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"Life Cycle Approach for Successful Aging"

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THE 4th INTERNATIONAL NURSING CONFERENCE
“LIFE CYCLE APPROACH FOR SUCCESSFUL AGING”

AHMAD ZAINURI HALL
UNIVERSITY OF MUHAMMADIYAH JEMBER
September, 7 2019

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PALLIATIVE NURSING

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**PROCEEDING
THE 4th INTERNATIONAL NURSING CONFERENCE
"LIFE CYCLE APPROACH FOR SUCCESSFUL AGING"**

**Faculty of Health Science
University of Muhammadiyah Jember
East Java, Indonesia**

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FOREWORD

The success of health development in Indonesia are affecting on reduction of birth rate, morbidity, mortality and at the same time increasing life expectancy. Life expectancy of Indonesia were 68.6 years in 2004 then become 69.8 years in 2010. In 2015 the life expectancy are growing to 70.8 years and it projected to keep growing at the future resulting an increase of the number of senior citizens in the future significantly. Indonesia are become one of the top five countries with the highest proportion of senior citizens in the world. The population census in 2010 stated that there were 18.1 million of elderly or 7.6% of the total population and it continue to grow. According to The Central Bureau of Statistic in 2013 the number of senior citizens are predicted to grow up to 27.1 millions of people in 2020, then become 33.7 millions in 2025 and keep growing up to 48.2 millions in 2035.

This situation needs an attention from the goverment. The goverment of Indonesia has take several action to ensure the good health and welfare of senior citizens. It is all began at 1996 where the goverment determine that May 29th is the day for seniors. Furthermore, in 1998 the goverment issued the 13th Legislation which known as Senior's Welfare Act as a legal basic where the seniors were aknowledge. At 2009 the goverment issued the 36th Legislation about The Act of Health which stated that the efforts to improve and maintain public health carried out based on the principle of non discriminatory, participatory and sustainable. The efforts to maintain health care for elderly are intended to ensure that the elderly remain healthy, independent, active and productiver socially and economically. To achieve this goal the goverment is obliged to ensure the availability of health care facilities and facilitating the development of senior's community.

As the senior citizens grow older, the more likely they are facing problems such as physical, mental, spiritual, economic and social one. The fundamental problems faced by the seniors are health problem caused by degenerative proccess which is indicated by disease data pattern of elderly. Based on basic medical research (Riskesdas) in 2018 the most prevalent diseases in elderly are non communicable disease such as hypertension, osteoarthritis, dental – mouth problems, Chronic Obstructive Pulmonary Disease (COPD) and Diabetes Mellitus (DM).

In the other hand, aging process experienced by seniors lead to a condition called geriatric syndromes. Geriatric syndromes include a number of condition typical of, if not spesific to, aging such as dementia, depression, delirium, incontinence, vertigo, falls, spontaneous bone fractures, failure to thrive, and neglect and abuse. Geriatric syndromes are associated with poor quality of life and reduced life expectancy.

The main problem for the elderly is the fulfillment of health care needs. Therefore it is necessary to develop health services that prioritize the improvement, prevention, and health care maintenance in addition to healing and recovery efforts. Long term purpose of this efforts are to gain better quality of life of the seniors.

Therefore as an efforts to support the success of the National Medium Term Development Plan (RPJMN) in 2019, the nurse as a part of health worker are play important roles. The nurse should be aware of this issue. Based on the above mentioned background, Faculty of Health Science University of Muhammadiyah Jember would conduct an International Seminar and



Workshop of Gerontology Nursing with the theme "Resolving Geriatric Syndromes Through Elderly Health Services".

Jember, September 2019

Comitte of The 4th International Nursing Conference and Workshop
Faculty of Health Science, University of Muhammadiyah Jember



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WHAT FACTORS ARE SUPPORTING BREASTFEEDING OF WORKING MOTHERS: LITERATURE REVIEW AS APPROACH

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ABSTRACT

BACKGROUND: Breastfeeding is one of the natural and important way to provide food for baby. It also has role to support the physical and emotional development between mothers and baby. Nowadays, coverage numbers of breastfeeding is low. The objective of this study is to understanding determinant factors to encourage breastfeeding of working mothers.

METHODE : This study was literature review. Searching literatur on online database consist of Medline, Pubmed, Science Direct and Cochrane. Inclusion criteria such as literature in english, both qualitative and quantitative research, literature published after 31 December 2005 until 31 December 2017. Article appraisal used Form Crowe Critical Appraisal Tool (CCAT). Based on the findings of the analysis of 21 literature.

RESULTS AND DISCUSSION : There are several factors that can influence mother working to breastfeed. Factors supporting: high incomes, high education, mature age, marital status, multiparity, low of psychosocial distress, broad knowledge, support from workplace, existing facilities at the workplace, part-time work, co-workers and supervisor to provide time to pumped breast milk, suggestions and appeals from health workers, also policy in workplace. Obstacle factor to breastfeeding for working mother such as tightly work schedule and unflexible, full-time work, mother did not understood about breasfeeding policy, low economy status, lack of support and facility for breastfeeding, vacation regulation, lack of support and attention of health workers, infant condition (premature or illness) and exposed advertisement of formula.

Keyword: working mother, breastfeeding

INTRODUCTION

Exclusive breastfeed for baby has been proven many benefit, but most of mothers do not understand. Based on report of basic health research (*Riskesdas*) (2013), showed breastfeeding coverage in Indonesia just 43%. The achievement still under on WHO target. WHO encourages breastfeeding coverage until 50%. The result indicates less child get adequate nutrition from breast-milk, while breast milk has important role on physical and emotional development. World Health Organization (WHO) estimated about 1,3 million infant mortality each years. Mortality of infant should be prevented by increasing exclusive breastfeeding coverage until 90% (Cattaneo and Romero, 2006).

Entwistle, Kendall, and Mead (2010), explained some factor to detained breasfeeding such as: experiences, socio-economy status, smoking, mothers attitude, support of health provider, couple and self confidence toward their ability to provide breastmilk. Infant factors such as harelip, gastrointestinal disorder. Impact on mother psychology such as mothers were anxious against their ability to produced enough breast-milk. Emotionally, mothers were distress and indignant easily. Physical impact showed by headaches frequently, no appetite, heart beat frequently, not enough breastmilk, swollen breast, sore nipples and bloody, often experience on severe dizziness,



and feeling very weak. Environmental factors such as culture, health workers, hospital and government policies

Low of exclusive breastfeeding coverage also related to formula advertisement, end of vacation, and lack of mother awareness and knowledge about breast milk. Active mother on commercial activity such as work in office or industry and entrepreneurship preferred to provide formula because considered more profitable (Prasetyo, 2012). Socio-cultural changed led to increase level of participation of women in the workforce and emancipation in all areas of work and community ignorance cause limited time for breastfeeding and duration of breastfeeding (Siregar, 2004). Rosalina (2014), explained most of women who back to work after childbirth usually discontinue to provide breast milk because no support in workplace. Ong, *et al.* (2005), also explained working mother affected on duration of breastfeeding cause short of vacation, supporting facility of breastfeeding unavailable and inflexible work duration. The objective of this study is to understanding determinant factors to encourage breastfeeding of working mothers.

METHODS

This study was literature review. Searching literatur on online database consist of Medline, Pubmed, Science Direct and Cochrane. Inclusion criteria such as literature in english or bahasa, both qualitative and quantitative research, literature published after 31 December 2005 until 31 December 2017. Article appraisal used Form Crowe Critical Appraisal Tool (CCAT). Keyword on searched literature such as Breastfeeding OR Lactation OR suckling OR latching OR Breastmilk AND Working mother OR working women OR working mom OR mother work. Penilaian artikel menggunakan Form Crowe Critical Appraisal Tool (CCAT).

RESULTS

Amounts of 21 literature has been finded from initial screening, abstract review and content review. All of literature reviewed to examined determinat factor of breastfeeding on working mother. This literature include: 13 literature comes from search results in the Pubmed database, 5 literature from Medline database, 2 literature comes from Science Direct database, and 1 more literature comes from the Cochrane database. Literatur search results depicted in the figure 1 below.

DISCUSSION

Literature review showed some factors to encourage and obstructed breastfeeding by working mother. Supporting factor to encourage breastfeeding of working mother such as higher income and education, mature age, marital status, multiparity, low of psychosocial distress, broad knowledges, support from workplace, co-workers and supervisor to provide time to pumped breast milk, facility in workplace, part-time work, suggestion and appeals from health workers, also policy in workplace. Obstacle factor to breastfeeding for working mother such as tightly work schedule and inflexible, full-time work, mother did not understood about breastfeeding policy, low economy status, lack of support and facility for breastfeeding, vacation regulation, lack of support and attention of health workers, infant condition (premature or illness) and exposed advertisement of formula.

Results of analytical studies of the literature obtained on factors influencing working mothers to breastfeed can be seen based on the characteristics below:

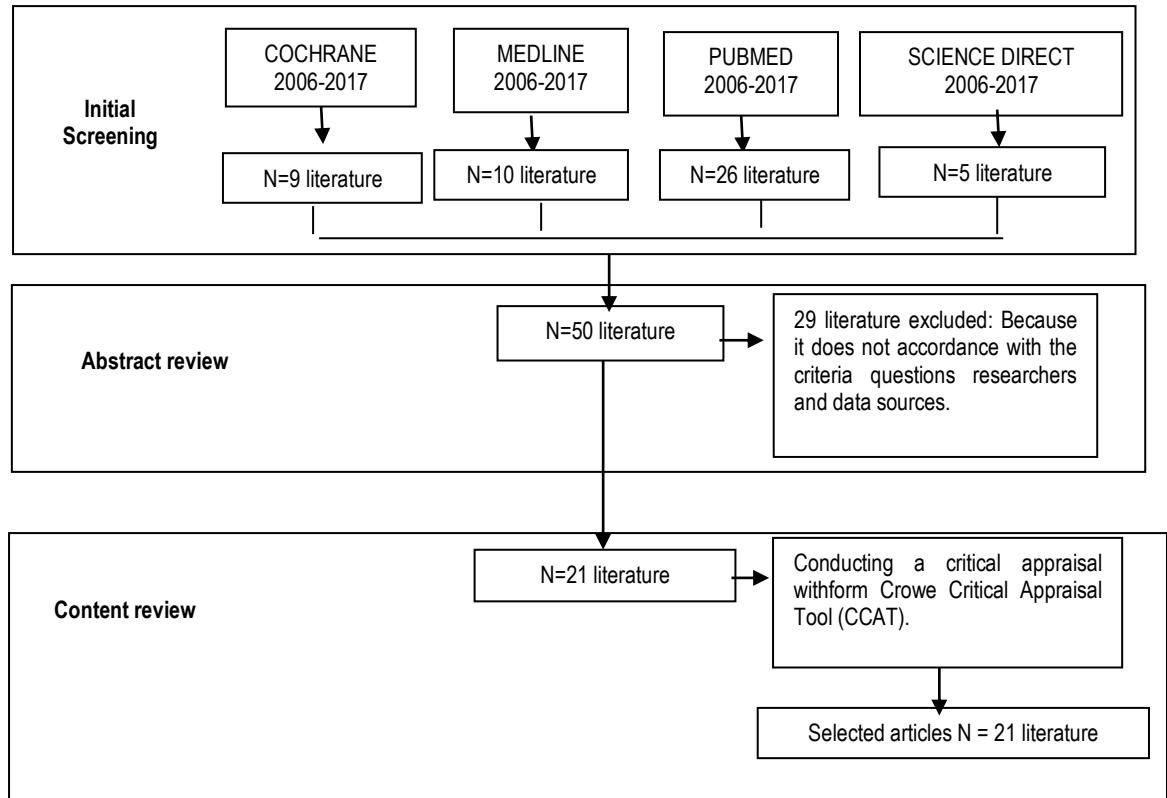


Figure 1. Schematic of search results and selected literature

1. Mother factor age older / mature

a) Age older / mature

Age of the mother who has matured contribute to the sustainability of mothers breastfeed after returning to work (Xiang et al., 2016; Chen and Chie, 2006; Guendelman et al., 2016). Age is too old, plus work shifts and work schedules were too tight, and ignorance of the policy/regulation related to desperation breastfeeding mothers to start breastfeeding and conversely (Chen and Chie, 2006).

b) Level of maternal education

level of higher education contribute to the sustainability of mothers with breastfeeding after returning to work (Xiang et al., 2016; Chen and Chie, 2006; Guendelman et al., 2016; Tsai, 2013). The level of education is one factor that makes the mother to continue breastfeeding after returning to work. Someone higher education will provide the knowledge is also high on someone.

c) Married status and socioeconomic

Sustainability of breastfeeding associated with marital status (Jackson et al., 2016; Xiang et al., 2016; Guendelman et al., 2016). Mothers who get married will be more likely to continue breastfeeding (OR: 1,82; 95%; CI: 1,39-13,05) (Xiang et al., 2016).



d) Welfare of mothers

Welfare of mother both physically and mentally will support the activities of breastfeeding (Xiang et al., 2016; Froh & Spatz., 2016; Dery and Laar., 2016; Guendelman et al., 2016). Healthy physical condition, not suffering from a disease and is not undergoing any treatment effect on the upon the success in breastfeeding. This statement is supported by research of Xiang et al. (2016), that mothers who feel physically healthy (OR: 1,02; 95%; CI: 1,01-1,03) and mental / psychological (OR: 1,01; 95%; CI: 1,002-1,02) there will be more who continue breastfeeding until 6 months. Results of qualitative research conducted by Froh & Spatz (2016), support it. Some mothers in the study said that the physical health conditions or complications such as the presence of cancer and treatment processes disrupt the activity of breastfeeding. Dery and Laar (2016), mothers who give birth normally be 10 times to give exclusive breastfeeding than mothers delivered by Caesarean section (OR: 9,02; 95%; CI: 2,85-28,53).

e) Type of work

Type of work mother will affect the sustainability of breastfeeding (Johsnton & Eposito., 2007; Ogbuanu et al., 2011; Tsai., 2013; Chen & Chi., 2006; Guendelman et al., 2016; Aikawa et al., 2011). Type of work that makes old mother was reunited with the child would hamper the mother to breastfeed her child. This statement is supported with the results of research Johsnton & Eposito (2007), which concluded that the part-time work support mothers to continue breastfeeding after returning to work activities. Working part-time, minimizing the time separation between mother and baby will facilitate breastfeeding mother upon returning to work. Mothers who work full time will tend to breastfeed with a shorter interval than mothers who work part-time or do not return to work. Results of cohort research conducted Ogbuanu et al. (2011), get the result that mothers who work part-time would be more likely to perform breastfeeding than mothers who work full time (RR: 4,26; 95%; CI: 1,39-13,05) and mother who works full time would be 10% lower compared to breastfeeding that do not work (RR: 0,90; 95%; CI: 0,82-0,97) and mother who does not work will be more numerous who breastfeed for more of the six months compared with mothers who work part-time and full-time. Work to implement shift work become an obstacle to mothers to keep breastfeeding mother upon returning to work. Tsai (2013), the research results stated that working mothers who followed a low prevalence shifts have to take the time pumping breast milk that has been provided workplace than women who work without shift.

