age ≥37 weeks is 84 people (89.4%). There is a family history of suffering Severe Preeclampsia for 8 people (8.5%).

Analysis Bivariable

Tabel 2: Respondent CharacteristicsAnalysis ResultsrelationshipwithSevere Preeclampsia (n =94)

Variabel	Severe Preeclampsia		χ^2	*p*	RP	95% CI
	Yes (%)	No (%)				
Mothers Age						
High Risk	15(55,6)	12 (44,4)	13,32	0,012	5,73	1,04-1,55
Low Risk	12(17,9)	55 (82,1)				
Parity						
High Risk	18 (30,0)	42 (70,0)	0,03	0,867	1,19	0,78-1,22
Low Risk	9 (26,5)	25 (73,5)				
Pregnancy Age						
Aterm	22 (26,2)	62 (75,8)	2,30	0,129	1,41	0,92-1,54
Not aterm	2 (20,0)	8 (80,0)				
Preeclampsia History						
Yes	4(57,1)	3(42,9)	7,79	0,01	3,7	1,07-1,57
No	23(26,4)	64(73,6)				

Keterangan :
χ^2 = *Chi-Square* *p* = *p-value*
RP = *Ratio Prevalens* CI = *Confidence Interval*

From the above data it can be seen prevalence of severe Preeclampsia at high risk age of 15 people (55.6%). Mothers who have a high risk for the occurrence severe preeclampsia chance of 5-6 times compared with low-risk maternal age. Statistically age had a significant relationship with the occurrence of severe preeclampsia. The prevalence of severe preeclampsia in high risk parity as many as 18 people (30%). The prevalence of severe preeclampsia was greatest in the group with gestational age ≥ 37 weeks at 22 people (26,27%).

DISCUSSION

Preeclampsia is a condition that is typical in pregnancy characterized by symptoms of edema, hypertension and protein urine that occurs after 28 weeks gestation and unknown causes. The prevalence of severe preeclampsia Based on the overall results of the study found the prevalence of mothers delivered with severe preeclampsia in the period January-December 2013 there were 112 respondents from the 1393 mothers who gave birth at the Hospital Sundari, Medan or 8.04% higher than the prevalence of severe preeclampsia in maternal years in 2012 as many as 50 mothers (3.23%) of the 1548 birth mothers. The high prevalence of severe preeclampsia was heavy in the hospital is probably due Hospital Sundari is a referral hospital of the health center and the maternity hospital that is around, but research is only done within the scope of small, only one hospital alone so the results may not be generalizable to other hospital.

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Relationship Dependent Variable and Independent Variables

Maternal age with the prevalence of severe preeclampsia

Maternal age with the prevalence of severe preeclampsia From the results of the univariate analysis of the prevalence of severe preeclampsia distribution by age showed that the prevalence of severe preeclampsia highest proportion found in high-risk age group is 55.6% compared with low-risk age group (20-35 years) is 17.9%. The results of calculations with the Chi-Square statistical obtained an association between maternal age at which the prevalence of severe preeclampsia OR = 5.73, this case illustrates that maternal age, <20 years / 35 years had 5.73 times the risk factors for preeclampsia occurs when compared with maternal age 30-35 years.

It is there conformity with research conducted by Koeswarsono et al (1991) in the RSU GunungWenang, Manado (1991), which reported the highest frequency of patients with eclampsia are at the age of 15-20 years, while the highest frequency of severe preeclampsia occurs at age> 35 years, Agus (2001) also reported the results of his research found that age <20 years have a risk of severe preeclampsia was 1.75 times and> 35 years had 2.47 times the risk of preeclampsia compared maternal age 20-35 years. In the study conducted by Septi (2007) in RSUPN Dr. CiptoMangunkusumo also found that the highest proportion of people with severe preeclampsia was highest at age <20 / .35 years by 37.5% compared to the 20-35 years age as much as 9.30%. According Sudhaberata (2001) based on the weight distribution of the prevalence of preeclampsia was found in the age group of maternal age <20 years> 35 years. (5) also said in his mother's age> 35 years increases the risk of severe preeclampsia. Women are encouraged pregnant at the age of 20-35 years. The high prevalence of preeclampsia was heavy in the age group <20 /> 35 years because this group is included in the high risk group, it is caused when viewed in terms of biological growth and reproductive development is not yet fully ready or mature, the young woman is not ready to bear the moral burden that the lack of conscientiousness prenatal care (Astuti, 2002) andmaternal age> 35 years in which the health condition and reproductive gone downhill.

Age is an important part of the reproductive status. Age associated with increased or decreased function of the body that affect a person's health status. A good age for pregnant women is 20-35 years. Cunningham states that pregnant teenagers aged women for the first time and who was pregnant at the age of> 35 years would have a high risk to develop preeclampsia (Indriani, 2012). Sumarni research results (2014) showed that most respondents aged 28-35 years. According to Lamminpa (2012)9 in Finlandi show pregnant women aged over 35 years had 1.5 times more likely to have pre-eclampsia compared to women under 35 years old. Pregnant women with pre eklampsia have a more severe risk of pregnancy such as premature labor and delivery by caesarean section. Other risk pregnancies that occur asphyxia 50% and 40% need NICU care.

In addition to the life of other factors such as smoking, obesity, diabetes and hypertension before pregnancy becomes motivating factors occurs preeclampsia.

Furthermore, Lamminpa states that maternal age become independent obstetric risk factors for early onset preeclampsia and fetal growth impaired. It has also been suggested that the risk of chronic and pregnancy-related hypertension increase, the increasing low birth weight and premature birth.

Parity

Parity with the prevalence of severe preeclampsia From the results of the univariate analysis showed that patients with the most severe preeclampsia in high risk groups, namely maternal P1 / P≥4 as much as 30% compared with maternal P2 / P3 is as much as 26.5%. Statistical analysis showed no significant relationship. This is not in accordance with the results of research conducted by Agus (2001) reported that the first parity occurred preeclampsia have a risk weight of 0.62 times compared to the second and third parity. Research conducted by Septi (2007) in RSUPN Dr. CiptoMangunkusumo also reported patients with severe preeclampsia in maternal parity first or fifth as much as 21.15% higher than the second and fourth parity ie 6.00%. He concluded that the first or fifth parity had 4.2 times the risk of severe preeclampsia occurs. The results of this study do not fit well with the theory that the first pregnancy increases the risk of preeclampsia was ten times more frequently(6). Cunningham in his book suggests McCartney (1964) have studied the results of renal biopsies from women with preeclampsia and find gromerulonefritis at 205 nullipara(5). Primigravida have a higher risk for severe preeclampsia occurs(7). With adequate nutrition and regular inspection of antenatal care can reduce the risk of preeclampsia in maternal and the administration calcium diet reduces the occurrence of preeclampsia(7).

Gestation with the prevalence of severe preeclampsia The results obtained from the univariate analysis, patients with severe preeclampsia highest proportion was found in the age group of high-risk pregnancies (≥ 37 weeks) as many as 22 people (26,27%), whereas in the group of gestational age <37 weeks, of two people (20%). OR = 1.41, this case illustrates that maternal age ≥ 37 weeks' gestation have severe preeclampsia risk of 1.41 times compared with birth mothers with gestational age <37 weeks. The results of calculations by the Fisher exact statistical test obtained no association between the occurrence of gestational age with severe preeclampsia. This is not in accordance with the theory that the more her pregnancy affect normal placenta changes such as thickening of blood vessel walls and villi that accelerate the process of preeclampsia and hypertension that generally occur in the third quarter(8). Furthermore in general preeclampsia and eclampsia develop after the 20th week of her pregnancy and increasingly more likely onset of preeclampsia(7).

Gasvarovic (2015) (13) found that many significant differences were apparent between early-onset preeclampsia and late-onset preeclampsia. Groups were significantly different in maternal characteristics according to maternal parity, grade of hypertension, liver enzyme levels and maternal BMI. It is unclear why the primigravid state is such an important predisposing factor. Hypertension is generally the earliest clinical finding of preeclampsia and is the most common clinical clue to the presence of the disease.

A History of Preeclampsia

The result is patients severe preeclampsi largest at birth mothers with a history of preeclampsia (genetic) that is equal to 57.1% or 4 of 7 risks groups. A history of poor labor triggered a predisposing factor. The results of calculations with fisher exact statistical test can be concluded there is no significant relationship between a history of preeclampsia (genetic) and the prevalencepreeclampsi, OR = 3.71. This illustrates that the birth mothers with a history of preeclampsia have a risk of preeclampsia compared with 3.71 times occur mothers who do not have a history of preeclampsia (genetic).

Our research found discrepancies with the theory advanced by (6) which states a family history of a genetic relationship, mother or sister increased risk of 4-8 times, in his

book also stated that the basic conditions contribute to maternal and are the factors that determine the occurrence of preeclampsia, Chesley and Cooper (1986) studied the sister, daughter, granddaughter and daughter-eclampsia than women who give birth, they concluded preeclampsia very likely lowered. Cooper and Liston (1979) observed that susceptibility to preeclampsia depend on a recessive gene. (5). With regular inspection of Antenatal Care in accordance with the policy program where antenatal visit should be done at least four times during pregnancy which aims to recognize early complications or abnormalities can be pursued early detect the presence of severe preeclampsia.

CONCLUSIONS AND RECOMMENDATIONS

Conclusion

Most respondents who suffered preeklampsi on low-risk age groups, as big as (71.3%), Parity is the group most at risk parity (P1 / ≥P4), as big as(63.8%), Gestational age group most at risk of gestational age is 84 respondents (89.4%). Variable history of preeclampsia are at less risk groups as big as (91.5%). There is a significant association between maternal age with the prevalence of severe preeclampsia. Variable parity, gestational age, and history of preeclampsia did not show any significant relationship with the occurrence of severe preeclampsia.

Suggestion

For health workers are expected to provide health education for pregnant brides to plan a healthy reproductive age. The midwife may make early detection of preeclampsia on each visit ante natal care and documenting midwifery care properly for observed condition of pregnancy pregnant women.

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O-22

COMPARISON OF CHOLESTEROL LEVELS IN OBESITY AND NON OBESITY AT POLTEKKES MEDAN

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ABSTRACT

Background; Obesity has become a problem of public health and nutrition in the world. The prevalence of obesity is increasing in recent years and has led to serious health problems. Globally at least 2.8 million deaths each year linked to weight gain and obesity. Obesity that persist and excessive food intake can cause metabolic system disorders such as hypercholesterolemia. Conditions of excess cholesterol in the blood can cause atherosclerosis, coronary heart disease, stroke, and high blood pressure that can lead to death. Obesity is often associated with hypercholesterolemia condition, but sometimes also high cholesterol levels in people who have normal weight. Purpose: This study aimed to compare the levels of cholesterol in adults with obesity and non-obese. Method: This type of research is descriptive analytic with cross sectional design. This research was conducted in the Polytechnic Health Ministry of Medan. The study population numbered 375 sample size is determined based on inclusion criteria and taken by accidental sampling. Test data used is T test with significant level of p = 0:05. Result: The results of this study indicate that there is no difference in cholesterol levels between people who are obese with non-obese where the average cholesterol levels of obese people is 188.89 while the average cholesterol level non-obese person is 190.11. T test results showed that the value of t = 0932 which means greater than 0.05 which means that the two groups are identical (no difference).Conclusion: There is no difference in cholesterol levels between people who are obese with non-obese

Keywords : Obesity, non Obesity, cholesterol

INTRODUCTION

Obesity has become a problem of public health and nutrition in the world, both in developed countries and developing countries. The prevalence of obesity is increasing in recent years and has led to serious health problems. Globally at least 2.8 million deaths each year linked to weight gain and obesity which 300,000 occur in the United States and 350,000 in Southeast Asia[1,2.] Based on data from the Non communicable Disease in South-East Asia Region in 2008 the prevalence of individuals with a BMI ≥ 25 kg / m2 increase in some countries and in Indonesia the percentage reached 16% in men and 25% in women [2] . Data taken from the Basic Health Research (Riskesdas) in 2010 reported that 11.65% of adults aged ≥18 years are obese and this figure increased in 2013, namely 19.7% of men aged ≥18 years were obese, while in women reached 32.9% [3]. For North Sumatra data obtained from the Regional Health Research (Riskesda) in 2007 showed the percentage reached 11.9% overweight and 13.5% obese. In 2010 the percentage of overweight males 10.9% and 12.8% in women, while the percentage of obese 9.4% in men and 17.4% in women [3].

The increasing of number of people with obesity have an bad impact for health, since obesity is a chronic disease that is polygenic or monogenic that can lead to some condition

or pathological dysfunction [4]. Some things that can affect obesity, including genetic factors, food intake, neuro endocrine mechanisms, social, cultural and lifestyle [5]. In Indonesia, the lifestyle changes that leads to Westernization causes changes in diet coupled with a lack of physical activity can have an impact on the increased risk of obesity [6,7].

Obesity is a condition of an imbalance between height and weight due to the amount of excess body fat tissue, generally deposited in the subcutaneous tissue, but due to disturbed or damaged then the lipid accumulating in layer of visceral fat [8]. Obesity is composed of two kinds of general obesity and central obesity / abdominal. General obesity can be seen through the indicator BMI ≥ 25 kg / m2 (Asia Pacific, 2000) or ≥ 30 kg / m2 (WHO criteria), while central obesity / abdominal indicators can be detected through the ratio of waist and hip circumference (waist hip ratio). According WHO (2008) limits ratio waist and hip for central obesity in Asian countries including Indonesia in men is> 0.90 and in women> 0.85. Central obesity is closely related to the occurrence of metabolic syndrome wherein one among its sign is the increase in total blood cholesterol.

Conditions obesity will impact in an increased risk of hypertension, diabetes mellitus, cardiovascular disease, dyslipidemia, renal failure and inflammatory responses[9]. Components dyslipidemia including high levels of total cholesterol, triglycerides, LDL and low HDL levels have a major role in the increase in atherosclerosis and cardiovascular disease. Total cholesterol including one indicator to determine the risk of cardiovascular disease. Hypercholesterolemia or increase in total cholesterol levels generally do not cause symptoms, so the examination of kolesterol levels for the prevention and routine checks of cholesterol levels necessary as a preventive measure for individuals who are at high risk [10].

Increased levels of cholesterol are a risk factor for heart disease and stroke have estimates of mortality in the world about 2.6 million. The highest mortality rate of about 54% in Europe, after that America 48%. Africa 22.6% and Southeast Asia region showed 29.0%[11].

Obesity that persist and excessive food intake can cause metabolic system disorders such as hypercholesterolemia. The setting of cholesterol metabolism will run normally when the amount of cholesterol in the blood sufficient and does not exceed the normal amount required. But in obesity can otherwise be an interruption in the regulation of fatty acid that increases the levels of triglycerides and cholesterol esters. People who are overweight more often have blood cholesterol levels were higher when compared with those of normal weight. Results of research Shah et al in 2008 showed that in people who are obese tend to have high total cholesterol levels

Increased blood cholesterol can also be caused by the increase of cholesterol in verylow- density lipoprotein and low-density lipoprotein secondary because of the increased triglycerides are lots in circulating if the event of excessive fat accumulation in the body.

Cholesterol is a natural substance with physical properties is fat but has the formula steroid. Cholesterol is an essential building substance for the body's vital substances synthesis such as cell membranes and insulation material around nerve fibers, as well as sex hormones, and adrenal, vitamin D and bile acids. However, when consumed in excessive amounts can cause increased cholesterol in the blood is called hypercholesterolemia, even in the long term can lead to death. Blood cholesterol levels tend to be elevated in people who are overweight, lack of exercise, and smokers.

The condition of hypercholesterolemia can lead to problems such as atherosclerosis (constriction of the arteries), coronary heart disease, stroke, and high blood pressure. Total levels blood cholesterol recommended is <200 mg / dl, when ≥ 200 mg / dl means the risk

for heart disease increases. Data Basic Health Research (Riskesdas) 2007 declare that the 45-54 years age group have at high risk of coronary heart disease or stroke

The relationship between obesity and high blood cholesterol levels have been reported both in children and adults. Gorces C et al reported that obesity is associated with abnormalities of cholesterol in the blood where increased cholesterol in the blood happen at the age more than of 30 years.

This study aims to determine how to comparison the cholesterol levels in people with obesity and normal weight or non-obese.

MATERIALS AND METHODS

The research instrument used, namely sheet the identity of the subject of research, scales of weight of body with Digital Scale capacity up to 150 kg with a level of accuracy of 0.1 kg, the measuring instrument height / microtoise capacity up to 200 cm with level of accuracy of 0.1 cm, tool of measuring of cholesterol levels total (autocheck), sticks cholesterol , cotton , alcohol, lancet devices.

The data collection is done by: Researchers ask permission from the person in charge of the Ministry of Health Poltekkes Medan Polyclinic by showing the research permit. Furthermore, for sampling carried out by accidental sampling technique.

After determination of survey respondents, then researchers explain the intent and purpose of the research and subject of research are asked willingness to become respondents, along with the signing of informed consent as evidence of a willingness to be respondent.

To find out the identity of respondents researchers conducted interviews with respondents. The results of the interview included in the sheet identity of respondents. Sheets respondents' identities were coded respondents to further facilitate researchers in the implementation of data processing.

Further measured the weight, height, and total cholesterol levels at the study subjects. Body weight was measured using scale of weight body with Capacity up to 150 kg with a level of accuracy of 0.1 kg. Height of body was measured using a microtoise with length up to 200 cm with a level of accuracy of 0.1 cm. At the time of measurement of footwear research subjects were removed and standing in an upright position. After obtaining data on weight and height BMI calculation is then performed in accordance with the formula BMI calculation, then the results are recorded and explained to the research subject. Total cholesterol was measured with autocheck.

RESULTS

The total number of samples as many as 57 people working in the Polytechnic health ministry of medan that taken by accidental sampling and categorized as obese and non-obese based on measurements of body mass index (BMI). furthermore the data samples is analized, then performed statistical data processing using T test

A.1. characteristics of Respondents

Characteristics of respondents can be seen in the table below:

Table 4.1. Frequency Distribution of Respondents by Age At a staff of polytechnic

health ministry of Medan

No	Age (year)	Frequency	%
1	25 – 34	11	19.30
2	35 – 44	20	35.08
3	45 – 54	17	29.82
4	55 – 64	9	15.80
	Total	57	100.00

From table 4.1. it can be seen that of the 57 samples that have been studied, the majority were in the age group 35-44 years of 20 people (35.08%).

Table 4.2. Frequency Distribution of Respondents by Gender At a staff of polytechnic health ministry of Medan

No	Gender	frequency	%
1	female	41	71.93
2	Male	16	28.07
	Total	57	100.00

From table 4.2. it can be seen that of the 57 samples that have been studied, the majority are women many as 41 people (71.93%).

Table 4.3. Frequency Distribution of Respondents by IMT At a staff of polytechnic health ministry of Medan

No	IMT	frequency	%
1	non obesitas (‹ 30 kg/m2)	38	66.67
2	Obesitas (≥ 30 kg/m2)	19	33.33
	Total	57	100.00

From table 4.3. it can be seen that of the 57 samples have been studied based on BMI, the majority of the samples in the category of non-obese amounted to 38 people (66.67%).

Table 4.4. Respondents Frequency Distribution Based on Cholesterol Levels In a staff of polytechnic health ministry of Medan

No	Cholesterol Levels	Frequency	%
1	≤ 145 mg/dl	11	19.30
2	> 145 mg/dl	46	80.70
	Total	57	100.00

From table 4.4. it can be seen that of the 57 samples that have examined cholesterol levels, the majority have cholesterol levels> 145 mg / dl totaled 46 people (80.70%).

2. Analysis Bivariat

Table 4.5. Comparison of Cholesterol Levels In obese and non obese respondents.

Category	Cholesterol				
	Mean	SD	F	Sig.	Sig. (2-tailed)
Non Obesitas	190.11	52.734	.340	.562	.932
Obesitas	188.89	44.233			

A comparison of the cholesterol levels between obese and non-obese groups can be seen in table 4.5. The average value of standard deviation for cholesterol levels in obese group was 44 233 ± 10 148 mg / dl, while the non-obese group was 52 743 ± 8555 mg / dl. It showed the average cholesterol level was higher in non-obese but did not have significant differences.

Based on the results of t test, the obtained value of F = 0:34 and significanty 0562 (p> 0.05), which means that the two groups: obese and non-obese identical or not there is a significant difference between the results of the cholesterol obese and non-obese groups.

From the test results significantly t test, t values obtained 0932 or> 0.05 meaning that both the average identical (average cholesterol between the obese and non-obese did not differ).

If seen from the relationship between cholesterol levels in obese and non-obese groups based on test results obtained by linear regression R = 0.026, meaning that there is no relationship between cholesterol levels and weight gain.

DISCUSSION

Based on the characteristics of the respondents was found that the age category most respondents are in the age range 35-44 years (35.08%), while the sex of the respondents the most were female (71.93%), for the largest percentage BMI categories are non obese as much as 66.67% and based on the results of largest cholesterol checks in the category> 145 mg / dl. If seen from the characteristics of the respondent that there can be seen that cholesterol levels are obtained from the staf at the polytechnic health ministry of medan average are in the category of high values (> 145 mg / dl) it is possible for the average respondents ranged in age from 35 -44, according to previous studies cholesterol levels tend to be high in the age range above 30 year[12], in addition to the majority of the samples were female which high cholesterol levels are also more common in women because of estrogen-related hormone wherein estrogen is also associated with the formation of cholesterol[13] .

The results showed that the average cholesterol levels in obese and non-obese group did not have significant difference for 0562 meaningful significance p> 0.05. after linear regression was found the value of R = 0.026, which means there is no relationship between cholesterol and weight gain.

Cholesterol is the precursor for steroid hormones, bile acids and vitamin D. Cholesterol is also an important element in the cell membrane and the outer layer of lipoprotein[14].

Almost all the cholesterol and phospholipids are absorbed in the gastrointestinal tract and enter into chylomicrons are formed in the intestinal mucosa. Cholesterol is synthesized entirely from acetyl-CoA in many tissues[14]. Thus enabling if cholesterol levels can be high in any individual, no matter whether the person is obese or non-obese. Although some previous studies that found that cholesterol levels related to body weight and BMI, but the synthesis of

cholesterol is also affected by many factors. Another factor that can affect plasma cholesterol levels in addition to hereditary factors are the increased intake of high cholesterol, diet with high saturated fat, a diet high in unsaturated fatty acids and insulin and deficiency of thyroid hormone and lipoprotein abnormalities.

Hereditary factors have the greatest role in determining a person's serum cholesterol levels such as abnormalities in the LDL receptor gene mutation leads to the formation of high LDL. Usually characterized by the production of cholesterol> 400 mg / dL and HDL cholesterol levels <35 mg / dL. However, the factor of food intake, and environments such as physical activity, smoking, also affect cholesterol levels[14].

High dietary intake of saturated fats also improve the cholesterol levels in plasma with increased as much as 15% -25%. This is due to fatty deposits in the liver which then led to increased element of acetyl-CoA in the liver to produce cholesterol[15].

Insulin and thyroid hormone deficiency can lead to increased plasma cholesterol levels, while excess thyroid hormones will result in an increase in plasma cholesterol levels. Thus is the main possibilities occur due to changes in the activity of enzymes that work in lipid metabolism[15].

Another thing that plays a role in the determination of high or low cholesterol levels is exercise. Sports are often said to be lower LDL levels in plasma while HDL levels will increase. Moreover, in condition unstable emotions or stress and taking caffeine considered to be associated with increased free fatty acids in plasma. The result applies increased triglycerides and VLDL cholesterol is transported through where this resulted in an increase in cholesterol levels in the circulation[14].

As for diet and lifestyle are the factors that are involved in stimulating the increase or decrease in cholesterol levels and it gives the view that hypercholesterolemia is a risk factor that can be modified[16]. In this study does not do food recall and review of physical activity the previous sample so it is likely the cause of high cholesterol levels in the samples examined may vary. Is most likely due to consumption of foods high in fat and lack of physical activity is accompanied by hormonal factors and emotional conditions or high stress levels in the face of work.

The research result obtained is in line with several previous studies including research conducted by Nugraha A (2014) who found that there was no relationship of body mass index with total cholesterol levels of teachers and school employees Surakarta Muhammadiyah 1 and 2. Harahap (2011)[17], which examines the relationship of total cholesterol and triglyceride levels in patients with a BMI of at hospital of Dr Hj. Adam Malik who find that the relationship between levels of triglycerides and total cholesterol levels by IMT weak. Other studies are consistent with the study conducted by Setiono (2012) by using a cross sectional study design. His research states that total cholesterol levels in the group of people who are obese and non-obese have a significant difference with a significance value of p = 0.457. Alafanta (2011)[18] conducted research on cholesterol screening in obese patients aged 30-60 years. The results showed that high total cholesterol levels are not always associated with obesity.

The results of different studies conducted by Caleb (2010)[19] on vocational teachers 1 Amurang with the conclusion that there is a relationship between nutritional status and total cholesterol levels. Results of other studies that are not in line, performed by Mawi (2003) on a sample of adults aged> 35 years. The result showed that there was significant relationship (p = 0.007) between body mass index and total cholesterol levels are an indicator of coronary heart disease. Total cholesterol in men will increase with the increase in the value of IMT. This

is also supported by the results of a study conducted in Finland showed a positive association between cholesterol levels with BMI in men and women aged 30-59 years[12].

The difference of this research may be caused by differences in the use of research methods, population and sampling techniques, the characteristics of respondents (age, sex, and occupation) as well as the criteria for total cholesterol and different nutritional status. In this study used cross sectional design, the sample is an employee who works in the Ministry of Health Poltekkes Medan aged 30-65 years with the categorization of obesity with a BMI ≥ 30 kg / m2, and non-obese with a BMI <30 kg / m2 while the obese category used other researchers are BMI ≥ 25 kg / m2 even use a standard obesity with a BMI ≥ 23 kg / m2, and the criteria for total cholesterol levels in other studies using the normal category (<200 mg / dL), and total cholesterol levels high (≥ 200 mg / dL), in this study we use the categories of test equipment used is autocheck which category normal cholesterol levels ≤ 145 mg / dl and higher if the kolestreol levels> 145 mg / dl. This is what might affect that different research results.

Limitations of this analysis, the researchers did not interview survey respondents directly about eating habits such as frequency of eating and type of food consumed during the last 24 hours, smoking history, physical activity undertaken before participating in the study. However, there are several factors that support the implementation of this research that respondents were cooperative during the study so that the research can be done and also researchers can obtain the required data.

The conclusion from this study that the cholesterol levels among staff who are obese and non-obese did not have significant differences, and recommended for staff who have high cholesterol levels to be more vigilant and do the activities that can lower cholesterol levels like regular exercise including aerobic exercise, cycling , or yoga and keep food intake by avoiding foods that contain saturated fats and consume more foods rich in fiber and fruits that can increase HDL cholesterol levels such as avocado. Expected to continue research with develop the variables and perform food recall to more completed data of food intake and physical activity.

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O-23

The Correlation Of Handover Implementation and Nurse Performance

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ABSTRACT

The hospital is one of the business entity that is engaged in health services and have the same goal which is to provide services to people who require nursing care. Quality of nursing care is determined by the hospital because the nurses provide nursing care for 24 hours, so it is important for nurses to be the spotlight of other professions and patients. Several factors influence the performance of nurses are discipline, quality and quantity of work, responsibility, initiative and skills, as well as good relationships with other staff through mutual communication or transfer of information both among nurses at shift change (handover). Transfer of this information is very important to determine the quality of services provided and to obtain nursing care has been and will be implemented continuously. Under these conditions, This study aims to determine the relationship of nurses with the implementation of handover performance of nurses in inpatient Ward Dr Pirngadi Hospital Medan. The samples in this study were 38 respondents nurse. The results obtained by 60.5% of respondents who carry out handover properly and as much as 55.3% of respondents with the performance of a good nurse. The statistical results showed that there is a relationship between the implementation of the handover performance of nurses in patient ward DrPirngadi Hospital of Medan {p = 0.005 and α = 0.05 then p ≤ α}. The conclusion is a significant correlation between the implementation of the handover performance of nurses in patient ward DrPirngadi Hospital of Medan.

Keywords : Handover, Nursing Services, Nurse Performance

Rumah sakit merupakan salah satu badan usaha yang bergerak dalam bidang pelayanan jasa kesehatan dan mempunyai tujuan yaitu untuk memberikan pelayanan kepada masyarakat yang membutuhkan pelayanan keperawatan. Mutu pelayanan keperawatan rumah sakit sangatlah ditentukan oleh perawat karena memberikan asuhan keperawatan selama 24 jam, sehingga perawat menjadi sorotan penting bagi profesi lain dan pasien. Bebera pafaktor yang mempengaruhi kinerja perawat yaitu disiplin, kualitas dan kuantitas pekerjaan, tanggung jawab, inisiatif, keterampilan, serta hubungan baik dengan staf lain yaitu saling komunikasi atau transfer informasi yang baik antar perawat pada pergantian *shift (handover).* Transfer informasi ini sangat penting untuk menentukan dalam kualitas pelayanan yang diberikan dan memperoleh asuhan keperawatan yang telah dan akan dilaksanakan berkesinambungan. Berdasarkan hal tersebut, penelitian ini bertujuan untuk mengetahui hubungan pelaksanaan *handover* perawat dengan kinerja perawat di Ruang Rawat Inap Rumah Sakit Dr Pirngadi Medan. Penelitian ini terdiri dari dua variabel; variabel dependen adalah pelaksanaan *handover* dan variabel independen adalah kinerja perawat di Ruang Rawat Inap Rumah Sakit Dr Pirngadi Medan. Sampel dalam penelitian ini sebanyak 38 responden atau perawat. Hasil dari penelitian ini diperoleh sebanyak 60,5% yang melaksanakan *handover* dengan baik dan sebanyak 55,3% dengan kinerja perawat yang baik. Hasil statistik menunjukan bahwa terdapat hubungan antara pelaksanaan *handover* dengan kinerja perawat di Ruang Rawat Inap Rumah Sakit Dr Pirngadi Medan (p-*value* = 0.005 dan α = 0.05, maka p-value ≤ α). Kesimpulan pada penelitian ini adalah ada hubungan yang bermakna antara pelaksanaan *handover* dengan kinerja perawat di ruang rawat inap Rumah Sakit Dr Pirngadi Medan.

Kata Kunci : *Handover*, Pelayanan Keperawatan, Kinerja Perawat

1. Introduction

The hospital is one business entity engaged in the field of health services to serve the people who need the optimal health care(1). Quality of service in hospitals is determined by nurses in providing nursing care because the nurses provide nursing care for 24 hours. A heavy responsibility and supported with adequate human resources, so that the nurses' performance a key highlight for the other professions, patients and their families(2).

The nursing care is given in the form of nurses' performance should be constituted with high capabilities so the performance to support the implementation of tasks in nursing care. The performance of nurses is an ability or learning application that has been received for completing nursing education program to provide responsible care in health improvement and disease prevention to patients(3). One of the problems in the management of human resources at the hospital is nurses' performance, because the success of the hospital affected by the performance of nurses. Factors to assess the performance of nurses is the quality and quantity of jobs, responsibilities, skills, accuracy, speed, behavior, attendance or use of time, the relationship between the other staff with mutual communication or transfer of information. Transfer of information is very important in determining the quality of services provided(4).

Transfer of information at the time of shift change is called handover. Information relating to the clinical state of the patient, the patient's personal circumstances, to the social factors of patients. Handover is to maintain the continuity and consistency of patient care. Nurses should arrive at least 15 minutes early to follow the handover so that the handover process can run smoothly(5).

Based on the results of the audit conducted by a team of nursing supervision in RSU Dr. WahidinSudiroHusodoMojokerto that in the standard operating procedures (SOP) of handover implementation there are 85% room did not execute properly handover. This is indicated with the achievement of handover implementation in ward less than 73%, but in a pavilion implementation oh handover about 81%.Based on the minimum service standards (SPM), the achievement of the implementation of the SOP with good criterion of 73-100%, so not implemented of handover may cause a risk to patient safety, decrease the performance of nurses and quality of services provided(6).

The results of the preliminary study at DrPirngadi Hospital of Medanthat the implementation of handover is didn't going well. During this time, at the turn of the shift, the nurse previously only briefly explain the based on records and spoken to the nurses will be on duty the next, but it was not followed by all the nurses who will be assigned the next. Nurse visits to patients at the time of shift change has not been implemented. The performance of nurses can be seen from the discipline of nursing, but there are still many nurses who arrive late at every change of shift. Based on the phenomenon and the preliminary study, researchers interested in studying about relationships handover implementation with the performance of nurses in patient wards DrPirngadi Hospital of Medan.

2. Method

This is descriptive analytic with cross sectional approach. This study was conducted on 30 June to July5, 2014 in Wards DrPirngadi Hospital of Medan. The population was all nurses in patient wards DrPirngadi Hospital of Medan are 62 nurses. The sampling technique used purposive sampling. The sample is 38 respondents with criteria of inclusion are ready to be respondent and have a work time more than 1 year. Nurse performance data used questionnaire by Nursalam (2011) with indicator like 1) quality and quantity of

work, 2)responsibility, 3) have a competency, 4) accurately and faster, 5) absence, and 6) communicate. Data of handover used a questionnaire prepared by the researcher and has been tested for validity and reliability. Indicator in handover are 1) implementation, 2) who are to be leader, 3) team of nurse, 4) information, and 5) place of implementation. Test the validity of using the Pearson product moment and reliability test using Cronbach alpha. Test results show the validity and reliability of the questionnaire is valid and reliability to be used as an instrument for the implementation of the handover to the value of r> 0.444 (n = 20) and Cronbach alpha values 0.968. Data were analyzed using chi-square testto determine the relationship handover implementation and performance of nurses.

3. Result

Based on result, handover implementation of nurses in patient ward DrPirngadi Hospital of Medanis mostly good about 60.5% (table 1).Every nurse must implementation of handover in every change of shift, give information about condition of patient, and implemented handover like SOP from hospital.

Table 1. Respondents Frequency Distribution Based on Implementation of Handover In Inpatient Ward DrPirngadi Hospital of Medan

Handover implemented	Frequency	Presentation
Enough	15	39.5%
Good	23	60.5%
Total	38	100,0 %

Based on result, nurse performance in patient ward DrPirngadi Hospital of Medanis mostly good about 55.3 %.Form 38 respondent, about 21 nurses shown good performance, while about 17 nurses shown not good performance (table 2).

Table 2. Frequency Distribution of Respondents by nursesperformance Inpatient Ward DrPirngadi Hospital of Medan

Nurse performance	Frequency	Presentation
Enough	17	44.7 %
Good	21	55.3 %
Total	38	100,0 %

Based on the statistics, chi-square p value obtained is 0.005, so the P-value ≤ α (0.05) (table 3), it's mean that there is a relationship between the implementation of the handover with the performance of nurses in patient ward DrPirngadi Hospital of Medan.

Table 3. Relationship of handover implementation with nurse performance in patient ward DrPirngadi Hospital of Medan (n=38)

Handover Implementation	Nurse Performance				Total		P value
	Enough		Good				
	F	%	F	%	F	%	
Enough	2	5.3	13	34.2	15	39.5	0.005
Good	15	39.5	8	21.1	23	60.5	
Total	17	44.7	21	55.3	38	100	

4. Discussion

In this research, most of nurses implemented good handover about 60.5 % (table 1). The implementation handover would be good if supported by some good aspects, are the aspects of commitment, responsibility, cooperation, motivation and communication (6). A good implementation of handover in the nurse station and at bedside, does on every shift and led by the head of the room, followed by all the nurses who have been on duty and the next on duty. Information submitted must accurate, concise, systematic and describe or explain the patient's condition at this time as well as maintaining patient confidentiality (7).There are 4 type of handover, 1) bedside handover is transfer information performed at the bedside to focus the report and condition of the patient, 2) recorded handover, to use these recordings to reduce turnover time shifts that overlap, 3) written handover, depend on handwritten or computer access, and the amount of information provided by nurses, 4) oral handover, an oral report to accommodate the experience and ability of the nurse who attended to give information about the patient's condition (5)

Handover is the communication that occurs when nurses changing shifts and has a specific goal is to communicate information about the patient's condition at the previous nursing care(8). Handover can also improve communication among nurses, in a relationship of cooperation and responsibilities among nurses, and nurses can keep track of the patient, so that the continuity of nursing care can next run perfectly(9).

Benefits of handover for the patient is patients receive optimal health care and be able to address the problem directly if there is a problem that has not been revealed. For hospitals, the handover can improve nursing care to patients in a comprehensive manner (9).

Table 1 shown that about 39.5% of respondent not implemented handover very well. There is factors that inhibit the implementation of the handover is communication, noise disturbance, fatigue, knowledge or experience, written communication, organizational culture, support systems, infrastructure, delivery of patients, limited space for a handover of patients, the limitations of technology and usage notes and manual reports or difficulty accessing important information, and lack of human resources (10).Not implemented of handover in hospital because of many nurse who implemented handover as responsibility of work without know about the effect if handover not implemented very well (6).

Handover is not running properly can cause boredom and can reduce the time to complete other important tasks. The problem of staff transfer is exacerbated if the shift would come home yet ready to give handover, like delay nurse who attended to 7 minutes, or if any other activities performed. Nurses should immediately react if an emergency occurs during or before the handover is done. Negligence of the staff who will return to prepare for the handover, or delay of the staff that will replace the shift, can lead to burnout for nurses who wait to accept delivery of nursing report (5).

Based on result, most of nurses shown good performance about 55.3% (table 2). The nursing care is given a form of performance of nurses(7). The performance of nurses is an act done by a nurse within an organization in accordance with competencies and responsibilities of each, are not breaking the law, as well as moral and ethical rules, where a good performance can give satisfaction to the service user or patient(1).Standard practices of nurses performance in nurse care who given by patient based on step of nursing proses are assessment, nursing diagnosis, planning, implementation, and evaluation (7).

According (11) determined the success of performance is very good guidance from the supervision of the supervisor to a subordinate who asked problems and obstacles encountered

in the implementation of the order to be given a solution. Supervision is a component of management functions to achieve results in conducting performance(3). While the factors that affect the performance of nurses are the quality of work, quantity of work, responsibility, initiative, skill and ability, accuracy, speed, presence or use of time, as well as good relations with other staff with mutual communication or transfer of information(4). Furthermore, the factor that affect a good nurse performance are internal motivation (knowledge, responsibility, development and work) and external motivation (work condition, work partner, and reward)(2).

Based on the research that not all of respondent shown good performance, there is a little bit of respondent about 44.7% shown not good performance. The main problem of nurses performance in nursing care is the lack of highly educated nurses, inadequate capacity, the number of nurses who are less patient and less hospitable in the face of the patient. The problem is certainly not only a matter of attitude is friendly and patient, but also a high workload and regulations are not clear to nurses(3).The expectation of the nurse was often not correspond to reality, because often lead to conflict during his work that can directly affect performance (12).

In this research shown that there is a significant correlation of handover implementation and nurse performance. Handover not implemented may cause a risk to the decline in the performance of nurses (6).Key of handover is the quality of the next of nurses care, if information not accurate or there is a mistake so can a make condition of patient dangerous.Handover as a support to another nurse to do the next nurse care. Handoveralso give catharsis benefit because nurse with emotional fatigue cause do nurse care can given to the nxt nurse at shift changeand not bring to go home. So, handover process can lack anxiety in nurse (9). Handover have a positive effect to nurse are give motivation, use experience and information to help planning in step of the next nursing care (in implemented of nursing care to patient must continuity).Good communication in handover will increase nurse motivate to increase performance. Motivation is a condition who move of selfworkerto achieve of goal organization (1). Motivation of work is an activity and need in every people, to motivate her/his self to full her/his needed and to be guideline of behavior to something that to be a goal.Motivation is also an effort to help the ability of nurses who have good skills(13)

Ongoing information transfer among shift will allow nurses to complete tasks and will have an impact on improving performance.The performance of nurses is influenced by the ability and skills of nurses in completing their tasks (1). A person skilled in doing their daily work, it will be easier to achieve the expected performance(13).

5. Conclusion

The conclusion are implementation of the handover in patient wards Dr Pirngadi Hospital of Medan, mostly good (60.5%) and nurse Performance patient ward Dr Pirngadi Hospital of Medan, mostly good (55.3%).There is a significant relationship between implementation handover with the performance of nurses in patient wards DrPirngadi Hospital of Medan.

Further studies shall be done with a different nurse characteristics about other factors on efforts to improve the performance of nurses and handover implementation. The results of this study can be used as reference material or baseline data to develop research related to handover implementation or the performance of nurses in hospitals.

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Poster Presentations

P-01

THE DESCRIPTION OF CHARACTERISTICS OF ABORTION AT THE SLEMAN REGIONAL PUBLIC HOSPITAL IN 2014

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ABSTRACT

Maternal mortality in developing countries are 14 times higher than in developed countries. Abortion is a direct cause of maternal mortality. Abortion contributes to 15-50% of maternal mortality. The highest maternal mortality rate in DIY is found in Sleman. he purpose of this study is to find out the description of characteristics of pregnant women causing the spontaneous abortion in the respective hospital. The data collection technique is using secondary data by lookingthrough the list of registers and hospital's medical record. Meanwhile, the tools used are format of data collection, the master table, and dummy table.

This study shows pregnant women with spontaneous abortion is that 38.8% of pregnant women experience an incomplete abortion, 35.3% of pregnant women experience infection, 15.3% of pregnant women suffer from chronic debility disease, 57.7% of pregnant women suffer from anemia, 56.5% of pregnant women are at risky age, 68.2% of pregnant women are with risk parity, 15.3% of pregnant women are with gestational distance <2 years, and 56,5% of pregnant women are at risky age couples. So the conclusion of characteristics of pregnant women who experience spontaneous abortion is large because of the risk parity, maternal age risk, paternal age risk, and risk of maternal nutrition.

Keywords: characteristics, pregnant women, spontaneous abortion

BACKGROUND

Mortality and morbidity is still a problems in many developing countries. According to WHO (2013), the rate of maternal mortality in developing countries are 14 times higher than in developed countries. There are 180 to 200 million womens become pregnant each year, and 585 thousand of them died as a result of one of the complications of pregnancy and childbirth[(1)]. Based on the Indonesian Demographic and Health Survey at 2007, maternal mortality rate achieves 228 per 100,000 live births. This figure puts Indonesia as one of the countries with the highest maternal mortality in Asia, the 3rd highest in the ASEAN region and the 2nd highest in the SEAR region. Indonesia targets to achieve the MDG's getting away because by Indonesia Demographic and Health Survey in 2012 the maternal mortality rate actually rose to 359 per 100,000 live births[(2)].

Abortion is a direct cause of death in women. According to WHO, abortion contributes 15-50% of maternal mortality. Abortion complications are bleeding and infection that lead to maternal death. Maternal mortality due to abortion often do not appear in the report of death because it is more often reported as bleeding and sepsis[(3)].

Abortion can occur 114 cases per hour. Some studies suggest the incidence of spontaneous abortion between 15-20% of all pregnancies. When examined further abortion closer to 50%. The high rate of pregnancy loss chemical that can not be known in 2-4 weeks after conception increases the incidence of abortion[(1)].

Factors that cause the death of the fetus is its own ovum factors, maternal factors, and paternal factors[4]. Causes include genetic factors, congenital uterine abnormalities, autoimmune, luteal phase defects, infection, hematologic, and the environment[1].

The incidence of abortion in Yogyakarta tend to increase. Increased incidence of abortion in Yogyakarta seen from the Hospital Information System records in DIY. It was found that the highest increase incidence of abortion in Sleman , about 3-fold from 2012 to 2013. The incidence of spontaneous abortion in 2012 with 51 cases per year increased to 174 cases per year in 2013.

Some studies suggest hospitals contribute 40-70% of maternal mortality. By looking at the matter, effort focused on reducing maternal mortality rate in the hospital. Sleman District Hospital is a general hospital that has PONEK that is ready to serve 24 hours and serve as a referral hospital from various districts in Sleman.

Referring to the problems above, this study aims to describe the characteristics of pregnant women who experience spontaneous abortion in Sleman District Hospital in 2014. The benefits of this research for health workers Hospital in Sleman as additional references and information in the field of health, to professional organizations can be used as input data for promotional activities followed by the prevention of abortion and more vigilant when screening for pregnant women, for the researchers can add new insights in the field of health, especially abortion.

METHODS

Type of research conducted in this study was a descriptive with cross sectional approach. The cross sectional study was conducted to study the dynamics of the correlation between risk factors and effects, with the approach, observation and data collection at once at a time[5]. The population in the study were all pregnant women who experience spontaneous abortion who in inpatient and outpatient care, and recorded in the register and complete medical record in accordance with the risk factors.

The study was conducted in Sleman District Hospital by taking secondary data from the registers and records of medical records of patients. The research was conducted on 1 April until 14 April 2015. The variables in this study were infection factors, chronic debility disease, nutrition, maternal age, parity, pregnancy spacing, and paternal age.

RESULTS

1. The characteristic description of spontaneous abortion by type of abortion

Table 1. The frequency distribution of pregnant women with spontaneous abortion based on the type of spontaneous abortion in Sleman District Hospital in 2014

No	Type of Abortion	Frequency	Prosentase (%)
1	Iminens	30	35,4
2	Insipiens	5	5,8
3	Inkomplet	33	38,8
4	Komplet	8	9,4
5	Septik	1	1,2
6	Rekuren/Habitualis	8	9,4
	Total	85	100

Table 1 shows that the majority of pregnant women who experience spontaneous abortion is classified as an incomplete abortion by 38.8%.

2. The characteristic description of spontaneous abortion by factors of infection

Table 2. The frequency distribution of pregnant women with spontaneous abortion based on the factors of infection in hospitals Sleman 2014

No	Type of Infection	Frequency	Prosentase (%)
1	Bacterial	30	35,3
2	Parasites	3	3,5
3	Unrecord	52	61,2
	Total	85	100

Table 2 shows the majority of pregnant women who experience of spontaneous abortion infection is not yet known whether have an infection or not (61.2%).

3. The characteristic description of of spontaneous abortion by a factor of chronic debility disease mother

Table 3. The frequency distribution of pregnant women with spontaneous abortion based on factors debility disease in hospitals Sleman 2014

No	Chronic Debility Disease	Frequency	Prosentase (%)
1	Hypertension	13	15,3
2	Diabetes Millitus	4	4,7
3	Non chronic debility disease	60	70,6
4	Etc.	8	9,4
Total		85	100

Table 3 shows the majority of pregnant women who experience of spontaneous abortion does not have a chronic debility disease (70.6%)

4. The characteristic feature of spontaneous abortion by nutritional factors

Table 4. The frequency distribution of pregnant women with spontaneous abortion based on factors of nutrition in hospitals Sleman 2014

No	Category	Frequency	Prosentase (%)
1	Anemia (< 11gr%)	49	57,7
2	Non-Anemia (≥11 gr%)	36	42,3
	Total	85	100

Table 4 shows that the majority of pregnant women who experience of spontaneous abortion have anemia (57.7%).

5. The characteristic description of spontaneous abortion by maternal age factor

Table 5. The frequency distribution of pregnant women with spontaneous abortion based on maternal age factor in Sleman District Hospital in 2014

No	Maternal Age	Frequency	Prosentase (%)
1	<20 years and >35 years	48	56,5
2	20-35 years	37	43,5
	Total	85	100

Table 5 shows the majority of pregnant women who experience of spontaneous abortion in Sleman District General Hospital in 2014 were women money to have that risk age <20 years and> 35 years (56.6%).

6. The characteristic description of spontaneous abortion by a factor of parity

Table 6. The frequency distribution of pregnant women with spontaneous abortion by a factor of parity in Sleman District Hospital in 2014

No	Parity	Frequency	Prosentase (%)
1	At Risk	58	68,2
2	Not Risk	27	31,8
	Total	85	100

Table 6 shows that women who experienced of spontaneous abortion in Sleman District General Hospital in 2014 mostly mothers have risky parity (68,2%).

7. The characteristic description of spontaneous abortion of pregnancy based on the spacing factor

Table 7. The frequency distribution of pregnant women with spontaneous abortion of pregnancy based on the spacing factor in Sleman District Hospital in 2014

No	Pregnancy Spacing	Frequency	Prosentase (%)
1	Primi	34	40
2	< 2 years	13	15,3
3	≥ 2 years	38	44,7
	Total	85	100

Table 7 shows that women who experienced spontaneous abortion most have pregnancy spacing with previous children ≥ 2 years (44.7%).

8. The characteristic description of spontaneous abortion by the age paternal factor

Table 8. The frequency distribution of pregnant women with spontaneous abortion by the age paternal factor in Sleman District Hospital in 2014

No	Paternal Age	Frequency	Prosentase (%)
1	< 20 years and ≥ 40 years	48	56,5
2	20 – 39 years	37	43,5
	Total	85	100

Table 8 shows that women who experienced of spontaneous abortion in Sleman District General Hospital in 2014 mostly from a father who has a risky age is <20 years and ≥ 40 years (56.5%).

DISCUSSION

The incidence of spontaneous abortion in Sleman District General Hospital in 2014 largely is incomplete abortion. Incomplete abortion is characterized by the partial products of conception out, and what remains is the decidua or placenta[4]. Incomplete abortion is more common in hospitals. Generally, patients present with complaints of severe abdominal pain, after examination found cervical opening and looked out the majority of the product of conception[6]. Abortion incomplete many happening so than with other types of abortion [7].

One of the factors that cause pregnant women experience spontaneous abortions are due to infection. From research conducted largely unknown whether the mother infection during pregnancy which causes spontaneous abortion. This is due to limited data obtained by researchers. But some mothers infection types of bacteria, most of the mother suffered a vaginal discharge during pregnancy is likely to be caused by bacterial vaginosis. There is a relationship between abortion with bacterial vaginosis[8]. Fetal death can be caused by toxins from the mother or the entry of germs or virus to the fetus [4]. During pregnancy a woman's vagina pH will increase making it more susceptible to vaginal infections. When the immune system is weak pregnant women, microorganisms easily get into the mother's body that cause pregnant women will have an infection that causes spontaneous abortion.

Another factor that causes spontaneous abortion is the debility chronic disease or chronic illness of the mother. Debility chronic disease of the mother would undermine maternal condition that will eventually lead to abortion. Based on research that has been done, most of the women who experienced spontaneous abortion does not have a chronic debility disease, but hypertension and diabetes mellitus contributes as a factor that causes spontaneous abortion. Although the numbers are few but proves that the disease can be debilitating chronic debility mother circumstances that cause spontaneous abortion. Other diseases suffered by mother and making declines durability is ever cyst surgery, suffering from gastritis, myoma, and tumors. Hypertension causes blood circulation disorder in the placenta, causing abortion[9]. Type of insulin-dependent diabetes with inadequate glucose control has a chance of 2-3 times more likely to abortion[1].

Lack of nutrition which obtained mother during pregnancy may lead to anemia which in turn can lead to spontaneous abortion. Way to detect a person is experiencing anemia with hemoglobin test. Anemia is a condition where the hemoglobin in the lower body, pregnant women are anemic which has hemogoblin <11gr% in the first trimester and 3, while in the second trimester maternal hemoglobin <10.5 g%. Most of the women who experienced spontaneous abortion are anemic shown by the results of hemoglobin <11 g%. Pregnant women who experience a decrease in iron in the blood would reduce the number of red blood cells and interfere with the formation of red blood cells in the fetus and placenta, so will increase the incidence of abortion[10]. Anemia is one of the causes of abortion that directly affect fetal growth through the placenta interfere with the intake of nutrients and oxygen circulation to the circulation retroplasenter[9].

In addition, maternal age factor is also a risk factor for a pregnant woman suffered a spontaneous abortion. Based on the research showed most of the women who experienced

of spontaneous abortion aged <20 years and> 35 years. Age <20 years at risk of pregnancy because at that age the reproductive organs of a woman is not yet mature, in addition to age <20 years vulnerable to malnutrition[11]. State of the pregnant mother at a young age are still unstable and mentally not ready to accept her pregnancy, this condition causes the mother to become stressed and will increase the risk of abortion[12]. Aged > 35 years are at risk for pregnancy and abortion experience because ovarian function is reduced which results in eggs that the less qualified[13].

Parity also be a risk factor for the occurrence of spontaneous abortion. Most women who experience spontaneous abortion is the mother who has the risk parity is nullipara or the mother who first pregnancy and multiparity were more than three times the birth. Mothers with parity over 3 times has a high maternal mortality rate because endometrial interference occurs because of repeated pregnancy, whereas the risk for uterine first parity for the first time received the products of conception and uterine muscle flexibility remains limited[14]. Abortion is more common in women with parity 1 and more than 3. Mothers with low parity tends to birthing babies who are not mature or no complications since the first experience on reproductive and allowing the onset of disease in pregnancy, whereas high parity mothers tend to experience complications in pregnancy which influence the outcome [7].

Risk factors for spontaneous abortion is also due to pregnancy spacing. This research obtains the majority of the women who experienced of spontaneous abortion with pregnancy spacing ≥ 2 years. Spacing pregnancies at risk is <2 years because of physical health and the mother's womb is still limited and the previous child is still in need of care and attention of their parents[15]. The distance-risk pregnancies at less than 2 years and more than 5 years as it increases the risk of maternal output[16]. Most of the women who experienced pregnancy abortion at a distance of more than 5 years.

Paternal age also affects the occurrence of spontaneous abortion. Most women who experience spontaneous abortion have a partner aged> 40 years. Categorize the father's age into five categories there is in <20 years, 20-29 years, 30-34 years, 35-39 years, and ≥40 years. Age 20-29 years is the age of the father who had little risk of having a spontaneous abortion[17]. The father's age <20 years and> 40 years increases the risk of premature birth, low birth weight, gestational age preterm, low Apgar scores, to neonatal death[18]. The risk of miscarriage is higher if women aged ≥35 years, but the increase is much greater risk for a couple consisting of a woman aged ≥35 years and a man aged ≥40 years[19]. The paternal age is significantly associated with spontaneous abortion[20].

CONCLUSION

Results of research taking medical records at the General Hospital of Sleman in 2014 can be concluded from 6382 pregnant womens there are 85 pregnant womens who experience spontaneous abortion caused due to infection, disease debility chronic mother, nutrition, pregnancy spacing, maternal age, paternal age , Then obtained the characteristics of spontaneous abortion experienced by pregnant women, with the following details:

1. Most women who experience spontaneous abortion is not known whether caused by infection, this is due to limitations of the data in the can. But some women who experience spontaneous abortion caused by a bacterial infection.
2. Most of the women who experienced spontaneous abortion are not caused by disease of chronic debility. But hypertension and diabetes mellitus a contributing cause spontaneous abortion.

3. Most of the women who experienced spontaneous abortion are anemic with hemoglobin levels <11 g%.
4. 4. Most of the women who experienced spontaneous abortion risk are age <20 years and> 35 years.
5. Most women who experience spontaneous abortion have parity risk that nullipara and multiparity.
6. Most of the women who have had a spontaneous abortion pregnancy spacing ≥2 years.
7. Most of the women who experienced spontaneous abortion have a partner with the age of risk is <20 years and ≥40 years.

RECOMMENDATION

1. For Medicals Hospital Sleman

   Suggested for health workers who are in the General Hospital Sleman to write complete and accurate data so that the secondary data recorded in the medical record can be believed to be true and if done research back will get better and right.

2. For Professional Organization

   As a health worker should be more cautious with pregnant women who have risk factors for spontaneous abortion. By increasing the information from social media such as journals, articles, newspapers, or books as a reference and reference undertake emergency measures.

3. For Researchers

   Variables and technical analysis of the captured data can be developed so that the risk factors for women who experience spontaneous abortion can be seen in more detail.

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P-02

KNOWLEDGE AND ATTITUDES ABOUT EARLY DETECTION OF CERVICAL CANCER

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ABSTRACT

Cervical cancer is the second most common cancer worldwide in women after breast cancer. It is estimated that each year there are approximately 15,000 new cases of Indonesian women who detected cervical cancer and 8,000 women died by cervical cancer. Bantul is the most patient of cervical cancer in Yogyakarta. Imogiri is the lowest scope of Visual Inspection with Acetic Acid and pap testin Bantul. This research aims to determine of knowledge and attitudes about early detection of cervical cancer. The type of research that used is quantitative descriptive with cross sectional study design. The data collection technique used a questionnaire that was tested by validity test. This was analyzed by SPSS program. Subjects were 45 respondents of reproductive age women. The results of research is 60% subjects have enough knowledge and 54% have supportive attitudes about early detection of cervical cancer. Based on the results, the majority of subjects have enough knowledge and supportive attitude.

Keywords: Knowledge, attitudes, cervical cancer

BACKGROUND

Cervical cancer is the most common cancer worldwide in women after breast cancer at 2012[1]. It is estimated that each year there are approximately 15.000 of Indonesian women who detected cervical cancer and 8,000 women died by cervical cancer[2].

Bantul has the biggest incidence of cervical cancer. The details are at range 25-44 years old is one person, 45-64 years old are 21 people and > 65 years old are 19 people[3].

In the developed countries, the incidence of cervical cancer decreased because of early detection programs through pap smear[4]. This is caused by the late of diagnosis that is found in an advanced stage, weak general state, low socioeconomic status, limited resources, lack of facilities and infrastructure, histopathologic type, and degree of education are participate to determining the prognosis of patients[4].

Imogiri is the lowest scope of Visual Inspection with Acetic Acid (or IVA) and pap smear test in Bantul[5]. Based of the information by the Head of Puskesmas Imogiri I, which covers four villages: Karang Talun, Wukir Sari, Giri Rejo, and Imogiri, participants of IVA and Pap smear is still in average even though it had been informed in public about the importance of early detection of cervical cancer by health workers. Based on preliminary studies by interviewed with seven residents in Dukuh Imogiri socialization of early detection of cervical cancer has been given, but they are not interested in joining early detection of cervical cancer because they feel embarrassed and afraid.

The people's knowledge about cervical cancer is a major cause of Indonesian womens coming to the health care. They are already late with advanced cervical cancer and difficult to cure. Only 12% of Indonesian women who understand about cervical cancer and had an early detection of cervical cancer with the Pap smear[6].

The process of attitudes are influenced by the stimulus of knowledge that will be processed to produce an attitude (closed) and behavior (open). [7]

The data explains the importance from knowledge and attitudes in reproductive age women about early detection of cervical cancer. Based on the those data above, this research aims to determine of knowledge and attitudes about early detection of cervical cancer. The purpose of this study is to describe knowledge and attitudes about early detection of cervical cancer in Dukuh Imogiri.

METHODS

The research is a descriptive quantitative with cross sectional study design. Subjects were 45 respondents of reproductive age women. The research was conducted in Dukuh Imogiri Bantul Yogyakarta at March-June 25, 2015. The research instruments using a questionnaire that was tested by validity test with the Pearson product-moment and reliability test with Cronbach Alpha. The data analyzed by SPSS program.

RESULT

Respondents characteristics

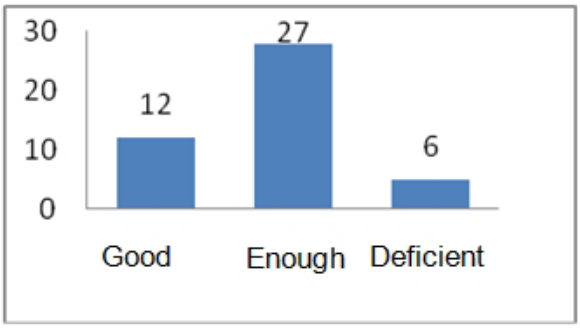
The respondent characteristics are age, education, occupation, and parity.

Table 1. Univariate Analysis of Respondent Characteristics in Dukuh Imogiri Bantul at 2015.

Respondent characteristics	Frequency	
	N	%
Age (years old)		
15-19	7	15,56
20 - 40	25	55,56
41-49	13	28,9
Education Level		
Not School	7	15, 56
Elementary School	9	20
Junior High School	10	22,22
Senior High School	14	31,11
University	5	11,11
Occupation		
Not work	28	62,22
Work	17	37,77
Parity		
Nulliparous	6	13,33
Primiparas	13	28,88
Multiparas	26	57,77

Table 1 shows that the most respondents were in age 20-40 years old, senior high school (education level), not work (occupation), and multiparas.

Knowledge about Early Detection of Cervical Cancer



Pictures 1. Knowledge about Early Detection of Cervical Cancer in Dukuh Imogiri Bantul at 2015.

Pictures 1 shows that the majority of knowledge about early detection of cervical cancer is enough.

Knowledge about Early Detection of Cervical Cancer Based on Characteristics

Table 2. Analysis of Knowledge and Characteristic Respondent in Dukuh Imogiri Bantul 2015.

Respondent characteristics	Knowledge						Total	
	Good		Enough		Deficient			
	N	%	N	%	N	%	N	%
Age (years old)								
15-19	3	42,9	4	57,1	0	0	7	100
20 - 40	5	20	15	60	5	20	25	100
41-49	4	30,8	8	61,5	1	7,7	13	100
Total	**12**	**26,7**	**27**	**60**	**6**	**13,3**	**45**	**100**
Education Level								
Not School	3	42,9	0	0	4	57,1	7	100
Elementary School	2	22,2	7	77,8	0	0	9	100
Junior High School	3	30	6	60	1	10	10	100
Senior High School	3	21,4	10	71,4	1	7,1	14	100
University	1	20	4	80	0	0	5	100
Total	**12**	**26,7**	**27**	**60**	**6**	**13,3**	**45**	**100**
Occupation								
Not work	6	21,4	18	64,3	4	14,3	28	100
Work	6	35,3	9	52,9	2	11,8	17	100
Total	**12**	**26,7**	**27**	**60**	**6**	**13,3**	**45**	**100**
Parity								
Nulliparous	1	16,7	4	66,7	1	16,7	6	100
Primiparas	3	23,1	8	61,5	2	15,4	13	100
Multiparas	8	30,8	15	57,5	3	11,5	26	100
Total	**12**	**100**	**27**	**100**	**6**	**100**	**45**	**100**

Table 2 shows that based on the age characteristics, the mostly aged 20-40 years have enough knowledge. Based on education, the majority of senior high school educated have enough knowledge. Based on employment status, most of the not work respondents have enough knowledge and based on parity most respondents of nulliparous have enough knowledge.

Attitudes of Reproductive age Women about Early Detection of Cervical CancerBased on Characteristics

Table 3.Distribution attitudes about Early Detection of Cervical Cancer

Attitudes	Total	
	N	%
Support	24	53,3
Unsupport	21	46,7
Total	**45**	**100**

Table 3 shows that the most attitudes about Early Detection of Cervical Cancer Based is support.

Attitudes about Early Detection of Cervical Cancer Based on Characteristics

Table 4. Cross Table between Attitudesand Characteristic respondent in Dukuh Imogiri Bantul 2015.

Respondent characteristics	Attitudes				Total	
	Support		Unsupport			
	N	%	N	%	N	%
Age (years old)						
15-19	7	100	0	0	7	100
20 - 40	13	52	12	48	25	100
41-49	4	30,8	9	69,2	13	100
Total	**24**	**53,3**	**21**	**46,7**	**45**	**100**
Education Level						
Not School	4	57,1	3	42,9	7	100
Elementary School	4	44,4	5	55,6	9	100
Junior High School	7	70	3	30	10	100
Senior High School	8	57,1	6	42,9	14	100
University	1	20	4	80	5	100
Total	**24**	**53,3**	**21**	**46,7**	**45**	**100**
Occupation						
Not work	15	53,6	13	46,4	28	100
Work	9	52,9	8	47,1	17	100
Total	**24**	**53,3**	**21**	**46,7**	**45**	**100**
Parity						
Nulliparous	4	33,3	2	66,7	6	100
Primiparas	8	61,5	5	38,5	13	100
Multiparas	12	46,2	14	53,8	26	100
Total	**24**	**53,3**	**21**	**46,77**	**45**	**100**

Table 4 shows that all respondents aged 15-19 years old have an supportive attitude, most of the respondents with a college education have a support attitude, the majority of unwork respondents have a supportive attitude, and the majority of nulliparous respondents are unsupport.

DISCUSSION

The research result shows that most respondents are knowledgeable enough as much as 60%. One of the affects of knowledge is a source of information. The source of information is something that can be known, but some are emphasizing the information as knowledge transfer [8].

The results of the study represent that the majority of respondents in this study were aged 20-40 years of reproductive age women as much as 55.6% with 60% has sufficient knowledge. Age 20-40 years is regarded as a mature age periode of human biological development to determine the level of maturity in thinking and working [9].

Knowledge about Early Detection of Cervical Cancer Based on Characteristic

a. Age

The results of the study represent that the majority of respondents in this study were aged 20-40 years of reproductive age women as much as 55.6% with 60% has sufficient knowledge. Age 20-40 years is regarded as a mature age periodization of human biological development to determine the level of maturity in thinking and working [9].

b. Education

The research result shows that 57.1% of respondents who are not school had deficient knowledge. It is consistent with the theory that education can increase the level of knowledge and absorb practical knowledge in the environment [10].

c. Occupation

The results of the study describes 62.22%respondents did not work, but 64.3% of them only have enough knowledge. The factors that influence knowledge is social, culture and economic. Economic status of a person will determine the availability of a facility that is required for certain activities so that the socio-economic status will affect a person's knowledge [8].

The economic status of a person can be influenced by a person's employment status, because most of the work to make money[8].

d. Parity

The results of the study represent that 66.7% of nulliparous respondents have enough knowledge.

Experience is one of the factors that influence the level of knowledge. Repeating the knowledge of solving problems in the past is a way to obtained the truth of knowledge[8].

Precentage of support and unsupport attitudes of the respondentsare almost same. The majority of support attitudes of respondents are in mature reproductive agewomen (aged 20-40 years). Age 20-40 years is regarded as a mature age periodization of human biological development to determine the level of maturity in thinking and working [9]. This has to do with the knowledge and experience acquired during life [11].

Experience is one of the factors that influence attitudes. Experience will influence the social stimulus that affects a person's attitude [12].

Attitude about Early Detection of Cervical Cancer Based on Characteristic

a. Age

The results of the study represent the majority of respondents in this study were aged 20-40 years as much as 55.56% with most of that 52% have a support attitude. Age 20-40 years is regarded as a mature age periodization of human biological development to determine the level of maturity in thinking and working [(9)]

b. Education

The research result shows that respondents with a college education level had 80% unsupport attitudes. According to the theory, the institution is a system who has an influence in the formation of attitudes because both of them put the foundation of understanding and moral concepts in their self [(12).]

c. Job status

The results of the study describes that 62.22% are unwork espondentswhich 53.6% has a support attitude. Experience is one of the factors that influence attitudes. Experience will make and influence the social stimulus that affects a person's attitude[(12)].

d. Parity

Results of the study describe as much as 66.7% of respondents have unsupport attitude. Experience of nulliparous is a factors that influence attitudes. Experience will make and influence the social stimulus that affects a person's attitude[(12).]

According to the researchers, that the possibility of unsupport attitude may be caused because the mothers never pregnancy and take care of child, so they did not feel the benefits of early detection of cervical cancer.

CONCLUSION

Respondents characteristics showing that most respondents were in age 20-40 years old, education level is senior high school, occupation is not work, and parity multiparas. The research result shows that most respondents are knowledgeable enough. The majority of respondents in this study were aged 20-40 years has enough knowledge. The majority respondent's attitudes is unsupport.

RECOMMENDATIONS

Recommendation for community leaders are expected to be more active in mobilizing like taking direct door-to-door to persuade the resident not to be embarrassed and afraid to take early detection of cervical cancer. It is needed free IVA program in Dukuh Imogiri especially for women aged 20-40 years who still have less knowledge and unsupport attitudes about early detection of cervical cancer. Research methods and other variables better as the correlation method and the addition of behavioral variables can be considered in the next research. The research may also examine factors that are not included in this study such as health behavioral factors, especially in high-risk women.

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P-03

DETERMINANTS OF UNMET NEED FOR FAMILY PLANNING AMONG WOMEN IN WEST LOMBOK REGENCY

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Abstract

It is a fact that utilization of contraception in Indonesia is fairly high. However, the rate of the community's unmet need for family planning services is equally high. A survey-based study conducted by the DHS in developing countries reported that at least 150 million women, or 1 out of 5 women. This study was conducted to analyze the determinants of unmet need in West Lombok that encompass socio-demographic factors, access to mass media, mother's knowledge on contraception and husband's approval on contraception use. This is a cross-sectional research with primary data of 170 women. The samples were taken using multistage random sampling. The data were analyzed by employing bivariate and multivariate analysis methods. The unmet needs in this research reached 12.5%, some variables related to the event of unmet needs were past contraception use status, access to media providing information on family planning, and husband's approval. Multivariate analysis results showed that women who had never used contraception were at fivefold risk (OR = 4.32) of experiencing unmet need in comparison to those who had, access to mass media (OR = 3.52), and husbands' approval (OR= 0.61).The improvement and betterment of counselling on contraception should be carried out by service providers. Proper counselling on contraception should be given not only to women but also their spouses. Counselling should be given not only during postpartum period, but also during antenatal care. A collaboration between the government and local mass media in broadcasting programs with interesting, easy to understand show concepts is needed.

Keywords: unmet need, family planning, contraception.

BACKGROUND

The substantial number and uneven distribution of population has become a population issue in Indonesia. This issue is followed by another more specific problem, which is relatively high number of fertility and mortality.[1] The phenomena of the potential of the occurrence of baby booming and Total Fertility Rate (TFR) stagnation, which reached 2.6 and took place in Indonesia during the period 2003-2012, needs attention both from the government and the community.

Some factors likely causing the high TFR and low Contraceptive Prevalence Rate (CPR), which are the indicators of population increase, are the community's poor knowledge on family planning, the high ideal number of children desired, the high number of unmet need and the strong sociocultural and religious influence on family planning.[2] According to the Indonesia Demographic and Health Survey (*Survey Demografi dan Kesehatan Indonesia*, abbreviated as SDKI) of 2002-2003, the percentage of unmet need, which remained around 8.6 percent, practically did not experience any significant decrease from the previous SDKI data. In 2007, the unmet need percentage rose back to 9.1 percent.[3] However, it plunged from 13.1 percent in 2007 to 11.4 percent in 2012.[4]

According to SDKI of 2012, the highest unmet need prevalence distribution, which was also greater than the national average, by provinces in Indonesia was 20 percent, gained by Papua, followed by West Papua at 16 percent, East Nusa Tenggara at 15.9 percent,

West Nusa Tenggara at 14 percent and Maluku at 14.5 percent.[4] Based on the BKKBP data of Lombok Barat Regency, the percentage of unmet need in Lombok Barat Regency by December 2016 is 11.3 percent. This percentage is still higher than the national average target specified. Through the KKBPK Work Program Plan of west of Lombok regency, the contraceptive prevalence rate (CPR) is planned to be increased to 60.1 percent and the unmet need rate is reduced to 6.5 percent. The CPR in west lombok regency is lower than the target of MDGs 2015 which is 65%, whereas CPR is one of the indicators of the event of unmet need, and also to realize one of the goals of the program SDGs, by 2030 ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes.

The standard unmet need measurement can be carried out using "Westoff-ochoa/DHS Method", which is known as core definition method. Nonetheless, there are some other wider unmet need measurement concepts that are constantly developed, including the wider definition of needs for contraception and the causes of unmet need.[5]

METHODS

This research aims to analyze the determinants of the event of unmet need in Lombok Barat Regency, including socio-demographic factors, access to media, mother's knowledge on contraception and husband's approval for contraception use. This study is an analytic research with cross sectional design. The population in this research were all married women aged 15-49 in Lombok Barat Regency, numbering 145,501. The samples in this research were qualified married women aged 15-49.

The size of the samples in this research was calculated based on the statistical calculation according to Lemeshow, numbering 170. The samples were taken by employing multistage random sampling method. The data used in this research were primary data directly obtained from the respondents through direct interviews. The types of analysis conducted in this research were descriptive (univariate) analysis, analytic (bivariate) analysis with chi-square test and multivariate analysis with logistic regression. Ethical approval of this study have been made and proposed for approval from the research ethics commission of Mataram University.

RESULTS AND DISCUSSION

The 170 samples in this research were married women of childbearing age (15-49). According to the results of the research and the univariate analysis, it was found out that out of the 170 respondents investigated, the highest number of respondents was within the age range of 20-34, which was 116 (68.2 percent). The majority of the respondents in this research were women with 1-2 living children, numbering 121 (71.2 percent) and the number of unemployed women was higher than the employed ones, numbering 117 (68.8 percent). The number of respondents who had the access to mass media providing the information on family planning with 1-2 kinds of media was 94 (55.3 percent), Islam was the religion adhered by the majority of the respondents, numbering 163 (95.8 percent) and 14 respondents (8.2 percent) stated that their husbands did not approve of the family planning. The majority of the respondents had ever used contraceptive method previously, numbering 119 (70 percent). The number of respondents with unmet need based on the univariate analysis in this research was 21 (12.4 percent), whereas those with met need numbered 149 (87.6 percent).

Table 1. Relationship between Socio-Demographic Factor, Access to Media, Mother's Knowledge on Contraception and Husband's Approval and Unmet Need

Covariate	Family Planning Need						x^2	P value
	Met Need		Unmet need		Total			
	n	%	n	%	n	%		
1. **Mother's age**								
- Healthy reproduction (20-34 years of age)	48	88.8	6	11.2	54	68.2	0.87	**0.77**
- At risk (< 20 years of age and ≥ 35 years of age)	101	87	15	13	116	31.8		
2 **Number of living children**								
- 1-2	105	86.7	16	14,3	121	71.2	2.27	**0.33**
- 3-4	38	92.6	3	7.4	41	24.1		
- ≥ 5	6	75	2	25	8	4.7		
3. Income								
- > Regional Minimum Wage	91	92.8	7	7.2	98	57.7	5.80	**0.016****
- < Regional Minimum Wage	58	80.5	14	19.5	72	42.3		
4. Employment								
- Employed	45	84.9	8	15.1	53	31.2	0.53	**0.47**
- Unemployed	104	88.8	13	11.2	117	68.8		
5. Access to Media								
- 1-2 kinds	77	81.9	17	18.1	94	55.3	6.38	**0.012****
- > 2 kinds	72	94.7	4	5.3	76	44.7		
6. Religion								
- Islam	142	87.1	21	13.9	163	95.8	1.02	**0.31**
- Hindu	7	100	0	0	7	4.2		
7. Knowledge on Contraceptive Method								
- > 6 methods								
- 4-6 methods	94	89.5	11	10.5	105	61.8	1.00	**0.60**
- 0-3 methods	51	85	9	15	60	35.3		
	4	80	1	20	5	2.9		
8. Husband's Approval								
- Approved								
- Disapproved	143	91.6	13	9.4	156	91.8	28.27	**0.000****
	6	42.8	8	57.2	14	8.2		
9. Contraceptive method use status								
- Never used								
- Ever used	39	76.4	12	23.6	51	30	8.40	**0.004****
	110	92.4	9	7.6	119	70		

Note: *** highly significant at the level of $p < 0.001$, ** significant at the level of $p < 0.01$, * significant at the level of $p < 0.05$

The results of the bivariate analysis using chi-square test showed that the variables significantly related to the event of unmet need were income, access to media, status of past contraception use, and husband's approval ($p < 0.05$). Meanwhile, the other variables including age, education, priority, occupation, religion and knowledge did not leave any significant impact on unmet need.

Table 4.4 Results of Multivariate Analysis using Logistic Regression

Selected Variables	x^2	P Value	OR
Access to media	6.38	0.012	3.53
Husband's approval	28.27	0.000	0.61
Status of contraception use	8.40	0.004	4.32

The variable of income is excluded for having OR the nearest to 1, which is 0.069

The variables that influenced the event of unmet need were access to media providing information on family planning, husband's approval and status of contraception use. The strength of the correlation can be seen from the OR values (EXP{B}). The strength of the correlation from the biggest to the smallest is status of contraception use (OR = 4.32), access to media (OR = 3.53) and husband's approval (OR = 0.61).

The results of this research are consistent with the results of research conducted in East New Delhi.[6] Based on the research subject classification by monthly family income, the highest unmet need was on women with income per capita lower than 30.8 percent. There was a significant influence between the income level and unmet need ($p = 0.014$).[6] Unmet need occurs when "cost of children" increases and the contraception price is affordable for some of the population. Women want and use contraception. However, not all Women can afford the contraception service. Some of the population having low income cannot afford the contraception service.[7]

At this stage, improvement in socioeconomic condition does not necessarily result in fertility number decrease. Rather, it increases the natural fertility but with lesser increase. Meanwhile, the "cost of children" rise and contraception price drop drive more people to use contraception compared to previous years, making fertility dependent on both matters. If the impact of socioeconomic improvement on natural fertility is smaller than the impact of contraception use, the fertility will decrease.[7]

The research conducted in Nigeria by Catherine Ogwuche (1999) shows that the access to mass media has a significant influence on the event of unmet need. New assumptions and hopes spread through communication media provide discussion legitimation on family planning.[8] There are discussions that previously were deemed taboo to be brought in public, for example the discussions on reproduction health. With television and radio broadcasts, the sense of shame from talking about family planning with friends or family members may be reduced. The broadcast of family planning programs via mass media is relatively effective in its function of spreading knowledge and innovation process as well as decision making, whereas interpersonal communication channels are more effective in its persuasive function.[9]

Husband's approval for the use of contraceptive method is the variable that had extremely significant influence on the event of unmet need. The influence of household and community environment could be very strong that they blur one's desire and norm in the community. Normally, one's social environment has a strong influence on the decision

making in relation to contraception use. For example, many Kenyan women when asked about their reasons of using certain method of contraception said that their decision of using or not using contraception as well as the reasons behind that decision were dependent on their husbands' wish.[10]

The status of contraceptive method use had an extremely significant influence on the event of unmet need (p = 0.004, p value < 0.05). According to the research conducted in Delhi some women who had never used any contraceptive method had several reasons for not using contraception, including the fear of side effects caused (75.5 percent), not understanding how to use contraception (43.7 percent), religious reason (31.85 percent), lack of knowledge (25.92 percent), family members' disapproval (14.07 percent) and husband's disapproval (8.88 percent). Although women with unmet need, in fact, wanted to postpone or limit number of births, but due to some reasons, they had never used any contraceptive method, which highly influenced the increase in number of unmet need directly causing TFR increase and indirectly influenced AKI because of unsafe abortion resulted from unintended pregnancy.[11]

CONCLUSIONS AND RECOMMENDATION

The variables influencing the event of unmet need are access to media providing information on family planning, husband's approval and status of contraception use. The strength of the correlation can be seen from the OR value (EXP{B}). The strength of correlation from the highest to the smallest are the status of contraception use (OR = 4.32), access to media (OR = 3.53) and husband's approval (OR = 0.61). The improvement and betterment of the method of counselling on contraception should be carried out by service providers. Proper counselling should be given not only to women but also their spouses so that the decision of using contraception is taken jointly and in order to increase women's role in decision making. Counselling should be given not only during postpartum period but also during antenatal care, giving the couples a clear understanding on contraception as early as possible. A collaboration between the government and local mass media in broadcasting programs, advertisements, or talk shows on contraception with regard to the conception process and women's reproduction health with interesting, easy to understand show concepts is needed.

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P-04

Knowledge of Mothers about Nutrition with Nutritional Status of Children Aged 1-5 Years

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ABSTRACT

One of the factors that affect the nutritional status of children is the mother's knowledge. Knowledge required for the application of the provision of food for the nutritional needs so that the nutritional status of children is known. The purpose of this study was analyze the correlation between nutrition knowledge of mothers about nutrition with nutritional status of children aged 1-5 years in Kedawung Village. The research used cross-sectional design, that the subject is mothers who have children aged 1-5 years. The independent variable is the knowledge of mothers about nutrition and dependent variables is the nutritional status of children aged 1-5 years. The instrumen are use questionnaire, WHO table, and measurment body weight. Total population is 369 children, with proportional sampling techniques and random sampling found 74 respondens and their children as the sample. Data collected by questionnaire and analyzed using the Spearman rank correlation test. The results show respondents have sufficient knowledge about children nutrition is equal to 44.59%. While most respondents children have good nutrition (81.08%). With the Spearman Rank test results obtained ρ = 0,5 with t formula is t value (4,9) > t table (1.993), then Ho is rejected it means there is a correlation between nutrition knowledge of mothers about nutrition with nutritional status of children aged 1-5 years in Kedawung village Ngadi health center. The conclusion is obtained that the better knowledge of the mother's so nutritional status of children will be close to normal. It's therefore suggested to provide information about nutrition.

Keywords : Children, Knowledge, Nutritional Status

BACKGROUND

Knowledge is the result of sensasion one of object. Knowledge is the result of understand something, and this occurred after the people perform sensing on a specific object. Sensing occurs from human senses, the senses of sight, hearing, smell, taste and touch. Most human knowledge is obtained through the eyes and ears. Knowledge is something that is known to be associated with the learning process.[1]

Nutrition is a process organisms use the food that consumed normally through the process of digestion, absorption, transport, storage, metabolism and elimination of substances that are not used to sustain their life. Nutritional status is an expression and balanced in the form of specific variables or form of nutriture in specific variables.[2]

Aged 1-5 years are an important period for child grow up. If the toddler food intake is not enough of nutrients and this situation lasted a long time, will result in metabolic changes in the brain, so that the brain is not able to function normally. When malnutrition is still on going and increasingly, it will cause stunted growth, the body is smaller. Besides malnutrition, it cause delays of motoric grow up, some case cause child be emotions, bad behavior. Emotional disturbances interrupt the child's behavior manifestation of the child's behavior such as damage to goods, disrupting sister, rolling, stammering and bedwetting.

During 2012, Health Department of Kediri has take action to improve the level of growth / nutritional. Based on the distribution of cases of malnutrition and malnutrition among children under five are the most common cause of cases because of poor parenting as much as 72.5%. Among them is because toddlers are not taken care of directly by the mother / deposited, hygiene sanitation is lacking, giving solids early, children under 2 years are not given good breast feeding and the eating of toddlers is not appropriate. The second, its because of under growth baby 15.4%, the third because of infectious diseases 4.4% and the fourth is gemeli with a percentage of 2.2%.[3]

Based on monthly report data on the nutritional in Kediri regency, explained that the nutritional situation in each region is different. Some 8.83% (263 infants) in Health Center of Ngadi experiencing less body weight, 2.28% (68 infants) were very less body weight. Some 12% (169 infants) in Health Center of Ngadi experiencing less body weight, 2.83% (40 infants) were very less body weight. Some 12.5% (309 infants) in Health center of Kepung experiencing less body weight, 1.01% (25 infants) suffered severely lacking body weight. Some 7.06% (100 infants) in Health center of Plosoklaten experiencing less body weight, 2.30% (32 infants) were very less body weight. Some 9:09% (96 infants) in Health center of Pelas experiencing less body weight, 1.13% (11 infants) were very less body weight.[3]

Results of Introduce studies in health centers of Ngadi explain that Kedawung village has the higher number of infants with malnutrition than other villages. More than 27 infants with malnutrition. Based on the phenomenon that researcher want to research about the correlation between knowledge of mothers about nutrition with nutritional status of children aged 1-5 years in kedawung village ngadi health center working area.

METHODS

The study used cross sectional design. Survey is a cross sectional study to study the dynamics of the correlation between risk factors with effects, with the approach, observation or data collection at once at a time.[4] The data collection is done at once at a time / the same time, collection knowledge of mothers about nutrition data and measured children weight to know the nutritional status.

The population in this study are all mothers who have children aged 1-5 years and their child in kedawung village 2014 a number of 369 children. The sample consisted of affordable segment of the population that can be used as research subjects through sampling.[5] The size of the sample is determined by, if a large population of ≤ 1000, the samples can be taken 20% - 30% .[5] Then: 369 x 20% = 73.8 = 74. The sample used in this study are some mothers who have children aged 1-5 years and their babies as much as 74 mothers and babies in kedawung village ngadi health center working area.

The sampling technique used is proportional sampling is to obtain a representative sample, making the subject of each region is determined balanced in proportion to the number of subjects in each area.[6] Furthermore, to obtain an adequate sample proportionally then stratified sampling conducted are use strata sampling technique.[7] In this study, a sample of each posyandu will at random again using a technical randomly (simple random sampling), writing all children are there, then drew members (lottery technique).[3] Thus the way they were taken, when the number one has been taken, it needs to be restored again. If you have taken out again, be deemed invalid and returned again.[8]

Criteria for inclusion in this study are mothers who ready to be respondents and mothers who can read and write. Exclusion criteria in this study are mothers who have children at the time of a child's weight is sick, mothers who at the time of the study were not in the village / traveling in a long time, mothers and children who have been registered in the lottery but did not come on when weighing took place. The research are took place in kedawung Village at June 17 to July 17, 2014. This research analysis of the proportion or percentage, by comparing the distribution of a cross between two variables concerned. After that, analysis of the results of statistical tests, which test Spearman Rank Correlation for two variables were related or correlated and scale of data both ordinal scale.

RESULT

1. Knowledge of mother about Nutrition

The results of a questionnaire abaut Knowledge of mother about Nutrition:

Table 1: Distribution Knowledge of mother about Nutrition

	Category	Frequency	Percentage
1.	Good	24	32,43%
2.	Enough	33	44,59%
3.	Less	17	22,98%
	Total	74	100%

Based on Table 1 can be explained that half of the respondents have enough knowledge about the nutritional up to 44.59%.

2. Children Nutritional Status

Nutritional status of infants weighing results with the values in the WHO tabel:

Table 2: Distribution of Toddler Nutritional Status

	Category	Frequency	Percentage
1.	More Nutrition	1	1,35%
2.	Good Nutrition	60	81,08%
3.	Less Nutrition	13	17,57%
4.	Malnutrition	0	0
	Total	74	100%

Based on Table 2 it can be explained that the majority of respondents have a good nutritional status (81.08%).

3. The correlation between knowledge of mothers about nutrition with nutritional status

Knowledge of mothers about nutrition with nutritional status of children aged 1-5 years in kedawung village ngadi health center working area is:

Table 3: Cross Table between knowledge of mothers about nutrition with nutritional status

	Nutritional Status				
Knowledge	More Nutrition	Good Nutrition	Less Nutrition	Malnutrition	Total
Good	0	23 (31,08%)	1 (1,35%)	0	24 (32,43%)
Enough	1 (1,35%)	27 (36,49%)	5 (6,76%)	0	33 (44,60%)
Less	0	10 (13,51%)	7 (9,46%)	0	17 (22,97%)
Total	1 (1,35%)	60 (81,08%)	13 (17,57%)	0	74 (100%)

Based on Table 3 cross table between mother knowledge about nutrition with nutritional status almost half of the respondents have enough knowledge and had a toddler with good nutritional status (36.49%).

Based on calculations using Spearman correlation test with a standard error of 5% (0.05) of the obtained results of calculation t = (4,9). Then t is compared with t table with df = n-2 is obtained t (4.9)> t table (1.993), then Ho is rejected and H1 accepted, meaning that there is a correlation between knowledge of mothers about nutrition with nutritional status of children aged 1-5 years in kedawung village ngadi health center working area.

DISCUSSION

1. Knowledge of mothers about nutrition in kedawung village ngadi health center working area

Almost half of the respondents have enough knowledge about the nutritional up to 44.59%. Up to 33 people from the respondents have enough knowledge about nutritional, 24 other people already have a good knowledge and 17 others have less knowledge about nutritional. From 74 respondents almost a half of the respondents have enough knowledge about toodler nutrition. Most respondents did'n know what is nutrition. Only 21 respondents who could answer the questions properly. For about 33 respondents have enough knowledge, and 25 respondents do not understand the nutritional very well.

Mother knowledge about nutrition is still quite enough, the data reveal that most respondents still low knowledge about balanced nutrition for toddlers. Note that from 33 respondents who have enough knowledgeable, there are 29 respondents do'nt understance balanced nutrition for toddlers. Based on the situation, its mean that some respondents not understand what a balanced nutrition yet, because the first stage of knowledge is know, with do'nt know what is nutrtion, of course, its will makes lees knowleadge understanding. most respondents also do'nt understand to preparation of menus for toddlers precisely. There are 33 respondents who are knowledgeable enough, 25 respondents have not understood yet how to prepare the right menu.

Most women do'nt have a good knowledge to prepare the right menu. Especially in presentation and replacement of their meals for toddlers every day. Most respondents to replace the menu of food after their servings. So, the food served in less varied. Less of knowledge on preparation menu can be affected from their experience in application of menu. Its can be detected from the majority respondent have one toddler only. Knowledge is a way to acquire knowledge of truth by repeating back the acquired knowledge in solving the problems facing the past.[1]

Based on the characteristics that have been obtained from each respondent, many factors that influence the differences in the level of knowledge respondents. For example,

factors maternal, education, work and the resources that have been obtained. Based on knowledge is quite could be due to one factor that is of the mother's education level. More than 50% education of respondents are junior school, but 33 respondents who have enough education that most of the respondents are from the class of elementary school graduates. It could have been a supporting factor, because education is one of the supporting height of knowledge. In addition other factors affecting the lack of experience regarding the fulfillment of food marked with nearly 50% of respondents who are knowledgeable enough to have one toddler.

One of the factors that can influence the level of knowledge is age. Majority (63) of respondents aged 20-35 years (85.14%), its mean that respondent majority are adult , so they have mature process of think., more and more information about the arrests add to his knowledge. Then, based on the nutrient information, most respondents had the information about the nutritional (79.73%) yet. They have it from television, midwife etc. From many variation knowleadge of respondent about nutrition, there are many factor that corelation each other. Therefore knowledge of mothers in the kedawung vilage are variation because the different characteristics of respondent.

2. Nutritional Status of Children Ages 1-5 Years in Kedawung village,Ngadi healt center working area.

Based on the results from 74 toodler who to be respondents, most toddlers have good nutrition (81.08%). One way to know the nutritional status can be measured by weighing a toddler. The same age do not necessarily get the same weighing anyway. Many factors inside and outside affecting the nutritional status of children, as the number and quality of the food, infant health, economic level, education, behavior, (parent / caregiver), social, cultural or habits and the availability of food.[9] Nutritional status is an expression and a state of equilibrium in the form of specific variables or embodiment of nutriture in the form of specific variables.[10]

Based on the number of children can be explained that more than 50% of respondents have one child (60.82%). The number of families also influence of nutrition. Members of family is oneinfluence factor of nutritional problems. Lot of children in the family, can influence educed attention and affection to the children.[8] Another factors for example the number of children who owned more than 50% of respondents are of the children (60.82%) so she can focus on providing attention to the toddler. Another factor that the majority of infants receive care from both parents. It is possible attention and close interaction between children and parents can be a good factor for children growth.one of the main goals of parenting is to facilitate a child to develop skills in line with the stage of development. Upbringing of children is one of the basic needs of children's growth and development, mother and child interaction closely as an indicator of the quality and quantity of the mother's role in parenting.[8]

3. The correlation between knowledge of mothers about nutrition with nutritional status of children aged 1-5 years in kedawung village ngadi health center working area.

The calculation of Spearman correlation test with a standard error of 5% (0.05) then obtained by calculating the value of t = 4.9> t table = 1.993, then the t count > t table means H0 is rejected or there is a correlation between knowledge of mother about nutrition with nutritional status children aged 1-5 years in Kedawung village. The results of bivariate analysis to determine the correlation knowledge of mothers with toodler nutritional status can be seen

that there are 23 respondents (31.08%) who have a good knowledge of having a toddler with good nutritional status anyway. Up to 27 respondents (36.49%) who have enough knowledge have a toddler with good nutritional status. Moreover 7 (9.46%) of respondents who have less knowledge also had a toddler with malnutrition status.

It is known that the respondents who have a good knowledge and also had a toddler with good nutritional status almost 50% of respondents already have a good knowledge about balanced nutrition and meal planning is right for babies. Also that respondents who have less knowledge and also had a toddler with less nutritional status of the majority of respondents have less knowledge about balanced nutrition and meal planning is right for babies.

Knowledge of good nutrition will certainly make good nutritional status anyway. Having knowledge about balanced nutrition is good, will bring an attitude to draw up a toddler with proper diet and varied. Basically knowledge will bring the attitude and form of behavior to act in toddler nutrition. So a good knowledge allow to have a good nutritional status as well.

Less of knowledge of mothers about nutrition can make a mother's behavior in regard toddler nutrition becomes less than the maximum. Surely it would be different to that already have a good knowledge. The majority of respondents who have less knowledge and had a toddler with malnutrition status, they are less good in preparing the menu for the toddler. Most provide the same diet for babies. In addition, respondents did not know the principles of balanced nutrition is the basis toddler toddler nutrition.

The factor of malnutrition in children under five year does not mean that their mother did not give much food for babies. But with the less of knowledge, the attitude of mothers in selecting, processing and serving food for toddlers become less true that the nutrients contained in the food decreased. Based on the analysis of multiple logistic regression showed that the mother's nutrient knowledge and attitude of maternal nutrition affects the nutritional status of children, knowledge variable maternal nutrition is the factor most strongly linked to the nutritional status of children, it is indicated with regression coefficient greater than the variable coefficients nutrition attitude.[8] Another thing that needs attention from the research is that there is one person of respondents (1.35%) who have a good knowledge but had a toddler with malnutrition, one of the respondents (1.35%) having sufficient knowledge had a toddler with more nutrition. Besides the 10 respondents (13.51) who have less knowledge can have a toddler with a good nutritional status.

Based on data obtained from the study, the presence of the respondents with good knowledge yet have the status of malnutrition caused due to other factors that cause different conditions than expected. This condition is due before sick toddler. But when weighing already healthy again. This caused the weight loss nutritional status of children under five become less. Besides weight gain relatively little each month can also make a consideration of why it happened. Other things, the presence of the respondent with sufficient knowledge but has better nutritional status due because the toddler has had weight relative fat from entering the age of five. Weigh recorded in 2014, that the respondents also have better nutritional status. It can also be influenced by genetic factors, could be due to the mother of a toddler also always have a relatively more weight.

In other side, there are respondents who have less knowledge but have toddler with a good nutritional status. It's because of the respondents there are cared for by a nanny that does'nt good knowledge so that services maximum. In addition, the routine to come Health Fasility where possible weigh midwife attention to the toddler be monitored nutritional status. It is influenced by several factors. There are amount and quality of food, infant health,

(presence or absence of disease). The external factors are influenced by the level of economic, educational, behavioral, (parent / caregiver), social, cultural or habits, the availability of food in the household.[7] The genetic factors are also the main capital in achieving the results of the growth process.[12]

The results showed the correlation between knowleadge of mother about nutrition with nutritional status. The better knowledge of mothers about nutrition, nutritional status of children will be closer to normal. Nutrition is important in making the mother's attitude, which will bring the behavior to provide good nutrition for babies. Mother knowledge about nutrition will make mothers more aware of the nutrients it needs child. The good knowledge of the mother will cultivate good behavior for food processing, serving and storing food so that nutrients contained not lost.

CONCLUSIONS

Knowledge of mothers about nutrition of children aged 1-5 years in Kedawung village Ngadi health center working area almost half of the respondents is enough. The majority of nutritional status of children aged 1-5 years in Kedawung village Ngadi health center working area are good. There is a correlation between knowledge of mothers about nutrition with nutritional status of children aged 1-5 years in kedawung village ngadi health center working area.

RECOMMENDATION

For Further Research, hope can develop this research about correlation between knowledge of mothers about nutrition with nutritional status of children. For Researcher, its can given this information is expected to mothers who have children can improve her knowledge about toddler nutrition. Its need the active role of medical workers to make promotif methods such as creating banners, leaflets as well as the promotion of health education in order to provide information on nutritional, so that people can know the information well.

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P-05

STUDY OF MOTHERS CHARACTERISTICS AND BEHAVIOR IN FAMILY NUTRITION AWARENESS IN AMBARKETAWANG, GAMPING, SLEMAN

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ABSTRACT

Indonesia still has many malnutrition problems, such as less of vitamin A, iron deficiency anemia, and less iodine disorder. One of government Efforts to tackle problems of malnutrition is increasing nutritional status of household through family nutrition-awareness program. In Sleman percentage of Kadarzi is 65% and in Ambarketawang is 90.89%. This research aims to know characteristic of mothers (education and job) and family behavior in applying Kadarzi. This is descriptive research include observational research with *cross sectional* study design. 36 families in Ambarketawang, Gamping, Sleman were chosen as samples of research. Data were collected by interviewing mothers using a questionnaire and Iodine test. 52.8% families did not apply Kadarzi family behaviors. Reviews those were weighing toddlers regularly, giving exclusive breastfeeding and consuming various foods. Achievement of Kadarzi behavior in families with highly educated mother was higher than families with a mother who had basic education, as well as in families that did not apply Kadarzi well. Achievement of Kadarzi behavior in families with house-wife mother was higher than a working mother, as well as in families that did not apply Kadarzi yet.

Keywords: Education, Job, Mother, Kadarzi behavior

BACKGROUND

In Indonesia there's also the problem of nutrition. Such as malnutrition, lack of vitamin A, iron deficiency Anemia (AGB), Less Iodine Disorders (GAKI) and obesity. Nutritional problem becomes one of determining the quality of human resources. These nutritional problems occur during life cycle begins in the womb (fetal), infant, child, adult and elderly. If early in life toddlers do not aware the importance of nutrition behavior, then it may interfere with the growth and development positively and can reduce health condition [1.]

Riskesdas 2013, from 33 provinces in Indonesia Yogyakarta has a percentage of underweight children based on body weight for age is 16.2% [2.]. In Sleman district contained 4.29% underweight children consist of 0.37% malnourished children and 3.92% children with malnutrition. The prevalence of malnutrition in Sleman comparatively low, but it is still a problem for public health [3.]

According to Law No. 17 of 2007 on the National Long-Term Development Plan of 2005-2025, one of government's efforts in addressing issue of nutrition is to improve human resource development, improving public health and nutrition through improved nutritional status of family, by increasing nutrition services through Family Nutrition Aware (Kadarzi) [4.] From 2 villages in Gamping I Public Health Center (PHC), percentage of Kadarzi is various in Ambarketawang and Balecatur .Based on preliminary survey, achievement Kadarzi in Ambarketawang is quite high, but 3.5% of children 0-23 months are under red line (BGM) and 2 infants suffered malnutrition[5.] This study aims to know mother's characteristics (education

and job) and family behavior in applying family Nutrition Aware (Kadarzi) in Ambarketawang Gamping Sleman.

METHOD

This is an observational research with descriptive and using *cross sectional* design. This research was conducted in Ambarketawang, Gamping Sleman on May-June 2016. Population was all family of children who live in Ambarketawang, Gamping Sleman. Sample were chosen using *cluster random sampling* based on location of north and south sides Geographically from Wates street, then selected six hamlets of area as a place of a study and randomly selected sample of six hamlets. Samples in this study are 36 families of toddlers. Criteria families as sample are family with a toddler who lived and cared by mother.
Variable in this research include mother's Characteristics (Education and Job), Achievement Kadarzi, Families behavior in; weighing infants regularly, exclusive breastfeeding in infants, varied food consumption, use of iodized salt, and giving vitamin A in infants. Data was collected through interviews using questionnaires and tests iodine. Instrument used in this study are stationery, Approval After Explanation (PSP), *informed consent,* questionnaires and tests iodine. Data were analyzed descriptively in a frequency distribution table.

RESULTS AND DISCUSSION

Research Location

Ambarketawang located in Gamping, Sleman, Yogyakarta with an area of 6,358,975 m^2 and consists of 13 hamlets; Mejing Lor, Wetan Mejing, Mejing Kidul, Gamping Lor, Gamping Tengah, Gamping Kidul, Patukan, Bodeh, Tlogo, Depok, Kalimanjung, Mancasan and Watulangkah.

Table 1. Distribution of Population Ambarketawang based Education

Education	Population (people)	%
Can't read and write	7	0.07
Not completed primary school	307	3.04
primary school	1701	16.85
junior high school	1738	17.21
Senior high school	5259	52.08
High school	1085	10.75
Total	10 097	100

Source: Profile Ambarketawang 2014

Table 1 shows most of population in Ambarketawang completed senior high school 52.08%, junior high school 17.21%, 16.85% finished primary school, graduated from high school 10.75%, 3.04% did not complete primary school. While at least that 0.07%. people can't read and write

Table 2. Distribution of Population Ambarketawang based on Job

Work	Population (people)	%
Farmer	206	12.75
Farm workers	269	16.66
PNS / TNI / Police	672	41.61
Self Employed / Traders	147	9.10
Private employees	321	19.88
Total	1615	100

Source: Profile Ambarketawang 2014

Table shows job of population in Ambarketawang most of them as PNS / TNI / Police 41.61%, private employee 19.88%, 16.66% farm workers, farmers and 12.75% and entrepreneur / trader 9.10%.

Characteristics of Respondents Research

Table 3. Distribution of Respondent Based on Education

Education	Frequency (n)	Percentage (%)
higher education	28	77.8
basic education	8	22.2
Total	36	100.0

Sources: Primary data 2016

Table 3 shows majority (77.8%) of mothers have higher education that have completed high school and graduated from university and 22.2% mother who have with basic education that graduated from elementary school and junior high school graduation. Education is a learning experience that aims to influence knowledge, attitudes and behavior [8]. Relation low parental education will lead to limited understanding of nutritional health problems [8].

Table 4. Distribution of Respondent Based Jobs

Work	Frequency (n)	Percentage (%)
Work	14	38.9
Does not work	22	61.1
Total	36	100.0

Sources: Primary data 2016

Table 4 shows the majority (61.1%) of mothers did not bekarja or as housewives and mothers are 38.9% work. Works included in source of family income, where a family with a regular job would be relatively secure earnings every month. If families do not have a regular job, then family income each month can't be ascertained. Works closely related to salary received, higher position leads their higher salary to meet food needs of family [9].

Someone who has a job with a pretty solid time will affect to carry her children. One of them is level attendance in Posyandu. In general, parents do not have free time to take their children, so higher activity of job lead difficult to come to Posyandu [10].

Family Behavior in Implementing Nutrition Aware Family

Table 5. Distribution of Achievement Kadarzi Based on Hamlet

Village	Implementation				Total	
	Kadarzi		Not Kadarzi			
	n	%	n	%	n	%
Gamping Kidul	3	50.0	3	50.0	6	100.0
Gamping Lor	2	33.3	4	66.7	6	100.0
Gamping Tengah	2	33.3	4	66.7	6	100.0
Mancasan	3	50.0	3	50.0	6	100.0
Mejing Lor	3	50.0	3	50.0	6	100.0
Tlogo	4	66.7	2	33.3	6	100.0

Sources: Primary data 2016

Table 5 shows the highest achievement Kadarzi in hamlet Tlogo (66.7%). While the lowest target on village Gamping Lor and Gamping Tengah (33.3%). Data were taken from two areas, north side of Wates Street (hamlet Gamping Tengah, Gamping Lor and Mejing Lor) and south side of Wates Street (hamlet Gamping Kidul, Mancasan and Tlogo). This result suggests that achievement Kadarzi in north side of Wates Street is lower than south side. South side is southern region Ambarketawang area of Gamping hills or mountains.

Table 6. Distribution of Achievement Kadarzi Ambarketawang

Parameter	Frequency (n)	Percentage (%)
Not Kadarzi	19	52.8
Kadarzi	17	47.2
Total	36	100.0

Sources: Primary data 2016

Table 6 shows majority (52.8%) have not implement behavior Kadarzi families and 47.2% of have applied Kadarzi behavior. This is consistent with research on assessment of knowledge and behavior about Kadarzi mother, with result that sample studied shows results of achievement of family behaviors that have applied behavior Kadarzi lower than families that have not implemented behavior Kadarzi [11].

Kadarzi achieved by applying a minimum of five indicators. If one of the five indicators have not been done, family can't be categorized as Kadarzi [12].Kadarzi families who have a family that has not been able to identify and address nutritional issues family members. Attitude and practice of the family has not been guided by a balanced nutrition and healthy behavior. This can lead to problems of nutrition and health in the family. Such as growth disorders toddler, Protein Energy Malnutrition (PEM), Less Iodine Disorders (IDD) and Lack of Vitamin A (KVA).

According to Law No. 17 of 2007 on the National Long-Term Development Plan of 2005-2025, one of the government's efforts in addressing issue of nutrition is to improve human resources development, improving public health and nutrition through improved nutritional status of families, one of them with programs of education on importance of family aware of nutrition to improve the nutritional status of family [4].

Family Behaviour Based Indicators Kadarzi

Table 7. Distribution of Family Based on Behavior Weighing Toddler Regularly

Weighing Weight Toddlers Regularly	Frequency (n)	Percentage (%)
Good	24	66.7
A Not Good	12	33.3
Total	36	100.0

Sources: Primary data 2016

Table 7 shows majority (66.7%) of families apply weighing toddlers regularly. In line with research about relationship of knowledge and behavior about Kadarzi mother factory workers with nutritional status of children under five, which shows that most of sample weighing implement a toddler on a regular basis [13.] However, these results have not yet reached target participation rate indicator (84%) toddlers come to Posyandu once a month (D / S) of Gamping I PHC, to improve achievement of participation is adding extension used media is using posters and flip charts to enhance participation and understanding of participants counseling about importance of monitoring children's growth through neighborhood health center, so the goal can be achieved [5.]

Monitoring children development can be done from birth until children reaches five years is by weighing on a regular basis. The rate of growth and development of children can be monitored through measurements of several physical dimensions, weight. The weight gain children can be shown within a month. Therefore, child must be weighing every month. If on a month children do not go up, it shows growth retardation children [8.]

Table 8. Distribution of Family Based Behavior Exclusive Breastfeeding

Exclusive breastfeeding	Frequency (n)	Percentage (%)
Good	23	63.9
A Not Good	13	36.1
Total	36	100.0

Sources: Primary data 2016

Table 8 shows majority (63.9%) have implemented family of exclusive breastfeeding in infants and only 36.1% of families who have not applied exclusively breastfeeding infants. This is consistent with research on assessment of knowledge and behavior about Kadarzi mother, that most of sample has implemented the behavior of exclusive breastfeeding in infants [11.] Result shows scope of Exclusive breastfeeding have not reach targets (80%). Need efforts to improve achievement Exclusive breastfeeding. [5.]

Table 9. Distribution Toddler Based Giving First Time Beverages / Food In addition to breast milk

Giving First Time Beverages / Food In addition to breast milk	Implementation				Total	
	Yes		No			
	n	%	n	%	n	%
0 months	3	8.3	33	91.7	36	100.0
1 months	4	11.1	32	88.9	36	100.0
2 months	4	11.1	32	88.9	36	100.0
3 months	7	19.4	29	80.6	36	100.0
4 months	9	25.0	27.0	75.0	36	100.0
5 months	13	36.1	23	63.9	36	100.0
6 months	34	94.4	2	5.6	36	100.0

Sources: Primary data 2016

Table 9 shows 8.3% toddlers are given drinks / foods besides breast milk at age of 0 months and there were 36.1% children has been given a drink / food other than breast milk in less than 6 months of age. Based on interviews, various problems faced by mothers so that they fail to provide exclusive breastfeeding to children between because milk that comes out is not smooth, busy mothers and their perception where situation of children who are always crying assumed hungry.

Food and drink other than breast milk given too early (less from 6 months) may endanger the health of infants. Food or drink (even water) is likely to carry germs that cause infections (diarrhea). In addition, provision of breast-milk substitutes too early can increase risk of children suffer from Protein Energy Malnutrition (PEM) because child's digestive system is not ready to process food[14.] Breastfeeding routine is recommended for babies from newborn until the age of 2 years, because no single man can milk exceed nutritional content of breast milk [15.]

Table 10. Distribution of Family Based Food Consumption Behavior Various

Food Consumption Behavior Various	Frequency (n)	Percentage (%)
Good	26	72.2
A Not Good	10	27.8
Total	36	100.0

Sources: Primary data 2016

Table 10 shows majority (72.2%) families have implemented diverse food consumption behavior and 27.8% families have not implemented a various food consumption. This is not fit with Octaviani about relationship of knowledge and behavior about Kadarzi labor mother with nutritional status under five, with result that majority (76.9%) have implement various food consumption [13.]

Consumption of a variety of foodstuffs for infants may warrant completeness necessary nutrients the body, because each food contains different nutrients sources in terms of type and number [1.] The age of first and second year after baby is born is a period where baby should be be given food regulated appropriately and correctly, so that child's needs can be met and child can grow and develop optimally. No food has a complete nutritional content, it is necessary to consume a various foods, nutritionally balanced and safe in order to fulfill nutritional adequacy of individuals to grow and develop [16.]

Table 11. Distribution of Family Based on Usage Behavior Iodized Salts

Behavior Usage iodized Salt	Frequency (n)	Percentage (%)
Good	36	100.0
A Not Good	0	0
Total	36	100.0

Sources: Primary data 2016

Table 11 shows behavior of families in implementing use of iodized salt for cooking which reach 100%. These results are in line with research on assessment of knowledge and behavior about Kadarzi mother, that all samples studied have implemented use of iodized salt [11.]

Behavior of iodized salt consumption is one effort to prevent Less Iodine Disorders (IDD). In addition, iodine in salt also has an important function for the human body [1.] Iodine deficiency is prolonged will disrupt function of thyroid gland that gradually causes enlargement of thyroid gland. In this case the fetus can get cretinism and death, case in children, adolescents and adults can cause goiter, hypothyroidism, and mental disorder. Successful achievement of behavior of the use of iodized salt is not out of the iodized salt program of the government, so that all salt that is distributed in Indonesia already contains iodine [17.]

Table 12. Distribution of Family Based Vitamin A Capsule Consumption Behavior in Toddlers

Consumption behavior of Vitamin A in Toddlers	Frequency (n)	Percentage (%)
Good	36	100.0
A Not Good	0	0
Total	36	100.0

Sources: Primary data 2016

Table 12 shows behaviors in giving capsules vitamin A in toddlers in previous year were optimal, reaching 100%. In line with research Melati et al (2014) study on knowledge and behavior about Kadarzi mother, that all samples implemented give vitamin A in infants [11.] The success of achievement behavior of consumption vitamin A supplementation showed a high awareness and willingness to make program successful distribution vitamin A supplementation in young children, pregnant women and role PHC and cadres of posyandu in support this program. Posyandu cadres have responsible to do home visit to under five if infants are not coming to Posyandu during month administration of vitamin A.

Vitamin A is an essential nutrient that can only be filled from outside the body. Vitamin A serves to prevent immune deficiencies that can lead to body vulnerable to infection. Lack of Vitamin A (KVA) is one of nutritional problems that frequently occur in Indonesia. As a result of vitamin A deficiency can cause night blindness and blindness. How to prevent and to treat vitamin A deficiency is consumption of foods contain high vitamin A, such as chicken liver, green vegetables and colorful fruits. Another way to do is giving high-dose vitamin A capsules, which is given to children every 6 months [16].

Educational attainment Kadarzi Based Respondent

Table 13. Distribution Kadarzi Based on Mothers Education

Mothers Education.	Achievement Kadarzi			
	Kadarzi		Not Kadarzi	
	n	%	N	%
higher education	14	82.4	14	73.7
basic education	3	17.6	5	24.4
Total	17	100.0	19	100.0

Sources: Primary data 2016

Table 13 shows that 82.4% families with highly educated mothers behave Kadarzi and 17.6% of families with basic education mothers. Achievement Kadarzi in family with educated mother can reach higher than basic education in mother. A person's behavior or public health is not only determined by knowledge (education), but is also determined by attitudes, beliefs, tradition of people or communities concerned. In addition, availability of facilities for health such as health centers, hospitals, nutritious food and money will support and strengthen formation of behavior [18].

Educational attainment Kadarzi Based Respondent

Table 14. Distribution Achievement Kadarzi Based Mothers Work

Mothers Work	Achievement Kadarzi			
	Kadarzi		Not Kadarzi	
	n	%	n	%
Work	7	41.2	7	36.8
Does not work	10	58.8	12	63.2
Total	17	100.0	19	100.0

Sources: Primary data 2016

Table 14 shows that 41.2% of families with working mothers do behavior Kadarzi and 58.8% of families with mothers who did not work do behavior Kadarzi. Achievement Kadarzi in families with mothers who did not work is higher than in families with working mothers. In general, families are busy with their work and don't have free time to carry out their children, so higher activity of job affect more difficult to come to Posyandu[10].

A person's health behavior is not only determined by knowledge (education), but also determined by attitudes, beliefs, tradition of people or communities concerned. In addition,

availability of facilities to increase health behaviors such as health centers, hospitals, nutritious food and money will also support and strengthen the formation of behavior [18].

CONCLUSION

1. Achievement Kadarzi in Ambarketawang is 47.2%
2. Achievement of family behavior in weighing infants regularly is 66.7%
3. Achievement of family behavior in exclusive breastfeeding of 63.9%
4. Achievement of family behavior in serving various food consumption is 72.2%
5. Achievement of family behavior in usage of iodized salt 100.0%
6. Achievement of family behavior in applying consumption of vitamin A supplements for under fives is 100.0%
7. Family with mother's higher education has greater achievement in Kadarzi than family with mother's lower education.
8. Achievement Kadarzi behavior in families with mothers who do not work is higher than mothers who do not working.

SUGGESTION

It is needed to improve counseling about importance Kadarzi especially on aspects of weighing and growth monitoring of children, exclusive breastfeeding and various food consumption.

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P-06

THE DEVELOPMENT OF CADRE'S PERFORMANCE WITH THE TRAINING OF NUTRITIONAL ASSESSMENT ON CHILDREN IN POSYANDU

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ABSTRACT

Background : The cause of toddler's nutritional problem is multifactorial, including the role of Posyandu is still lacking. The cause of the malfunction of one of them because of the ability of cadres in Posyandu are still low. Cadre plays an important role in the effort of optimizing nutritional status of toddler through nutritional status assessment activities.
Purpose : To provide knowledge and skills to cadres on how to assess nutritional status correctly, in order to improve the cadres's performance in malnutrition's screening process.
Method : Community service activities in the form of training is done in the hamlet Santan, Maguwoharjo, Depok, Sleman, with 7 cadres were participated. The training was using FGD (Focus Group Discussion) method with the topic of nutrition status assessment includes anthropometric measurements, anthropometric assessment, and toddler's intake.
Result : The activities run smoothly, participants discussed actively, sharing about how nutrition status assessment that had been done in Posyandu, as well as provide positive feedback by telling some of the nutritional problems found during the Posyandu. Participants can better understand how assess toddler's nutritional status and how to solve nutritional problems.
Conclusion : The attitude and behavior of Posyandu cadres in general is good, but there are still some obstacles, including lack of cadre's knowledge and skill in nutritional status assessment of toddler, lack of public awareness to participate in Posyandu activities, as well as the process of monitoring the growth of toddler which not maximal.

Keywords : Nutritional status assessment, toddler, cadres.

PRELIMINARY

In order to establish a fair and prosperous society, the development is done in all fields. Health development is an integral part of national development as a whole which should be encouraged[1]. One of the goals of the Sustainable Development Goals (SDGs), which was agreed by 193 countries in the world in August 2015 was in terms of alleviation of hunger, include ending hunger, achieve food security and nutrition improvement, and promoting sustainable agriculture.

WHO data on year 2002 show that each year approximately 11 million toddler worldwide die from infectious diseases such as respiratory infections, diarrhea, malaria, measles, and others. Ironically, 54% of the deaths were related to the lack of nutrition. In 2004, Bappenas mentioned toddler mortality rate in Indonesia is the highest in ASEAN. Profile of Sleman District Health Office in 2014 shows the results of monitoring the nutritional status based on indicators Weight for Age (W/A) in Sleman with totally 56.071 toddlers appoint magnitude of nutritional problems in Sleman, namely malnutrition as much as 3.538 and severe malnutrition as much as 246.

The problem of malnutrition is generally caused by poverty, lack of availability of food, poor sanitation, lack of public knowledge about nutrition, the imbalance of diet and health.

Nutritional problems are caused by multifactorial, therefore in tackled effort must involve a wide range of related sectors, one of which is the role of Posyandu[2].

Posyandu is a real activities that involve community participation, from, by and for the people in the health care effort that carried out by cadres[3]. One of the causes of malnutrition in the community is the lack of a functioning social institutions in society, such as Posyandu, which resulting toddler nutrition monitoring is not working as it should. The weighing process of the toddler who should have as principal activity can only be a side activity[4].

The cause of the malfunction of Posyandu because of the ability of the cader which still low. Implementation of Posyandu once a month depending on the presence and encouragement of health workers and the activities of the health cadres. However the level of ability, thoroughness and accuracy of the data collected cadres still low, and 90% of cadres made a mistake. One mistake cadre of the most frequently encountered is the lack of skill on the weighing process technique[4].

Nutritional education and training on cadres in Posyandu with approach for weighing process and recording the growth of the toddler's weight at KMS and interpret KMS well, is the key to success of Posyandu[5]. Cadre plays an important role in the effort optimizing nutritional status of toddler through nutritional status assessment activities. Therefore, it is important to hold community service activities such as training of cadres about nutritional status assessment of toddler, in order to be success in malnutrition screening process especially on toddler.

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METHOD

This community service activities performed in the hamlet Santan, Maguwoharjo, Depok, Sleman, with 7 cadres participated. The activities carried out in the form of training of nutritional status assessment on toddler, which included anthropometric measurements (weight, height), assessment of nutritional status using the indicator W/A, H/A and W/H, as well as the assessment of nutritional status based on the intake of toddler.

The training was using FGD (Focus Group Discussion) method, ie, all the participants involved in discussions regarding the assessment of the nutritional status of toddler. With this method, each participant has an equal opportunity to argue and sharing each other's experiences for the improvement of the system implementation in the process of nutritional status assessment of toddler in the Posyandu in the Santan area. Topics covered may be developed in accordance with the existing problems when Posyandu is held.

RESULT

The activities run smoothly, participants discussed actively, sharing about how nutrition status assessment that had been done in Posyandu, as well as provide positive feedback by telling some of the nutritional problems found during the Posyandu, among others, the diet on cases of child obesity, the slowing of the growth process and development in childhood, cases of toddler with cancer and one kidney, malnutrition in the Santan area, toddler's diet, as well as preparation for Posyandu menu cycle.

Based on the evaluation of activities, Posyandu's cadres can better understand how ratings nutritional status of toddler and how to deal with the problems of nutrition in the Santan area. Participants asking for similar activities are held on an ongoing basis in order to improve their knowledge and performance while running role as volunteers.

DISCUSSION

Posyandu is a community center for health services among others include: (1) the family planning program, (2) nutrition program, (3) immunization program, (4) diarrhea prevention program, (5) maternal and child health program. Posyandu is a continuation of the park nutritional / postal weighing, which has been carried out by the PKK, and then fitted with a family planning health services. Posyandu is a social institution functioning as child growth monitoring[5].

In an effort to optimize the development of the child, should involve three aspects: nutrition, health, and parenting. The role of women in caring for and raising toddler is so important, so make education for women is especially significant[6].

Currently, there are various problems are arising in the implementation of Posyandu, among others: (1) only about 40% of posyandu be able to function properly, (2) the equipment is inadequate, (3) did not have a decent service, (4) the provide guidance to posyandu yet evenly distributed, (5) the coverage posyandu still low (<50%) and the majority are children under the age of 2 years, (6) almost 100% of mothers had heard posyandu, but were present at the posyandu activities less than half, and (7) do not have a sufficient cadre amount when compared with the target, or although the amount is sufficient but not active cadres[7].

Being a cadre is one form of participation as members of the community to improve efficiency on the basis of limited services in the operation of public health services. In general, the cadres are not professionals but merely assist in health care, where activities which can be performed cadres in Posyandu is carrying out the registration, carrying out a child's weighing process, recording the child's weight, provide counseling, and help provide services and refer.

The results of this public service activities in accordance with previous similar activities in the Kuok District that the characteristics of the trainees can be seen from the attitude and behavior of the overall show good results[8]. Nevertheless, there are still some obstacles in the process of determining the nutritional status of toddler during the Posyandu, including lack of knowledge and skill of cadres in nutritional status assessment of toddler, lack of public awareness to participate in Posyandu activities, as well as the process of monitoring the growth of toddler which not maximal.

Knowledge of cadres is the potentially sustainable in their role as a volunteer. The admission process will be a lasting new behavior when it is based on knowledge, awareness and positive attitude. The lack of knowledge and lack of experience are the main trigger of less active participation of health cadres. In addition, other triggers are the preoccupations of cadres in household affairs so that cadres could experience lacking on understanding and service skills, causing cadres to experience more less independent so it depends on health workers and community health centers. Therefore, during the Posyandu implemented, the role of cadres often do not function properly. Whereas reduction of malnutrition prevalence requires the accuracy, speed and thorough[9].

Lack of cadres role in monitoring the growth of toddler shows that the importance of health education to the cadre in monitoring the growth of toddler so that the growth and development of toddler can be monitored to obtain optimal results[10].

Health education can enhance the role of cadres in which the role with enough categories increased from 39.4% to 63.6% and a role in the poor category decreased from 51.5% to 24.2% 10. It shows that health education has a very big role in health care, including in this community service activities. With increasing knowledge of the cadres about nutritional

status assessment of toddler, is expected to enhance the role of the volunteer in the effort to address problems related to the nutritional status of toddler in the Santan area.

CONCLUSION AND RECOMMENDATION

The results showed that the attitude and behavior of Posyandu cadres in general is good, but there are still some obstacles, including lack of knowledge and skill of cadres in nutritional status assessment of toddler, lack of public awareness to participate in Posyandu activities, as well as the process of monitoring the growth of toddler which not maximal.

From these results, it can be suggested among other things the Government needs to do a variety of activities to stimulate, encourage and increase the participation of cadres Posyandu by providing incentives and rewards as motivation of cadres in carrying out various activities. Besides, it should also be trained on an ongoing basis in order to improve the knowledge and skills of cadres in carrying out its role and function as a cadre, especially in terms of nutritional status assessment, which is expected to achieve optimal health status in toddler.

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P-07

THE IMPACT OF PSYCHOLOGICAL TRAUMA ON VICTIMS OF TRAFFIC ACCIDENTS: Literature Review

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ABSTRACT

Background: Traffic accident is a traumatic event that not only cause physical trauma to the experience, but will also lead to psychological disorders such as post-traumatic stress disorder (PTSD). From these reasons, it will need to know how the effects of psychological trauma on victims of traffic accidents
Aim: The main objective of this study was to determine and identify the impact of psychological trauma in the form of post-traumatic stress disorder called Post Traumatic Stress Disorder (PTSD) victims of traffic accidents
Methods:. This study uses a method by applying a literature search through the English research articles published in journals between 2010 and 2015 were carried out. A computerized search of ProQuest, Science Direct and EBSCOhost databases is done by using the search term "psychological trauma in a traffic accident".
Results:the psychological impact of a traffic accident can cause symptoms such as nightmares, flashbacks, and / or recurrent and distressing memories of the traumatic event. Avoidance considering the trauma that happens, adverse changes in mood, cognition associated with trauma (eg, dissociative amnesia, loss of interest, and feelings of detachment), and significant changes in activity after trauma (outburst of anger is unwarranted, hypervigilance, and the response is exaggerated) the direct effects of acute psychological trauma including emotional as intense fear and helplessness.
Conclusion: The psychological impact of traffic accidents, better understanding and treatment efforts have not received maximal attention. The attention given to victims of traffic accidents are usually more focused on the handling of physical, psychological treatment while often gets the last priority.

Keywords: Psychological trauma, traffic accidents, impact.

BACKGROUND

Someone who experienced traumaticthings in life, such as traffic accidents are quite severe, can result in injury or settled temporarily in the body and may also have a physical disability to partial loss of limbs. Someone who previously was able to move with complete limbs and living independently, after an accident and have a physical disability, life becomes changed. Daily activities becomes blocked, limited and often become dependent on others. Traffic accident is a traumatic event that not only cause physical trauma to the experience, but will also lead to psychological disorders such as disorders post-traumatic stress or a so-called Post Traumatic Stress Disorder (PTSD) (8).

According to WHO, traffic accidents an estimated 1.2 million deaths worldwide in 2010. Ninety two percent of traffic accidents occur in countries with low and middle income East Asia and Africa have the highest rates. Meanwhile, according to data from the Central Statistics Agency (BPS), in 2012 the number of traffic accident victims reach 117 949 by the victim died as many as 29 544, 39 704 severe injuries and minor injuries as much as 128 312. According to the Australian Centre for Post-traumatic Mental Health In 2013, motor

vehicle accidents can cause psychological trauma to those who experience it, accounts for 13-25% of psychological trauma disorders caused by motor vehicle accidents. During the first months after the accident, PTSD rate varies between 16% and 41% of the data from evaluations conducted four months after the accident were approximately 40% and when the evaluation carried out six months after the accident, the rate of PTSD ranged from 6% to 26%. Twelve months after the accident, the rate of PTSD range from 2% to 30% (10). There are factors that have been identified to predict PTSD. Among these are the pre-crash factors and accidents, a factor pre-crash included socio-demographic factors such as age, sex, socio-economic factors, mental illness before, a road traffic accident earlier are the factors that influence the development of PTSD, the factors of accidents including impacts perceived influence led to the development of PTSD in victims (10).

Trauma management is multidimensional and very challenging task. The patients Traumatic events after a road traffic accident (RTA) is usually handled in the emergency room (ER) by the surgeon orthopedic or trauma trained in managing only physical injuries, while psychological problems not handled properly, resulting in a significant impact on the victims , the victim's family, and ultimately society as a whole. Psychological concerns, if not handled properly, can cause mental health condition is acute or chronic.

AIM

The main objective of this study was to review the literature to determine and identify the impact of psychological trauma in the form of post-traumatic stress disorder called Post Traumatic Stress Disorder (PTSD) victims of traffic accidents.

METHOD

This study uses a method by applying a literature search through the English research articles published in journals. A computerized search of ProQuest, Science Direct and EBSCOhost databases is done by using the search term "psychological trauma in a traffic accident". Literature qualified in the inclusion criteria is literature that focuses on the "psychological trauma in a traffic accident.

RESULTS AND DISCUSSION

Some studies suggest that there are gender differences in the psychological responses after MVA (motor vehicle accidents), and this study demonstrates the fact that women show psychological disorders more often than men, especially Acute Stress Disorder (ASD) and Posttraumatic Stress Disorder(PTSD). The samples studied are likely victims with and without severe injury and did not take into account the severity of the accident, which could explain the inconsistent results obtained. To evaluate the diagnosis of PTSD four months later and to analyze the predictive power peritraumatic dissociation and symptoms of ASD to explain later psychological disorders (PTSD)(10). According to(1); in the DSM-IV-TR (Diagnostic and Statistical Manual of Mental Disorders, 4th edition, text revision), has led the response involving fear, intense fear, or despair. Accidents resulting in pathological responses that involve a number of cognitive, psychological, and behavioral processes, including symptoms of numbness and avoidance. However, previous studies have questioned the DSM criteria for PTSD, with a lot of criticism about the usability criteria (5) recommendation.

Recent for DSM-V revision involves, or even the removal of a number of psychological problems of clinical significance have been associated with serious MVA, but the most consistent disorders reported among the victims were post-traumatic stress disorder (PTSD). The accident victim may feel fear, nightmares, and even hallucinations. NICE (National Institute for Clinical Excellence), (10), states that, in addition to these psychological symptoms, can also be accompanied by physical symptoms such as trembling and sweating are all symptoms lasted for at least one month after the occurrence of traffic accidents.The trauma that would interfere with daily activities, especially in terms of productivity and the need to socialize with other people will be disturbed. Not to mention the physical conditions of people with disabilities, the mobility would be hampered.

Meanwhile, according to (2) the psychological impact of a traffic accident can cause symptoms such as nightmares, flashbacks, and / or recurrent and distressing memories of the traumatic event. Avoidance considering the trauma that happens, adverse changes in mood, cognition associated with trauma (eg, dissociative amnesia, loss of interest, and feelings of detachment), and significant changes in activity after trauma (outburst of anger is unwarranted, hypervigilance, and the response is exaggerated) the direct effects of acute psychological trauma including emotional as intense fear and helplessness.

Handling of PTSD in addition to pharmacological treatment such as antidepressants and anti-anxiety, can also be dealt with using psychotherapy. Cognitive Behavioral Therapy (CBT) is a psychotherapy that combines behavioral therapy and cognitive therapy which is based on the assumption that human behavior is simultaneously influenced by the ideas, feelings, physiological processes and consequences on behavior. Psychotherapy approaches with methods Cognitive Behavioral Therapy (CBT) is said to be one of the treatment methods of psychotherapy are most effective in addressing PTSD (7). Meanwhile, according to the EMDR International Association, (2009) Eye Movement Desensitization and Reprocessing (EMDR) is a method that is scientifically validated gradual, integrative psychotherapy approach based on the theory of psychopathology caused by traumatic experiences or events that disrupt the journey of life. (6) states that EMDR treatmentproved to be the most consistently provide a positive effect to overcome the trauma. While stabilization techniques are part of EMDR therapy, but more emphasis on maintaining and restoring the basic functions of the individual after an interruption. The above data reveal the number of traffic accidents can result in psychological harm themselves victims of accidents both weight and minor accidents. Traffic accidents can result in psychological effects such as trauma, mental disorders on the victims or their families who are still alive.

CONCLUSION

The psychological impact of traffic accidents, better understanding and treatment efforts have not received maximal attention. The attention given to victims of traffic accidents are usually more focused on the handling of physical, psychological treatment while often gets the last priority. Assistance and recovery efforts of victims of traffic accidents should be done immediately, because this disorder if it continues will cause chronic disorders and will greatly disturb social life and work of the individual. Traffic accidents, especially those that resulted in serious injuries for most people is a severe traumatic experiences. Traffic accident victims is expected to overcome the psychological anxiety that may arise as a result of accidents suffered. However, not all victims of traffic accidents to emerge from traumatic experiences. This is caused by the way of meaning, respond to and cope with traumatic events and efforts to adapt to the problems differ from one person to another.

RECOMMENDATION

There needs to be a coordinated effort at the national level or the state's level for the strong trauma system to support victims of traffic accidents so as to reduce the psychological impact of the trauma.

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P-08

KNOWLEDGE CHARACTERISTIC CONCERNING LACTATION WITH BREASTFEEDING TECHNIQUE AMONG POSYANDU CADRE

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ABSTRACT

Health Data It is known that scope of Exclusive breastfeeding in Malang is 58,47%, this number is still low compared to national target of 80%. To obtain success in giving breastmilk for infant, it should be supported by good lactation management and good breastfeeding technique so that benefit of Exclusive breastfeeding could be gained. An active role of Posyandu cadres in contributing their mind and effort to improve community health is highly important. This study aims to investigate the characteristics of knowledge about lactation breastfeeding technique at the Posyandu cadres in Malang city, and the relationship with the attitude of cadres Posyandu knowledge about breastfeeding techniques. This study method was analytical survey with cross sectional approach. Sample was collected by simple random sampling technique. Total of sample is 50 respondents from total population of Posyandu cadres representing 5 districts in Malang. This study instrument was questionnaire and check list observation sheet. Data analysis was using Somers'd Correlation. Knowledge of Posyandu cadres regarding breastfeeding was mostly good (68%), attitude of Posyandu cadres regarding breastfeeding technique was still lacking (62%). There was no meaningful correlation between knowledge of Posyandu cadres and attitude regarding breastfeeding technique (p>0,05).This study proved that good knowledge among Posyandu cadres regarding lactation is still less supported by attitude of Posyandu cadres in giving explanation regarding breastfeeding technique. Therefore, we need to optimize extension and training by health personnel toward Posyandu cadres regarding lactation management.

Keywords: Posyandu cadres, Lactation, Breastfeeding technique

INTRODUCTION

Infant mortalityrate is one of health measure parameter in a country. Based on UNICEF data, infant mortality rate in the world would reach 4 million per year. In Indonesia until 2012, infant mortality still holds in 32 mortality per 1000 delivery. This figure was still far from *Millenium Development Goals* (MDGs) target with 23 per 1000 delivery [(1)] . After more examination, the main cause of infant mortality after birth and for infant under five years old would be no early breastfeeding initiation and exclusive breastfeeding. Lower number of exclusive breastfeeding has stimulated lower rate for infant and babies nutritional status. Giving exclusive ASI would be able to suppress infant mortality by reducing approximately 30.000 infant mortality in Indonesia and 10 million infant mortality in the world through giving exclusive breastfeeding for the first six month after birth without giving additional food or drink toward infant and babies.

Based on data from UNICEF, exclusive breastfeeding in Indonesia was still far from world average with only 38%. While according to SDKI, it show that number of babies who got exclusive breastfeeding has decrease to 7,2%, however for formulated milk the number is increasing to 27,9%. According to Dinas Kesehatan Malang, scope of mother who gave exclusive breastfeeding in Malang still about 58,47 %, this figure is still far from target figure

of scope exclusive breastfeeding in Malang which is 80 %, this number also become the target for scope of national exclusive breastfeeding. To gain success in giving breastfeeding for babies, it should be supplemented by good lactation management so that benefit of breastfeeding was optimized.

In an effort to increase utilization of breastfeeding it shows that key obstacle of breastfeeding utilization is lack of mother's knowledge about exclusive breastfeeding and breastfeeding technique. Exclusive breastfeeding and breastfeeding technique was generally assumed as ubiquitous and there was no need to learn about it. Lactation management or incorrect breastfeeding and other misleading myths have impede breastfeeding for infant [(2)]. Lower figure in success of exclusive breastfeeding has been influenced by several factors such as change in social culture aspect for example, working mother, thus infant was given food addition to breastmilk before 6 month old, and there was belief that formulated milk is more prestigious than breastmilk. Other factor that supports this lower figure is lack of support from the family or the surrounding environment to give exclusive breasfeeding for 0-6 months old [(3)].

Realizing the importance of community active role in supporting development success for health, it is in need for development agents that could raise people awareness to participate in development. People participation in health development with great role is as Maternal and ChildHealth Centre (PosPelayananTerpadu – Posyandu) Cadre [(4)]. Posyandu cadres generally volunteer from community figure that assumed to be more affluent than other member of the community [(5)].

Effort to improve role of community member would be through caderization system by training, extension, and guidance to raise independence and thus able to dig and use the available resources and to raise and solving problems for optimum service. For this purpose, we would need good health cadre, those who can contribute their mind and energy to improve community's health [(6)].

PURPOSE

This study aimed to discover relationship between knowledge of Posyandu cadre about lactation and breastfeeding technique in Malang. It was expected that result of this study could be used as cadre material to increase the scope of exclusive breastfeeding.

METHOD

Design in this study was using analysis survey and data collection was using cross sectional technique. This study was done to discover about relationship between Posyandu cadre knowledge concerning lactation with breastfeeding technique.

Sample was collected by *simple random sampling* technique. Total of sample is 50 respondents from total population of Posyandu cadres representing 5 districts in Malang(Klojen, Kedungkandang, Sukun, Blimbing, and Lowokwaru). Implementation was done by maintain the *privacy* and confidentiality of respondent.

Statistical analysis in this study would consist of univariate and bivariate analysis. Univariate analysis consists of: age, education, occupation, and duration/length when one become Posyandu cadre. Bivariate analysis in this study consists of cadre knowledge regarding lactation and breastfeeding technique. Statistical test was using correlation test from Somers'd.

RESULT AND DISCUSSION

Respondent Characteristic

Respondent characteristic of Posyandu cadre was taken from 5 districts in Malang (KecamatanKlojen, KedungKandang, Sukun, Blimbing and Lowokwaru). Respondent characteristic reviewed in this study consist of: age, education, occupation and duration/ length in becoming Posyandu cadre. Table 1 below illustrated respondent's characteristic of Posyandu cadre in Malang.

Table 1: Respondent Characteristic of Posyandu Cadre in Malang for July – September 2014

No	Respondent Characteristic	N	%
1	Age Range		
	< 30 years old	0	0
	30 - 40 years old	6	12
	40 - 50 years old	18	36
	> 50 years old	26	52
2	Education Level		
	Primary school	9	18
	Junior High	4	8
	Senior High	26	52
	Higher Education	11	22
3	Occupation		
	Housewives	46	92
	Private	4	8
4	Duration as Cadre		
	< 5 year	9	18
	5 - 10 year	9	18
	> 10 year	32	64

(N=50)

Table 1 above has illustrated respondent characteristic of Posyandu cadre who participated in this study. Univariate analysis result showed that most respondent in this study was more than 50 years old that is 26 people (52%). Most people have senior high school as their education level that is 26 people (52%). Univariate analysis result also showed that most cadre works as housewives, with 46 people (92%). Large number of housewives respondent was caused by housewives has lots of leisure time therefore participating in this activities could used up some of these leisure time and to increase knowledge in health, also become a Posyandu cadre would improve socialization in the eye of community. Duration or length of respondent act as Posyandu cadre was mostly for more than 10 year, about 32 people (64%). This duration was due to reasoning that as part of the community, respondent feel proud to be able to participate, actively engaged and voluntarily involved in increasing people's health, this is in accord with cadre formation purpose that is to actively engage the community member in responsible manner. Community member's involvement in increasing service efficiency is the basic for limited power and by operational of Posyandu would be able to utilize the existing resources in optimum manner **(5,6)** .

Other characteristic of Posyandu cadre being reviewed would be level of knowledge and attitude of Posyandu cadre regarding lactation. Below was Table that showed level of knowledge and attitude of Posyandu cadre regarding lactation (Table 2).

Table 2: Characteristic for Knowledge Level and Attitude of Posyandu Cadre Regarding Lactation

No	Respondent Characteristic	N	%
1	Level of knowledge Posyandu cadre regarding lactaction		
	Good	34	68
	Medium	16	32
	Less	0	0
	Poor	0	0
2	Attitude of Posyandu cadre regarding lactation		
	Good	0	0
	Medium	1	2
	Less	31	62
	Poor	18	36

(N=50)

Based on Table 2 univariate analysis for level of knowledge of Posyandu cadre regarding lactation, most has good knowledge that is for 34 people (68%) and the remaining has medium knowledge with 16 people (32%). Although most respondent has good knowledge regarding lactation, but based on knowledge questionnaire item concerning lactation there were still lots of respondent who did not know the answers (answering wrongly). Several knowledge that not yet known by respondent regarding lactation would be: mother who breastfeed the babies would succeed though her nipple is sunken or flat, since shape and size of nipple won't become the obstacle in breastfeeding. The need of babies to breastfeed is not schedule-based but rather on demand, thus more frequent the mother breastfeed the baby the amount of breastmilk produced would increase, also amount of breastmilk by breast would depend on babies suction, since babies suction is stimulation for breastmilk production, through prolactin reflex and letdown reflex [(3)] .

Other knowledge item that was less known by respondent would be the benefit of breasfeeding other than to increase baby's immune system. It would also affect baby's development and intelligence. It was also known that breastfeeding could prevent lots of infection-related illness (diarrhea, respiratory infection, ear infection, pneumonia, bladder infection) and other illness (obesity, diabetes, allergic, digestion inflammation, cancer) [(3,7)] . This was due to breastmilk contain Sig A (*Secretory Imunoglubulin A*) which is body immune system particularly in maturity of babies digestion tract. Acid condition formed due to breastmilk was signal for mucous formation in digestive tract. Increase in Sig A content was correlated with increase in digestive tract immune system toward infection, while mucous layering the digestive tract surface would act as barrier so that microorganism wouldn't be able to enter the blood circulation. Breast feeding should be encouraged and highly recommended in the first two years of life as it provides Secretory IgA to breast fed infants who in turn protect them against epithelial damage caused by Rota viral gastroenteritis [(8)]. Good position in breastfeeding is knowledge less known by most respondents. It was started with preparation, during and after breastfeeding, particularly in attachment of mother's breast and baby's

mouth. By knowing the correct position when mother breastfeeding correctly is one of the key successes in breastfeeding[9] .

Attitude of Posyandu cadre in explaining about breastfeeding technique (lactation) toward people, particularly pregnant woman and breastfeeding women is still lacking with only 31 people (62%). This lack of attitude concerning breastfeeding technique was shown particularly for during breastfeeding, in preparation and after breastfeeding. Likelihood in lacking attitude from Posyandu cadre in explaining breastfeeding technique toward community member was caused due:

1. Extension toward Posyandu cadre by health personnel regarding lactation management was not accompanied by special training regarding breastfeeding technique (if there was, it would demonstration in nature) thus not all Posyandu cadre able to do breastfeeding technique in practice.
2. None/lack of direct companion by health personnel toward Posyandu cadre during extension and implementation of breastfeeding technique toward community member particularly toward pregnant and breastfeeding women.
3. Lack/almost none of evaluation from health personnel from community health center particularly toward community satisfaction (particularly pregnant women and breastfeeding mother) regarding breastfeeding technique given by Posyandu cadre. Success in breastfeeding would be supported by good and correct breastfeeding technique, begins with baby's positioning, stimulation for breastfeeding, attaching baby's mouth with mother's nipple until how to burping babies after breastfeeding [9,10,11] .

Relationship Between Knowledge of Posyandu Cadre regarding Lactation with Attitude of Breastfeeding Technique

Bivariate analysis in this study was done to discover the relationship between knowledge of Posyandu cadre regarding lactation and breastfeeding technique. Below is the table that revealed result of bivariate analysis of relationship between knowledge of Posyandu cadre regarding lactation with breastfeeding technique.

Table 3: Relationship between Knowledge of Posyandu Cadre Regarding Lactation with Attitude of Breastfeeding Technique

		Attitude			Total	r	p
		Medium	Lacking	Poor			
Knowledge	Good 0		23	11	34	0,072	0,651
	Medium 1	8		7	16		
Total		1	31	18	50		

Based on Table 3 regarding relationship between knowledge of Posyandu cadre regarding lactation and attitude of breastfeeding technique analyzed using correlation test Somers'd obtained r value=0,072 (very weak) with p value=0,651 (p>0,05). There was no meaningful correlation between knowledge of Posyandu cadre and attitude of breastfeeding technique. Event cross tabulation between knowledge of Posyandu cadre regarding lactation with attitude of breastfeeding technique also showed that Posyandu cadre with good knowledge has lack of attitude regarding breastfeeding technique for about 23 people (46%) and poor attitude for about 11 people(22%). Lower relationship between knowledge

of Posyandu cadre about lactation with attitude of breastfeeding technique was due to most Posyandu cadre was more than 50 years old and most of them were housewives. With most cadre were 50 years old, they have physical limitation and only becoming Posyandu cadre to use up their spare time. This has cause Posyandu cadre is not maximized (unwilling) to develop their knowledge, though several Posyandu has mostly given extension/briefing regarding lactation management with breastfeeding technique [4,5].

In extension/briefing, lactation management given by health personnel from Community health center consist of breastfeeding technique material but it mostly demonstration in nature. If there was cadre who practice it, it would only count for only few people. This was due to limited time in extension thus to improve practicing (improve *soft skills*) is highly limited, besides various material for Posyandu extension would need its own allocated time to deliver it. Limitation in extension time along with training should be scheduled and supplemented with training result implementation directly toward community member particularly for pregnant women and breastfeeding mother. Therefore good knowledge would be supported by good attitude [12] .

CONCLUSION

Based on study stages conducted by author, conclusion may be inferred as follows:

1. Knowledge of Posyandu cadres regarding breastfeeding is quite good (68%),
2. Attitude of Posyandu cadres regarding breastfeeding attitude is still lacking (62%).
3. There was no meaningful correlation between knowledge level of Posyandu cadres and attitude regarding breastfeeding technique

RECOMMENDATION

Result of this study has proven that good knowledge among Posyandu cadres concerning lactation is less supported by attitude of Posyandu cadres in giving explanation regarding breastfeeding technique. Therefore, author would like to suggest several things below:

1. Maximizing extension and training by health personnel (particularly health personnel from community health center) toward Posyandu cadres regarding lactation management, in particular breastfeeding technique by practicing (improving *soft skills*) (Stuebe and Schwarz,, 2010)
2. Directly implementing training result of Posyandu cadres toward community member particularly for pregnant woman and breastfeeding woman, also companion of Posyandu cadre by health personnel particularly in initial implementation of how to do the correct breastfeeding technique.
3. Health personnel particularly health personnel from community health center would always evaluate Posyandu cadre in periodical interval regarding implementation of lactation management toward member of the community.

ACKNOWLEDGMENT

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P-09

IMPORTANCE OF ASSISTANCE TO CHILDREN WITH CANCER

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ABSTRACT

Handling children with cancer does not only depend on the medical team only, because treatments for cancer patients not only in terms of the medical but also the views of the whole problem of suffering that includes psychological and social aspects. One element that can help provide non-medical treatment to patients are volunteers. Therefore, the purpose of this paper is to understand the role of volunteers for children with cancer and their families. This study examined aspects of care and assistance that are important for 8-12 years old children with cancer. Data were gathered through interviews with 25 children, 31 parents, and 32 nurses. Each participant was asked: "What caring aspects are important for you/your child/the child to feel cared for?" and "What help, if any, do you/your child/the child need outside the hospital?" Data were analyzed by content analysis. The following important caring aspects were identified: amusement, clinical competence, continuity, family participation, honest communication, information, participation in decision making, satisfaction of basic needs, social competence, and time. Children most frequently mentioned the importance of social competence, amusement, and satisfaction of basic needs. Parents and nurses most frequently mentioned the importance of information, social competence, and participation in decision making. The following important assistance aspects were also identified: emotional support, family life, meeting friends, practical support, rehabilitation, and school support. Two-thirds of the children did not mention that they needed any help outside the hospital. According to parents and nurses, one third of the children needed emotional support, whereas none of the children mentioned a need for this.

Keyword: Assistance, Children, Cancer

BACKGROUND

Cancer can affect any part of the human body and at any age. Cancer can also occur in children. For cancer patients, coping with cancer and its treatment procedure is not an easy thing. It is of course also strongly felt by children with cancer. In addition, if one family member affected by cancer, the impact is felt by the whole family.