2. Baby condition

The baby's condition problematic will affect the mother to breastfeed (Xiang, 2016). The baby's condition is weak due to prematurity or illness reduce the ability to suck and opportunities for breastfeeding mothers. Mothers who deliver the baby at gestational age <9 months will be less to do exclusive breastfeeding than women who give birth with gestational age were quite (OR: 0,11; 95%; CI: 0,02-0,80). A similar statement delivered by Xiang (2016), from his research show that mothers with premature babies will be lower for the continuation of breastfeeding until 6 months (OR: 0,72; 95%; CI: 0,54-0,96) compared to mothers with gestational age babies sufficient. Health problems premature babies may be



found among others that the instability of the general state of baby, stopped breathing, endurance limited, incoordination reflex sucking, swallowing, and breathing, and lack of proper control of oral motors function. The conditions prematurity make babies should receive intensive care. This condition also often make a baby separated from his mother. Some hospitals give formula and less support mothers to keep breastfeeding. The things is what makes the mother is not exclusive breastfeeding.

3. Environmental factor

a) Culture

Research by Amin et al. (2011), shows that a tribe or ethnicity influence the behavior of the mother in breastfeeding. Of the 290 mothers who initially breastfeeding, 51% did not continue/discontinue breastfeeding. The majority 54% of the the mother breastfeeding stop the time of the child's age <3 months and more ethnic chinese (OR: 3,7; 95%; CI: 1,7-7,8), india (OR:7,3; 95%; CI: 1,9-27,4) when compared with the tribe Malay. Ogbuanu (2011), summed up the results of his researchthat the tribe of mothers variablesassociated with duration of breastfeeding (p value< 0,001). Results of qualitative research on barriers to return to work breastfeeding mothers in Ireland who do Desmond and Meaney (2016), showed that some respondents stated that their cultural influence to be a challenge and big problem facing mothers in breastfeeding exclusively for 6 months.

b) Support and socialization given breastfeeding policies in the workplace

Support given to working mothers who breastfeeding, such as breastfeeding policies, facilities, part-time work will have a positive effect on the sustainability of mothers breastfeeding at work (Desmond & Meaney., 2016; Chen & Chie., 2011; Amin et al., 2011; Tsai, 2013; Froh and Spatz, 2016). Results of qualitative research conducted by Desmond & Meaney (2016), shows that there are several respondents in the study was the lack of attention and support in the workplace. Mothers who desire to breastfeed exclusively, when she returned to work encountered some difficulties, among others: the company / workplace does not facilitate mothers to continue breastfeeding, lack of support and information sharing. The policy is designed to facilitate breastfeeding among other activities with allow time for mothers to pump breast milk. Information on breastfeeding policies in the workplace is important known by employees. Mothers who continue breastfeeding when returning to work are mothers who know their breastfeeding policies in office (Chen & Chie, 2011).

c) Suggestion, appeal and support of health workers

Suggestion, appeal and support of health workers both midwives, nurses and doctors become one of the factors that contribute to the determination and confidence to continue breastfeeding mothers (Dery et al. 2016; Desmond & Meaney., 2016). Results of research by Dery et al. (2016), shows that nearly all respondents (95%) recognize the importance of exclusive breastfeeding. Although most aware of the importance of exclusive breastfeeding, in practice, only 10.3% are working mothers who managed to do it. One reason is not to get advice, information and support from health professionals to continue breastfeeding upon returning to work. Mothers who do not get the advice of health officials linked exclusively breastfeeding less doing exclusive breastfeeding than getting an explanation (OR: 0,45; 95%; CI: 0,27-0,77).

d) Information about the breast milk and Breastfeeding Training



Information about the importance of breastfeeding and training to be what determines a mother to continue breastfeeding upon returning to work (Dery & Laar., 2016;). Research results by Dery and Laar (2016), showed that the possibility of the mother to give exclusive breastfeeding will be higher when mothers get information about breastfeeding before and after pregnancy. Knowledge mothers is the determinant that affects the working mother to continue breastfeeding upon returning to work. Knowledge according Notoatmodjo (2015), is the result of human senses or know somebody results of the object through its senses such as eyes, nose, ears, and so on.

e) Work schedule

Mothers get the work schedule affects the mother in to breastfeed their babies (Chen & Chi., 2006; Amin et al., 2011; Tsai., 2013; Xiang et al. 2016). Research results by Chen & Chi (2006), states that the work schedule is too strict associated with hopelessness mothers to begin breastfeeding and vice versa (p value <0.01). These results are in line with research conducted by Amin et al (2011), that working time is too strict and inflexible make mothers hesitate to continue breastfeeding (p value <0.01). Retrospective study conducted by Tsai (2013), the mother works at an electronics factory get the result that mothers who have shorter working hours (8 hours / day) will make mothers to continue breastfeeding until the child is 6 months of age (OR: 2,38) compared to mothers working hours more than 8 hours per day. Xiang et al. (2016), states that the number of mothers breastfeeding at 6 months working mother decline with increasing the number of hours worked. Mothers who returned to work within six months and worked ≥ 20 hours per week will be significantly lower for the continuation of 6 months breastfeeding than women with shorter working hours. Working mothers who breastfeeding have a lower intensity mention several reasons, including: lack of time to breastfeeding due to the number of hours the working and difficulties adjusting with the working shifts. Most working mothers > 8 hours per day and must follow the shifts said big to breastfeed (Tsai, 2013).

g) Length of leave / furlough

The duration of maternity leave which is applied in the workplace affect the practice of breastfeeding mothers who do work (Amin et al., 2011; Chuang et al., 2012; Guendelman et al., 2016; Xiang et al., 2016; Ogbuanu et al., 2011; Dery & Laar., 2016). Research results by Amin et al. (2011), shows that the period of leave rules applied in the workplace influence a mother's decision to continue or discontinue breastfeeding (p value < 0,01). Chuang et al. (2012), stated that the mother of the leave is less than or equal to 6 months will be early to stop breastfeeding compared to mothers who leave period of more than six months. Mothers who return to work within one year after the leave will be early weaning than women without having to return to work. This is consistent with research results Guendelman et al. (2016), that mothers have period of leave ≤ 6 weeks or 6-12 weeks after delivery was significantly associated with 4 times and 2 times as for failing to maintain the cessation of breastfeeding and improve after successfully defended. Mothers who returned to work less than 12 weeks in particular less from 6 weeks, there is little possibility to sustain breastfeeding than mothers who have a longer period of leave, or mothers who did not back to work. Along with working hours, longer furlough an effect on breastfeeding in mothers work. Xiang et al. (2016), stated that based on his research, mothers who return to work within six months and



worked ≥ 20 hours per week will be significantly lower for the continuation breastfeeding 6 months than mothers who did not return to work.

h) Exposure of the mother with information formula milk

Information about the formula milk affected the behavior of breastfeeding (Dery & Laar., 2016; Marques et al., 2001; Giugliani et al., 2008;). Mothers who get suggestions and persuasion to use formula milk will be lower for exclusive breastfeeding (OR: 0,19; 95%; CI: 0,05-0,79) (Dery & Laar, 2016). Conversely mother who considers giving a more complicated formula, will tend to give exclusive breastfeeding (OR: 2,27; 95%; CI: 1,03-4,99). The provision of food besides breast milk in infants can cause a decline in milk production. Infants who have received other foods such as formula milk in addition to breast milk, drinking water or tea will make them early satiety. This will be decrease the baby's desire to suck thereby decreasing milk production. Production and supply of milk the less it will make the shorter duration of breastfeeding. As soon as the baby given formula, the frequency and duration of sucking is going down rapidly. The faster the baby given formula, the shorter duration of breastfeeding (Marques et al., 2001; Giugliani et al., 2008). Formula feeding during childbirth makes the mother stop exclusive lactating. Health officials are advised to give milk supplements will further enable the mother to stop breastfeeding.

CONCLUSIONS AND RECOMMENDATION

Determinant factor to encourage breastfeeding by working mother including demographic (mature age, education, type of job/work duration, marital status, physical and emotional condition, multiparitas, socio-economy), infant condition (premature or illness), environmental factor (supporting from supervisor, co-workers and facility in workplace, policy in workplace and suggestion and support from health worker.

Some suggestions are given researchers, among others: companies or workplace The majority of workers women are supposed to provide for the needs or facilities for working mothers to breastfeed or pump breast milk, such as their room lactation, the availability of refrigerator, the place clean and comfortable for mothers to breastfeed. Direction of policies that does not burden the working motherfor breastfeeding, such as flexible work schedules, part-time employment, their permission to breastfeed longer rest periods, days off longer. Support from the workplace to the success of breastfeeding mothers. Nurses as health professionals should be able to provide information through health education to mothers about the importance of breastfeeding and the factors that can affect the mother in breastfeeding / lactating.

Nurses must provide full support for the working mother to breastfeeding. Nurses must have ability to counseling, training about breastfeeding, accompaniment of breastfeeding. Health workers must organize education/socialization in workplace to improve knowledge, provide facility and supporting policy for breastfeeding.

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NUTRITIONAL STATUS AND SOCIALIZATION ABILITY IN CHILDREN WITH AUTISTIC DISORDER

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ABSTRACT

BACKGROUND : Autism is a pervasive development disorder that affects abilities in social interaction, communication and behavior. The disorder is seen before a three year old child. Children with autistic disorders have behavioral disorders called autistic behavior. Autistic behavior is classified into two types, namely excessive behavior and deficit behavior. The purpose of this study was to determine the relationship between nutritional status and socialization ability in autistic children.

SUBJECT AND METHODE : This study is a correlation study conducted with a cross sectional approach. The population in this study were 35 autistic children in SLB Bintoro. The instrument used was a questionnaire on the nutritional status of autistic children to assess nutritional status, and a Social Skills training (SST) sheet to assess the socialization skills of autistic children. Data analysis was carried out by using the Spearman Rho correlation statistical test.

RESULTS : The results showed that the results of the study using the Spearman RHO test for nutritional status on the socialization abilities of autistic children showed that a significant value of $p = 0.000$ because the value of $p < 0.05$, there was a significant relationship between nutritional status and the ability to disseminate information on autistic children shows a very strong relationship.

DISCUSSION : Nutrition status is one factor that greatly affects the socialization capabilities of autistic children.

Key words : Nutritional Status, Socialization Skills, Autism

INTRODUCTION

Autism is a pervasive developmental disorder that affects the ability of social interaction, communication and behavior. The disorder is seen before the child is three years old. Children with autistic disorder are having behavior called autistic behavior. This behavior is classified into two types, namely excessive behavior and deficient behavior. Excessive behavior is hyperactive and tantrum behavior such as screaming, flapping, biting, clawing, hitting and including self abuse. Deficient behavior is a behavior that cause speech disorder or lack of social behavior such as laughing or crying without a reason and daydreaming (Nurhidayati, 2015).

The data taken from Health Basic Research (Riskesdas) 2013 stated that the number of autistic patients reach 112.000 people out of 253,60 million people in Indonesia. According to the Chief of the East Java Education Office, around 2009 in East Java there were 388 special school for children with special need with 13,150 students. There are 93 schools with children with special needs 1,478 children and 15% are autistic children. The preliminary study in Jember Regency



found 60 children suffering from autism at school age, from 6 SLB spread across Jember Regency (Jember Regency Education Office, 2018).

Behavioral disorder in autistic children are influenced by various factors. One of them is food, especially foods that contain gluten. This occurs because the type of protein is difficult to digest by the body. There are some abnormalities found in gastrointestinal membrane of autistic children, which is the abnormalities of the pores and permeability of intestinal mucosal. Gluten in autistic children is only broken up into polypeptides. These polypeptides then absorbed into the bloodstream and circulate in the form of gluten. The gluten bound to receptors in the brain that affect mood and behavior so that the binding of these two substances can affect behavior disorder in autistic children. Therefore, one way to reduce behavioral disorders in children with autism, is avoiding food that contain gluten (Nurhidayati, 2015).

Social skill training is one way that believe can improve socialization skill in autistic children. It can be taught individually or by group. Social skill training are indicate for children with interaction difficulties, social phobia and anxiety. This training conduct to improve children's ability to interact in an environment, so that they could improve their self control, improve the ability to do activity independently or together with friend and improve interpersonal skill by training to socialize with people and environment (Landeen, 2001 : Kneisl, 2004). Walter (2011) stated that social skill training could become standart therapy for psychiatric nursing specialist and need to be socialized to all health service order. A good autistic nutritional status merger with social skill training are believed to improve social skill of an autistic children significantly.

The preliminary study has been done in May 2019. The result show that most parent of autistic children are not pay attention about the food consume by their children. It should appropriate with the right nutritional status according to physician's advice, so that it could affect socialization ability in autistic children.

METHODE

This study is a correlation study conducted with a cross sectional approach. The population in this study were 35 autistic children in SLB Bintoro. The instrument used was a questionnaire on the nutritional status of autistic children to assess nutritional status, and a Social Skills training (SST) sheet to assess the socialization skills of autistic children. Data analysis was carried out by using the Spearman Rho correlation statistical test.

RESULTS AND DISCUSSION

Data collection has been done at May 2019 and involving 35 autistic children in SLB – B autism TPA Jember. The results are showed in table 1.

Tabel 1. General Characteristic of Respondents (Source: Primary Data Research, 2019)

Characteristic	Amount	Percentage
Age		
4 – 9 years old	4	11,4
10-14 years old	13	37,1
15-19 years old	15	42,9



	>20 years old	3	8,6
Gender	Male	28	80,0
	Female	7	20,0
Nutritional status	Good	23	65,7
	Not good	12	34,3
Autistic level	Mild	17	48,6
	Moderate	11	31,4
	Severe	7	20,0

This research is done at Jun 2019. There were 35 respondents consist of 28 male and 7 female students. Respondent with good nutritonal status counted 23 children and 12 children are not. Parents stated that they do ot provide good nutrition is because of ignorance about gluten and some are of the opinion because there is no effect whatsoever. Some parents who have given a gluten free diet claim that there is a difference if they are on gluten diet, the children are more communicable and not do repetitive movement.