With a large number of children surviving cancer worldwide, there are now many survivors who experience residual physical, behavioural, emotional, or social sequelae associated with the disease or its treatment. Numerous studies have documented an increased occurrence of psychosocial problems in childhood cancer survivors. In contrast, other studies have suggested normal psychosocial adjustment of survivors with only minor problems and differences relative to healthy controls. These discrepancies could be attributed to methodological differences and heterogeneous survivor subject groups.[1]

Much of the literature regarding children's experiences of cancer report the results of generic measures of psychiatric symptoms by parents and the health-care team treating the children. It cannot be assumed that reports from parents or the health-care team accurately reflect the views of the children.[1]

Children who have had cancer now have an excellent chance of surviving their disease with 80% of patients live 5 or more years from diagnosis. However previous studies have shown these patients are at a higher risk of death from other causes in later life, primarily as a result of recurrence or continuation of their cancer, but also due to the side effects of treatment leading to second cancers and cardiac disease.[2,5]

PURPOSE

The purpose of this paper is to understand the role of volunteers for children with cancer and their families.

METHOD

Information on each patient's sex, age, date of diagnosis and cancer type was included with the latter classified into ten main groups based upon their code. In a small number of cases where death was recorded and a cause of death could not be identified. This study examined aspects of care and assistance that are important for 8-12 years old children with cancer. Data was gathered through interviews with 25 children, 31 parents, and 32 nurses.

DISCUSSION

Based on field findings, it can be seen that the shape of the role that volunteers provide assistance to children with cancer and their families seemed like a form of social worker role. Therefore, it is important to involve social worker order services integrated treatment can be given to patients and families which have any kind of chronic illness and in all age groups, as a social worker has sufficient knowledge (knowledge), skills (skills), and value (value), as a form of unity of the helping profession.[3,4]

During treatment, children must be made happy and cared for lovingly, for example, provide a number of entertaining activities. In addition to parents, volunteers and psychologists can assist the children in the hospital, as their second home. The healing process would be better if parents encourage without showing a sad face[6].

Children should be made comfortable during treatment because the process of treatment to cure a child with cancer will take quite a long time[7,8].

CONCLUSION

The importance of considering the child with cancer within the context of the family and other social systems is one of the core assumptions of the Pediatric Medical Traumatic Stress (PMTS) model. This model considers family members' reactions to children cancer along a continuum of post-traumatic stress symptoms ranging from normative, acute stress reactions to long-term, impairing reactions. Medical events are termed ''potentially traumatic'' to reflect the subjective nature of trauma experiences, which may be influenced by pre-existing factors such as parental mental health, social support, or coping skills, as well as the manner in which the cancer is perceived.

RECOMMENDATION

1. Children who have any type of cancer should get the assistance of the immediate family, especially the parents. Emotional stability must be maintained and avoid the stress that can occur at any time and if it is not maintained can lead to accelerate disease severity.
2. Be bearers of hope that can give encouragement to the children with cancer worldwide.

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P-10

The Benefits of *Gembili* (*Dioscorea esculenta*) Flour Probiotic on The Amount of *Lactobacillus casei* Probiotic Bacteria by In Vitro

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ABSTRACT

Background: In the field of health and functional food science lately has evolved in a way that can be done to keep the body healthy. It can be done by consuming foods that contain "probiotic". Probiotic is "feed supplement" of live microbes that beneficially affect the host by improving parent balance of microorganisms in the digestive tract
Objective: To examine the effect of adding various concentrations of *gembili* (*Dioscorea esculenta*) flour to the number of probiotic bacteria *Lactobacillus casei* by in vitro.
Method: The study was experimental in which researchers provide treatment or intervention to a variable. The study design was post-test with control .
Result: The concentration of yam flour used is 0 %, 1 %, 3 %, 5 %, 7 % and 9 %. The higher concentration of yam flour is added, giving the results of increasing the number of bacteria *Lactobacillus casei*
Conclusion: There is the influence of yam flour toward an increase in the number of bacteria Lactobacillus casei. Big influence of yam flour toward an increase in the number of bacteria *Lactobacillus casei* 94.9 %

Keywords: *Gembili* flour, *Lactobacillus casei,* amount of bacteria

INTRODUCTION

Lactobacillus casei is the one of member of genus *Lactobacillus* which has defend ability from gastric acid condition and the low surface tension of a liquid bile order to be able to live to in the colon. *Lactobacillus casei* can improve the normal bacteria activity and other useful bacteria, absorbing dangerous material, immobilize and kill pathogenic bacteria and have the effect of anti tumor which stronger than other bacteria[1].

In general, limitation of probiotic is indigestible foodstuff by upper gastrointestinal tract so it can reach the colon and support good bacteria growth in intestines. Commonly, non-digestible probiotic is carbohydrate. Which include in carbohydrate is fructose, lactose, raffinose, inulin and resistant starch (RS) which can be the source of carbohydrate for advantage bacteria in alimentary tract[2].

According to Lehmann, RS has some benefits i.e. not causing constipation (difficult defecate), lowering cholesterol and capable of lowering glycemic index (numbers which shows potentially increasing blood sugar of carbohydrates which available on a foodstuffs)[3].

Gembili is tubers variety which growth vines with greeny leaf and thorny stems. Its fruit like sweet potato with adult's fist shape, russet and thin skin. *Gembili* usually cooked by boiling, and its skin shall become dry after boiling. Its tuber is white clean colour, its texture like sweet potato and has peculiar flavor. *Gembili* contains ethanol which can be used as a raw bio-ethanol or alcoholic beverages.

Research conducted by Zubaidah, Elok and Akhadiana, Wilda reveals the benefits of inulin which contained in *gembili* (*dioscorea esculenta*). Inulin is a polymers from fructose which the components are composed of β chain [1.2] fruktofu-ranocide. Inulin included in carbohydrates with length of the chain 2-60 unit. Long chain inulin (22-60) unit be less soluble and a more condensed so they could be used as a substitute for fat[4].

Inulin is one of groceries component parts that utilized as functional because food has high fibers. Inulin is probiotic where it cannot be digested by digestion enzymes, but in colon, inulin will fermented by bifidobacterium which gives health benefits to the body[4].

Based on the discussion, researchers interested to have a research on the benefits of probiotic of *gembili* (*dioscorea esculenta*) flour toward the amount of *Lactobacillus casei* probiotics bacteria in vitro.

OBJECTIVE

To know the influence of adding various concentration to *gembili* (*dioscorea esculenta*) flour toward the amount of *Lactobacillus casei* probiotics bacteria in vitro.

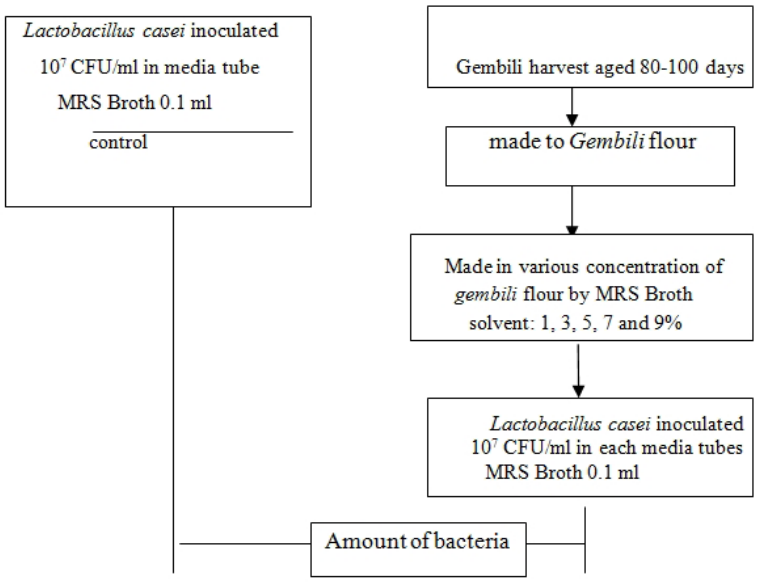
TYPE OF RESEARCH

It was experimental, where the researcher gave treatment or intervention toward one variable.

MATERIAL

a. Gembili flour
b. Lactobacillus casei
c. Sodium Chloride 0,5%
d. Distilled water
e. MRSB
f. MRSA

METHOD :



RESULT AND DISCUSSION

This research was conducted in August -September 2015 in Bacteriology Laboratory of Medical Laboratory Technology of Health Polytechnic of Health Ministry in Yogyakarta. This research was using five concentration variations of *gembili* flour, i.e. by concentration 1%, 3%, 5%, 7% and 9% and one group control.

Table 1. Amount of *Lactobacillus casei* bacteria on *gembili* flour

Replication	Concentration of *Gembili* Flour (in %)					
	0	1	3	5	7	9
	Amount of *Lactobacillus casei* bacteria					
1	1400	2200	5400	8500	10100	13800
2	3300	4700	5000	8300	9800	14200
3	1600	4700	5600	7600	10900	14000
4	2500	4200	6500	8900	11000	14800
5	2800	4500	6800	8000	11200	16300
6	3000	4600	6600	7600	9900	15600
Average	2433	4150	6100	8150	10483	14783

1. Descriptive Analysis

   The result shows that higher *gembili* flour added, increasing *Lactobacillus casei* bacteria.

2. Statistic Analysis

   Determination Coefficient Test (R^2)

   R square used to know the large impact. In this analyze, R^2 was 0.949, it means that the influence of *gembili* flour influence towards the increasing of *Lactobacillus casei* 94.9%.

   Gembili is food which contains many inulin. Inulin is one of components food which commonly used as functional food because it has high fibers. Inulin is probiotic where inulin cannot be digestible by digestion enzyme, but in colon, inulin will fermented by Bifidobacterium bacteria which bring a lot of health benefits in the body[4].

   The bigger concentration of *gembili* flour, probiotic levels for growth nutrition of probiotics *Lactobacillus casei* bacteria also will bigger. Good prebiotic requirement i.e. it cannot be hydrolyzed in the upper gastrointestinal, digestible by god bacteria in colon so able to press the growth of pathogen bacteria. More adding of *gembili* flour, so the alt *Lactobacillus casei* will be higher.

   The characteristic of anaerobic *Lactobacillus casei* is facultative, i.e. need less oxygen, *gembili* flour which added in MRS Broth media can increase anaerobic condition, so can enhance conformity the need of oxygen for *Lactobacillus casei* growth. *Lactobacillus casei* incubation in a MRS media was 48 hours, it means to maximize *Lactobacillus casei* growth in MRS media combined with various concentration of *gembili* flour and MRS media only in a tube control.

   In former research by Reski Praja Putra with entitled “The Resistance of Starch and the Functional Characteristic of Horn Banana Flour (*Musa paradisiaca formaaatypica*) Modified through Lactic Acid and Autoclave Heating”, horn banana flour can be used as alternative source of forming material of resistant starch (RS) because it has high amylase. RS has a function as probiotic which can raise lactic acid bacteria[4].

CONCLUSION

There's some effects on giving *gembili* flour toward the number of *Lactobacillus casei* bacteria

SUGGESTION

1. For the people, consuming *gembili* is useful for health because can increase and fertilize the amount of probiotic bacteria in colon
2. For the next researchers can increase *gembili* flour concentration, so can get the optimum concentration
3. Need further research in In vivo

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P-11

THE USAGE OF TOOTH PASTE IN DECREASING PLAQUE SCORE IN ELEMENTARY STUDENTS MASSAL TOOTH BRUSHING

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ABSTRACT

Elementary school students are the high risk community on caries. Their ages are the golden age on practicing their motoric skills in tooth brushing which is the primary prevention of caries. Toothpaste is paste or gel using for tooth brushing to clean food debris on teeth. This study wanted to know the effect of toothpaste in decreasing plaque score. This study was quasi experiment with cross sectional aproach, pretest-posttest design with control group. The samples, taken from SD IT Salsabila 3 Banguntapan, Bantul, Yogyakarta on April 2014, were 30 samples with inclusion criteria : registered on class 3 and 4, no caries, willing to be respondents and cooperative, presented on the day of research. The measurment of plaque score was PHP-M (Personal Higiene Performance-Modified) technique. The data were analyzed with Wilcoxon test. The result showed that plaque score decreased from 2.63 to 1.00 after toothbrushing with toothpaste group and on the group of toothbrushing without tooth paste, it decreased from 2.60 to 1.20 (p value : 0.000). It concluded that there was significant effect on decreasing plaque score by using toothpaste on massal toothbrushing activity.

Keyword : tooth paste, tooth brushing, plaque score.

INTRODUCTION

Dental health must be maintained since young ages due to the vulnerable condition of teeth. Process of the defect of teeth is started by formation of decay which is called caries. This caries happens due to the bacteria activity in plaque which is covered the teeth surface[1]. Toothbrushing is the effective mechanic method to cleaning tooth plaque [2]. Toothpaste used in toothbrushing has the effect of cleaning and smoothing the teeth surface and refreshing the mouth due to the aroma on it [3]. This process of toothbrushing must be followed with rinse the mouth.[4]

Prelimenery research had been done on 20 students SD IT Salsabila 3 Banguntapan Bantul. It was found that 25% sudents didn't use tooth paste while brushing their teeth. According to this condition, we would like to know is there any effect of tooth paste in decreasing plaque score?

METHOD

This study was quasi experiment with corss sectional approach which observed one occasion in the same period of time.[5] Research's design was pretest-posttest with control group. The samples were 30 students of class 3 & 4 in SDIT Salsabila 3 which taken randomized. On the first day, they brushed their teeth with tooth paste and on the second day they brushed without tooth paste. Dependent variable was plaque score and independent

variable was toothbrushing with modification technique, using straight handle toothbrush with flat brushes in two minutes. Tooth paste contained of fluoride. The instruments used were diagnostic instruments, phantom, tooth brush, mask and handschoen, rinse glass, mirror and form of PHP-M scores. The material used were 70% alcohol, tooth paste, disclosing solution, cotton pellet and tissue paper. The data were analyzed statistically by Wilcoxon test.

RESULT AND DISCUSSION

1. Respondents Criteria
   Respondents frequency discribed as bellow:

Table1. Frequency Distribution of Respondents

Characteristic	Jumlah	Percentage (%)
Based on Sex		
Girls	20	66,7
Boys	10	33,3
Total	30	100
Based on Age		
9 years old	18	60
10 years old	12	40
Total	30	100

The biggest respondents were girls (66.7%). Most of the respondents were 9 years old (60%)

2. Plaque Score Criteria

Tabel 2. Frequency distribution of Plaque Score

Plaque Score Criteria	Before		After	
	N	%	N	%
With tooth paste				
Good (0-20)	0	0	30	100
Moderate (21-40)	11	36,7	0	0
Poor (41-60)	19	63,3	0	0
Total	30	100	30	100
Without tooth paste				
Good (0-20)	0	0	24	80
Moderate (21-40)	12	40	6	20
Poor (41-60)	18	60	0	0
Total	30	100	30	100

There were no students who had good plaque score. There were 63.3 % respondents who changed from poor and 36.7% from moderate to good criteria after brushing their teeth with tooth paste. All respondents (100%) became good criteria after brushing their teeth with tooth paste. The usage of tooth paste could clean the teeth surface and remove plaque and bacteria[6]. Acoording to Panjaitan (1977), the usage of tooth paste could result foam, remove food debris on teeth surface, clean and give fresh effect[7]

There were only 60 % respondents who changed from poor to good after brushing their teeth without tooth paste. Not all respondents became good criteria after brushing their teeth without tooth paste. There were only 80% respondents who became good criteria.

3. Plaque Score Difference

Table 3. Plaque Score Difference On Brushing Teeth With And Without Tooth Paste

Variable	N	Mean (x)		Difference
		Before	After	
Brushing teeth with toothpaste	30	2,63	1,00	1,63
Brushing teeth without toothpaste	30	2,60	1,20	1,40

Table 3 showed that the plaque score difference using tooth paste 1.63 and 1.40 without tooth paste. Brushing teeth without toothpaste had the weakness which was it coudn't clean inter dental surface effectively and give fresh effect to the mouth.[8]

4. Statistic Analysis

Table 4. The Result of Wilcoxon Test on Plaque Score Difference

Variable	N	Sig.	z hitung
Brushing teeth with toothpaste	30	0,000	-4,964
Brushing teeth without toothpaste	30	0,000	-4,949

Statistical analysis with Wilcoxon showed that p value 0.000 < 0.05. It meant that there was th significat effect between brushing teeth with and without toothpaste toward plaque score. The usage of tooth paste with fluoride.coutd decrease the acumulation of plaque and caries incidence[9]. Principally, plaque could be removed by brushing teeth without tooth paste if the technique of toothbrushing was good and correct.[10]

CONCLUSION

1. Plaque score criteria before brushing teeth with tooth paste was poor and it became good after.
2. Plaque score criteria before brushing teeth without tooth paste was poor and it became good and moderate after.
3. There was a signifficatn difference between brushing teeth with and without toothpaste toward plaque score (p=0,000<0,05, Wilcoxon test)

RECOMENDATION

1. It's better to brush teeth with toothpaste containde with fluoride for elementary school students because it helps remove food debris and plaque, smooth the teeth surface and give freshness impact
2. This study could be the refference for promotion activity in maintaining oral hygiene for society especially students.

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P-12

Effect of Orange-Flavored Soft Drinks Against TheLevel of Acidity Salivary pH In Elementary School Students

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Abstract

Background: The rest of the food or beverage can form plaque that will affect the pH of saliva are other detrimental oral health. Based on preliminary studies to 10 students fromPanggang elementary school average data obtained saliva pH less than 7 below normal.
Problem: Is there any influence of drinking soft drinks orange flavor to the salivary pH in elementary school students?
Methods: The experiments, with pretest and posttest with control group design. Samples: 100 samples with stratified random sampling technique. Statistical Test Non Parametric Tests. Test T-test with Wilcoxon test.
Research purposes : knowing the effect before and after drinking soft drinks the pH of saliva.
Result: The pH before and after drinkingorange flavor soft drinks of significance is p = 0.03 <0.05.
Conclusion: The existence of significant influence drinking orange-flavored soft drink to the pH value of the students.

Keywords: orange-flavored soft drink, the pH of saliva

PRELIMINARY

School-age children is an investment for the nation as the future generation. The quality of the nation in the future is determined by the quality of children today. Efforts to improve the quality of human resources should be done early. School-age child development is optimal depends on the provision of nutrition to the quality and quantity of the good and true. Primary school children aged 10-12 years more spent a quarter of his time at the school with a variety of school activities are quite dense resulting in increased appetite naturally. Children also have started good at determining the food and drink that they like knowing the environment, usually prefer soft drinks and instant foods containing carbohydrates and MSG as a flavor enhancer. In general, school children liked the food hawker in front of the school by reason of cheap, easy, attractive packaging, and diverse. Children are more often consume snacks such as sweets, cereal bars, biscuits and fizzy drinks. A research institutes in the area of East Jakarta revealed that the type of snacks that are often consumed by children of school is ice syrup and cilok. Leftover food or beverage can form plaque that will affect the pH of saliva (Maranatha, 2013) [1].

According to some observations, eating certain foods or beverages can affect the pH of saliva are other detrimental oral health. Consuming beverages containing acid such as soft drinks can also lead to demineralization of tooth enamel due to the solubility in saliva (Preethi et al cit. Parade, 2011) [2]. In addition to having a low pH, soft drinks such as orange drinks packaging also contains glucose, fructose, sucrose and other sugars. Bacteria in the mouth can ferment carbohydrates (glucose, fructose, and sucrose) and produce acids that can destroy tooth enamel for sweet drinks often increase the risk of dental caries (Parade,

2011) [2]. Production of various types of soft drinks marketed and consumed globally known for sure can cause demineralization email directly known as erosion. When through the fermentation of carbohydrates in conjunction with bacterial activity known as dental caries. Demineralization directly undertaken by the acid content in a kind of soft drink, may be more meaningful than the losses resulting sugar content. Most soft drinks, including isotonic drinks contain several types of acids, such as phosphoric acid, citric acid, malic acid and tartaric acid. soft drink pH is between pH 2.4 to 4.5 which is under the critical pH range (Ramadhani, 2013) [3].

A study conducted in 1974, found a positive correlation between soft drink consumption frequency and severity of tooth decay, especially in children. This discovery is surprising because the researchers also take into account the consumption of other sweet foods, but still found that most soft drinks contribute to tooth decay (Jacobson cit. Latif, 2012) [4]. The researchers suggested that the more teeth in contact with the acid-containing soft drinks, the greater the occurrence of tooth enamel mineral solubility in saliva (Latif, 2012) [4]. Saliva is one component that contributes to the level of acidity (pH) of the mouth. Saliva as a buffer system to maintain optimal oral pH, which tends to alkaline pH. If without saliva, so every meal will form an acidic environment that will support the growth of bacteria that damage the teeth. Inside there are also saliva ions such as calcium and phosphate which are the fundamental building blocks of tooth structure. Another function of saliva is to help the process of remineralization of small lesions on the enamel layer (Kusumasari, 2012) [5].

Based on a preliminary study by interviewing 10 students from PanggangSedayuBantul Elementary School about drinking soft drinks obtained data is that students often consume drinking soft drinks, and examination of the average student saliva the saliva pH less than 7 below normal. Based on the description above, the writer interested in conducting research on the effect of the pH of saliva after drinking soft drinks at elementary school students.

RESEARCH PURPOSES

Knowing the influence of drink-orange-flavored soft drink on the salivary pH of Panggang Sedayu Bantul Elementary School.

RESEARCH METHODS

This research used experimental method with pretest and posttest control group design. Selection of this method to test the effect of soft drinks on the pH of saliva elementary school students.

RESEARCH RESULT

Research on “Effect of Orange-Flavored Soft Drinks Against TheLevel of Acidity Salivary pH In Elementary School Students” which was held in March-June 2016 the respondent class III, IV, and V Panggang, Sedayu, BantulElementary School as many as 100 students. The data obtained from the study and then normality test data. Data normality test results as follows:

Normality Test (Kolmogor Smirnov)

Conclusion: Asymp. Sig = 0.000 <0.05, so it was not a normal distribution of data, including the type of research Nonparametric. Using the Wilcoxon test to determine the effect

(Pre and Post Group Experiments pH value) and using the Mann Whitney test to determine difference (Difference Experiment Group and Control Group).

Data normality test results, the data processed using Wilcoxon and Mann Whitney analysis and presented in the following table:

Table 1: Frequency Distribution of Respondents by Average Value pH Variable Mean Difference

Variable	Mean		Difference
	Before	After	
Experimental Group (Drink Soft Drink Taste Orange)	6,7	6,44	-0,26
Control Group (No Drink Soft Drink Taste Orange)	6,92	7,36	0,44

Table 1 shows the pH value of saliva in the experimental group after drinking orange-flavored soft drinks decreased from before drinking orange-flavored soft drink, which is from 6.7 to 6.44, while the control group after the measurement of pH values increased saliva second of measurement salivary pH value of the first is from the previous 6.92 to 7.36.

Table 2: Results of Analysis Using the Wilcoxon test

N	Z	Asymp. Sig	A
50	-2.172	0,030	0,05

Table 2 shows that the value Asymp. Sig was 0,030 lower than 0,05 so Ho rejected and Ha is accepted, then the statistics show a significant difference between the value of the pH of saliva students of classes III, IV, and V Panggang Elementary School before and after drinking orange flavored soft drink or the influence drinking soft drinks orange flavor to the salivary pH values of students of classes III, IV, and V Panggang Elementary School.

Table 3: Analysis Using Mann Whitney Test

N	Z	Asymp. Sig	A
100	-4.342	0,000	0,05

Table 3 shows that the value Asymp. Sig differences in salivary pH value difference between students who drank orange-flavored soft drink with students who did not consume soft drinks orange flavor is 0,000 less than 0.05 so Ho rejected and Ha is received, it can be concluded that there were significant differences in value salivary pH between students who drank orange-flavored soft drink with students who do not drink orange-flavored soft drink.

DISCUSSION

Results (see Table 1) shows that the average value of the pH of saliva students of class III, IV, and V Panggang Elementary School after drinking orange-flavored soft drinks declined or become more acidic ie from 6.7 (acidic pH) to 6 , 44 (acidic pH), while the students who do not drink orange-flavored soft drink increased the average value becomes alkaline pH of saliva or that of 6,92 (acidic pH) to 7.36 (alkaline pH). Based on Table 2 shows that the pH

value of saliva before drinking orange-flavored soft drink and after drinking soft drinks orange flavor of significance is p = 0.03 p <0.05, significant difference drinking orange-flavored soft drinks to the value salivary pH students of class III, IV, and V Panggang Elementary School. This difference is due to the decreased value of the pH of saliva students after drinking orange-flavored soft drink. In accordance with the opinion of Ircham in research Rahmawati (2014) [6] which states that if we eat sweets or sugary foods, including soft drinks, the bacteria in the plaque will turn it into acid. This acid will lower the acidity of saliva which then will cause enamel decalcification process so that over time it came to pass dental caries.

This research was supported by Sari (2008) [7] which states that exposure of acid on tooth surfaces can cause a decrease in pH in the oral cavity with rapid and accelerating the process of demineralization. Sources acid commonly consumed by the community of which comes from soft drinks and fruit juices. The same opinion was expressed by Preethi and colleagues in research Parade (2011) [2] which states that eating certain foods or beverages can affect the pH of saliva are other detrimental oral health. Consuming beverages containing acid such as soft drinks can also lead to demineralization of tooth enamel due to the solubility in saliva. This study was supported by research Alam (2010) [8] which states that the pH of saliva decreases after consuming soft drinks for soft drinks contain acid and have a pH of 3.0 or lower and thus may cause the demineralization of dental hard tissue. the pH of saliva will be back to normal within 30 seconds of exposure to soft drinks.

The decline in the average value of the pH of saliva students of class III, IV, and V Panggang Elementary School after drinking soft drinks orange flavor that is from 6.7 (acidic pH) to 6.44 (acidic pH) in accordance with the opinion of Patel et al in research Mulyanti (2015) [9] that soft drinks have some effect on the oral cavity. Soft drink pH value is between 2.4 to 4.5, while the critical pH is 5.5, it means that the pH of soft drinks are below the limits critical pH which causes demineralization of tooth enamel. According to research Panigoro, et al (2015) [10] which states that the activity of eating and drinking one's impact on the demineralization and remineralization email. Demineralization occurs because the acid exposure from food or drink in a long time led to changes in pH of the oral cavity so that the tooth surface becomes acidic. Demineralization can occur when emails are in an environment of pH below 5.5 as in soft drinks with a pH below 5.5 which is now widely consumed by the public.

Results of statistical analysis using the Wilcoxon test showed that there is a change in the pH value is proven by the results of significance 0.03 <0.05 which indicates that Ho is rejected and Ha received thus drinking orange flavor affect significantly decrease the value of the pH of saliva students class III, IV, and V Panggang Elementary School. According to research Tyasning (2014) [11] which states that the relationship of sugar in foods or soft drinks larger influence on the caries process because usually the food or soft drinks are often consumed between two meals, so it has a low tendency. Research salivary pH which is supported by parade (2011) [2] which states that in addition to having a low pH, soft drinks such as orange drinks packaging also contains glucose, fructose, sucrose and other sugars. Bacteria in the mouth can ferment carbohydrates (glucose, fructose, and sucrose) and produce acids that can destroy tooth enamel for sweet drinks often increase the risk of dental caries. Ramadhani (2013) [3] also revealed that most soft drinks, including isotonic drinks contain several types of acids, such as phosphoric acid, citric acid, malic acid and tartaric acid. soft drink pH is between pH 2.4 to 4.5 which is under the critical pH range. Eating fruit juices containing acids, such as citric acid in oranges, folic acid in the juice of green beans, and so more than

twice a day have an increased capacity buffer solution, and also can cause the pH of the mouth dropped prolonged, which can result in dissolution tooth enamel.

The results of the study (see Table 3) indicated that the value Asymp. Sig differences in salivary pH value difference in the students who drank orange-flavored soft-drink with students who did not drink soft-drinks orange flavor is 0.000 <0.05 so it can be concluded that the pH value of saliva students were drinking soft drinks taste grapefruit have significant differences with saliva pH value of students who did not drink soft-drinks orange flavor.

The results of this study are supported by Kusumasari (2012) [5] which states that the saliva is one component that contributes to the level of acidity (pH) of the mouth. Saliva as a buffer system to maintain optimal oral pH, which tends to alkaline pH. If no saliva, so every meal will form an acidic environment that will support the growth of bacteria that damage the teeth. Inside there are also saliva ions such as calcium and phosphate which are the fundamental building blocks of tooth structure. Another function of saliva is to help the process of remineralization of small lesions on tooth enamel. This research was also supported by Maranatha (2013) [12] which states that a child snacks such as candy, wafers, cakes, biscuits and soft drinks containing sugar. Type most widely used sugar is sucrose. Sucrose consumption in large quantities can lower the pH of saliva. The incidence of caries is high mainly due to the sucrose for the synthesis of extracellular sucrose faster than other sugars such as glucose, fructose, and lactose so quickly transformed by microorganisms in the oral cavity becomes acidic. Salivary secretions and saliva generated component is liquid exocrine essential for healthy teeth and oral cavity. Salivary function one of which is having the ability buffer that will affect the value of the pH of saliva, wherein the pH of saliva may change due to the influence of the rhythm of day and night, as well as being acid 15 minutes after eating.

This research was also supported by research Latif (2013) [4] which states that after 10 minutes of consuming soft drinks are acidic can cause salivary pH drops further demineralization process so as to accelerate the acid environment in the mouth will be back to normal after 30-60 minutes of consuming the soft drink demineralization itself is a process of moving minerals in the form of mineral ions of the tooth enamel. Decreasing the pH value of the students after drinking soft drinks orange flavor in this study was also supported by research Prasetya (2008) [13] which states that the various types of soft drinks manufactured, marketed and consumed globally known for sure can cause demineralization email the drink contain ingredients such as asamfosfat and asamsitrat carbonation. Both of these materials consist of a mixture of organic acids such as maleic and tartaric. These organic acids inhibit buffer capacity and lowering the pH of saliva.

CONCLUSION

The study of 100 respondents in Panggang Elementary School titled “Effect of Orange-Flavored Soft Drinks Against TheLevel of Acidity Salivary pH In Elementary School Students” can be concluded that:

1. The existence of significant influence drinking orange-flavored soft drink to the pH value of the students of class III, IV, and V Panggang Elementary School.
2. The pH of the students who drank orange-flavored soft-drink with students who do not drink orange-flavored soft-drinks have differences.
3. Based on the average pH value before and after the students drinking orange-flavored soft drink has a pH value which means a decrease in pH becomes more acidic after

drinking orange-flavored soft drink. While the students who do not drink orange-flavored soft-drinks have a pH change from acid to alkaline.

SUGGESTION

Based on research that has been done, the advice to researchers convey is:

1. For the Respondents

   Improving oral health by increasing insight as much as possible, either by reading the book and the mass media or follow oral and dental health education as well as more selective in choosing healthy foods and beverages and tooth decay. It is also recommended to drink water after drinking soft drinks and do not brush your teeth immediately after drinking the beverages to avoid the risk of dental caries and erosion.
2. For Elementary School

   As input and resources to improve the oral health knowledge by organizing promotional activities and preventive one with more selective in watching her students choose snacks that are consumed.
3. For Further Research

   This research can be used as a guide and reference for further research to give an idea of the influence of drink-orange flavored soft drinks to the level of acidity pH value and is expected to be developed with a wider scope and a more complete aspect.

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P-13

EFFECTIVENESS FAMILY PSYCHOEDUCATION THERAPY IN PATIENTS WITH MENTAL DISORDERS : LITERATURE REVIEW

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ABSTRACT

Introduction : Family psychoeducation is one form of family therapy that can be administered to patients with mental disorders and their familyies. Psychoeducation includes educational and psychosocial objectives that require the use of pedagogical methods and techniques to develop permanent behavioral changes in patients.
Aim : To identify and evaluate the effectiveness of psychoeducation family therapy in an effort to care for patients with mental disorders.
Methods : The study was a literature review. The literature review was obtained from variety of publish literature in 2010 until 2016. The articles used were taken from several databases like Ebsco host, Pub Med, Google Scholar, and Science Direct. The author analyzes the effectiveness of family pschoeducation therapy on patients mental disorders.
Results: The findings suggest that group psychoeducation may have an impact on the participants perceived social support, knowledge and acceptance of bipolar disorder, personal insights, attitudes toward treatment and access to services. There are social and psychological burdens coincided with the development of progressive disease.
Discussion : Psychoeducation Family therapy is one of the most routine intervention in the management of a patient with mental disorders such as schizophrenia. Effects of psychoeducation family therapy on their families' quality of life has been studied in a limited previous research and most of them have evaluated the family burden. Differences between the studies mentioned can be attributed to differences in methods of assessment of burden on families and more important with the type of intervention.

Keywords: Family Psychoeducation Therapy, patients with mental disorders, effectiveness.

INTRODUCTION

Family psychoeducation is one form of family therapy can be administered to patients with mental disorders and family. The goal of family psychoeducation is to increase family knowledge about the disease through education about the efforts and signs of behavioral symptoms that can support the strength of family [1]. Based on research Keliat (2006) found that the recurrence rate in patients without family therapy by 25-50%, while the recurrence rate in patients with family therapy amounted to 5 -10%.

Psychoeducation family is the provision of education to a person who supports the treatment and rehabilitation [2]. Family psychoeducation is one form of mental health treatment therapies families by providing information and education through therapeutic communication. Psychoeducation program is an approach that is education and pragmatic [3]. The goal of family psychoeducation reduce the intensity of emotions in the family to a low level so as to improve the achievement of family knowledge about the disease and teach families about efforts to help them protect their families to know the symptoms of behavioral and supports the strength of the family [4]. Benefits of family psychoeducation increase knowledge about mental disorders, teaches techniques that can help families to know the

symptoms - symptoms of deviant behavior, as well as increased support for the family members themselves. This therapy can be done in hospitals both hospital on condition that the room should be conducive. Can also be done in the family home itself. The house can provide information to health workers about how the style of interaction that occurs within the family, values - values shared in the family and how the family understanding about health.

Psychoeducation is defined as a systematic, structured and pedagogic approaches to the disease and its treatment. Psychoeducation includes educational and psychosocial objectives that require the use of pedagogical methods and techniques to develop permanent behavioral change in patients. With the program psychoeducation structured, patients can improve their quality of life by developing their basic knowledge of Bipolar Disorder, including information about the recurrence rate of the disease, treatment and side effects, trigger factors, the importance of adherence to medication, how to control the symptoms, stress management, risk suicide, pregnancy, stigmatization, introduction of symptom recurrence early, avoid the use of alcohol and other substances, and the importance of living life with a well-structured [5].

Seeing these problems, it is necessary to study methods of effectiveness of family psychoeducation therapies are performed on patients with mental disorders.

AIM

The intent of literature review was to identify and evaluate the effectiveness of therapy psychoeducation family in an effort to care for patients with mental disorders.

METHOD

This research uses methods of literature study. This paper takes from the literature such as PubMed, Science Direct, Ebsco host, and Google Scholar. The total number employed in the literature review as many as ten literature. The literature was obtained from variety of published literature in 2010 until 2016.

RESULT AND DISCUSSION

Renaires et al (2010) states that patients in the early stages of bipolar the benefits of family psychoeducation to have a longer time to relapse (Chi-square: 6:26; p = 0.012). There was no significant benefit of family psychoeducation was found in patients with advanced stage. Patients with advanced increased the vulnerability and resilience as the disease progresses. Patients may show a more severe long maladaptive coping strategies. Thus, the restructuring of habit or routine regularity can become more complex. Similarly, family attitudes, behavior and overall family functioning may be more difficult to modify relatives of patients with higher chronicity and severity. In addition, family psychoeducation therapy is not focused directly on patients, but their families, it is possible that the more severe the patient will need to be directly involved in the intervention to obtain better results. There are social and psychological burdens coincided with the development of progressive disease. Furthermore, as has been found in previous studies, the severity of disease and dysfunction of higher among patients associated with higher levels of burden in the family. Task caregivers to monitor patients has been associated with emotional exhaustion and subjective burden [6].

Hubbard, compared to waiting list control group, the treatment group showed immediate and significant in caregiver burden, and increased knowledge of bipolar disorder and

bipolar disorder self-efficacy. This improvement is maintained or enhanced for follow up. No significant changes were observed in the DASS-21. The first A Randomized Controlled Trial (RCT) evaluating short, group psychoeducation intervention two sessions for the individual to caregivers in with bipolar disorder. It is also the first to include the size of the RCT bipolar disorder caregiver self-efficacy, and the results are promising. As hypothesized, participants in the intervention condition reported a significant reduction in the burden, and improvement in bipolar disorder significant self-efficacy and knowledge about bipolar disorder from pre- to post-intervention, and the advantage was maintained at one-month follow-up. These findings are consistent with previous studies that have also been found helpful for the caregiver psychoeducation, although with sub intervention to help speed up the process again [7]. In line with this study, the second study found a decrease in weight and improvement in knowledge about bipolar disorder, however, is not measured self-efficacy.

According to these results, psychoeducation allegedly to prevent relapse and showed a protective effect in the long term. However, the application psychoeducational treatment programs routinely in Turkey is not at the required level. Thus, nurses soul has a comfortable position in evaluating the patient's needs, and preparing and implementing psychoeducational programs aimed at these needs as they relate to the patient in the process of treatment and care [5]. Strengths of this study is the fact that it is the first study of psychoeducation 4 individual sessions conducted with the participation of patients suffering from Bipolar Disorder (BD). Another strength of this study is the ad- vantage of individual psychoeducation in patients who do not want to discuss their personal problems in the education group. Lower dropout rates are also other advantages. Limitations consist of a study conducted at a single center, the number of patients is low and the period for evaluating the effectiveness of the study to 12 months.

They are allocated either Multi Family Group Psychoeducation (MFGP) or Solution Focussed Group Therapy (SFGP) have significantly increased their knowledge and reduce the overall burden and psychological distress in year one and is maintained in year two. Advantage as it was not apparent among those allocated to Treatment As Usual (TAU). These findings are consistent with other studies in bipolar disorder also showed a significant increase in the nurse's knowledge of post-psychoeducation. We found an improvement in psychological pressure guard in both years one and two years for a random caregiver for both SFGP and MFGP while no improvement for them in the arm TAU. There is also increasing the quality of life of people affected by bipolar disorder that caregivers attend both intervention and control MFGP SFGP, without any significant change in the quality of life for those that TAU. Unlike Clarkin et al. we found only a marginal improvement in global function in the patients whose families attend more MFGP TAU and is not maintained at year two. There is no benefit in terms of global functions for the patients relatives were allocated to SFGP [7].

The findings suggest that group psychoeducation may have an impact on the participants perceived social support, knowledge and acceptance of bipolar disorder, personal insights, attitudes toward treatment and access to services , Key recommendations for improvements, including: allowing more time for group discussions, offering group sessions for family members and avoid the use of a hospital or university for the group [8]. Psychoeducation Family is one the most routine intervention in the management of a patient with schizophrenia. We evaluated the effects of the education program-needs-based assessment compared to the current program on global function and quality of life (QOL) of patients and their families [9].

So far, many studies have addressed the effectiveness of psychoeducation in the treatment of schizophrenia. In a systematic review on 44 clinical trials (including 5142 patients), it was found that psychoeducation improve function and quality of life of patients globally and increase satisfaction with social and mental health services. Although the components and the current contents program different education, a successful program must have the following approaches in common: (1) In view of schizophrenia as an illness, (2) must be designed and directed by professionals, (3) should be part of the treatment package more comprehensively spanning biological treatment, (4) consider family members as treatment factors and not the patient, (5) a focus on the results of the disorder, although the results of the family is also important, and (6) do not have confidence in a conventional family therapy behavior and relationships within the family plays a key role in the aetiology and development of schizophrenia (. the contents of the program information psychoeducation families are diverse, and in general, including awareness about the nature of the disorder and symptoms, medications, and their complications, adherence to treatment, getting familiar with the early symptoms of relapse, strategies crisis , the role of the family in care, communication skills training, rehabilitation, and education on health behaviors [9].

According to a study investigating the implementation of psychoeducation for schizophrenia, in 2003, at 83% of hospitals in Germany, Austria and Switzerland. However, overall, only 21% of patients who received psychoeducation. The high dropout rate of 25% [4]. Several factors may have contributed to this situation. Some hospitals may still question the effectiveness of these programs, but most hospitals do not have enough staff to provide psycho-education program well-prepared weekly for their patients. And even for those who do, reach their patients seem to be a difficult task. In some patients, symptoms may be too severe. Other discarded (with or against medical advice) before they complete the program, and some patients do not have the motivation to join or finish the program. Meanwhile, the hospital and the patient's point of view, many of these reasons for not offering or pating part in psychoeducation can be understood, the cost is high. Rummel-Kluge et al. It is estimated that up to 150 million euros could be saved each year by tripling the number of patients who received psychoeducation [4].

Effects of psychoeducation family on their families' quality of life has been studied in a limited previous research and most of them have evaluated the family burden , Several studies have reported that family psychoeducation can reduce the burden on families / pengasuhSebaliknya, Chan et al in [9], reported short-term, but not long-term benefits of psychoeducation for the burden of the family. Also, González-Blanch *et*al.melaporkan that brief family psychoeducation is not enough to reduce the burden of the family. Several other studies found no beneficial effect of treatment group keluarga atau education keluarga pada family outcomes. Differences between the studies mentioned can be attributed to differences in methods of assessment burden on families and more important with this type of intervention.

CONCLUSION

Psychoeducation family can improve cognitive abilities and psychomotor abilities families, because in psychoeducation family contains elements improve family knowledge about the disease and teach techniques that can be helping families to know the symptoms of deviant behavior and support for the family members themselves. So that the family can perform maintenance on mental patients in the home and reduce recurrence

RECOMENDATION

We should be able to do other therapies by combining family psychoeducation therapy with other therapies to help patients in the recovery process. We also need to increase knowledge about the intervention we can do for patients with mental disorders.

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P-14

BETWEEN THE EFFECTIVENESS OF PHARMACOLOGICAL AND NON-PAHARMAGOLOGICAL THERAPY IN EFFORT SMOKING CESSATION

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ABSTRACT

Background: Smoking already known by children of school age. the negative impact of very large, especially in the health sector. Smoking largest contributor of death in the United States. pengehntian smoking efforts have been done to target various ages with different ways namely pharmacological and non-pharmacological therapy.
Aim: To identify the pharmacological therapies used in smoking cessation efforts, non-pharmacological therapies used in smoking cessation efforts and that effectiveness of the pharmacological therapy and non-pharmacological against efforts to stop smoking.
Methods: The systematic review was obtained from variety of published literature in 2011 until 2015 through several journals, among others BMC Public Health, Journal of Nursing Education and Practice, Journal of Hospital Administration, The Journal of The Association of Chest Physicians, Colonial Academic Alliance Undergraduate Research Journal and Internationale Journal of Preventive Medicine
Results: Pharmacological therapy used in smoking cessation is nicotine replacement therapy, bupropion, Champix and Zyban. This therapy has a higher level of effectiveness. There are also non-pharmacological therapies are often diguankan is self-help, hypnosis, hypnoterapi, acupuncture, counseling, CBT, group therapy and intervention / doctor's advice.
Conclusion: Smoking cessation will be more effective if pharmacological therapy combined with non pharmacological therapy.

Keywords: Smooking, cessation, therapy.

BACKGROUND

Smoking basically have a positive or negative impact. Although smoking has a positive impact, but the negative impact caused is far greater, especially for health. In some countries, smoking is the major contributor to mortality, for example in the United States 2.4 million deaths of the year are caused by smoking. Smoking is also a contributor to the deaths of 500 thousand deaths of the year in the European Union [1]. Ironically, current smoking has become a lifestyle ranging from school-aged childres to senior citizens.

The highest prevalence of smoking are in the age range 25-44 years [2]. While in India, as many as 250 million tobacco users aged over 20 years, the number of men more than women. In an effort to improve the health of the population, then one of the effective measures taken by the United States that increase the number of population to quit smoking [1].

Smoking cessation efforts have been entered into various targets, which starting from school age children to nurses, patients and families at the hospital with a variety of methods both pharmacological and non-pharmacological. Various attempts were made by health workers both doctors, nurses and counselors. The aim of this systematic review is to identify and evaluate the effectiveness of the pharmacological and non-pharmacological therapy in an attempt to smoking cessation through evidence based practice approach.

AIM

Investigation results of this research include pharmacological therapies used in smoking cessation efforts, non-pharmacological therapies used in smoking cessation efforts and that effectiveness of the pharmacological therapy and non-pharmacological against efforts to stop smoking.

METHODS

The systematic review was obtained from variety of published literature in 2011 until 2015 through several journals, among others BMC Public Health, Journal of Nursing Education and Practice, Journal of Hospital Administration, The Journal of The Association of Chest Physicians, Colonial Academic Alliance Undergraduate Research Journal and Internationale Journal of Preventive Medicine. Literature in form of original research, literature review, research article and the original article. The total number employed in the systematic literature review as many as six literature, all of which are associated with smoking cessation efforts through several interventions, in which the author classifies into two forms of methods of pharmacological and non-pharmacological. The author identifies the various smoking cessation interventions in several countries that have implemented the smoking cessation efforts in the United States, UK, Australia, Iran, Turkey, India and Egypt.

RESULT

1. Pharmacological therapy

   The first smoking cessation methods that are used in some countries is through pharmacological therapy. All the literature used in this systematic review include this therapy as a method of smoking cessation. Type pharmacological most widely used is nicotine replacement, known as Nicotine Replacement Therapy (NRT), which has been approved by the Food and Drug Administration (FDA). NRT provides an alternative form of nicotine for smoking dependence to reduce symptoms [3].NRT consists of a patch, sublingual tablets, candies, lozenges, inhaler and nasal spray. This product is safe for patients with cardiovascular disease, including stable angina. Nicotine replacement does not increase blood coagulability or exposure to oxidizing carbon monoxide or groups that can damage the endothelium [4].

   Another type of pharmacological effective in stop smoking and is found in several journals that Bupropion is also recommended by the FDA [3].Additionally, Zyban and Champix also obtained the highest score after the NRT in relation to the effectiveness of the smoking cessation [4].

2. The non-pharmacological therapy

   This type of therapy that are found in all journal that are used in a systematic review of this and also effective in smoking cessation efforts is a group of non-pharmacological therapies. Non-pharmacological therapy is used as a support for pharmacological therapy with the aim to change behavior by using multiple interventions.

   Self-help is a kind of non-pharmacological therapies are most commonly found in the literature were used in the systematic review of this and has an equivalent level of effectiveness of pharmacological therapy is even more effective than pharmacological therapy. Behavioral therapy is most often used by the people of the Unites States and

New South Wales (Australia) in smoking cessation efforts are self-help as well as used in the age group of teenagers and young adults [1].. Although in both countries, self-help has a small proportion compared with NRT. Other literature equivalent which is a comparative study conducted by Heydari, G., et.al. (2014) on methods of cessation and tobacco control found that self-help effectiveness highest scores after NRT, Champix and Zyban. As for the Turkish community, self-help is a method of smoking cessation are much more effective than use of NRT and medications like. Methods of self-help in the form of cold Turkey and a reduction in the number of cigarettes before quitting [1].

Hypnosis and hypnotherapy and acupuncture are second from non-pharmacological therapies are also often used in smoking cessation efforts are found in most of the literature. Hypnosis and acupuncture became an adjunct therapy in smoking cessation efforts in India [3]. Hypnosis is the middle score while acupuncture is the lowest score is based on the results of comparative studies does [4].. Hypnotherapy is the most effective method for smoking cessation for young secondary school in Egypt where 2/3 of the students learn to stop after nine weeks of practicing hypnosis and the percentage of cigarette packs was reduced every day [5]. Other literature shows that hypnotherapy and acupuncture is also used as a secondary intervention that can be used by nurses in smoking cessation efforts for nurses, patients with cancer and families in hospitals [6].

Counseling is a type of non-pharmacological therapy was ranked third identified in some literature. The literature states that this therapy is also effective and commonly used in smoking cessation effort. Counseling either by phone or in person counseling is the medium scores on a comparative study conducted by Heydary, et.al. (2014). Although it has a small proportion in use, but the method of counseling remains a part in smoking cessation efforts in the United States and Australia. Both countries are using counseling by phone/telephone helpline [1]. In India, the counseling was ranked second, which is effective in smoking cessation efforts. Counseling is done over the telephone and in person. To get effective results, it must be done by trained counselor and repeated at least four weeks [3].

Non-pharmacological therapies which can be used also in efforts to stop smoking is groups therapy, cognitive behavior therapy (CBT) and advice/intervention of a doctor. Altough contributing to efforts to stop smoking, but these methods are very little is found in literature. Stating that group therapy and CBT used as an effective method in an attempt to stop smoking in adolescents young adults so that they can change the smoking habit [7]. Suggestions/physician intervention into the most effective methods or become the primary method in smoking cessation efforts in India. This method can improve smoking cessation 30% [3].

DISCUSSION

Smoking cessation efforts in several countries like USA, New South Wales (Australia), the UK, Egypt, Iran, Turkey and India is based on the results of a review that is conducted through several methods including Nicotine Replacement Therapy (NRT), Champix, Zyban, Bupropian, Selpf-help, Hypnosis, Hypnotherapy, Acupuncture, Counsleing, Group Therapy, Cognitive Behavior Therapy (CBT), and Advice/intervention of a doctor. Overall these methods can be classified into pharmacological and non-pharmacological therapies. Which include pharmacological therapy is NRT, Champix, Zyban and Bupropian. While the Selpf-help, Hypnosis, Hypnotherapy, Acupuncture, Counsleing, Group Therapy, Cognitive Behavior

Therapy (CBT), and Advice/intervention of a doctors grouped into non-pharmacological therapy.

Results of the review has been carried out on six literature used, it was found that the pharmacological therapy group were the most effective group therapy and most commonly used in smoking cessation efforts, both in the group of smokers teens, young adults and elderly. This is because the effects produced faster in reducing the symptoms of smoking dependence. The effectiveness of these drugs has been recognized and approved for use by FDA. Of some pharmacological theraoy used, NRT expressed more effective than a similar drug because some preparation such as nasal sprays, inhalers and patches steam can reduce symptoms of smoking dependence more rapidly at twelve week after use and users more comfortable in using the product [3].

Non-pharmacological therapies also have effectiveness against efforts to stop smoking, although its use in several countries such as Australia, USA and UK remained the lowest proportion [1]. Based on a review of seven literature used, all articles are obtained using non-pharmacological therapy as an alternative therapy or secondary intervention after pharmacological therapy. The effectiveness obtained by the cognitive changes of the smokers would be the negative effects caused by smoking and behaviors that can change the smoking habit can even quit smoking.

Typs of non-pharmacological therapies are most commonly used and most effective is based on a review of self-help. Other non-pharmacological therapy is also effective as a smoking cessation method is a hypnosis, hypnotherapy, acupuncture, counseling, CBT, group therapy and doctor's advice. However, its use is still in a small proportion.

The types of methods in non-pharmacological therapy can basically overlap between one and the other in cognitive and behavioral change of smokers so as to reduce or even stop the smoking habit. These methods have similarities and differences. The equation is all of these methods aim to assist smoking cessation well with cognitive and behavioral change of smokers. While the difference is only in technique and execution time o each method.

Although, based on the results of a review that pharmacological therapy have a higher level of effectiveness in almost all literature when comrade with non-pharmacological therapy, this is because the effect is more rapid in reducing symptoms of smoking dependence. However, in practice should be combined because both mind and body is one unit and mind will greatly affect a person's behavior. Thus, it is important to note that in therapy should also be given the motivation to quit, by educating patients about the dangers of smoking and find the best alternative for patients in making choices for smoking cessation [7].

CONCLUSION

Some results of the study of literature that has been done, it can be concluded that pharmacological therapy through the use of NRT proved effective and most widely used as a method to quit smoking. However, a combination with non-pharmacological therapy still showed effective results in smoking cessation efforts.

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RECOMENDATION

To stop smoking behaviors can be done with pharmacological and non-pharmacological therapy.

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P-15

MEDITATION-DZIKIR EFFECT ON ANXIETY IN PATIENTS' FAMILY WHO WILL GET PERCUTANEUS TRANSLUMINASI CORONARY ARTERY

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ABSTRACT

Background. Coronary heart disease is the leading cause of death and the first in a developing country, replacing the death due to infectious disease management that can quickly lead to problems for patients who have difficulty in deciding that can increase feelings of anxiety. Meditation-dzikir is one of nonpharmacological measures to lower systolic blood pressure, pulse, frequency of breathing, meditation are also effective for people who are experiencing stress, anxiety. **Objective of research**. To determine the effect of Meditation-Dzikir to anxiety in families of patients who will get Percutaneus Transluminasi Coronary Artery (PTCA). **Method** :Quasi experimental research design with "Pre-Post Test with Control". The sampling used systematic random sampling technique. Inclusion criteria: 1. Family (Wife) Patients who get PTCA, 2. Husband / Wife, 3. Willing to be a subject of research by signing an informed consent. Exclusion criteria: the families of patients undergoing PTCA with bleeding complications. Number of samples were 32 people in treatment group, and 32 people in control group. Analysis of the data using the Mann-Whitney Test. **Results :** There was a mean reduction in anxiety 46.97 p value = 0.000 (α <0.05), in the treatment group (post-test) after administration of Meditation - Dzikir for 30 minutes. **Conclusion** : There is a significant difference in decreasing of anxiety in families who did meditation-dzikir for 30 minutes. **Suggestions:** To reduce of the anxiety, meditation-dzikir can be performed for 30 minutes.

Keywords: meditation-dzikir, anxiety

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BACKGROUND

Coronary heart disease (CHD) is a main and the first cause of death in developing country, replacing the death due to infectious disease management. The prevalence of CHD is increasing. 1.57 million patients is treated every year related to the increasing of various risk factors and unhealthy life style. One of CHD is Accute Coronary Sindrome (ACS), most of the death in ACS happen in 2 hours in the beginning of the attack and before getting treatment in hospital so it needs a fast and effective management strategy. Fast management causes anxiety for the patient and the family.[1]

Role of the patient's family that has to undergo PTCA therapy is very needed in giving support system for patient and accompany patient during the therapy so that they can feel comfortable and secure, and also it can increase their psychological status.

Meditation is a technique or exercise method that is used to train the attention and increase consciousness level, so that mental processes can be more control able consciously to develop internal world or inner world and enrich life meaning for them. Meditation can increase confidence, elf control, emphati and actualization. Besides, meditation is also effective for people with stress, anxiety, phobia and insomnia.[2]

The research result showed that there is a significant difference in anxiety level before and after *Dzikir Khafi* treatment to servical cancer pre operative patitents.[3] Another research showed that meditation can lower physical and psychosocial stress in elderly with primary hypertention.[4,5]

Dzikir is saying the name of Alloh by saying tasbih (*Subhanallah*), tahlil (*Lailahaillallahu*), and tahmid (*Alhamdulillahi*). If we continuosly performe dzikir, we will not put our attention to something that is not clear and we will focus on one point. Heart is a conciuosness vehicle and having some layers. If dzikir is done continuosly, it will get through the layers in the heart.[6] The meaning of dzikir that becomes a study in this discussion is:

a. Tahlil

ه اِلاَّاالل لاَإِله

Meaning: *"There is none is worthy of worship but Alloh."*

b. Tasbih

الْعَظِيْمِ سبْحَانَاللِ ه ,وَبِـِمَدِهِ االلِ ن سبْحَا ه

Meaning: *"Glory is to Alloh and praise is to Alloh, there is none worthy of worship but Alloh, and Alloh is the Greatest."*

c. *Tahmid*

الْعَالَمِيْنَ رَبِّ دلِلِ اَلْمَدْمْه

Meaning: *"All praise and thanks belong to Alloh.*"

c. Takbir

هو الكَبْرَ اَللهه

Meaning: "*Allah is The Greatest*"

d. Istighfar

الْعَظِيْمَ غْفِهرالل اَسْتَ

Meaning : "*I seek forgiveness from God"*

The name of Alloh mentioned above is easier to remember, memorize, and say. Therefore it can be done continuosly everywhere and anytime. Dzikir meditation is a combination of meditation and dzikir (remember) to Alloh as a creator of the universe. It means that meditation is an afterthought, thingking and seeing thought (especially for religious service) that aims to Alloh. While dzikir is saying or remembering Alloh.

Anxiety is a condition that happens in almost everyone in certain time in their life. Anxiety is a right respond to a threat, but it can be abnormal if the level is not correspond with the proportion of the threat or if it happens without any cause or it is not a respond for environmental changes. In the extreme form, anxiety can distract our daily functions.[7]

Anxiety is a condition of mood that is marked with physical symphtoms like physical tension and worry about future. Anxiety can be in the form of subjective agitation. Some behaviors (anxious, agitated, and restless) or physiological respond that sourced in the brain and reflect in the form of increasing heart rate and tightening muscle.[8]

The unpleasant feeling is usually equivocal and hard to ascertain but it can always be felt.[9] Anxiety usually come with physical symptoms like headache, fast heart rate, out of breath, stomachache, not rileks, hard to take a set calmly, etc.[10] All anxiety disorders are related to anxious feeling (for example fearness, worry, despodensi (moody, hopeless]) and various psychological stress reactions like tachycardia (fast heart beat), hypertention, nausea, breathing hard, sleeping disorders and high glucotycoid level.[11]

Dzikir can get rid of sadness, anxiety and depression and also it can create calmness, happiness and life spaciousness. It is because dzikir has psikoterapeutic that contains spiritual and religious power that can awake self confidence and strong optimism. Dzikir is easy to perform and creating rewards (from God). It is the easiest form of worship however it is the greatest and the most beneficial because oral movement is the the lightest and easiest movement of the body.[12]

Meditation is a strategy to get healthy personality and mental health. Dzikir meditation makes someone puts concentration into healthy soul factors like understanding, calmness, sttitude full of attention and neutrality that prevent the emerge of unhealthy soul factors to dominate someone's soul.

Dzikir meditation is a combination of meditation and dzikir (remember) to Alloh as a creator of the universe. It means that meditation is an afterthought, thingking and seeing thought (especially for religious service) that aims to Alloh. While dzikir is saying or remembering Alloh.

Pulse is influenced by blood flow rate which get through the vessel directly proportional with pressure gradient and inversely proportional with vascular resistency. Blood will flow from high pressure area to low pressure area. The bigger pressure gradient that pull the blood through a vessel, then the bigger blood flow rate.[14]

Resistency is a size of blood flow obstacle which goes through blood vessel. The higher the resintency, the harder the blood gets through the blood vessel. Resistency depends on three factors those are viscocity or bllod thickness, length of blood vessel dan radius of the blood vessel. If the blood is thicker, the viscocity also becomes higher so that blood pressure will increase. While in vasolidatation arteriole, the radius of arteriole vessel is getting bigger and the relaxation of smooth muscle layer increases the blood flow through the blood vessel therefore the blood pressure will decrease. The size of arteriole radius is influenced by symphatic nerve in the arteriole smooth muscle. The decreasing of symphatic nerve activity causes comprehensive vasodilatation arteriole. Other factors that influence the size of arteriole radius is epinephrine and norepinephrin hormone factors. Norepinephrin paired with receptor α The treatment of hypertension is by changing the balance of Na^+. The changing of Na^+ balance is usually done by giving diuretic orally. Lowering blood pressure mechanism by diueretik is firstly diuretic medicine lower the extracell volume and cardiac output then it will lower the vascular resistency.

Anxiety is an emotion about future that is marked with *uncontrollability* perception and uncertainty about phenomena that has potentional to hostility and fast friction in paying attention to the focus of dangerous potentionally phenomenon or affective respond itself.[15] Freud explained that anxiety is an affective situation that is unpleasant and followed by physical sensation that warns someone about the danger that threatens. The unpleasant feeling is usually equivocal and hard to ascertain but it can always be felt.[16]

Anxiety is a condition of heart that is marked by negative effect and physical tension symphtoms in which someone anticipates the possibility of danger or misfortune in the future

with worry feeling.[17] Anxiety might include feeling, behavior, and physiological responds.[15] Anxiety usually come with physical symptoms like headache, fast heart rate, out of breath, stomachache, not rileks, hard to take a set calmly, etc.[10] All anxiety disorders are related to anxious feeling (for example fearness, worry, despodensi (moody, hopeless) and various psychological stress reactions like tachycardia (fast heart beat), hypertention, nausea, breathing hard, sleeping disorders and high glucotycoid level.[11]

Psychology dynamic through spiritual activities like shalat, having a prayer or dzikir will make you in the state of relax, calm and peace. This situation influences human brain which is related to emotional process especially in hypothalamus part. In the state of meditative through breathing concentration, saying dzikir, having a prayer, shalat and saying other autosuggestion sentences will cause hypothalamus activity stimulation thus it blocks the excression of *corticotropin-realising factor* (CRF) hormone, which causes *anterior pituitari* gland being hampered to release *adrenocorticotrophic hormone* (ACTH) hormone. It hold adrenal gland to produce *kortisol, adrenalin,* dan *noradrenalin* hormones. It makes *tiroksin* hormone that is released by *tyroid* gland is also hampered. The high level of tiroksin hormone will cause someone being easily getting tired, anxious, high tension, and hard to get sleep so that the meditative state that full of calm and peace feeling will create pyshical effect that is calm and relax.[18]

Based on the research, it is showed that dzikir is a healer. Some of medical and physiological effects are balancing the concentration of serotonin and neropineprine level in the body, in which this phenomenon is a natural morphine that works in the brain and it causes heart and thought feel calm compared to before performing dzikir. Body muscles will slacken especially shoulder muscle that often causes physical tension.[19] That is one of Alloh precious gifts that functions as a transquilizer substances in the human brain.

Physiologically, spiritual therapy with dzikir or remembering Alloh names will cause the brain to work. When the brain gets stimulus from outside, then the brain will produce chemical substance that gives comfortable feeling that is *neuropeptida.* After the brain produces that substance, it will get stucked and absorbed by the body that will later give feed back in the form of pleasure and calmness.[20]

RESEARCH METHOD

The research is a quasi experiment with pre-post test with control design. It was conducted at Coronary Unit in Sardjito Hospital, Yogyakarta. The research was conducted for 3 months that was from June 1 to August 29, 2016. The populations of the research were all families of patients that will get PTCA therapy in Sardjito Hospital, Yogyakarta. The inclusive criteria were: 1. Family of the patient, 2. Husband/Wife, 3. Willing to be the subject of the research by signing informed consent. The exclusive criterion was family of the patients that will get PTCA and had bleeding complication. The determination of the research subjects was as following: Identifying family (husband/wife) of the patients that will get PTCA by doctors in Coronary Unit of Sardjito Hospital. Conducting sampling with systematic random sampling by putting an order of patient families 1-3 as treatment groups and the next 3 patients' families as control groups, etc. 64 patients were divided randomly into 2 groups (1 treatment group and 1 control group). Each treatment group consisted of 32 in treatment group and 32 in control group. During the research, respondents were guided to perform dzikir for 30 minutes.

RESEARCH RESULT AND DISCUSSION

The research was conducted from June 1 to August 29, 2016 at Coronary Unit in Sardjito Hospital, Yogyakarta. Before performing dzikir, respondents (husband/wife) was measured based on anxiety score using *Halminton Rating Scale* of *Anxiety* (HRSA).

1. Respondents' Characteristics

Respondents' Characteristics Based on Age and Gender at Coronary Unit in Sardjito Hospital in 2016

NO	Variables	Intervention		Control	
		f	%	f	%
1	Age				
	31 – 40	0	0	1	3.12
	41 – 50	29	90.62	27	84.38
	51 – 60	3	9.38	4	12.5
2	Gender:				
	Male	4	12.5	3	9.38
	Female	28	87.2	29	90.62
3	Length of PTCA				
	≥ 1 jam	31	96.88	30	93.75
	> 1 jam	1	3.12	2	6.25

Based on tabel 1, it showed that most of the respondents were in the age of 41-50 years old, both in the treatment group and control group. If it is seen from the distribution of the length of PTCA, it was less than or the same as 1 hour both in treatment group or in control group. Based on normality test in both groups, treatment group (n=32) and control group (n=32) with one sample Kolmogorov-Smirnov test, it was obtained the data of systolic and diastolic blood pressure, pulse, breathing and anxietyscore were not distributed normally with p value <0.0, so the analysis of the data was conducted with *Mann-Whitney Test*.

2. Mean Rank of Anxiety Score before and after performing dzikir meditation

Tabel 3.Mean Rank of patients' Anxiety before and after performing dzikir meditation at coronary unit in Sardjito Hospital in 2016

Variable Group		Median (min-maks)	Mean ± SD	Z	P *Value*
anxious treatment	before	69 (58-80)	66.28 ± 8.38	- 4.84	0.000
	after	47 (38 - 55)	46.66 ± 4.79		
control	before	69 (53 – 94)	68.28 ± 9.18	- 1.87	0.041
	after	68 (54 – 94)	67.28 ± 9.31		

The total amount of samples in treatment group (n=32) and in control group (n=32)

Based on table 2, it showed that there was a difference in mean score that showed the difference of anxiety mean score one hour before and after both in treatment group that

performed dzikir meditation with p value = 0.000 (<0.005) or in the group that did not perform dzikir meditation with p value = 0.061 (>0.05).

The result of the research was in line with the previous research that meditation can lower physical and psychosocial stress in primary hypertension patient and elderly with primary hypertension.[4,5] This is in accordance with the theory that dzikir meditation can make individual being in the state of relax, calm and peace. This situation influences human brain which is related to emotional process especially in hypothalamus part. In the state of meditative through breathing concentration, saying dzikir, having a prayer, shalat and saying other autosuggestion sentences will cause hypothalamus activity stimulation thus it blocks the excression of *corticotropin-realising factor* (CRF) hormone, which causes *anterior pituitari* gland being hampered to release *adrenocorticotrophic hormone* (ACTH) hormone. It hold adrenal gland to produce *kortisol, adrenalin,* dan *noradrenalin* hormones.

3. The result of Difference Test in Decreasing Anxiety Score before and after both in group that performed Dzikir Meditation and the one which did not perform Dzikir Meditation

Tabel 3.The result of Difference Test in Decreasing Anxiety Score Mean Rank before and after both in group that performed Dzikir Meditation and the one which did not perform Dzikir Meditation at Coronary Unit in Sardjito Hospital, Yigyakarta in 2016

Variable	Group	Mean Rank	*Z*	*P value*
anxious				
	Treatment	46.97	- 6.229	0,000
	Control	18.03		

Total amount of treatment group (n=32) and control group (n=32)

Based on table 3, it showed that mean rank in decreasing anxiety score was 46.97 in the treatment group and in the control group. Based on *Mann-Whitney Test,*it was obtained p value 0.000 (<0.05) which means there was a significant different in the decreasing of anxiety score in treatment group and in control group.

This research was in line with the previous research that there was an influence of dzikir on the decreasing of anxiety level in pre operatif cervical cancer patients. This is also in accordance with another theory that dzikir can get rid of sadness, anxiety and depression and also it can create calmness, happiness and life spaciousness. It is because dzikir has psikoterapeutic that contains spiritual and religious power that can awake self confidence and strong optimism.[3]

Based on the research result, eventhough there was a decreasing of mean score in control group, there was a difference in decreasing of anxiety mean score after conducting difference test statistically using *Manny-Whitney Test.*The research result was in accordance with the previous research taht stated dzikir meditation had some medical and psychological effects such as balancing the concentration of serotonin and neropineprine level in the body, in which this phenomenon is a natural morphine that works in the brain and it causes heart and thought feel calm compared to before performing dzikir. Body muscles will slacken especially shoulder muscle that often causes physical tension.[19]

Dizkir meditation was a nonpharmacological action to decrease the mean rank of anxiety score before treatment from 66.28 became 47.

The research result was in accordance with the previous research that stated dzikir meditation can make an individual in the state of relax, calm and peace. This situation influences human brain which is related to emotional process especially in hypothalamus part. In the state of meditative through breathing concentration, saying dzikir, having a prayer, shalat and saying other autosuggestion sentences will cause hypothalamus activity stimulation thus it blocks the excression of *corticotropin-realising factor* (CRF) hormone, which causes *anterior pituitari* gland being hampered to release *adrenocorticotrophic hormone* (ACTH) hormone. It hold adrenal gland to produce *kortisol, adrenalin,* dan *noradrenalin* hormones. It makes *tiroksin* hormone that is released by *tyroid* gland is also hampered. The high level of tiroksin hormone will cause someone being easily getting tired, anxious, high tension, and hard to get sleep so that the meditative state that full of calm and peace feeling will create pyshical effect that is calm and relax. The meditative state also influenced and gave stimulus to *autonomic nervous system* that was divided into two types, those were *sympathetic nervous system* if someone was in stress or tension and *parasimpathetic nervous system* if someone was in the state of relax.[18] Hal tersebut merupakan salah satu bentuk karunia Allah yang sangat berharga yang berfungsi sebagai zat penenang didalam otak manusia.[18] That is one of Alloh precious gifts that functions as a transquilizer substances in the human brain.

Physiologically, spiritual therapy with dzikir or remembering Alloh names will cause the brain to work. When the brain gets stimulus from outside, then the brain will produce chemical substance that gives comfortable feeling that is *neuropeptida.* After the brain produces that substance, it will get stucked and absorbed by the body that will later give feed back in the form of pleasure and calmness.[20]

By time of getting older, there are structural and functional changes in perifer vessel system that is responsible for blood pressure changes. The changes include aterosklerosis or the lost of connective tissue elasticity and the decreasing of relaxation of smooth muscle in blood vessel that will later decrease distency ability and tensile strength of blood vessel. The consequence is aorta and the great artery lost the ability in accommodating the volume of the blood that is pumped by the heart (stroke volume). It causes the lowering of cardiac output and increasing the peripheral resistance so that it can make the tissue lost its elasticity and arterisklerosis in elderly and blood vessel dilation that will cause the increasing of blood pressure.[15]

Beside using medication, the action that can be done to lower diastolic blood pressure, pulse and breathing frequency is with having regular exercise. Regular exercise can increase muscle strength and peripheral blood vessel elasticity so that it can lower blood pressure.

CONCLUSION AND SUGGESTION

Conclusion

Based on the research result, it can be seen that there is a significant difference in decreasing of anxiety scorein family that performs dzikir meditation for 30 minutes, as following in details: the mean rank of decreasing anxiety score in the family of patients that get PTCA after performing dzikir meditation for 30 minutes is 46.97 with p value 0.000 (<0.05).

Suggestion

In order to decrease anxiety score, dzikir meditation can be performed for 30 minutes.

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P-16

Strategies to Increase Survival Rate of Hemorrhagic Stroke Patients: A Systematic Review

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ABSTRACT

Background: Hemorrhagic stroke is a common medical problem, this neurologic disorder often occurs suddenly and often leads to death. Hemorrhagic stroke contribute for 10% of 27% of strokes worldwide, with a mortality rate of > 50% for intracerebral haemorrhage and about 45% for subarachnoid hemorrhage. To prevent disability due to oxygen deprivation, early treatment is crucial.
Aims: To explain and discuss the strategy to increase survival rate hemorrhagic stroke patients
Methods: Articles were collected from electronic databases of Pub Med, Science Direct and Google Scholar. 15 articles were reviewed in this study. The criteria of articles were full text and published between 2010-2015. The search was restricted to the English language.
Results: Rapid diagnosis and management of patients is essential. The strategy needs to be done includes: pre-hospital management and hospital management. Pre-hospital management to do with health promotion. Golden period is also very important to be known by patients, families and communities. Golden period i.e. 3-6 hours is a precious time for someone to get help. Health seeking behavior and family social support can prevent individuals from mental threats. Hospital management includes three parallel processes: (1) management of threatening condition in the acute phase, (2) medical and neurologic evaluation and (3) Primary therapy.
Conclusion: Strategies to increase survival rate include the pre-hospital management and hospital management

Keyword: Survival rate, Hemorrhagic Stroke

Background

Hemorrhagic stroke is a common medical problem, this neurologic disorder often occurs suddenly and often leads to death. Globally, the incidence of hemorrhagic stroke incidence by 5.3 million and the number of deaths from hemorrhagic stroke is 3.2 million[1]. Hemorrhagic stroke contribute for 10% of 27% of strokes worldwide, with a mortality rate of > 50% for intracerebral haemorrhage and about 45% for subarachnoid hemorrhage[2,3]. Asian continent has the largest incidence of hemorrhagic stroke in the world. The incidence of hemorrhagic stroke varies in the age ranged 18-95 years with an increased incidence of doubled along with an increase of up to 80 years of age. Africa and America have the greatest incidence of hypertension asthe cause of hemorrhagic stroke[4].

Approximately 70,000 people in the United States suffer death or severe impairment of consciousness due to a hemorrhagic stroke each year. Approximately 10-30% of cases of stroke, hospitalized a hemorrhagic stroke. The American Heart Association estimates that there are 610,000 new cases of stroke in the United States and 185,000 cases of recurrent strokes. Many cases of hemorrhagic stroke require long-term care, only 20% of patients were able to live independently, while 40% of cases died within 30 days and about half will

die within 48 hours. As many as 80% of cases of hemorrhagic stroke in which the damage caused rupture of the arteries due to chronic hypertension[5,6,7]. Hemorrhagic stroke covers 10% of all strokes in developed countries and 20% in developing countries, with a death rate in one month is 25-35% and 30-48%. In the United States the cost of treatment for hemorrhagic stroke per patient of $ 4.830[1]. The prevalence of hemorrhagic stroke in Indonesia based on data from Health Research Association in 2013 as many as 7/mil and diagnosed health personnel as much as 12.1/mil. Number of patients with stroke is expected to increase along with the many of risk factors[8].