Gluten considered as a toxic since the body of an autistic person do not produce enzyme to digest the protein. Undigestabel protein then turned into chemical component called opiod which is like morfin, opium and heroin which work as a toxic which is interfere brain function, immunity and behavioral disorder (Abata, 2014).

Removing food that contain wheat will reduce the intake of vitamin and minerals in child's body. That is why children need to be given enough vitamin and mineral so that they would grow healthy. Vitamin and minerals should be provide under supervision of professional (physician or nutritionist) and if its not done then the metabolic process of digestion will be disrupted (Nugraheni, 2008).

Autistic behavior is a special behavior disorder of an autistic children. Those behavior include hyperactivity (unpurposed movement), inability to maintain eye contact with others, does not repond if called, unreasonable crying or laughing and some other indicator of special behavior. Some respondents of this research are found to have behavioral disorder whish is 20% respondents are having severe autism, 31% respondents are having moderate autism and 48,6% respondents are having mild autism level. The reduction of autistic behavior commonly in form of reduction of hyperactive intensity to a subject and subject ability in doing an instruction from theraphyst, ability to concentrate and starting to put up words to speak.

Some factors could interfere autistic behavior such as therapy intensity, methode of therapy, parent and family involvement and diet therapy. According to results of questionnaire given to subject's parents, most of the parents claim that there a correlationship between autistic behavior and child's eating habit. Behavioral disorder such as hyperactivity are believed to decrease since the parent reduce the frequency in giving martabak or sweet martabak that contain flour.



Dietary pattern of an autistic child must contain a number of nutrient, especially high in carbohydrate, protein, and calcium to fulfill needs during growth and development. the experts agree that people with autism must have good nutritional status by doing gluten diet. Gluten diet is believe could improve digestive disorders and also reducing symptoms or improve behavior of an autistic child. Even gluten and protein came from the same class, gluten are derived from wheat such as flour wheat, oat danbarley (Seroussi, 2004).

Tabel 2. Analysis Behavior and Gluten Consumption

			Free gluten	Perilaku anak
Spearman's rho	Free Gluten	Koefisien Korelasi	1.000	.653**
		Sig. (2-tailed)	.	.0,00
		N	35	35
	Perilaku Anak Autis	Koefisien Korelasi	.653**	1.000
		Sig. (2-tailed)	.000	.
		N	35	35

** . Correlation is significant at the 0.01 level (2-tailed).

Table 3. Coefficient Value

Coefficient	Correlational Power
0,00	No correlationship
0,01-0,09	Less correlationship
0,10-0,29	Weak correlationship
0,30-0,49	Moderate relationship
0,50-0,69	Strong relationship
0,70-0,89	Very strong correlationship
>0,90	Near perfect correlationship

According to the table Spearman RangE (Rho) test show that the analysis from 35 respondent produce p value $0,000 < 0,05$. It mean H1 accepted, there is a correlationship between nutritional status and socialization ability of autistic children in SLB B autism TPA Jember. Coefficient value of these two variable is 0,653 which mean show a very strong correlationship.

This research produce p value $< 0,05$ mean hypothesis accepted. In the other words there are correlationship between nutritioanl status and social ability of autistic childrenin SLB B Autism TPA Jember. Correlation coefficient value is 0.653 mean these two variable has very strong correlationship.



One of the action that can be done to prevent hyperactive behavior in autistic children is by doing regulation of food selection. Food is a matter that must be considered for people with autism. Their food commonly same as healthy children in general, which is healthy and meets balanced nutrition (Kusumayanti, 2011).

Selection of foods that are in accordance with the diet must be given appropriately in order to prevent malnutrition in autistic children. Children should not be allowed to choose their own food. Autistic children must be given special diet according to symptoms experienced. Autistic children is also must be avoid food that contain monosodium glutamate and artificial food coloring. This kind of food could lead to changing of behavior and emotional of an autistic person after consume food that contain gluten. In the other hand some food contain artificial food coloring could destroy DNA that can lead to genetical mutation and disturbing the function of brain and nervus. Artificial food coloring also can cause allergies in autistic children (Ramadayanti, 2013).

Analytical statistic using Spearman rho about nutritional status to social ability of an autistic children showing significant p value 0.000. since p value < 0.05 it can be stated that there are significant influence between nutritional status to social ability of an autistic children. This result is in line with the research conduct by Rifmie Arfiriana Pratiwi (2013) which is stated that there are correlationship between the frequency of consuming food free gluten and free cassein with behavioral changing af an autistic person. The more they consume food containing gluten and cassein the more frequent they will have behavioral changing. It is all happen due to incomplete breakdown of protein contained in gluten and casein. Gluten and casein are part of short chain amino acids called peptide. Normally peptides are absorb in a little amount by the body then eliminate through feses. And this metabolism are not happen in autistical person.

Hypermeability of intestinal mucosa in autistical person causing this peptides to increase. Some are absorbed into the circulation and some are absorbed to the brain. Peptides that travel to the brain are attach to opioid receptors in the brain and change it functions like morphine. Gluten peptides will form glutemorphin and gliadimorphin while casein peptide will change into caseomorphin. The two substance will affect central nervus system so that it can lead to behavioral disorder. This statement is in accordance with observations that have been carried out in this study that autsitic person who have low frequency habits in consuming foods containing gluten and casein will have more directed behavioral changes compared to them who have high frequency in consuming food that contain gluten and casein. Some of the bhavioral changes including the children become more calm, easily given instructionat at therapy, not easy to cry or angry.

CONCLUSION AND RECOMMENDATION

According to analytical statistic using Spearman Rho test about nutritional status to social ability of an autistic children showing significant p value 0.000. since p value < 0.05 it can be stated that there are significant influence between nutritional status to social ability of an autistic children. Corelation coefficient value is 0.653 show a significant correlationship

From the result above some recommendation that coul be given as follow : SLB B autism TPA Jember should maintain good nutritional status by doing free gluten diet and involving family to



improve the knowledge of the client and family about autistic children's nutritional status so that they could have good socialization ability.

The family of an autistic children should have a full commitment in free gluten diet programme so that the children will have a good nutritional status as specified so that their condition is controlled and their social ability will improve.

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A DIFFERENCE BETWEEN THE EFFECT OF TRANSFEMORAL PROSTHESIS USE AND AXILLARY CRUTCHES TOWARD THE QUALITY OF LIFE

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ABSTRACT

BACKGROUND: Quality of Life (QOL) is an individual perception of their position in life. Some factors that affected a person's QOL may be physical condition. Related with this factor, amputation is a form of physical change that has a negative effect on physical, psychological and social life. One way to overcome is rehabilitation program. The program aims to improving mobility and re-integration to community. The aims of this study were to determine the effect of prosthesis and axillary use toward QOL.

SUBJECTS AND METHODS: This study was Quasi-Experiment with two-group only by post- test design. Forty individuals with lower limb amputation that using transfemoral prosthesis and axillary crutch in PT Kuspito Prosthetic Orthotic participated in this study. QOL was then measured using the WHOQOL-BREF. The data was analyzed by using descriptive statistics and Mann-Whitney test.

RESULTS: Prosthesis users overall QOL and health scores were 3.8824 and axillary crutch users scores were 3.8696 and 3.9130. Prosthesis users scored significantly higher on all QOL domains. Statistically, there were differences in QOL domains of prosthesis and axillary crutch users, with score in physical health ($p = 0.018$), psychological ($p = 0.017$), social relationship ($p = 0.026$) and environment ($p = 0.003$).

CONCLUSION: There are differences in the quality of life in the environmental domain between groups using transfemoral prosthesis and axillary crutches. In the environmental domain, the use of transfemoral prosthesis is more influential in improving the quality of life.

Keywords: Transfemoral Amputation, Transfemoral Prosthesis, Axillary Crutch, Quality of Life

INTRODUCTION

Amputation is a form of physical disability that occurs due to incomplete limbs (Dewi, 2014). The definition of amputation is the loss of a part of a person's body which is used to save lives, life-threatening conditions and also to utilize the failure of extremity function maximally. The level of amputation for the lower limbs can be classified based on their anatomic or prosthetic classification (Yamani 2016).



The capability and opportunity of patients in doing activities both inside and outside at home are also limited. Added, there are still many people who have not provided adequate facilities for people with disabilities. This situation ultimately worsened the quality of life of patients after amputation. In several studies, it was found that the quality of life of patients after amputation decreased with a quality of life 50-81% lower than normal people (Sinha et al., 2011).

Prosthesis can help to overcome the limitations of activity that occurs in someone who lost a leg because of amputation. (Murray 2010). By prosthesis, it is hoped that the patient's limbs can be equipped so that he can carry out daily activities.

The use of assistive devices as like transfemoral prosthesis can reduce social problems and improve global health (Hagberg 2006). The use of transfemoral prosthesis can improve the quality of life as evidenced by the increase in patient mobility (Schalk et al. 2015). The use of prosthesis has a positive effect on the physical health component rather than the mental health component (Sinha et al. 2011).

Axillary crutch is a type of tool that is widely used to help ambulation in various types of locomotor disabilities. Where its principle works is the transfer of the pedestal from the side of the disabled to the axilla so that the ambulation of the patient can be fulfilled, the use of crutches can improve the quality of life (Kahaduwa et al. 2009).

The purpose of this study is to determine the differences between the effect of the use of transfemoral prosthesis and axillary crutches toward the quality of life for the patient with knee amputation.

METHOD

This study used a quantitative approach by using Quasi-experimental design in the form of two-group with post-test only. Group of Transfemoral Prosthetic Users and groups of Axillary crutch users. The sample was 40 post-transfemoral amputation patients by simple random sampling. The data was collected by questionnaire and documentation. QOL was then measured using the WHOQOL-BREF. The data were analyzed using descriptive statistics and the Mann-Whitney test.

RESULT AND DISCUSSION

Shapiro-Wilk normality test result showed that some variables have abnormal data distribution. Because the result in one of the variable groups had an abnormal data distribution, the hypothesis test used was the non-parametric Mann-Whitney test. From the Mann-Whitney test results, the significance value (p) < 0.05 was obtained in all domains of quality of life. So that it can be concluded that there were differences in the influence of the use of transfemoral prosthesis and axillary crutches on the quality of life of patients with amputation of the knee.

The purpose of this study was to identify the difference of the effect of using transfemoral prosthesis and axillary crutches on quality of life. The study was conducted by considering the factors that affect the quality of life of amputation patients. It was expected to be a reference in providing services in accordance with patient characteristics so that the objectives of prosthetic orthotic services in helping to improve the quality of life of patients after amputation will be achieved.



1. Perception of quality of life and health in general

Based on the results of the study, showed that the perception of quality of life in general users of transfemoral prosthesis and majority of axillary crutches both with a mean value of 3,8696 and 3,9130. In this study there was no difference in perception of general quality of life between amputation patients who used transfemoral prosthesis and axillary crutches. The result of this study is in line with previous studies, the research which has been conducted by Adegoke (2012), which reveals that the overall value of perception of quality of life and health of respondents is 3.91 ± 0.65 (range = 3.26 - 4.56) and 3.62 ± 0.85 (range = 2.97 - 4.07). While Widya (2016) states that in essence the picture of a person's quality of life can only be illustrated by the person himself subjectively and cannot be defined exactly.

2. Physical health

Based on the results in domain of physical health, the physical health of respondents was at a level both in the category of transfemoral prosthesis users and axillary crutches. However, based on the mean value, it was known that the quality of life of respondents based on the physical health domain was greater in transfemoral prosthesis users (79.52) than compared with axillary crutch users (70.86). While based on hypothesis, it was known that in the domain of physical health, there was a difference in the influence of the use of transfemoral prosthesis and axillary crutch on the quality of life of patients with knee amputation with a significance value (p) 0.018 ($p < 0.05$). This study is supported by research conducted by Hagberg (2006) which reveals that general health, mobility and global health have improved after using prosthesis and few problems have emerged in the last two years. Sinha et. al. (2011) also concludes that the use of prostheses has a positive effect on the physical health component.

In the aspect of physical health, the value of simple quality of life of men is higher than the sample of women even though the proportion which is owned is not too large. This is in accordance with research conducted by Adegoke et. al. (2012) which states that male amputation patients has a significantly higher quality of life score than women in the domain of physical health, social relations and general quality of life.

Then another theory is presented by Dajpratham et. al. (2011) that the length of time the amputation is related to the physical health domain. It proves that the mean value of the physical health domain occupies the largest value in the long time category of amputation. Da Silva et. al. (2011) adds that amputation of the lower limb does not affect neither outdoor leisure activities nor the quality of life.

So, it can be concluded that there is a difference between groups using transfemoral prosthesis and axillary crutches toward quality of life in the physical health domain. Then, it also concludes that in the domain of physical health, the use of transfemoral prosthesis is more influential in improving the quality of life.

3. Psychological

Deborah (2012) argues that the substance of the psychological domain on the quality of life of amputation patients including the feelings of pleasure, hopelessness, self-appraisal, beliefs, an ability to think, learning, memory and concentration in making decisions and assess to the problem which is happened. Based on the results of the study noted that the mean value



of subjects using transfemoral prosthesis (77.82) was higher than axillary crutch users (70.78). However, the value of quality of life is classified as good quality of life. Now, the results of data analysis revealed that (p) 0.017 ($p < 0.05$), so it can be concluded that there was a difference between the effect of using transfemoral prosthesis and axillary crutches of patients with knee amputations in the psychological domain. Psychologically, prosthesis provides a better psychological view. The growing cosmesis component makes it difficult for ordinary people to distinguish whether an amputee uses prosthesis or not.

Da Silva et. al. (2011) thought that a person's level of physical activity affects the psychological domain. The data analysis showed that the athlete profession overall has a higher quality of life (mean = 81.00) with a very good category than someone who does not work (mean = 63.00) who only belongs to the category of good quality of life.

4. Social Interaction

In the domain of social interaction, the quality of life of users with transfemoral prosthesis and axillary crutches is in the category of good quality of life with mean values of 74.47 and 68.43. Based on the significance value obtained p value of 0.026 ($p < 0.05$) it means that there is a difference between the effect of the use of transfemoral prosthesis and axillary crutches on the quality of life of knee amputation patients. According to Deborah (2012), the quality of life in the domain of social interaction such as personal relationships that describe the relationship between individuals and other individuals, social support that illustrates the availability of assistance which is obtained by person from the surrounding environment, as well as sexual activities that describe the sexual activities which are experienced by person.

Based on the data analysis, it was known that the social interaction scores in women were higher than men. In other opinion, Adegoke's (2012) stated that men have significantly higher social relations scores than women. However, Cox et. al. (2011) expressed that women's quality of life scores are significantly higher than men in the four quality of life domains.

Furthermore, based on marital status, Mailani (2014) argued that patients who are divorced or do not have a life partner tend to have a lower quality of life value than patients who are married. Apparently, this statement was not proven in this study, where it was found that the value of the quality of life of social interaction in the marriage and divorce categories is the same. Meanwhile, Horne & Neil (2009) found that marital status is not an important factor determining the quality of life score of the domain of social relations. So that it can be concluded that, marital status has no influence on the quality of life of knee amputation patient.

5. Environment

The substance of the environmental domain for the individual quality of life after getting amputation includes financial resources that describe the financial condition of the subject, the environment of residence as well as participation and opportunities for recreational or fun activities (Deborah, 2012). Based on the results of the study revealed that in the environmental domain, the quality of life of users of transfemoral prosthesis was in the good category with a mean value of 71.00. While for axillary crutch users with a mean value of 59.30, the quality of life was medium. The results of data analysis obtained p value 0.003, it meant that there was a difference in the effect of quality of life in the environmental domain both in transfemoral prosthesis users and axillary crutch users.

Turney et. al. (2001) stated that there is a significant difference between the scores of individual environmental domains after getting amputation and amputation levels. Turney also



stated that amputation level is the only predictor of environmental adaptation for the person after getting amputation. The same with Nagarajan et. al. (2003) found that the environmental domain was also influenced by occupational categories.

In transfemoral prosthesis users, the data analysis on stump length characteristics showed that the quality of life score in the environmental domain increases along with increasing of amputation. whilst on job characteristics, the highest quality of life score from the environmental domain was the athlete profession.

CONCLUSION AND RECOMMENDATION

There was a difference quality of life in all domains between knee amputation patient using transfemoral prosthesis and axillary crutches. In all domains of quality of life, the quality of life of knee amputation patient using transfemoral prosthesis was better than the knee amputation patient using axillary crutches. The most influence domain for the quality of life of amputation patient who uses transfemoral prosthesis or axillary crutch was physical health domain.

Amputation patients over the knee would be better by using transfemoral prosthesis as a mobility assist. Because using prosthesis is able to improve not only the quality of life but also help functional activities and improve body image.

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AN EXTRAORDINARY SCHOOL TEACHER EXPERIENCE IN OVERCOMING GROWTH AND DEVELOPMENT OF CHILDREN WITH SPECIAL NEEDS

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ABSTRACT

BACKGROUND : Children with special needs are children who in the process of growth or development experience abnormalities or deviations so as to require special treatment.

SUBJECT AND METHODE : This is qualitative study conduct with phenomenological approach. The participants were all teacher in Extraordinary Middle School in Waingapu. The data was obtained by structured interview and analyzed and presented in narrative form towards themes, sub themes, and categories found. This study was conduct to describe teacher's experience in overcoming the growth and development of children with special needs.

RESULTS : The themes obtained in this study were "the role of the teacher" and "the source of obstacles". The theme of the teacher's role consist of two subthemes, namely the teacher's role as an educator and the teacher's role as a motivator. The source of obstacle themes consist of 2 subthemes, namely students and teachers.

CONCLUSION : The role of the teacher as a motivator has been carried out in the form of support, praise and reward but not doing touch. The results of research sources of obstacles from students are the limitations both physically and psychologically. Barriers from the teacher are lack of experience and feeling feel difficult and discouraged in dealing with students.

Key words : Experience, role of teachers, Extraordinary School Teachers, Children with Special Needs

INTRODUCTION

Normally each parent will enroll their child in the best choice school and leave the responsibility of educating their children to the teachers at the school, so that the teacher become the second parent of the child when they enter the school environment. Likewise for parents who have children with special needs, extraordinary schools are an option for parents in the hope that their children get a proper education with a special approach. Children with special needs are children who are in the process of growth or development process who experience abnormalities or deviations (physical, mental, intellectual, social emotional), thus requiring special treatment. The diversity of developmental characters and barriers in children with special needs is known as mental retardation, hearing impairment and speech impairment, autism, physical impairment, unsociable, and visual impairment (Abdullah, 2013 in Nur Wulan Wati, 2018).

The teacher has an important role and also has guidance to be able to play a role in community and the school environment in a professional manner. Children with special needs have



different characteristics from normal children, teachers must pay attention to them because they also deserve knowledge like normal children. Teachers should not discriminate between them with normal children. Therefore the teacher's attitude is very important in dealing with children who have mental disorders, as we know for themselves that children who have mental disorders need support and motivation from those around them. The teacher's attitude is very influential on children with special needs. A teacher who teaches children with special needs must have a spirit of love for their students or be willing to accept the situation of students and value human values more than formal rules. The spirit of the teacher is expected to be able to make students not easily discouraged and do not feel inferior to their normal friends. If teachers are a little deviated from their thinking then they feel that no one really pays attention to them at school and makes their enthusiasm for learning disappear. Teachers who teach children with mental disorders must really have patience and be able to recognize the child's character. Teacher solutions in overcoming child growth and development with special needs are responding to students feeling, using student's ideas to carry out interactions that have been designed, dialogue and discuss with students, conformity between behavior and action, adjusting the contents of student's thinking frameworks, and smiling to students.

The data obtained from the Central Statistics Agency (BPS), stated that the number of children with special needs in Indonesia are reach 1.6 million children in 2017, and only 18 percent have received inclusive education services either from extraordinary school or ordinary schools implementing inclusive education. That is, one million more children with special needs have not received education that is important for their lives. The low number of children with special needs who educated was caused by various factors, ranging from the lack of adequate school infrastructure, the lack of special teaching staff, and also the community's stigma of children with special needs. Based on data obtained from extraordinary junior high school at Waingapu the number of students in 2015 was 25 students, in 2016 were 20 students, and in 2017 there were 20 students divided into elementary, junior high school and senior high school. The number of teacher at extraordinary junior high school in Waingapu is 7 people.

Every teacher involved in learning activities is required to understand correctly, intactly and comprehensively about the potential contained in the human psychological structure as mentioned above. A teacher who does not master the human psychological structure will not only fail in carrying out his duties, but an act that is academically professional as an irresponsible act. Based on the description above, this research was conducted with the aim of obtaining a picture of the teacher's experience in overcoming the growth and development of children with special needs.

METHODE

This type of research is a qualitative research with phenomenological approach that provides an overview the experience special needs in Extraordinary Junior High School in Waingapu at 2018. Participants in this study were all teachers who teach in Extraordinary Junior High School in Waingapu. Data collection techniques used in this study were structured interviews conducted by researchers. Data were analyzed and presented in the form of narratives of the themes, sub themes, and categories found.

RESULT



This section consists of a description of the characteristics of the participants and themes that emerge from the results of interviews conducted based on teachers's experience in overcoming the growth and development of children with special needs, as follows :

1. Participants characteristic

Participants in this study were five people. All participants are teachers who teach at Extraordinary Junior High School and have experience in overcoming the development of children with special needs in the working area of Extraordinary Junior High School East Sumba Regency. Characteristics of participants can be seen in the following table 1.

Table 1. Participants Characteristic in Extraordinary Junior High School in Waingapu (Primary Data, 2018)

Participant's Code	Respondent's Characteristic			
	Age (years ol)	Gender	Educational degree	Employment Status
01	37	male	Bachelor degree	Government employee
02	37	Female	Bachelor degree	Government employee
03	28	Female	Bachelor degree	Honorary employee
04	31	Female	Bachelor degree	Honorary employee
05	31	Female	Bachelor degree	Honorary employee

2. Theme analysis

The themes obtained in this study are "the role of teacher" and "the source of obstacle", which are described as follows :

Theme 1 : Teacher's role

The teacher's role theme consist of 2 sub themes namely the teacher's role as educator and teacher's role as a motivator. The sub-theme of educator consist of 2 categories namely giving general lessons and teaching independence, while the motivator sub-theme consist of 2 categories, namely giving praise, giving touch and giving a gift.

The following is the participants statement that confirms the teacher's role as an educator.

"when I see that they have not been well studied, I go up to them and ask what makes them noisy"(P1)

"after teaching I take the time to talk with them, so that I get closer to them"(P2)

"in dealing with the growth and development of children with mental disorders no longer lay for us because we have long been a teacher at this school"(P3)

"with students studying in school and with good mentoring by teachers it is hoped that lessons can be well received"(P4)

"i hope they can learn back at home the subjects they have received at school and the next day they can answer question"(P5)



The following are participant statements that emphasize the teacher's role as a motivator.

"....well... always give motivation in the form of praise and reward to students who are able to carry out the instruction from me. But I also do not forget to motivate students who have not been able to carry out instructions from me so that they do not despair"(P1)

".... I applaud and applaud for children who can carry out my instructions and I also do not forget to give praise and I give encouragement to children who have not been able to carry out instruction from me"(P2)

".... I always give praise and support to them"(P3)

"....I always give praise and reward to the children"(P4)

":....I give rewards to students who can answer the questions I give" (P5)

"....I made a quiz and asked them "come on...who can answer rise your hand, who can answer will get the candy"(P3)

".... for example, I gave an example of human needs and I asked to give examples of human needs, who can answer even though it is not perfect yet, I still give rewards..." (P2)

Theme 2 :Source of obstacle

The source of obstacle themes consist of 2 subthemes namely students and teachers. Subthemes of students consist of 2 categories, namely physical disability of children and psychological disabilities of children, while the sub-theme of teachers consists of 2 categories, namely experience and feeling.

The following are participant statements that confirm the source of the obstacles that come from students:

"....well the obstacles are conditional, for example, children are sulking, whiny and not in the mood... that's where the difficulty is, time is spent with that child..."(P1)

"....that's where the difficulty is, our time is up with that child, because students in junior high school should be able to go to the toilet independently"(P2)

"....the obstacle is there are some students who do not want to write, because they are not in the mood, time is up with that child"(P3)

"....sometimes they don't want to go to the class and we have to be able to persuade them to go to the class"(P4)

"....well the obstacles are I must guide them to write and read"(P5)

The following is a participant statement that confirms the source of the obstacles that come from teacher :



"....we find it a bit difficult in giving lessons in general, it must be individual. They need help because they have difficulty in writing and understanding..." (P1)

"during my teaching I always had difficulty dealing with students. They cannot keep quiet and always go in and out when I'm teaching"(P3)

DISCUSSION

Theme 1 : Teacher's Role

a. Educator (Lesson in General and Independency)

The results show teachers's role as an educator of five participants have different expectations where two participants said that *the role as educator by giving approach to students of any conditions (P1 and P2)*, while the other participants namely by their respective ways to provide lessons so the learning is acceptable to students and students can repeat it at home according to what is received by each student (P3, P4, and P5).

The role of teachers as an educator is that a teacher not only educates and teach his students, but guides, provides guidance, role models, assistance, training, understanding, skills, values, norm of decency, good and praiseworthy attitudes and so. In this case a teacher does not merely play a role as teaching staff who only carry out activities related to the transfer of knowledge, but also act as an educator who transfers the values and at the same time as a supervisor who give direction and guides all students in more detail the duties of a teacher (Sardiman, 2005).

This research is in line with Sardiman's theory in 2005. But the teacher's role as an educator is not as easy as given to the children with special needs. This is due to limitation of the students themselves both physically and psychologically.

Research conducted by Dian Mardiana (2014) says that the teacher's role is not only as an educator but also as a demonstrator, motivator, mediator, facilitator, and evaluator. According to the researcher the role of a teacher as an educator in which the teacher provides instruction to students so that the knowledge possessed by the teacher can be transferred to their students as expected. But giving instruction to the children with special needs is not as easy as we think. Viewed physically they are not as normal as other students, not to mention in certain cases there are students who are unable to be controlled properly so it is disturbing the learning process. This condition requires the role of a teacher who is not only an educator but is expected to be multi-role teacher figure. This is consistent with the results of the study that P1 and P2 said that the role of teachers as educators in children with special needs need to be approached according to their respective cases so that learning objectives can be achieved. Participants 3, P4 and P5 have their own way to providing teaching in accordance with the teacher's experience, this is in accordance with participants who have Bachelor education. Teachers in extraordinary junior high school in Waingapu are well prepared so that they already master the knowledge needed in their fields.

The teacher is prepared so that he can give good teaching in general and make the students become independent, it means that the students can carry out their learning task independently. Thus what is expected of a teacher as an educator can be achieved at an extraordinary junior high school.



b. Motivator (Praise, touch, and gift)

The results of the study stated that the five participants doing their roles as motivators in their students by giving praise (P1, P2, P3, P4 and P5). While giving praise to students and giving rewards are participants of P3, P4, and P5. But none of them performed their role as motivators by touching the students.

The role of teacher as a motivator is important in order to increase the enthusiasm and development of students learning activities. Teachers must be able to stimulate and provide encouragement and to dynamize student potential, foster activity and creativity, so that there will be dynamics in the teaching and learning process. In the motto of education in Taman Siswa has long been known as "Ing Madya Mangun Karsa". The role of the teacher as a motivator is very important in teaching and learning interactions, because it involves the essence of the work of educating that requires social skills, in the sense of personalization and self socialization (Slameto, 1997).

This research is in accordance with research conducted by Dian Mardiana (2014) which say that the teacher's role as a motivator, they must show more of what is taught since children with mental retardation more often mimics what is done by their teacher.

Researcher also tough taht teacher's role as motivator is to give support or enthusiasm to the students in the learning proccess/ motivation carried out on both normal students or those with special needs is not much different. In children with special needs teacher are more likely to assist children when learning, teachers provide assistance to children when they face difficulties (Rahayu, 2017). This also in accordance with research conducted by Widuri (2013) that handles the interaction ability of social interaction namely learning activities and behavioral therapy given by the teacher. Being a motivator does not only encourage the students only, but the teachers also need to praise and giving a reward for the students who could accomplish the task. In a certain case, such as autism, motivation is not only given by praise or reward bit also by assistance and touch that has to be done by the teacher.