Based on the above data it can be seen that a hemorrhagic stroke is a major health problem in developed and developing countries as well as the number one cause of disability in adults. In addition, the life expectancy of patients with hemorrhagic stroke is low and the socio-economic impact on the family, because the cost of treatment is quite expensive and long. Disability inflicted on patients with post- hemorrhagic stroke causes reduced ability to work and be a burden to the family

"Time is Brain and The Golden Hour" is the slogan of the management of hemorrhagic stroke patients. The faster the treatmentlesser thesequelae of stroke. Golden period for treatment is3-6 hours[9]. Allowing time soon to get treatment in the hope of preventing the minimum of damage to brain cells are deprived of oxygen, which can prevent the severity of disability[10]. Therefore, the efforts to counter the threat of hemorrhagic stroke should be as optimal as possible and the participation of the various parties needed to resolve this problem

Aims

To explain and discuss the strategy to increase survival rate hemorrhagic stroke patients

Methods

This systematic review was conducted by collecting and analyzing articles regarding hemorrhagic stroke. Articles were collected from electronic databases of Pub Med, Science Direct and Google Scholar. Included were articles describing the presentation of strategies to increase survival rate of hemorrhagic stroke, full text and published between 2010-2015 and written in English. Excluded were literature reviews, meta-analyses, case studies, dissertations, and master's theses. A total of 15 articles met the inclusion criteria and are presented

Results and Discussion

Haemorrhagicstroke is an emergency situation. Rapid diagnosis and management of patients is essential, since the beginning of general decline in the first few hours after the incident that > 20 % of patients experienced a reduction in GCS and 15 % to 23 % of patients showed a continued deterioration in the first hours after arriving in ED[10]. Those who survive are usually very vulnerable to setbacks. Functional disorders, for example: paralysis, dysphagia, ataxia, perception deficiency and depression behavior[11]. Assessment of a patient includes evaluating airway, breathing, circulation and blood sugar checks should be done immediately. The health condition prior to the attack should be asked to the patient (if conscious), or their families. Evaluate whether there are other neurological deficits, at the time the attack took place and how long, the risk factors exist and whether controlled and any medication commonly drunk[12].

Given the scale of adverse impact of large numbers of hemorrhagic stroke seem disability, life expectancy is low, the need to do a variety of strategies to address the problem. The strategy needs to be done includes: pre-hospital management and hospital management. Pre-hospital management to do with health promotion regarding hemorrhagic stroke which aims to improve understanding for the community. Health promotion can be done regularly includes education about risk factors that must be prevented such as smoking, hypertension, obesity and other diseases originator[13,14]. Primary prevention is done with the aim of reducing the incidence by finding and treating risk factors such as hypertensionand diabetes mellitus and heart disease. Secondary prevention can be done to prevent a recurrence rate. It should be emphasized to the public that the introduction of the signs and symptoms of early stroke and efforts referral to hospital should be done immediately because of the success of stroke therapy is determined by the speed of action in the acute phase, the longer the effort referral to hospital or the longer the interval between the time of the attack with the current therapy means the worse the prognosis.

Golden period is also very important to be known by patients, families and communities. Golden period i.e.3-6 hours is a precious time for someone to get help[10]. Delays in aid are particularly at risk for the occurrence of disability or death. Patients, families and communities must be able to recognize and make the most of the golden period. Research in the US indicates that <50% of stroke patients seek help in time ≤3 hours, 30% that is > 3 hours and 20% over 24 hours. Delay stroke patients seeking help is divided into three stages, namely: (1) at the start of the first symptoms until it decides to seek help (3 hours), (2) when the patient or his family decided to seek help up to meet with health care providers (10 hours) and (3) when the patient has been in contact with health care until the patient finally was admitted to hospital (2 hours). Of the three stages, the longest was when the family decided to seek help up to meet with health care[15].

In addition to the use of the golden period needs to be changed also include the health seeking behaviour. A little delay could have an impact on disability and death. Various factors that influence this behavior, one of which is a socio-cultural factors in terms of handling pain, that people tend to self-medicate prior to hospital. In addition it is the lack of understanding related to the appropriate treatment[16]. Here, the role of health workers to change this behavior is certainly the promotion of health. Family support is also a consideration in this matter, the family should be able to recognize and determine treatment quickly. Family social support can prevent individuals from mental threats and make people more optimistic in the face of tough times

Hospital management in cases of hemorrhagic stroke should quickly get help. Emergency management includes three parallel processes, that is: (1) management's threatening condition that can cause deterioration or complications in the acute phase, (2) medical and neurologic evaluation with the latest imaging equipment and (3) management of the stroke with the provision of primary therapy. Nurses play a role in this section[17]. Competence and traffic becomes a necessary condition that must-have for treating patients with hemorrhagic stroke be right and appropriate in order to disability and conditions are not expected did not happen[17]. Nurses doing: 1) monitoring of ICP, CPP and hemodynamic function. 2) Implementation of ICP management, BP, ventilation, hipertermi and monitor glucose levels. 3) Prevent complications, keep airway free, mobilization in physical tolerance and conducting a detailed assessment related to neurological function. Nurses are recommended for treating patients of hemorrhagic stroke is an acute care nurse neuroscience expertise[10].

Conclusions

Hemorrhagic stroke is one of the biggest causes of death in the world, early treatment delays can be at risk of disability and death.

The strategy needs to be done includes: pre-hospital management and hospital management. Pre-hospital management to do with health promotion regarding hemorrhagic stroke which aims to improve understanding for the community

Emergency management includes three parallel processes, that is: (1) management's threatening condition that can cause deterioration or complications in the acute phase, (2) medical and neurologic evaluation with the latest imaging equipment and (3) management of the stroke with the provision of primary therapy.

Recommendation

Strategies to increase survival rate include the management of pre-hospital (health promotion, utilization golden period, changing the health seeking behavior and family support). Hospital management includes treatment according to the recommendations of ASA.

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Attachment:

Author and Year	Purpose	Methods	Mayor Finding	Weakness	Strength
Biffi, A., Smith, E., Ayres, A.M & Goldstein, J.N (2011)	Todetermine whether statin exposure is protective for patients who develop ICH.	Case-control study and meta-analysis	Data from our center demonstrated an association between statin use before ICH and increased probability of favorable outcome (odds ratio [OR] = 2.08, 95% confidence interval [CI] 1.37–3.17) and reduced mortality (OR = 0.47, 95% CI 0.32–0.70) at 90 days. No compound-specific statin effect was identified. Meta-analysis of all published evidence confirmed the effect of statin use on good outcome (OR = 1.91, 95% CI 1.38–2.65) and mortality (OR = 0.55, 95% CI 0.42–0.72) after ICH	-	large sample and using 2 methods
Go, G.O., Park, H., Lee, C.H., Hwang, S.H., Han, J.W., Park, I.S (2013).	The purpose of this study was to investigate causes, sites and other factors affecting the prognosis of ICH in young adults aged ≤ 40 years	Retrospective	The most common structural etiology was arteriovenous malformation. A statistically significantly higher proportion of patients with good outcomes had a lower initial systolic blood pressure (SBP ≤ 160 mmHg, p = 0.036), a higher initial Glasgow coma scale (GCS) (9 or more, p = 0.034), lower cholesterol levels (< 200 mg/dl, p = 0.036), and smoking history (at discharge, p = 0.008; 6 months after discharge, p = 0.019).	Just use the GCS to see results	Good methods and long term research
Hariyanti, T., Harsono & Prabandari. Y.S (2015)	This study purposely wants to determine the behavior of stroke patients in health seeking related to the disease	Observational descriptive	The results show that 31.5% patients came to the hospital immediately with various time spans. Stroke patients who went to the hospital within 3 hours were 18,7%, while the rest arrived after more Than 3hours. Patients who were examined by health workers first then taken to the hospital were 46.5%, and patients were not taken to hospital after being taken to the medical and non-medical personnel were 22%. Health seeking behavior was influenced by several factors, namely demographic and geographic factors, socio-cultural, clinical, perception, and knowledge	-	Large sample
Haynes, E., Pancioli, A., Shaw, G., Woo, D (2012).	To explain peripheral leucocytes and intracerebral hemorrhage	Retrospective	The identified 186 ICH patients seen in the ED within 12 hours of symptom onset and with complete baseline data. Mean age was 67.3±14.8 years; 51% were male, and 22% black. Median [interquartile range] ICH volume was 12.8mL	-	Good methods and long term research

Kim et al (2011)	To investigate factors associated with prehospital delay after acute ischemic stroke in Korea.	Prospective study	Among the 500 patients (median 67 years, 62% men), the median time interval from symptom onset to arrival was 474 minutes (interquartile range, 170-1313). Early arrival within 3 hours of symptom onset was significantly associated with the following factors: high National Institutes of Health Stroke Scale (NIHSS) score, previous stroke, atrial fibrillation, use of ambulance, knowledge about thrombolysis and awareness of the patient/bystander that the initial symptom was a stroke. Multivariable logistic regression analysis indicated that awareness of the patient/bystander that the initial symptom was a stroke (OR 4.438, 95% CI 2.669-7.381), knowledge about thrombolysis (OR 2.002, 95% CI 1.104-3.633) and use of ambulance (OR 1.961, 95% CI 1.176-3.270) were significantly associated with early arrival	-	Large sample and good methods
Brouwers, H.B & Goldstein, J.N (2012)	To investigate management in a neuroscience intensive care unit	Review	preventing recurrence of intracerebral hemorrhage is of pivotal importance, and tight blood pressure management is paramoun	-	Many clinical trials are planned or actively enrolling patients, and the near future may hold a wide range of new therapies
Elliot, J & Smith, M (2010)	This review discusses the current understanding of the pathophysiology of spontaneous and anticoagulationrelated ICH and presents consensus evidence for its acute management.	Clinical Review	Attention must be given to fluid and glycemic management, minimizing the risk of ventilator-acquired pneumonia, fever control, provision of enteral nutrition, and thromboembolic prophylaxis. There is an increasing awareness that aggressive management in the acute phase can translate into improved outcomes after ICH		Structured and easy to understand
Rincon, F & Mayer, S.A (2012	This review discusses Intracerebral hemorrhage management	Review articles	Surgical hematoma evacuation does not improve outcome for more patients, but is a reasonable option for patients with early worsening due to mass effect due to large cerebellar or lobar hemorrhages. Promising experimental treatments currently include ultra-early hemostatic therapy, intraventricular clot lysis with thrombolytics, pioglitazone, temperature modulation, and deferoxamine to reduce iron-mediated perihematomalinflammation and tissue injury	-	Structured and easy to understand

P-17

THE IMPACT OF WORKPLACE BULLYING IN NURSING: Literature Review

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ABSTRACT

Background: Bullying in the healthcare workplace has been recognized long time ago that workplace bullying in nursing is characterized as the on-going health or career endangering mistreatment of an employee. Bullying is named as indirection aggression, social or relational aggression, horizontal violence, and workplace violence. It was identified the damaging effect of bullying not only for individuals but also organizations Notice from these reason, it will require to know how bullying make impact for nurses.
Aim: To identify the impact of workplace bullying in nursing.
Methods: This study used implementing a literature search through up to date researches articles. The article used was taken from several databases like ProQuest, Science Direct, and EBSCOhost from 2012-2015. The author analyzes on how the impact about the workplace bullying in nursing.
Results: This study used about 10 researches articles which explained that bullying in workplace can cause psychological and/or physical harm among professionals, disrupt nursing care, and threaten patient safety and quality outcomes of nursing care. It brings poor quality patient care and increased medical error, low patient satisfaction, and increased operational costs. It emerges suppresses confidence, decreases self-worth, encourages acute anxiety and depression, facilitates burnout, promotes Post-Traumatic Stress Disorder (PTSD) and can be factors of both suicidal ideation and actual suicide.
Conclusion: Bullying can destroy nurses mentally and physically. Workplace bullying should be addressed through educational programs geared toward curbing and ultimately eradicating bullying. Education topics such as understanding bullying, ensuring self-care, improving communication skills, utilizing social support, and gaining peer support may help manage bullying in the nursing workplace.

Keywords: Workplace bullying, nurse, impact.

BACKGROUND

Many organizations world-wide are facing the issue of bullying in the workplace and many employees report being subjected to bullying. Researchers reported the workplace bullying is a pervasive and harmful feature of modern workplaces. It was identified the damaging impact of bullying not only for individuals but also organizations [1]. Bullying can occur in any workplace regardless of culture and affect both genders with serious consequences. Bullying at work can include all types of mistreatment, including threats, intimidation, and humiliation. The health care sector is one of the fields where bullying is commonplace [2].

Workplace bullying is distinct from other definitions such as incivility or disruptive behaviors because the behaviors of the bully toward the victim are not random acts, are intentional, and occur over an extended period. Workplace incivility is defined as disrespectful deviant work behaviors of a person to harm another that violates workplace rule [3]. Workplace bullying is considered a serious issue in nursing too. It occurs when an employee (i.e., target) is facing prolonged exposure to negative behaviors against which one feels unable to defend

oneself. Research suggests that up to 40% of nurses are exposed to bullying behaviors, including exclusion, intimidation, and belittlement [4].

Bullying has probably been part of the nursing workplace culture since the beginning of professional nursing. Thus, nurses are up to three times more likely to be victims of violence than other categories of health personnel, with female nurses considered the most vulnerable [2]. Bullying can call by many names: workplace aggression, indirection aggression, social or relational aggression, horizontal (lateral) violence, and workplace violence. It has become so popularized in the press. Bullying in the healthcare workplace has been recognized that there is still a culture of silence in many institutions.

The deliberate, repetitive, and aggressive behaviors of bullying can cause psychological and/or physical harm among professionals, disrupt nursing care, and threaten patient safety and quality outcomes. The consequences of workplace bullying are as evident today as they were one hundred years ago. A century later the workplace has changed for the better in many parts of the world. Yet, in spite of such advances, nurses still experience bullying in the workplace [5].

AIM

The intent of literature review study was to know and identified the impact of the workplace bullying in nursing, which is in physical, psychological and organizational.

METHODS

This study used methods by implementing a literature search through English language research articles published in journals between 2012 and 2015 which was conducted. A computerized search of the ProQuest, Science Direct, and EBSCOhost databases was conducted using the search terms “bullying in workplace” and “bullying in nursing”. Since the purpose of this systematic review focused on bullying in the nursing workplace, the final 10 articles specific to bullying among nurses in their workplaces were selected and potentially eligible in the inclusion criteria. Each selected article was reviewed for suitability for full article review. The literature that eligible in the inclusion criteria are literatures which focus on impact of nursing bullying in workplace issues.

RESULT AND DISCUSSION

According to the American Nurses Association (2015), bullying in nursing in the workplace is characterized as the on-going health or career endangering mistreatment of an employee, by one or more of their peers or higher-ups and reflects the misuse of actual and/or perceived power or position that undermines a person’s ability to succeed or do good, or leaves them feeling hurt, frightened, angry or powerless [6]. In general, bullying consists of the behavior which targeted at a person to humiliate and stigmatize socially. It also aims at sabotaging the victim’s reputation by attacking the victim’s character and professional competence. A person can experience bullying at work from managers, supervisors, co-workers, subordinates, administrators, clinical instructors, charge nurses, and staff nurses [7].

According to the research on workplace bullying in nursing in Alaska (2009), 27.3% of the 249 emergency room, nurses surveyed admitted to being bullied at work. 50% of those who reported being bullied identified managers as the bullies. Similarly, in 2009, 21% of the 286 nurses surveyed in a Turkish study admitted exposure to workplace bullying and reported

that 39% of the bullying behaviors were perpetrated by administrators. 63% of those who experienced bullying identified the perpetrators as more experienced nursing colleagues [8].

Lewis (2006) estimated that approximately 80% of UK nurses experienced bullying at some point in their career, with the majority of these acts being perpetrated by co-workers in Australian hospital settings [9]. Persistent behaviors were reported as repeated occurrence of bullying behaviors over at least once a week for at least a 6-month period [1].

The impact of workplace bullying brings poor quality patient care and outcomes increased medical error, low patient satisfaction, and increased operational costs through liability. As a direct consequence, workplace bullying may affect subtlety and/or sometimes unknowingly their mental health, not only in other physical but also in psychological consequences too. In psychological consequences, they include suppresses confidence, decreases self-worth, fosters feelings of non-appreciativeness, creates self-hatred compromises mental well-being, causes depression, encourages acute anxiety, facilitates burnout, promotes Post-Traumatic Stress Disorder (PTSD), and produces powerlessness. Physically, bullying drains every ounce of compassion, well-intentions, and altruism a nurse [6].

The people, who exposed to long term and persistent bullying at work, have been reported to have low self-esteem and self confidence and to suffer from social isolation, stigmatization and ill-adjustment as well as demonstrating anxiety, aggression, depression or depression-related symptoms. Many bullying victims have been known to demonstrate symptoms of Post-Traumatic Stress Disorder and some have reportedly attempted suicide. On the other hand, individuals experiencing bullying at work have poor job satisfaction, work performance, motivation and efficiency, while their social relations suffer both at work and home. The common bullying behavior that addressed is isolation at work, aggression towards professional status, aggression towards personality, and directly hostile behavior [7].

Workplace bullying has also been associated with serious mental health problems, such as Post-Traumatic Stress Disorder (PTSD). PTSD is a serious anxiety disorder that is associated with persistent exposure to stressful conditions. Researchers have argued that victims of bullying who exhibit symptoms such as memory problems, nervousness, social isolation, avoidance and hostility may in fact be suffering from PTSD. Studies examining bullying and PTSD have found that, on average, 86% of victims reported signs of PTSD. It seems reasonable to expect that given their young age and lack of experience, novice may not yet have developed protective intrapersonal resources making them particularly susceptible to this symptomology when faced with persistent bullying [9].

Another impact from exposure to workplace bullying has been proposed to be an important predictor the underlying factors of both suicidal ideation and actual suicide. Some research established that severely bullied workers were 6 times more likely than non-bullied workers to report suicidal ideations. Workplace bullying refers to a situation in which one or several individuals persistently perceive themselves to be on the receiving end of negative actions from superiors or coworkers and in which the targets find it difficult to defend themselves against these actions. When people over a prolonged period perceive themselves to be socially alienated from others and simultaneously feel that they are a burden on others social exclusion from one's peers or supervisors at work, they develop a risk factor for suicidal ideation and behavior [10].

The other impact of bullying is it can result in serious health-related outcomes among not only in nurses but also patients under their care and health care organizations. Nurses might be more vulnerable to bullying than other health care workers because they were

predominantly female and perceived themselves to be powerless and oppressed. Negative behaviors of a bully are perceived as demeaning and downgrading through vicious words and cruel acts, offensive, abusive, intimidating, malicious, or insulting behavior and unreasonable behaviors. The consequences or damages as a result of bullying in the nursing workplace not only affect interpersonal relationships but also, on an organizational level and negative image of workplace [1].

These outcomes can have significant repercussions for health care organizations and the quality of care they provide. It can contribute to the already salient nursing shortage and generate considerable costs in terms of staff replacement and recruitment [4]. Workplace bullying makes nurses intention to leave the organization because being out of the clique (feeling alienated due to ethnicity or educational level). Some strategy was the provision of assertiveness and aggression training which helped nurses handling adverse working environments, such as approach of partnering nurses mentors with academic participants resolved conflicts and provided support and effective communication that enhanced the work climate or educate their colleagues and administrators on the effects of workplace bullying and strategies for maintaining a more supportive work environment [1].

CONCLUSION

In essence, bullying can destroy nurses mentally and physically. It can have significant association between victimization from bullying and subsequent suicidal ideation because bullying in nursing workplace is considered to be the repeated, cumulative, and patterned form of negative behaviors of a perpetrator abusing his or her power over time toward the victim, resulting in a profound negative impact on the bully victim and organization. So, workplace bullying should be addressed through educational programs geared toward curbing and ultimately eradicating bullying. Education topics such as understanding bullying, ensuring self-care, improving communication skills, utilizing social support, and gaining peer support may help manage bullying in the nursing workplace.

RECOMENDATION

We must create a good workplace environment where caregivers can feel safe and comfortable in their workplace and it should be responsibility of everyone to enhance the knowledge about bullying, which is about the characteristics of bullying and how to against this behavior of all levels of employees up to supervisor in the area of hospital.

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P-18

RISK FACTOR ANALYSIS OF FILARIASIS LYMPHATIC IN VIQUEQUE SUB DISTRICT OF TIMOR LESTE

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ABSTRACT

Viqueque District was one of four sub districts in Viqueque District, Timor Leste. Its filariasis lymphatic disease incidence number was the highest than three other sub districts. This was due to most of its society had an out-at-night activity, they did not use mosquito net while sleeping, and they did not have mosquito-proof home construction.This research aimed to know risk factors of filariasis lymphatic incidence in Viqueque Sub District.

This was an analytical observational research by case control method with sample number of 135 respondents that consisted of 45 respondent cases and 90 respondent controls.

Research result number showed a low out-at-night behaviour with OR value = 0.303; CI = 0.132 – 0.695, mosquito net use behaviour was very low with OR value = 16; CI = 2.088 – 122.611, and its home construction was not mosquito proof with OR value = 16; CI = 2.088 – 122.611 in Viqueque Sub District society of Timor Leste.The conclusion from this research was that people who were out-at-night, they did not use mosquito net while sleeping, and whom their homes were not mosquito proof had higher risk suffered from filariasis lymphatic compared with people who did not out-at-night, who used mosquito net while sleeping and had mosquito proof home construction. Based on this research, it was suggested in order that people did not out- at-night, people was suggested to use mosquito net while sleeping, and their homes were installed with plafond, did not let clothes hanging, and installed wire gauze in their home ventilation, floor to be cemented, tight home wall in order to pursue mosquito entered into the house, and developed guidance to the society on out-at-night danger, did not use mosquito net, and wall construction, mosquito net use, home floor and plafond.

Keywords: Behavior, Epidemiology, Filariasis Lymphatic.

INTRODUCTION

Filariasis has infected 120 million people in 83 countries worldwide and 1/5 of the world population, or 1.3 billion people in 83 countries are at risk of filariasis1. In tropical and subtropical regions there are 22 million children at under 15 who have been infected and 40 million inhabitants have suffered from serious disability. According to WHO, lymphatic filariasis problems that occur in East Timor has been included as the target of elimination programin 2020[1]. The number of people with night activities and sleep habits without nets plays a risk factor for disease transmission of lymphatic filariasis.

Most of the home conditions which do not meet mosquito proof standard which suggests that mosquito cannot fly through the bottom of the house (for the types of houses on stilts). Tribes (village level) in Viqueque Subdistrict are categorized as high filariasis endemic which reached 146 cases in 2010. Sub Viqueque District is an area with the highest lymphatic filariasis cases among other 4 Sub Districts, although its prevalence is lower among others. Most of People in Sub district of Viqueque are farmers. During the maize and paddy seasons, people use to go out at night to keep the plants from the

threat of theft and vermin or animal herbivore so people often sleep in the garden and the fields for months. They come back home after harvest. Some previous studies which were done in other places, showed that going out at night, the use of mosquito nets, and house construction were not statistically significant. But until now there are still lymphatic filariasis cases in sub district of Viqueque that may correlate to society behavior and the condition of the home which has never had filariasis research. Therefore, the researchers are interested in knowing factor of going out at night, use of mosquito nets and home construction whether it is associated with the occurrence of lymphatic filariasis in the sub district of Viqueque, Timor Leste.

METHOD

This research was analytic observational study with case control design, with 45 cases with a ratio of 1: 2, so that the sample in this study were 135 respondents. Filariasis cases based on medical record in 2010 - July 2011 in sub health centers in Viqueque district, East Timor.

The data was taken by getting secondary data in health institutions, whereas the primary data was obtained by performing environmental observation and interviews with respondents in accordance with the research inclusion criteria. Data which were collected were going out behavior, the use of mosquito nets when sleeping and house construction that included the condition of wire netting, house walls, ceilings, and floors of the house. The collected data were analyzed with the help of the computer to perform chi - square and calculate the odds ratio.

RESULT AND DISCUSSION

Research setting description

Figure 1. Viqueque Sub District and Health Facilities (CSI/CHC: Centro Saude Interna, HP: Health Pos, MC: Mobile Clinic)

Sub District Viqueque in the map shows a light blue color. It has ± 1.850 km2, with population of 23.287 inhabitants. This sub-district has 10 tribes (tribe in Indonesia has the

same level as Kelurahan), 62 aldeias (the same level as village) and one hospital. Sub District Viqueque has a border area, they are:

1. East Area : Watulari
2. West Area : Lacluta
3. North Area : Ossu
4. South Area : Laut Timor

Based on the report of Community Health Center at Sub District Viqueque year 2010-2011 finds that there are 45 patients with lymphatic filariasis. But the health department does not have a special medical record of lymphatic filariasis. Based on the guidebooks/guidelines of Timor Leste Ministry of Health classify lymphatic filariasis only to the list of diseases "and other points" (etc)., so the researchers could not take and copy patient's medical record of lymphatic filariasis.

Characteristics of Respondents

1. Univariate Analysis
   a. Age
      Age in this study can be found at table 1.

Table 1. Frequency Distribution of Respondents by Age Group

No	Age	Number (people)	Percentage (%)
1	25-45 yearsold	15	11,1
2	46-65 yearsold	84	62,2
3	66-85 yearsold	36	26,6
4	≥86 yearsold	0	0
	Total	135	100

Data Resource: Primary Data

   b. Education Level
      Education level in this study can be found at table 2.

Table 2. Frequency Distribution of Respondents by Education Level Group

No	Education Level	Number (people)	Percentage (%)
1	No School	135	100
2	Elemantary School	0	0
3	Junior High School	0	0
4	Senior High School	0	0
5	University	0	0
	Total	135	100

Data Resource: Primary Data

c. Occupation

Occupation in this study can be found at table 3.

Table 3. Frequency Distribution of Respondents by Occupation Group

No	Occupation	Number (people)	Percentage (%)
1	Farmer	135	100
2	entrepreneur	0	0
3	government employees	0	0
	Total	135	100

Data Resource: Primary Data

d. Out of the house

The respondent's Out of the house in this study cab be found at table 4

Table 4. Frequency Distribution of Respondents by the respondent's out of the house

No	Out of the House	Number(people)	Percentage (%)
1	06.00-14.00	111	82,2
2	15.00-22.00	1	0,7
3	23.00-06.00	23	17,0
	Total	135	100

Data Resource: Primary Data

2. Bivariate analysis

Bivariate analysis used to analys relationship between independent variables and dependent variable and looking at Odds Ratio (OR), dan CI 95%, used crosstabulation method. Bivariat analysis shows in table 5.

Table 5. Bivariate analysis between independent variables and dependent variable

No	Variable	Status		OR	CI
		Case	Control		
1.	Hang out on night				
	a. Yes	28	76		
	b. No (stay at home)	17	14	0,303	0,132-0,695

Source: primary data

Tabel 6. Bivariate analysis between independent variables and dependent variable

No	Variable	Status		OR	CI
		Case	Control		
1.	Used mosquito net				
	No	44	66		
	Yes	1	24	16	2,088-122,611

Source: primary data

Tabel 7. Bivariate analysis between independent variables and dependent variable

No	Variabel	Status		OR	CI
		Case	Control		
1.	House construction with Mosquito proof				
	No	44	66		2,088-
	Yes	1	24	16	122,611

Source: primary data

Tabel 8. Bivariate analysis between independent variables and dependent variable

No	Variabel	Status		OR	CI
		Case	Control		
1.	Kawat Kasa				
	Yes	0	0	16	2,088-122,611
	No	45	90		

Source: primary data

Tabel 9. Frequecy distribution of wall

No	Variabel	Status		OR	CI
		Case	Control		
1.	Wall				
	Close	0	0	16	2,088-122,611
	Open	45	90		

Source: primary data

Tabel 10. Frequecy distribution of Plafon

No	Variabel	Status		OR	CI
		Case	Control		
1.	Plafon				
	Yes	0	0	16	2,088-122,611
	No	45	90		

Source: primary data

Tabel 11. Frequecy distribution of Floor

No	Variabel	Status		OR	CI
		Case	Control		
1.	Floor				
	a. Permanen	1	0	16	2,088-122,611
	b.Natural/ Soil	44	90		

Source: primary data

DISCUSSION

Correlation between Hang out at night and Filariasis Limfatik

This study showed that no correlation between hang out at night and filariasis (CI = 0,132-0,695). OR = 0,303 it means that respondent who hang out at night did not high risk

of filariasis limfatik rather than the respondent who stay at home.

This research differs from research Sunardi (2006) which states that there is a relationship between a go out at night with the incidence of lymphatic filariasis (P = 0.01). Value OR = 26.2 it means that go out at night have 26.2 times greater risk affected lymphatic filariasis compared with those who did not go out at night.

This is because the possibility of mosquitoes do not bite when respondents go out at night but could have been a mosquito bite in the house as well as the transmission occurs at home if we see the condition of the house that very allows the house to be resting on the vector mosquitoes, because the value of OR of construction of the house is greater than the value OR behavior of go out at night.

Relationship Between Use of Netting With Lymphatic Filariasis Incidence

Based on the research results, there is a relationship between the use of nets with the incidence of lymphatic filariasis (CI = 2.088 to 122.611). OR value indicates that the use of mosquito nets is a risk factor with OR = 16, which means that they are not using mosquito nets while sleeping nights at risk 16 times greater risk of lymphatic filariasis compared with those using mosquito nets while sleeping at night.

These findings are consistent with research that states that there is a relationship between the use of nets with the incidence of lymphatic filariasis (P = 0.01 p <0.05). Value OR = 9.57 means those who do not use the nets at risk 9.57 times greater risk of lymphatic filariasis compared with those who use the nets. Incidence of lymphatic filariasis caused by the respondents did not use nets during the night sleep. Mosquito nets are a barrier when netting in a good condition.[3]

Relationship Between Construction Home Mosquito Proof With Lymphatic Filariasis Incidence

Figure 2. Construction Home Respondents

Based on the research results, there is a relationship between the construction of homes that are not mosquito proof with the incidence of lymphatic filariasis (CI = 2.088 to 122.611). Value of OR = 16, meaning that those who do not mosquito proof construction of houses at risk 16 times greater affected lymphatic filariasis comparing with are mosquito proof of home construction. This study is consistent with research states that there is a relationship between construction homes are not proof mosquito with an incidence of lymphatic filariasis, house wall construction OR = 3.1 (CI = 1.137 to 8.535), meaning that those who house wall construction

that there is a gap at risk 3, 1 times greater to affected lymphatic filariasis comparing with the construction of his house was no gap. House ceiling OR = 4.7 (CI = 1.739 to 12.525), which means that house construction without ceiling have a risk 4.7 times greater risk of lymphatic filariasis compared with those house with ceiling construction , and use mosquito netting wire OR = 3.7 (CI = 1.411 to 968), meaning that ventilation house construction without wire gauze mosquito have a risk 3.7 times greater risk of lymphatic filariasis

It is because of the house with non mosquito proof will ease the mosquitoes to enter the house. The ceiling is a divider between upper wall and roof that is made by wood, plasterboard or bamboo webbing. If there is no ceiling, it means that there is a hole or space between wall and roof so mosquitoes will be easier entering the house. Therefore the risk of contact between people and mosquito will be bigger than the house without space. People who live in the area with mosquitoes breeding places, no ceiling and non permanent houses have bigger risk in getting filariasis compared to the houses without mosquitoes breeding places, with ceiling and permanent houses.

CONCLUSION AND SUGGESTION

A. CONCLUSION

The results of the research are:

1. There is no relation between going at night and the incidence of lymphatic filariasis.
2. There is a relation between the using of mosquito net when sleeping at night and the incidence of lymphatic filariasis.
3. There is a relation between mosquito proof housing construction and the incidence of lymphatic filariasis.

B. SUGGESTION

Based on the conclusion above, the researcher can give some suggestions as following:

1. Community Health Center can give counseling for not going at night even though there is no relation based on the analysis result.
2. Community Health Center can do an activity to distribute mosquito net for people in Viqueque District in general and Sub Distrik Viqueque in specific.
3. It is expected that Community Health Center can give understanding for people whose house construction is not yet mosquito proof to improve their houses quality.
4. It is expected that Timor Leste government especially Timor Leste Health Ministry to create a policy related to filariasis disease problem.
5. It is expected that the Head of Health Department of Viqueque District can improve surveillance activities against filariasis disease.

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P-19

The Relations of Gingivitis Severity Levels with Teeth Sensitivity on Women Aged 30-45

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ABSTRACT

Sensitive tooth is the common term that is used to show hypersensitive dentin because of thinner enamel, gum reduction and dentin formation, a layer under enamel. In short, gingivitis is defined as gum inflammation or gum infection. Gingivitis and periodontitis are the illnesses of periodontal tissue inflammation that happen in most people. The purpose of this research was to know the relations of gingivitis severitty levels with teeth sensitivity of women at the age of 30-45 years old. The subjects of this research were PKK members in the age of age 30-45. This research used descriptive quantitative method and the data was presented by crosstab. The result of this research the most common condition related to gingivitis severity was 52% of the women had mild level of gingivitis and the condition related to teeth sensitivity was 43,5% with sensitive pain. The gingivitis severity level was 62,5% that had mild inflammation at the most. The most women who had sensitive teeth are 57,5 % with pain criteria and had no pain criteria with 42,5% at the least, also the gingivitis severity level was 56,5% which had mild inflammation with pain sensitivity level.

Keywords: Gingivitis Severity Levels, Teeth Sensitivity, Women

INTRODUCTION

Sensitiv Dental is a general term used to indicate the presence of dentin hipersensitiv due to thinning enamel, gums and decrease the opening of dentin, a layer below the enamel. Pain associated with tooth sensitivity occur in the nerves, the pain of tooth sensitiv not remain forever, but periodically there is a temporary[1].

Gingivitis and periodontitis is an inflammatory disease of periodontal tissue that affects many people. Gingivitis is simply defined as gingival inflammation. Another definition states that gingivitis is an inflammation of the gingival epithelium jungsional which is still intact on the teeth in the initial conditions so its attachment has not changed[2].

Mojogedang subdistrict located in Karanganyar, Mojogedang region itself is divided into 14 regions at the village with an area of 5330.90 hectares and a population of some 62 728 people, while the population of the hamlet of 697 souls Mojogedang number by the number of population aged 30-45 years is male number 84 souls and female 96 souls[3].

Based on observations conducted in women with age 30-45 years Mojogedang village, Karanganyar, Solo, showed as many as 10 people had gingivitis and 8 of them experienced a different level of sensitivity that is felt cold, pains, do not feel pains when exposed to cold water. Based on these data can be obtained from the average severity of gingivitis and sensitivity in women aged 30-45 years.

The purpose of this study was to determine the severity of gingivitis with tooth sensitivity in women aged 30-45 years Mojogedang village, Karanganyar, Surakarta.

The results of this research can be useful in the field of theoretical broaden knowledge about oral health counseling related to dental and oral diseases and prevention of oral disease. In the field of practical (1) For researchers used to broaden their horizons and increase knowledge of oral health in particular regarding the description of the severity of gingivitis and sensitivity (2) For the people that this research can provide information of oral health and prevention solutions teeth and mouth disease particularly the description of the severity of gingivitis and sensitivity.

MATRIALS AND METHODE

This type of research is quantitative descriptive. Data collection was performed by cross sectional study was that the data concerning the variables to be collected at the same time[4].

Population is the subject of research[5]. The population in this study were aged 30-45 years PKK Mojogedang village of 40 people. When the study in February-March 2016, in the village of Mojogedang, Karanganyar, Surakarta.

Aspects of this research is the relationship with the severity level of gingivitis tooth sensitivity while uncontrolled aspect is the speed of the brushing, the pressure in the brush, tooth paste, tooth brush types.

Assessment on the severity of gingivitis is an inflammation of the gingival characterized by inflammation and discoloration of the gingiva. Measurement index of gingival taken six teeth were used as tooth index are first molar upper right incisor first upper left first premolar left upper first molars lower left, incisors first bottom right, and first premolar bottom right is given a score based on the index gingiva in the area (facial / labial, mesial, distal, and lingual), namely: (1) a healthy condition in which a state of gingival no inflammation, no discoloration and no bleeding was given a score of 0, (2) mild conditions in which the state of the gingiva there is little change in color and a little edema, but no spontaneous bleeding probing is given a score of 1, (3) the condition of being in which the state of the gingiva there is redness, edema, and bleeding on probing is given a score of 2, (4) severe conditions in which the state of the gingiva No red light or illuminated, the edema, the tendency of spontaneous bleeding was given a score of 3. Determination of criteria in the assessment of gingival index, namely: (1) healthy criteria is given a score of 0, (2) criteria for mild inflammation was given a score of 0.1-1, (3) criteria inflammation was given a score of 1.1 to 2, (4) criteria of severe inflammation was given a score of 2.1 to 3[3]. Rate overview tooth sensitivity is where the teeth will feel pains and pains when exposed to cold stimuli from the outside that attack tooth nerve. Measurement of tooth sensitivity overview of respondents using ethyl chlor (CE) applied to the gingival respondents who had gingivitis criteria and rheumatic pains felt.

Management of data in this research is to look at the severity level of gingivitis with tooth sensitivity in women aged 30-45 years Mojogedang village, Karanganyar district, Surakarta. Researchers used the test of cross tabulation or Crosstabs.

Ethics in Research carried out with due regard to ethics and respect the rights of research subjects signed informed consent.

RESULTS

Research Result

Table 1. Frequency distribution criteria for severity of gingivitis

Severity of gingivitis	Amount	Percentage (%)
Healthy	1	2,5
Mild inflammation	25	62,5
Medium inflammation	14	35
Weight Inflammation	0	0
Total	40	100

Table 2. Distribution of the frequency of tooth sensitivity on the respondent

Sensitivity	Amount	Percentage (%)
Pain	23	57,5
No Pain	17	42,5
Total	40	100

Table 3. Cross tabulation of the age of the respondents to the severity gingivitis

Age (Year)	Severity of gingivitis						Total	
	Healthy		Mild inflammation		Medium inflammation			
	Amount	(%)	Amount	(%)	Amount	(%)	Amount	(%)
30-35	1	100	13	52	0	0	14	35
36-40	0	0	11	44	0	0	11	27
41-45	0	0	1	4	14	100	15	37,5
Total	1	100	25	100	14	100	40	100

Table 4. Cross tabulation of the age of the respondents with tooth sensitivity

Age (Year)	Sensitivity				Total	
	Pain		No Pain			
	Amount	(%)	Amount	(%)	Amount	(%)
30-35	7	30,4	7	41,2	14	35
36-40	6	26,1	5	29,4	11	27,5
41-45	10	43,5	5	29,4	15	37,5
Total	23	100	17	100	40	100

Table 5. Cross tabulation of the severity of gingivitis and tooth sensitivity

Severity of gingivitis	Sensitivity				Total	
	Pain		No Pain			
	Amount	(%)	Amount	(%)	Amount	(%)
Healthy	0	0	1	5,9	1	2,5
Mild	13	56,5	12	70,6	25	62,5
Medium	10	43,5	4	23,5	14	35
Total	23	100	17	100	40	100

DISCUSSION

From the results of the examination conducted on 40 respondents aged 30-45 years old mother in the village of Karanganyar Surakarta Mojogedang obtained results in Table 1, respondents with mild inflammation at most, with the number of 13 respondents (52%), while respondents with no severe inflammation , inflammation of the gums that occurs to the respondent due to brushing too hard and too stressed toothbrush on the surface of teeth and gums, so that the injured and inflamed gums. Gum inflammation can be caused due to an error at the time you brush your teeth, because the severity of polishing, it can injure the gums, sores in the gums and the unraveling of the underlying connective tissue and cause pain. More localized lesions are the result of tertusuknya gums by rows of brushes. The use of toothpicks with toothpicks imposing entrance way into the gap below the contact point. To areas where gaps can occur buildup of food debris that led to the occurrence of gingivitis and periodontitis[2].

According to Table 2, the rate of tooth sensitivity can be seen tooth sensitivity with pain criteria at most, at the age of 41-45 years with the number of 10 respondents (43.5%), taste sensitive pain suffered by the respondent due to the age factor, the use or how to brush teeth that are not quite as long as the age of respondents could lead to gum recession or decline, so the open dentin layer and gives rise to a sense of rheumatic pains in the teeth not only respondent.

Taste experienced by cavities, teeth still good also felt shooting pain. Sensitiv teeth is caused by the opening of a layer of dentin. Normally a layer of dentin covered by enamel and gums, but there are some things that cause the enamel and gums is lost, resulting in the opening of the dentine coating. Among gum recession or deterioration of the gums due to incorrect brushing or age factor, acidic food or beverage that can erode enamel, frequent brushing with a toothpaste that is abrasiv[5].

The results of the research and severity of gingivitis with tooth sensitivity in women aged 30-35 years in the village of Karanganyar district Mojogedang Surakarta will be discussing the following, the results obtained from Table 3, it can be seen cross-tabulations of age and severity of gingivitis most respondents with medium inflammation most that 11 respondents (44%) at the age of 36-40 years, while the cross-tabulation between the age of the respondents to the sensitivity of visible tabulation value most is in Table 4, the age group 41 to 45 years old with 10 respondents (43.5%). Age can affect the severity of gingivitis, this is due to the decrease of gingival line attached to the neck of the teeth or gingival recession are attached to the neck of the teeth or gingival recession, opening a layer of dentin at the root of their taste

for frequent pains in the respondents. There are several other factors that led to a sense of aching in the teeth respondents aged 41- 45 years. Age resulting in an increasingly crowded and increasingly rough gingival connective tissue. In the older age group is 65-80 years found a vast improvement infiltrated connective tissue, increasing the flow of gingival crevice fluid (crivicular fluid), and an increase in gingival index, the index markers of inflammation of the gingival tissues. It is found in healthy gingival conditions[6].

In cross-tabulations severity of the severity of gingivitis with final education level of respondents is shown in Table 5, the value of the tabulation at most that low educated respondents with a number of 22 respondents (88%). While the value of tabulation most in cross-tabulation between the severity of gingivitis and work can be seen in Table 7, with the severity of mild gingivitis housewives ie 25 respondents (100%) and the value of cross tabulation between the severity of gingivitis with an income can be seen in Table 9, with earnings 500000-1000000 have mild severity is 16 respondents (64%). In Table 6, it can be seen low levels of education have a level of sensitivity shooting pain as much as 13 respondents (39.1%). Further cross-tabulation between respondents work with tooth sensitivity seen from Table 8, the number of 14 respondents (60.9%). Cross-tabulation between income and tooth sensitivity can be seen in Table 10, which is a person's income between 500.00-1.000.000 have shooting pain sensitivity level with the number of 15 respondents (65.2%). The level of education also affects the level of knowledge of a person in obtaining and understanding information oral health, with people with low education will affect their jobs and income derived by a person and will impact on the importance of oral health, auto-person middle to lower income would be more concerned with basic needs in everyday to survive, rather than thinking about the importance of maintaining healthy teeth and mouths[7]. it shows the relationship between education and research that most of the respondents with low education have mild inflammation severity gingivitis number of 22 respondents (100%) and shooting pain sensitivity level number of 13 respondents (52%). In our work most respondents only work as housewives so that access in receiving information regarding oral health is very limited, it is seen by the severity of gingivitis number of 25 respondents (100%) had mild inflammation and sensitivity level of pain a number of 15 respondents (60%). In line with their lower education and housewives work that affect the respondent's income, it is seen in research that has been done is the respondents who earn 500000-1000000 have the severity of gingivitis with mild inflammation number of 16 respondents (64%) and sensitivity shooting pain a number of 16 respondents (64%).

On cross-tabulation between the severity of gingivitis and tooth sensitivity can be seen in Table 11, namely that the severity of mild gingivitis experience shooting pain sensitivity with the number of 13 respondents (56.5%), this occurs due to incorrect brushing teeth and excess pressure on the respondents during this time, so that the gum has decreased or gingival recession and consequently open dentin that result in pain rheumatic pain that occurs on the teeth of respondents. The cause of tooth sensitiv is from research experts in the USA, as many as 50-90% of patients with large or excessive pressure when brushing teeth. Tooth brushing habits excess pressure can make the gums become irritated or gum down from the neck teeth, over time the roots of the teeth will be open (gingival recession), neck cavities, enamel would be reduced in thickness so that when drinking cold water, sour or sweet or even touched toothbrush bristles will ache[8]. It outlines the causes of tooth sensitivity is gum decline, poor oral hygiene (OHI-S), bleaching (whitening tooth surface), the erosion of email, brushing your teeth too strong[1].

Factors that affect the oral health knowledge is the level of education, information, cultural, social and economic experience. It becomes multi interrelated factors regarding oral health indices someone[9]. Age is associated with increased damage to tissue attachment. Such damage is caused by the accumulation of potential process detruktif like periodontitis because the amount of plaque increases, trauma chronic disease and tooth brushing, as well as the destruction of iatrogenic of manufacture restorations that are not right, or the act of scaling repeated that had to be performed at each visit on maintenance therapy[6].

CONCLUTION

1. The average women has gingivitis severity of mild severity at most with a 52% with a sensitivity of 43.5% with a tooth ache sensitivity.
2. The severity of gingivitis in the women is a 62.5% experienced mild inflammation at most and no severe inflammation.
3. Tooth sensitivity in the women is a 57.5% experienced tooth sensitivity with pain criteria at most and least in the criteria does not pains criteria amount of 42.5%.
4. On average women who experienced the severity of gingivitis is a 56.5% had mild inflammation with pain sensitivity level.

SUGGESTION

1. For the researchers could study results as a guide to increase knowledge and insight on oral health, especially regarding the severity of gingivitis and sensitivity as well as a guide to promote the wider community.
2. For women 30-45 years of age are advised to maintain the health and dental and oral hygiene by brushing teeth with a way and a good time and precise, avoiding foods and beverages that are acidic use a toothpaste that is not abrasiv which aims to prevent oral disease.
3. For further research studies on the association expected the severity of gingivitis and tooth sensitivity towards menopausal women.

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P-20

BEHAVIOR OF PARENTS AND RESPONSE OF CHILDREN LIVING WITH HIV AIDS (CLWHA)

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ABSTRACT

Human Immunodeficiency Virus (HIV) reduce the ability of human immune system. New HIV casesfrom 2000 until now was decrease is35%, on the other hand in children, which is found 58% increase in new cases. HIV attacks the immune system of patients, when it is combined withprolonged psychosocial-spiritual stress, it will accelerate the emergence of AIDS and even increase mortality. A person's response can be in the form of good or bad, positive or negative. Parents behavior has a major influence on a child's response to HIV / AIDS.The purpose of this study is to determine relationship of the behavior of parents and responce of CLWHA.
Methods: This research is a combination of quantitative completed with qualitative data. The subjects were parents and CLWHA who are active in NGOs - Victory Plus. Independent variable in this research is the behavior of parents with HIV / AIDS. Dependent variable in this research is the child's response to HIV / AIDS. Processing was performed using product moment correlation analysis.Based on hypothesis test using product moment correlation coefficient was obtained at significance level of 5%.
Result: Significant value of research results was 0,000 with p-value<0.05. It shows there is a relationship between the behavior of parents and Responce of CLWHA.

Keywords: Behavior, Response, Children Living With HIV AIDS (CLWHA)

BACKGROUND

Human Immunodeficiency Virus (HIV) reduce the ability of human immune system, making patients susceptible to various diseases. HIV infection is still one of the major health problems and one of the infectious diseases that can affect maternal and child mortality. Indonesia is one country in Asia with HIV / AIDS epidemic is growing most rapidlywith concentrated HIV epidemic, because there are some areas where the HIV prevalence of more than 5% in certain subpopulations, and high HIV prevalence in the general population 15-49 year occurred in the provinces of Papua and West Papua (2.4%).[1] The prevalence of HIV in Yogyakarta was 75.2 per 100,000 population .[2]

Since 2000 until now there is a 35% decrease in new HIV cases, but conditions in children, which found 58% increase in new cases. This condition need our consern because in Indonesia services to children with HIV still inadequate. Also, today throughout the world is estimated there are 17.1 million people living with HIV are unaware that they are HIV positive.[1]

Children infected with HIV have a lower quality of life than children with better immunity. Lack of affection, problem of stigma and discrimination become a great shock and pressure. Psychological distress, social, and conditions often make the child or the child's family would choose to withdraw from the social environment. Nursalam&Ninuk (2009) said physiologically, prolonged stress of psychosocial-spiritual will accelerate HIV to the onset of AIDS even increase mortality, and if the stress reaches the stage of exhaustion, it can lead to failure of immune system function aggravating the situation of children with HIV AIDS.

Response is a reaction of stimulus, or the result of stimulus itself.[4]Every humanplay a role as a controller between stimulus and response. Determinants of individual response to the stimulus is stimulus itself and the individual factors. The person's response can be in the good or bad form, positive or negatif.[5]

The response of children is a concept that determines the success or failure of the individual in facing difficult times. Good response can be built, and it need support from family, friends and community in order to realize the potential responce.[6] The purpose of this study was to determine the relationship of the behavior of parents with HIV / AIDS and the child's response to HIV / AIDS.

METHOD

This research is a combination of quantitative completed with qualitative data to determine the relationship of the behavior of parents with HIV / AIDS and the child's response to HIV / AIDS. The subjects were parents and children with HIV / AIDS who were active in Victory Plus NGOs. Independent variable in this research is the behavior of parents with HIV / AIDS. Dependent variable in this research is the child's response to HIV / AIDS. Data collection of the family using a questionnaire and equipped data qualitative by interviews. Data processing was performed using product moment correlation analysis.

RESULTS AND DISCUSSION

A. RESULTS

1. Description of Research

This research was conducted at the NGO Victory PlusJlTurnggorono No. 5, Mrican, Yogyakarta from April until September 2015. Sample size are 30 children with HIV / AIDS.

2. Univariable Analysis

a. Parents Behaviour of CLWHA (Children Living with HIV and AIDS)
From the data it can be seen that the average of behavior of parents CLWHAis 86, median value is 88, and modus is95. In this study, if the value of x>mean then it categorized as having good manners, and if the value of x <mean then it will catagorized as categorized unfavorable / less behavior.

Table 1. Distribution of Parents Behaviour of CLWHA

	n	%
Parents Behavior		
– Good	20	66.7
– Less	10	33.3

From the above data it was found that two thirds of parents have good manners towards CLWHA.

b. Response of CLWHA
The average value of the child's response amounted to 86, median value is 87, and modus is 90. if the value of x>mean then it categorized as as having a positive response, and if the value of x<mean then it will catagorized as negative response.

Table 2. Distribution Of Response from CLWHA

Responce	n	%
Positive	16	53.3
Negative	14	46.7
Total	30	100

The data shows that positive response owned more than half of the respondents.

3. Bivariable Analysis
   a. Normality Test
      Normality test is use Kolmogorov-Smirnov Z method, to determine the collected data is taken from normal distribution or normal population. (value more then 0,05).
      In this test researchers used SPSS 17:00 for Windows.We found that that variable parental behavior has value 0.167 (> 0.05) and variable of response CLWHA has 0.119 (> 0.05). So, both of variables are distibuted normally.
   b. Correlation test
      Test is using product moment correlation method which is used to determine whether there is a relationship between the study variables. Thw results shows there is a significant colleration between behavior of parents and responce of children(v-value = 0.000) .

B. DISCUSSION

Based on hypothesis test using Product Moment Correlation showed there is significant values between behavior of parents with response of CLWHA.

The results of this study is accordance with the previous study that found that the response is a reaction or response depends on the stimulus or are the result of the stimulus. Humanplay a role as a controller between stimulus and response. [4, 5] Positive responce of CLWHA is basically a concept that determines the success or failure of the individual in the face of difficult times. It can be built, so that it is possible for all individuals.

People living with HIV were able to show positive responceto face any difficulties that arise due to HIV infection. The resilience of people living with HIV look of their emotional awareness and emotional control, the ability to control impulses, optimistic, flexible and accurate thinking, the ability to empathize, relationships and achievement, as well as problem-solving skills.[7]

In this study, parents who have good (66.7%) is linear with positive responsevof their child (53.3%). This shows that the behavior of parents have an important role in the response of CLWHA. Parent behaviour in this study assessed from three domains, there are cognitive, affective and psychomotor. Parents with good behaviour will either bring positive impacts on children's response to HIV / AIDS.

CONCLUSION

1. Most parents have good behavior.
2. Most of the child's response to HIV / AIDS positive
3. There is a relationship behaviors of parents of CLWHA with Responce of CLWHA

SUGGESTION

Required more in-depth analysis on quantitative data to measure the behavior of the parents.

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P-21

THE PROVISION OF CLEAN WATER, CONTAMINATION RISK AND ENVIRONMENT PERCEPTION OF WATER USER GROUPS (POKMAIR) IN WATUMALANG DISTRICT, WONOSOBO REGENCY, CENTRAL JAVA

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ABSTRACT

Wonosobo Regency is part of Central Java Province which promising potential of water resources. This condition is cause an existence of enormous numbers of spring. However, the utilization of it just impressed to fulfill requirement of quantity than quality. As a consequence, this considered giving negative effect to local communities health. One of it is considerated as cause of diarrhea outbreak. The Watumalang District is one of diarrheal outbreak area in Wonosobo. Mitigation is the most importance value of research in clean water distribution. The research objectives are: (1) to evaluate contamination risk factors of sanitary facilities, (2) to determine water quality of local people raw water and (3) to determine environment perception of local communities. Research subject is local communities who classified as independent users of water (without advanced processing). This research used primary survey, secondary data collection and questionnare. Result of the research shown that 37% have very high contamination risk in sanitary facilities meanwhile 25% is low risk. Analysis of water quality shown that all of samples have a high coliform numbers with average value is 270/100 ml. Assessment of POKMAIR environmental perception resulting a moderate to very good perception (77%). Based on those results, the water quality management should be done with construction repair, better handling and monitoring on sanitary facilities.

Keywords : sanitary, contamination risk, water quality, environmental perception, Watumalang

INTRODUCTION

Water is one of the vital needs of life sustainability. Water resources problems refer to (a) availability in quantity and quality context and (b) utilization and conservation efforts. Based on quantity, Indonesia have a sufficient water resources. Ministry of Public Works [7] described that Indonesia rain water volume is approximately 21.120 mm anually. Twenty five percent was loaded in surface water system, 72% flushed into the sea or as flood (also called runoff water) with only 3% consummed by people.

Major challenge of Indonesia water resources management is quality degradation. The main cause of this challenge is an anthropogenic ethic. This shallow ecology ethic is simply placed environment as only fulfillment instrument of human needs [6][14]. The anthropogenic ethic induced over-exploitation and water system pollution.

Major of pollutant is produced by anthropogenic activities including heavy metal compound, faecal coliform and agrochemistry materials. Pollution will be more vulnerable in surface water systems [1]. Pathogen contamination (carried by faecal bacteria) giving a tangible threats to human health. This condition became a consumption limitation, especially for water without specific treatment [1]. Healthy risk of water refers to the character as organism growth media and infection pathway [5]. Provision of healthy drinking water became

fundamental needs to ensure a public health and it was one of human rights. Nevertheless, the amount of clean water are limited both quantity and quality. There was a prediction that the amount will be decrease as long as population growth, urbanization and climate change [9].

Wonosobo Regency in Central Java has a potential of water resources. This condition indicated existence of springs that spread evenly on its administrative area. This potency gives benefit for local communities. However, provision and distribution of clean water are indicated lack in health standard. Negative impact in lack quality of water is diarrheal outbreak (KLB-*bahasa*) in some district, including Watumalang which there are 51 peoples suffering diarrhea. The contamination of *Escherichia coli* in water consumption is the cause of outbreak. Early observation of this research showing some boosting factors including : lack of management on distribution system, lack of spring protection, unhygienic water reservoirs and unhealthy sanitary.

Indonesian Government regulating Law Number 32 Year 2009 to preserve environmental quality. Water resources management specifically regulated in Law Number 7 Year 2009 [15]. Requirements and monitoring of water quality is regulated by Ordinance of Health Minister Number 416/Menkes/Per/IX/1990 and Ordinance of Health Minister Number 492/Menkes/Per/IV/2010 for drinking water. However, lack of monitoring level, law enforcement and public awareness made water quality to be difficult to managing. This research will investigate water distribution system, perception of community to contamination and environmentsanitary and environment perception in Watumalang. The research is also as implement of The Law Number 24 Year 2007 about Mitigation.

OBJECTIVES

The objectives of this research are (1) to evaluate sanitary facilities contamination risk in POKMAIR community of Watumalang District, (2) to evaluate the consumed water quality in POKMAIR community of Watumalang District and (3) to asses environment perception of POKMAIR community

RESEARCH METHODS

A. Research Location and Period

This research located in Watumalang District, Wonosobo Regency, Central Java. Water samples analyzed in Local Office of Public Health Laboratory of Wonosobo. Period of contamination risk and water quality analysis is in mid of 2015. Questionnare about environment perception conducted in early of 2016.

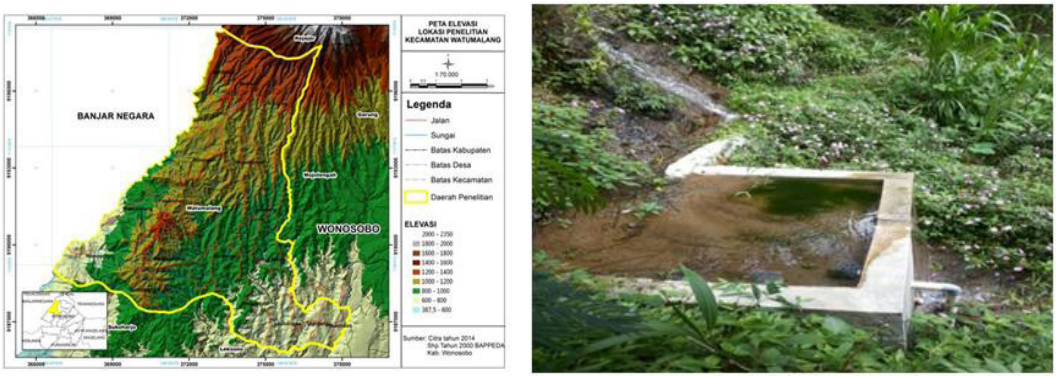

Figure 1.a. and 1.b. Research location map (left) and condition of spring protection facilities in Gumawang Kidul Village, Watumalang (right)

B. Instruments and Materials

Instruments utilized including stationary, laptop, digital camera, digital water tester, set of MPN instruments and questionnare sheets. Material be required including environmental character data and water samples from POKMAIR community reservoir.

C. Research Subjects

Research population is POKMAIR community of Watumalang, included sanitary condition and water distribution systems. All samples were taken randomly to represent of villages. Amount of contamination risk samples is 24 spots of sanitary facilities. Respondences of questionnare is 26 persons and water samples taken from 8 spots of primary springs of Watumalang.

D. Data Collection and Analysis

Data collection was conducted by top down and bottom up approach combination. Top down approach was applied to collect secondary data to decribing an environment character of Watumalang. Bottom up aproach was applied to collect primary data including water samples, questionnare of contamination risk and envronment perception.

Water quality analysis was conducted by laboratory test of chemicals and biologicals parameter. Biological analysis was conducted to count the number of coliform through Most Probable Number (MPN) Test. Result of analysis will be compared with government regulation about water quality standards including : Government Ordinance Number 82 Year 2001 (class of water utilization) [12], Ordinance of Health Minister Number 416/Menkes/Per/IX/1990 (clean water)[10] and Ordinance of Health Minister Number 492/Menkes/Per/IV/2010 (drinking water)[11] to determine class of utilization and appropriateness.

Environment perception questionnare will be advanced through a validity and reliabilty test to ensure an appropriateness instrument. Both of test conducted with Pearson Corellation Test and Cronbach Alpha which assisted by SPSS 20 software. Result of that environment perception questionnare will be converted into quantitative data based on point of every question (a = 3, b = 2 and c = 1). Total point of questionnare from each respondents will be categorized below in Table 1

Table 1. Range category of environmental perception questionnare points

Environment perception assesment		**Contamination risk factors assesments**	
Total points range	**Environment perception categories***	**Range of points (%)**	**Contamination risk categories****
0 - 91,75	Low	≤25	Low
91,75 - 96,5	Moderate	26-50	Medium
96,5 - 98,25	Good	51-74	High
>98,25	Very good	≥75	Very high

based on analysis result of the questionnare Anonim, 2010*

RESULTS AND DISCUSSION

A. Environmental Character of Watumalang District

Watumalang is a part of Wonosobo Regency which dominated by mountain area (average altitude 913 masl). Total area of Watumalang is 12.716 Ha that dominated by moor,

state forests and rice fields. Average annual temperature is 21,5^0 C, total annual rainfall is 2545 mm (2014) with 242 rainy days [3]. Number of Watumalang population is 49.266 people (2016 projection). Watumalang is classified as agrarian area, dominated by farm workers (48%), business sector in agriculture and livestock (79%) and land use which has strong relationship with agriculture and livestock activities[3].

Employment and business sector do not have a strong correlation with sanitation system. However, dominancy of agrarian sector usually have tendency with the life pattern of rural communities. General pattern of rural communities have less concerned in good sanitation as effects of lack of knowledge.

B. Contamination Risk Factors of Sanitation Facilities

Database from Sanitasi Total Berbasis Masyarakat (STBM) in 2016 shown that toilet access in Watumalang District is 64,78%. It was only 4864 families have a permanent toilet facilities from 14878 families in Watumalang. Approximately 4639 families (31,18%) are inaccessible with toilet or didn't have representative sanitation either private and public. Rest of them had a semi permanent toilet or using public toilet[13].

Generally, Wonosobo had ranks at 34th position from 35th regency in Central Java for the coverage of healthy toilets (owned by 50,16% of population). This condition that indicates behavior of unhealthy sanitary in majority of local peoples. Unhygiene habit of defecate carelessly still have a high percentation at local communities

Inspection of sanitation facilities are conducted to 24 spots of facilities in Watumalang. In this research, inspection of sanitation has objectives to evaluate contamination risk in sanitary facilities. Inspection of sanitary also have purpose to fulfill environmental surveillance objectives namely to measure an influence of contamination towards environment quality. The result of inspection of sanitary shown at the table below

Table 2. Result of sanitary facilities contamination risk analysis in Watumalang

Category of sanitary facilities contamination risk	Amount of units	Percentage (%)
Very high	9	37
High	3	13
Medium	6	25
Low	6	25

According to the result, as much as 50% sample of sanitary units in Watumalang have a high to very high contamination risk. The rest, each of 25% of sanitary units have a medium to low risk contamination. It was only 25% facilities fulfilling a healthy standards. As recommendation, 50% of facilities must be rebuilding following correct construction regulation and other 50% of facilities must be conducting water quality monitoring and evaluation about contaminant level.

Poor sanitary giving risk a lack of reliability towards water contamination.Water contamination in general is carried by seepange or run off water which also contaminated with fecal bacteria including *Escherichia coli*. Based on the fact, this condition should be appointed as primary factor of diarrhea outbreak in Watumalang.

C. Water Quality and Feasibility Analysis

Water samples taking from 8 random spots from residents reservoirs. Samples only taken from residents uses water spring. Watumalang communities has developed water distribution systems independently with their own funding. This system distributed water from the spring to people house with utilizing narrow *polyvinyl chloride* (PVC) pipes. Basic concept of this distribution type is to distribute adequate quantities to residents.

Water quality test conducted in 4 variables which represented chemical parameters (pH, cadmium and total chromium) and biological (total coliform). The analysis result is shown on the table below

Table 4. Result of water quality test from random water samples in Watumalang

No	Spring sources	Chemical			Biological
		pH	Cd	Cr	MPN
1	Wanadadi	8,47	0,003	0,03	240
2	Depok	8,73	0,004	0,03	210
3	Siranda	8,74	0,001	0,02	1100
4	Kalitelu	9,02	0,002	0,02	75
5	Jugrugan	6,94	0,002	0,01	93
6	Sicowet	7	0,003	0,04	210
7	Igirmranak	9,58	0,004	0,01	23
8	Krangean	9,58	0,003	0,02	210
Average values		8,51	0,003	0,02	270,13

**Cd and Cr in unit of mg/l; MPN in unit of sum individuals/100 ml*

Furthermore, the result will be compared with regulation standart to determine class of water utilization, feasibility of clean water and drinking water

Table 5. Comparison test between water samples analysis result and Indonesia regulation

No	Regulation compared	Variable of water quality			
		pH	Cd	Cr	MPN
1	Ordinance of Indonesia Gov. 82 Year 2001^	Class I	Class I	Class I	Class I
	Ordinance of Health Mins. No 416 Year 1990*	NA	Feasible	Feasible	Not feasible
	Ordinance of Health Mins. No 492 Year 2010**	Feasible	Feasible ***	Feasible	Not feasible
2	Ordinance of Indonesia Gov. 82 Tahun 2001^	Class I	Class I	Class I	Class I
	Ordinance of Health Mins. No 416 Year 1990*	NA	Feasible	Feasible	Not feasible
	Ordinance of Health Mins. No 492 Year 2010**	Feasible	Not feasible	Feasible	Not feasible
3	Ordinance of Indonesia Gov. 82 Tahun 2001^	Class I	Class I	Class I	Class II
	Ordinance of Health Mins. No 416 Year 1990*	NA	Feasible	Feasible	Not feasible
	Ordinance of Health Mins. No 492 Year 2010**	Feasible	Feasible	Feasible	Not feasible
4	Ordinance of Indonesia Gov. 82 Tahun 2001^	Not feasible	Class I	Class I	Class I
	Ordinance of Health Mins. No 416 Year 1990*	NA	Feasible	Feasible	Not feasible
	Ordinance of Health Mins. No 492 Year 2010**	Not feasible	Feasible	Feasible	Not feasible
5	Ordinance of Indonesia Gov. 82 Tahun 2001^	Class I	Class I	Class I	Class I
	Ordinance of Health Mins. No 416 Year 1990*	NA	Feasible	Feasible	Not feasible
	Ordinance of Health Mins. No 492 Year 2010**	Feasible	Feasible	Feasible	Not feasible
6	Ordinance of Indonesia Gov. 82 Tahun 2001^	Class I	Class I	Class I	Class I
	Ordinance of Health Mins. No 416 Year 1990*	NA	Feasible	Feasible	Not feasible
	Ordinance of Health Mins. No 492 Year 2010**	Feasible	Feasible	Feasible	Not feasible
7	Ordinance of Indonesia Gov. 82 Tahun 2001^	Not feasible	Class I	Class I	Class I
	Ordinance of Health Mins. No 416 Year 1990*	NA	Feasible	Feasible	Feasible
	Ordinance of Health Mins. No 492 Year 2010**	Not feasible	Feasible	Feasible	Not feasible
8	Ordinance of Indonesia Gov. 82 Tahun 2001^	Not feasible	Class I	Class I	Class I
	Ordinance of Health Mins. No 416 Year 1990*	NA	Feasible	Feasible	Not feasible
	Ordinance of Health Mins. No 492 Year 2010**	Not feasible	Feasible	Feasible	Not feasible

*^Government Ordinance No 82 Year 2001 about class of water utilized, *about feasibility of clean water, **about feasibilty of drinking water, ***feasible but at maximum standards limit. Red blocks indicated not feasible quality*

1. Class of water utilization

   Indonesian government was classified 4 (four) class of water utilization based on quality standards regulated in Ordinance of Indonesia Government Number 82 Year 2001. The 1st Class requiring highest quality standards of water for consumption (including drinking water). Comparison test resulted almost all of samples are fulfill the 1st Class water requirements except sample number 3 (in MPN value) also number 4, 7, and 8 (in pH value).

2. Clean water feasibility

Quality standards of clean water were regulated by Ordinance of Health Minister Number 416 Year 1990. Generally, almost all of samples are exceed the limit of clean water quality standards, especially in total coliform value. The quality standards required maximum numbers of total coliform is 50 individuals/100 ml (non-piped water) and 100 individuals/100 ml (piped water). Based on analysis, only sample number 7 fulfilled this regulation. Contamination of coliform became early indicators of health problems in digestive tract, including as diarrheal indicator.

3. Drinking water feasibilty

Quality standards of drinking water were regulated in Ordinance of Health Minister Number 492 Year 2010. In general, all of samples are exceed the limit of drinking water quality standards, especially in numbers of total coliform (> 0 /100 ml). Besides it, some sample are exceed other chemical standard likes cadmium (2) and pH level (4,7,8). Based on total coliform value should be concluded that the water is not feasible as drinking water. This condition have a significant probability as cause of diarrhea outbreak in Watumalang.

D. Environment Perception of POKMAIR Community

Assesment on enviromental perception objectives are evaluate public awareness and insight of environment problems. Validity test of questionnare resulted that 33 valid from total 35 questions. Realibilty test resulted a Cronbach Alpha value 0,95. Its mean that instruments is reliable because the value is higher than 0,60. Table 6 shown the result of environmental perception assesment.

Table 6. Result of environmental perception assesment in Watumalang

Environment perception categories	Sum of respondences	Percentage (%)
Very good	6	23
Good	7	27
Moderate	7	27
Low	6	23

Result of questionnare found that only 23% of local resident with low environment perception. Rest of them have adequately perspective to support sanitation facilities and water distribution improvement. The result should be concluded that environmental patterns of local communities are set in repairing perspectives. Only few of them has an ignoring or destructive perspetives. This condition should be applied to drive a communities empowerment movement to improve the environmental health quality of Watumalang. Of course it must be supported by local government and acamedic societies.

E. General review

Based on analysis of comparasion study, water quality consumed by Watumalang POKMAIR communities is not feasible especially as drinking water. Almost all of samples have high numbers of coliform inside. Occasion of diarrheal oubreak just only strenghten this conclusion. The coliform contamination have correlation with poor sanitary facilities condition. Inspection of sanitary resulted a high to very high risk contamination condition in majority of Watumalang sanitary facilities. Contamination of coliform also boosted by

defecate carelessly habit [4][13]. Environment perception assesment resulted a good value of environment perception especially in POKMAIR community. It means that the community have an adequate ability to restore and rebuild their environmental condition including sanitary and water distribution problems. Environmental quality improvement efforts should be done based on community development.

INTERNAL / EKSTERNAL	Strenght (S) Good environment perception and local wisdom Supported by economic factors	Weakness (W) Poor sanitary pattern Limited amount of representative sanitation facilities
Opportunity (O) Enormous potential of water resources Attention of local government	A good environmental perception and local wisdom is an incentiver to reach a sustainable nature resource utilization Sinergy of economic condition, and government attention should build a feasible sanitation facilities	Utilization of water resource should open a pathway to repair sanitary facilities and water distribution Assesment of local government will be open an access to environmental healht education to change the poor sanitary habit
Threat (T) Potency of nature resource should sparks over exploitation on the future Unpredictable funding from government and private sectors	Environmental perspective and economic establishment will build strong boundary from temptation of overexploited profits Self environmental awareness and economic establishment will set independent mentality from government funding	Natural resource potency should be utilized by communities empowerment and indepndency in cooperation with investors to build better sanitary facilities Profit from natural potency utilizationshould be used to minimize a government funding depedency to restore sanitary and water distribution system

Figure 3. The SWOT Matrix of Watumalang communities towards water resource potency, sanitar facilities and environment perception.

CONCLUSION

Inspection of sanitatation facilities in Watumalang determined 50% facilities are in high risk of contamination. It was only 25% in safety level (low risk of contamination). Quality of POKMAIR consumed water classified as not feasible for drinking water, especially as cause of high coliform numbers. This conclusion is refer to applicable regulation about quality standard of drinking water. Assessment of environmental perception shown that 77% of respodents of POKMAIR communities have adequate perspectives about environmental problems.

RECOMMENDATION

1. The sanitation facilities and clean water distribution need to repair rapidly, especially in construction.
2. Change in sanitary habits of local communities to build a better environmental health

3. Quality of raw water quality that consumed by Watumalang residents is needed to monitor and evaluate continously
4. Boosting communities empowerment to repairing, handling, protecting and evaluating environmental health condition, especially related with raw water condition.

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P-22

List of Exhibitors

1. *Inez Cosmetics*
2. *PT. Sagung Seto : EBSCO Host*
3. *UII Net*
4. *BNI 46*
5. *BPD DIY*
6. *PT. Unisi*
7. *Freeland*
8. *Cressendo*
9. *CV. Toyoris*
10. *CV. Alfa Kimia*
11. *Yogya Tronic*
12. *NU Skin*
13. *Anggun Modeste*
14. *Rumah Batik Kamila*
15. *ACE Life Insurence*

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Relationship Dependent Variable and Independent Variables

Maternal age with the prevalence of severe preeclampsia

Maternal age with the prevalence of severe preeclampsia From the results of the univariate analysis of the prevalence of severe preeclampsia distribution by age showed that the prevalence of severe preeclampsia highest proportion found in high-risk age group is 55.6% compared with low-risk age group (20-35 years) is 17.9%. The results of calculations with the Chi-Square statistical obtained an association between maternal age at which the prevalence of severe preeclampsia OR = 5.73, this case illustrates that maternal age, <20 years / 35 years had 5.73 times the risk factors for preeclampsia occurs when compared with maternal age 30-35 years.