Theme 2 : source of obstacle

a. Student (children physical disability and psychological disability)

Result study describing that children with special need is having an abnormal development, automatically they are facing many obstacle in learning proccess. P1 said that her emotion is unstable so that she run out of time dealing with the children, P2 said that physical disability affect their ability to performing their basic need such as toileting independently. P3 and P4 said that the children refuse to write or read when they are studying, P4 said that the children refuse to entering the classroom, P5.

It is in line by theory explained by Sunardi and Suryono (2007) that student learning obstacle are came from internal and external factors so that they are fail to change an action becoming a cognitive shape with certain rules. Natawijaya (2005) said that learning obstacle is a situation caused an obstacle in applying theory when learning proccess is progressing. So that learning is important to understand since the learning obstacle could come into every class every children. Every children has the same possibilities to having this kind of



obstacle. And children with special needs must have it too. Mudjito et al (2012) said that the present of children in inclusive school has to mastering their function and task better than an ordinary teacher.

This result is in line with the study conducted by Dayintha Galih Jalandhini (2017) said that the obstacle of children with special needs at the learning process is that they are feel the learning process is runs too fast and that make it difficult to understand. In this case, the deaf students can not foolow the learning process since they have no hearing aid tools. The deaf students has limitation in understading communication ande evironment surround them. Teh result study show the teacher are running out of time in handling these children.

The children with special needs are difficult to understand the learning material since they have physical and psychological limitation, so it need more teachers to fulfill the standart rasio. So that the children with special needs will get served better. Teacher should be able to make curriculum arrangement and schedule that are felxible according to the study conducted by Suningsih and Arnidha (2017) because the limitation of children with special needs, that they can not understand auditory communicatoin from the environment.

As stated in artice1 10 paragraph 1 of Ministry of Education Regulation NO 70 2009 explian that district/city goverment is required to provide at least 1 special titor in the education unit designated to carry out inclusive education. Thus problems that are related to children with special needs can be overcome because spesial advisors have been equipped and prepared to deal with childern with special needs so that the obstacle related to students both pshysically and psychologically cen be handled properly.

b. Teacher (experience and feeling)

The results study show that the obstacles in learning process is not only come from the internal but also the external, namely the teacher. The teacher has different experience and feeling : some says that giving a lesson to the children with special needs is difficult, the lesson could not be teachd generally, and the teacher should be understand their limitation (P1), it needs more patience handling children with special needs, they have many limitation... (P2). "During my teaching I always had difficulty dealing with the students. They cannot keep quiet and always go in and out when I'am teaching"(P3). ".....feeling annoyed and difficult to face them. Returning to think ou goals asa teacher and wants to teach and educate children with special needs...just enjoy it " (P4). ".....there is a sense of despair handling children with special needs. One positive things that I can take that is learning how to be patience".

According to theGreat Indonesian dictionary ostacle have a very important meaningin carrying a task or a job. A task or a job will not be carried out if there is an obstacle that interferes with the work. Obstacle are circumstances that can cause implementation to be disrupted and not implemented properly, and therefore the obstacle experienced by participants in this study are teachers who experience conditional obstacles. This is in line with the explained by Purwodarminto (1996) states that conditions and situations that has been experineced (felt), carried out, and accounted for in real practice. The experience felt by teachers is reflected in the experience of feeling difficult when teaching students as expressed by participats (P1, P2,P3).

The study conducted by Dayinta Galih (2017) says that barriers experienced by inclusive teachers in SD Negeri Petir 2 include : 1) learning material that is not delivered in



its entirety, 2) selection and use of learning strategies and methods that are appropriate for all students, 3) applicable assessment policies, 4) curriculum modifications. This is consistent with the results of research in which teachers find it difficult to give lessons to the children with special needs. Dian Mardiana's study in 2014 stated that the experience of teachers in providing education to mentally disabled students especially the SDLB –C level required two teachers for one class because when using individual methods of approach other students still get attention.

According to researcher, the external barriers of children with special needs are teachers, teacher play an important role in their learning process. The results tell about his experience in which the teacher feels difficulty in handling children with special need who are also limited in their ability to receive lessons in general. Feeling felt by the teacher also felt difficult and despair with different treatment. Therefore patience and commitment are needed in carrying out the role of children with special need. Quantitatively, it is necessary to increase the number of teachers so that if teachers find it difficult to share with senior teachers who have a lot of experience with children with special needs and find a way out, given the general data of participants, three of them are contract workers. Their experiences and feelings will be surely be different from those who have long been involved with children with special needs.

CONCLUSION

Theme 1 : Teacher's Role

The result study shows that teacher's role as an educator have not yet maximally made the children with special needs able to accept lessons delivered by the teacher. In carrying out the role as an motivator the five respondents provided support, praise and rewards but all of them are not doing touch.

Theme 2 : Source of Obstacle

The results study shows that the obstacles are came from the students, namely limitation both physically and psychologically. Barriers from the teacher are the lack of experience and the sense of feel difficult and discouraged in dealing with the children with special needs.

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THE CORRELATIONSHIP BETWEEN SELF EFFICACY AND COMPLIANCE OF LOW SALT DIET IN THE ELDERLY WITH HYPERTENSION IN WORKING AREA OF JELBUK HEALTH CENTRE

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ABSTRACT

BACKGROUND : Self-efficacy is an individual's belief in his ability to organize and perform the specific tasks required to get results as expected. Compliance is the extent to which a person's behavior is committed to a therapeutic regimen that has been agreed with a health care provider. The purpose of this study was to determine the correlation of self efficacy with low salt diit adherence in elderly hypertension in Jelbuk District Jember Working Area.

SUBJECT AND METHODE : This research use correlation research design with cross sectional approach. The population in this study were 746 elderly with hypertension, with purposive sampling technique and proportional sampling with inclusion criteria and exclusion criteria were obtained as many as 149.

RESULTS : The result of hypertension elderly with high self efficacy was 85.2%, low self efficacy 14.8%. Low salt with obedient 75.8%, low salt diit adherence with non-adherence 24.2%, self efficacy in good category and obdient in low-salt diit equal to 86,6%, whereas self efficacy less with low salt diit compliance in adherence category 13,6% using Chi Square analysis obtained p value 0.000 which means H1 accepted which means there is a relationship of self efficacy with low salt diit compliance.

CONCLUSION : In conclusion there is a relationship of self efficacy with adherence of low salt diit in elderly hypertension In Work Area Puskesmas Jelbuk Jember regency. It is expected that elderly increase self efficacy so that they coul run in low-salt diit.

Key words : Self Efficacy. Low-salt diit compliance. Hypertension

INTRODUCTION

As life expectancy increases, the nukber of elderly people in Indonesia tends to increase. The increasing number of elderly people will have an increasing impact, related to health and welfare problem of elderly. The goverment needs to formulate policies and programs aimed at the elderly so that they can play a role in development and not become the burden on the community (Ministry of Health, Republic of Indonesia, 2013).

Hypertension is a chronic disease that can damage organs. It is also called the silent killer because it includes a deadly disease without any symptomsa first. One of the main problems in controlling hypertension is to increase compliance with hypertension diet (Puspita, 2012).

According to Roesma, the average salt consumption of Indonesian people is 15 grams/day, while WHO recommendation is a maximum of 6 grams or 1 teaspoon a day. In the other hand, yhe culture



of using cooking spice such as MSG has reached an alarming level. It is all causes hypertension in Indonesia increasing every year (Suara Karya, in Sarasaty, 2011).

Based on the data from the Jember District Health Office in 2016. Jelbuk Health Center is a health center with the highest prevalence of hypertension. There were 1799 people live with hypertension. The second place is Semboro health center with the number is 1511 people with hypertension and the third is Sabang Health center with 1114 people with hypertension. The elderly with hypertension in Jelbuk were counted as 746 elderly. Hypertension is one of big ten of morbidity in Jelbuk at 2016.

Feuer Stein et al (1998 in Tumenggung Imran, 2013) stated that there are several factors that affected compliance of diet program which is understanding of instruction, interaction quality, family social support and faith, attitude and personality. From these four factors faith are believed to be one thing that strengthen patient's compliance. Self efficacy has been used to predict various health behavior including the compliance in patients with chronic disease, and one of them is compliance of low salt diet in hypertension. The aims of this study is to determine the relationship between self efficacy and the compliance of low salt diet in elderly with hypertension.

METHOD

This is a correlation study conducted with cross sectional approach. This study involving 149 elderly from total 746 elderly with hypertension in working area of Jelbuk health center. The respondents are taken by purposive sampling. The data collected by using general self efficacy questionnaire. Then the data analyzed by using Chi square test.

RESULT AND DISCUSSION

Table 1. Distribution Frequency of Respondents Gender in Working Area of Jelbuk Health Center (Primary Data, 2017)

Gender	Amount	Percentage (%)
Male	74	49,7
Female	75	50,3
Total	149	100

Based on the data in table 1 it can conclude that most respondents are female as much 75 elderly (50.3%).

Table 2. Distribution Frequency of Respondents Age in Working Area of Jelbuk Health Center (Primary Data, 2017)

Age (years old)	Amount	Percentage (%)
45 - 59	83	55,7
60 - 74	66	44,3
75 - 90	0	0
≥ 91	0	0
Total	149	100

According to the data on table 2 we can see that most respondents (55.7%) are 45 – 59 years old.



Table 3. Distribution Frequency of Respondents Educational Degree in Working Area of Jelbuk Health Center (Primary Data, 2017)

Educational Degree	Amount	Percentage (%)
Elementary school	111	74,5
Junior high school	25	16,8
Senior high school	13	8,7
College	0	0
Total	149	100

Based on the data on table 3 we see that most respondents (74.5%) were graduated from elementary school.

Table 4. Distribution Frequency of Respondents Self Efficacy in Working Area of Jelbuk Health Center (Primary Data, 2017)

Self Efficacy	Frequency	Percentage (%)
High	127	85,2
Low	22	14,8
Total	149	100

The data in table 4 shows that most respondents (85.2) has high self efficacy. Most of respondents in this study (85.2%) shows that they has high self efficaction. It means that most elderly in working area of Jelbuk Health Center has high self effication.

The study that has been done by Sulistyaningsih (2017) stated that efficacy is form through the process of cognitive, motivation, affective and selection through lifetime. Theory of self efficacy are based on someone's hope related to spesific set of actions. It is a predictive theory about the confidence that someone could done certain behaviors.

Table 5. Distribution Frequency of Respondents Compliance on Low Salt Diet in Working Area of Jelbuk Health Center (Primary Data, 2017)

Compliance on Low Salt Diet	Frequency	Percentage (%)
Obey	113	75,8
Disobey	36	24,2
Total	149	100

Based on the data in table 5 we see that majority of respondents (75.8%) are obey to the rule of low salt diet. Self efficacy and family support play a big role in shaping someone's compliance. Self efficacy play a bigger role than family support. Eventhough someone has good family support but in the other side he has low self effication, it will make him become incomppliance



Table 6. Cross Tabulation of Self Efficacy and Compliance on Low Salt Diet in Elderly With Hypertension in Working Area of Jelbuk Health Center (2017)

The data in table 6 shows that from 127 respondents with high self efficacy has obey the the diet program as much as 86.6%. Meanwhile from 22 respondents with low self efficacy, 3 respondents obey the diet program. It is confirmed by the results of statistical analysis using chi square test which show p value $0.000 < 0.05$ so that hypothesis accepted. It means that there are significant correlation between self efficacy and compliance on low salt diet in elderly with hypertension in working area of Jelbuk Health Center.

The data on table 5 show that most respondent (75.8%) are obey the low salt diet. Barnett et al (2007) stated that the obedience to therapeutic regimen and avoiding or minimize the complication is an important factor that contribute to immunity and quality of life.

Obedience means how far someone behavior could maintain the commitment about the the therapeutic regimen agreed upon with the health advisor. The client and the advisor could affect the obedience since when these two has good relationship then the client's obedience will improve so that the client will has better health behavior.

Meanwhile the disobedience will lengthen the illness and healing process. Damayanti (2014) stated that self efficacy is the main predictor of behavior that affect the starting of some task, any effort to finish the task, and time to accomplish the task. We believed that self efficacy have a correlation with the compliance of low salt diet. Respondents are expected to enhance their self efficacy by predicting event and improve techniques to control any events that could effect their life and also motivate the self and do some guided anticipatory action to make sure the successful of the diet.

CONCLUSION AND RECOMMENDATION

From analytical statistic the correlation between self efficacy and compliance of low salt diet show p value 0,000 means that there are significant correlation between self efficacy and compliance of low salt diet.

Recommendation

From the result above we recommend that the nurse as an educator need to educate the client about how to manage the hypertension so that they could manage the symptoms and enhance the obedience to the therapeutic regimen.

Compliance on Low Salt Diet								
		Obey		Disobey		Total		<i>P value</i>
		n	%	n	%	n	%	
Self Efficacy	High	110	86.6	17	13.4	127	100	0.000
	Low	3	13.6	19	86.4	22	100	
Total		113	75.8	36	24.2	149	100	



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**ANALYSIS OF FACTORS RELATED TO THE ABILITY TO PERFORMING SELF CARE IN
PATIENTS WITH AUDITORY HALLUCINATION IN WORKING AREA OF UPTD
KARANGANYAR HEALTH CENTER GANDUSARY SUB-DISTRICT TRENGGALEK REGENCY**

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ABSTRACT

BACKGROUND : Auditory hallucination is inability of individual to differ internal stimuli (mind) and external stimuli (the outside world). Patient with hallucination are giving perception or opinion about the environment without any object or real stimulus so it will affect their ability to fulfill their needs, including the need of self care. There are some factors related to their ability to performing self care. This study is conducted to analyze factors that related to the ability of performing self care in patients with auditory hallucination in working area of UPTD Karanganyar Health Center.

SUBJECT AND METHOD : It is an observational study conducted with cross sectional approach involving 20 patients taken by total sampling. The variables were observed by using checklist. This study was conducted at 13 May to 13 June 2019. The independent variables were factors related to ability of patients with auditory hallucination while the dependent variables were ability to performing self care. The correlation between these two variables were analyzed using Spearman Rank and contingency coefficient with α 5%.

RESULTS : Statistical analysis shows that factors which have no relation to the ability to performing self care in patients with hallucination are including age, education, gender, living with family, marital status, duration of suffered mental disorder, history of being hospitalized and medical history. While factors related to the ability to performing self care are including occupation (p-value 0.012) and regularity of having medication (p-value 0.004). **DISCUSSION** : The patients were recommended to stay active to work and having medication regularly so that they could control the hallucination that affect the ability to performing self care. Family and health practitioners should support the patients so they will have motivation to performing self care.

Keywords : patients, hallucination, auditory, self care

INTRODUCTION

Hallucination is a distortion of false perception which can arise from one of the senses (Keliat, 2016). Auditory hallucination is inability to differ internal stimuli (mind) and external stimuli (the outside world). Client with hallucination are giving perception or opinion about the environment without any object or real stimulus so it will affect their ability to fulfill their needs, including the need of self care. For example, client say that he hear a voice even though no one speaking and it make him feel uncomfortable with the hallucination he experienced (Kusumawati Farida, 2012).

Clients with mental disorder are experience the change of mindset that will affect their ability to do something. Self care is one of problem that arise at people with mental disorder. This situation is a sign of negative behavior and cause the patient to be ostracized in the family or even the society



(Yusuf, 2015). One of the problems that happen in people with hallucination is decreasing of will and ability to performing self care which is a situation where someone that facing any difficulties to do or finish their daily activity independently such as : has no will to taking a bath regularly, no combing hair, dirty clothes, body odor, stinky breath, and not neat clothes. Incident of lack of self care are often experienced by people with auditory hallucination, due to preoccupied by the hallucination, so the they have no will and ability to performing self care.

Perry and Potter (2005) stated that som factors affected the ability to performing self care are including body image, social practice, social economical status, knowledge, culture, personal choice, physical condition, family support and hospital services. General performance could describe the meaning of hygiene. Body image could change often. Clients who looks not neat need a health education about the importance of hygiene. Social group is a forum where interaction happen and affect the personal hygiene practice. Economic resources will affect the type and level of hygiene practice since personal care pratrice need some tools and materials and those need some money to afford. Faith, culture, and personal value also affect the self care performance. Someone from different cultural background will practice different way in performing self care. Some people in Indonesia believe that sick people should not be bathed. Some people in different situation or having certain disease or should facing the operation are often being in a condition which is lack of physical energy and dexterity to performing self care.

According to the data released by WHO stated by Yoseph (2013) that mental disorder has become a serious problems worldwide. WHO predict there are about 450 millions people all over the world are having mental disorders. Indonesia has become one of countries experiencing an increase in mental health disorders. Based on the data of Basic Health Research (Riskesdas) 2013 which is publish bay Health Ministry of Indonesia , it is stated that the prevalence of severe mental disorders are increase 1 -3% from all of Indonesians.

At mental hospital in Indonesia, about 70% of hallucination experienced by the clients are auditory hallucination. 20% are visual hallucination, 10% are halucinating hallucinations, tasting and touch. The incident of hallucinations in East Java are quiet high (Mamnu'ah, 2010). Basic Health Research (Riskesdas) 2013 in East Java shows the prevalence of severe mental disorders as much as 0.22% or about 56,602 people. Nationally, mental emotional is also reported in Riskesdas on East Java as much as 6% Or about 1,598,224 people.

According to the study conducted by Triariani Diah in Radjiman Wdiodiningrat Mental Hospital, the total ammount of patients with mental disorders in 2010 were about 4282 people and increasing in 2011 become 5213 people. In August – December 2011 percentage of patiens whos wa gruped by nursing problems are 1.42% with low self estee, 14.4% with self care deficit, 8.65% with social isolation; 5% with changing of mindset; 26.49% with violent behavior, 44.06% with cahnging of perception and 0% with suicidal risk and in Seruni Ward there were about 73.68% people are diagnosed by violent behavior.

Prelelimary study conduct in Karangayar Health Center show that there were 150 people were diagnosed by mental disorders and they were apreading in 5 village which is Widoro, Kanranganyar, Melis, Sukorame, and Krandekan. They are diagnosed as violent behavior (45



patients), social isolation (35 pasien), low self esteem (30 patients), auditory hallucination were in fourth place (20 patients) self care deficit (15 patients) and delusion (5 patients).

People with hallucination will give perception or opinion about their surrounding environment without any object or real stimuli. For example they will hear someone talking even though no one is speaking (Direja, 2011). One of hallucinatory effect is self care deficit since the patients are no longer care about others opinion about them self and their performance, preoccupied by their hallucination and due to decrease of will and ability to performing self care. Wibowo (2009) stated that patients with hallucination especially auditory hallucination are lack in self care performance, due to lack of family support to the patients with family disorders.

Lack of self care performance will make an impact physically and biopsychosocial as well. Physical impact will cause skin integrity disorders, disorders of oral mucous membrane, risk of infection in the eyes and ears, and physical disorders of the nails. It also impact on psychosocial problems such as discomfort, disorders of need to love and be loved, self actualization and social interaction (Darmawan, 2013).

Family support is very much needed for mental patients who are treated at home. About 65% of people with mental disorders live with family. Family and other care provider can be a major source of support for mental disorders (Keliat, 2016). Likewise in patients with auditory hallucinations who experience self care deficits, they need family assistance in meeting their bathing needs, need for food, need for clothes, and need for toileting. If family doesn't take part in self care performance, the patients will feel like no one cares, and it will greatly affect his condition.

The role of health workers are actively needed in giving health education about self care in patients with mental disorders or the family, so that patient with self care deficit could change the behavior of personal hygiene or self care to be willing and able to carry out activities in performing self care.

Based on the background above, we're interest to conduct a study with the titled "Analysis of factors related to the ability performing self care in patients with auditory hallucination at Karanganyar Health Center Gandusari Subdistrict Trenggalek Regency"

METHODE

This is an observational study conducted with cross sectional analytic approach. This study involve 20 people in working area of Karanganyar Health Center who was diagnosed with auditory hallucination taken by total sampling. The variables are observed by using check lists instruments. The variables were observe by using checklist. This study were conduct at 13 May to 13 June 2019. The independent variables were factors related to ability of patients with auditory hallucination while the dependent variables were ability to performing self care. The correlation between these two variables were analyzed using Spearman Rank and contingence coefficient with α 5%..



RESULT AND DISCUSSION

According to table 1 it can be seen that 65% respondents are 35 – 60 years old, 45% respondents are graduated from elementary school and junior high school, 60% respondents are farmer, 85% respondents living with family, 45% respondents are married, 60% respondents were sick for 6 – 10 years, 50% respondents were hospitalized, 70% respondents are taking medicine regularly and 90% respondents were treated in the hospital

Table 1. Characteristics of Respondents with Auditory Hallucination in Working Area of karanganyar Health Center Trenggalek (Primary Data, 2019)

Variables	Cathegory	N	%
Age (years old)	< 35	5	25,0
	35 - 60	13	65,0
	> 60	2	10,0
	Total	20	100
Education	Elementary school	9	45,0
	Junior High School	9	45,0
	Senior High School	2	10,0
	Total	38	100
Gender	Male	13	65,0
	Female	7	35,0
	Total	20	100
Occupatuin	Unemployment	6	30,0
	Farmer	12	60,0
	Enterpreneur	2	10,0
	Total	20	100
Living with the family	Yes	17	85
	No	3	15
	Total	20	100
Marital status	Married	9	45
	Single	8	40
	Divorce	3	15
	Total	20	100
Periode of having mental disorders	2-5 tahun	2	10
	6-10 tahun	12	60
	> 10 tahun	6	30
	Total	20	100
history of hospitalized	1-2 times	10	50
	2-5 times	8	40
	>5 times	2	10
	Total	20	100
Having medicine	Regularly	14	70
	Irregularly	6	30
	Total	20	100
History of medication	Hospital	18	90
	Community helath center	2	10
	Total	20	100



Table 2. Description Of Ability in Performing Self Care in Patients with Auditory Hallucination in Karanganyar Health Center Trenggalek

Ability	Ammount	Percentage
Good	13	65
Quiet good	3	15
Less	4	20
Total	20	100

According to the data in table 2 65 respondents are well performing self care and 20% respondents are lack of preforming self care

Table 3. Bivariate Test Result of Factors Related to Ability to Performing Self Care in Patients with Auditory Hallucination in Karanganyar Health Center Trenggalek

No	Independent Variabel	Dependent Variabel	p value	Conclusion
1	Fulfillment of Needs	Age	* 0,532	No correlation
		Education	*0,267	No correlation
		Length of suffering	*0,568	No correlation
		History of hospitalisation	*0,710	No correlation
		Gender	**0,354	No correlation
		Job	**0,012	Correlation
		Marital Status	**0,696	No correlation
		Living with family	**0,438	No correlatioin
		Regularity of taking medicine	**0,004	Correlation
		History of medication	**0,494	No correlation

Information : * : Spearman rank analysis

** : contingen coefficient analysis

According to the data from table 3 we see that from all of dependent variables analyzed there were 2 variables that show p value < 0.05, which is variables of job and regularity of having medication. It means that job and regularity of having medication are related to ability to performing self care in patients with auditory hallucination.

According to the Spearman Correlational analysis, some results show no significant correlation with ability to performing self care in patients with auditory hallucination in Karanganyar Health Center Trenggalek. Those factors are age with p value 0.532; education with p value 0.267; periode of having mental disorders with p value 0.568 and history of being treated in hospital with p value 0.720.

Based on results of Contingency Coeffisient Analysis there are some factors that correlated significantly with ability to performing self care in patients with auditory hallucination in Karanganyar Health Centre Trenggalek which are job with p value 0.04 ang regularity of having medication with p value 0.004. aome factors that has no correlation are gender with p value 0.354; marital status with p value 0.696; living with the familiy with p value 0.348 and istory of medication with p value 0.494.

Robins stated that ability consist of two factors, namely intellectual ability and physical ability. Intellectual ability is an ability that needed to do various kind activity of mind, tough, reasoning and problem solving. Physical ability are ability of tasks that train the stamina of skill, power and similiar characteristic (Sriyanto, 2010). Eventhough the patient's ability hasn't decresed physically, but they do experienced decreasing of intellectual ability due to decrease or cognitive distortion. In the other hand, the patients with auditory hallucination will facing inability to differ the internal stimuli (mind) and external stimuli (outside world). The clients giving responds or opinion about the environment without real object or stimulus (Dalami, 2010).



One of impacts arising in patients with auditory hallucination is self care deficit. Self care is a basic ability to fulfill their basic need to maintain their life, health and welfare according to their health conditions. The client is otherwise disrupted by his self care if he cannot perform self care (Darmawan, 2013).

The strategy of implementing self care in patients with auditory hallucination is by discuss the importance of personal hygiene, how to care for themselves and train patients how to care for personal hygiene such as bathing, grooming, eating and toileting. some syndromes that occur in the problem of lack of self care are difficulty in taking food or inability to carry food from the container to the mouth, inability to clean the body or body part, lack of interest in choosing apparel, abnormalities in the ability to wear clothing, and maintaining a satisfying appearance and the absence willingness to defecate or urinate without assistance (Farida, 2012).

According to Potter and Perry (2005) there are several factors that affect the ability of self care namely body image (age gender), social practice, socioeconomic status (occupation), knowledge (education), culture, personal choice, physical condition (period of suffering mental disorders), family support (living with family, marital status) and hospital service (history of medication, taking medication, history in hospital).

The results showed that occupation and regularity of taking medication were related to meeting self care needs in hallucinatory patients. From table 1 and table 2 it is found that almost half of the respondents are 6 respondents (30%) are unemployed and a small portion of respondents namely 3 respondents have sufficient ability and a small portion of respondents namely 4 respondents (20%) have less ability. Besides that most of the respondents are 12 respondents (60%) work as farmers and there is a small portion of respondents namely 2 respondents working privately. The working environment can make a person gain an experience and knowledge both directly and indirectly (Mubarak, 2007). Respondents who work have a tendency to interact with others so that they will motivate patients to pay attention to themselves including their personal hygiene or care needs, and the place of work is also a social group that serves as a forum for someone to connect with others and will affect their personal hygiene practice.

Likewise someone who does not work like a respondent tends to spend more time at home, less socializing with the environment which will affect the lack of motivation in self care. Or it could be that respondents who are not working tend to prefer going outside the house without a purpose so that the desire for self care decreases. In addition, Potter (2005) stated that work is a person's economic resources that will affect the type and level of hygiene practice used because self care requires tools and materials that all require money to provide it. Thus patients who work will be able to provide the cost to purchase equipment needed for self care.

Another factor related to the fulfillment of self care in hallucinatory patients is a history of regular medication taking. Most respondents namely 14 respondents (70%) regularly take medication and most respondents namely 13 respondents (65%) have good self care skills. In addition, it was also obtained data that almost half of the respondents were 6 respondents (30%) and a small portions of respondents namely 3 respondents (15%) had less ability and a small portion of respondents namely 4 respondents (20%) had less ability. The drug is one of the implementation strategies in hallucinatory patients to control the appearance of hallucinations. According to Stuart (2005), psychopharmacology is a set standard in dealing with neuro – biological disease. Respondents who regularly take medication will be able control their hallucinations so that hallucinations rarely appear and patients can pay more attention to their needs, including the needs in their care. Respondents who still often appear to have hallucinations have a tendency to follow more hallucination experienced than to pay attention to their care and this causes the willingness and ability of respondents in fulfilling their self care.



From the results above, it is also found that several factors are not related to the fulfillment of self care in hallucinatory patients namely, age, education, period of having mental disorders, history of hospitalization, gender, marital status, living arrangement and history of medication.

Based on the data on table 1 it is found that respondents who live with the family are 17 respondents (85%) and living alone are 3 respondents (15%) but from the table 2 there are 3 respondents (15%) has sufficient ability and 4 respondents (20%) has less ability to performing self care. From table 1 it is also found that almost half of respondents are 9 respondents (45%) are married, 8 respondents (40%) are single, and 3 respondents (15%) are widowed/widower. This is possible even if they live with family or are married, but maybe they do not get support from family or their partners and the households atmosphere is not conducive so that it will affect the motivation of patients in fulfilling their care.

Suliswati (2005) stated that household atmosphere such as frequent fighting, misunderstanding among family members, lack of happiness and lack of trust with family members can have undesirable effects on individuals. In addition, the family functions as a safe and peaceful place for rest and recovery and helps individuals in mastering emotions, the family as a feedback, guiding and mediating problem solving and as an effort to motivate patients to function properly. Patients who live with family or partners should get a lot of support so that it will be easier for someone to carry out their activities, there are those who help directly the difficulties faced, for example, providing complete and adequate equipment in fulfilling patients self care, as well as the award given by the family when the patients is able to fulfillment of care himself. However, in reality on ground all these things are not done by families because there are still many families who consider that mental patients do not need to be considered, including their self care.