It is there conformity with research conducted by Koeswarsono et al (1991) in the RSU GunungWenang, Manado (1991), which reported the highest frequency of patients with eclampsia are at the age of 15-20 years, while the highest frequency of severe preeclampsia occurs at age> 35 years, Agus (2001) also reported the results of his research found that age <20 years have a risk of severe preeclampsia was 1.75 times and> 35 years had 2.47 times the risk of preeclampsia compared maternal age 20-35 years. In the study conducted by Septi (2007) in RSUPN Dr. CiptoMangunkusumo also found that the highest proportion of people with severe preeclampsia was highest at age <20 / .35 years by 37.5% compared to the 20-35 years age as much as 9.30%. According Sudhaberata (2001) based on the weight distribution of the prevalence of preeclampsia was found in the age group of maternal age <20 years> 35 years. (5) also said in his mother's age> 35 years increases the risk of severe preeclampsia. Women are encouraged pregnant at the age of 20-35 years. The high prevalence of preeclampsia was heavy in the age group <20 /> 35 years because this group is included in the high risk group, it is caused when viewed in terms of biological growth and reproductive development is not yet fully ready or mature, the young woman is not ready to bear the moral burden that the lack of conscientiousness prenatal care (Astuti, 2002) andmaternal age> 35 years in which the health condition and reproductive gone downhill.

Age is an important part of the reproductive status. Age associated with increased or decreased function of the body that affect a person's health status. A good age for pregnant women is 20-35 years. Cunningham states that pregnant teenagers aged women for the first time and who was pregnant at the age of> 35 years would have a high risk to develop preeclampsia (Indriani, 2012). Sumarni research results (2014) showed that most respondents aged 28-35 years. According to Lamminpa (2012)9 in Finlandi show pregnant women aged over 35 years had 1.5 times more likely to have pre-eclampsia compared to women under 35 years old. Pregnant women with pre eklampsia have a more severe risk of pregnancy such as premature labor and delivery by caesarean section. Other risk pregnancies that occur asphyxia 50% and 40% need NICU care.

In addition to the life of other factors such as smoking, obesity, diabetes and hypertension before pregnancy becomes motivating factors occurs preeclampsia.

Furthermore, Lamminpa states that maternal age become independent obstetric risk factors for early onset preeclampsia and fetal growth impaired. It has also been suggested that the risk of chronic and pregnancy-related hypertension increase, the increasing low birth weight and premature birth.

Parity

Parity with the prevalence of severe preeclampsia From the results of the univariate analysis showed that patients with the most severe preeclampsia in high risk groups, namely maternal P1 / P≥4 as much as 30% compared with maternal P2 / P3 is as much as 26.5%. Statistical analysis showed no significant relationship. This is not in accordance with the results of research conducted by Agus (2001) reported that the first parity occurred preeclampsia have a risk weight of 0.62 times compared to the second and third parity. Research conducted by Septi (2007) in RSUPN Dr. CiptoMangunkusumo also reported patients with severe preeclampsia in maternal parity first or fifth as much as 21.15% higher than the second and fourth parity ie 6.00%. He concluded that the first or fifth parity had 4.2 times the risk of severe preeclampsia occurs. The results of this study do not fit well with the theory that the first pregnancy increases the risk of preeclampsia was ten times more frequently(6). Cunningham in his book suggests McCartney (1964) have studied the results of renal biopsies from women with preeclampsia and find gromerulonefritis at 205 nullipara(5). Primigravida have a higher risk for severe preeclampsia occurs(7). With adequate nutrition and regular inspection of antenatal care can reduce the risk of preeclampsia in maternal and the administration calcium diet reduces the occurrence of preeclampsia(7).

Gestation with the prevalence of severe preeclampsia The results obtained from the univariate analysis, patients with severe preeclampsia highest proportion was found in the age group of high-risk pregnancies (≥ 37 weeks) as many as 22 people (26,27%), whereas in the group of gestational age <37 weeks, of two people (20%). OR = 1.41, this case illustrates that maternal age ≥ 37 weeks' gestation have severe preeclampsia risk of 1.41 times compared with birth mothers with gestational age <37 weeks. The results of calculations by the Fisher exact statistical test obtained no association between the occurrence of gestational age with severe preeclampsia. This is not in accordance with the theory that the more her pregnancy affect normal placenta changes such as thickening of blood vessel walls and villi that accelerate the process of preeclampsia and hypertension that generally occur in the third quarter(8). Furthermore in general preeclampsia and eclampsia develop after the 20th week of her pregnancy and increasingly more likely onset of preeclampsia(7).

Gasvarovic (2015) (13) found that many significant differences were apparent between early-onset preeclampsia and late-onset preeclampsia. Groups were significantly different in maternal characteristics according to maternal parity, grade of hypertension, liver enzyme levels and maternal BMI. It is unclear why the primigravid state is such an important predisposing factor. Hypertension is generally the earliest clinical finding of preeclampsia and is the most common clinical clue to the presence of the disease.

A History of Preeclampsia

The result is patients severe preeclampsi largest at birth mothers with a history of preeclampsia (genetic) that is equal to 57.1% or 4 of 7 risks groups. A history of poor labor triggered a predisposing factor. The results of calculations with fisher exact statistical test can be concluded there is no significant relationship between a history of preeclampsia (genetic) and the prevalencepreeclampsi, OR = 3.71. This illustrates that the birth mothers with a history of preeclampsia have a risk of preeclampsia compared with 3.71 times occur mothers who do not have a history of preeclampsia (genetic).

Our research found discrepancies with the theory advanced by (6) which states a family history of a genetic relationship, mother or sister increased risk of 4-8 times, in his

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book also stated that the basic conditions contribute to maternal and are the factors that determine the occurrence of preeclampsia, Chesley and Cooper (1986) studied the sister, daughter, granddaughter and daughter-eclampsia than women who give birth, they concluded preeclampsia very likely lowered. Cooper and Liston (1979) observed that susceptibility to preeclampsia depend on a recessive gene. (5). With regular inspection of Antenatal Care in accordance with the policy program where antenatal visit should be done at least four times during pregnancy which aims to recognize early complications or abnormalities can be pursued early detect the presence of severe preeclampsia.

CONCLUSIONS AND RECOMMENDATIONS

Conclusion

Most respondents who suffered preeklampsi on low-risk age groups, as big as (71.3%), Parity is the group most at risk parity (P1 / ≥P4), as big as(63.8%), Gestational age group most at risk of gestational age is 84 respondents (89.4%). Variable history of preeclampsia are at less risk groups as big as (91.5%). There is a significant association between maternal age with the prevalence of severe preeclampsia. Variable parity, gestational age, and history of preeclampsia did not show any significant relationship with the occurrence of severe preeclampsia.

Suggestion

For health workers are expected to provide health education for pregnant brides to plan a healthy reproductive age. The midwife may make early detection of preeclampsia on each visit ante natal care and documenting midwifery care properly for observed condition of pregnancy pregnant women.

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O-22

COMPARISON OF CHOLESTEROL LEVELS IN OBESITY AND NON OBESITY AT POLTEKKES MEDAN

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ABSTRACT

Background; Obesity has become a problem of public health and nutrition in the world. The prevalence of obesity is increasing in recent years and has led to serious health problems. Globally at least 2.8 million deaths each year linked to weight gain and obesity. Obesity that persist and excessive food intake can cause metabolic system disorders such as hypercholesterolemia. Conditions of excess cholesterol in the blood can cause atherosclerosis, coronary heart disease, stroke, and high blood pressure that can lead to death. Obesity is often associated with hypercholesterolemia condition, but sometimes also high cholesterol levels in people who have normal weight. Purpose: This study aimed to compare the levels of cholesterol in adults with obesity and non-obese. Method: This type of research is descriptive analytic with cross sectional design. This research was conducted in the Polytechnic Health Ministry of Medan. The study population numbered 375 sample size is determined based on inclusion criteria and taken by accidental sampling. Test data used is T test with significant level of p = 0:05. Result: The results of this study indicate that there is no difference in cholesterol levels between people who are obese with non-obese where the average cholesterol levels of obese people is 188.89 while the average cholesterol level non-obese person is 190.11. T test results showed that the value of t = 0932 which means greater than 0.05 which means that the two groups are identical (no difference).Conclusion: There is no difference in cholesterol levels between people who are obese with non-obese

Keywords : Obesity, non Obesity, cholesterol

INTRODUCTION

Obesity has become a problem of public health and nutrition in the world, both in developed countries and developing countries. The prevalence of obesity is increasing in recent years and has led to serious health problems. Globally at least 2.8 million deaths each year linked to weight gain and obesity which 300,000 occur in the United States and 350,000 in Southeast Asia[1,2.] Based on data from the Non communicable Disease in South-East Asia Region in 2008 the prevalence of individuals with a BMI ≥ 25 kg / m2 increase in some countries and in Indonesia the percentage reached 16% in men and 25% in women [2] . Data taken from the Basic Health Research (Riskesdas) in 2010 reported that 11.65% of adults aged ≥18 years are obese and this figure increased in 2013, namely 19.7% of men aged ≥18 years were obese, while in women reached 32.9% [3]. For North Sumatra data obtained from the Regional Health Research (Riskesda) in 2007 showed the percentage reached 11.9% overweight and 13.5% obese. In 2010 the percentage of overweight males 10.9% and 12.8% in women, while the percentage of obese 9.4% in men and 17.4% in women [3].

The increasing of number of people with obesity have an bad impact for health, since obesity is a chronic disease that is polygenic or monogenic that can lead to some condition

or pathological dysfunction [4]. Some things that can affect obesity, including genetic factors, food intake, neuro endocrine mechanisms, social, cultural and lifestyle [5]. In Indonesia, the lifestyle changes that leads to Westernization causes changes in diet coupled with a lack of physical activity can have an impact on the increased risk of obesity [6,7].

Obesity is a condition of an imbalance between height and weight due to the amount of excess body fat tissue, generally deposited in the subcutaneous tissue, but due to disturbed or damaged then the lipid accumulating in layer of visceral fat [8]. Obesity is composed of two kinds of general obesity and central obesity / abdominal. General obesity can be seen through the indicator BMI ≥ 25 kg / m2 (Asia Pacific, 2000) or ≥ 30 kg / m2 (WHO criteria), while central obesity / abdominal indicators can be detected through the ratio of waist and hip circumference (waist hip ratio). According WHO (2008) limits ratio waist and hip for central obesity in Asian countries including Indonesia in men is> 0.90 and in women> 0.85. Central obesity is closely related to the occurrence of metabolic syndrome wherein one among its sign is the increase in total blood cholesterol.

Conditions obesity will impact in an increased risk of hypertension, diabetes mellitus, cardiovascular disease, dyslipidemia, renal failure and inflammatory responses[9]. Components dyslipidemia including high levels of total cholesterol, triglycerides, LDL and low HDL levels have a major role in the increase in atherosclerosis and cardiovascular disease. Total cholesterol including one indicator to determine the risk of cardiovascular disease. Hypercholesterolemia or increase in total cholesterol levels generally do not cause symptoms, so the examination of kolesterol levels for the prevention and routine checks of cholesterol levels necessary as a preventive measure for individuals who are at high risk [10].

Increased levels of cholesterol are a risk factor for heart disease and stroke have estimates of mortality in the world about 2.6 million. The highest mortality rate of about 54% in Europe, after that America 48%. Africa 22.6% and Southeast Asia region showed 29.0%[11].

Obesity that persist and excessive food intake can cause metabolic system disorders such as hypercholesterolemia. The setting of cholesterol metabolism will run normally when the amount of cholesterol in the blood sufficient and does not exceed the normal amount required. But in obesity can otherwise be an interruption in the regulation of fatty acid that increases the levels of triglycerides and cholesterol esters. People who are overweight more often have blood cholesterol levels were higher when compared with those of normal weight. Results of research Shah et al in 2008 showed that in people who are obese tend to have high total cholesterol levels

Increased blood cholesterol can also be caused by the increase of cholesterol in verylow- density lipoprotein and low-density lipoprotein secondary because of the increased triglycerides are lots in circulating if the event of excessive fat accumulation in the body.

Cholesterol is a natural substance with physical properties is fat but has the formula steroid. Cholesterol is an essential building substance for the body's vital substances synthesis such as cell membranes and insulation material around nerve fibers, as well as sex hormones, and adrenal, vitamin D and bile acids. However, when consumed in excessive amounts can cause increased cholesterol in the blood is called hypercholesterolemia, even in the long term can lead to death. Blood cholesterol levels tend to be elevated in people who are overweight, lack of exercise, and smokers.

The condition of hypercholesterolemia can lead to problems such as atherosclerosis (constriction of the arteries), coronary heart disease, stroke, and high blood pressure. Total levels blood cholesterol recommended is <200 mg / dl, when ≥ 200 mg / dl means the risk

for heart disease increases. Data Basic Health Research (Riskesdas) 2007 declare that the 45-54 years age group have at high risk of coronary heart disease or stroke

The relationship between obesity and high blood cholesterol levels have been reported both in children and adults. Gorces C et al reported that obesity is associated with abnormalities of cholesterol in the blood where increased cholesterol in the blood happen at the age more than of 30 years.

This study aims to determine how to comparison the cholesterol levels in people with obesity and normal weight or non-obese.

MATERIALS AND METHODS

The research instrument used, namely sheet the identity of the subject of research, scales of weight of body with Digital Scale capacity up to 150 kg with a level of accuracy of 0.1 kg, the measuring instrument height / microtoise capacity up to 200 cm with level of accuracy of 0.1 cm, tool of measuring of cholesterol levels total (autocheck), sticks cholesterol , cotton , alcohol, lancet devices.

The data collection is done by: Researchers ask permission from the person in charge of the Ministry of Health Poltekkes Medan Polyclinic by showing the research permit. Furthermore, for sampling carried out by accidental sampling technique.

After determination of survey respondents, then researchers explain the intent and purpose of the research and subject of research are asked willingness to become respondents, along with the signing of informed consent as evidence of a willingness to be respondent.

To find out the identity of respondents researchers conducted interviews with respondents. The results of the interview included in the sheet identity of respondents. Sheets respondents' identities were coded respondents to further facilitate researchers in the implementation of data processing.

Further measured the weight, height, and total cholesterol levels at the study subjects. Body weight was measured using scale of weight body with Capacity up to 150 kg with a level of accuracy of 0.1 kg. Height of body was measured using a microtoise with length up to 200 cm with a level of accuracy of 0.1 cm. At the time of measurement of footwear research subjects were removed and standing in an upright position. After obtaining data on weight and height BMI calculation is then performed in accordance with the formula BMI calculation, then the results are recorded and explained to the research subject. Total cholesterol was measured with autocheck.

RESULTS

The total number of samples as many as 57 people working in the Polytechnic health ministry of medan that taken by accidental sampling and categorized as obese and non-obese based on measurements of body mass index (BMI). furthermore the data samples is analized, then performed statistical data processing using T test

A.1. characteristics of Respondents

Characteristics of respondents can be seen in the table below:

Table 4.1. Frequency Distribution of Respondents by Age At a staff of polytechnic

health ministry of Medan

No	Age (year)	Frequency	%
1	25 – 34	11	19.30
2	35 – 44	20	35.08
3	45 – 54	17	29.82
4	55 – 64	9	15.80
	Total	57	100.00

From table 4.1. it can be seen that of the 57 samples that have been studied, the majority were in the age group 35-44 years of 20 people (35.08%).

Table 4.2. Frequency Distribution of Respondents by Gender At a staff of polytechnic health ministry of Medan

No	Gender	frequency	%
1	female	41	71.93
2	Male	16	28.07
	Total	57	100.00

From table 4.2. it can be seen that of the 57 samples that have been studied, the majority are women many as 41 people (71.93%).

Table 4.3. Frequency Distribution of Respondents by IMT At a staff of polytechnic health ministry of Medan

No	IMT	frequency	%
1	non obesitas (‹ 30 kg/m2)	38	66.67
2	Obesitas (≥ 30 kg/m2)	19	33.33
	Total	57	100.00

From table 4.3. it can be seen that of the 57 samples have been studied based on BMI, the majority of the samples in the category of non-obese amounted to 38 people (66.67%).

Table 4.4. Respondents Frequency Distribution Based on Cholesterol Levels In a staff of polytechnic health ministry of Medan

No	Cholesterol Levels	Frequency	%
1	≤ 145 mg/dl	11	19.30
2	> 145 mg/dl	46	80.70
	Total	57	100.00

From table 4.4. it can be seen that of the 57 samples that have examined cholesterol levels, the majority have cholesterol levels> 145 mg / dl totaled 46 people (80.70%).

2. Analysis Bivariat

Table 4.5. Comparison of Cholesterol Levels In obese and non obese respondents.

Category	Cholesterol				
	Mean	SD	F	Sig.	Sig. (2-tailed)
Non Obesitas	190.11	52.734	.340	.562	.932
Obesitas	188.89	44.233			

A comparison of the cholesterol levels between obese and non-obese groups can be seen in table 4.5. The average value of standard deviation for cholesterol levels in obese group was 44 233 ± 10 148 mg / dl, while the non-obese group was 52 743 ± 8555 mg / dl. It showed the average cholesterol level was higher in non-obese but did not have significant differences.

Based on the results of t test, the obtained value of F = 0:34 and significanty 0562 (p> 0.05), which means that the two groups: obese and non-obese identical or not there is a significant difference between the results of the cholesterol obese and non-obese groups.

From the test results significantly t test, t values obtained 0932 or> 0.05 meaning that both the average identical (average cholesterol between the obese and non-obese did not differ).

If seen from the relationship between cholesterol levels in obese and non-obese groups based on test results obtained by linear regression R = 0.026, meaning that there is no relationship between cholesterol levels and weight gain.

DISCUSSION

Based on the characteristics of the respondents was found that the age category most respondents are in the age range 35-44 years (35.08%), while the sex of the respondents the most were female (71.93%), for the largest percentage BMI categories are non obese as much as 66.67% and based on the results of largest cholesterol checks in the category> 145 mg / dl. If seen from the characteristics of the respondent that there can be seen that cholesterol levels are obtained from the staf at the polytechnic health ministry of medan average are in the category of high values (> 145 mg / dl) it is possible for the average respondents ranged in age from 35 -44, according to previous studies cholesterol levels tend to be high in the age range above 30 year[12], in addition to the majority of the samples were female which high cholesterol levels are also more common in women because of estrogen-related hormone wherein estrogen is also associated with the formation of cholesterol[13] .

The results showed that the average cholesterol levels in obese and non-obese group did not have significant difference for 0562 meaningful significance p> 0.05. after linear regression was found the value of R = 0.026, which means there is no relationship between cholesterol and weight gain.

Cholesterol is the precursor for steroid hormones, bile acids and vitamin D. Cholesterol is also an important element in the cell membrane and the outer layer of lipoprotein[14].

Almost all the cholesterol and phospholipids are absorbed in the gastrointestinal tract and enter into chylomicrons are formed in the intestinal mucosa. Cholesterol is synthesized entirely from acetyl-CoA in many tissues[14]. Thus enabling if cholesterol levels can be high in any individual, no matter whether the person is obese or non-obese. Although some previous studies that found that cholesterol levels related to body weight and BMI, but the synthesis of

cholesterol is also affected by many factors. Another factor that can affect plasma cholesterol levels in addition to hereditary factors are the increased intake of high cholesterol, diet with high saturated fat, a diet high in unsaturated fatty acids and insulin and deficiency of thyroid hormone and lipoprotein abnormalities.

Hereditary factors have the greatest role in determining a person's serum cholesterol levels such as abnormalities in the LDL receptor gene mutation leads to the formation of high LDL. Usually characterized by the production of cholesterol> 400 mg / dL and HDL cholesterol levels <35 mg / dL. However, the factor of food intake, and environments such as physical activity, smoking, also affect cholesterol levels[14].

High dietary intake of saturated fats also improve the cholesterol levels in plasma with increased as much as 15% -25%. This is due to fatty deposits in the liver which then led to increased element of acetyl-CoA in the liver to produce cholesterol[15].

Insulin and thyroid hormone deficiency can lead to increased plasma cholesterol levels, while excess thyroid hormones will result in an increase in plasma cholesterol levels. Thus is the main possibilities occur due to changes in the activity of enzymes that work in lipid metabolism[15].

Another thing that plays a role in the determination of high or low cholesterol levels is exercise. Sports are often said to be lower LDL levels in plasma while HDL levels will increase. Moreover, in condition unstable emotions or stress and taking caffeine considered to be associated with increased free fatty acids in plasma. The result applies increased triglycerides and VLDL cholesterol is transported through where this resulted in an increase in cholesterol levels in the circulation[14].

As for diet and lifestyle are the factors that are involved in stimulating the increase or decrease in cholesterol levels and it gives the view that hypercholesterolemia is a risk factor that can be modified[16]. In this study does not do food recall and review of physical activity the previous sample so it is likely the cause of high cholesterol levels in the samples examined may vary. Is most likely due to consumption of foods high in fat and lack of physical activity is accompanied by hormonal factors and emotional conditions or high stress levels in the face of work.

The research result obtained is in line with several previous studies including research conducted by Nugraha A (2014) who found that there was no relationship of body mass index with total cholesterol levels of teachers and school employees Surakarta Muhammadiyah 1 and 2. Harahap (2011)[17], which examines the relationship of total cholesterol and triglyceride levels in patients with a BMI of at hospital of Dr Hj. Adam Malik who find that the relationship between levels of triglycerides and total cholesterol levels by IMT weak. Other studies are consistent with the study conducted by Setiono (2012) by using a cross sectional study design. His research states that total cholesterol levels in the group of people who are obese and non-obese have a significant difference with a significance value of p = 0.457. Alafanta (2011)[18] conducted research on cholesterol screening in obese patients aged 30-60 years. The results showed that high total cholesterol levels are not always associated with obesity.

The results of different studies conducted by Caleb (2010)[19] on vocational teachers 1 Amurang with the conclusion that there is a relationship between nutritional status and total cholesterol levels. Results of other studies that are not in line, performed by Mawi (2003) on a sample of adults aged> 35 years. The result showed that there was significant relationship (p = 0.007) between body mass index and total cholesterol levels are an indicator of coronary heart disease. Total cholesterol in men will increase with the increase in the value of IMT. This

is also supported by the results of a study conducted in Finland showed a positive association between cholesterol levels with BMI in men and women aged 30-59 years[12].

The difference of this research may be caused by differences in the use of research methods, population and sampling techniques, the characteristics of respondents (age, sex, and occupation) as well as the criteria for total cholesterol and different nutritional status. In this study used cross sectional design, the sample is an employee who works in the Ministry of Health Poltekkes Medan aged 30-65 years with the categorization of obesity with a BMI ≥ 30 kg / m2, and non-obese with a BMI <30 kg / m2 while the obese category used other researchers are BMI ≥ 25 kg / m2 even use a standard obesity with a BMI ≥ 23 kg / m2, and the criteria for total cholesterol levels in other studies using the normal category (<200 mg / dL), and total cholesterol levels high (≥ 200 mg / dL), in this study we use the categories of test equipment used is autocheck which category normal cholesterol levels ≤ 145 mg / dl and higher if the kolestreol levels> 145 mg / dl. This is what might affect that different research results.

Limitations of this analysis, the researchers did not interview survey respondents directly about eating habits such as frequency of eating and type of food consumed during the last 24 hours, smoking history, physical activity undertaken before participating in the study. However, there are several factors that support the implementation of this research that respondents were cooperative during the study so that the research can be done and also researchers can obtain the required data.

The conclusion from this study that the cholesterol levels among staff who are obese and non-obese did not have significant differences, and recommended for staff who have high cholesterol levels to be more vigilant and do the activities that can lower cholesterol levels like regular exercise including aerobic exercise, cycling , or yoga and keep food intake by avoiding foods that contain saturated fats and consume more foods rich in fiber and fruits that can increase HDL cholesterol levels such as avocado. Expected to continue research with develop the variables and perform food recall to more completed data of food intake and physical activity.

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O-23

The Correlation Of Handover Implementation and Nurse Performance

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1,2,3Nursing ProgramPoltekkes Kemenkes Medan

ABSTRACT

The hospital is one of the business entity that is engaged in health services and have the same goal which is to provide services to people who require nursing care. Quality of nursing care is determined by the hospital because the nurses provide nursing care for 24 hours, so it is important for nurses to be the spotlight of other professions and patients. Several factors influence the performance of nurses are discipline, quality and quantity of work, responsibility, initiative and skills, as well as good relationships with other staff through mutual communication or transfer of information both among nurses at shift change (handover). Transfer of this information is very important to determine the quality of services provided and to obtain nursing care has been and will be implemented continuously. Under these conditions, This study aims to determine the relationship of nurses with the implementation of handover performance of nurses in inpatient Ward Dr Pirngadi Hospital Medan. The samples in this study were 38 respondents nurse. The results obtained by 60.5% of respondents who carry out handover properly and as much as 55.3% of respondents with the performance of a good nurse. The statistical results showed that there is a relationship between the implementation of the handover performance of nurses in patient ward DrPirngadi Hospital of Medan {p = 0.005 and α = 0.05 then p ≤ α}. The conclusion is a significant correlation between the implementation of the handover performance of nurses in patient ward DrPirngadi Hospital of Medan.

Keywords : Handover, Nursing Services, Nurse Performance

Rumah sakit merupakan salah satu badan usaha yang bergerak dalam bidang pelayanan jasa kesehatan dan mempunyai tujuan yaitu untuk memberikan pelayanan kepada masyarakat yang membutuhkan pelayanan keperawatan. Mutu pelayanan keperawatan rumah sakit sangatlah ditentukan oleh perawat karena memberikan asuhan keperawatan selama 24 jam, sehingga perawat menjadi sorotan penting bagi profesi lain dan pasien. Bebera pafaktor yang mempengaruhi kinerja perawat yaitu disiplin, kualitas dan kuantitas pekerjaan, tanggung jawab, inisiatif, keterampilan, serta hubungan baik dengan staf lain yaitu saling komunikasi atau transfer informasi yang baik antar perawat pada pergantian *shift (handover).* Transfer informasi ini sangat penting untuk menentukan dalam kualitas pelayanan yang diberikan dan memperoleh asuhan keperawatan yang telah dan akan dilaksanakan berkesinambungan. Berdasarkan hal tersebut, penelitian ini bertujuan untuk mengetahui hubungan pelaksanaan *handover* perawat dengan kinerja perawat di Ruang Rawat Inap Rumah Sakit Dr Pirngadi Medan. Penelitian ini terdiri dari dua variabel; variabel dependen adalah pelaksanaan *handover* dan variabel independen adalah kinerja perawat di Ruang Rawat Inap Rumah Sakit Dr Pirngadi Medan. Sampel dalam penelitian ini sebanyak 38 responden atau perawat. Hasil dari penelitian ini diperoleh sebanyak 60,5% yang melaksanakan *handover* dengan baik dan sebanyak 55,3% dengan kinerja perawat yang baik. Hasil statistik menunjukan bahwa terdapat hubungan antara pelaksanaan *handover* dengan kinerja perawat di Ruang Rawat Inap Rumah Sakit Dr Pirngadi Medan (p-*value* = 0.005 dan α = 0.05, maka p-value ≤ α). Kesimpulan pada penelitian ini adalah ada hubungan yang bermakna antara pelaksanaan *handover* dengan kinerja perawat di ruang rawat inap Rumah Sakit Dr Pirngadi Medan.

Kata Kunci : *Handover*, Pelayanan Keperawatan, Kinerja Perawat

1. Introduction

The hospital is one business entity engaged in the field of health services to serve the people who need the optimal health care(1). Quality of service in hospitals is determined by nurses in providing nursing care because the nurses provide nursing care for 24 hours. A heavy responsibility and supported with adequate human resources, so that the nurses' performance a key highlight for the other professions, patients and their families(2).

The nursing care is given in the form of nurses' performance should be constituted with high capabilities so the performance to support the implementation of tasks in nursing care. The performance of nurses is an ability or learning application that has been received for completing nursing education program to provide responsible care in health improvement and disease prevention to patients(3). One of the problems in the management of human resources at the hospital is nurses' performance, because the success of the hospital affected by the performance of nurses. Factors to assess the performance of nurses is the quality and quantity of jobs, responsibilities, skills, accuracy, speed, behavior, attendance or use of time, the relationship between the other staff with mutual communication or transfer of information. Transfer of information is very important in determining the quality of services provided(4).

Transfer of information at the time of shift change is called handover. Information relating to the clinical state of the patient, the patient's personal circumstances, to the social factors of patients. Handover is to maintain the continuity and consistency of patient care. Nurses should arrive at least 15 minutes early to follow the handover so that the handover process can run smoothly(5).

Based on the results of the audit conducted by a team of nursing supervision in RSU Dr. WahidinSudiroHusodoMojokerto that in the standard operating procedures (SOP) of handover implementation there are 85% room did not execute properly handover. This is indicated with the achievement of handover implementation in ward less than 73%, but in a pavilion implementation oh handover about 81%.Based on the minimum service standards (SPM), the achievement of the implementation of the SOP with good criterion of 73-100%, so not implemented of handover may cause a risk to patient safety, decrease the performance of nurses and quality of services provided(6).

The results of the preliminary study at DrPirngadi Hospital of Medanthat the implementation of handover is didn't going well. During this time, at the turn of the shift, the nurse previously only briefly explain the based on records and spoken to the nurses will be on duty the next, but it was not followed by all the nurses who will be assigned the next. Nurse visits to patients at the time of shift change has not been implemented. The performance of nurses can be seen from the discipline of nursing, but there are still many nurses who arrive late at every change of shift. Based on the phenomenon and the preliminary study, researchers interested in studying about relationships handover implementation with the performance of nurses in patient wards DrPirngadi Hospital of Medan.

2. Method

This is descriptive analytic with cross sectional approach. This study was conducted on 30 June to July5, 2014 in Wards DrPirngadi Hospital of Medan. The population was all nurses in patient wards DrPirngadi Hospital of Medan are 62 nurses. The sampling technique used purposive sampling. The sample is 38 respondents with criteria of inclusion are ready to be respondent and have a work time more than 1 year. Nurse performance data used questionnaire by Nursalam (2011) with indicator like 1) quality and quantity of

work, 2)responsibility, 3) have a competency, 4) accurately and faster, 5) absence, and 6) communicate. Data of handover used a questionnaire prepared by the researcher and has been tested for validity and reliability. Indicator in handover are 1) implementation, 2) who are to be leader, 3) team of nurse, 4) information, and 5) place of implementation. Test the validity of using the Pearson product moment and reliability test using Cronbach alpha. Test results show the validity and reliability of the questionnaire is valid and reliability to be used as an instrument for the implementation of the handover to the value of r> 0.444 (n = 20) and Cronbach alpha values 0.968. Data were analyzed using chi-square testto determine the relationship handover implementation and performance of nurses.

3. Result

Based on result, handover implementation of nurses in patient ward DrPirngadi Hospital of Medanis mostly good about 60.5% (table 1).Every nurse must implementation of handover in every change of shift, give information about condition of patient, and implemented handover like SOP from hospital.

Table 1. Respondents Frequency Distribution Based on Implementation of Handover In Inpatient Ward DrPirngadi Hospital of Medan

Handover implemented	Frequency	Presentation
Enough	15	39.5%
Good	23	60.5%
Total	38	100,0 %

Based on result, nurse performance in patient ward DrPirngadi Hospital of Medanis mostly good about 55.3 %.Form 38 respondent, about 21 nurses shown good performance, while about 17 nurses shown not good performance (table 2).

Table 2. Frequency Distribution of Respondents by nursesperformance Inpatient Ward DrPirngadi Hospital of Medan

Nurse performance	Frequency	Presentation
Enough	17	44.7 %
Good	21	55.3 %
Total	38	100,0 %

Based on the statistics, chi-square p value obtained is 0.005, so the P-value ≤ α (0.05) (table 3), it's mean that there is a relationship between the implementation of the handover with the performance of nurses in patient ward DrPirngadi Hospital of Medan.

Table 3. Relationship of handover implementation with nurse performance in patient ward DrPirngadi Hospital of Medan (n=38)

Handover Implementation	Nurse Performance				Total		P value
	Enough		Good				
	F	%	F	%	F	%	
Enough	2	5.3	13	34.2	15	39.5	0.005
Good	15	39.5	8	21.1	23	60.5	
Total	17	44.7	21	55.3	38	100	

4. Discussion

In this research, most of nurses implemented good handover about 60.5 % (table 1). The implementation handover would be good if supported by some good aspects, are the aspects of commitment, responsibility, cooperation, motivation and communication (6). A good implementation of handover in the nurse station and at bedside, does on every shift and led by the head of the room, followed by all the nurses who have been on duty and the next on duty. Information submitted must accurate, concise, systematic and describe or explain the patient's condition at this time as well as maintaining patient confidentiality (7).There are 4 type of handover, 1) bedside handover is transfer information performed at the bedside to focus the report and condition of the patient, 2) recorded handover, to use these recordings to reduce turnover time shifts that overlap, 3) written handover, depend on handwritten or computer access, and the amount of information provided by nurses, 4) oral handover, an oral report to accommodate the experience and ability of the nurse who attended to give information about the patient's condition (5)

Handover is the communication that occurs when nurses changing shifts and has a specific goal is to communicate information about the patient's condition at the previous nursing care(8). Handover can also improve communication among nurses, in a relationship of cooperation and responsibilities among nurses, and nurses can keep track of the patient, so that the continuity of nursing care can next run perfectly(9).

Benefits of handover for the patient is patients receive optimal health care and be able to address the problem directly if there is a problem that has not been revealed. For hospitals, the handover can improve nursing care to patients in a comprehensive manner (9).

Table 1 shown that about 39.5% of respondent not implemented handover very well. There is factors that inhibit the implementation of the handover is communication, noise disturbance, fatigue, knowledge or experience, written communication, organizational culture, support systems, infrastructure, delivery of patients, limited space for a handover of patients, the limitations of technology and usage notes and manual reports or difficulty accessing important information, and lack of human resources (10).Not implemented of handover in hospital because of many nurse who implemented handover as responsibility of work without know about the effect if handover not implemented very well (6).

Handover is not running properly can cause boredom and can reduce the time to complete other important tasks. The problem of staff transfer is exacerbated if the shift would come home yet ready to give handover, like delay nurse who attended to 7 minutes, or if any other activities performed. Nurses should immediately react if an emergency occurs during or before the handover is done. Negligence of the staff who will return to prepare for the handover, or delay of the staff that will replace the shift, can lead to burnout for nurses who wait to accept delivery of nursing report (5).

Based on result, most of nurses shown good performance about 55.3% (table 2). The nursing care is given a form of performance of nurses(7). The performance of nurses is an act done by a nurse within an organization in accordance with competencies and responsibilities of each, are not breaking the law, as well as moral and ethical rules, where a good performance can give satisfaction to the service user or patient(1).Standard practices of nurses performance in nurse care who given by patient based on step of nursing proses are assessment, nursing diagnosis, planning, implementation, and evaluation (7).

According (11) determined the success of performance is very good guidance from the supervision of the supervisor to a subordinate who asked problems and obstacles encountered

in the implementation of the order to be given a solution. Supervision is a component of management functions to achieve results in conducting performance(3). While the factors that affect the performance of nurses are the quality of work, quantity of work, responsibility, initiative, skill and ability, accuracy, speed, presence or use of time, as well as good relations with other staff with mutual communication or transfer of information(4). Furthermore, the factor that affect a good nurse performance are internal motivation (knowledge, responsibility, development and work) and external motivation (work condition, work partner, and reward)(2).

Based on the research that not all of respondent shown good performance, there is a little bit of respondent about 44.7% shown not good performance. The main problem of nurses performance in nursing care is the lack of highly educated nurses, inadequate capacity, the number of nurses who are less patient and less hospitable in the face of the patient. The problem is certainly not only a matter of attitude is friendly and patient, but also a high workload and regulations are not clear to nurses(3).The expectation of the nurse was often not correspond to reality, because often lead to conflict during his work that can directly affect performance (12).

In this research shown that there is a significant correlation of handover implementation and nurse performance. Handover not implemented may cause a risk to the decline in the performance of nurses (6).Key of handover is the quality of the next of nurses care, if information not accurate or there is a mistake so can a make condition of patient dangerous.Handover as a support to another nurse to do the next nurse care. Handoveralso give catharsis benefit because nurse with emotional fatigue cause do nurse care can given to the nxt nurse at shift changeand not bring to go home. So, handover process can lack anxiety in nurse (9). Handover have a positive effect to nurse are give motivation, use experience and information to help planning in step of the next nursing care (in implemented of nursing care to patient must continuity).Good communication in handover will increase nurse motivate to increase performance. Motivation is a condition who move of selfworkerto achieve of goal organization (1). Motivation of work is an activity and need in every people, to motivate her/his self to full her/his needed and to be guideline of behavior to something that to be a goal.Motivation is also an effort to help the ability of nurses who have good skills(13)

Ongoing information transfer among shift will allow nurses to complete tasks and will have an impact on improving performance.The performance of nurses is influenced by the ability and skills of nurses in completing their tasks (1). A person skilled in doing their daily work, it will be easier to achieve the expected performance(13).

5. Conclusion

The conclusion are implementation of the handover in patient wards Dr Pirngadi Hospital of Medan, mostly good (60.5%) and nurse Performance patient ward Dr Pirngadi Hospital of Medan, mostly good (55.3%).There is a significant relationship between implementation handover with the performance of nurses in patient wards DrPirngadi Hospital of Medan.

Further studies shall be done with a different nurse characteristics about other factors on efforts to improve the performance of nurses and handover implementation. The results of this study can be used as reference material or baseline data to develop research related to handover implementation or the performance of nurses in hospitals.

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Poster Presentations

P-01

THE DESCRIPTION OF CHARACTERISTICS OF ABORTION AT THE SLEMAN REGIONAL PUBLIC HOSPITAL IN 2014

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ABSTRACT

Maternal mortality in developing countries are 14 times higher than in developed countries. Abortion is a direct cause of maternal mortality. Abortion contributes to 15-50% of maternal mortality. The highest maternal mortality rate in DIY is found in Sleman. he purpose of this study is to find out the description of characteristics of pregnant women causing the spontaneous abortion in the respective hospital. The data collection technique is using secondary data by lookingthrough the list of registers and hospital's medical record. Meanwhile, the tools used are format of data collection, the master table, and dummy table.

This study shows pregnant women with spontaneous abortion is that 38.8% of pregnant women experience an incomplete abortion, 35.3% of pregnant women experience infection, 15.3% of pregnant women suffer from chronic debility disease, 57.7% of pregnant women suffer from anemia, 56.5% of pregnant women are at risky age, 68.2% of pregnant women are with risk parity, 15.3% of pregnant women are with gestational distance <2 years, and 56,5% of pregnant women are at risky age couples. So the conclusion of characteristics of pregnant women who experience spontaneous abortion is large because of the risk parity, maternal age risk, paternal age risk, and risk of maternal nutrition.

Keywords: characteristics, pregnant women, spontaneous abortion

BACKGROUND

Mortality and morbidity is still a problems in many developing countries. According to WHO (2013), the rate of maternal mortality in developing countries are 14 times higher than in developed countries. There are 180 to 200 million womens become pregnant each year, and 585 thousand of them died as a result of one of the complications of pregnancy and childbirth[(1)]. Based on the Indonesian Demographic and Health Survey at 2007, maternal mortality rate achieves 228 per 100,000 live births. This figure puts Indonesia as one of the countries with the highest maternal mortality in Asia, the 3rd highest in the ASEAN region and the 2nd highest in the SEAR region. Indonesia targets to achieve the MDG's getting away because by Indonesia Demographic and Health Survey in 2012 the maternal mortality rate actually rose to 359 per 100,000 live births[(2)].

Abortion is a direct cause of death in women. According to WHO, abortion contributes 15-50% of maternal mortality. Abortion complications are bleeding and infection that lead to maternal death. Maternal mortality due to abortion often do not appear in the report of death because it is more often reported as bleeding and sepsis[(3)].

Abortion can occur 114 cases per hour. Some studies suggest the incidence of spontaneous abortion between 15-20% of all pregnancies. When examined further abortion closer to 50%. The high rate of pregnancy loss chemical that can not be known in 2-4 weeks after conception increases the incidence of abortion[(1)].

Factors that cause the death of the fetus is its own ovum factors, maternal factors, and paternal factors[4]. Causes include genetic factors, congenital uterine abnormalities, autoimmune, luteal phase defects, infection, hematologic, and the environment[1].

The incidence of abortion in Yogyakarta tend to increase. Increased incidence of abortion in Yogyakarta seen from the Hospital Information System records in DIY. It was found that the highest increase incidence of abortion in Sleman , about 3-fold from 2012 to 2013. The incidence of spontaneous abortion in 2012 with 51 cases per year increased to 174 cases per year in 2013.

Some studies suggest hospitals contribute 40-70% of maternal mortality. By looking at the matter, effort focused on reducing maternal mortality rate in the hospital. Sleman District Hospital is a general hospital that has PONEK that is ready to serve 24 hours and serve as a referral hospital from various districts in Sleman.

Referring to the problems above, this study aims to describe the characteristics of pregnant women who experience spontaneous abortion in Sleman District Hospital in 2014. The benefits of this research for health workers Hospital in Sleman as additional references and information in the field of health, to professional organizations can be used as input data for promotional activities followed by the prevention of abortion and more vigilant when screening for pregnant women, for the researchers can add new insights in the field of health, especially abortion.

METHODS

Type of research conducted in this study was a descriptive with cross sectional approach. The cross sectional study was conducted to study the dynamics of the correlation between risk factors and effects, with the approach, observation and data collection at once at a time[5]. The population in the study were all pregnant women who experience spontaneous abortion who in inpatient and outpatient care, and recorded in the register and complete medical record in accordance with the risk factors.

The study was conducted in Sleman District Hospital by taking secondary data from the registers and records of medical records of patients. The research was conducted on 1 April until 14 April 2015. The variables in this study were infection factors, chronic debility disease, nutrition, maternal age, parity, pregnancy spacing, and paternal age.

RESULTS

1. The characteristic description of spontaneous abortion by type of abortion

Table 1. The frequency distribution of pregnant women with spontaneous abortion based on the type of spontaneous abortion in Sleman District Hospital in 2014

No	Type of Abortion	Frequency	Prosentase (%)
1	Iminens	30	35,4
2	Insipiens	5	5,8
3	Inkomplet	33	38,8
4	Komplet	8	9,4
5	Septik	1	1,2
6	Rekuren/Habitualis	8	9,4
	Total	85	100

Table 1 shows that the majority of pregnant women who experience spontaneous abortion is classified as an incomplete abortion by 38.8%.

2. The characteristic description of spontaneous abortion by factors of infection

Table 2. The frequency distribution of pregnant women with spontaneous abortion based on the factors of infection in hospitals Sleman 2014

No	Type of Infection	Frequency	Prosentase (%)
1	Bacterial	30	35,3
2	Parasites	3	3,5
3	Unrecord	52	61,2
	Total	85	100

Table 2 shows the majority of pregnant women who experience of spontaneous abortion infection is not yet known whether have an infection or not (61.2%).

3. The characteristic description of of spontaneous abortion by a factor of chronic debility disease mother

Table 3. The frequency distribution of pregnant women with spontaneous abortion based on factors debility disease in hospitals Sleman 2014

No	Chronic Debility Disease	Frequency	Prosentase (%)
1	Hypertension	13	15,3
2	Diabetes Millitus	4	4,7
3	Non chronic debility disease	60	70,6
4	Etc.	8	9,4
Total		85	100

Table 3 shows the majority of pregnant women who experience of spontaneous abortion does not have a chronic debility disease (70.6%)

4. The characteristic feature of spontaneous abortion by nutritional factors

Table 4. The frequency distribution of pregnant women with spontaneous abortion based on factors of nutrition in hospitals Sleman 2014

No	Category	Frequency	Prosentase (%)
1	Anemia (< 11gr%)	49	57,7
2	Non-Anemia (≥11 gr%)	36	42,3
	Total	85	100

Table 4 shows that the majority of pregnant women who experience of spontaneous abortion have anemia (57.7%).

5. The characteristic description of spontaneous abortion by maternal age factor

Table 5. The frequency distribution of pregnant women with spontaneous abortion based on maternal age factor in Sleman District Hospital in 2014

No	Maternal Age	Frequency	Prosentase (%)
1	<20 years and >35 years	48	56,5
2	20-35 years	37	43,5
	Total	85	100

Table 5 shows the majority of pregnant women who experience of spontaneous abortion in Sleman District General Hospital in 2014 were women money to have that risk age <20 years and> 35 years (56.6%).

6. The characteristic description of spontaneous abortion by a factor of parity

Table 6. The frequency distribution of pregnant women with spontaneous abortion by a factor of parity in Sleman District Hospital in 2014

No	Parity	Frequency	Prosentase (%)
1	At Risk	58	68,2
2	Not Risk	27	31,8
	Total	85	100

Table 6 shows that women who experienced of spontaneous abortion in Sleman District General Hospital in 2014 mostly mothers have risky parity (68,2%).

7. The characteristic description of spontaneous abortion of pregnancy based on the spacing factor

Table 7. The frequency distribution of pregnant women with spontaneous abortion of pregnancy based on the spacing factor in Sleman District Hospital in 2014

No	Pregnancy Spacing	Frequency	Prosentase (%)
1	Primi	34	40
2	< 2 years	13	15,3
3	≥ 2 years	38	44,7
	Total	85	100

Table 7 shows that women who experienced spontaneous abortion most have pregnancy spacing with previous children ≥ 2 years (44.7%).

8. The characteristic description of spontaneous abortion by the age paternal factor

Table 8. The frequency distribution of pregnant women with spontaneous abortion by the age paternal factor in Sleman District Hospital in 2014

No	Paternal Age	Frequency	Prosentase (%)
1	< 20 years and ≥ 40 years	48	56,5
2	20 – 39 years	37	43,5
	Total	85	100

Table 8 shows that women who experienced of spontaneous abortion in Sleman District General Hospital in 2014 mostly from a father who has a risky age is <20 years and ≥ 40 years (56.5%).

DISCUSSION

The incidence of spontaneous abortion in Sleman District General Hospital in 2014 largely is incomplete abortion. Incomplete abortion is characterized by the partial products of conception out, and what remains is the decidua or placenta[4]. Incomplete abortion is more common in hospitals. Generally, patients present with complaints of severe abdominal pain, after examination found cervical opening and looked out the majority of the product of conception[6]. Abortion incomplete many happening so than with other types of abortion [7].

One of the factors that cause pregnant women experience spontaneous abortions are due to infection. From research conducted largely unknown whether the mother infection during pregnancy which causes spontaneous abortion. This is due to limited data obtained by researchers. But some mothers infection types of bacteria, most of the mother suffered a vaginal discharge during pregnancy is likely to be caused by bacterial vaginosis. There is a relationship between abortion with bacterial vaginosis[8]. Fetal death can be caused by toxins from the mother or the entry of germs or virus to the fetus [4]. During pregnancy a woman's vagina pH will increase making it more susceptible to vaginal infections. When the immune system is weak pregnant women, microorganisms easily get into the mother's body that cause pregnant women will have an infection that causes spontaneous abortion.

Another factor that causes spontaneous abortion is the debility chronic disease or chronic illness of the mother. Debility chronic disease of the mother would undermine maternal condition that will eventually lead to abortion. Based on research that has been done, most of the women who experienced spontaneous abortion does not have a chronic debility disease, but hypertension and diabetes mellitus contributes as a factor that causes spontaneous abortion. Although the numbers are few but proves that the disease can be debilitating chronic debility mother circumstances that cause spontaneous abortion. Other diseases suffered by mother and making declines durability is ever cyst surgery, suffering from gastritis, myoma, and tumors. Hypertension causes blood circulation disorder in the placenta, causing abortion[9]. Type of insulin-dependent diabetes with inadequate glucose control has a chance of 2-3 times more likely to abortion[1].

Lack of nutrition which obtained mother during pregnancy may lead to anemia which in turn can lead to spontaneous abortion. Way to detect a person is experiencing anemia with hemoglobin test. Anemia is a condition where the hemoglobin in the lower body, pregnant women are anemic which has hemogoblin <11gr% in the first trimester and 3, while in the second trimester maternal hemoglobin <10.5 g%. Most of the women who experienced spontaneous abortion are anemic shown by the results of hemoglobin <11 g%. Pregnant women who experience a decrease in iron in the blood would reduce the number of red blood cells and interfere with the formation of red blood cells in the fetus and placenta, so will increase the incidence of abortion[10]. Anemia is one of the causes of abortion that directly affect fetal growth through the placenta interfere with the intake of nutrients and oxygen circulation to the circulation retroplasenter[9].

In addition, maternal age factor is also a risk factor for a pregnant woman suffered a spontaneous abortion. Based on the research showed most of the women who experienced

of spontaneous abortion aged <20 years and> 35 years. Age <20 years at risk of pregnancy because at that age the reproductive organs of a woman is not yet mature, in addition to age <20 years vulnerable to malnutrition[11]. State of the pregnant mother at a young age are still unstable and mentally not ready to accept her pregnancy, this condition causes the mother to become stressed and will increase the risk of abortion[12]. Aged > 35 years are at risk for pregnancy and abortion experience because ovarian function is reduced which results in eggs that the less qualified[13].

Parity also be a risk factor for the occurrence of spontaneous abortion. Most women who experience spontaneous abortion is the mother who has the risk parity is nullipara or the mother who first pregnancy and multiparity were more than three times the birth. Mothers with parity over 3 times has a high maternal mortality rate because endometrial interference occurs because of repeated pregnancy, whereas the risk for uterine first parity for the first time received the products of conception and uterine muscle flexibility remains limited[14]. Abortion is more common in women with parity 1 and more than 3. Mothers with low parity tends to birthing babies who are not mature or no complications since the first experience on reproductive and allowing the onset of disease in pregnancy, whereas high parity mothers tend to experience complications in pregnancy which influence the outcome [7].

Risk factors for spontaneous abortion is also due to pregnancy spacing. This research obtains the majority of the women who experienced of spontaneous abortion with pregnancy spacing ≥ 2 years. Spacing pregnancies at risk is <2 years because of physical health and the mother's womb is still limited and the previous child is still in need of care and attention of their parents[15]. The distance-risk pregnancies at less than 2 years and more than 5 years as it increases the risk of maternal output[16]. Most of the women who experienced pregnancy abortion at a distance of more than 5 years.

Paternal age also affects the occurrence of spontaneous abortion. Most women who experience spontaneous abortion have a partner aged> 40 years. Categorize the father's age into five categories there is in <20 years, 20-29 years, 30-34 years, 35-39 years, and ≥40 years. Age 20-29 years is the age of the father who had little risk of having a spontaneous abortion[17]. The father's age <20 years and> 40 years increases the risk of premature birth, low birth weight, gestational age preterm, low Apgar scores, to neonatal death[18]. The risk of miscarriage is higher if women aged ≥35 years, but the increase is much greater risk for a couple consisting of a woman aged ≥35 years and a man aged ≥40 years[19]. The paternal age is significantly associated with spontaneous abortion[20].

CONCLUSION

Results of research taking medical records at the General Hospital of Sleman in 2014 can be concluded from 6382 pregnant womens there are 85 pregnant womens who experience spontaneous abortion caused due to infection, disease debility chronic mother, nutrition, pregnancy spacing, maternal age, paternal age , Then obtained the characteristics of spontaneous abortion experienced by pregnant women, with the following details:

1. Most women who experience spontaneous abortion is not known whether caused by infection, this is due to limitations of the data in the can. But some women who experience spontaneous abortion caused by a bacterial infection.
2. Most of the women who experienced spontaneous abortion are not caused by disease of chronic debility. But hypertension and diabetes mellitus a contributing cause spontaneous abortion.

3. Most of the women who experienced spontaneous abortion are anemic with hemoglobin levels <11 g%.
4. 4. Most of the women who experienced spontaneous abortion risk are age <20 years and> 35 years.
5. Most women who experience spontaneous abortion have parity risk that nullipara and multiparity.
6. Most of the women who have had a spontaneous abortion pregnancy spacing ≥2 years.
7. Most of the women who experienced spontaneous abortion have a partner with the age of risk is <20 years and ≥40 years.

RECOMMENDATION

1. For Medicals Hospital Sleman

   Suggested for health workers who are in the General Hospital Sleman to write complete and accurate data so that the secondary data recorded in the medical record can be believed to be true and if done research back will get better and right.

2. For Professional Organization

   As a health worker should be more cautious with pregnant women who have risk factors for spontaneous abortion. By increasing the information from social media such as journals, articles, newspapers, or books as a reference and reference undertake emergency measures.

3. For Researchers

   Variables and technical analysis of the captured data can be developed so that the risk factors for women who experience spontaneous abortion can be seen in more detail.

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P-02

KNOWLEDGE AND ATTITUDES ABOUT EARLY DETECTION OF CERVICAL CANCER

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ABSTRACT

Cervical cancer is the second most common cancer worldwide in women after breast cancer. It is estimated that each year there are approximately 15,000 new cases of Indonesian women who detected cervical cancer and 8,000 women died by cervical cancer. Bantul is the most patient of cervical cancer in Yogyakarta. Imogiri is the lowest scope of Visual Inspection with Acetic Acid and pap testin Bantul. This research aims to determine of knowledge and attitudes about early detection of cervical cancer. The type of research that used is quantitative descriptive with cross sectional study design. The data collection technique used a questionnaire that was tested by validity test. This was analyzed by SPSS program. Subjects were 45 respondents of reproductive age women. The results of research is 60% subjects have enough knowledge and 54% have supportive attitudes about early detection of cervical cancer. Based on the results, the majority of subjects have enough knowledge and supportive attitude.

Keywords: Knowledge, attitudes, cervical cancer

BACKGROUND

Cervical cancer is the most common cancer worldwide in women after breast cancer at 2012[1]. It is estimated that each year there are approximately 15.000 of Indonesian women who detected cervical cancer and 8,000 women died by cervical cancer[2].

Bantul has the biggest incidence of cervical cancer. The details are at range 25-44 years old is one person, 45-64 years old are 21 people and > 65 years old are 19 people[3].

In the developed countries, the incidence of cervical cancer decreased because of early detection programs through pap smear[4]. This is caused by the late of diagnosis that is found in an advanced stage, weak general state, low socioeconomic status, limited resources, lack of facilities and infrastructure, histopathologic type, and degree of education are participate to determining the prognosis of patients[4].

Imogiri is the lowest scope of Visual Inspection with Acetic Acid (or IVA) and pap smear test in Bantul[5]. Based of the information by the Head of Puskesmas Imogiri I, which covers four villages: Karang Talun, Wukir Sari, Giri Rejo, and Imogiri, participants of IVA and Pap smear is still in average even though it had been informed in public about the importance of early detection of cervical cancer by health workers. Based on preliminary studies by interviewed with seven residents in Dukuh Imogiri socialization of early detection of cervical cancer has been given, but they are not interested in joining early detection of cervical cancer because they feel embarrassed and afraid.

The people's knowledge about cervical cancer is a major cause of Indonesian womens coming to the health care. They are already late with advanced cervical cancer and difficult to cure. Only 12% of Indonesian women who understand about cervical cancer and had an early detection of cervical cancer with the Pap smear[6].

The process of attitudes are influenced by the stimulus of knowledge that will be processed to produce an attitude (closed) and behavior (open). [7]

The data explains the importance from knowledge and attitudes in reproductive age women about early detection of cervical cancer. Based on the those data above, this research aims to determine of knowledge and attitudes about early detection of cervical cancer. The purpose of this study is to describe knowledge and attitudes about early detection of cervical cancer in Dukuh Imogiri.

METHODS

The research is a descriptive quantitative with cross sectional study design. Subjects were 45 respondents of reproductive age women. The research was conducted in Dukuh Imogiri Bantul Yogyakarta at March-June 25, 2015. The research instruments using a questionnaire that was tested by validity test with the Pearson product-moment and reliability test with Cronbach Alpha. The data analyzed by SPSS program.

RESULT

Respondents characteristics

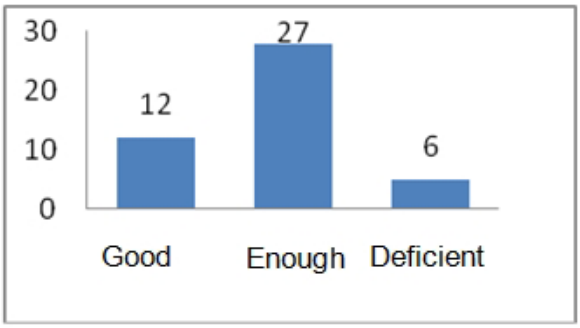
The respondent characteristics are age, education, occupation, and parity.

Table 1. Univariate Analysis of Respondent Characteristics in Dukuh Imogiri Bantul at 2015.

Respondent characteristics	Frequency	
	N	%
Age (years old)		
15-19	7	15,56
20 - 40	25	55,56
41-49	13	28,9
Education Level		
Not School	7	15, 56
Elementary School	9	20
Junior High School	10	22,22
Senior High School	14	31,11
University	5	11,11
Occupation		
Not work	28	62,22
Work	17	37,77
Parity		
Nulliparous	6	13,33
Primiparas	13	28,88
Multiparas	26	57,77

Table 1 shows that the most respondents were in age 20-40 years old, senior high school (education level), not work (occupation), and multiparas.

Knowledge about Early Detection of Cervical Cancer



Pictures 1. Knowledge about Early Detection of Cervical Cancer in Dukuh Imogiri Bantul at 2015.

Pictures 1 shows that the majority of knowledge about early detection of cervical cancer is enough.

Knowledge about Early Detection of Cervical Cancer Based on Characteristics

Table 2. Analysis of Knowledge and Characteristic Respondent in Dukuh Imogiri Bantul 2015.

Respondent characteristics	Knowledge						Total	
	Good		Enough		Deficient			
	N	%	N	%	N	%	N	%
Age (years old)								
15-19	3	42,9	4	57,1	0	0	7	100
20 - 40	5	20	15	60	5	20	25	100
41-49	4	30,8	8	61,5	1	7,7	13	100
Total	**12**	**26,7**	**27**	**60**	**6**	**13,3**	**45**	**100**
Education Level								
Not School	3	42,9	0	0	4	57,1	7	100
Elementary School	2	22,2	7	77,8	0	0	9	100
Junior High School	3	30	6	60	1	10	10	100
Senior High School	3	21,4	10	71,4	1	7,1	14	100
University	1	20	4	80	0	0	5	100
Total	**12**	**26,7**	**27**	**60**	**6**	**13,3**	**45**	**100**
Occupation								
Not work	6	21,4	18	64,3	4	14,3	28	100
Work	6	35,3	9	52,9	2	11,8	17	100
Total	**12**	**26,7**	**27**	**60**	**6**	**13,3**	**45**	**100**
Parity								
Nulliparous	1	16,7	4	66,7	1	16,7	6	100
Primiparas	3	23,1	8	61,5	2	15,4	13	100
Multiparas	8	30,8	15	57,5	3	11,5	26	100
Total	**12**	**100**	**27**	**100**	**6**	**100**	**45**	**100**

Table 2 shows that based on the age characteristics, the mostly aged 20-40 years have enough knowledge. Based on education, the majority of senior high school educated have enough knowledge. Based on employment status, most of the not work respondents have enough knowledge and based on parity most respondents of nulliparous have enough knowledge.

Attitudes of Reproductive age Women about Early Detection of Cervical CancerBased on Characteristics

Table 3.Distribution attitudes about Early Detection of Cervical Cancer

Attitudes	Total	
	N	%
Support	24	53,3
Unsupport	21	46,7
Total	**45**	**100**

Table 3 shows that the most attitudes about Early Detection of Cervical Cancer Based is support.

Attitudes about Early Detection of Cervical Cancer Based on Characteristics

Table 4. Cross Table between Attitudesand Characteristic respondent in Dukuh Imogiri Bantul 2015.

Respondent characteristics	Attitudes				Total	
	Support		Unsupport			
	N	%	N	%	N	%
Age (years old)						
15-19	7	100	0	0	7	100
20 - 40	13	52	12	48	25	100
41-49	4	30,8	9	69,2	13	100
Total	**24**	**53,3**	**21**	**46,7**	**45**	**100**
Education Level						
Not School	4	57,1	3	42,9	7	100
Elementary School	4	44,4	5	55,6	9	100
Junior High School	7	70	3	30	10	100
Senior High School	8	57,1	6	42,9	14	100
University	1	20	4	80	5	100
Total	**24**	**53,3**	**21**	**46,7**	**45**	**100**
Occupation						
Not work	15	53,6	13	46,4	28	100
Work	9	52,9	8	47,1	17	100
Total	**24**	**53,3**	**21**	**46,7**	**45**	**100**
Parity						
Nulliparous	4	33,3	2	66,7	6	100
Primiparas	8	61,5	5	38,5	13	100
Multiparas	12	46,2	14	53,8	26	100
Total	**24**	**53,3**	**21**	**46,77**	**45**	**100**

Table 4 shows that all respondents aged 15-19 years old have an supportive attitude, most of the respondents with a college education have a support attitude, the majority of unwork respondents have a supportive attitude, and the majority of nulliparous respondents are unsupport.

DISCUSSION

The research result shows that most respondents are knowledgeable enough as much as 60%. One of the affects of knowledge is a source of information. The source of information is something that can be known, but some are emphasizing the information as knowledge transfer [8].

The results of the study represent that the majority of respondents in this study were aged 20-40 years of reproductive age women as much as 55.6% with 60% has sufficient knowledge. Age 20-40 years is regarded as a mature age periode of human biological development to determine the level of maturity in thinking and working [9].

Knowledge about Early Detection of Cervical Cancer Based on Characteristic

a. Age

The results of the study represent that the majority of respondents in this study were aged 20-40 years of reproductive age women as much as 55.6% with 60% has sufficient knowledge. Age 20-40 years is regarded as a mature age periodization of human biological development to determine the level of maturity in thinking and working [9].

b. Education

The research result shows that 57.1% of respondents who are not school had deficient knowledge. It is consistent with the theory that education can increase the level of knowledge and absorb practical knowledge in the environment [10].

c. Occupation

The results of the study describes 62.22%respondents did not work, but 64.3% of them only have enough knowledge. The factors that influence knowledge is social, culture and economic. Economic status of a person will determine the availability of a facility that is required for certain activities so that the socio-economic status will affect a person's knowledge [8].

The economic status of a person can be influenced by a person's employment status, because most of the work to make money[8].

d. Parity

The results of the study represent that 66.7% of nulliparous respondents have enough knowledge.

Experience is one of the factors that influence the level of knowledge. Repeating the knowledge of solving problems in the past is a way to obtained the truth of knowledge[8].

Precentage of support and unsupport attitudes of the respondentsare almost same. The majority of support attitudes of respondents are in mature reproductive agewomen (aged 20-40 years). Age 20-40 years is regarded as a mature age periodization of human biological development to determine the level of maturity in thinking and working [9]. This has to do with the knowledge and experience acquired during life [11].

Experience is one of the factors that influence attitudes. Experience will influence the social stimulus that affects a person's attitude [12].

Attitude about Early Detection of Cervical Cancer Based on Characteristic

a. Age

The results of the study represent the majority of respondents in this study were aged 20-40 years as much as 55.56% with most of that 52% have a support attitude. Age 20-40 years is regarded as a mature age periodization of human biological development to determine the level of maturity in thinking and working [(9)]

b. Education

The research result shows that respondents with a college education level had 80% unsupport attitudes. According to the theory, the institution is a system who has an influence in the formation of attitudes because both of them put the foundation of understanding and moral concepts in their self [(12).]

c. Job status

The results of the study describes that 62.22% are unwork espondentswhich 53.6% has a support attitude. Experience is one of the factors that influence attitudes. Experience will make and influence the social stimulus that affects a person's attitude[(12)].

d. Parity

Results of the study describe as much as 66.7% of respondents have unsupport attitude. Experience of nulliparous is a factors that influence attitudes. Experience will make and influence the social stimulus that affects a person's attitude[(12).]

According to the researchers, that the possibility of unsupport attitude may be caused because the mothers never pregnancy and take care of child, so they did not feel the benefits of early detection of cervical cancer.

CONCLUSION

Respondents characteristics showing that most respondents were in age 20-40 years old, education level is senior high school, occupation is not work, and parity multiparas. The research result shows that most respondents are knowledgeable enough. The majority of respondents in this study were aged 20-40 years has enough knowledge. The majority respondent's attitudes is unsupport.

RECOMMENDATIONS

Recommendation for community leaders are expected to be more active in mobilizing like taking direct door-to-door to persuade the resident not to be embarrassed and afraid to take early detection of cervical cancer. It is needed free IVA program in Dukuh Imogiri especially for women aged 20-40 years who still have less knowledge and unsupport attitudes about early detection of cervical cancer. Research methods and other variables better as the correlation method and the addition of behavioral variables can be considered in the next research. The research may also examine factors that are not included in this study such as health behavioral factors, especially in high-risk women.

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P-03

DETERMINANTS OF UNMET NEED FOR FAMILY PLANNING AMONG WOMEN IN WEST LOMBOK REGENCY

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Abstract

It is a fact that utilization of contraception in Indonesia is fairly high. However, the rate of the community's unmet need for family planning services is equally high. A survey-based study conducted by the DHS in developing countries reported that at least 150 million women, or 1 out of 5 women. This study was conducted to analyze the determinants of unmet need in West Lombok that encompass socio-demographic factors, access to mass media, mother's knowledge on contraception and husband's approval on contraception use. This is a cross-sectional research with primary data of 170 women. The samples were taken using multistage random sampling. The data were analyzed by employing bivariate and multivariate analysis methods. The unmet needs in this research reached 12.5%, some variables related to the event of unmet needs were past contraception use status, access to media providing information on family planning, and husband's approval. Multivariate analysis results showed that women who had never used contraception were at fivefold risk (OR = 4.32) of experiencing unmet need in comparison to those who had, access to mass media (OR = 3.52), and husbands' approval (OR= 0.61).The improvement and betterment of counselling on contraception should be carried out by service providers. Proper counselling on contraception should be given not only to women but also their spouses. Counselling should be given not only during postpartum period, but also during antenatal care. A collaboration between the government and local mass media in broadcasting programs with interesting, easy to understand show concepts is needed.

Keywords: unmet need, family planning, contraception.

BACKGROUND

The substantial number and uneven distribution of population has become a population issue in Indonesia. This issue is followed by another more specific problem, which is relatively high number of fertility and mortality.[1] The phenomena of the potential of the occurrence of baby booming and Total Fertility Rate (TFR) stagnation, which reached 2.6 and took place in Indonesia during the period 2003-2012, needs attention both from the government and the community.

Some factors likely causing the high TFR and low Contraceptive Prevalence Rate (CPR), which are the indicators of population increase, are the community's poor knowledge on family planning, the high ideal number of children desired, the high number of unmet need and the strong sociocultural and religious influence on family planning.[2] According to the Indonesia Demographic and Health Survey (*Survey Demografi dan Kesehatan Indonesia*, abbreviated as SDKI) of 2002-2003, the percentage of unmet need, which remained around 8.6 percent, practically did not experience any significant decrease from the previous SDKI data. In 2007, the unmet need percentage rose back to 9.1 percent.[3] However, it plunged from 13.1 percent in 2007 to 11.4 percent in 2012.[4]

According to SDKI of 2012, the highest unmet need prevalence distribution, which was also greater than the national average, by provinces in Indonesia was 20 percent, gained by Papua, followed by West Papua at 16 percent, East Nusa Tenggara at 15.9 percent,

West Nusa Tenggara at 14 percent and Maluku at 14.5 percent.[4] Based on the BKKBP data of Lombok Barat Regency, the percentage of unmet need in Lombok Barat Regency by December 2016 is 11.3 percent. This percentage is still higher than the national average target specified. Through the KKBPK Work Program Plan of west of Lombok regency, the contraceptive prevalence rate (CPR) is planned to be increased to 60.1 percent and the unmet need rate is reduced to 6.5 percent. The CPR in west lombok regency is lower than the target of MDGs 2015 which is 65%, whereas CPR is one of the indicators of the event of unmet need, and also to realize one of the goals of the program SDGs, by 2030 ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes.

The standard unmet need measurement can be carried out using "Westoff-ochoa/DHS Method", which is known as core definition method. Nonetheless, there are some other wider unmet need measurement concepts that are constantly developed, including the wider definition of needs for contraception and the causes of unmet need.[5]

METHODS

This research aims to analyze the determinants of the event of unmet need in Lombok Barat Regency, including socio-demographic factors, access to media, mother's knowledge on contraception and husband's approval for contraception use. This study is an analytic research with cross sectional design. The population in this research were all married women aged 15-49 in Lombok Barat Regency, numbering 145,501. The samples in this research were qualified married women aged 15-49.

The size of the samples in this research was calculated based on the statistical calculation according to Lemeshow, numbering 170. The samples were taken by employing multistage random sampling method. The data used in this research were primary data directly obtained from the respondents through direct interviews. The types of analysis conducted in this research were descriptive (univariate) analysis, analytic (bivariate) analysis with chi-square test and multivariate analysis with logistic regression. Ethical approval of this study have been made and proposed for approval from the research ethics commission of Mataram University.

RESULTS AND DISCUSSION

The 170 samples in this research were married women of childbearing age (15-49). According to the results of the research and the univariate analysis, it was found out that out of the 170 respondents investigated, the highest number of respondents was within the age range of 20-34, which was 116 (68.2 percent). The majority of the respondents in this research were women with 1-2 living children, numbering 121 (71.2 percent) and the number of unemployed women was higher than the employed ones, numbering 117 (68.8 percent). The number of respondents who had the access to mass media providing the information on family planning with 1-2 kinds of media was 94 (55.3 percent), Islam was the religion adhered by the majority of the respondents, numbering 163 (95.8 percent) and 14 respondents (8.2 percent) stated that their husbands did not approve of the family planning. The majority of the respondents had ever used contraceptive method previously, numbering 119 (70 percent). The number of respondents with unmet need based on the univariate analysis in this research was 21 (12.4 percent), whereas those with met need numbered 149 (87.6 percent).

Table 1. Relationship between Socio-Demographic Factor, Access to Media, Mother's Knowledge on Contraception and Husband's Approval and Unmet Need

Covariate	Family Planning Need						x^2	P value
	Met Need		Unmet need		Total			
	n	%	n	%	n	%		
1. **Mother's age**								
- Healthy reproduction (20-34 years of age)	48	88.8	6	11.2	54	68.2	0.87	**0.77**
- At risk (< 20 years of age and ≥ 35 years of age)	101	87	15	13	116	31.8		
2 **Number of living children**								
- 1-2	105	86.7	16	14,3	121	71.2	2.27	**0.33**
- 3-4	38	92.6	3	7.4	41	24.1		
- ≥ 5	6	75	2	25	8	4.7		
3. Income								
- > Regional Minimum Wage	91	92.8	7	7.2	98	57.7	5.80	**0.016****
- < Regional Minimum Wage	58	80.5	14	19.5	72	42.3		
4. Employment								
- Employed	45	84.9	8	15.1	53	31.2	0.53	**0.47**
- Unemployed	104	88.8	13	11.2	117	68.8		
5. Access to Media								
- 1-2 kinds	77	81.9	17	18.1	94	55.3	6.38	**0.012****
- > 2 kinds	72	94.7	4	5.3	76	44.7		
6. Religion								
- Islam	142	87.1	21	13.9	163	95.8	1.02	**0.31**
- Hindu	7	100	0	0	7	4.2		
7. Knowledge on Contraceptive Method								
- > 6 methods								
- 4-6 methods	94	89.5	11	10.5	105	61.8	1.00	**0.60**
- 0-3 methods	51	85	9	15	60	35.3		
	4	80	1	20	5	2.9		
8. Husband's Approval								
- Approved								
- Disapproved	143	91.6	13	9.4	156	91.8	28.27	**0.000****
	6	42.8	8	57.2	14	8.2		
9. Contraceptive method use status								
- Never used								
- Ever used	39	76.4	12	23.6	51	30	8.40	**0.004****
	110	92.4	9	7.6	119	70		

Note: *** highly significant at the level of $p < 0.001$, ** significant at the level of $p < 0.01$, * significant at the level of $p < 0.05$

The results of the bivariate analysis using chi-square test showed that the variables significantly related to the event of unmet need were income, access to media, status of past contraception use, and husband's approval ($p < 0.05$). Meanwhile, the other variables including age, education, priority, occupation, religion and knowledge did not leave any significant impact on unmet need.

Table 4.4 Results of Multivariate Analysis using Logistic Regression

Selected Variables	x^2	P Value	OR
Access to media	6.38	0.012	3.53
Husband's approval	28.27	0.000	0.61
Status of contraception use	8.40	0.004	4.32

The variable of income is excluded for having OR the nearest to 1, which is 0.069

The variables that influenced the event of unmet need were access to media providing information on family planning, husband's approval and status of contraception use. The strength of the correlation can be seen from the OR values (EXP{B}). The strength of the correlation from the biggest to the smallest is status of contraception use (OR = 4.32), access to media (OR = 3.53) and husband's approval (OR = 0.61).

The results of this research are consistent with the results of research conducted in East New Delhi.[6] Based on the research subject classification by monthly family income, the highest unmet need was on women with income per capita lower than 30.8 percent. There was a significant influence between the income level and unmet need ($p = 0.014$).[6] Unmet need occurs when "cost of children" increases and the contraception price is affordable for some of the population. Women want and use contraception. However, not all Women can afford the contraception service. Some of the population having low income cannot afford the contraception service.[7]

At this stage, improvement in socioeconomic condition does not necessarily result in fertility number decrease. Rather, it increases the natural fertility but with lesser increase. Meanwhile, the "cost of children" rise and contraception price drop drive more people to use contraception compared to previous years, making fertility dependent on both matters. If the impact of socioeconomic improvement on natural fertility is smaller than the impact of contraception use, the fertility will decrease.[7]

The research conducted in Nigeria by Catherine Ogwuche (1999) shows that the access to mass media has a significant influence on the event of unmet need. New assumptions and hopes spread through communication media provide discussion legitimation on family planning.[8] There are discussions that previously were deemed taboo to be brought in public, for example the discussions on reproduction health. With television and radio broadcasts, the sense of shame from talking about family planning with friends or family members may be reduced. The broadcast of family planning programs via mass media is relatively effective in its function of spreading knowledge and innovation process as well as decision making, whereas interpersonal communication channels are more effective in its persuasive function.[9]

Husband's approval for the use of contraceptive method is the variable that had extremely significant influence on the event of unmet need. The influence of household and community environment could be very strong that they blur one's desire and norm in the community. Normally, one's social environment has a strong influence on the decision

making in relation to contraception use. For example, many Kenyan women when asked about their reasons of using certain method of contraception said that their decision of using or not using contraception as well as the reasons behind that decision were dependent on their husbands' wish.[10]

The status of contraceptive method use had an extremely significant influence on the event of unmet need (p = 0.004, p value < 0.05). According to the research conducted in Delhi some women who had never used any contraceptive method had several reasons for not using contraception, including the fear of side effects caused (75.5 percent), not understanding how to use contraception (43.7 percent), religious reason (31.85 percent), lack of knowledge (25.92 percent), family members' disapproval (14.07 percent) and husband's disapproval (8.88 percent). Although women with unmet need, in fact, wanted to postpone or limit number of births, but due to some reasons, they had never used any contraceptive method, which highly influenced the increase in number of unmet need directly causing TFR increase and indirectly influenced AKI because of unsafe abortion resulted from unintended pregnancy.[11]

CONCLUSIONS AND RECOMMENDATION

The variables influencing the event of unmet need are access to media providing information on family planning, husband's approval and status of contraception use. The strength of the correlation can be seen from the OR value (EXP{B}). The strength of correlation from the highest to the smallest are the status of contraception use (OR = 4.32), access to media (OR = 3.53) and husband's approval (OR = 0.61). The improvement and betterment of the method of counselling on contraception should be carried out by service providers. Proper counselling should be given not only to women but also their spouses so that the decision of using contraception is taken jointly and in order to increase women's role in decision making. Counselling should be given not only during postpartum period but also during antenatal care, giving the couples a clear understanding on contraception as early as possible. A collaboration between the government and local mass media in broadcasting programs, advertisements, or talk shows on contraception with regard to the conception process and women's reproduction health with interesting, easy to understand show concepts is needed.

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P-04

Knowledge of Mothers about Nutrition with Nutritional Status of Children Aged 1-5 Years

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ABSTRACT

One of the factors that affect the nutritional status of children is the mother's knowledge. Knowledge required for the application of the provision of food for the nutritional needs so that the nutritional status of children is known. The purpose of this study was analyze the correlation between nutrition knowledge of mothers about nutrition with nutritional status of children aged 1-5 years in Kedawung Village. The research used cross-sectional design, that the subject is mothers who have children aged 1-5 years. The independent variable is the knowledge of mothers about nutrition and dependent variables is the nutritional status of children aged 1-5 years. The instrumen are use questionnaire, WHO table, and measurment body weight. Total population is 369 children, with proportional sampling techniques and random sampling found 74 respondens and their children as the sample. Data collected by questionnaire and analyzed using the Spearman rank correlation test. The results show respondents have sufficient knowledge about children nutrition is equal to 44.59%. While most respondents children have good nutrition (81.08%). With the Spearman Rank test results obtained ρ = 0,5 with t formula is t value (4,9) > t table (1.993), then Ho is rejected it means there is a correlation between nutrition knowledge of mothers about nutrition with nutritional status of children aged 1-5 years in Kedawung village Ngadi health center. The conclusion is obtained that the better knowledge of the mother's so nutritional status of children will be close to normal. It's therefore suggested to provide information about nutrition.

Keywords : Children, Knowledge, Nutritional Status

BACKGROUND

Knowledge is the result of sensasion one of object. Knowledge is the result of understand something, and this occurred after the people perform sensing on a specific object. Sensing occurs from human senses, the senses of sight, hearing, smell, taste and touch. Most human knowledge is obtained through the eyes and ears. Knowledge is something that is known to be associated with the learning process.[1]

Nutrition is a process organisms use the food that consumed normally through the process of digestion, absorption, transport, storage, metabolism and elimination of substances that are not used to sustain their life. Nutritional status is an expression and balanced in the form of specific variables or form of nutriture in specific variables.[2]

Aged 1-5 years are an important period for child grow up. If the toddler food intake is not enough of nutrients and this situation lasted a long time, will result in metabolic changes in the brain, so that the brain is not able to function normally. When malnutrition is still on going and increasingly, it will cause stunted growth, the body is smaller. Besides malnutrition, it cause delays of motoric grow up, some case cause child be emotions, bad behavior. Emotional disturbances interrupt the child's behavior manifestation of the child's behavior such as damage to goods, disrupting sister, rolling, stammering and bedwetting.

During 2012, Health Department of Kediri has take action to improve the level of growth / nutritional. Based on the distribution of cases of malnutrition and malnutrition among children under five are the most common cause of cases because of poor parenting as much as 72.5%. Among them is because toddlers are not taken care of directly by the mother / deposited, hygiene sanitation is lacking, giving solids early, children under 2 years are not given good breast feeding and the eating of toddlers is not appropriate. The second, its because of under growth baby 15.4%, the third because of infectious diseases 4.4% and the fourth is gemeli with a percentage of 2.2%.[3]

Based on monthly report data on the nutritional in Kediri regency, explained that the nutritional situation in each region is different. Some 8.83% (263 infants) in Health Center of Ngadi experiencing less body weight, 2.28% (68 infants) were very less body weight. Some 12% (169 infants) in Health Center of Ngadi experiencing less body weight, 2.83% (40 infants) were very less body weight. Some 12.5% (309 infants) in Health center of Kepung experiencing less body weight, 1.01% (25 infants) suffered severely lacking body weight. Some 7.06% (100 infants) in Health center of Plosoklaten experiencing less body weight, 2.30% (32 infants) were very less body weight. Some 9:09% (96 infants) in Health center of Pelas experiencing less body weight, 1.13% (11 infants) were very less body weight.[3]

Results of Introduce studies in health centers of Ngadi explain that Kedawung village has the higher number of infants with malnutrition than other villages. More than 27 infants with malnutrition. Based on the phenomenon that researcher want to research about the correlation between knowledge of mothers about nutrition with nutritional status of children aged 1-5 years in kedawung village ngadi health center working area.

METHODS

The study used cross sectional design. Survey is a cross sectional study to study the dynamics of the correlation between risk factors with effects, with the approach, observation or data collection at once at a time.[4] The data collection is done at once at a time / the same time, collection knowledge of mothers about nutrition data and measured children weight to know the nutritional status.

The population in this study are all mothers who have children aged 1-5 years and their child in kedawung village 2014 a number of 369 children. The sample consisted of affordable segment of the population that can be used as research subjects through sampling.[5] The size of the sample is determined by, if a large population of ≤ 1000, the samples can be taken 20% - 30% .[5] Then: 369 x 20% = 73.8 = 74. The sample used in this study are some mothers who have children aged 1-5 years and their babies as much as 74 mothers and babies in kedawung village ngadi health center working area.

The sampling technique used is proportional sampling is to obtain a representative sample, making the subject of each region is determined balanced in proportion to the number of subjects in each area.[6] Furthermore, to obtain an adequate sample proportionally then stratified sampling conducted are use strata sampling technique.[7] In this study, a sample of each posyandu will at random again using a technical randomly (simple random sampling), writing all children are there, then drew members (lottery technique).[3] Thus the way they were taken, when the number one has been taken, it needs to be restored again. If you have taken out again, be deemed invalid and returned again.[8]

Criteria for inclusion in this study are mothers who ready to be respondents and mothers who can read and write. Exclusion criteria in this study are mothers who have children at the time of a child's weight is sick, mothers who at the time of the study were not in the village / traveling in a long time, mothers and children who have been registered in the lottery but did not come on when weighing took place. The research are took place in kedawung Village at June 17 to July 17, 2014. This research analysis of the proportion or percentage, by comparing the distribution of a cross between two variables concerned. After that, analysis of the results of statistical tests, which test Spearman Rank Correlation for two variables were related or correlated and scale of data both ordinal scale.

RESULT

1. Knowledge of mother about Nutrition

The results of a questionnaire abaut Knowledge of mother about Nutrition:

Table 1: Distribution Knowledge of mother about Nutrition

	Category	Frequency	Percentage
1.	Good	24	32,43%
2.	Enough	33	44,59%
3.	Less	17	22,98%
	Total	74	100%

Based on Table 1 can be explained that half of the respondents have enough knowledge about the nutritional up to 44.59%.

2. Children Nutritional Status

Nutritional status of infants weighing results with the values in the WHO tabel:

Table 2: Distribution of Toddler Nutritional Status

	Category	Frequency	Percentage
1.	More Nutrition	1	1,35%
2.	Good Nutrition	60	81,08%
3.	Less Nutrition	13	17,57%
4.	Malnutrition	0	0
	Total	74	100%

Based on Table 2 it can be explained that the majority of respondents have a good nutritional status (81.08%).

3. The correlation between knowledge of mothers about nutrition with nutritional status

Knowledge of mothers about nutrition with nutritional status of children aged 1-5 years in kedawung village ngadi health center working area is:

Table 3: Cross Table between knowledge of mothers about nutrition with nutritional status

	Nutritional Status				
Knowledge	More Nutrition	Good Nutrition	Less Nutrition	Malnutrition	Total
Good	0	23 (31,08%)	1 (1,35%)	0	24 (32,43%)
Enough	1 (1,35%)	27 (36,49%)	5 (6,76%)	0	33 (44,60%)
Less	0	10 (13,51%)	7 (9,46%)	0	17 (22,97%)
Total	1 (1,35%)	60 (81,08%)	13 (17,57%)	0	74 (100%)

Based on Table 3 cross table between mother knowledge about nutrition with nutritional status almost half of the respondents have enough knowledge and had a toddler with good nutritional status (36.49%).

Based on calculations using Spearman correlation test with a standard error of 5% (0.05) of the obtained results of calculation t = (4,9). Then t is compared with t table with df = n-2 is obtained t (4.9)> t table (1.993), then Ho is rejected and H1 accepted, meaning that there is a correlation between knowledge of mothers about nutrition with nutritional status of children aged 1-5 years in kedawung village ngadi health center working area.

DISCUSSION

1. Knowledge of mothers about nutrition in kedawung village ngadi health center working area

Almost half of the respondents have enough knowledge about the nutritional up to 44.59%. Up to 33 people from the respondents have enough knowledge about nutritional, 24 other people already have a good knowledge and 17 others have less knowledge about nutritional. From 74 respondents almost a half of the respondents have enough knowledge about toodler nutrition. Most respondents did'n know what is nutrition. Only 21 respondents who could answer the questions properly. For about 33 respondents have enough knowledge, and 25 respondents do not understand the nutritional very well.

Mother knowledge about nutrition is still quite enough, the data reveal that most respondents still low knowledge about balanced nutrition for toddlers. Note that from 33 respondents who have enough knowledgeable, there are 29 respondents do'nt understance balanced nutrition for toddlers. Based on the situation, its mean that some respondents not understand what a balanced nutrition yet, because the first stage of knowledge is know, with do'nt know what is nutrtion, of course, its will makes lees knowleadge understanding. most respondents also do'nt understand to preparation of menus for toddlers precisely. There are 33 respondents who are knowledgeable enough, 25 respondents have not understood yet how to prepare the right menu.

Most women do'nt have a good knowledge to prepare the right menu. Especially in presentation and replacement of their meals for toddlers every day. Most respondents to replace the menu of food after their servings. So, the food served in less varied. Less of knowledge on preparation menu can be affected from their experience in application of menu. Its can be detected from the majority respondent have one toddler only. Knowledge is a way to acquire knowledge of truth by repeating back the acquired knowledge in solving the problems facing the past.[1]

Based on the characteristics that have been obtained from each respondent, many factors that influence the differences in the level of knowledge respondents. For example,

factors maternal, education, work and the resources that have been obtained. Based on knowledge is quite could be due to one factor that is of the mother's education level. More than 50% education of respondents are junior school, but 33 respondents who have enough education that most of the respondents are from the class of elementary school graduates. It could have been a supporting factor, because education is one of the supporting height of knowledge. In addition other factors affecting the lack of experience regarding the fulfillment of food marked with nearly 50% of respondents who are knowledgeable enough to have one toddler.

One of the factors that can influence the level of knowledge is age. Majority (63) of respondents aged 20-35 years (85.14%), its mean that respondent majority are adult , so they have mature process of think., more and more information about the arrests add to his knowledge. Then, based on the nutrient information, most respondents had the information about the nutritional (79.73%) yet. They have it from television, midwife etc. From many variation knowleadge of respondent about nutrition, there are many factor that corelation each other. Therefore knowledge of mothers in the kedawung vilage are variation because the different characteristics of respondent.

2. Nutritional Status of Children Ages 1-5 Years in Kedawung village,Ngadi healt center working area.

Based on the results from 74 toodler who to be respondents, most toddlers have good nutrition (81.08%). One way to know the nutritional status can be measured by weighing a toddler. The same age do not necessarily get the same weighing anyway. Many factors inside and outside affecting the nutritional status of children, as the number and quality of the food, infant health, economic level, education, behavior, (parent / caregiver), social, cultural or habits and the availability of food.[9] Nutritional status is an expression and a state of equilibrium in the form of specific variables or embodiment of nutriture in the form of specific variables.[10]

Based on the number of children can be explained that more than 50% of respondents have one child (60.82%). The number of families also influence of nutrition. Members of family is oneinfluence factor of nutritional problems. Lot of children in the family, can influence educed attention and affection to the children.[8] Another factors for example the number of children who owned more than 50% of respondents are of the children (60.82%) so she can focus on providing attention to the toddler. Another factor that the majority of infants receive care from both parents. It is possible attention and close interaction between children and parents can be a good factor for children growth.one of the main goals of parenting is to facilitate a child to develop skills in line with the stage of development. Upbringing of children is one of the basic needs of children's growth and development, mother and child interaction closely as an indicator of the quality and quantity of the mother's role in parenting.[8]

3. The correlation between knowledge of mothers about nutrition with nutritional status of children aged 1-5 years in kedawung village ngadi health center working area.

The calculation of Spearman correlation test with a standard error of 5% (0.05) then obtained by calculating the value of t = 4.9> t table = 1.993, then the t count > t table means H0 is rejected or there is a correlation between knowledge of mother about nutrition with nutritional status children aged 1-5 years in Kedawung village. The results of bivariate analysis to determine the correlation knowledge of mothers with toodler nutritional status can be seen

that there are 23 respondents (31.08%) who have a good knowledge of having a toddler with good nutritional status anyway. Up to 27 respondents (36.49%) who have enough knowledge have a toddler with good nutritional status. Moreover 7 (9.46%) of respondents who have less knowledge also had a toddler with malnutrition status.

It is known that the respondents who have a good knowledge and also had a toddler with good nutritional status almost 50% of respondents already have a good knowledge about balanced nutrition and meal planning is right for babies. Also that respondents who have less knowledge and also had a toddler with less nutritional status of the majority of respondents have less knowledge about balanced nutrition and meal planning is right for babies.

Knowledge of good nutrition will certainly make good nutritional status anyway. Having knowledge about balanced nutrition is good, will bring an attitude to draw up a toddler with proper diet and varied. Basically knowledge will bring the attitude and form of behavior to act in toddler nutrition. So a good knowledge allow to have a good nutritional status as well.

Less of knowledge of mothers about nutrition can make a mother's behavior in regard toddler nutrition becomes less than the maximum. Surely it would be different to that already have a good knowledge. The majority of respondents who have less knowledge and had a toddler with malnutrition status, they are less good in preparing the menu for the toddler. Most provide the same diet for babies. In addition, respondents did not know the principles of balanced nutrition is the basis toddler toddler nutrition.

The factor of malnutrition in children under five year does not mean that their mother did not give much food for babies. But with the less of knowledge, the attitude of mothers in selecting, processing and serving food for toddlers become less true that the nutrients contained in the food decreased. Based on the analysis of multiple logistic regression showed that the mother's nutrient knowledge and attitude of maternal nutrition affects the nutritional status of children, knowledge variable maternal nutrition is the factor most strongly linked to the nutritional status of children, it is indicated with regression coefficient greater than the variable coefficients nutrition attitude.[8] Another thing that needs attention from the research is that there is one person of respondents (1.35%) who have a good knowledge but had a toddler with malnutrition, one of the respondents (1.35%) having sufficient knowledge had a toddler with more nutrition. Besides the 10 respondents (13.51) who have less knowledge can have a toddler with a good nutritional status.

Based on data obtained from the study, the presence of the respondents with good knowledge yet have the status of malnutrition caused due to other factors that cause different conditions than expected. This condition is due before sick toddler. But when weighing already healthy again. This caused the weight loss nutritional status of children under five become less. Besides weight gain relatively little each month can also make a consideration of why it happened. Other things, the presence of the respondent with sufficient knowledge but has better nutritional status due because the toddler has had weight relative fat from entering the age of five. Weigh recorded in 2014, that the respondents also have better nutritional status. It can also be influenced by genetic factors, could be due to the mother of a toddler also always have a relatively more weight.

In other side, there are respondents who have less knowledge but have toddler with a good nutritional status. It's because of the respondents there are cared for by a nanny that does'nt good knowledge so that services maximum. In addition, the routine to come Health Fasility where possible weigh midwife attention to the toddler be monitored nutritional status. It is influenced by several factors. There are amount and quality of food, infant health,

(presence or absence of disease). The external factors are influenced by the level of economic, educational, behavioral, (parent / caregiver), social, cultural or habits, the availability of food in the household.[7] The genetic factors are also the main capital in achieving the results of the growth process.[12]

The results showed the correlation between knowleadge of mother about nutrition with nutritional status. The better knowledge of mothers about nutrition, nutritional status of children will be closer to normal. Nutrition is important in making the mother's attitude, which will bring the behavior to provide good nutrition for babies. Mother knowledge about nutrition will make mothers more aware of the nutrients it needs child. The good knowledge of the mother will cultivate good behavior for food processing, serving and storing food so that nutrients contained not lost.

CONCLUSIONS

Knowledge of mothers about nutrition of children aged 1-5 years in Kedawung village Ngadi health center working area almost half of the respondents is enough. The majority of nutritional status of children aged 1-5 years in Kedawung village Ngadi health center working area are good. There is a correlation between knowledge of mothers about nutrition with nutritional status of children aged 1-5 years in kedawung village ngadi health center working area.

RECOMMENDATION

For Further Research, hope can develop this research about correlation between knowledge of mothers about nutrition with nutritional status of children. For Researcher, its can given this information is expected to mothers who have children can improve her knowledge about toddler nutrition. Its need the active role of medical workers to make promotif methods such as creating banners, leaflets as well as the promotion of health education in order to provide information on nutritional, so that people can know the information well.

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P-05

STUDY OF MOTHERS CHARACTERISTICS AND BEHAVIOR IN FAMILY NUTRITION AWARENESS IN AMBARKETAWANG, GAMPING, SLEMAN

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ABSTRACT

Indonesia still has many malnutrition problems, such as less of vitamin A, iron deficiency anemia, and less iodine disorder. One of government Efforts to tackle problems of malnutrition is increasing nutritional status of household through family nutrition-awareness program. In Sleman percentage of Kadarzi is 65% and in Ambarketawang is 90.89%. This research aims to know characteristic of mothers (education and job) and family behavior in applying Kadarzi. This is descriptive research include observational research with *cross sectional* study design. 36 families in Ambarketawang, Gamping, Sleman were chosen as samples of research. Data were collected by interviewing mothers using a questionnaire and Iodine test. 52.8% families did not apply Kadarzi family behaviors. Reviews those were weighing toddlers regularly, giving exclusive breastfeeding and consuming various foods. Achievement of Kadarzi behavior in families with highly educated mother was higher than families with a mother who had basic education, as well as in families that did not apply Kadarzi well. Achievement of Kadarzi behavior in families with house-wife mother was higher than a working mother, as well as in families that did not apply Kadarzi yet.

Keywords: Education, Job, Mother, Kadarzi behavior

BACKGROUND

In Indonesia there's also the problem of nutrition. Such as malnutrition, lack of vitamin A, iron deficiency Anemia (AGB), Less Iodine Disorders (GAKI) and obesity. Nutritional problem becomes one of determining the quality of human resources. These nutritional problems occur during life cycle begins in the womb (fetal), infant, child, adult and elderly. If early in life toddlers do not aware the importance of nutrition behavior, then it may interfere with the growth and development positively and can reduce health condition [1.]

Riskesdas 2013, from 33 provinces in Indonesia Yogyakarta has a percentage of underweight children based on body weight for age is 16.2% [2.]. In Sleman district contained 4.29% underweight children consist of 0.37% malnourished children and 3.92% children with malnutrition. The prevalence of malnutrition in Sleman comparatively low, but it is still a problem for public health [3.]

According to Law No. 17 of 2007 on the National Long-Term Development Plan of 2005-2025, one of government's efforts in addressing issue of nutrition is to improve human resource development, improving public health and nutrition through improved nutritional status of family, by increasing nutrition services through Family Nutrition Aware (Kadarzi) [4.] From 2 villages in Gamping I Public Health Center (PHC), percentage of Kadarzi is various in Ambarketawang and Balecatur .Based on preliminary survey, achievement Kadarzi in Ambarketawang is quite high, but 3.5% of children 0-23 months are under red line (BGM) and 2 infants suffered malnutrition[5.] This study aims to know mother's characteristics (education

and job) and family behavior in applying family Nutrition Aware (Kadarzi) in Ambarketawang Gamping Sleman.

METHOD

This is an observational research with descriptive and using *cross sectional* design. This research was conducted in Ambarketawang, Gamping Sleman on May-June 2016. Population was all family of children who live in Ambarketawang, Gamping Sleman. Sample were chosen using *cluster random sampling* based on location of north and south sides Geographically from Wates street, then selected six hamlets of area as a place of a study and randomly selected sample of six hamlets. Samples in this study are 36 families of toddlers. Criteria families as sample are family with a toddler who lived and cared by mother.
Variable in this research include mother's Characteristics (Education and Job), Achievement Kadarzi, Families behavior in; weighing infants regularly, exclusive breastfeeding in infants, varied food consumption, use of iodized salt, and giving vitamin A in infants. Data was collected through interviews using questionnaires and tests iodine. Instrument used in this study are stationery, Approval After Explanation (PSP), *informed consent,* questionnaires and tests iodine. Data were analyzed descriptively in a frequency distribution table.

RESULTS AND DISCUSSION

Research Location

Ambarketawang located in Gamping, Sleman, Yogyakarta with an area of 6,358,975 m^2 and consists of 13 hamlets; Mejing Lor, Wetan Mejing, Mejing Kidul, Gamping Lor, Gamping Tengah, Gamping Kidul, Patukan, Bodeh, Tlogo, Depok, Kalimanjung, Mancasan and Watulangkah.

Table 1. Distribution of Population Ambarketawang based Education

Education	Population (people)	%
Can't read and write	7	0.07
Not completed primary school	307	3.04
primary school	1701	16.85
junior high school	1738	17.21
Senior high school	5259	52.08
High school	1085	10.75
Total	10 097	100

Source: Profile Ambarketawang 2014

Table 1 shows most of population in Ambarketawang completed senior high school 52.08%, junior high school 17.21%, 16.85% finished primary school, graduated from high school 10.75%, 3.04% did not complete primary school. While at least that 0.07%. people can't read and write

Table 2. Distribution of Population Ambarketawang based on Job

Work	Population (people)	%
Farmer	206	12.75
Farm workers	269	16.66
PNS / TNI / Police	672	41.61
Self Employed / Traders	147	9.10
Private employees	321	19.88
Total	1615	100

Source: Profile Ambarketawang 2014

Table shows job of population in Ambarketawang most of them as PNS / TNI / Police 41.61%, private employee 19.88%, 16.66% farm workers, farmers and 12.75% and entrepreneur / trader 9.10%.

Characteristics of Respondents Research

Table 3. Distribution of Respondent Based on Education

Education	Frequency (n)	Percentage (%)
higher education	28	77.8
basic education	8	22.2
Total	36	100.0

Sources: Primary data 2016

Table 3 shows majority (77.8%) of mothers have higher education that have completed high school and graduated from university and 22.2% mother who have with basic education that graduated from elementary school and junior high school graduation. Education is a learning experience that aims to influence knowledge, attitudes and behavior [8]. Relation low parental education will lead to limited understanding of nutritional health problems [8].

Table 4. Distribution of Respondent Based Jobs

Work	Frequency (n)	Percentage (%)
Work	14	38.9
Does not work	22	61.1
Total	36	100.0

Sources: Primary data 2016

Table 4 shows the majority (61.1%) of mothers did not bekarja or as housewives and mothers are 38.9% work. Works included in source of family income, where a family with a regular job would be relatively secure earnings every month. If families do not have a regular job, then family income each month can't be ascertained. Works closely related to salary received, higher position leads their higher salary to meet food needs of family [9].

Someone who has a job with a pretty solid time will affect to carry her children. One of them is level attendance in Posyandu. In general, parents do not have free time to take their children, so higher activity of job lead difficult to come to Posyandu [10].

Family Behavior in Implementing Nutrition Aware Family

Table 5. Distribution of Achievement Kadarzi Based on Hamlet

Village	Implementation				Total	
	Kadarzi		Not Kadarzi			
	n	%	n	%	n	%
Gamping Kidul	3	50.0	3	50.0	6	100.0
Gamping Lor	2	33.3	4	66.7	6	100.0
Gamping Tengah	2	33.3	4	66.7	6	100.0
Mancasan	3	50.0	3	50.0	6	100.0
Mejing Lor	3	50.0	3	50.0	6	100.0
Tlogo	4	66.7	2	33.3	6	100.0

Sources: Primary data 2016

Table 5 shows the highest achievement Kadarzi in hamlet Tlogo (66.7%). While the lowest target on village Gamping Lor and Gamping Tengah (33.3%). Data were taken from two areas, north side of Wates Street (hamlet Gamping Tengah, Gamping Lor and Mejing Lor) and south side of Wates Street (hamlet Gamping Kidul, Mancasan and Tlogo). This result suggests that achievement Kadarzi in north side of Wates Street is lower than south side. South side is southern region Ambarketawang area of Gamping hills or mountains.

Table 6. Distribution of Achievement Kadarzi Ambarketawang

Parameter	Frequency (n)	Percentage (%)
Not Kadarzi	19	52.8
Kadarzi	17	47.2
Total	36	100.0

Sources: Primary data 2016

Table 6 shows majority (52.8%) have not implement behavior Kadarzi families and 47.2% of have applied Kadarzi behavior. This is consistent with research on assessment of knowledge and behavior about Kadarzi mother, with result that sample studied shows results of achievement of family behaviors that have applied behavior Kadarzi lower than families that have not implemented behavior Kadarzi [11].

Kadarzi achieved by applying a minimum of five indicators. If one of the five indicators have not been done, family can't be categorized as Kadarzi [12].Kadarzi families who have a family that has not been able to identify and address nutritional issues family members. Attitude and practice of the family has not been guided by a balanced nutrition and healthy behavior. This can lead to problems of nutrition and health in the family. Such as growth disorders toddler, Protein Energy Malnutrition (PEM), Less Iodine Disorders (IDD) and Lack of Vitamin A (KVA).

According to Law No. 17 of 2007 on the National Long-Term Development Plan of 2005-2025, one of the government's efforts in addressing issue of nutrition is to improve human resources development, improving public health and nutrition through improved nutritional status of families, one of them with programs of education on importance of family aware of nutrition to improve the nutritional status of family [4].

Family Behaviour Based Indicators Kadarzi

Table 7. Distribution of Family Based on Behavior Weighing Toddler Regularly

Weighing Weight Toddlers Regularly	Frequency (n)	Percentage (%)
Good	24	66.7
A Not Good	12	33.3
Total	36	100.0

Sources: Primary data 2016

Table 7 shows majority (66.7%) of families apply weighing toddlers regularly. In line with research about relationship of knowledge and behavior about Kadarzi mother factory workers with nutritional status of children under five, which shows that most of sample weighing implement a toddler on a regular basis [13.] However, these results have not yet reached target participation rate indicator (84%) toddlers come to Posyandu once a month (D / S) of Gamping I PHC, to improve achievement of participation is adding extension used media is using posters and flip charts to enhance participation and understanding of participants counseling about importance of monitoring children's growth through neighborhood health center, so the goal can be achieved [5.]

Monitoring children development can be done from birth until children reaches five years is by weighing on a regular basis. The rate of growth and development of children can be monitored through measurements of several physical dimensions, weight. The weight gain children can be shown within a month. Therefore, child must be weighing every month. If on a month children do not go up, it shows growth retardation children [8.]

Table 8. Distribution of Family Based Behavior Exclusive Breastfeeding

Exclusive breastfeeding	Frequency (n)	Percentage (%)
Good	23	63.9
A Not Good	13	36.1
Total	36	100.0

Sources: Primary data 2016

Table 8 shows majority (63.9%) have implemented family of exclusive breastfeeding in infants and only 36.1% of families who have not applied exclusively breastfeeding infants. This is consistent with research on assessment of knowledge and behavior about Kadarzi mother, that most of sample has implemented the behavior of exclusive breastfeeding in infants [11.] Result shows scope of Exclusive breastfeeding have not reach targets (80%). Need efforts to improve achievement Exclusive breastfeeding. [5.]

Table 9. Distribution Toddler Based Giving First Time Beverages / Food In addition to breast milk

Giving First Time Beverages / Food In addition to breast milk	Implementation				Total	
	Yes		No			
	n	%	n	%	n	%
0 months	3	8.3	33	91.7	36	100.0
1 months	4	11.1	32	88.9	36	100.0
2 months	4	11.1	32	88.9	36	100.0
3 months	7	19.4	29	80.6	36	100.0
4 months	9	25.0	27.0	75.0	36	100.0
5 months	13	36.1	23	63.9	36	100.0
6 months	34	94.4	2	5.6	36	100.0

Sources: Primary data 2016

Table 9 shows 8.3% toddlers are given drinks / foods besides breast milk at age of 0 months and there were 36.1% children has been given a drink / food other than breast milk in less than 6 months of age. Based on interviews, various problems faced by mothers so that they fail to provide exclusive breastfeeding to children between because milk that comes out is not smooth, busy mothers and their perception where situation of children who are always crying assumed hungry.

Food and drink other than breast milk given too early (less from 6 months) may endanger the health of infants. Food or drink (even water) is likely to carry germs that cause infections (diarrhea). In addition, provision of breast-milk substitutes too early can increase risk of children suffer from Protein Energy Malnutrition (PEM) because child's digestive system is not ready to process food[14.] Breastfeeding routine is recommended for babies from newborn until the age of 2 years, because no single man can milk exceed nutritional content of breast milk [15.]

Table 10. Distribution of Family Based Food Consumption Behavior Various

Food Consumption Behavior Various	Frequency (n)	Percentage (%)
Good	26	72.2
A Not Good	10	27.8
Total	36	100.0

Sources: Primary data 2016

Table 10 shows majority (72.2%) families have implemented diverse food consumption behavior and 27.8% families have not implemented a various food consumption. This is not fit with Octaviani about relationship of knowledge and behavior about Kadarzi labor mother with nutritional status under five, with result that majority (76.9%) have implement various food consumption [13.]

Consumption of a variety of foodstuffs for infants may warrant completeness necessary nutrients the body, because each food contains different nutrients sources in terms of type and number [1.] The age of first and second year after baby is born is a period where baby should be be given food regulated appropriately and correctly, so that child's needs can be met and child can grow and develop optimally. No food has a complete nutritional content, it is necessary to consume a various foods, nutritionally balanced and safe in order to fulfill nutritional adequacy of individuals to grow and develop [16.]

Table 11. Distribution of Family Based on Usage Behavior Iodized Salts

Behavior Usage iodized Salt	Frequency (n)	Percentage (%)
Good	36	100.0
A Not Good	0	0
Total	36	100.0

Sources: Primary data 2016

Table 11 shows behavior of families in implementing use of iodized salt for cooking which reach 100%. These results are in line with research on assessment of knowledge and behavior about Kadarzi mother, that all samples studied have implemented use of iodized salt [11.]

Behavior of iodized salt consumption is one effort to prevent Less Iodine Disorders (IDD). In addition, iodine in salt also has an important function for the human body [1.] Iodine deficiency is prolonged will disrupt function of thyroid gland that gradually causes enlargement of thyroid gland. In this case the fetus can get cretinism and death, case in children, adolescents and adults can cause goiter, hypothyroidism, and mental disorder. Successful achievement of behavior of the use of iodized salt is not out of the iodized salt program of the government, so that all salt that is distributed in Indonesia already contains iodine [17.]

Table 12. Distribution of Family Based Vitamin A Capsule Consumption Behavior in Toddlers

Consumption behavior of Vitamin A in Toddlers	Frequency (n)	Percentage (%)
Good	36	100.0
A Not Good	0	0
Total	36	100.0

Sources: Primary data 2016

Table 12 shows behaviors in giving capsules vitamin A in toddlers in previous year were optimal, reaching 100%. In line with research Melati et al (2014) study on knowledge and behavior about Kadarzi mother, that all samples implemented give vitamin A in infants [11.] The success of achievement behavior of consumption vitamin A supplementation showed a high awareness and willingness to make program successful distribution vitamin A supplementation in young children, pregnant women and role PHC and cadres of posyandu in support this program. Posyandu cadres have responsible to do home visit to under five if infants are not coming to Posyandu during month administration of vitamin A.

Vitamin A is an essential nutrient that can only be filled from outside the body. Vitamin A serves to prevent immune deficiencies that can lead to body vulnerable to infection. Lack of Vitamin A (KVA) is one of nutritional problems that frequently occur in Indonesia. As a result of vitamin A deficiency can cause night blindness and blindness. How to prevent and to treat vitamin A deficiency is consumption of foods contain high vitamin A, such as chicken liver, green vegetables and colorful fruits. Another way to do is giving high-dose vitamin A capsules, which is given to children every 6 months [16].

Educational attainment Kadarzi Based Respondent

Table 13. Distribution Kadarzi Based on Mothers Education

Mothers Education.	Achievement Kadarzi			
	Kadarzi		Not Kadarzi	
	n	%	N	%
higher education	14	82.4	14	73.7
basic education	3	17.6	5	24.4
Total	17	100.0	19	100.0

Sources: Primary data 2016

Table 13 shows that 82.4% families with highly educated mothers behave Kadarzi and 17.6% of families with basic education mothers. Achievement Kadarzi in family with educated mother can reach higher than basic education in mother. A person's behavior or public health is not only determined by knowledge (education), but is also determined by attitudes, beliefs, tradition of people or communities concerned. In addition, availability of facilities for health such as health centers, hospitals, nutritious food and money will support and strengthen formation of behavior [18].

Educational attainment Kadarzi Based Respondent

Table 14. Distribution Achievement Kadarzi Based Mothers Work

Mothers Work	Achievement Kadarzi			
	Kadarzi		Not Kadarzi	
	n	%	n	%
Work	7	41.2	7	36.8
Does not work	10	58.8	12	63.2
Total	17	100.0	19	100.0

Sources: Primary data 2016

Table 14 shows that 41.2% of families with working mothers do behavior Kadarzi and 58.8% of families with mothers who did not work do behavior Kadarzi. Achievement Kadarzi in families with mothers who did not work is higher than in families with working mothers. In general, families are busy with their work and don't have free time to carry out their children, so higher activity of job affect more difficult to come to Posyandu[10].

A person's health behavior is not only determined by knowledge (education), but also determined by attitudes, beliefs, tradition of people or communities concerned. In addition,

availability of facilities to increase health behaviors such as health centers, hospitals, nutritious food and money will also support and strengthen the formation of behavior [18].

CONCLUSION

1. Achievement Kadarzi in Ambarketawang is 47.2%
2. Achievement of family behavior in weighing infants regularly is 66.7%
3. Achievement of family behavior in exclusive breastfeeding of 63.9%
4. Achievement of family behavior in serving various food consumption is 72.2%
5. Achievement of family behavior in usage of iodized salt 100.0%
6. Achievement of family behavior in applying consumption of vitamin A supplements for under fives is 100.0%
7. Family with mother's higher education has greater achievement in Kadarzi than family with mother's lower education.
8. Achievement Kadarzi behavior in families with mothers who do not work is higher than mothers who do not working.

SUGGESTION

It is needed to improve counseling about importance Kadarzi especially on aspects of weighing and growth monitoring of children, exclusive breastfeeding and various food consumption.

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P-06

THE DEVELOPMENT OF CADRE'S PERFORMANCE WITH THE TRAINING OF NUTRITIONAL ASSESSMENT ON CHILDREN IN POSYANDU

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ABSTRACT

Background : The cause of toddler's nutritional problem is multifactorial, including the role of Posyandu is still lacking. The cause of the malfunction of one of them because of the ability of cadres in Posyandu are still low. Cadre plays an important role in the effort of optimizing nutritional status of toddler through nutritional status assessment activities.
Purpose : To provide knowledge and skills to cadres on how to assess nutritional status correctly, in order to improve the cadres's performance in malnutrition's screening process.
Method : Community service activities in the form of training is done in the hamlet Santan, Maguwoharjo, Depok, Sleman, with 7 cadres were participated. The training was using FGD (Focus Group Discussion) method with the topic of nutrition status assessment includes anthropometric measurements, anthropometric assessment, and toddler's intake.
Result : The activities run smoothly, participants discussed actively, sharing about how nutrition status assessment that had been done in Posyandu, as well as provide positive feedback by telling some of the nutritional problems found during the Posyandu. Participants can better understand how assess toddler's nutritional status and how to solve nutritional problems.
Conclusion : The attitude and behavior of Posyandu cadres in general is good, but there are still some obstacles, including lack of cadre's knowledge and skill in nutritional status assessment of toddler, lack of public awareness to participate in Posyandu activities, as well as the process of monitoring the growth of toddler which not maximal.

Keywords : Nutritional status assessment, toddler, cadres.

PRELIMINARY

In order to establish a fair and prosperous society, the development is done in all fields. Health development is an integral part of national development as a whole which should be encouraged[1]. One of the goals of the Sustainable Development Goals (SDGs), which was agreed by 193 countries in the world in August 2015 was in terms of alleviation of hunger, include ending hunger, achieve food security and nutrition improvement, and promoting sustainable agriculture.

WHO data on year 2002 show that each year approximately 11 million toddler worldwide die from infectious diseases such as respiratory infections, diarrhea, malaria, measles, and others. Ironically, 54% of the deaths were related to the lack of nutrition. In 2004, Bappenas mentioned toddler mortality rate in Indonesia is the highest in ASEAN. Profile of Sleman District Health Office in 2014 shows the results of monitoring the nutritional status based on indicators Weight for Age (W/A) in Sleman with totally 56.071 toddlers appoint magnitude of nutritional problems in Sleman, namely malnutrition as much as 3.538 and severe malnutrition as much as 246.

The problem of malnutrition is generally caused by poverty, lack of availability of food, poor sanitation, lack of public knowledge about nutrition, the imbalance of diet and health.

Nutritional problems are caused by multifactorial, therefore in tackled effort must involve a wide range of related sectors, one of which is the role of Posyandu[2].

Posyandu is a real activities that involve community participation, from, by and for the people in the health care effort that carried out by cadres[3]. One of the causes of malnutrition in the community is the lack of a functioning social institutions in society, such as Posyandu, which resulting toddler nutrition monitoring is not working as it should. The weighing process of the toddler who should have as principal activity can only be a side activity[4].

The cause of the malfunction of Posyandu because of the ability of the cader which still low. Implementation of Posyandu once a month depending on the presence and encouragement of health workers and the activities of the health cadres. However the level of ability, thoroughness and accuracy of the data collected cadres still low, and 90% of cadres made a mistake. One mistake cadre of the most frequently encountered is the lack of skill on the weighing process technique[4].

Nutritional education and training on cadres in Posyandu with approach for weighing process and recording the growth of the toddler's weight at KMS and interpret KMS well, is the key to success of Posyandu[5]. Cadre plays an important role in the effort optimizing nutritional status of toddler through nutritional status assessment activities. Therefore, it is important to hold community service activities such as training of cadres about nutritional status assessment of toddler, in order to be success in malnutrition screening process especially on toddler.

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METHOD

This community service activities performed in the hamlet Santan, Maguwoharjo, Depok, Sleman, with 7 cadres participated. The activities carried out in the form of training of nutritional status assessment on toddler, which included anthropometric measurements (weight, height), assessment of nutritional status using the indicator W/A, H/A and W/H, as well as the assessment of nutritional status based on the intake of toddler.

The training was using FGD (Focus Group Discussion) method, ie, all the participants involved in discussions regarding the assessment of the nutritional status of toddler. With this method, each participant has an equal opportunity to argue and sharing each other's experiences for the improvement of the system implementation in the process of nutritional status assessment of toddler in the Posyandu in the Santan area. Topics covered may be developed in accordance with the existing problems when Posyandu is held.

RESULT

The activities run smoothly, participants discussed actively, sharing about how nutrition status assessment that had been done in Posyandu, as well as provide positive feedback by telling some of the nutritional problems found during the Posyandu, among others, the diet on cases of child obesity, the slowing of the growth process and development in childhood, cases of toddler with cancer and one kidney, malnutrition in the Santan area, toddler's diet, as well as preparation for Posyandu menu cycle.

Based on the evaluation of activities, Posyandu's cadres can better understand how ratings nutritional status of toddler and how to deal with the problems of nutrition in the Santan area. Participants asking for similar activities are held on an ongoing basis in order to improve their knowledge and performance while running role as volunteers.

DISCUSSION

Posyandu is a community center for health services among others include: (1) the family planning program, (2) nutrition program, (3) immunization program, (4) diarrhea prevention program, (5) maternal and child health program. Posyandu is a continuation of the park nutritional / postal weighing, which has been carried out by the PKK, and then fitted with a family planning health services. Posyandu is a social institution functioning as child growth monitoring[5].

In an effort to optimize the development of the child, should involve three aspects: nutrition, health, and parenting. The role of women in caring for and raising toddler is so important, so make education for women is especially significant[6].

Currently, there are various problems are arising in the implementation of Posyandu, among others: (1) only about 40% of posyandu be able to function properly, (2) the equipment is inadequate, (3) did not have a decent service, (4) the provide guidance to posyandu yet evenly distributed, (5) the coverage posyandu still low (<50%) and the majority are children under the age of 2 years, (6) almost 100% of mothers had heard posyandu, but were present at the posyandu activities less than half, and (7) do not have a sufficient cadre amount when compared with the target, or although the amount is sufficient but not active cadres[7].

Being a cadre is one form of participation as members of the community to improve efficiency on the basis of limited services in the operation of public health services. In general, the cadres are not professionals but merely assist in health care, where activities which can be performed cadres in Posyandu is carrying out the registration, carrying out a child's weighing process, recording the child's weight, provide counseling, and help provide services and refer.

The results of this public service activities in accordance with previous similar activities in the Kuok District that the characteristics of the trainees can be seen from the attitude and behavior of the overall show good results[8]. Nevertheless, there are still some obstacles in the process of determining the nutritional status of toddler during the Posyandu, including lack of knowledge and skill of cadres in nutritional status assessment of toddler, lack of public awareness to participate in Posyandu activities, as well as the process of monitoring the growth of toddler which not maximal.

Knowledge of cadres is the potentially sustainable in their role as a volunteer. The admission process will be a lasting new behavior when it is based on knowledge, awareness and positive attitude. The lack of knowledge and lack of experience are the main trigger of less active participation of health cadres. In addition, other triggers are the preoccupations of cadres in household affairs so that cadres could experience lacking on understanding and service skills, causing cadres to experience more less independent so it depends on health workers and community health centers. Therefore, during the Posyandu implemented, the role of cadres often do not function properly. Whereas reduction of malnutrition prevalence requires the accuracy, speed and thorough[9].

Lack of cadres role in monitoring the growth of toddler shows that the importance of health education to the cadre in monitoring the growth of toddler so that the growth and development of toddler can be monitored to obtain optimal results[10].

Health education can enhance the role of cadres in which the role with enough categories increased from 39.4% to 63.6% and a role in the poor category decreased from 51.5% to 24.2% 10. It shows that health education has a very big role in health care, including in this community service activities. With increasing knowledge of the cadres about nutritional

status assessment of toddler, is expected to enhance the role of the volunteer in the effort to address problems related to the nutritional status of toddler in the Santan area.

CONCLUSION AND RECOMMENDATION

The results showed that the attitude and behavior of Posyandu cadres in general is good, but there are still some obstacles, including lack of knowledge and skill of cadres in nutritional status assessment of toddler, lack of public awareness to participate in Posyandu activities, as well as the process of monitoring the growth of toddler which not maximal.

From these results, it can be suggested among other things the Government needs to do a variety of activities to stimulate, encourage and increase the participation of cadres Posyandu by providing incentives and rewards as motivation of cadres in carrying out various activities. Besides, it should also be trained on an ongoing basis in order to improve the knowledge and skills of cadres in carrying out its role and function as a cadre, especially in terms of nutritional status assessment, which is expected to achieve optimal health status in toddler.

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P-07

THE IMPACT OF PSYCHOLOGICAL TRAUMA ON VICTIMS OF TRAFFIC ACCIDENTS: Literature Review

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ABSTRACT

Background: Traffic accident is a traumatic event that not only cause physical trauma to the experience, but will also lead to psychological disorders such as post-traumatic stress disorder (PTSD). From these reasons, it will need to know how the effects of psychological trauma on victims of traffic accidents
Aim: The main objective of this study was to determine and identify the impact of psychological trauma in the form of post-traumatic stress disorder called Post Traumatic Stress Disorder (PTSD) victims of traffic accidents
Methods:. This study uses a method by applying a literature search through the English research articles published in journals between 2010 and 2015 were carried out. A computerized search of ProQuest, Science Direct and EBSCOhost databases is done by using the search term "psychological trauma in a traffic accident".
Results:the psychological impact of a traffic accident can cause symptoms such as nightmares, flashbacks, and / or recurrent and distressing memories of the traumatic event. Avoidance considering the trauma that happens, adverse changes in mood, cognition associated with trauma (eg, dissociative amnesia, loss of interest, and feelings of detachment), and significant changes in activity after trauma (outburst of anger is unwarranted, hypervigilance, and the response is exaggerated) the direct effects of acute psychological trauma including emotional as intense fear and helplessness.
Conclusion: The psychological impact of traffic accidents, better understanding and treatment efforts have not received maximal attention. The attention given to victims of traffic accidents are usually more focused on the handling of physical, psychological treatment while often gets the last priority.

Keywords: Psychological trauma, traffic accidents, impact.

BACKGROUND

Someone who experienced traumaticthings in life, such as traffic accidents are quite severe, can result in injury or settled temporarily in the body and may also have a physical disability to partial loss of limbs. Someone who previously was able to move with complete limbs and living independently, after an accident and have a physical disability, life becomes changed. Daily activities becomes blocked, limited and often become dependent on others. Traffic accident is a traumatic event that not only cause physical trauma to the experience, but will also lead to psychological disorders such as disorders post-traumatic stress or a so-called Post Traumatic Stress Disorder (PTSD) (8).

According to WHO, traffic accidents an estimated 1.2 million deaths worldwide in 2010. Ninety two percent of traffic accidents occur in countries with low and middle income East Asia and Africa have the highest rates. Meanwhile, according to data from the Central Statistics Agency (BPS), in 2012 the number of traffic accident victims reach 117 949 by the victim died as many as 29 544, 39 704 severe injuries and minor injuries as much as 128 312. According to the Australian Centre for Post-traumatic Mental Health In 2013, motor

vehicle accidents can cause psychological trauma to those who experience it, accounts for 13-25% of psychological trauma disorders caused by motor vehicle accidents. During the first months after the accident, PTSD rate varies between 16% and 41% of the data from evaluations conducted four months after the accident were approximately 40% and when the evaluation carried out six months after the accident, the rate of PTSD ranged from 6% to 26%. Twelve months after the accident, the rate of PTSD range from 2% to 30% (10). There are factors that have been identified to predict PTSD. Among these are the pre-crash factors and accidents, a factor pre-crash included socio-demographic factors such as age, sex, socio-economic factors, mental illness before, a road traffic accident earlier are the factors that influence the development of PTSD, the factors of accidents including impacts perceived influence led to the development of PTSD in victims (10).

Trauma management is multidimensional and very challenging task. The patients Traumatic events after a road traffic accident (RTA) is usually handled in the emergency room (ER) by the surgeon orthopedic or trauma trained in managing only physical injuries, while psychological problems not handled properly, resulting in a significant impact on the victims , the victim's family, and ultimately society as a whole. Psychological concerns, if not handled properly, can cause mental health condition is acute or chronic.

AIM

The main objective of this study was to review the literature to determine and identify the impact of psychological trauma in the form of post-traumatic stress disorder called Post Traumatic Stress Disorder (PTSD) victims of traffic accidents.

METHOD

This study uses a method by applying a literature search through the English research articles published in journals. A computerized search of ProQuest, Science Direct and EBSCOhost databases is done by using the search term "psychological trauma in a traffic accident". Literature qualified in the inclusion criteria is literature that focuses on the "psychological trauma in a traffic accident.

RESULTS AND DISCUSSION

Some studies suggest that there are gender differences in the psychological responses after MVA (motor vehicle accidents), and this study demonstrates the fact that women show psychological disorders more often than men, especially Acute Stress Disorder (ASD) and Posttraumatic Stress Disorder(PTSD). The samples studied are likely victims with and without severe injury and did not take into account the severity of the accident, which could explain the inconsistent results obtained. To evaluate the diagnosis of PTSD four months later and to analyze the predictive power peritraumatic dissociation and symptoms of ASD to explain later psychological disorders (PTSD)(10). According to(1); in the DSM-IV-TR (Diagnostic and Statistical Manual of Mental Disorders, 4th edition, text revision), has led the response involving fear, intense fear, or despair. Accidents resulting in pathological responses that involve a number of cognitive, psychological, and behavioral processes, including symptoms of numbness and avoidance. However, previous studies have questioned the DSM criteria for PTSD, with a lot of criticism about the usability criteria (5) recommendation.

Recent for DSM-V revision involves, or even the removal of a number of psychological problems of clinical significance have been associated with serious MVA, but the most consistent disorders reported among the victims were post-traumatic stress disorder (PTSD). The accident victim may feel fear, nightmares, and even hallucinations. NICE (National Institute for Clinical Excellence), (10), states that, in addition to these psychological symptoms, can also be accompanied by physical symptoms such as trembling and sweating are all symptoms lasted for at least one month after the occurrence of traffic accidents.The trauma that would interfere with daily activities, especially in terms of productivity and the need to socialize with other people will be disturbed. Not to mention the physical conditions of people with disabilities, the mobility would be hampered.

Meanwhile, according to (2) the psychological impact of a traffic accident can cause symptoms such as nightmares, flashbacks, and / or recurrent and distressing memories of the traumatic event. Avoidance considering the trauma that happens, adverse changes in mood, cognition associated with trauma (eg, dissociative amnesia, loss of interest, and feelings of detachment), and significant changes in activity after trauma (outburst of anger is unwarranted, hypervigilance, and the response is exaggerated) the direct effects of acute psychological trauma including emotional as intense fear and helplessness.

Handling of PTSD in addition to pharmacological treatment such as antidepressants and anti-anxiety, can also be dealt with using psychotherapy. Cognitive Behavioral Therapy (CBT) is a psychotherapy that combines behavioral therapy and cognitive therapy which is based on the assumption that human behavior is simultaneously influenced by the ideas, feelings, physiological processes and consequences on behavior. Psychotherapy approaches with methods Cognitive Behavioral Therapy (CBT) is said to be one of the treatment methods of psychotherapy are most effective in addressing PTSD (7). Meanwhile, according to the EMDR International Association, (2009) Eye Movement Desensitization and Reprocessing (EMDR) is a method that is scientifically validated gradual, integrative psychotherapy approach based on the theory of psychopathology caused by traumatic experiences or events that disrupt the journey of life. (6) states that EMDR treatmentproved to be the most consistently provide a positive effect to overcome the trauma. While stabilization techniques are part of EMDR therapy, but more emphasis on maintaining and restoring the basic functions of the individual after an interruption. The above data reveal the number of traffic accidents can result in psychological harm themselves victims of accidents both weight and minor accidents. Traffic accidents can result in psychological effects such as trauma, mental disorders on the victims or their families who are still alive.

CONCLUSION

The psychological impact of traffic accidents, better understanding and treatment efforts have not received maximal attention. The attention given to victims of traffic accidents are usually more focused on the handling of physical, psychological treatment while often gets the last priority. Assistance and recovery efforts of victims of traffic accidents should be done immediately, because this disorder if it continues will cause chronic disorders and will greatly disturb social life and work of the individual. Traffic accidents, especially those that resulted in serious injuries for most people is a severe traumatic experiences. Traffic accident victims is expected to overcome the psychological anxiety that may arise as a result of accidents suffered. However, not all victims of traffic accidents to emerge from traumatic experiences. This is caused by the way of meaning, respond to and cope with traumatic events and efforts to adapt to the problems differ from one person to another.

RECOMMENDATION

There needs to be a coordinated effort at the national level or the state's level for the strong trauma system to support victims of traffic accidents so as to reduce the psychological impact of the trauma.

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P-08

KNOWLEDGE CHARACTERISTIC CONCERNING LACTATION WITH BREASTFEEDING TECHNIQUE AMONG POSYANDU CADRE

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ABSTRACT

Health Data It is known that scope of Exclusive breastfeeding in Malang is 58,47%, this number is still low compared to national target of 80%. To obtain success in giving breastmilk for infant, it should be supported by good lactation management and good breastfeeding technique so that benefit of Exclusive breastfeeding could be gained. An active role of Posyandu cadres in contributing their mind and effort to improve community health is highly important. This study aims to investigate the characteristics of knowledge about lactation breastfeeding technique at the Posyandu cadres in Malang city, and the relationship with the attitude of cadres Posyandu knowledge about breastfeeding techniques. This study method was analytical survey with cross sectional approach. Sample was collected by simple random sampling technique. Total of sample is 50 respondents from total population of Posyandu cadres representing 5 districts in Malang. This study instrument was questionnaire and check list observation sheet. Data analysis was using Somers'd Correlation. Knowledge of Posyandu cadres regarding breastfeeding was mostly good (68%), attitude of Posyandu cadres regarding breastfeeding technique was still lacking (62%). There was no meaningful correlation between knowledge of Posyandu cadres and attitude regarding breastfeeding technique (p>0,05).This study proved that good knowledge among Posyandu cadres regarding lactation is still less supported by attitude of Posyandu cadres in giving explanation regarding breastfeeding technique. Therefore, we need to optimize extension and training by health personnel toward Posyandu cadres regarding lactation management.

Keywords: Posyandu cadres, Lactation, Breastfeeding technique

INTRODUCTION

Infant mortalityrate is one of health measure parameter in a country. Based on UNICEF data, infant mortality rate in the world would reach 4 million per year. In Indonesia until 2012, infant mortality still holds in 32 mortality per 1000 delivery. This figure was still far from *Millenium Development Goals* (MDGs) target with 23 per 1000 delivery [(1)] . After more examination, the main cause of infant mortality after birth and for infant under five years old would be no early breastfeeding initiation and exclusive breastfeeding. Lower number of exclusive breastfeeding has stimulated lower rate for infant and babies nutritional status. Giving exclusive ASI would be able to suppress infant mortality by reducing approximately 30.000 infant mortality in Indonesia and 10 million infant mortality in the world through giving exclusive breastfeeding for the first six month after birth without giving additional food or drink toward infant and babies.

Based on data from UNICEF, exclusive breastfeeding in Indonesia was still far from world average with only 38%. While according to SDKI, it show that number of babies who got exclusive breastfeeding has decrease to 7,2%, however for formulated milk the number is increasing to 27,9%. According to Dinas Kesehatan Malang, scope of mother who gave exclusive breastfeeding in Malang still about 58,47 %, this figure is still far from target figure

of scope exclusive breastfeeding in Malang which is 80 %, this number also become the target for scope of national exclusive breastfeeding. To gain success in giving breastfeeding for babies, it should be supplemented by good lactation management so that benefit of breastfeeding was optimized.

In an effort to increase utilization of breastfeeding it shows that key obstacle of breastfeeding utilization is lack of mother's knowledge about exclusive breastfeeding and breastfeeding technique. Exclusive breastfeeding and breastfeeding technique was generally assumed as ubiquitous and there was no need to learn about it. Lactation management or incorrect breastfeeding and other misleading myths have impede breastfeeding for infant [(2)]. Lower figure in success of exclusive breastfeeding has been influenced by several factors such as change in social culture aspect for example, working mother, thus infant was given food addition to breastmilk before 6 month old, and there was belief that formulated milk is more prestigious than breastmilk. Other factor that supports this lower figure is lack of support from the family or the surrounding environment to give exclusive breasfeeding for 0-6 months old [(3)].

Realizing the importance of community active role in supporting development success for health, it is in need for development agents that could raise people awareness to participate in development. People participation in health development with great role is as Maternal and ChildHealth Centre (PosPelayananTerpadu – Posyandu) Cadre [(4)]. Posyandu cadres generally volunteer from community figure that assumed to be more affluent than other member of the community [(5)].

Effort to improve role of community member would be through caderization system by training, extension, and guidance to raise independence and thus able to dig and use the available resources and to raise and solving problems for optimum service. For this purpose, we would need good health cadre, those who can contribute their mind and energy to improve community's health [(6)].

PURPOSE

This study aimed to discover relationship between knowledge of Posyandu cadre about lactation and breastfeeding technique in Malang. It was expected that result of this study could be used as cadre material to increase the scope of exclusive breastfeeding.

METHOD

Design in this study was using analysis survey and data collection was using cross sectional technique. This study was done to discover about relationship between Posyandu cadre knowledge concerning lactation with breastfeeding technique.

Sample was collected by *simple random sampling* technique. Total of sample is 50 respondents from total population of Posyandu cadres representing 5 districts in Malang(Klojen, Kedungkandang, Sukun, Blimbing, and Lowokwaru). Implementation was done by maintain the *privacy* and confidentiality of respondent.

Statistical analysis in this study would consist of univariate and bivariate analysis. Univariate analysis consists of: age, education, occupation, and duration/length when one become Posyandu cadre. Bivariate analysis in this study consists of cadre knowledge regarding lactation and breastfeeding technique. Statistical test was using correlation test from Somers'd.

RESULT AND DISCUSSION

Respondent Characteristic

Respondent characteristic of Posyandu cadre was taken from 5 districts in Malang (KecamatanKlojen, KedungKandang, Sukun, Blimbing and Lowokwaru). Respondent characteristic reviewed in this study consist of: age, education, occupation and duration/ length in becoming Posyandu cadre. Table 1 below illustrated respondent's characteristic of Posyandu cadre in Malang.

Table 1: Respondent Characteristic of Posyandu Cadre in Malang for July – September 2014

No	Respondent Characteristic	N	%
1	Age Range		
	< 30 years old	0	0
	30 - 40 years old	6	12
	40 - 50 years old	18	36
	> 50 years old	26	52
2	Education Level		
	Primary school	9	18
	Junior High	4	8
	Senior High	26	52
	Higher Education	11	22
3	Occupation		
	Housewives	46	92
	Private	4	8
4	Duration as Cadre		
	< 5 year	9	18
	5 - 10 year	9	18
	> 10 year	32	64

(N=50)

Table 1 above has illustrated respondent characteristic of Posyandu cadre who participated in this study. Univariate analysis result showed that most respondent in this study was more than 50 years old that is 26 people (52%). Most people have senior high school as their education level that is 26 people (52%). Univariate analysis result also showed that most cadre works as housewives, with 46 people (92%). Large number of housewives respondent was caused by housewives has lots of leisure time therefore participating in this activities could used up some of these leisure time and to increase knowledge in health, also become a Posyandu cadre would improve socialization in the eye of community. Duration or length of respondent act as Posyandu cadre was mostly for more than 10 year, about 32 people (64%). This duration was due to reasoning that as part of the community, respondent feel proud to be able to participate, actively engaged and voluntarily involved in increasing people's health, this is in accord with cadre formation purpose that is to actively engage the community member in responsible manner. Community member's involvement in increasing service efficiency is the basic for limited power and by operational of Posyandu would be able to utilize the existing resources in optimum manner **(5,6)** .

Other characteristic of Posyandu cadre being reviewed would be level of knowledge and attitude of Posyandu cadre regarding lactation. Below was Table that showed level of knowledge and attitude of Posyandu cadre regarding lactation (Table 2).

Table 2: Characteristic for Knowledge Level and Attitude of Posyandu Cadre Regarding Lactation

No	Respondent Characteristic	N	%
1	Level of knowledge Posyandu cadre regarding lactaction		
	Good	34	68
	Medium	16	32
	Less	0	0
	Poor	0	0
2	Attitude of Posyandu cadre regarding lactation		
	Good	0	0
	Medium	1	2
	Less	31	62
	Poor	18	36

(N=50)

Based on Table 2 univariate analysis for level of knowledge of Posyandu cadre regarding lactation, most has good knowledge that is for 34 people (68%) and the remaining has medium knowledge with 16 people (32%). Although most respondent has good knowledge regarding lactation, but based on knowledge questionnaire item concerning lactation there were still lots of respondent who did not know the answers (answering wrongly). Several knowledge that not yet known by respondent regarding lactation would be: mother who breastfeed the babies would succeed though her nipple is sunken or flat, since shape and size of nipple won't become the obstacle in breastfeeding. The need of babies to breastfeed is not schedule-based but rather on demand, thus more frequent the mother breastfeed the baby the amount of breastmilk produced would increase, also amount of breastmilk by breast would depend on babies suction, since babies suction is stimulation for breastmilk production, through prolactin reflex and letdown reflex [(3)] .

Other knowledge item that was less known by respondent would be the benefit of breasfeeding other than to increase baby's immune system. It would also affect baby's development and intelligence. It was also known that breastfeeding could prevent lots of infection-related illness (diarrhea, respiratory infection, ear infection, pneumonia, bladder infection) and other illness (obesity, diabetes, allergic, digestion inflammation, cancer) [(3,7)] . This was due to breastmilk contain Sig A (*Secretory Imunoglubulin A*) which is body immune system particularly in maturity of babies digestion tract. Acid condition formed due to breastmilk was signal for mucous formation in digestive tract. Increase in Sig A content was correlated with increase in digestive tract immune system toward infection, while mucous layering the digestive tract surface would act as barrier so that microorganism wouldn't be able to enter the blood circulation. Breast feeding should be encouraged and highly recommended in the first two years of life as it provides Secretory IgA to breast fed infants who in turn protect them against epithelial damage caused by Rota viral gastroenteritis [(8)]. Good position in breastfeeding is knowledge less known by most respondents. It was started with preparation, during and after breastfeeding, particularly in attachment of mother's breast and baby's

mouth. By knowing the correct position when mother breastfeeding correctly is one of the key successes in breastfeeding[9] .

Attitude of Posyandu cadre in explaining about breastfeeding technique (lactation) toward people, particularly pregnant woman and breastfeeding women is still lacking with only 31 people (62%). This lack of attitude concerning breastfeeding technique was shown particularly for during breastfeeding, in preparation and after breastfeeding. Likelihood in lacking attitude from Posyandu cadre in explaining breastfeeding technique toward community member was caused due:

1. Extension toward Posyandu cadre by health personnel regarding lactation management was not accompanied by special training regarding breastfeeding technique (if there was, it would demonstration in nature) thus not all Posyandu cadre able to do breastfeeding technique in practice.
2. None/lack of direct companion by health personnel toward Posyandu cadre during extension and implementation of breastfeeding technique toward community member particularly toward pregnant and breastfeeding women.
3. Lack/almost none of evaluation from health personnel from community health center particularly toward community satisfaction (particularly pregnant women and breastfeeding mother) regarding breastfeeding technique given by Posyandu cadre. Success in breastfeeding would be supported by good and correct breastfeeding technique, begins with baby's positioning, stimulation for breastfeeding, attaching baby's mouth with mother's nipple until how to burping babies after breastfeeding [9,10,11] .

Relationship Between Knowledge of Posyandu Cadre regarding Lactation with Attitude of Breastfeeding Technique

Bivariate analysis in this study was done to discover the relationship between knowledge of Posyandu cadre regarding lactation and breastfeeding technique. Below is the table that revealed result of bivariate analysis of relationship between knowledge of Posyandu cadre regarding lactation with breastfeeding technique.

Table 3: Relationship between Knowledge of Posyandu Cadre Regarding Lactation with Attitude of Breastfeeding Technique

		Attitude			Total	r	p
		Medium	Lacking	Poor			
Knowledge	Good 0		23	11	34	0,072	0,651
	Medium 1	8		7	16		
Total		1	31	18	50		

Based on Table 3 regarding relationship between knowledge of Posyandu cadre regarding lactation and attitude of breastfeeding technique analyzed using correlation test Somers'd obtained r value=0,072 (very weak) with p value=0,651 (p>0,05). There was no meaningful correlation between knowledge of Posyandu cadre and attitude of breastfeeding technique. Event cross tabulation between knowledge of Posyandu cadre regarding lactation with attitude of breastfeeding technique also showed that Posyandu cadre with good knowledge has lack of attitude regarding breastfeeding technique for about 23 people (46%) and poor attitude for about 11 people(22%). Lower relationship between knowledge

of Posyandu cadre about lactation with attitude of breastfeeding technique was due to most Posyandu cadre was more than 50 years old and most of them were housewives. With most cadre were 50 years old, they have physical limitation and only becoming Posyandu cadre to use up their spare time. This has cause Posyandu cadre is not maximized (unwilling) to develop their knowledge, though several Posyandu has mostly given extension/briefing regarding lactation management with breastfeeding technique [4,5].

In extension/briefing, lactation management given by health personnel from Community health center consist of breastfeeding technique material but it mostly demonstration in nature. If there was cadre who practice it, it would only count for only few people. This was due to limited time in extension thus to improve practicing (improve *soft skills*) is highly limited, besides various material for Posyandu extension would need its own allocated time to deliver it. Limitation in extension time along with training should be scheduled and supplemented with training result implementation directly toward community member particularly for pregnant women and breastfeeding mother. Therefore good knowledge would be supported by good attitude [12] .

CONCLUSION

Based on study stages conducted by author, conclusion may be inferred as follows:

1. Knowledge of Posyandu cadres regarding breastfeeding is quite good (68%),
2. Attitude of Posyandu cadres regarding breastfeeding attitude is still lacking (62%).
3. There was no meaningful correlation between knowledge level of Posyandu cadres and attitude regarding breastfeeding technique

RECOMMENDATION

Result of this study has proven that good knowledge among Posyandu cadres concerning lactation is less supported by attitude of Posyandu cadres in giving explanation regarding breastfeeding technique. Therefore, author would like to suggest several things below:

1. Maximizing extension and training by health personnel (particularly health personnel from community health center) toward Posyandu cadres regarding lactation management, in particular breastfeeding technique by practicing (improving *soft skills*) (Stuebe and Schwarz,, 2010)
2. Directly implementing training result of Posyandu cadres toward community member particularly for pregnant woman and breastfeeding woman, also companion of Posyandu cadre by health personnel particularly in initial implementation of how to do the correct breastfeeding technique.
3. Health personnel particularly health personnel from community health center would always evaluate Posyandu cadre in periodical interval regarding implementation of lactation management toward member of the community.

ACKNOWLEDGMENT

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P-09

IMPORTANCE OF ASSISTANCE TO CHILDREN WITH CANCER

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ABSTRACT

Handling children with cancer does not only depend on the medical team only, because treatments for cancer patients not only in terms of the medical but also the views of the whole problem of suffering that includes psychological and social aspects. One element that can help provide non-medical treatment to patients are volunteers. Therefore, the purpose of this paper is to understand the role of volunteers for children with cancer and their families. This study examined aspects of care and assistance that are important for 8-12 years old children with cancer. Data were gathered through interviews with 25 children, 31 parents, and 32 nurses. Each participant was asked: "What caring aspects are important for you/your child/the child to feel cared for?" and "What help, if any, do you/your child/the child need outside the hospital?" Data were analyzed by content analysis. The following important caring aspects were identified: amusement, clinical competence, continuity, family participation, honest communication, information, participation in decision making, satisfaction of basic needs, social competence, and time. Children most frequently mentioned the importance of social competence, amusement, and satisfaction of basic needs. Parents and nurses most frequently mentioned the importance of information, social competence, and participation in decision making. The following important assistance aspects were also identified: emotional support, family life, meeting friends, practical support, rehabilitation, and school support. Two-thirds of the children did not mention that they needed any help outside the hospital. According to parents and nurses, one third of the children needed emotional support, whereas none of the children mentioned a need for this.

Keyword: Assistance, Children, Cancer

BACKGROUND

Cancer can affect any part of the human body and at any age. Cancer can also occur in children. For cancer patients, coping with cancer and its treatment procedure is not an easy thing. It is of course also strongly felt by children with cancer. In addition, if one family member affected by cancer, the impact is felt by the whole family.

With a large number of children surviving cancer worldwide, there are now many survivors who experience residual physical, behavioural, emotional, or social sequelae associated with the disease or its treatment. Numerous studies have documented an increased occurrence of psychosocial problems in childhood cancer survivors. In contrast, other studies have suggested normal psychosocial adjustment of survivors with only minor problems and differences relative to healthy controls. These discrepancies could be attributed to methodological differences and heterogeneous survivor subject groups.[1]

Much of the literature regarding children's experiences of cancer report the results of generic measures of psychiatric symptoms by parents and the health-care team treating the children. It cannot be assumed that reports from parents or the health-care team accurately reflect the views of the children.[1]

Children who have had cancer now have an excellent chance of surviving their disease with 80% of patients live 5 or more years from diagnosis. However previous studies have shown these patients are at a higher risk of death from other causes in later life, primarily as a result of recurrence or continuation of their cancer, but also due to the side effects of treatment leading to second cancers and cardiac disease.[2,5]

PURPOSE

The purpose of this paper is to understand the role of volunteers for children with cancer and their families.

METHOD

Information on each patient's sex, age, date of diagnosis and cancer type was included with the latter classified into ten main groups based upon their code. In a small number of cases where death was recorded and a cause of death could not be identified. This study examined aspects of care and assistance that are important for 8-12 years old children with cancer. Data was gathered through interviews with 25 children, 31 parents, and 32 nurses.

DISCUSSION

Based on field findings, it can be seen that the shape of the role that volunteers provide assistance to children with cancer and their families seemed like a form of social worker role. Therefore, it is important to involve social worker order services integrated treatment can be given to patients and families which have any kind of chronic illness and in all age groups, as a social worker has sufficient knowledge (knowledge), skills (skills), and value (value), as a form of unity of the helping profession.[3,4]

During treatment, children must be made happy and cared for lovingly, for example, provide a number of entertaining activities. In addition to parents, volunteers and psychologists can assist the children in the hospital, as their second home. The healing process would be better if parents encourage without showing a sad face[6].

Children should be made comfortable during treatment because the process of treatment to cure a child with cancer will take quite a long time[7,8].

CONCLUSION

The importance of considering the child with cancer within the context of the family and other social systems is one of the core assumptions of the Pediatric Medical Traumatic Stress (PMTS) model. This model considers family members' reactions to children cancer along a continuum of post-traumatic stress symptoms ranging from normative, acute stress reactions to long-term, impairing reactions. Medical events are termed ''potentially traumatic'' to reflect the subjective nature of trauma experiences, which may be influenced by pre-existing factors such as parental mental health, social support, or coping skills, as well as the manner in which the cancer is perceived.

RECOMMENDATION

1. Children who have any type of cancer should get the assistance of the immediate family, especially the parents. Emotional stability must be maintained and avoid the stress that can occur at any time and if it is not maintained can lead to accelerate disease severity.
2. Be bearers of hope that can give encouragement to the children with cancer worldwide.