Potter (2005) stated that age, education, period of having mental disorder, history of hospitalization, gender, marital status, living arrangement and history of medication will affect someone in performing self care. However in mental patients these factors may not be related because patient with hallucination disorders occur perception that is perceiving something and in fact something absent or intangible. In patients with mental disorder also occur attention disorder called aprosexia which is a condition in which there is an inability to pay attention diligently to the situation / circumstance without regard to the importance of problem including self care problems. In addition, hallucinatory patients also like to be alone, unable to follow orders, engrossed in their hallucination and cannot distinguish reality, especially if the hallucinations instruct clients to do something like a ban on self care, even though they have been reminded by their families, patients still do not want to do it. So even though the patient had been hospitalized, was married, having history of medication, living with family, ripe age, higher education if hallucination are still active it will be difficult to fulfill his care.

Family participation is very important for patients healing, because family is the closest support system for patient. Family need to be involved in every activity at medication such as planning, caring and treatment, discharge planning and follow up plan at home. It will motivate the family to actively involved in resolving patient's problems (Suliswati, 2005). But it's all come back to the patients condition, since the hallucination is still active and clients could not control it so the fulfillment of their self care need is still disturbed or not fulfill since according to Law number 3/1996 in Nasir (2010) stated that mental disorder is a state of psychiatric dysfunction which includes thought processes, emotions, willpower, motoric behavior including speech.



CONCLUSION AND RECOMMENDATION

Some factors related to the ability of hallucinatory patients in performing self care in working area of Karanganyar Health Center are occupational factor and regularity in taking medication. And some factors that has no correlation with the ability of performing self care in halucinatory patients are age, educatoinal degree, period of having mental disorders, history of hosptallization, gender, marital status, living arrangement, and history of medication.

Patients are expected to actively work and medication regularly to control their hallucination that will affect their ability to performing self care. Health workers in working area of Karanganyar Health Center are expected to working together with the government to promote health information to the community about mental disorders especially auditory hallucination, and gradually able to reduce people's negative perception about mental disorders.

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SELF MANAGEMENT EXPERIENCE ON PATIENTS WITH HYPERTENSION IN PANGGANG II COMMUNITY HEALTH CENTERS GUNUNGKIDUL DISTRICT

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ABSTRACT

BACKGROUND : Hypertension is a non-communicable disease that causes the highest death in the world. It is said hypertension if systolic pressure is ≥ 140 mmHg or more and diastolic 90 mmHg or more. National hypertension prevalence in the results of Basic Health Research (Riskesdas) in 2013 based on the results of blood pressure measurements by medical personnel reached 25.8%. Self-management activities, especially in patients with hypertension can certainly affect the possibility of complications and the degree of health of these patients. This study aims to find a picture related to the Self Management Experience in Patients with Hypertension.

SUBJECT AND METHODES : This study uses a qualitative descriptive approach with in-depth interviews, participant observation and documentation. Data analysis in this study used qualitative content analysis to interpret the description of data obtained from all interviews conducted with participants regarding self management experiences in patients with hypertension.

RESULTS : The results showed 4 main themes which were further described by researchers in the results of this study. The 5 themes are: 1) dietary patterns at home; 2) exercise routine; 3) antihypertensive drug therapy; 4) obstacles in controlling blood pressure; 5) source of support.

DISCUSSION : With this research it is hoped that the prolanis program manager can design health education programs for hypertensive patients routinely and continuously in every event created, so as to increase patient awareness in carrying out proper self-care management.

Keywords: Self Management Experience, Hypertension

INTRODUCTION

Non-communicable diseases that cause the highest death in the world, one of which is hypertension. One non-communicable disease that causes the highest death in the world is cardiovascular disease, where the high mortality rate in cardiovascular disease is caused by the main risk factor, namely an increase in blood pressure (hypertension). An increase in a person's blood pressure will increase the risk of stroke and coronary heart disease (WHO, 2011).

Hypertension is better known as high blood pressure. The blood pressure limit that can be used as a reference to determine whether or not the blood pressure is normal is systolic and diastolic. Based on JNC (Joint National Committee) VII, a person is said to have hypertension if systolic pressure is



≥140 mmHg or more and diastolic 90 mmHg or more. Based on the etiology, hypertension can be divided into 2, namely essential hypertension and secondary hypertension.

Essential or idiopathic hypertension is hypertension without clear pathological basis. More than 90% of cases are essential hypertension. Causes of hypertension include genetic and environmental factors. While secondary hypertension covers 5-10% of cases of hypertension is secondary hypertension from comorbid diseases or certain medications that can increase blood pressure (Smeltzer & Bare, 2001). In Indonesia, the national prevalence of hypertension in the results of the 2013 Basic Health Research (Riskesdas) based on the results of blood pressure measurements by medical personnel reached 25.8%.

According to PERKI (2015) leading a healthy lifestyle has been shown to reduce blood pressure, and in general is very beneficial in reducing the risk of cardiovascular problems. In patients suffering from first-degree hypertension, without other cardiovascular risk factors, the healthy lifestyle strategy is an initial management stage, which must be undertaken for at least 4-6 months. If after this time period, there is no expected decrease in blood pressure or other cardiovascular risk factors are obtained, then it is highly recommended to start pharmacological therapy.

Nwinee (2011) explains that self care management is everything related to the client's responsibility in managing himself at home properly when there are no doctors and nurses. Self Care Management which is a form of hypertension patient behavior in managing hypertension is influenced by internal factors (from the patient's own) and external factors, namely from the environment in this case related to social support received by hypertensive patients in the management of hypertension. Contents Hypertensive self-management activities include: Weight reduction / control, reducing salt intake. exercise, reduce alcohol consumption, and stop smoking. Self-care management is a major factor in efforts to improve health. The ability of patients to meet self-care is influenced by internal and external factors (Orem, 2001). Self-management activities, especially in patients with hypertension can certainly affect the possibility of complications and the degree of health of these patients (Leventhal, Nerenz, & Steele, in Taylor, 2006). Based on this description, researchers are interested in exploring self-management experiences in patients with hypertension in order to know how the picture is related to "Self Management Experiences in Patients with Hypertension?"

METHODS

This study uses a qualitative descriptive approach with in-depth interviews and observation as data collection methods (Sandelowski, 2009; Creswell, 2014). The study was conducted by directly describing and not manipulating the phenomena that occur regarding Illness Representation and Self Management Experiences in Patients with Hypertension in Baked II Health Center Gunungkidul.

Data analysis on a qualitative approach is subjective because the researcher is the main instrument for data collection and analysis of research (Creswell, 2014). Data analysis uses qualitative



content analysis to interpret the description of data obtained from all interviews in hypertensive patients related to the description of Self Management Experiences in Patients with Hypertension.

RESULTS

This research was conducted to 7 participants through a process of in-depth interviews (in depth interviews) and then verbatim results were analyzed in order to obtain 4 main themes which were further described by researchers in the results of this study. The 5 themes are: 1) dietary patterns at home; 2) exercise routine; 3) antihypertensive drug therapy; 4) obstacles in controlling blood pressure; and 5) sources of support.

Diet at Home

Based on the results of research that has been done that most of the participants said that they had to reduce salt in every processing and daily consumption of food to control blood pressure so as not to be high.

"...sampai sekarang itu saya kalau masak tidak banyak garam" ("... until now, I don't cook too much salt") (P1, 69 years old, junior high school)

"sik pun dilakoni nggih niku kurangi garam carane nggih mangkih nek teng nggriyo masak dikurangi garam" ("what has been done is reducing the salt by means of cooking at home is reduce salt") (P2, 57 years old, elementary school); (P4, 71 years old, elementary school)

In addition to reducing salt in the implementation of the diet there are also participants who say that it must reduce oil because of the source of cholesterol.

"Pantangan onten sik liyane garam nggih minyak nggih gorengan barang niku soale niku kolesterol jare"(abstinence is there other than salt oil, fried food because it's said cholesterol) (P2, 57 years old, elementary school)

"...kulo tahu tempe diabcem. mboten nate digoreng. Riyin digoreng ning sakniki ken ngirangi lingsah niku to bu gek pun mboten digoreng" (I never fried tempe or tahu, but it was fried in the past but now I am told to reduce the uterine oil, I have not fried it again) (P4, 71 years old, elementary school)

In this study the data obtained that almost all participants said that they began to reduce consumption of rice and coffee because according to them it can also increase blood pressure.

"Selain garam nggih niku kurangi kurangi nasi, banyak sayuran" ("In addition to salt, reduce rice, lots of vegetables") (P2, 57 years old, elementary school) (P4, 71 years old, elementary school)



school); (P5, 54 years old, elementary school) (P6, 65 years old, elementary school); (P7, 80 years old, no school)

“..terus sudah tidak minum kopi” (“... continue to not drink coffee”) (P1, 69 years old, junior high school)

“Ngunjukke enjing teh manis kalih putih niku. Kopi sekali-kali kalau kepingin mawon” (“...drink it in the morning sweet tea and water, Coffee if just I want it”) (P3, 61 years old, elementary school)

In implementing their daily dietary patterns they also say that they routinely consume vegetables and sometimes also with fruit because they follow the advice of doctors at the health center.

“Sekarang ya mung sayur-sayuran sayur bening ngoten niku dan kadang kalau ada juga buah”

(“Now maybe the vegetables addict and sometimes if there is also fruit”) (P1, 69 years old, junior high school); (P7, 80 years old, no school)

Sports Routines

In this study the next theme that emerged in the implementation of self management in patients with hypertension was related to sports routines, where almost all participants had exercised, namely gymnastics once a week at the health center, but not all of them routinely followed by reason of bother, no time, and etc.

“Iya senam seminggu sekali dipuskesmas” (“Yes gymnastics once a week at the community health center”) (P1, 69 years old, junior high school)

“Olah ragane nek mboten repot nggih mangkat senam teng puskesmas” (“if the exercise is not busy I go to gymnastics at the health center) (P2, 57 years old, elementary school); (P6, 65 years old, elementary school)

Antihypertensive Drug Therapy

Based on the results of the study all participants explained about the consumption of antihypertensive drugs related to the type and dose of the drug. Where there are those who get 1 kind of antihypertensive medication and there are those who get 2 kinds of antihypertensive drugs at a dose once a day and some are 2 times a day.

“Nek obat tensi amlodipine kadang captopril ngambile sebulan sekali le ngunjuk sepindah pas enjing” (“if the drug is tension amlodipine and sometimes captopril, take it once a month and drink it once in the morning”) (P1, 69 years old, junior high school); (P3, 61 years old, elementary school); (P4, 71 years old, elementary school); (P6, 65 years old, elementary school); (P7, 80 years old, no school)



"Obate amlodipin kalih sik kecil-kecil niku (captopril) sejak awal sudah 2 obat itu" ("the drug is amlodipine and the small ones (captopril) since the beginning have 2 drugs") (P2, 57 years old, elementary school); (P5, 54 years old, elementary school)

Obstacles In Controlling Blood Pressure

Based on data collected from hypertensive participants experiencing several obstacles in controlling blood pressure at home, the first perceived obstacle concerns difficulties in terms of diet especially to reduce salt and oily food.

"Iha nek kurang garam niku mboten enak je.. .kurangi minyak juga tapi mboten saged (sambil tertawa)" (lack of salt is not good ... reduces the oil too but it is difficult (while laughing)) (P2, 57 years old, elementary school)

"Masak nggih serba minyak, gereh gek kanmongko seneng" ("I cook all the oil, salted fish I also really like) (P3, 61 years, elementary school); (P6, 65 years old, elementary school)

Next is the difficulty in participating in sports because of the perceived lack of time and difficulty in getting enough rest because some patients find it difficult to sleep and rest because some are still working.

"Olah raga niku waah..jarang olah raga mbak..Iha wedale niku lho.." (sambil tertawa) (sports are seldom if not busy ...) (P5, 54 years old, elementary school); (P7, 80 years old, no school)

"..niku sakpangertosan kulo ning sik angel ki nggih ngaso (sambil tertawa)" (... to my knowledge but the hard ones are resting) (P4, 71 years old, elementary school)

"Kulo ki sok angel sanget tilem e mbak.." .. "(I was acting really hard to sleep like this) (P6, 65 th, elementary school); (P6, 65 years old, elementary school)

Sources of Support

Based on data collected from participants undergoing treatment at their home, they received external support in controlling blood pressure at home, such external support included support from family members.

"Kulo ki kiyambak teng nggriyo ning sedherek kiwo tengen niko gemati sanget kok" (I am alone at home but relatives who live right next to the left are very considerate) (P4, 71 years old, elementary school)

Other support comes from health services, namely from community health centers and clinics

"Nek priksa nggih ngantos sakniki nggih cocokke teng puskesmas niki mbak pun mboten pindah-pindah" (I have checked up to now so that it is suitable in this community health center not to move) (P6, 65 years old, elementary school)



“...terus kolo wingi jumat wingi dipriksakken di klinik wonten Blimbing (nama klinik)..” (Then, yesterday was examined at the Blimbing clinic) (P1, 69 years old, junior high school)

Furthermore, all participants said that other external support was also obtained from the health program that was followed, namely prolanis, and support from health financing guarantees namely BPJS.

“Kulo ndherek Prolanis niku pas wiwit onten prolanis pun ndherek skitar 2012 niku kulo” (I joined Prolanis since 2012) (P2, 57 years old, elementary school)

“Kami semua yang ikut prolanis menggunakan BPJS mbak...”

(“All of us who joined the program using BPJS miss ...”) (P1, 69 years old, SMP) (P3, 61 years old, elementary school); (P4, 71 years old, elementary school); (P6, 65 years old, elementary school); (P7, 80 years old, TS)

“....kulo BPJS mandiri iuran tiap bulan niko” (..saya BPJS mandiri iuran tiap bulan itu)(P2, 57 th, SD); (P5, 54 th, SD)

DISCUSSION

Diet at Home

Based on the results of research that has been done that most of the participants said that they must reduce salt in every processing and consumption of daily food to control blood pressure so as not to be high. Restricting sodium consumption is an action to prevent an increase in blood pressure. Salt restriction is done by reducing the amount or dose of partispan daily salt so it does not really use salt at all (Elvi O, et al, 2018).