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P-10

The Benefits of *Gembili* (*Dioscorea esculenta*) Flour Probiotic on The Amount of *Lactobacillus casei* Probiotic Bacteria by In Vitro

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ABSTRACT

Background: In the field of health and functional food science lately has evolved in a way that can be done to keep the body healthy. It can be done by consuming foods that contain "probiotic". Probiotic is "feed supplement" of live microbes that beneficially affect the host by improving parent balance of microorganisms in the digestive tract
Objective: To examine the effect of adding various concentrations of *gembili* (*Dioscorea esculenta*) flour to the number of probiotic bacteria *Lactobacillus casei* by in vitro.
Method: The study was experimental in which researchers provide treatment or intervention to a variable. The study design was post-test with control .
Result: The concentration of yam flour used is 0 %, 1 %, 3 %, 5 %, 7 % and 9 %. The higher concentration of yam flour is added, giving the results of increasing the number of bacteria *Lactobacillus casei*
Conclusion: There is the influence of yam flour toward an increase in the number of bacteria Lactobacillus casei. Big influence of yam flour toward an increase in the number of bacteria *Lactobacillus casei* 94.9 %

Keywords: *Gembili* flour, *Lactobacillus casei,* amount of bacteria

INTRODUCTION

Lactobacillus casei is the one of member of genus *Lactobacillus* which has defend ability from gastric acid condition and the low surface tension of a liquid bile order to be able to live to in the colon. *Lactobacillus casei* can improve the normal bacteria activity and other useful bacteria, absorbing dangerous material, immobilize and kill pathogenic bacteria and have the effect of anti tumor which stronger than other bacteria[1].

In general, limitation of probiotic is indigestible foodstuff by upper gastrointestinal tract so it can reach the colon and support good bacteria growth in intestines. Commonly, non-digestible probiotic is carbohydrate. Which include in carbohydrate is fructose, lactose, raffinose, inulin and resistant starch (RS) which can be the source of carbohydrate for advantage bacteria in alimentary tract[2].

According to Lehmann, RS has some benefits i.e. not causing constipation (difficult defecate), lowering cholesterol and capable of lowering glycemic index (numbers which shows potentially increasing blood sugar of carbohydrates which available on a foodstuffs)[3].

Gembili is tubers variety which growth vines with greeny leaf and thorny stems. Its fruit like sweet potato with adult's fist shape, russet and thin skin. *Gembili* usually cooked by boiling, and its skin shall become dry after boiling. Its tuber is white clean colour, its texture like sweet potato and has peculiar flavor. *Gembili* contains ethanol which can be used as a raw bio-ethanol or alcoholic beverages.

Research conducted by Zubaidah, Elok and Akhadiana, Wilda reveals the benefits of inulin which contained in *gembili* (*dioscorea esculenta*). Inulin is a polymers from fructose which the components are composed of β chain [1.2] fruktofu-ranocide. Inulin included in carbohydrates with length of the chain 2-60 unit. Long chain inulin (22-60) unit be less soluble and a more condensed so they could be used as a substitute for fat[4].

Inulin is one of groceries component parts that utilized as functional because food has high fibers. Inulin is probiotic where it cannot be digested by digestion enzymes, but in colon, inulin will fermented by bifidobacterium which gives health benefits to the body[4].

Based on the discussion, researchers interested to have a research on the benefits of probiotic of *gembili* (*dioscorea esculenta*) flour toward the amount of *Lactobacillus casei* probiotics bacteria in vitro.

OBJECTIVE

To know the influence of adding various concentration to *gembili* (*dioscorea esculenta*) flour toward the amount of *Lactobacillus casei* probiotics bacteria in vitro.

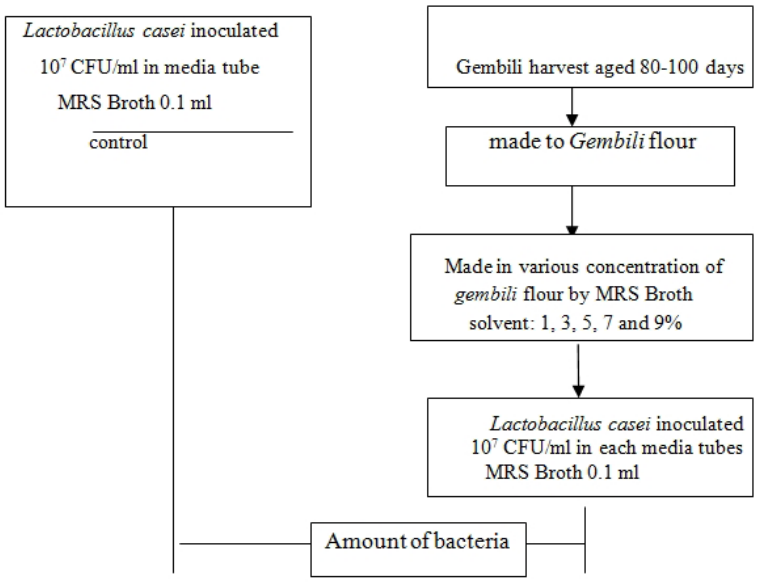
TYPE OF RESEARCH

It was experimental, where the researcher gave treatment or intervention toward one variable.

MATERIAL

a. Gembili flour
b. Lactobacillus casei
c. Sodium Chloride 0,5%
d. Distilled water
e. MRSB
f. MRSA

METHOD :



RESULT AND DISCUSSION

This research was conducted in August -September 2015 in Bacteriology Laboratory of Medical Laboratory Technology of Health Polytechnic of Health Ministry in Yogyakarta. This research was using five concentration variations of *gembili* flour, i.e. by concentration 1%, 3%, 5%, 7% and 9% and one group control.

Table 1. Amount of *Lactobacillus casei* bacteria on *gembili* flour

Replication	Concentration of *Gembili* Flour (in %)					
	0	1	3	5	7	9
	Amount of *Lactobacillus casei* bacteria					
1	1400	2200	5400	8500	10100	13800
2	3300	4700	5000	8300	9800	14200
3	1600	4700	5600	7600	10900	14000
4	2500	4200	6500	8900	11000	14800
5	2800	4500	6800	8000	11200	16300
6	3000	4600	6600	7600	9900	15600
Average	2433	4150	6100	8150	10483	14783

1. Descriptive Analysis

   The result shows that higher *gembili* flour added, increasing *Lactobacillus casei* bacteria.

2. Statistic Analysis

   Determination Coefficient Test (R^2)

   R square used to know the large impact. In this analyze, R^2 was 0.949, it means that the influence of *gembili* flour influence towards the increasing of *Lactobacillus casei* 94.9%.

   Gembili is food which contains many inulin. Inulin is one of components food which commonly used as functional food because it has high fibers. Inulin is probiotic where inulin cannot be digestible by digestion enzyme, but in colon, inulin will fermented by Bifidobacterium bacteria which bring a lot of health benefits in the body[4].

   The bigger concentration of *gembili* flour, probiotic levels for growth nutrition of probiotics *Lactobacillus casei* bacteria also will bigger. Good prebiotic requirement i.e. it cannot be hydrolyzed in the upper gastrointestinal, digestible by god bacteria in colon so able to press the growth of pathogen bacteria. More adding of *gembili* flour, so the alt *Lactobacillus casei* will be higher.

   The characteristic of anaerobic *Lactobacillus casei* is facultative, i.e. need less oxygen, *gembili* flour which added in MRS Broth media can increase anaerobic condition, so can enhance conformity the need of oxygen for *Lactobacillus casei* growth. *Lactobacillus casei* incubation in a MRS media was 48 hours, it means to maximize *Lactobacillus casei* growth in MRS media combined with various concentration of *gembili* flour and MRS media only in a tube control.

   In former research by Reski Praja Putra with entitled “The Resistance of Starch and the Functional Characteristic of Horn Banana Flour (*Musa paradisiaca formaaatypica*) Modified through Lactic Acid and Autoclave Heating”, horn banana flour can be used as alternative source of forming material of resistant starch (RS) because it has high amylase. RS has a function as probiotic which can raise lactic acid bacteria[4].

CONCLUSION

There's some effects on giving *gembili* flour toward the number of *Lactobacillus casei* bacteria

SUGGESTION

1. For the people, consuming *gembili* is useful for health because can increase and fertilize the amount of probiotic bacteria in colon
2. For the next researchers can increase *gembili* flour concentration, so can get the optimum concentration
3. Need further research in In vivo

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P-11

THE USAGE OF TOOTH PASTE IN DECREASING PLAQUE SCORE IN ELEMENTARY STUDENTS MASSAL TOOTH BRUSHING

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ABSTRACT

Elementary school students are the high risk community on caries. Their ages are the golden age on practicing their motoric skills in tooth brushing which is the primary prevention of caries. Toothpaste is paste or gel using for tooth brushing to clean food debris on teeth. This study wanted to know the effect of toothpaste in decreasing plaque score. This study was quasi experiment with cross sectional aproach, pretest-posttest design with control group. The samples, taken from SD IT Salsabila 3 Banguntapan, Bantul, Yogyakarta on April 2014, were 30 samples with inclusion criteria : registered on class 3 and 4, no caries, willing to be respondents and cooperative, presented on the day of research. The measurment of plaque score was PHP-M (Personal Higiene Performance-Modified) technique. The data were analyzed with Wilcoxon test. The result showed that plaque score decreased from 2.63 to 1.00 after toothbrushing with toothpaste group and on the group of toothbrushing without tooth paste, it decreased from 2.60 to 1.20 (p value : 0.000). It concluded that there was significant effect on decreasing plaque score by using toothpaste on massal toothbrushing activity.

Keyword : tooth paste, tooth brushing, plaque score.

INTRODUCTION

Dental health must be maintained since young ages due to the vulnerable condition of teeth. Process of the defect of teeth is started by formation of decay which is called caries. This caries happens due to the bacteria activity in plaque which is covered the teeth surface[1]. Toothbrushing is the effective mechanic method to cleaning tooth plaque [2]. Toothpaste used in toothbrushing has the effect of cleaning and smoothing the teeth surface and refreshing the mouth due to the aroma on it [3]. This process of toothbrushing must be followed with rinse the mouth.[4]

Prelimenery research had been done on 20 students SD IT Salsabila 3 Banguntapan Bantul. It was found that 25% sudents didn't use tooth paste while brushing their teeth. According to this condition, we would like to know is there any effect of tooth paste in decreasing plaque score?

METHOD

This study was quasi experiment with corss sectional approach which observed one occasion in the same period of time.[5] Research's design was pretest-posttest with control group. The samples were 30 students of class 3 & 4 in SDIT Salsabila 3 which taken randomized. On the first day, they brushed their teeth with tooth paste and on the second day they brushed without tooth paste. Dependent variable was plaque score and independent

variable was toothbrushing with modification technique, using straight handle toothbrush with flat brushes in two minutes. Tooth paste contained of fluoride. The instruments used were diagnostic instruments, phantom, tooth brush, mask and handschoen, rinse glass, mirror and form of PHP-M scores. The material used were 70% alcohol, tooth paste, disclosing solution, cotton pellet and tissue paper. The data were analyzed statistically by Wilcoxon test.

RESULT AND DISCUSSION

1. Respondents Criteria
   Respondents frequency discribed as bellow:

Table1. Frequency Distribution of Respondents

Characteristic	Jumlah	Percentage (%)
Based on Sex		
Girls	20	66,7
Boys	10	33,3
Total	30	100
Based on Age		
9 years old	18	60
10 years old	12	40
Total	30	100

The biggest respondents were girls (66.7%). Most of the respondents were 9 years old (60%)

2. Plaque Score Criteria

Tabel 2. Frequency distribution of Plaque Score

Plaque Score Criteria	Before		After	
	N	%	N	%
With tooth paste				
Good (0-20)	0	0	30	100
Moderate (21-40)	11	36,7	0	0
Poor (41-60)	19	63,3	0	0
Total	30	100	30	100
Without tooth paste				
Good (0-20)	0	0	24	80
Moderate (21-40)	12	40	6	20
Poor (41-60)	18	60	0	0
Total	30	100	30	100

There were no students who had good plaque score. There were 63.3 % respondents who changed from poor and 36.7% from moderate to good criteria after brushing their teeth with tooth paste. All respondents (100%) became good criteria after brushing their teeth with tooth paste. The usage of tooth paste could clean the teeth surface and remove plaque and bacteria[6]. Acoording to Panjaitan (1977), the usage of tooth paste could result foam, remove food debris on teeth surface, clean and give fresh effect[7]

There were only 60 % respondents who changed from poor to good after brushing their teeth without tooth paste. Not all respondents became good criteria after brushing their teeth without tooth paste. There were only 80% respondents who became good criteria.

3. Plaque Score Difference

Table 3. Plaque Score Difference On Brushing Teeth With And Without Tooth Paste

Variable	N	Mean (x)		Difference
		Before	After	
Brushing teeth with toothpaste	30	2,63	1,00	1,63
Brushing teeth without toothpaste	30	2,60	1,20	1,40

Table 3 showed that the plaque score difference using tooth paste 1.63 and 1.40 without tooth paste. Brushing teeth without toothpaste had the weakness which was it coudn't clean inter dental surface effectively and give fresh effect to the mouth.[8]

4. Statistic Analysis

Table 4. The Result of Wilcoxon Test on Plaque Score Difference

Variable	N	Sig.	z hitung
Brushing teeth with toothpaste	30	0,000	-4,964
Brushing teeth without toothpaste	30	0,000	-4,949

Statistical analysis with Wilcoxon showed that p value 0.000 < 0.05. It meant that there was th significat effect between brushing teeth with and without toothpaste toward plaque score. The usage of tooth paste with fluoride.coutd decrease the acumulation of plaque and caries incidence[9]. Principally, plaque could be removed by brushing teeth without tooth paste if the technique of toothbrushing was good and correct.[10]

CONCLUSION

1. Plaque score criteria before brushing teeth with tooth paste was poor and it became good after.
2. Plaque score criteria before brushing teeth without tooth paste was poor and it became good and moderate after.
3. There was a signifficatn difference between brushing teeth with and without toothpaste toward plaque score (p=0,000<0,05, Wilcoxon test)

RECOMENDATION

1. It's better to brush teeth with toothpaste containde with fluoride for elementary school students because it helps remove food debris and plaque, smooth the teeth surface and give freshness impact
2. This study could be the refference for promotion activity in maintaining oral hygiene for society especially students.

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P-12

Effect of Orange-Flavored Soft Drinks Against TheLevel of Acidity Salivary pH In Elementary School Students

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Abstract

Background: The rest of the food or beverage can form plaque that will affect the pH of saliva are other detrimental oral health. Based on preliminary studies to 10 students fromPanggang elementary school average data obtained saliva pH less than 7 below normal.
Problem: Is there any influence of drinking soft drinks orange flavor to the salivary pH in elementary school students?
Methods: The experiments, with pretest and posttest with control group design. Samples: 100 samples with stratified random sampling technique. Statistical Test Non Parametric Tests. Test T-test with Wilcoxon test.
Research purposes : knowing the effect before and after drinking soft drinks the pH of saliva.
Result: The pH before and after drinkingorange flavor soft drinks of significance is p = 0.03 <0.05.
Conclusion: The existence of significant influence drinking orange-flavored soft drink to the pH value of the students.

Keywords: orange-flavored soft drink, the pH of saliva

PRELIMINARY

School-age children is an investment for the nation as the future generation. The quality of the nation in the future is determined by the quality of children today. Efforts to improve the quality of human resources should be done early. School-age child development is optimal depends on the provision of nutrition to the quality and quantity of the good and true. Primary school children aged 10-12 years more spent a quarter of his time at the school with a variety of school activities are quite dense resulting in increased appetite naturally. Children also have started good at determining the food and drink that they like knowing the environment, usually prefer soft drinks and instant foods containing carbohydrates and MSG as a flavor enhancer. In general, school children liked the food hawker in front of the school by reason of cheap, easy, attractive packaging, and diverse. Children are more often consume snacks such as sweets, cereal bars, biscuits and fizzy drinks. A research institutes in the area of East Jakarta revealed that the type of snacks that are often consumed by children of school is ice syrup and cilok. Leftover food or beverage can form plaque that will affect the pH of saliva (Maranatha, 2013) [1].

According to some observations, eating certain foods or beverages can affect the pH of saliva are other detrimental oral health. Consuming beverages containing acid such as soft drinks can also lead to demineralization of tooth enamel due to the solubility in saliva (Preethi et al cit. Parade, 2011) [2]. In addition to having a low pH, soft drinks such as orange drinks packaging also contains glucose, fructose, sucrose and other sugars. Bacteria in the mouth can ferment carbohydrates (glucose, fructose, and sucrose) and produce acids that can destroy tooth enamel for sweet drinks often increase the risk of dental caries (Parade,

2011) [2]. Production of various types of soft drinks marketed and consumed globally known for sure can cause demineralization email directly known as erosion. When through the fermentation of carbohydrates in conjunction with bacterial activity known as dental caries. Demineralization directly undertaken by the acid content in a kind of soft drink, may be more meaningful than the losses resulting sugar content. Most soft drinks, including isotonic drinks contain several types of acids, such as phosphoric acid, citric acid, malic acid and tartaric acid. soft drink pH is between pH 2.4 to 4.5 which is under the critical pH range (Ramadhani, 2013) [3].

A study conducted in 1974, found a positive correlation between soft drink consumption frequency and severity of tooth decay, especially in children. This discovery is surprising because the researchers also take into account the consumption of other sweet foods, but still found that most soft drinks contribute to tooth decay (Jacobson cit. Latif, 2012) [4]. The researchers suggested that the more teeth in contact with the acid-containing soft drinks, the greater the occurrence of tooth enamel mineral solubility in saliva (Latif, 2012) [4]. Saliva is one component that contributes to the level of acidity (pH) of the mouth. Saliva as a buffer system to maintain optimal oral pH, which tends to alkaline pH. If without saliva, so every meal will form an acidic environment that will support the growth of bacteria that damage the teeth. Inside there are also saliva ions such as calcium and phosphate which are the fundamental building blocks of tooth structure. Another function of saliva is to help the process of remineralization of small lesions on the enamel layer (Kusumasari, 2012) [5].

Based on a preliminary study by interviewing 10 students from PanggangSedayuBantul Elementary School about drinking soft drinks obtained data is that students often consume drinking soft drinks, and examination of the average student saliva the saliva pH less than 7 below normal. Based on the description above, the writer interested in conducting research on the effect of the pH of saliva after drinking soft drinks at elementary school students.

RESEARCH PURPOSES

Knowing the influence of drink-orange-flavored soft drink on the salivary pH of Panggang Sedayu Bantul Elementary School.

RESEARCH METHODS

This research used experimental method with pretest and posttest control group design. Selection of this method to test the effect of soft drinks on the pH of saliva elementary school students.

RESEARCH RESULT

Research on “Effect of Orange-Flavored Soft Drinks Against TheLevel of Acidity Salivary pH In Elementary School Students” which was held in March-June 2016 the respondent class III, IV, and V Panggang, Sedayu, BantulElementary School as many as 100 students. The data obtained from the study and then normality test data. Data normality test results as follows:

Normality Test (Kolmogor Smirnov)

Conclusion: Asymp. Sig = 0.000 <0.05, so it was not a normal distribution of data, including the type of research Nonparametric. Using the Wilcoxon test to determine the effect

(Pre and Post Group Experiments pH value) and using the Mann Whitney test to determine difference (Difference Experiment Group and Control Group).

Data normality test results, the data processed using Wilcoxon and Mann Whitney analysis and presented in the following table:

Table 1: Frequency Distribution of Respondents by Average Value pH Variable Mean Difference

Variable	Mean		Difference
	Before	After	
Experimental Group (Drink Soft Drink Taste Orange)	6,7	6,44	-0,26
Control Group (No Drink Soft Drink Taste Orange)	6,92	7,36	0,44

Table 1 shows the pH value of saliva in the experimental group after drinking orange-flavored soft drinks decreased from before drinking orange-flavored soft drink, which is from 6.7 to 6.44, while the control group after the measurement of pH values increased saliva second of measurement salivary pH value of the first is from the previous 6.92 to 7.36.

Table 2: Results of Analysis Using the Wilcoxon test

N	Z	Asymp. Sig	A
50	-2.172	0,030	0,05

Table 2 shows that the value Asymp. Sig was 0,030 lower than 0,05 so Ho rejected and Ha is accepted, then the statistics show a significant difference between the value of the pH of saliva students of classes III, IV, and V Panggang Elementary School before and after drinking orange flavored soft drink or the influence drinking soft drinks orange flavor to the salivary pH values of students of classes III, IV, and V Panggang Elementary School.

Table 3: Analysis Using Mann Whitney Test

N	Z	Asymp. Sig	A
100	-4.342	0,000	0,05

Table 3 shows that the value Asymp. Sig differences in salivary pH value difference between students who drank orange-flavored soft drink with students who did not consume soft drinks orange flavor is 0,000 less than 0.05 so Ho rejected and Ha is received, it can be concluded that there were significant differences in value salivary pH between students who drank orange-flavored soft drink with students who do not drink orange-flavored soft drink.

DISCUSSION

Results (see Table 1) shows that the average value of the pH of saliva students of class III, IV, and V Panggang Elementary School after drinking orange-flavored soft drinks declined or become more acidic ie from 6.7 (acidic pH) to 6 , 44 (acidic pH), while the students who do not drink orange-flavored soft drink increased the average value becomes alkaline pH of saliva or that of 6,92 (acidic pH) to 7.36 (alkaline pH). Based on Table 2 shows that the pH

value of saliva before drinking orange-flavored soft drink and after drinking soft drinks orange flavor of significance is p = 0.03 p <0.05, significant difference drinking orange-flavored soft drinks to the value salivary pH students of class III, IV, and V Panggang Elementary School. This difference is due to the decreased value of the pH of saliva students after drinking orange-flavored soft drink. In accordance with the opinion of Ircham in research Rahmawati (2014) [6] which states that if we eat sweets or sugary foods, including soft drinks, the bacteria in the plaque will turn it into acid. This acid will lower the acidity of saliva which then will cause enamel decalcification process so that over time it came to pass dental caries.

This research was supported by Sari (2008) [7] which states that exposure of acid on tooth surfaces can cause a decrease in pH in the oral cavity with rapid and accelerating the process of demineralization. Sources acid commonly consumed by the community of which comes from soft drinks and fruit juices. The same opinion was expressed by Preethi and colleagues in research Parade (2011) [2] which states that eating certain foods or beverages can affect the pH of saliva are other detrimental oral health. Consuming beverages containing acid such as soft drinks can also lead to demineralization of tooth enamel due to the solubility in saliva. This study was supported by research Alam (2010) [8] which states that the pH of saliva decreases after consuming soft drinks for soft drinks contain acid and have a pH of 3.0 or lower and thus may cause the demineralization of dental hard tissue. the pH of saliva will be back to normal within 30 seconds of exposure to soft drinks.

The decline in the average value of the pH of saliva students of class III, IV, and V Panggang Elementary School after drinking soft drinks orange flavor that is from 6.7 (acidic pH) to 6.44 (acidic pH) in accordance with the opinion of Patel et al in research Mulyanti (2015) [9] that soft drinks have some effect on the oral cavity. Soft drink pH value is between 2.4 to 4.5, while the critical pH is 5.5, it means that the pH of soft drinks are below the limits critical pH which causes demineralization of tooth enamel. According to research Panigoro, et al (2015) [10] which states that the activity of eating and drinking one's impact on the demineralization and remineralization email. Demineralization occurs because the acid exposure from food or drink in a long time led to changes in pH of the oral cavity so that the tooth surface becomes acidic. Demineralization can occur when emails are in an environment of pH below 5.5 as in soft drinks with a pH below 5.5 which is now widely consumed by the public.

Results of statistical analysis using the Wilcoxon test showed that there is a change in the pH value is proven by the results of significance 0.03 <0.05 which indicates that Ho is rejected and Ha received thus drinking orange flavor affect significantly decrease the value of the pH of saliva students class III, IV, and V Panggang Elementary School. According to research Tyasning (2014) [11] which states that the relationship of sugar in foods or soft drinks larger influence on the caries process because usually the food or soft drinks are often consumed between two meals, so it has a low tendency. Research salivary pH which is supported by parade (2011) [2] which states that in addition to having a low pH, soft drinks such as orange drinks packaging also contains glucose, fructose, sucrose and other sugars. Bacteria in the mouth can ferment carbohydrates (glucose, fructose, and sucrose) and produce acids that can destroy tooth enamel for sweet drinks often increase the risk of dental caries. Ramadhani (2013) [3] also revealed that most soft drinks, including isotonic drinks contain several types of acids, such as phosphoric acid, citric acid, malic acid and tartaric acid. soft drink pH is between pH 2.4 to 4.5 which is under the critical pH range. Eating fruit juices containing acids, such as citric acid in oranges, folic acid in the juice of green beans, and so more than

twice a day have an increased capacity buffer solution, and also can cause the pH of the mouth dropped prolonged, which can result in dissolution tooth enamel.

The results of the study (see Table 3) indicated that the value Asymp. Sig differences in salivary pH value difference in the students who drank orange-flavored soft-drink with students who did not drink soft-drinks orange flavor is 0.000 <0.05 so it can be concluded that the pH value of saliva students were drinking soft drinks taste grapefruit have significant differences with saliva pH value of students who did not drink soft-drinks orange flavor.

The results of this study are supported by Kusumasari (2012) [5] which states that the saliva is one component that contributes to the level of acidity (pH) of the mouth. Saliva as a buffer system to maintain optimal oral pH, which tends to alkaline pH. If no saliva, so every meal will form an acidic environment that will support the growth of bacteria that damage the teeth. Inside there are also saliva ions such as calcium and phosphate which are the fundamental building blocks of tooth structure. Another function of saliva is to help the process of remineralization of small lesions on tooth enamel. This research was also supported by Maranatha (2013) [12] which states that a child snacks such as candy, wafers, cakes, biscuits and soft drinks containing sugar. Type most widely used sugar is sucrose. Sucrose consumption in large quantities can lower the pH of saliva. The incidence of caries is high mainly due to the sucrose for the synthesis of extracellular sucrose faster than other sugars such as glucose, fructose, and lactose so quickly transformed by microorganisms in the oral cavity becomes acidic. Salivary secretions and saliva generated component is liquid exocrine essential for healthy teeth and oral cavity. Salivary function one of which is having the ability buffer that will affect the value of the pH of saliva, wherein the pH of saliva may change due to the influence of the rhythm of day and night, as well as being acid 15 minutes after eating.

This research was also supported by research Latif (2013) [4] which states that after 10 minutes of consuming soft drinks are acidic can cause salivary pH drops further demineralization process so as to accelerate the acid environment in the mouth will be back to normal after 30-60 minutes of consuming the soft drink demineralization itself is a process of moving minerals in the form of mineral ions of the tooth enamel. Decreasing the pH value of the students after drinking soft drinks orange flavor in this study was also supported by research Prasetya (2008) [13] which states that the various types of soft drinks manufactured, marketed and consumed globally known for sure can cause demineralization email the drink contain ingredients such as asamfosfat and asamsitrat carbonation. Both of these materials consist of a mixture of organic acids such as maleic and tartaric. These organic acids inhibit buffer capacity and lowering the pH of saliva.

CONCLUSION

The study of 100 respondents in Panggang Elementary School titled “Effect of Orange-Flavored Soft Drinks Against TheLevel of Acidity Salivary pH In Elementary School Students” can be concluded that:

1. The existence of significant influence drinking orange-flavored soft drink to the pH value of the students of class III, IV, and V Panggang Elementary School.
2. The pH of the students who drank orange-flavored soft-drink with students who do not drink orange-flavored soft-drinks have differences.
3. Based on the average pH value before and after the students drinking orange-flavored soft drink has a pH value which means a decrease in pH becomes more acidic after

drinking orange-flavored soft drink. While the students who do not drink orange-flavored soft-drinks have a pH change from acid to alkaline.

SUGGESTION

Based on research that has been done, the advice to researchers convey is:

1. For the Respondents

   Improving oral health by increasing insight as much as possible, either by reading the book and the mass media or follow oral and dental health education as well as more selective in choosing healthy foods and beverages and tooth decay. It is also recommended to drink water after drinking soft drinks and do not brush your teeth immediately after drinking the beverages to avoid the risk of dental caries and erosion.
2. For Elementary School

   As input and resources to improve the oral health knowledge by organizing promotional activities and preventive one with more selective in watching her students choose snacks that are consumed.
3. For Further Research

   This research can be used as a guide and reference for further research to give an idea of the influence of drink-orange flavored soft drinks to the level of acidity pH value and is expected to be developed with a wider scope and a more complete aspect.

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P-13

EFFECTIVENESS FAMILY PSYCHOEDUCATION THERAPY IN PATIENTS WITH MENTAL DISORDERS : LITERATURE REVIEW

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ABSTRACT

Introduction : Family psychoeducation is one form of family therapy that can be administered to patients with mental disorders and their familyies. Psychoeducation includes educational and psychosocial objectives that require the use of pedagogical methods and techniques to develop permanent behavioral changes in patients.
Aim : To identify and evaluate the effectiveness of psychoeducation family therapy in an effort to care for patients with mental disorders.
Methods : The study was a literature review. The literature review was obtained from variety of publish literature in 2010 until 2016. The articles used were taken from several databases like Ebsco host, Pub Med, Google Scholar, and Science Direct. The author analyzes the effectiveness of family pschoeducation therapy on patients mental disorders.
Results: The findings suggest that group psychoeducation may have an impact on the participants perceived social support, knowledge and acceptance of bipolar disorder, personal insights, attitudes toward treatment and access to services. There are social and psychological burdens coincided with the development of progressive disease.
Discussion : Psychoeducation Family therapy is one of the most routine intervention in the management of a patient with mental disorders such as schizophrenia. Effects of psychoeducation family therapy on their families' quality of life has been studied in a limited previous research and most of them have evaluated the family burden. Differences between the studies mentioned can be attributed to differences in methods of assessment of burden on families and more important with the type of intervention.

Keywords: Family Psychoeducation Therapy, patients with mental disorders, effectiveness.

INTRODUCTION

Family psychoeducation is one form of family therapy can be administered to patients with mental disorders and family. The goal of family psychoeducation is to increase family knowledge about the disease through education about the efforts and signs of behavioral symptoms that can support the strength of family [1]. Based on research Keliat (2006) found that the recurrence rate in patients without family therapy by 25-50%, while the recurrence rate in patients with family therapy amounted to 5 -10%.

Psychoeducation family is the provision of education to a person who supports the treatment and rehabilitation [2]. Family psychoeducation is one form of mental health treatment therapies families by providing information and education through therapeutic communication. Psychoeducation program is an approach that is education and pragmatic [3]. The goal of family psychoeducation reduce the intensity of emotions in the family to a low level so as to improve the achievement of family knowledge about the disease and teach families about efforts to help them protect their families to know the symptoms of behavioral and supports the strength of the family [4]. Benefits of family psychoeducation increase knowledge about mental disorders, teaches techniques that can help families to know the

symptoms - symptoms of deviant behavior, as well as increased support for the family members themselves. This therapy can be done in hospitals both hospital on condition that the room should be conducive. Can also be done in the family home itself. The house can provide information to health workers about how the style of interaction that occurs within the family, values - values shared in the family and how the family understanding about health.

Psychoeducation is defined as a systematic, structured and pedagogic approaches to the disease and its treatment. Psychoeducation includes educational and psychosocial objectives that require the use of pedagogical methods and techniques to develop permanent behavioral change in patients. With the program psychoeducation structured, patients can improve their quality of life by developing their basic knowledge of Bipolar Disorder, including information about the recurrence rate of the disease, treatment and side effects, trigger factors, the importance of adherence to medication, how to control the symptoms, stress management, risk suicide, pregnancy, stigmatization, introduction of symptom recurrence early, avoid the use of alcohol and other substances, and the importance of living life with a well-structured [5].

Seeing these problems, it is necessary to study methods of effectiveness of family psychoeducation therapies are performed on patients with mental disorders.

AIM

The intent of literature review was to identify and evaluate the effectiveness of therapy psychoeducation family in an effort to care for patients with mental disorders.

METHOD

This research uses methods of literature study. This paper takes from the literature such as PubMed, Science Direct, Ebsco host, and Google Scholar. The total number employed in the literature review as many as ten literature. The literature was obtained from variety of published literature in 2010 until 2016.

RESULT AND DISCUSSION

Renaires et al (2010) states that patients in the early stages of bipolar the benefits of family psychoeducation to have a longer time to relapse (Chi-square: 6:26; p = 0.012). There was no significant benefit of family psychoeducation was found in patients with advanced stage. Patients with advanced increased the vulnerability and resilience as the disease progresses. Patients may show a more severe long maladaptive coping strategies. Thus, the restructuring of habit or routine regularity can become more complex. Similarly, family attitudes, behavior and overall family functioning may be more difficult to modify relatives of patients with higher chronicity and severity. In addition, family psychoeducation therapy is not focused directly on patients, but their families, it is possible that the more severe the patient will need to be directly involved in the intervention to obtain better results. There are social and psychological burdens coincided with the development of progressive disease. Furthermore, as has been found in previous studies, the severity of disease and dysfunction of higher among patients associated with higher levels of burden in the family. Task caregivers to monitor patients has been associated with emotional exhaustion and subjective burden [6].

Hubbard, compared to waiting list control group, the treatment group showed immediate and significant in caregiver burden, and increased knowledge of bipolar disorder and

bipolar disorder self-efficacy. This improvement is maintained or enhanced for follow up. No significant changes were observed in the DASS-21. The first A Randomized Controlled Trial (RCT) evaluating short, group psychoeducation intervention two sessions for the individual to caregivers in with bipolar disorder. It is also the first to include the size of the RCT bipolar disorder caregiver self-efficacy, and the results are promising. As hypothesized, participants in the intervention condition reported a significant reduction in the burden, and improvement in bipolar disorder significant self-efficacy and knowledge about bipolar disorder from pre- to post-intervention, and the advantage was maintained at one-month follow-up. These findings are consistent with previous studies that have also been found helpful for the caregiver psychoeducation, although with sub intervention to help speed up the process again [7]. In line with this study, the second study found a decrease in weight and improvement in knowledge about bipolar disorder, however, is not measured self-efficacy.

According to these results, psychoeducation allegedly to prevent relapse and showed a protective effect in the long term. However, the application psychoeducational treatment programs routinely in Turkey is not at the required level. Thus, nurses soul has a comfortable position in evaluating the patient's needs, and preparing and implementing psychoeducational programs aimed at these needs as they relate to the patient in the process of treatment and care [5]. Strengths of this study is the fact that it is the first study of psychoeducation 4 individual sessions conducted with the participation of patients suffering from Bipolar Disorder (BD). Another strength of this study is the ad- vantage of individual psychoeducation in patients who do not want to discuss their personal problems in the education group. Lower dropout rates are also other advantages. Limitations consist of a study conducted at a single center, the number of patients is low and the period for evaluating the effectiveness of the study to 12 months.

They are allocated either Multi Family Group Psychoeducation (MFGP) or Solution Focussed Group Therapy (SFGP) have significantly increased their knowledge and reduce the overall burden and psychological distress in year one and is maintained in year two. Advantage as it was not apparent among those allocated to Treatment As Usual (TAU). These findings are consistent with other studies in bipolar disorder also showed a significant increase in the nurse's knowledge of post-psychoeducation. We found an improvement in psychological pressure guard in both years one and two years for a random caregiver for both SFGP and MFGP while no improvement for them in the arm TAU. There is also increasing the quality of life of people affected by bipolar disorder that caregivers attend both intervention and control MFGP SFGP, without any significant change in the quality of life for those that TAU. Unlike Clarkin et al. we found only a marginal improvement in global function in the patients whose families attend more MFGP TAU and is not maintained at year two. There is no benefit in terms of global functions for the patients relatives were allocated to SFGP [7].

The findings suggest that group psychoeducation may have an impact on the participants perceived social support, knowledge and acceptance of bipolar disorder, personal insights, attitudes toward treatment and access to services , Key recommendations for improvements, including: allowing more time for group discussions, offering group sessions for family members and avoid the use of a hospital or university for the group [8]. Psychoeducation Family is one the most routine intervention in the management of a patient with schizophrenia. We evaluated the effects of the education program-needs-based assessment compared to the current program on global function and quality of life (QOL) of patients and their families [9].

So far, many studies have addressed the effectiveness of psychoeducation in the treatment of schizophrenia. In a systematic review on 44 clinical trials (including 5142 patients), it was found that psychoeducation improve function and quality of life of patients globally and increase satisfaction with social and mental health services. Although the components and the current contents program different education, a successful program must have the following approaches in common: (1) In view of schizophrenia as an illness, (2) must be designed and directed by professionals, (3) should be part of the treatment package more comprehensively spanning biological treatment, (4) consider family members as treatment factors and not the patient, (5) a focus on the results of the disorder, although the results of the family is also important, and (6) do not have confidence in a conventional family therapy behavior and relationships within the family plays a key role in the aetiology and development of schizophrenia (. the contents of the program information psychoeducation families are diverse, and in general, including awareness about the nature of the disorder and symptoms, medications, and their complications, adherence to treatment, getting familiar with the early symptoms of relapse, strategies crisis , the role of the family in care, communication skills training, rehabilitation, and education on health behaviors [9].

According to a study investigating the implementation of psychoeducation for schizophrenia, in 2003, at 83% of hospitals in Germany, Austria and Switzerland. However, overall, only 21% of patients who received psychoeducation. The high dropout rate of 25% [4]. Several factors may have contributed to this situation. Some hospitals may still question the effectiveness of these programs, but most hospitals do not have enough staff to provide psycho-education program well-prepared weekly for their patients. And even for those who do, reach their patients seem to be a difficult task. In some patients, symptoms may be too severe. Other discarded (with or against medical advice) before they complete the program, and some patients do not have the motivation to join or finish the program. Meanwhile, the hospital and the patient's point of view, many of these reasons for not offering or pating part in psychoeducation can be understood, the cost is high. Rummel-Kluge et al. It is estimated that up to 150 million euros could be saved each year by tripling the number of patients who received psychoeducation [4].

Effects of psychoeducation family on their families' quality of life has been studied in a limited previous research and most of them have evaluated the family burden , Several studies have reported that family psychoeducation can reduce the burden on families / pengasuhSebaliknya, Chan et al in [9], reported short-term, but not long-term benefits of psychoeducation for the burden of the family. Also, González-Blanch *et*al.melaporkan that brief family psychoeducation is not enough to reduce the burden of the family. Several other studies found no beneficial effect of treatment group keluarga atau education keluarga pada family outcomes. Differences between the studies mentioned can be attributed to differences in methods of assessment burden on families and more important with this type of intervention.

CONCLUSION

Psychoeducation family can improve cognitive abilities and psychomotor abilities families, because in psychoeducation family contains elements improve family knowledge about the disease and teach techniques that can be helping families to know the symptoms of deviant behavior and support for the family members themselves. So that the family can perform maintenance on mental patients in the home and reduce recurrence

RECOMENDATION

We should be able to do other therapies by combining family psychoeducation therapy with other therapies to help patients in the recovery process. We also need to increase knowledge about the intervention we can do for patients with mental disorders.

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P-14

BETWEEN THE EFFECTIVENESS OF PHARMACOLOGICAL AND NON-PAHARMAGOLOGICAL THERAPY IN EFFORT SMOKING CESSATION

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ABSTRACT

Background: Smoking already known by children of school age. the negative impact of very large, especially in the health sector. Smoking largest contributor of death in the United States. pengehntian smoking efforts have been done to target various ages with different ways namely pharmacological and non-pharmacological therapy.
Aim: To identify the pharmacological therapies used in smoking cessation efforts, non-pharmacological therapies used in smoking cessation efforts and that effectiveness of the pharmacological therapy and non-pharmacological against efforts to stop smoking.
Methods: The systematic review was obtained from variety of published literature in 2011 until 2015 through several journals, among others BMC Public Health, Journal of Nursing Education and Practice, Journal of Hospital Administration, The Journal of The Association of Chest Physicians, Colonial Academic Alliance Undergraduate Research Journal and Internationale Journal of Preventive Medicine
Results: Pharmacological therapy used in smoking cessation is nicotine replacement therapy, bupropion, Champix and Zyban. This therapy has a higher level of effectiveness. There are also non-pharmacological therapies are often diguankan is self-help, hypnosis, hypnoterapi, acupuncture, counseling, CBT, group therapy and intervention / doctor's advice.
Conclusion: Smoking cessation will be more effective if pharmacological therapy combined with non pharmacological therapy.

Keywords: Smooking, cessation, therapy.

BACKGROUND

Smoking basically have a positive or negative impact. Although smoking has a positive impact, but the negative impact caused is far greater, especially for health. In some countries, smoking is the major contributor to mortality, for example in the United States 2.4 million deaths of the year are caused by smoking. Smoking is also a contributor to the deaths of 500 thousand deaths of the year in the European Union [1]. Ironically, current smoking has become a lifestyle ranging from school-aged childres to senior citizens.

The highest prevalence of smoking are in the age range 25-44 years [2]. While in India, as many as 250 million tobacco users aged over 20 years, the number of men more than women. In an effort to improve the health of the population, then one of the effective measures taken by the United States that increase the number of population to quit smoking [1].

Smoking cessation efforts have been entered into various targets, which starting from school age children to nurses, patients and families at the hospital with a variety of methods both pharmacological and non-pharmacological. Various attempts were made by health workers both doctors, nurses and counselors. The aim of this systematic review is to identify and evaluate the effectiveness of the pharmacological and non-pharmacological therapy in an attempt to smoking cessation through evidence based practice approach.

AIM

Investigation results of this research include pharmacological therapies used in smoking cessation efforts, non-pharmacological therapies used in smoking cessation efforts and that effectiveness of the pharmacological therapy and non-pharmacological against efforts to stop smoking.

METHODS

The systematic review was obtained from variety of published literature in 2011 until 2015 through several journals, among others BMC Public Health, Journal of Nursing Education and Practice, Journal of Hospital Administration, The Journal of The Association of Chest Physicians, Colonial Academic Alliance Undergraduate Research Journal and Internationale Journal of Preventive Medicine. Literature in form of original research, literature review, research article and the original article. The total number employed in the systematic literature review as many as six literature, all of which are associated with smoking cessation efforts through several interventions, in which the author classifies into two forms of methods of pharmacological and non-pharmacological. The author identifies the various smoking cessation interventions in several countries that have implemented the smoking cessation efforts in the United States, UK, Australia, Iran, Turkey, India and Egypt.

RESULT

1. Pharmacological therapy

   The first smoking cessation methods that are used in some countries is through pharmacological therapy. All the literature used in this systematic review include this therapy as a method of smoking cessation. Type pharmacological most widely used is nicotine replacement, known as Nicotine Replacement Therapy (NRT), which has been approved by the Food and Drug Administration (FDA). NRT provides an alternative form of nicotine for smoking dependence to reduce symptoms [3].NRT consists of a patch, sublingual tablets, candies, lozenges, inhaler and nasal spray. This product is safe for patients with cardiovascular disease, including stable angina. Nicotine replacement does not increase blood coagulability or exposure to oxidizing carbon monoxide or groups that can damage the endothelium [4].

   Another type of pharmacological effective in stop smoking and is found in several journals that Bupropion is also recommended by the FDA [3].Additionally, Zyban and Champix also obtained the highest score after the NRT in relation to the effectiveness of the smoking cessation [4].

2. The non-pharmacological therapy

   This type of therapy that are found in all journal that are used in a systematic review of this and also effective in smoking cessation efforts is a group of non-pharmacological therapies. Non-pharmacological therapy is used as a support for pharmacological therapy with the aim to change behavior by using multiple interventions.

   Self-help is a kind of non-pharmacological therapies are most commonly found in the literature were used in the systematic review of this and has an equivalent level of effectiveness of pharmacological therapy is even more effective than pharmacological therapy. Behavioral therapy is most often used by the people of the Unites States and

New South Wales (Australia) in smoking cessation efforts are self-help as well as used in the age group of teenagers and young adults [1].. Although in both countries, self-help has a small proportion compared with NRT. Other literature equivalent which is a comparative study conducted by Heydari, G., et.al. (2014) on methods of cessation and tobacco control found that self-help effectiveness highest scores after NRT, Champix and Zyban. As for the Turkish community, self-help is a method of smoking cessation are much more effective than use of NRT and medications like. Methods of self-help in the form of cold Turkey and a reduction in the number of cigarettes before quitting [1].

Hypnosis and hypnotherapy and acupuncture are second from non-pharmacological therapies are also often used in smoking cessation efforts are found in most of the literature. Hypnosis and acupuncture became an adjunct therapy in smoking cessation efforts in India [3]. Hypnosis is the middle score while acupuncture is the lowest score is based on the results of comparative studies does [4].. Hypnotherapy is the most effective method for smoking cessation for young secondary school in Egypt where 2/3 of the students learn to stop after nine weeks of practicing hypnosis and the percentage of cigarette packs was reduced every day [5]. Other literature shows that hypnotherapy and acupuncture is also used as a secondary intervention that can be used by nurses in smoking cessation efforts for nurses, patients with cancer and families in hospitals [6].

Counseling is a type of non-pharmacological therapy was ranked third identified in some literature. The literature states that this therapy is also effective and commonly used in smoking cessation effort. Counseling either by phone or in person counseling is the medium scores on a comparative study conducted by Heydary, et.al. (2014). Although it has a small proportion in use, but the method of counseling remains a part in smoking cessation efforts in the United States and Australia. Both countries are using counseling by phone/telephone helpline [1]. In India, the counseling was ranked second, which is effective in smoking cessation efforts. Counseling is done over the telephone and in person. To get effective results, it must be done by trained counselor and repeated at least four weeks [3].

Non-pharmacological therapies which can be used also in efforts to stop smoking is groups therapy, cognitive behavior therapy (CBT) and advice/intervention of a doctor. Altough contributing to efforts to stop smoking, but these methods are very little is found in literature. Stating that group therapy and CBT used as an effective method in an attempt to stop smoking in adolescents young adults so that they can change the smoking habit [7]. Suggestions/physician intervention into the most effective methods or become the primary method in smoking cessation efforts in India. This method can improve smoking cessation 30% [3].

DISCUSSION

Smoking cessation efforts in several countries like USA, New South Wales (Australia), the UK, Egypt, Iran, Turkey and India is based on the results of a review that is conducted through several methods including Nicotine Replacement Therapy (NRT), Champix, Zyban, Bupropian, Selpf-help, Hypnosis, Hypnotherapy, Acupuncture, Counsleing, Group Therapy, Cognitive Behavior Therapy (CBT), and Advice/intervention of a doctor. Overall these methods can be classified into pharmacological and non-pharmacological therapies. Which include pharmacological therapy is NRT, Champix, Zyban and Bupropian. While the Selpf-help, Hypnosis, Hypnotherapy, Acupuncture, Counsleing, Group Therapy, Cognitive Behavior

Therapy (CBT), and Advice/intervention of a doctors grouped into non-pharmacological therapy.

Results of the review has been carried out on six literature used, it was found that the pharmacological therapy group were the most effective group therapy and most commonly used in smoking cessation efforts, both in the group of smokers teens, young adults and elderly. This is because the effects produced faster in reducing the symptoms of smoking dependence. The effectiveness of these drugs has been recognized and approved for use by FDA. Of some pharmacological theraoy used, NRT expressed more effective than a similar drug because some preparation such as nasal sprays, inhalers and patches steam can reduce symptoms of smoking dependence more rapidly at twelve week after use and users more comfortable in using the product [3].

Non-pharmacological therapies also have effectiveness against efforts to stop smoking, although its use in several countries such as Australia, USA and UK remained the lowest proportion [1]. Based on a review of seven literature used, all articles are obtained using non-pharmacological therapy as an alternative therapy or secondary intervention after pharmacological therapy. The effectiveness obtained by the cognitive changes of the smokers would be the negative effects caused by smoking and behaviors that can change the smoking habit can even quit smoking.

Typs of non-pharmacological therapies are most commonly used and most effective is based on a review of self-help. Other non-pharmacological therapy is also effective as a smoking cessation method is a hypnosis, hypnotherapy, acupuncture, counseling, CBT, group therapy and doctor's advice. However, its use is still in a small proportion.

The types of methods in non-pharmacological therapy can basically overlap between one and the other in cognitive and behavioral change of smokers so as to reduce or even stop the smoking habit. These methods have similarities and differences. The equation is all of these methods aim to assist smoking cessation well with cognitive and behavioral change of smokers. While the difference is only in technique and execution time o each method.

Although, based on the results of a review that pharmacological therapy have a higher level of effectiveness in almost all literature when comrade with non-pharmacological therapy, this is because the effect is more rapid in reducing symptoms of smoking dependence. However, in practice should be combined because both mind and body is one unit and mind will greatly affect a person's behavior. Thus, it is important to note that in therapy should also be given the motivation to quit, by educating patients about the dangers of smoking and find the best alternative for patients in making choices for smoking cessation [7].

CONCLUSION

Some results of the study of literature that has been done, it can be concluded that pharmacological therapy through the use of NRT proved effective and most widely used as a method to quit smoking. However, a combination with non-pharmacological therapy still showed effective results in smoking cessation efforts.

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RECOMENDATION

To stop smoking behaviors can be done with pharmacological and non-pharmacological therapy.

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P-15

MEDITATION-DZIKIR EFFECT ON ANXIETY IN PATIENTS' FAMILY WHO WILL GET PERCUTANEUS TRANSLUMINASI CORONARY ARTERY

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ABSTRACT

Background. Coronary heart disease is the leading cause of death and the first in a developing country, replacing the death due to infectious disease management that can quickly lead to problems for patients who have difficulty in deciding that can increase feelings of anxiety. Meditation-dzikir is one of nonpharmacological measures to lower systolic blood pressure, pulse, frequency of breathing, meditation are also effective for people who are experiencing stress, anxiety. **Objective of research**. To determine the effect of Meditation-Dzikir to anxiety in families of patients who will get Percutaneus Transluminasi Coronary Artery (PTCA). **Method** :Quasi experimental research design with "Pre-Post Test with Control". The sampling used systematic random sampling technique. Inclusion criteria: 1. Family (Wife) Patients who get PTCA, 2. Husband / Wife, 3. Willing to be a subject of research by signing an informed consent. Exclusion criteria: the families of patients undergoing PTCA with bleeding complications. Number of samples were 32 people in treatment group, and 32 people in control group. Analysis of the data using the Mann-Whitney Test. **Results :** There was a mean reduction in anxiety 46.97 p value = 0.000 (α <0.05), in the treatment group (post-test) after administration of Meditation - Dzikir for 30 minutes. **Conclusion** : There is a significant difference in decreasing of anxiety in families who did meditation-dzikir for 30 minutes. **Suggestions:** To reduce of the anxiety, meditation-dzikir can be performed for 30 minutes.

Keywords: meditation-dzikir, anxiety

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BACKGROUND

Coronary heart disease (CHD) is a main and the first cause of death in developing country, replacing the death due to infectious disease management. The prevalence of CHD is increasing. 1.57 million patients is treated every year related to the increasing of various risk factors and unhealthy life style. One of CHD is Accute Coronary Sindrome (ACS), most of the death in ACS happen in 2 hours in the beginning of the attack and before getting treatment in hospital so it needs a fast and effective management strategy. Fast management causes anxiety for the patient and the family.[1]

Role of the patient's family that has to undergo PTCA therapy is very needed in giving support system for patient and accompany patient during the therapy so that they can feel comfortable and secure, and also it can increase their psychological status.

Meditation is a technique or exercise method that is used to train the attention and increase consciousness level, so that mental processes can be more control able consciously to develop internal world or inner world and enrich life meaning for them. Meditation can increase confidence, elf control, emphati and actualization. Besides, meditation is also effective for people with stress, anxiety, phobia and insomnia.[2]

The research result showed that there is a significant difference in anxiety level before and after *Dzikir Khafi* treatment to servical cancer pre operative patitents.[3] Another research showed that meditation can lower physical and psychosocial stress in elderly with primary hypertention.[4,5]

Dzikir is saying the name of Alloh by saying tasbih (*Subhanallah*), tahlil (*Lailahaillallahu*), and tahmid (*Alhamdulillahi*). If we continuosly performe dzikir, we will not put our attention to something that is not clear and we will focus on one point. Heart is a conciuosness vehicle and having some layers. If dzikir is done continuosly, it will get through the layers in the heart.[6] The meaning of dzikir that becomes a study in this discussion is:

a. Tahlil

ه اِلاَّاالل لاَإِله

Meaning: *"There is none is worthy of worship but Alloh."*

b. Tasbih

الْعَظِيْمِ سبْحَانَاللِ ه ,وَبِـِمَدِهِ االلِ ن سبْحَا ه

Meaning: *"Glory is to Alloh and praise is to Alloh, there is none worthy of worship but Alloh, and Alloh is the Greatest."*

c. *Tahmid*

الْعَالَمِيْنَ رَبِّ دلِلِ اَلْمَدْمْه

Meaning: *"All praise and thanks belong to Alloh.*"

c. Takbir

هو الكَبْرَ اَللهه

Meaning: "*Allah is The Greatest*"

d. Istighfar

الْعَظِيْمَ غْفِهرالل اَسْتَ

Meaning : "*I seek forgiveness from God"*

The name of Alloh mentioned above is easier to remember, memorize, and say. Therefore it can be done continuosly everywhere and anytime. Dzikir meditation is a combination of meditation and dzikir (remember) to Alloh as a creator of the universe. It means that meditation is an afterthought, thingking and seeing thought (especially for religious service) that aims to Alloh. While dzikir is saying or remembering Alloh.

Anxiety is a condition that happens in almost everyone in certain time in their life. Anxiety is a right respond to a threat, but it can be abnormal if the level is not correspond with the proportion of the threat or if it happens without any cause or it is not a respond for environmental changes. In the extreme form, anxiety can distract our daily functions.[7]

Anxiety is a condition of mood that is marked with physical symphtoms like physical tension and worry about future. Anxiety can be in the form of subjective agitation. Some behaviors (anxious, agitated, and restless) or physiological respond that sourced in the brain and reflect in the form of increasing heart rate and tightening muscle.[8]

The unpleasant feeling is usually equivocal and hard to ascertain but it can always be felt.[9] Anxiety usually come with physical symptoms like headache, fast heart rate, out of breath, stomachache, not rileks, hard to take a set calmly, etc.[10] All anxiety disorders are related to anxious feeling (for example fearness, worry, despodensi (moody, hopeless]) and various psychological stress reactions like tachycardia (fast heart beat), hypertention, nausea, breathing hard, sleeping disorders and high glucotycoid level.[11]

Dzikir can get rid of sadness, anxiety and depression and also it can create calmness, happiness and life spaciousness. It is because dzikir has psikoterapeutic that contains spiritual and religious power that can awake self confidence and strong optimism. Dzikir is easy to perform and creating rewards (from God). It is the easiest form of worship however it is the greatest and the most beneficial because oral movement is the the lightest and easiest movement of the body.[12]

Meditation is a strategy to get healthy personality and mental health. Dzikir meditation makes someone puts concentration into healthy soul factors like understanding, calmness, sttitude full of attention and neutrality that prevent the emerge of unhealthy soul factors to dominate someone's soul.

Dzikir meditation is a combination of meditation and dzikir (remember) to Alloh as a creator of the universe. It means that meditation is an afterthought, thingking and seeing thought (especially for religious service) that aims to Alloh. While dzikir is saying or remembering Alloh.

Pulse is influenced by blood flow rate which get through the vessel directly proportional with pressure gradient and inversely proportional with vascular resistency. Blood will flow from high pressure area to low pressure area. The bigger pressure gradient that pull the blood through a vessel, then the bigger blood flow rate.[14]

Resistency is a size of blood flow obstacle which goes through blood vessel. The higher the resintency, the harder the blood gets through the blood vessel. Resistency depends on three factors those are viscocity or bllod thickness, length of blood vessel dan radius of the blood vessel. If the blood is thicker, the viscocity also becomes higher so that blood pressure will increase. While in vasolidatation arteriole, the radius of arteriole vessel is getting bigger and the relaxation of smooth muscle layer increases the blood flow through the blood vessel therefore the blood pressure will decrease. The size of arteriole radius is influenced by symphatic nerve in the arteriole smooth muscle. The decreasing of symphatic nerve activity causes comprehensive vasodilatation arteriole. Other factors that influence the size of arteriole radius is epinephrine and norepinephrin hormone factors. Norepinephrin paired with receptor α The treatment of hypertension is by changing the balance of Na^+. The changing of Na^+ balance is usually done by giving diuretic orally. Lowering blood pressure mechanism by diueretik is firstly diuretic medicine lower the extracell volume and cardiac output then it will lower the vascular resistency.

Anxiety is an emotion about future that is marked with *uncontrollability* perception and uncertainty about phenomena that has potentional to hostility and fast friction in paying attention to the focus of dangerous potentionally phenomenon or affective respond itself.[15] Freud explained that anxiety is an affective situation that is unpleasant and followed by physical sensation that warns someone about the danger that threatens. The unpleasant feeling is usually equivocal and hard to ascertain but it can always be felt.[16]

Anxiety is a condition of heart that is marked by negative effect and physical tension symphtoms in which someone anticipates the possibility of danger or misfortune in the future

with worry feeling.[17] Anxiety might include feeling, behavior, and physiological responds.[15] Anxiety usually come with physical symptoms like headache, fast heart rate, out of breath, stomachache, not rileks, hard to take a set calmly, etc.[10] All anxiety disorders are related to anxious feeling (for example fearness, worry, despodensi (moody, hopeless) and various psychological stress reactions like tachycardia (fast heart beat), hypertention, nausea, breathing hard, sleeping disorders and high glucotycoid level.[11]

Psychology dynamic through spiritual activities like shalat, having a prayer or dzikir will make you in the state of relax, calm and peace. This situation influences human brain which is related to emotional process especially in hypothalamus part. In the state of meditative through breathing concentration, saying dzikir, having a prayer, shalat and saying other autosuggestion sentences will cause hypothalamus activity stimulation thus it blocks the excression of *corticotropin-realising factor* (CRF) hormone, which causes *anterior pituitari* gland being hampered to release *adrenocorticotrophic hormone* (ACTH) hormone. It hold adrenal gland to produce *kortisol, adrenalin,* dan *noradrenalin* hormones. It makes *tiroksin* hormone that is released by *tyroid* gland is also hampered. The high level of tiroksin hormone will cause someone being easily getting tired, anxious, high tension, and hard to get sleep so that the meditative state that full of calm and peace feeling will create pyshical effect that is calm and relax.[18]

Based on the research, it is showed that dzikir is a healer. Some of medical and physiological effects are balancing the concentration of serotonin and neropineprine level in the body, in which this phenomenon is a natural morphine that works in the brain and it causes heart and thought feel calm compared to before performing dzikir. Body muscles will slacken especially shoulder muscle that often causes physical tension.[19] That is one of Alloh precious gifts that functions as a transquilizer substances in the human brain.

Physiologically, spiritual therapy with dzikir or remembering Alloh names will cause the brain to work. When the brain gets stimulus from outside, then the brain will produce chemical substance that gives comfortable feeling that is *neuropeptida.* After the brain produces that substance, it will get stucked and absorbed by the body that will later give feed back in the form of pleasure and calmness.[20]

RESEARCH METHOD

The research is a quasi experiment with pre-post test with control design. It was conducted at Coronary Unit in Sardjito Hospital, Yogyakarta. The research was conducted for 3 months that was from June 1 to August 29, 2016. The populations of the research were all families of patients that will get PTCA therapy in Sardjito Hospital, Yogyakarta. The inclusive criteria were: 1. Family of the patient, 2. Husband/Wife, 3. Willing to be the subject of the research by signing informed consent. The exclusive criterion was family of the patients that will get PTCA and had bleeding complication. The determination of the research subjects was as following: Identifying family (husband/wife) of the patients that will get PTCA by doctors in Coronary Unit of Sardjito Hospital. Conducting sampling with systematic random sampling by putting an order of patient families 1-3 as treatment groups and the next 3 patients' families as control groups, etc. 64 patients were divided randomly into 2 groups (1 treatment group and 1 control group). Each treatment group consisted of 32 in treatment group and 32 in control group. During the research, respondents were guided to perform dzikir for 30 minutes.

RESEARCH RESULT AND DISCUSSION

The research was conducted from June 1 to August 29, 2016 at Coronary Unit in Sardjito Hospital, Yogyakarta. Before performing dzikir, respondents (husband/wife) was measured based on anxiety score using *Halminton Rating Scale* of *Anxiety* (HRSA).

1. Respondents' Characteristics

Respondents' Characteristics Based on Age and Gender at Coronary Unit in Sardjito Hospital in 2016

NO	Variables	Intervention		Control	
		f	%	f	%
1	Age				
	31 – 40	0	0	1	3.12
	41 – 50	29	90.62	27	84.38
	51 – 60	3	9.38	4	12.5
2	Gender:				
	Male	4	12.5	3	9.38
	Female	28	87.2	29	90.62
3	Length of PTCA				
	≥ 1 jam	31	96.88	30	93.75
	> 1 jam	1	3.12	2	6.25

Based on tabel 1, it showed that most of the respondents were in the age of 41-50 years old, both in the treatment group and control group. If it is seen from the distribution of the length of PTCA, it was less than or the same as 1 hour both in treatment group or in control group. Based on normality test in both groups, treatment group (n=32) and control group (n=32) with one sample Kolmogorov-Smirnov test, it was obtained the data of systolic and diastolic blood pressure, pulse, breathing and anxietyscore were not distributed normally with p value <0.0, so the analysis of the data was conducted with *Mann-Whitney Test*.

2. Mean Rank of Anxiety Score before and after performing dzikir meditation

Tabel 3.Mean Rank of patients' Anxiety before and after performing dzikir meditation at coronary unit in Sardjito Hospital in 2016

Variable Group		Median (min-maks)	Mean ± SD	Z	P *Value*
anxious treatment	before	69 (58-80)	66.28 ± 8.38	- 4.84	0.000
	after	47 (38 - 55)	46.66 ± 4.79		
control	before	69 (53 – 94)	68.28 ± 9.18	- 1.87	0.041
	after	68 (54 – 94)	67.28 ± 9.31		

The total amount of samples in treatment group (n=32) and in control group (n=32)

Based on table 2, it showed that there was a difference in mean score that showed the difference of anxiety mean score one hour before and after both in treatment group that

performed dzikir meditation with p value = 0.000 (<0.005) or in the group that did not perform dzikir meditation with p value = 0.061 (>0.05).

The result of the research was in line with the previous research that meditation can lower physical and psychosocial stress in primary hypertension patient and elderly with primary hypertension.[4,5] This is in accordance with the theory that dzikir meditation can make individual being in the state of relax, calm and peace. This situation influences human brain which is related to emotional process especially in hypothalamus part. In the state of meditative through breathing concentration, saying dzikir, having a prayer, shalat and saying other autosuggestion sentences will cause hypothalamus activity stimulation thus it blocks the excression of *corticotropin-realising factor* (CRF) hormone, which causes *anterior pituitari* gland being hampered to release *adrenocorticotrophic hormone* (ACTH) hormone. It hold adrenal gland to produce *kortisol, adrenalin,* dan *noradrenalin* hormones.

3. The result of Difference Test in Decreasing Anxiety Score before and after both in group that performed Dzikir Meditation and the one which did not perform Dzikir Meditation

Tabel 3.The result of Difference Test in Decreasing Anxiety Score Mean Rank before and after both in group that performed Dzikir Meditation and the one which did not perform Dzikir Meditation at Coronary Unit in Sardjito Hospital, Yigyakarta in 2016

Variable	Group	Mean Rank	*Z*	*P value*
anxious				
	Treatment	46.97	- 6.229	0,000
	Control	18.03		

Total amount of treatment group (n=32) and control group (n=32)

Based on table 3, it showed that mean rank in decreasing anxiety score was 46.97 in the treatment group and in the control group. Based on *Mann-Whitney Test,*it was obtained p value 0.000 (<0.05) which means there was a significant different in the decreasing of anxiety score in treatment group and in control group.

This research was in line with the previous research that there was an influence of dzikir on the decreasing of anxiety level in pre operatif cervical cancer patients. This is also in accordance with another theory that dzikir can get rid of sadness, anxiety and depression and also it can create calmness, happiness and life spaciousness. It is because dzikir has psikoterapeutic that contains spiritual and religious power that can awake self confidence and strong optimism.[3]

Based on the research result, eventhough there was a decreasing of mean score in control group, there was a difference in decreasing of anxiety mean score after conducting difference test statistically using *Manny-Whitney Test.*The research result was in accordance with the previous research taht stated dzikir meditation had some medical and psychological effects such as balancing the concentration of serotonin and neropineprine level in the body, in which this phenomenon is a natural morphine that works in the brain and it causes heart and thought feel calm compared to before performing dzikir. Body muscles will slacken especially shoulder muscle that often causes physical tension.[19]

Dizkir meditation was a nonpharmacological action to decrease the mean rank of anxiety score before treatment from 66.28 became 47.

The research result was in accordance with the previous research that stated dzikir meditation can make an individual in the state of relax, calm and peace. This situation influences human brain which is related to emotional process especially in hypothalamus part. In the state of meditative through breathing concentration, saying dzikir, having a prayer, shalat and saying other autosuggestion sentences will cause hypothalamus activity stimulation thus it blocks the excression of *corticotropin-realising factor* (CRF) hormone, which causes *anterior pituitari* gland being hampered to release *adrenocorticotrophic hormone* (ACTH) hormone. It hold adrenal gland to produce *kortisol, adrenalin,* dan *noradrenalin* hormones. It makes *tiroksin* hormone that is released by *tyroid* gland is also hampered. The high level of tiroksin hormone will cause someone being easily getting tired, anxious, high tension, and hard to get sleep so that the meditative state that full of calm and peace feeling will create pyshical effect that is calm and relax. The meditative state also influenced and gave stimulus to *autonomic nervous system* that was divided into two types, those were *sympathetic nervous system* if someone was in stress or tension and *parasimpathetic nervous system* if someone was in the state of relax.[18] Hal tersebut merupakan salah satu bentuk karunia Allah yang sangat berharga yang berfungsi sebagai zat penenang didalam otak manusia.[18] That is one of Alloh precious gifts that functions as a transquilizer substances in the human brain.

Physiologically, spiritual therapy with dzikir or remembering Alloh names will cause the brain to work. When the brain gets stimulus from outside, then the brain will produce chemical substance that gives comfortable feeling that is *neuropeptida.* After the brain produces that substance, it will get stucked and absorbed by the body that will later give feed back in the form of pleasure and calmness.[20]

By time of getting older, there are structural and functional changes in perifer vessel system that is responsible for blood pressure changes. The changes include aterosklerosis or the lost of connective tissue elasticity and the decreasing of relaxation of smooth muscle in blood vessel that will later decrease distency ability and tensile strength of blood vessel. The consequence is aorta and the great artery lost the ability in accommodating the volume of the blood that is pumped by the heart (stroke volume). It causes the lowering of cardiac output and increasing the peripheral resistance so that it can make the tissue lost its elasticity and arterisklerosis in elderly and blood vessel dilation that will cause the increasing of blood pressure.[15]

Beside using medication, the action that can be done to lower diastolic blood pressure, pulse and breathing frequency is with having regular exercise. Regular exercise can increase muscle strength and peripheral blood vessel elasticity so that it can lower blood pressure.

CONCLUSION AND SUGGESTION

Conclusion

Based on the research result, it can be seen that there is a significant difference in decreasing of anxiety scorein family that performs dzikir meditation for 30 minutes, as following in details: the mean rank of decreasing anxiety score in the family of patients that get PTCA after performing dzikir meditation for 30 minutes is 46.97 with p value 0.000 (<0.05).

Suggestion

In order to decrease anxiety score, dzikir meditation can be performed for 30 minutes.

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P-16

Strategies to Increase Survival Rate of Hemorrhagic Stroke Patients: A Systematic Review

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ABSTRACT

Background: Hemorrhagic stroke is a common medical problem, this neurologic disorder often occurs suddenly and often leads to death. Hemorrhagic stroke contribute for 10% of 27% of strokes worldwide, with a mortality rate of > 50% for intracerebral haemorrhage and about 45% for subarachnoid hemorrhage. To prevent disability due to oxygen deprivation, early treatment is crucial.
Aims: To explain and discuss the strategy to increase survival rate hemorrhagic stroke patients
Methods: Articles were collected from electronic databases of Pub Med, Science Direct and Google Scholar. 15 articles were reviewed in this study. The criteria of articles were full text and published between 2010-2015. The search was restricted to the English language.
Results: Rapid diagnosis and management of patients is essential. The strategy needs to be done includes: pre-hospital management and hospital management. Pre-hospital management to do with health promotion. Golden period is also very important to be known by patients, families and communities. Golden period i.e. 3-6 hours is a precious time for someone to get help. Health seeking behavior and family social support can prevent individuals from mental threats. Hospital management includes three parallel processes: (1) management of threatening condition in the acute phase, (2) medical and neurologic evaluation and (3) Primary therapy.
Conclusion: Strategies to increase survival rate include the pre-hospital management and hospital management

Keyword: Survival rate, Hemorrhagic Stroke

Background

Hemorrhagic stroke is a common medical problem, this neurologic disorder often occurs suddenly and often leads to death. Globally, the incidence of hemorrhagic stroke incidence by 5.3 million and the number of deaths from hemorrhagic stroke is 3.2 million[1]. Hemorrhagic stroke contribute for 10% of 27% of strokes worldwide, with a mortality rate of > 50% for intracerebral haemorrhage and about 45% for subarachnoid hemorrhage[2,3]. Asian continent has the largest incidence of hemorrhagic stroke in the world. The incidence of hemorrhagic stroke varies in the age ranged 18-95 years with an increased incidence of doubled along with an increase of up to 80 years of age. Africa and America have the greatest incidence of hypertension asthe cause of hemorrhagic stroke[4].

Approximately 70,000 people in the United States suffer death or severe impairment of consciousness due to a hemorrhagic stroke each year. Approximately 10-30% of cases of stroke, hospitalized a hemorrhagic stroke. The American Heart Association estimates that there are 610,000 new cases of stroke in the United States and 185,000 cases of recurrent strokes. Many cases of hemorrhagic stroke require long-term care, only 20% of patients were able to live independently, while 40% of cases died within 30 days and about half will

die within 48 hours. As many as 80% of cases of hemorrhagic stroke in which the damage caused rupture of the arteries due to chronic hypertension[5,6,7]. Hemorrhagic stroke covers 10% of all strokes in developed countries and 20% in developing countries, with a death rate in one month is 25-35% and 30-48%. In the United States the cost of treatment for hemorrhagic stroke per patient of $ 4.830[1]. The prevalence of hemorrhagic stroke in Indonesia based on data from Health Research Association in 2013 as many as 7/mil and diagnosed health personnel as much as 12.1/mil. Number of patients with stroke is expected to increase along with the many of risk factors[8].

Based on the above data it can be seen that a hemorrhagic stroke is a major health problem in developed and developing countries as well as the number one cause of disability in adults. In addition, the life expectancy of patients with hemorrhagic stroke is low and the socio-economic impact on the family, because the cost of treatment is quite expensive and long. Disability inflicted on patients with post- hemorrhagic stroke causes reduced ability to work and be a burden to the family

"Time is Brain and The Golden Hour" is the slogan of the management of hemorrhagic stroke patients. The faster the treatmentlesser thesequelae of stroke. Golden period for treatment is3-6 hours[9]. Allowing time soon to get treatment in the hope of preventing the minimum of damage to brain cells are deprived of oxygen, which can prevent the severity of disability[10]. Therefore, the efforts to counter the threat of hemorrhagic stroke should be as optimal as possible and the participation of the various parties needed to resolve this problem

Aims

To explain and discuss the strategy to increase survival rate hemorrhagic stroke patients

Methods

This systematic review was conducted by collecting and analyzing articles regarding hemorrhagic stroke. Articles were collected from electronic databases of Pub Med, Science Direct and Google Scholar. Included were articles describing the presentation of strategies to increase survival rate of hemorrhagic stroke, full text and published between 2010-2015 and written in English. Excluded were literature reviews, meta-analyses, case studies, dissertations, and master's theses. A total of 15 articles met the inclusion criteria and are presented

Results and Discussion

Haemorrhagicstroke is an emergency situation. Rapid diagnosis and management of patients is essential, since the beginning of general decline in the first few hours after the incident that > 20 % of patients experienced a reduction in GCS and 15 % to 23 % of patients showed a continued deterioration in the first hours after arriving in ED[10]. Those who survive are usually very vulnerable to setbacks. Functional disorders, for example: paralysis, dysphagia, ataxia, perception deficiency and depression behavior[11]. Assessment of a patient includes evaluating airway, breathing, circulation and blood sugar checks should be done immediately. The health condition prior to the attack should be asked to the patient (if conscious), or their families. Evaluate whether there are other neurological deficits, at the time the attack took place and how long, the risk factors exist and whether controlled and any medication commonly drunk[12].

Given the scale of adverse impact of large numbers of hemorrhagic stroke seem disability, life expectancy is low, the need to do a variety of strategies to address the problem. The strategy needs to be done includes: pre-hospital management and hospital management. Pre-hospital management to do with health promotion regarding hemorrhagic stroke which aims to improve understanding for the community. Health promotion can be done regularly includes education about risk factors that must be prevented such as smoking, hypertension, obesity and other diseases originator[13,14]. Primary prevention is done with the aim of reducing the incidence by finding and treating risk factors such as hypertensionand diabetes mellitus and heart disease. Secondary prevention can be done to prevent a recurrence rate. It should be emphasized to the public that the introduction of the signs and symptoms of early stroke and efforts referral to hospital should be done immediately because of the success of stroke therapy is determined by the speed of action in the acute phase, the longer the effort referral to hospital or the longer the interval between the time of the attack with the current therapy means the worse the prognosis.

Golden period is also very important to be known by patients, families and communities. Golden period i.e.3-6 hours is a precious time for someone to get help[10]. Delays in aid are particularly at risk for the occurrence of disability or death. Patients, families and communities must be able to recognize and make the most of the golden period. Research in the US indicates that <50% of stroke patients seek help in time ≤3 hours, 30% that is > 3 hours and 20% over 24 hours. Delay stroke patients seeking help is divided into three stages, namely: (1) at the start of the first symptoms until it decides to seek help (3 hours), (2) when the patient or his family decided to seek help up to meet with health care providers (10 hours) and (3) when the patient has been in contact with health care until the patient finally was admitted to hospital (2 hours). Of the three stages, the longest was when the family decided to seek help up to meet with health care[15].

In addition to the use of the golden period needs to be changed also include the health seeking behaviour. A little delay could have an impact on disability and death. Various factors that influence this behavior, one of which is a socio-cultural factors in terms of handling pain, that people tend to self-medicate prior to hospital. In addition it is the lack of understanding related to the appropriate treatment[16]. Here, the role of health workers to change this behavior is certainly the promotion of health. Family support is also a consideration in this matter, the family should be able to recognize and determine treatment quickly. Family social support can prevent individuals from mental threats and make people more optimistic in the face of tough times

Hospital management in cases of hemorrhagic stroke should quickly get help. Emergency management includes three parallel processes, that is: (1) management's threatening condition that can cause deterioration or complications in the acute phase, (2) medical and neurologic evaluation with the latest imaging equipment and (3) management of the stroke with the provision of primary therapy. Nurses play a role in this section[17]. Competence and traffic becomes a necessary condition that must-have for treating patients with hemorrhagic stroke be right and appropriate in order to disability and conditions are not expected did not happen[17]. Nurses doing: 1) monitoring of ICP, CPP and hemodynamic function. 2) Implementation of ICP management, BP, ventilation, hipertermi and monitor glucose levels. 3) Prevent complications, keep airway free, mobilization in physical tolerance and conducting a detailed assessment related to neurological function. Nurses are recommended for treating patients of hemorrhagic stroke is an acute care nurse neuroscience expertise[10].

Conclusions

Hemorrhagic stroke is one of the biggest causes of death in the world, early treatment delays can be at risk of disability and death.

The strategy needs to be done includes: pre-hospital management and hospital management. Pre-hospital management to do with health promotion regarding hemorrhagic stroke which aims to improve understanding for the community

Emergency management includes three parallel processes, that is: (1) management's threatening condition that can cause deterioration or complications in the acute phase, (2) medical and neurologic evaluation with the latest imaging equipment and (3) management of the stroke with the provision of primary therapy.

Recommendation

Strategies to increase survival rate include the management of pre-hospital (health promotion, utilization golden period, changing the health seeking behavior and family support). Hospital management includes treatment according to the recommendations of ASA.

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Attachment:

Author and Year	Purpose	Methods	Mayor Finding	Weakness	Strength
Biffi, A., Smith, E., Ayres, A.M & Goldstein, J.N (2011)	Todetermine whether statin exposure is protective for patients who develop ICH.	Case-control study and meta-analysis	Data from our center demonstrated an association between statin use before ICH and increased probability of favorable outcome (odds ratio [OR] = 2.08, 95% confidence interval [CI] 1.37–3.17) and reduced mortality (OR = 0.47, 95% CI 0.32–0.70) at 90 days. No compound-specific statin effect was identified. Meta-analysis of all published evidence confirmed the effect of statin use on good outcome (OR = 1.91, 95% CI 1.38–2.65) and mortality (OR = 0.55, 95% CI 0.42–0.72) after ICH	-	large sample and using 2 methods
Go, G.O., Park, H., Lee, C.H., Hwang, S.H., Han, J.W., Park, I.S (2013).	The purpose of this study was to investigate causes, sites and other factors affecting the prognosis of ICH in young adults aged ≤ 40 years	Retrospective	The most common structural etiology was arteriovenous malformation. A statistically significantly higher proportion of patients with good outcomes had a lower initial systolic blood pressure (SBP ≤ 160 mmHg, p = 0.036), a higher initial Glasgow coma scale (GCS) (9 or more, p = 0.034), lower cholesterol levels (< 200 mg/dl, p = 0.036), and smoking history (at discharge, p = 0.008; 6 months after discharge, p = 0.019).	Just use the GCS to see results	Good methods and long term research
Hariyanti, T., Harsono & Prabandari. Y.S (2015)	This study purposely wants to determine the behavior of stroke patients in health seeking related to the disease	Observational descriptive	The results show that 31.5% patients came to the hospital immediately with various time spans. Stroke patients who went to the hospital within 3 hours were 18,7%, while the rest arrived after more Than 3hours. Patients who were examined by health workers first then taken to the hospital were 46.5%, and patients were not taken to hospital after being taken to the medical and non-medical personnel were 22%. Health seeking behavior was influenced by several factors, namely demographic and geographic factors, socio-cultural, clinical, perception, and knowledge	-	Large sample
Haynes, E., Pancioli, A., Shaw, G., Woo, D (2012).	To explain peripheral leucocytes and intracerebral hemorrhage	Retrospective	The identified 186 ICH patients seen in the ED within 12 hours of symptom onset and with complete baseline data. Mean age was 67.3±14.8 years; 51% were male, and 22% black. Median [interquartile range] ICH volume was 12.8mL	-	Good methods and long term research

Kim et al (2011)	To investigate factors associated with prehospital delay after acute ischemic stroke in Korea.	Prospective study	Among the 500 patients (median 67 years, 62% men), the median time interval from symptom onset to arrival was 474 minutes (interquartile range, 170-1313). Early arrival within 3 hours of symptom onset was significantly associated with the following factors: high National Institutes of Health Stroke Scale (NIHSS) score, previous stroke, atrial fibrillation, use of ambulance, knowledge about thrombolysis and awareness of the patient/bystander that the initial symptom was a stroke. Multivariable logistic regression analysis indicated that awareness of the patient/bystander that the initial symptom was a stroke (OR 4.438, 95% CI 2.669-7.381), knowledge about thrombolysis (OR 2.002, 95% CI 1.104-3.633) and use of ambulance (OR 1.961, 95% CI 1.176-3.270) were significantly associated with early arrival	-	Large sample and good methods
Brouwers, H.B & Goldstein, J.N (2012)	To investigate management in a neuroscience intensive care unit	Review	preventing recurrence of intracerebral hemorrhage is of pivotal importance, and tight blood pressure management is paramoun	-	Many clinical trials are planned or actively enrolling patients, and the near future may hold a wide range of new therapies
Elliot, J & Smith, M (2010)	This review discusses the current understanding of the pathophysiology of spontaneous and anticoagulationrelated ICH and presents consensus evidence for its acute management.	Clinical Review	Attention must be given to fluid and glycemic management, minimizing the risk of ventilator-acquired pneumonia, fever control, provision of enteral nutrition, and thromboembolic prophylaxis. There is an increasing awareness that aggressive management in the acute phase can translate into improved outcomes after ICH		Structured and easy to understand
Rincon, F & Mayer, S.A (2012	This review discusses Intracerebral hemorrhage management	Review articles	Surgical hematoma evacuation does not improve outcome for more patients, but is a reasonable option for patients with early worsening due to mass effect due to large cerebellar or lobar hemorrhages. Promising experimental treatments currently include ultra-early hemostatic therapy, intraventricular clot lysis with thrombolytics, pioglitazone, temperature modulation, and deferoxamine to reduce iron-mediated perihematomalinflammation and tissue injury	-	Structured and easy to understand

P-17

THE IMPACT OF WORKPLACE BULLYING IN NURSING: Literature Review

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ABSTRACT

Background: Bullying in the healthcare workplace has been recognized long time ago that workplace bullying in nursing is characterized as the on-going health or career endangering mistreatment of an employee. Bullying is named as indirection aggression, social or relational aggression, horizontal violence, and workplace violence. It was identified the damaging effect of bullying not only for individuals but also organizations Notice from these reason, it will require to know how bullying make impact for nurses.
Aim: To identify the impact of workplace bullying in nursing.
Methods: This study used implementing a literature search through up to date researches articles. The article used was taken from several databases like ProQuest, Science Direct, and EBSCOhost from 2012-2015. The author analyzes on how the impact about the workplace bullying in nursing.
Results: This study used about 10 researches articles which explained that bullying in workplace can cause psychological and/or physical harm among professionals, disrupt nursing care, and threaten patient safety and quality outcomes of nursing care. It brings poor quality patient care and increased medical error, low patient satisfaction, and increased operational costs. It emerges suppresses confidence, decreases self-worth, encourages acute anxiety and depression, facilitates burnout, promotes Post-Traumatic Stress Disorder (PTSD) and can be factors of both suicidal ideation and actual suicide.
Conclusion: Bullying can destroy nurses mentally and physically. Workplace bullying should be addressed through educational programs geared toward curbing and ultimately eradicating bullying. Education topics such as understanding bullying, ensuring self-care, improving communication skills, utilizing social support, and gaining peer support may help manage bullying in the nursing workplace.

Keywords: Workplace bullying, nurse, impact.

BACKGROUND

Many organizations world-wide are facing the issue of bullying in the workplace and many employees report being subjected to bullying. Researchers reported the workplace bullying is a pervasive and harmful feature of modern workplaces. It was identified the damaging impact of bullying not only for individuals but also organizations [1]. Bullying can occur in any workplace regardless of culture and affect both genders with serious consequences. Bullying at work can include all types of mistreatment, including threats, intimidation, and humiliation. The health care sector is one of the fields where bullying is commonplace [2].

Workplace bullying is distinct from other definitions such as incivility or disruptive behaviors because the behaviors of the bully toward the victim are not random acts, are intentional, and occur over an extended period. Workplace incivility is defined as disrespectful deviant work behaviors of a person to harm another that violates workplace rule [3]. Workplace bullying is considered a serious issue in nursing too. It occurs when an employee (i.e., target) is facing prolonged exposure to negative behaviors against which one feels unable to defend

oneself. Research suggests that up to 40% of nurses are exposed to bullying behaviors, including exclusion, intimidation, and belittlement [4].

Bullying has probably been part of the nursing workplace culture since the beginning of professional nursing. Thus, nurses are up to three times more likely to be victims of violence than other categories of health personnel, with female nurses considered the most vulnerable [2]. Bullying can call by many names: workplace aggression, indirection aggression, social or relational aggression, horizontal (lateral) violence, and workplace violence. It has become so popularized in the press. Bullying in the healthcare workplace has been recognized that there is still a culture of silence in many institutions.

The deliberate, repetitive, and aggressive behaviors of bullying can cause psychological and/or physical harm among professionals, disrupt nursing care, and threaten patient safety and quality outcomes. The consequences of workplace bullying are as evident today as they were one hundred years ago. A century later the workplace has changed for the better in many parts of the world. Yet, in spite of such advances, nurses still experience bullying in the workplace [5].

AIM

The intent of literature review study was to know and identified the impact of the workplace bullying in nursing, which is in physical, psychological and organizational.

METHODS

This study used methods by implementing a literature search through English language research articles published in journals between 2012 and 2015 which was conducted. A computerized search of the ProQuest, Science Direct, and EBSCOhost databases was conducted using the search terms “bullying in workplace” and “bullying in nursing”. Since the purpose of this systematic review focused on bullying in the nursing workplace, the final 10 articles specific to bullying among nurses in their workplaces were selected and potentially eligible in the inclusion criteria. Each selected article was reviewed for suitability for full article review. The literature that eligible in the inclusion criteria are literatures which focus on impact of nursing bullying in workplace issues.

RESULT AND DISCUSSION

According to the American Nurses Association (2015), bullying in nursing in the workplace is characterized as the on-going health or career endangering mistreatment of an employee, by one or more of their peers or higher-ups and reflects the misuse of actual and/or perceived power or position that undermines a person’s ability to succeed or do good, or leaves them feeling hurt, frightened, angry or powerless [6]. In general, bullying consists of the behavior which targeted at a person to humiliate and stigmatize socially. It also aims at sabotaging the victim’s reputation by attacking the victim’s character and professional competence. A person can experience bullying at work from managers, supervisors, co-workers, subordinates, administrators, clinical instructors, charge nurses, and staff nurses [7].

According to the research on workplace bullying in nursing in Alaska (2009), 27.3% of the 249 emergency room, nurses surveyed admitted to being bullied at work. 50% of those who reported being bullied identified managers as the bullies. Similarly, in 2009, 21% of the 286 nurses surveyed in a Turkish study admitted exposure to workplace bullying and reported

that 39% of the bullying behaviors were perpetrated by administrators. 63% of those who experienced bullying identified the perpetrators as more experienced nursing colleagues [8].

Lewis (2006) estimated that approximately 80% of UK nurses experienced bullying at some point in their career, with the majority of these acts being perpetrated by co-workers in Australian hospital settings [9]. Persistent behaviors were reported as repeated occurrence of bullying behaviors over at least once a week for at least a 6-month period [1].

The impact of workplace bullying brings poor quality patient care and outcomes increased medical error, low patient satisfaction, and increased operational costs through liability. As a direct consequence, workplace bullying may affect subtlety and/or sometimes unknowingly their mental health, not only in other physical but also in psychological consequences too. In psychological consequences, they include suppresses confidence, decreases self-worth, fosters feelings of non-appreciativeness, creates self-hatred compromises mental well-being, causes depression, encourages acute anxiety, facilitates burnout, promotes Post-Traumatic Stress Disorder (PTSD), and produces powerlessness. Physically, bullying drains every ounce of compassion, well-intentions, and altruism a nurse [6].

The people, who exposed to long term and persistent bullying at work, have been reported to have low self-esteem and self confidence and to suffer from social isolation, stigmatization and ill-adjustment as well as demonstrating anxiety, aggression, depression or depression-related symptoms. Many bullying victims have been known to demonstrate symptoms of Post-Traumatic Stress Disorder and some have reportedly attempted suicide. On the other hand, individuals experiencing bullying at work have poor job satisfaction, work performance, motivation and efficiency, while their social relations suffer both at work and home. The common bullying behavior that addressed is isolation at work, aggression towards professional status, aggression towards personality, and directly hostile behavior [7].

Workplace bullying has also been associated with serious mental health problems, such as Post-Traumatic Stress Disorder (PTSD). PTSD is a serious anxiety disorder that is associated with persistent exposure to stressful conditions. Researchers have argued that victims of bullying who exhibit symptoms such as memory problems, nervousness, social isolation, avoidance and hostility may in fact be suffering from PTSD. Studies examining bullying and PTSD have found that, on average, 86% of victims reported signs of PTSD. It seems reasonable to expect that given their young age and lack of experience, novice may not yet have developed protective intrapersonal resources making them particularly susceptible to this symptomology when faced with persistent bullying [9].

Another impact from exposure to workplace bullying has been proposed to be an important predictor the underlying factors of both suicidal ideation and actual suicide. Some research established that severely bullied workers were 6 times more likely than non-bullied workers to report suicidal ideations. Workplace bullying refers to a situation in which one or several individuals persistently perceive themselves to be on the receiving end of negative actions from superiors or coworkers and in which the targets find it difficult to defend themselves against these actions. When people over a prolonged period perceive themselves to be socially alienated from others and simultaneously feel that they are a burden on others social exclusion from one's peers or supervisors at work, they develop a risk factor for suicidal ideation and behavior [10].

The other impact of bullying is it can result in serious health-related outcomes among not only in nurses but also patients under their care and health care organizations. Nurses might be more vulnerable to bullying than other health care workers because they were

predominantly female and perceived themselves to be powerless and oppressed. Negative behaviors of a bully are perceived as demeaning and downgrading through vicious words and cruel acts, offensive, abusive, intimidating, malicious, or insulting behavior and unreasonable behaviors. The consequences or damages as a result of bullying in the nursing workplace not only affect interpersonal relationships but also, on an organizational level and negative image of workplace [1].

These outcomes can have significant repercussions for health care organizations and the quality of care they provide. It can contribute to the already salient nursing shortage and generate considerable costs in terms of staff replacement and recruitment [4]. Workplace bullying makes nurses intention to leave the organization because being out of the clique (feeling alienated due to ethnicity or educational level). Some strategy was the provision of assertiveness and aggression training which helped nurses handling adverse working environments, such as approach of partnering nurses mentors with academic participants resolved conflicts and provided support and effective communication that enhanced the work climate or educate their colleagues and administrators on the effects of workplace bullying and strategies for maintaining a more supportive work environment [1].

CONCLUSION

In essence, bullying can destroy nurses mentally and physically. It can have significant association between victimization from bullying and subsequent suicidal ideation because bullying in nursing workplace is considered to be the repeated, cumulative, and patterned form of negative behaviors of a perpetrator abusing his or her power over time toward the victim, resulting in a profound negative impact on the bully victim and organization. So, workplace bullying should be addressed through educational programs geared toward curbing and ultimately eradicating bullying. Education topics such as understanding bullying, ensuring self-care, improving communication skills, utilizing social support, and gaining peer support may help manage bullying in the nursing workplace.

RECOMENDATION

We must create a good workplace environment where caregivers can feel safe and comfortable in their workplace and it should be responsibility of everyone to enhance the knowledge about bullying, which is about the characteristics of bullying and how to against this behavior of all levels of employees up to supervisor in the area of hospital.

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P-18

RISK FACTOR ANALYSIS OF FILARIASIS LYMPHATIC IN VIQUEQUE SUB DISTRICT OF TIMOR LESTE

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ABSTRACT

Viqueque District was one of four sub districts in Viqueque District, Timor Leste. Its filariasis lymphatic disease incidence number was the highest than three other sub districts. This was due to most of its society had an out-at-night activity, they did not use mosquito net while sleeping, and they did not have mosquito-proof home construction.This research aimed to know risk factors of filariasis lymphatic incidence in Viqueque Sub District.

This was an analytical observational research by case control method with sample number of 135 respondents that consisted of 45 respondent cases and 90 respondent controls.

Research result number showed a low out-at-night behaviour with OR value = 0.303; CI = 0.132 – 0.695, mosquito net use behaviour was very low with OR value = 16; CI = 2.088 – 122.611, and its home construction was not mosquito proof with OR value = 16; CI = 2.088 – 122.611 in Viqueque Sub District society of Timor Leste.The conclusion from this research was that people who were out-at-night, they did not use mosquito net while sleeping, and whom their homes were not mosquito proof had higher risk suffered from filariasis lymphatic compared with people who did not out-at-night, who used mosquito net while sleeping and had mosquito proof home construction. Based on this research, it was suggested in order that people did not out- at-night, people was suggested to use mosquito net while sleeping, and their homes were installed with plafond, did not let clothes hanging, and installed wire gauze in their home ventilation, floor to be cemented, tight home wall in order to pursue mosquito entered into the house, and developed guidance to the society on out-at-night danger, did not use mosquito net, and wall construction, mosquito net use, home floor and plafond.

Keywords: Behavior, Epidemiology, Filariasis Lymphatic.

INTRODUCTION

Filariasis has infected 120 million people in 83 countries worldwide and 1/5 of the world population, or 1.3 billion people in 83 countries are at risk of filariasis1. In tropical and subtropical regions there are 22 million children at under 15 who have been infected and 40 million inhabitants have suffered from serious disability. According to WHO, lymphatic filariasis problems that occur in East Timor has been included as the target of elimination programin 2020[1]. The number of people with night activities and sleep habits without nets plays a risk factor for disease transmission of lymphatic filariasis.

Most of the home conditions which do not meet mosquito proof standard which suggests that mosquito cannot fly through the bottom of the house (for the types of houses on stilts). Tribes (village level) in Viqueque Subdistrict are categorized as high filariasis endemic which reached 146 cases in 2010. Sub Viqueque District is an area with the highest lymphatic filariasis cases among other 4 Sub Districts, although its prevalence is lower among others. Most of People in Sub district of Viqueque are farmers. During the maize and paddy seasons, people use to go out at night to keep the plants from the

threat of theft and vermin or animal herbivore so people often sleep in the garden and the fields for months. They come back home after harvest. Some previous studies which were done in other places, showed that going out at night, the use of mosquito nets, and house construction were not statistically significant. But until now there are still lymphatic filariasis cases in sub district of Viqueque that may correlate to society behavior and the condition of the home which has never had filariasis research. Therefore, the researchers are interested in knowing factor of going out at night, use of mosquito nets and home construction whether it is associated with the occurrence of lymphatic filariasis in the sub district of Viqueque, Timor Leste.

METHOD

This research was analytic observational study with case control design, with 45 cases with a ratio of 1: 2, so that the sample in this study were 135 respondents. Filariasis cases based on medical record in 2010 - July 2011 in sub health centers in Viqueque district, East Timor.

The data was taken by getting secondary data in health institutions, whereas the primary data was obtained by performing environmental observation and interviews with respondents in accordance with the research inclusion criteria. Data which were collected were going out behavior, the use of mosquito nets when sleeping and house construction that included the condition of wire netting, house walls, ceilings, and floors of the house. The collected data were analyzed with the help of the computer to perform chi - square and calculate the odds ratio.

RESULT AND DISCUSSION

Research setting description

Figure 1. Viqueque Sub District and Health Facilities (CSI/CHC: Centro Saude Interna, HP: Health Pos, MC: Mobile Clinic)

Sub District Viqueque in the map shows a light blue color. It has ± 1.850 km2, with population of 23.287 inhabitants. This sub-district has 10 tribes (tribe in Indonesia has the

same level as Kelurahan), 62 aldeias (the same level as village) and one hospital. Sub District Viqueque has a border area, they are:

1. East Area : Watulari
2. West Area : Lacluta
3. North Area : Ossu
4. South Area : Laut Timor

Based on the report of Community Health Center at Sub District Viqueque year 2010-2011 finds that there are 45 patients with lymphatic filariasis. But the health department does not have a special medical record of lymphatic filariasis. Based on the guidebooks/guidelines of Timor Leste Ministry of Health classify lymphatic filariasis only to the list of diseases "and other points" (etc)., so the researchers could not take and copy patient's medical record of lymphatic filariasis.

Characteristics of Respondents

1. Univariate Analysis
   a. Age
      Age in this study can be found at table 1.

Table 1. Frequency Distribution of Respondents by Age Group

No	Age	Number (people)	Percentage (%)
1	25-45 yearsold	15	11,1
2	46-65 yearsold	84	62,2
3	66-85 yearsold	36	26,6
4	≥86 yearsold	0	0
	Total	135	100

Data Resource: Primary Data

   b. Education Level
      Education level in this study can be found at table 2.

Table 2. Frequency Distribution of Respondents by Education Level Group

No	Education Level	Number (people)	Percentage (%)
1	No School	135	100
2	Elemantary School	0	0
3	Junior High School	0	0
4	Senior High School	0	0
5	University	0	0
	Total	135	100

Data Resource: Primary Data

c. Occupation

Occupation in this study can be found at table 3.

Table 3. Frequency Distribution of Respondents by Occupation Group

No	Occupation	Number (people)	Percentage (%)
1	Farmer	135	100
2	entrepreneur	0	0
3	government employees	0	0
	Total	135	100

Data Resource: Primary Data

d. Out of the house

The respondent's Out of the house in this study cab be found at table 4

Table 4. Frequency Distribution of Respondents by the respondent's out of the house

No	Out of the House	Number(people)	Percentage (%)
1	06.00-14.00	111	82,2
2	15.00-22.00	1	0,7
3	23.00-06.00	23	17,0
	Total	135	100

Data Resource: Primary Data

2. Bivariate analysis

Bivariate analysis used to analys relationship between independent variables and dependent variable and looking at Odds Ratio (OR), dan CI 95%, used crosstabulation method. Bivariat analysis shows in table 5.

Table 5. Bivariate analysis between independent variables and dependent variable

No	Variable	Status		OR	CI
		Case	Control		
1.	Hang out on night				
	a. Yes	28	76		
	b. No (stay at home)	17	14	0,303	0,132-0,695

Source: primary data

Tabel 6. Bivariate analysis between independent variables and dependent variable

No	Variable	Status		OR	CI
		Case	Control		
1.	Used mosquito net				
	No	44	66		
	Yes	1	24	16	2,088-122,611

Source: primary data

Tabel 7. Bivariate analysis between independent variables and dependent variable

No	Variabel	Status		OR	CI
		Case	Control		
1.	House construction with Mosquito proof				
	No	44	66		2,088-
	Yes	1	24	16	122,611

Source: primary data

Tabel 8. Bivariate analysis between independent variables and dependent variable

No	Variabel	Status		OR	CI
		Case	Control		
1.	Kawat Kasa				
	Yes	0	0	16	2,088-122,611
	No	45	90		

Source: primary data

Tabel 9. Frequecy distribution of wall

No	Variabel	Status		OR	CI
		Case	Control		
1.	Wall				
	Close	0	0	16	2,088-122,611
	Open	45	90		

Source: primary data

Tabel 10. Frequecy distribution of Plafon

No	Variabel	Status		OR	CI
		Case	Control		
1.	Plafon				
	Yes	0	0	16	2,088-122,611
	No	45	90		

Source: primary data

Tabel 11. Frequecy distribution of Floor

No	Variabel	Status		OR	CI
		Case	Control		
1.	Floor				
	a. Permanen	1	0	16	2,088-122,611
	b.Natural/ Soil	44	90		

Source: primary data

DISCUSSION

Correlation between Hang out at night and Filariasis Limfatik

This study showed that no correlation between hang out at night and filariasis (CI = 0,132-0,695). OR = 0,303 it means that respondent who hang out at night did not high risk

of filariasis limfatik rather than the respondent who stay at home.

This research differs from research Sunardi (2006) which states that there is a relationship between a go out at night with the incidence of lymphatic filariasis (P = 0.01). Value OR = 26.2 it means that go out at night have 26.2 times greater risk affected lymphatic filariasis compared with those who did not go out at night.

This is because the possibility of mosquitoes do not bite when respondents go out at night but could have been a mosquito bite in the house as well as the transmission occurs at home if we see the condition of the house that very allows the house to be resting on the vector mosquitoes, because the value of OR of construction of the house is greater than the value OR behavior of go out at night.

Relationship Between Use of Netting With Lymphatic Filariasis Incidence

Based on the research results, there is a relationship between the use of nets with the incidence of lymphatic filariasis (CI = 2.088 to 122.611). OR value indicates that the use of mosquito nets is a risk factor with OR = 16, which means that they are not using mosquito nets while sleeping nights at risk 16 times greater risk of lymphatic filariasis compared with those using mosquito nets while sleeping at night.

These findings are consistent with research that states that there is a relationship between the use of nets with the incidence of lymphatic filariasis (P = 0.01 p <0.05). Value OR = 9.57 means those who do not use the nets at risk 9.57 times greater risk of lymphatic filariasis compared with those who use the nets. Incidence of lymphatic filariasis caused by the respondents did not use nets during the night sleep. Mosquito nets are a barrier when netting in a good condition.[3]

Relationship Between Construction Home Mosquito Proof With Lymphatic Filariasis Incidence

Figure 2. Construction Home Respondents

Based on the research results, there is a relationship between the construction of homes that are not mosquito proof with the incidence of lymphatic filariasis (CI = 2.088 to 122.611). Value of OR = 16, meaning that those who do not mosquito proof construction of houses at risk 16 times greater affected lymphatic filariasis comparing with are mosquito proof of home construction. This study is consistent with research states that there is a relationship between construction homes are not proof mosquito with an incidence of lymphatic filariasis, house wall construction OR = 3.1 (CI = 1.137 to 8.535), meaning that those who house wall construction

that there is a gap at risk 3, 1 times greater to affected lymphatic filariasis comparing with the construction of his house was no gap. House ceiling OR = 4.7 (CI = 1.739 to 12.525), which means that house construction without ceiling have a risk 4.7 times greater risk of lymphatic filariasis compared with those house with ceiling construction , and use mosquito netting wire OR = 3.7 (CI = 1.411 to 968), meaning that ventilation house construction without wire gauze mosquito have a risk 3.7 times greater risk of lymphatic filariasis

It is because of the house with non mosquito proof will ease the mosquitoes to enter the house. The ceiling is a divider between upper wall and roof that is made by wood, plasterboard or bamboo webbing. If there is no ceiling, it means that there is a hole or space between wall and roof so mosquitoes will be easier entering the house. Therefore the risk of contact between people and mosquito will be bigger than the house without space. People who live in the area with mosquitoes breeding places, no ceiling and non permanent houses have bigger risk in getting filariasis compared to the houses without mosquitoes breeding places, with ceiling and permanent houses.

CONCLUSION AND SUGGESTION

A. CONCLUSION

The results of the research are:

1. There is no relation between going at night and the incidence of lymphatic filariasis.
2. There is a relation between the using of mosquito net when sleeping at night and the incidence of lymphatic filariasis.
3. There is a relation between mosquito proof housing construction and the incidence of lymphatic filariasis.

B. SUGGESTION

Based on the conclusion above, the researcher can give some suggestions as following:

1. Community Health Center can give counseling for not going at night even though there is no relation based on the analysis result.
2. Community Health Center can do an activity to distribute mosquito net for people in Viqueque District in general and Sub Distrik Viqueque in specific.
3. It is expected that Community Health Center can give understanding for people whose house construction is not yet mosquito proof to improve their houses quality.
4. It is expected that Timor Leste government especially Timor Leste Health Ministry to create a policy related to filariasis disease problem.
5. It is expected that the Head of Health Department of Viqueque District can improve surveillance activities against filariasis disease.

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P-19

The Relations of Gingivitis Severity Levels with Teeth Sensitivity on Women Aged 30-45

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ABSTRACT

Sensitive tooth is the common term that is used to show hypersensitive dentin because of thinner enamel, gum reduction and dentin formation, a layer under enamel. In short, gingivitis is defined as gum inflammation or gum infection. Gingivitis and periodontitis are the illnesses of periodontal tissue inflammation that happen in most people. The purpose of this research was to know the relations of gingivitis severitty levels with teeth sensitivity of women at the age of 30-45 years old. The subjects of this research were PKK members in the age of age 30-45. This research used descriptive quantitative method and the data was presented by crosstab. The result of this research the most common condition related to gingivitis severity was 52% of the women had mild level of gingivitis and the condition related to teeth sensitivity was 43,5% with sensitive pain. The gingivitis severity level was 62,5% that had mild inflammation at the most. The most women who had sensitive teeth are 57,5 % with pain criteria and had no pain criteria with 42,5% at the least, also the gingivitis severity level was 56,5% which had mild inflammation with pain sensitivity level.

Keywords: Gingivitis Severity Levels, Teeth Sensitivity, Women

INTRODUCTION

Sensitiv Dental is a general term used to indicate the presence of dentin hipersensitiv due to thinning enamel, gums and decrease the opening of dentin, a layer below the enamel. Pain associated with tooth sensitivity occur in the nerves, the pain of tooth sensitiv not remain forever, but periodically there is a temporary[1].

Gingivitis and periodontitis is an inflammatory disease of periodontal tissue that affects many people. Gingivitis is simply defined as gingival inflammation. Another definition states that gingivitis is an inflammation of the gingival epithelium jungsional which is still intact on the teeth in the initial conditions so its attachment has not changed[2].

Mojogedang subdistrict located in Karanganyar, Mojogedang region itself is divided into 14 regions at the village with an area of 5330.90 hectares and a population of some 62 728 people, while the population of the hamlet of 697 souls Mojogedang number by the number of population aged 30-45 years is male number 84 souls and female 96 souls[3].

Based on observations conducted in women with age 30-45 years Mojogedang village, Karanganyar, Solo, showed as many as 10 people had gingivitis and 8 of them experienced a different level of sensitivity that is felt cold, pains, do not feel pains when exposed to cold water. Based on these data can be obtained from the average severity of gingivitis and sensitivity in women aged 30-45 years.

The purpose of this study was to determine the severity of gingivitis with tooth sensitivity in women aged 30-45 years Mojogedang village, Karanganyar, Surakarta.

The results of this research can be useful in the field of theoretical broaden knowledge about oral health counseling related to dental and oral diseases and prevention of oral disease. In the field of practical (1) For researchers used to broaden their horizons and increase knowledge of oral health in particular regarding the description of the severity of gingivitis and sensitivity (2) For the people that this research can provide information of oral health and prevention solutions teeth and mouth disease particularly the description of the severity of gingivitis and sensitivity.

MATRIALS AND METHODE

This type of research is quantitative descriptive. Data collection was performed by cross sectional study was that the data concerning the variables to be collected at the same time[4].

Population is the subject of research[5]. The population in this study were aged 30-45 years PKK Mojogedang village of 40 people. When the study in February-March 2016, in the village of Mojogedang, Karanganyar, Surakarta.

Aspects of this research is the relationship with the severity level of gingivitis tooth sensitivity while uncontrolled aspect is the speed of the brushing, the pressure in the brush, tooth paste, tooth brush types.

Assessment on the severity of gingivitis is an inflammation of the gingival characterized by inflammation and discoloration of the gingiva. Measurement index of gingival taken six teeth were used as tooth index are first molar upper right incisor first upper left first premolar left upper first molars lower left, incisors first bottom right, and first premolar bottom right is given a score based on the index gingiva in the area (facial / labial, mesial, distal, and lingual), namely: (1) a healthy condition in which a state of gingival no inflammation, no discoloration and no bleeding was given a score of 0, (2) mild conditions in which the state of the gingiva there is little change in color and a little edema, but no spontaneous bleeding probing is given a score of 1, (3) the condition of being in which the state of the gingiva there is redness, edema, and bleeding on probing is given a score of 2, (4) severe conditions in which the state of the gingiva No red light or illuminated, the edema, the tendency of spontaneous bleeding was given a score of 3. Determination of criteria in the assessment of gingival index, namely: (1) healthy criteria is given a score of 0, (2) criteria for mild inflammation was given a score of 0.1-1, (3) criteria inflammation was given a score of 1.1 to 2, (4) criteria of severe inflammation was given a score of 2.1 to 3[3]. Rate overview tooth sensitivity is where the teeth will feel pains and pains when exposed to cold stimuli from the outside that attack tooth nerve. Measurement of tooth sensitivity overview of respondents using ethyl chlor (CE) applied to the gingival respondents who had gingivitis criteria and rheumatic pains felt.

Management of data in this research is to look at the severity level of gingivitis with tooth sensitivity in women aged 30-45 years Mojogedang village, Karanganyar district, Surakarta. Researchers used the test of cross tabulation or Crosstabs.

Ethics in Research carried out with due regard to ethics and respect the rights of research subjects signed informed consent.

RESULTS

Research Result

Table 1. Frequency distribution criteria for severity of gingivitis

Severity of gingivitis	Amount	Percentage (%)
Healthy	1	2,5
Mild inflammation	25	62,5
Medium inflammation	14	35
Weight Inflammation	0	0
Total	40	100

Table 2. Distribution of the frequency of tooth sensitivity on the respondent

Sensitivity	Amount	Percentage (%)
Pain	23	57,5
No Pain	17	42,5
Total	40	100

Table 3. Cross tabulation of the age of the respondents to the severity gingivitis

Age (Year)	Severity of gingivitis						Total	
	Healthy		Mild inflammation		Medium inflammation			
	Amount	(%)	Amount	(%)	Amount	(%)	Amount	(%)
30-35	1	100	13	52	0	0	14	35
36-40	0	0	11	44	0	0	11	27
41-45	0	0	1	4	14	100	15	37,5
Total	1	100	25	100	14	100	40	100

Table 4. Cross tabulation of the age of the respondents with tooth sensitivity

Age (Year)	Sensitivity				Total	
	Pain		No Pain			
	Amount	(%)	Amount	(%)	Amount	(%)
30-35	7	30,4	7	41,2	14	35
36-40	6	26,1	5	29,4	11	27,5
41-45	10	43,5	5	29,4	15	37,5
Total	23	100	17	100	40	100

Table 5. Cross tabulation of the severity of gingivitis and tooth sensitivity

Severity of gingivitis	Sensitivity				Total	
	Pain		No Pain			
	Amount	(%)	Amount	(%)	Amount	(%)
Healthy	0	0	1	5,9	1	2,5
Mild	13	56,5	12	70,6	25	62,5
Medium	10	43,5	4	23,5	14	35
Total	23	100	17	100	40	100

DISCUSSION

From the results of the examination conducted on 40 respondents aged 30-45 years old mother in the village of Karanganyar Surakarta Mojogedang obtained results in Table 1, respondents with mild inflammation at most, with the number of 13 respondents (52%), while respondents with no severe inflammation , inflammation of the gums that occurs to the respondent due to brushing too hard and too stressed toothbrush on the surface of teeth and gums, so that the injured and inflamed gums. Gum inflammation can be caused due to an error at the time you brush your teeth, because the severity of polishing, it can injure the gums, sores in the gums and the unraveling of the underlying connective tissue and cause pain. More localized lesions are the result of tertusuknya gums by rows of brushes. The use of toothpicks with toothpicks imposing entrance way into the gap below the contact point. To areas where gaps can occur buildup of food debris that led to the occurrence of gingivitis and periodontitis[2].

According to Table 2, the rate of tooth sensitivity can be seen tooth sensitivity with pain criteria at most, at the age of 41-45 years with the number of 10 respondents (43.5%), taste sensitive pain suffered by the respondent due to the age factor, the use or how to brush teeth that are not quite as long as the age of respondents could lead to gum recession or decline, so the open dentin layer and gives rise to a sense of rheumatic pains in the teeth not only respondent.

Taste experienced by cavities, teeth still good also felt shooting pain. Sensitiv teeth is caused by the opening of a layer of dentin. Normally a layer of dentin covered by enamel and gums, but there are some things that cause the enamel and gums is lost, resulting in the opening of the dentine coating. Among gum recession or deterioration of the gums due to incorrect brushing or age factor, acidic food or beverage that can erode enamel, frequent brushing with a toothpaste that is abrasiv[5].

The results of the research and severity of gingivitis with tooth sensitivity in women aged 30-35 years in the village of Karanganyar district Mojogedang Surakarta will be discussing the following, the results obtained from Table 3, it can be seen cross-tabulations of age and severity of gingivitis most respondents with medium inflammation most that 11 respondents (44%) at the age of 36-40 years, while the cross-tabulation between the age of the respondents to the sensitivity of visible tabulation value most is in Table 4, the age group 41 to 45 years old with 10 respondents (43.5%). Age can affect the severity of gingivitis, this is due to the decrease of gingival line attached to the neck of the teeth or gingival recession are attached to the neck of the teeth or gingival recession, opening a layer of dentin at the root of their taste

for frequent pains in the respondents. There are several other factors that led to a sense of aching in the teeth respondents aged 41- 45 years. Age resulting in an increasingly crowded and increasingly rough gingival connective tissue. In the older age group is 65-80 years found a vast improvement infiltrated connective tissue, increasing the flow of gingival crevice fluid (crivicular fluid), and an increase in gingival index, the index markers of inflammation of the gingival tissues. It is found in healthy gingival conditions[6].

In cross-tabulations severity of the severity of gingivitis with final education level of respondents is shown in Table 5, the value of the tabulation at most that low educated respondents with a number of 22 respondents (88%). While the value of tabulation most in cross-tabulation between the severity of gingivitis and work can be seen in Table 7, with the severity of mild gingivitis housewives ie 25 respondents (100%) and the value of cross tabulation between the severity of gingivitis with an income can be seen in Table 9, with earnings 500000-1000000 have mild severity is 16 respondents (64%). In Table 6, it can be seen low levels of education have a level of sensitivity shooting pain as much as 13 respondents (39.1%). Further cross-tabulation between respondents work with tooth sensitivity seen from Table 8, the number of 14 respondents (60.9%). Cross-tabulation between income and tooth sensitivity can be seen in Table 10, which is a person's income between 500.00-1.000.000 have shooting pain sensitivity level with the number of 15 respondents (65.2%). The level of education also affects the level of knowledge of a person in obtaining and understanding information oral health, with people with low education will affect their jobs and income derived by a person and will impact on the importance of oral health, auto-person middle to lower income would be more concerned with basic needs in everyday to survive, rather than thinking about the importance of maintaining healthy teeth and mouths[7]. it shows the relationship between education and research that most of the respondents with low education have mild inflammation severity gingivitis number of 22 respondents (100%) and shooting pain sensitivity level number of 13 respondents (52%). In our work most respondents only work as housewives so that access in receiving information regarding oral health is very limited, it is seen by the severity of gingivitis number of 25 respondents (100%) had mild inflammation and sensitivity level of pain a number of 15 respondents (60%). In line with their lower education and housewives work that affect the respondent's income, it is seen in research that has been done is the respondents who earn 500000-1000000 have the severity of gingivitis with mild inflammation number of 16 respondents (64%) and sensitivity shooting pain a number of 16 respondents (64%).

On cross-tabulation between the severity of gingivitis and tooth sensitivity can be seen in Table 11, namely that the severity of mild gingivitis experience shooting pain sensitivity with the number of 13 respondents (56.5%), this occurs due to incorrect brushing teeth and excess pressure on the respondents during this time, so that the gum has decreased or gingival recession and consequently open dentin that result in pain rheumatic pain that occurs on the teeth of respondents. The cause of tooth sensitiv is from research experts in the USA, as many as 50-90% of patients with large or excessive pressure when brushing teeth. Tooth brushing habits excess pressure can make the gums become irritated or gum down from the neck teeth, over time the roots of the teeth will be open (gingival recession), neck cavities, enamel would be reduced in thickness so that when drinking cold water, sour or sweet or even touched toothbrush bristles will ache[8]. It outlines the causes of tooth sensitivity is gum decline, poor oral hygiene (OHI-S), bleaching (whitening tooth surface), the erosion of email, brushing your teeth too strong[1].

Factors that affect the oral health knowledge is the level of education, information, cultural, social and economic experience. It becomes multi interrelated factors regarding oral health indices someone[9]. Age is associated with increased damage to tissue attachment. Such damage is caused by the accumulation of potential process detruktif like periodontitis because the amount of plaque increases, trauma chronic disease and tooth brushing, as well as the destruction of iatrogenic of manufacture restorations that are not right, or the act of scaling repeated that had to be performed at each visit on maintenance therapy[6].

CONCLUTION

1. The average women has gingivitis severity of mild severity at most with a 52% with a sensitivity of 43.5% with a tooth ache sensitivity.
2. The severity of gingivitis in the women is a 62.5% experienced mild inflammation at most and no severe inflammation.
3. Tooth sensitivity in the women is a 57.5% experienced tooth sensitivity with pain criteria at most and least in the criteria does not pains criteria amount of 42.5%.
4. On average women who experienced the severity of gingivitis is a 56.5% had mild inflammation with pain sensitivity level.

SUGGESTION

1. For the researchers could study results as a guide to increase knowledge and insight on oral health, especially regarding the severity of gingivitis and sensitivity as well as a guide to promote the wider community.
2. For women 30-45 years of age are advised to maintain the health and dental and oral hygiene by brushing teeth with a way and a good time and precise, avoiding foods and beverages that are acidic use a toothpaste that is not abrasiv which aims to prevent oral disease.
3. For further research studies on the association expected the severity of gingivitis and tooth sensitivity towards menopausal women.

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P-20

BEHAVIOR OF PARENTS AND RESPONSE OF CHILDREN LIVING WITH HIV AIDS (CLWHA)

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ABSTRACT

Human Immunodeficiency Virus (HIV) reduce the ability of human immune system. New HIV casesfrom 2000 until now was decrease is35%, on the other hand in children, which is found 58% increase in new cases. HIV attacks the immune system of patients, when it is combined withprolonged psychosocial-spiritual stress, it will accelerate the emergence of AIDS and even increase mortality. A person's response can be in the form of good or bad, positive or negative. Parents behavior has a major influence on a child's response to HIV / AIDS.The purpose of this study is to determine relationship of the behavior of parents and responce of CLWHA.
Methods: This research is a combination of quantitative completed with qualitative data. The subjects were parents and CLWHA who are active in NGOs - Victory Plus. Independent variable in this research is the behavior of parents with HIV / AIDS. Dependent variable in this research is the child's response to HIV / AIDS. Processing was performed using product moment correlation analysis.Based on hypothesis test using product moment correlation coefficient was obtained at significance level of 5%.
Result: Significant value of research results was 0,000 with p-value<0.05. It shows there is a relationship between the behavior of parents and Responce of CLWHA.

Keywords: Behavior, Response, Children Living With HIV AIDS (CLWHA)

BACKGROUND

Human Immunodeficiency Virus (HIV) reduce the ability of human immune system, making patients susceptible to various diseases. HIV infection is still one of the major health problems and one of the infectious diseases that can affect maternal and child mortality. Indonesia is one country in Asia with HIV / AIDS epidemic is growing most rapidlywith concentrated HIV epidemic, because there are some areas where the HIV prevalence of more than 5% in certain subpopulations, and high HIV prevalence in the general population 15-49 year occurred in the provinces of Papua and West Papua (2.4%).[1] The prevalence of HIV in Yogyakarta was 75.2 per 100,000 population .[2]

Since 2000 until now there is a 35% decrease in new HIV cases, but conditions in children, which found 58% increase in new cases. This condition need our consern because in Indonesia services to children with HIV still inadequate. Also, today throughout the world is estimated there are 17.1 million people living with HIV are unaware that they are HIV positive.[1]

Children infected with HIV have a lower quality of life than children with better immunity. Lack of affection, problem of stigma and discrimination become a great shock and pressure. Psychological distress, social, and conditions often make the child or the child's family would choose to withdraw from the social environment. Nursalam&Ninuk (2009) said physiologically, prolonged stress of psychosocial-spiritual will accelerate HIV to the onset of AIDS even increase mortality, and if the stress reaches the stage of exhaustion, it can lead to failure of immune system function aggravating the situation of children with HIV AIDS.

Response is a reaction of stimulus, or the result of stimulus itself.[4]Every humanplay a role as a controller between stimulus and response. Determinants of individual response to the stimulus is stimulus itself and the individual factors. The person's response can be in the good or bad form, positive or negatif.[5]

The response of children is a concept that determines the success or failure of the individual in facing difficult times. Good response can be built, and it need support from family, friends and community in order to realize the potential responce.[6] The purpose of this study was to determine the relationship of the behavior of parents with HIV / AIDS and the child's response to HIV / AIDS.

METHOD

This research is a combination of quantitative completed with qualitative data to determine the relationship of the behavior of parents with HIV / AIDS and the child's response to HIV / AIDS. The subjects were parents and children with HIV / AIDS who were active in Victory Plus NGOs. Independent variable in this research is the behavior of parents with HIV / AIDS. Dependent variable in this research is the child's response to HIV / AIDS. Data collection of the family using a questionnaire and equipped data qualitative by interviews. Data processing was performed using product moment correlation analysis.

RESULTS AND DISCUSSION

A. RESULTS

1. Description of Research

This research was conducted at the NGO Victory PlusJlTurnggorono No. 5, Mrican, Yogyakarta from April until September 2015. Sample size are 30 children with HIV / AIDS.

2. Univariable Analysis

a. Parents Behaviour of CLWHA (Children Living with HIV and AIDS)
From the data it can be seen that the average of behavior of parents CLWHAis 86, median value is 88, and modus is95. In this study, if the value of x>mean then it categorized as having good manners, and if the value of x <mean then it will catagorized as categorized unfavorable / less behavior.

Table 1. Distribution of Parents Behaviour of CLWHA

	n	%
Parents Behavior		
– Good	20	66.7
– Less	10	33.3

From the above data it was found that two thirds of parents have good manners towards CLWHA.

b. Response of CLWHA
The average value of the child's response amounted to 86, median value is 87, and modus is 90. if the value of x>mean then it categorized as as having a positive response, and if the value of x<mean then it will catagorized as negative response.

Table 2. Distribution Of Response from CLWHA

Responce	n	%
Positive	16	53.3
Negative	14	46.7
Total	30	100

The data shows that positive response owned more than half of the respondents.

3. Bivariable Analysis
   a. Normality Test
      Normality test is use Kolmogorov-Smirnov Z method, to determine the collected data is taken from normal distribution or normal population. (value more then 0,05).
      In this test researchers used SPSS 17:00 for Windows.We found that that variable parental behavior has value 0.167 (> 0.05) and variable of response CLWHA has 0.119 (> 0.05). So, both of variables are distibuted normally.
   b. Correlation test
      Test is using product moment correlation method which is used to determine whether there is a relationship between the study variables. Thw results shows there is a significant colleration between behavior of parents and responce of children(v-value = 0.000) .

B. DISCUSSION

Based on hypothesis test using Product Moment Correlation showed there is significant values between behavior of parents with response of CLWHA.

The results of this study is accordance with the previous study that found that the response is a reaction or response depends on the stimulus or are the result of the stimulus. Humanplay a role as a controller between stimulus and response. [4, 5] Positive responce of CLWHA is basically a concept that determines the success or failure of the individual in the face of difficult times. It can be built, so that it is possible for all individuals.

People living with HIV were able to show positive responceto face any difficulties that arise due to HIV infection. The resilience of people living with HIV look of their emotional awareness and emotional control, the ability to control impulses, optimistic, flexible and accurate thinking, the ability to empathize, relationships and achievement, as well as problem-solving skills.[7]

In this study, parents who have good (66.7%) is linear with positive responsevof their child (53.3%). This shows that the behavior of parents have an important role in the response of CLWHA. Parent behaviour in this study assessed from three domains, there are cognitive, affective and psychomotor. Parents with good behaviour will either bring positive impacts on children's response to HIV / AIDS.

CONCLUSION

1. Most parents have good behavior.
2. Most of the child's response to HIV / AIDS positive
3. There is a relationship behaviors of parents of CLWHA with Responce of CLWHA

SUGGESTION

Required more in-depth analysis on quantitative data to measure the behavior of the parents.

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P-21

THE PROVISION OF CLEAN WATER, CONTAMINATION RISK AND ENVIRONMENT PERCEPTION OF WATER USER GROUPS (POKMAIR) IN WATUMALANG DISTRICT, WONOSOBO REGENCY, CENTRAL JAVA

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ABSTRACT

Wonosobo Regency is part of Central Java Province which promising potential of water resources. This condition is cause an existence of enormous numbers of spring. However, the utilization of it just impressed to fulfill requirement of quantity than quality. As a consequence, this considered giving negative effect to local communities health. One of it is considerated as cause of diarrhea outbreak. The Watumalang District is one of diarrheal outbreak area in Wonosobo. Mitigation is the most importance value of research in clean water distribution. The research objectives are: (1) to evaluate contamination risk factors of sanitary facilities, (2) to determine water quality of local people raw water and (3) to determine environment perception of local communities. Research subject is local communities who classified as independent users of water (without advanced processing). This research used primary survey, secondary data collection and questionnare. Result of the research shown that 37% have very high contamination risk in sanitary facilities meanwhile 25% is low risk. Analysis of water quality shown that all of samples have a high coliform numbers with average value is 270/100 ml. Assessment of POKMAIR environmental perception resulting a moderate to very good perception (77%). Based on those results, the water quality management should be done with construction repair, better handling and monitoring on sanitary facilities.

Keywords : sanitary, contamination risk, water quality, environmental perception, Watumalang

INTRODUCTION

Water is one of the vital needs of life sustainability. Water resources problems refer to (a) availability in quantity and quality context and (b) utilization and conservation efforts. Based on quantity, Indonesia have a sufficient water resources. Ministry of Public Works [7] described that Indonesia rain water volume is approximately 21.120 mm anually. Twenty five percent was loaded in surface water system, 72% flushed into the sea or as flood (also called runoff water) with only 3% consummed by people.

Major challenge of Indonesia water resources management is quality degradation. The main cause of this challenge is an anthropogenic ethic. This shallow ecology ethic is simply placed environment as only fulfillment instrument of human needs [6][14]. The anthropogenic ethic induced over-exploitation and water system pollution.

Major of pollutant is produced by anthropogenic activities including heavy metal compound, faecal coliform and agrochemistry materials. Pollution will be more vulnerable in surface water systems [1]. Pathogen contamination (carried by faecal bacteria) giving a tangible threats to human health. This condition became a consumption limitation, especially for water without specific treatment [1]. Healthy risk of water refers to the character as organism growth media and infection pathway [5]. Provision of healthy drinking water became

fundamental needs to ensure a public health and it was one of human rights. Nevertheless, the amount of clean water are limited both quantity and quality. There was a prediction that the amount will be decrease as long as population growth, urbanization and climate change [9].

Wonosobo Regency in Central Java has a potential of water resources. This condition indicated existence of springs that spread evenly on its administrative area. This potency gives benefit for local communities. However, provision and distribution of clean water are indicated lack in health standard. Negative impact in lack quality of water is diarrheal outbreak (KLB-*bahasa*) in some district, including Watumalang which there are 51 peoples suffering diarrhea. The contamination of *Escherichia coli* in water consumption is the cause of outbreak. Early observation of this research showing some boosting factors including : lack of management on distribution system, lack of spring protection, unhygienic water reservoirs and unhealthy sanitary.

Indonesian Government regulating Law Number 32 Year 2009 to preserve environmental quality. Water resources management specifically regulated in Law Number 7 Year 2009 [15]. Requirements and monitoring of water quality is regulated by Ordinance of Health Minister Number 416/Menkes/Per/IX/1990 and Ordinance of Health Minister Number 492/Menkes/Per/IV/2010 for drinking water. However, lack of monitoring level, law enforcement and public awareness made water quality to be difficult to managing. This research will investigate water distribution system, perception of community to contamination and environmentsanitary and environment perception in Watumalang. The research is also as implement of The Law Number 24 Year 2007 about Mitigation.

OBJECTIVES

The objectives of this research are (1) to evaluate sanitary facilities contamination risk in POKMAIR community of Watumalang District, (2) to evaluate the consumed water quality in POKMAIR community of Watumalang District and (3) to asses environment perception of POKMAIR community

RESEARCH METHODS

A. Research Location and Period

This research located in Watumalang District, Wonosobo Regency, Central Java. Water samples analyzed in Local Office of Public Health Laboratory of Wonosobo. Period of contamination risk and water quality analysis is in mid of 2015. Questionnare about environment perception conducted in early of 2016.

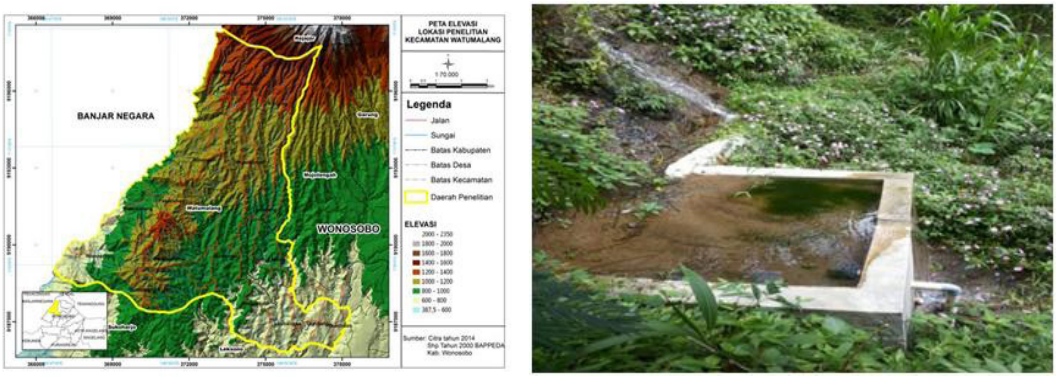

Figure 1.a. and 1.b. Research location map (left) and condition of spring protection facilities in Gumawang Kidul Village, Watumalang (right)

B. Instruments and Materials

Instruments utilized including stationary, laptop, digital camera, digital water tester, set of MPN instruments and questionnare sheets. Material be required including environmental character data and water samples from POKMAIR community reservoir.

C. Research Subjects

Research population is POKMAIR community of Watumalang, included sanitary condition and water distribution systems. All samples were taken randomly to represent of villages. Amount of contamination risk samples is 24 spots of sanitary facilities. Respondences of questionnare is 26 persons and water samples taken from 8 spots of primary springs of Watumalang.

D. Data Collection and Analysis

Data collection was conducted by top down and bottom up approach combination. Top down approach was applied to collect secondary data to decribing an environment character of Watumalang. Bottom up aproach was applied to collect primary data including water samples, questionnare of contamination risk and envronment perception.

Water quality analysis was conducted by laboratory test of chemicals and biologicals parameter. Biological analysis was conducted to count the number of coliform through Most Probable Number (MPN) Test. Result of analysis will be compared with government regulation about water quality standards including : Government Ordinance Number 82 Year 2001 (class of water utilization) [12], Ordinance of Health Minister Number 416/Menkes/Per/IX/1990 (clean water)[10] and Ordinance of Health Minister Number 492/Menkes/Per/IV/2010 (drinking water)[11] to determine class of utilization and appropriateness.

Environment perception questionnare will be advanced through a validity and reliabilty test to ensure an appropriateness instrument. Both of test conducted with Pearson Corellation Test and Cronbach Alpha which assisted by SPSS 20 software. Result of that environment perception questionnare will be converted into quantitative data based on point of every question (a = 3, b = 2 and c = 1). Total point of questionnare from each respondents will be categorized below in Table 1

Table 1. Range category of environmental perception questionnare points

Environment perception assesment		**Contamination risk factors assesments**	
Total points range	**Environment perception categories***	**Range of points (%)**	**Contamination risk categories****
0 - 91,75	Low	≤25	Low
91,75 - 96,5	Moderate	26-50	Medium
96,5 - 98,25	Good	51-74	High
>98,25	Very good	≥75	Very high

based on analysis result of the questionnare Anonim, 2010*

RESULTS AND DISCUSSION

A. Environmental Character of Watumalang District

Watumalang is a part of Wonosobo Regency which dominated by mountain area (average altitude 913 masl). Total area of Watumalang is 12.716 Ha that dominated by moor,

state forests and rice fields. Average annual temperature is 21,5^0 C, total annual rainfall is 2545 mm (2014) with 242 rainy days [3]. Number of Watumalang population is 49.266 people (2016 projection). Watumalang is classified as agrarian area, dominated by farm workers (48%), business sector in agriculture and livestock (79%) and land use which has strong relationship with agriculture and livestock activities[3].

Employment and business sector do not have a strong correlation with sanitation system. However, dominancy of agrarian sector usually have tendency with the life pattern of rural communities. General pattern of rural communities have less concerned in good sanitation as effects of lack of knowledge.

B. Contamination Risk Factors of Sanitation Facilities

Database from Sanitasi Total Berbasis Masyarakat (STBM) in 2016 shown that toilet access in Watumalang District is 64,78%. It was only 4864 families have a permanent toilet facilities from 14878 families in Watumalang. Approximately 4639 families (31,18%) are inaccessible with toilet or didn't have representative sanitation either private and public. Rest of them had a semi permanent toilet or using public toilet[13].

Generally, Wonosobo had ranks at 34th position from 35th regency in Central Java for the coverage of healthy toilets (owned by 50,16% of population). This condition that indicates behavior of unhealthy sanitary in majority of local peoples. Unhygiene habit of defecate carelessly still have a high percentation at local communities

Inspection of sanitation facilities are conducted to 24 spots of facilities in Watumalang. In this research, inspection of sanitation has objectives to evaluate contamination risk in sanitary facilities. Inspection of sanitary also have purpose to fulfill environmental surveillance objectives namely to measure an influence of contamination towards environment quality. The result of inspection of sanitary shown at the table below

Table 2. Result of sanitary facilities contamination risk analysis in Watumalang

Category of sanitary facilities contamination risk	Amount of units	Percentage (%)
Very high	9	37
High	3	13
Medium	6	25
Low	6	25

According to the result, as much as 50% sample of sanitary units in Watumalang have a high to very high contamination risk. The rest, each of 25% of sanitary units have a medium to low risk contamination. It was only 25% facilities fulfilling a healthy standards. As recommendation, 50% of facilities must be rebuilding following correct construction regulation and other 50% of facilities must be conducting water quality monitoring and evaluation about contaminant level.

Poor sanitary giving risk a lack of reliability towards water contamination.Water contamination in general is carried by seepange or run off water which also contaminated with fecal bacteria including *Escherichia coli*. Based on the fact, this condition should be appointed as primary factor of diarrhea outbreak in Watumalang.

C. Water Quality and Feasibility Analysis

Water samples taking from 8 random spots from residents reservoirs. Samples only taken from residents uses water spring. Watumalang communities has developed water distribution systems independently with their own funding. This system distributed water from the spring to people house with utilizing narrow *polyvinyl chloride* (PVC) pipes. Basic concept of this distribution type is to distribute adequate quantities to residents.

Water quality test conducted in 4 variables which represented chemical parameters (pH, cadmium and total chromium) and biological (total coliform). The analysis result is shown on the table below

Table 4. Result of water quality test from random water samples in Watumalang

No	Spring sources	Chemical			Biological
		pH	Cd	Cr	MPN
1	Wanadadi	8,47	0,003	0,03	240
2	Depok	8,73	0,004	0,03	210
3	Siranda	8,74	0,001	0,02	1100
4	Kalitelu	9,02	0,002	0,02	75
5	Jugrugan	6,94	0,002	0,01	93
6	Sicowet	7	0,003	0,04	210
7	Igirmranak	9,58	0,004	0,01	23
8	Krangean	9,58	0,003	0,02	210
Average values		8,51	0,003	0,02	270,13

**Cd and Cr in unit of mg/l; MPN in unit of sum individuals/100 ml*

Furthermore, the result will be compared with regulation standart to determine class of water utilization, feasibility of clean water and drinking water

Table 5. Comparison test between water samples analysis result and Indonesia regulation

No	Regulation compared	Variable of water quality			
		pH	Cd	Cr	MPN
1	Ordinance of Indonesia Gov. 82 Year 2001^	Class I	Class I	Class I	Class I
	Ordinance of Health Mins. No 416 Year 1990*	NA	Feasible	Feasible	Not feasible
	Ordinance of Health Mins. No 492 Year 2010**	Feasible	Feasible ***	Feasible	Not feasible
2	Ordinance of Indonesia Gov. 82 Tahun 2001^	Class I	Class I	Class I	Class I
	Ordinance of Health Mins. No 416 Year 1990*	NA	Feasible	Feasible	Not feasible
	Ordinance of Health Mins. No 492 Year 2010**	Feasible	Not feasible	Feasible	Not feasible
3	Ordinance of Indonesia Gov. 82 Tahun 2001^	Class I	Class I	Class I	Class II
	Ordinance of Health Mins. No 416 Year 1990*	NA	Feasible	Feasible	Not feasible
	Ordinance of Health Mins. No 492 Year 2010**	Feasible	Feasible	Feasible	Not feasible
4	Ordinance of Indonesia Gov. 82 Tahun 2001^	Not feasible	Class I	Class I	Class I
	Ordinance of Health Mins. No 416 Year 1990*	NA	Feasible	Feasible	Not feasible
	Ordinance of Health Mins. No 492 Year 2010**	Not feasible	Feasible	Feasible	Not feasible
5	Ordinance of Indonesia Gov. 82 Tahun 2001^	Class I	Class I	Class I	Class I
	Ordinance of Health Mins. No 416 Year 1990*	NA	Feasible	Feasible	Not feasible
	Ordinance of Health Mins. No 492 Year 2010**	Feasible	Feasible	Feasible	Not feasible
6	Ordinance of Indonesia Gov. 82 Tahun 2001^	Class I	Class I	Class I	Class I
	Ordinance of Health Mins. No 416 Year 1990*	NA	Feasible	Feasible	Not feasible
	Ordinance of Health Mins. No 492 Year 2010**	Feasible	Feasible	Feasible	Not feasible
7	Ordinance of Indonesia Gov. 82 Tahun 2001^	Not feasible	Class I	Class I	Class I
	Ordinance of Health Mins. No 416 Year 1990*	NA	Feasible	Feasible	Feasible
	Ordinance of Health Mins. No 492 Year 2010**	Not feasible	Feasible	Feasible	Not feasible
8	Ordinance of Indonesia Gov. 82 Tahun 2001^	Not feasible	Class I	Class I	Class I
	Ordinance of Health Mins. No 416 Year 1990*	NA	Feasible	Feasible	Not feasible
	Ordinance of Health Mins. No 492 Year 2010**	Not feasible	Feasible	Feasible	Not feasible

*^Government Ordinance No 82 Year 2001 about class of water utilized, *about feasibility of clean water, **about feasibilty of drinking water, ***feasible but at maximum standards limit. Red blocks indicated not feasible quality*

1. Class of water utilization

   Indonesian government was classified 4 (four) class of water utilization based on quality standards regulated in Ordinance of Indonesia Government Number 82 Year 2001. The 1st Class requiring highest quality standards of water for consumption (including drinking water). Comparison test resulted almost all of samples are fulfill the 1st Class water requirements except sample number 3 (in MPN value) also number 4, 7, and 8 (in pH value).

2. Clean water feasibility

Quality standards of clean water were regulated by Ordinance of Health Minister Number 416 Year 1990. Generally, almost all of samples are exceed the limit of clean water quality standards, especially in total coliform value. The quality standards required maximum numbers of total coliform is 50 individuals/100 ml (non-piped water) and 100 individuals/100 ml (piped water). Based on analysis, only sample number 7 fulfilled this regulation. Contamination of coliform became early indicators of health problems in digestive tract, including as diarrheal indicator.

3. Drinking water feasibilty

Quality standards of drinking water were regulated in Ordinance of Health Minister Number 492 Year 2010. In general, all of samples are exceed the limit of drinking water quality standards, especially in numbers of total coliform (> 0 /100 ml). Besides it, some sample are exceed other chemical standard likes cadmium (2) and pH level (4,7,8). Based on total coliform value should be concluded that the water is not feasible as drinking water. This condition have a significant probability as cause of diarrhea outbreak in Watumalang.

D. Environment Perception of POKMAIR Community

Assesment on enviromental perception objectives are evaluate public awareness and insight of environment problems. Validity test of questionnare resulted that 33 valid from total 35 questions. Realibilty test resulted a Cronbach Alpha value 0,95. Its mean that instruments is reliable because the value is higher than 0,60. Table 6 shown the result of environmental perception assesment.

Table 6. Result of environmental perception assesment in Watumalang

Environment perception categories	Sum of respondences	Percentage (%)
Very good	6	23
Good	7	27
Moderate	7	27
Low	6	23

Result of questionnare found that only 23% of local resident with low environment perception. Rest of them have adequately perspective to support sanitation facilities and water distribution improvement. The result should be concluded that environmental patterns of local communities are set in repairing perspectives. Only few of them has an ignoring or destructive perspetives. This condition should be applied to drive a communities empowerment movement to improve the environmental health quality of Watumalang. Of course it must be supported by local government and acamedic societies.

E. General review

Based on analysis of comparasion study, water quality consumed by Watumalang POKMAIR communities is not feasible especially as drinking water. Almost all of samples have high numbers of coliform inside. Occasion of diarrheal oubreak just only strenghten this conclusion. The coliform contamination have correlation with poor sanitary facilities condition. Inspection of sanitary resulted a high to very high risk contamination condition in majority of Watumalang sanitary facilities. Contamination of coliform also boosted by

defecate carelessly habit [4][13]. Environment perception assesment resulted a good value of environment perception especially in POKMAIR community. It means that the community have an adequate ability to restore and rebuild their environmental condition including sanitary and water distribution problems. Environmental quality improvement efforts should be done based on community development.

INTERNAL / EKSTERNAL	Strenght (S) Good environment perception and local wisdom Supported by economic factors	Weakness (W) Poor sanitary pattern Limited amount of representative sanitation facilities
Opportunity (O) Enormous potential of water resources Attention of local government	A good environmental perception and local wisdom is an incentiver to reach a sustainable nature resource utilization Sinergy of economic condition, and government attention should build a feasible sanitation facilities	Utilization of water resource should open a pathway to repair sanitary facilities and water distribution Assesment of local government will be open an access to environmental healht education to change the poor sanitary habit
Threat (T) Potency of nature resource should sparks over exploitation on the future Unpredictable funding from government and private sectors	Environmental perspective and economic establishment will build strong boundary from temptation of overexploited profits Self environmental awareness and economic establishment will set independent mentality from government funding	Natural resource potency should be utilized by communities empowerment and indepndency in cooperation with investors to build better sanitary facilities Profit from natural potency utilizationshould be used to minimize a government funding depedency to restore sanitary and water distribution system

Figure 3. The SWOT Matrix of Watumalang communities towards water resource potency, sanitar facilities and environment perception.

CONCLUSION

Inspection of sanitatation facilities in Watumalang determined 50% facilities are in high risk of contamination. It was only 25% in safety level (low risk of contamination). Quality of POKMAIR consumed water classified as not feasible for drinking water, especially as cause of high coliform numbers. This conclusion is refer to applicable regulation about quality standard of drinking water. Assessment of environmental perception shown that 77% of respodents of POKMAIR communities have adequate perspectives about environmental problems.

RECOMMENDATION

1. The sanitation facilities and clean water distribution need to repair rapidly, especially in construction.
2. Change in sanitary habits of local communities to build a better environmental health

3. Quality of raw water quality that consumed by Watumalang residents is needed to monitor and evaluate continously
4. Boosting communities empowerment to repairing, handling, protecting and evaluating environmental health condition, especially related with raw water condition.

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P-22

List of Exhibitors

1. *Inez Cosmetics*
2. *PT. Sagung Seto : EBSCO Host*
3. *UII Net*
4. *BNI 46*
5. *BPD DIY*
6. *PT. Unisi*
7. *Freeland*
8. *Cressendo*
9. *CV. Toyoris*
10. *CV. Alfa Kimia*
11. *Yogya Tronic*
12. *NU Skin*
13. *Anggun Modeste*
14. *Rumah Batik Kamila*
15. *ACE Life Insurence*

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book also stated that the basic conditions contribute to maternal and are the factors that determine the occurrence of preeclampsia, Chesley and Cooper (1986) studied the sister, daughter, granddaughter and daughter-eclampsia than women who give birth, they concluded preeclampsia very likely lowered. Cooper and Liston (1979) observed that susceptibility to preeclampsia depend on a recessive gene. (5). With regular inspection of Antenatal Care in accordance with the policy program where antenatal visit should be done at least four times during pregnancy which aims to recognize early complications or abnormalities can be pursued early detect the presence of severe preeclampsia.

CONCLUSIONS AND RECOMMENDATIONS

Conclusion

Most respondents who suffered preeklampsi on low-risk age groups, as big as (71.3%), Parity is the group most at risk parity (P1 / ≥P4), as big as(63.8%), Gestational age group most at risk of gestational age is 84 respondents (89.4%). Variable history of preeclampsia are at less risk groups as big as (91.5%). There is a significant association between maternal age with the prevalence of severe preeclampsia. Variable parity, gestational age, and history of preeclampsia did not show any significant relationship with the occurrence of severe preeclampsia.

Suggestion

For health workers are expected to provide health education for pregnant brides to plan a healthy reproductive age. The midwife may make early detection of preeclampsia on each visit ante natal care and documenting midwifery care properly for observed condition of pregnancy pregnant women.

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O-22

COMPARISON OF CHOLESTEROL LEVELS IN OBESITY AND NON OBESITY AT POLTEKKES MEDAN

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ABSTRACT

Background; Obesity has become a problem of public health and nutrition in the world. The prevalence of obesity is increasing in recent years and has led to serious health problems. Globally at least 2.8 million deaths each year linked to weight gain and obesity. Obesity that persist and excessive food intake can cause metabolic system disorders such as hypercholesterolemia. Conditions of excess cholesterol in the blood can cause atherosclerosis, coronary heart disease, stroke, and high blood pressure that can lead to death. Obesity is often associated with hypercholesterolemia condition, but sometimes also high cholesterol levels in people who have normal weight. Purpose: This study aimed to compare the levels of cholesterol in adults with obesity and non-obese. Method: This type of research is descriptive analytic with cross sectional design. This research was conducted in the Polytechnic Health Ministry of Medan. The study population numbered 375 sample size is determined based on inclusion criteria and taken by accidental sampling. Test data used is T test with significant level of p = 0:05. Result: The results of this study indicate that there is no difference in cholesterol levels between people who are obese with non-obese where the average cholesterol levels of obese people is 188.89 while the average cholesterol level non-obese person is 190.11. T test results showed that the value of t = 0932 which means greater than 0.05 which means that the two groups are identical (no difference).Conclusion: There is no difference in cholesterol levels between people who are obese with non-obese

Keywords : Obesity, non Obesity, cholesterol

INTRODUCTION

Obesity has become a problem of public health and nutrition in the world, both in developed countries and developing countries. The prevalence of obesity is increasing in recent years and has led to serious health problems. Globally at least 2.8 million deaths each year linked to weight gain and obesity which 300,000 occur in the United States and 350,000 in Southeast Asia[1,2.] Based on data from the Non communicable Disease in South-East Asia Region in 2008 the prevalence of individuals with a BMI ≥ 25 kg / m2 increase in some countries and in Indonesia the percentage reached 16% in men and 25% in women [2] . Data taken from the Basic Health Research (Riskesdas) in 2010 reported that 11.65% of adults aged ≥18 years are obese and this figure increased in 2013, namely 19.7% of men aged ≥18 years were obese, while in women reached 32.9% [3]. For North Sumatra data obtained from the Regional Health Research (Riskesda) in 2007 showed the percentage reached 11.9% overweight and 13.5% obese. In 2010 the percentage of overweight males 10.9% and 12.8% in women, while the percentage of obese 9.4% in men and 17.4% in women [3].

The increasing of number of people with obesity have an bad impact for health, since obesity is a chronic disease that is polygenic or monogenic that can lead to some condition