In addition to reducing salt in the implementation of the diet there are also participants who say that it must reduce oil and rice because according to them it can also increase blood pressure. In implementing their daily dietary patterns they also say that they routinely consume vegetables and sometimes also with fruit because they follow the advice of doctors at the health center. The importance of low-salt diet as explained by Puspita, et al (2012) explains that diet is one way to overcome hypertension without serious side effects because of its natural control methods. Reducing salt intake, increasing fiber, stopping bad habits such as smoking, drinking coffee, consuming alcohol, utilizing vegetables and herbs and taking medicine regularly will help in lowering blood pressure.

Sports Routines

Based on the results of this study, the next theme that emerged in the implementation of self management in patients with hypertension was related to sports routines, where almost all



participants had done sports, namely gymnastics once a week at the health center, although not all routinely follow for various reasons. The importance of physical activity is because physical activity is an activity where carrying out daily activities is included in physical activity, besides physical activity is an activity that is cheap, easy and healthy because doing physical activity makes the blood pressure in systolic decrease by 4-9 mmHg (Paul A et al., 2015)

While the research of Surbakti (2014) explains that sports activities such as 30 minute walking exercises have an effect on the decrease in systolic blood pressure in patients with hypertension. This is due to aerobic forms of exercise such as walking exercises can influence in increasing blood capillaries, hemoglobin concentration, differences in oxygen in the arteries and veins and blood flow in the muscles.

Antihypertensive Drug Therapy

Based on the results of this study all participants delivered about antihypertensive drug therapy that has been undertaken, because all participants routinely consume antihypertensive drugs with different types and dosages for each participant, there are those who get just one type of drug, but there are some who get 2 types of antihypertensive drugs at the same time with the dosage and schedule of taking medication 1 time a day and some are 2 times a day.

Treatment of hypertension according to WHO (2012) aims to achieve rational use of medicines by referring to the use of responsible drugs which means patients receive the right medicines at the right time, use the right drugs and cause benefits to patients, so it is important have knowledge and awareness about treatment. The use of antihypertensive drugs in hypertensive patients includes the accuracy of the drug, the accuracy of the dose, and the patient's compliance in taking the drug Rakha. (2015). So that in this study all participants already knew about the use of drugs and drug doses taken.

Obstacles in Blood Pressure Control

Based on data collected from the experience of self management in participants with hypertension, they said that they experienced some obstacles in controlling blood pressure at home. The perceived obstacle is the first concerning the difficulty in terms of diet especially to reduce salt and oily food because they feel bad if the food is less salt and the habit of consuming fried foods which is also difficult to leave.

Other research that is in line with Prasetyo (2012) found that the elderly often found that their diet is still wrong where most elderly people still like salty and savory foods, especially fast foods that contain lots of saturated fats and high levels of salt so have a great chance of getting hypertension. This certainly affects the difficulty of someone in removing the habit if the daily food consumed is still the same as before going on a diet. Ideally the foods recommended in the DASH dietary guidelines consist of rice, side dishes, vegetables and fruits without salty taste when tasted and served (Azizah, 2011). By consuming the right and right foods can help the elderly in controlling blood pressure.



Furthermore, the difficulties experienced by participants are in terms of participating in sports because of the perceived lack of time and difficulty in getting enough rest because some patients find it difficult to sleep and rest because some are still working. Johnson, Sheldon, and Carey (2010) who show that prolonged illness does not guarantee an increase in patient compliance in the self-management process. Patients can seek information from various sources at the time of initial diagnosis of the disease and after that the patient does not get a structured education program according to the patient's condition, so that at the time of evaluation there is no increase in knowledge and meaningful behavior changes in these patients.

Sources of Support

Based on data collected from participants who are undergoing treatment at their home received external support in controlling blood pressure at home, the external support included support from the family. Family support obtained by patients in the treatment of hypertension at home is in the form of mental, information, instrumental and financial support (Elvi O, et al, 2018). Various verbal responses from the family are generally received by participants. This verbal response usually arises because it is triggered by a family fearing continuous high blood pressure and its effects. These effects are related to the condition of headache, palpitations, excessive anxiety and nervousness in the neck. This should be a concern of hypertension sufferers (Loriza S., et al, 2018).

Other support comes from health services namely and from the health program that is followed, namely prolanis, and support from health insurance, namely BPJS. The availability of health insurance makes it easy to pay so that access to health services such as routine blood pressure checks is easier to reach, compared to patients who do not have health insurance because frequent treatment will always be costly (Djuhaeni, 2007).

CONCLUSION AND RECOMMENDATION

The description of self management experiences in patients with hypertension is related to:

1. A description of dietary patterns at home where all participants know that they must reduce salt intake in their diet and also reduce oil and increase vegetables and fruit.
2. The description of sports routines carried out by participants is that most of them do routine exercise, namely gymnastics at the puskesmas although not all participants routinely attend these activities for various reasons.
3. All participants are routinely taking antihypertensive drugs with different types and doses of each participant, there are those who get just one type of drug, but there are some who get 2 types of antihypertensive drugs at once, with the dosage and schedule of taking drugs one time a day and there are also the 2 times a day.



4. Obstacles in Blood Pressure Control experienced by participants, namely in terms of diet, especially in reducing salt and oily food, difficulty in participating in sports because of the time that is felt to be inappropriate and difficulty in adequate rest especially difficulty in terms of sleep.
5. All participants have sources of support obtained from external parties including support from families, support from health services and health programs that are followed, namely prolanis, and support from health insurance, namely BPJS.

From the result of study, some recommendation based in this study are :

1. For Hypertension Patients
It is recommended to further increase self-awareness in maintaining diet, especially in salt intake and oil consumption as well as increasing restitution so that blood pressure can be controlled properly.
2. For Families
It is recommended to always provide support, affection, attention, so that it can help the patient's healing process.
3. For community health centers and health services
For the puskesmas, especially the prolanis program manager, it is hoped that in the future they can design health management and education programs for hypertensive patients routinely in every event that is created so as to increase patient awareness in carrying out proper self-care management.
4. For Other Researchers
In order to conduct further research on coping strategies and self-regulation in the implementation of self-management in patients with hypertension.

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THE LEVEL PREPAREDNESS HEAD OF FAMILY FOR FACING THE EARTHQUAKE DISASTER SUB-DISTRICT IMOIRI AND JETIS IN BANTUL DISTRICT

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ABSTRACT

BACKGROUND : Indonesia is one of the countries in the world that is vulnerable to various natural disasters. Indonesia is located at the confluence of three main plates of the earth, the Eurasian Plate, the Indo-Australian Plate and the Pacific Plate. One of the disasters that occurred in Indonesia was an earthquake, Yogyakarta is an area prone to experiencing earthquakes more precisely in Bantul district. In 2006 the earthquake in Yogyakarta claimed more than 6500 lives and property losses. The main factor in the emergence of many victims due to disaster is due to lack of knowledge about disasters and lack of preparedness in anticipating the disaster. The purpose of this study was to measure the preparedness of the head of the family for the earthquake disaster in Imogiri and Jetis sub-districts of Bantul Regency.

SUBJECT AND METHODE : This type of research is in the form of quantitative descriptive by describing data that has been collected without intending to make conclusions that do not apply to the public. The number of samples is 192 head familys. Sampling of research using accidental sampling for the selection of male head family respondents. The instruments used were LIPI and UNESCO in 2006.

RESULTS : The results of research on the level of disaster preparedness in the majority Imogiri districts in the ready category (65-79) were 93 respondents (96.9%), while the jetis sub-district included in the ready category (65-79) 95 respondents (99%). There is no difference in the level of preparedness between the imogiri and the jetis sub-district with a sig value of 0.313.

CONCLUSION : Suggestions from this research are to improve disaster preparedness by conducting training and simulations from the government, BPBD or involving health education institutions.

Keywords: Preparedness, Disasters, Earthquakes, Head of Family

BACKGROUND

Indonesia as one of the Asia-Pacific countries is the country with the second largest disaster risk in the world. This is because the entire Indonesian archipelago is vulnerable to disasters (BNPB, Disaster Preparedness Guide for Families, 2018). Indonesia is located in the path of the meeting of 3 world tectonic plates, namely the Indo Australian Plate, the Eurasian Plate and the Pacific Plate. The movements of these three plates have different speeds. Tectonic plates in Indonesia are still mostly active, these plates have different directions of movement, namely the Eurasian plate which moves relative to the southeast, the Indo-Australian Plate which moves relative to the north, and the Pacific plate which relatively moves to the west. The collision between the plates that are always moving is what causes earthquakes, earthquakes caused by collisions between these plates are also called



tectonic earthquakes. As a result of the collision of the plates formed a subduction line (subduction zone) (Sukandarrumidi, 2010). Based on data from the Yogyakarta Regional Disaster Management Agency (BPBD), the 2006 earthquake caused more than 5800 deaths, 37,000 people were injured, 84,000 houses were razed to the ground, and more than 200,000 houses suffered minor, moderate or severe damage. An earthquake is a shock that is quickly earthed due to faults or shifts in soil slabs (Buana & Utomo, 2017). Earthquakes are natural disasters that cannot be accurately predicted, even so far there are no tools that can detect these earthquakes. Considering that the earthquake was a devastating disaster and not a few casualties and building damage due to the earthquake. Disaster management is a method used for disaster management, this disaster management is effective in minimizing casualties and also damage to buildings, and existing facilities. One of the stages of disaster management is Preparedness (Rini, 2017). Disaster management is an integral part of national development in order to carry out the mandate of the 1945 Constitution, as referred to in paragraph IV of the opening of the 1945 Constitution. In its implementation, disaster management is the duty and responsibility of the government and regional government together with the wider community. The form of responsibility includes meeting the needs of the community caused by disaster which is one form of state protection for citizens.

Natural disasters are events that are caused by natural hazards that may be the result of several factors, including internal factors (under the earth's surface), such as plate movements, external / topographic factors (topography) such as land contours, weather factors (meteorology or hydrology)), and biological phenomenon factors (Buana & Utomo, 2017). Preparedness is an effort made to anticipate disasters through organizing appropriate and efficient steps. It is intended that residents have better preparation for facing disasters (BNPB, 2016). Preparedness aims to minimize the side effects of hazards through effective, timely, adequate, efficient preventive measures for emergency response measures and disaster relief. Parameter is a measure that is assessed to measure something. In preparedness there are several parameters to measure preparedness. Based on parameters from LIPI and UNESCO, 2006 (Sopaheluwakan, 2006).

The community preparedness framework is used as a tool to assess the extent of community preparedness in an area. The parameters that become the reference in the framework of preparedness to deal with earthquake-tsunami disasters, including knowledge and attitudes towards disaster; emergency response plan; disaster warning system; resource mobilization (Hidayati, Ngadi, Purwaningsih, & Soekarno, 2008). One element in society is the head of the family. The head of the family is the person who acts as a leader in the family (Buana & Utomo, 2017).

Families are expected to have the ability to cope with earthquakes, because the family's role in preparedness is very important. The head of the family plays a role in conveying information to his family, making decisions that can quickly affect his family members and also the head of the family as a source of social support for his family, due to the influence of all his words, behavior and actions will be modeled by his family (Rini, 2017). Utilization of knowledge as a product can encourage knowledge users to be able and independent to support the resolution of the problems they face.

Knowledge is developed through a process of experience in which the knowledge is used. Therefore, to minimize the risk of disaster must be an integrated part with the head of the family. Based



on data from the Yogyakarta Regional Disaster Management Agency (BPBD), the 2006 earthquake caused more than 5800 deaths, 37,000 people were injured, 84,000 houses were razed to the ground, and more than 200,000 houses suffered minor, moderate or severe damage. Much damage occurred in Imogiri and Jetis Districts. Therefore the researcher wants to know the frequency distribution of the level of preparedness of the head of the family related to the earthquake disaster and to know whether there are differences in the level of preparedness in Imogiri and Jetis Districts.

METHODE

This type of research was quantitative with the design used in this study is descriptive by describing the data that has been collected without intending to make conclusions that apply to the public. The population in this study were all head of families in Imogiri sub-district 17,670 and Jetis sub-district 15,755. The sample in this study was head of families heads with male sex, based on creative tables the number of samples was 192 respondents. Sampling technique with accidental sampling for the selection of head of families. Instructions in the form of questionnaires refer to (Sopaheluwakan, 2006) in the form of structured questionnaires and interviews. Preparedness is grouped into four parameters namely knowledge and attitudes / Knowledge and Attitude (KA), emergency planning (Emergency) (EP), warning system / Warning System (WS) and resource mobilization (RMC). Readiness index is formulated as follows:

$$\text{Preparedness Index} = \frac{\text{Real Total Parameters}}{\text{Parameter Maximum Score}} \times 100\%$$

Table 1. Categories of readiness index values

No	Index Value	Category
1	80 – 100	Very Ready
2	65 – 79	Ready
3	55 - 64	Almost Ready
4	40 - 54	Less Ready
5	0 - 39	Not Ready

RESULTS AND DISCUSSION

Research results can be seen from the table below:

Table 2. Characteristics of respondents based on age, occupation and education (Primary Data, 2019)

Characteristics of Respondents	Imogiri sub-district		Jetis sub-district	
	f	%	f	%
Age				
26 - 35 years old	5	5,2	10	10,4
36 - 45 years old	33	34,4	37	38,5
46 – 55 years old	43	44,8	36	37,5
56 – 65 years old	15	15,6	13	13,5



Occupation				
Does Not Work	2	2,1	2	2,1
Farmer	18	18,8	16	16,7
Government employees	11	11,5	11	11,5
<hr/>				
Private employees	21	21,9	26	27,1
Entrepreneur	18	18,8	18	18,8
Trader	26	27,1	23	24
Education				
No school	3	3,1	2	2,1
Elementary school	20	20,8	18	18,8
Junior high school	20	20,8	18	18,8
Senior high school	29	30,2	34	35,4
College	24	25	24	25

Based on data describing the characteristics of respondents in the Imogiri sub-district, the majority of respondents in the range of 46-55 years of age are 43 respondents, while for the majority of sub district, the age range is 36-45 years, amounting to 37 respondents. The occupation that is mostly done in the Imogiri sub-district and if the majority of the profession are both private employees. The level of responsive education also shows the same results in the two regions where the majority of education is Senior high school.

Table 3. Disaster Knowledge in Imogiri and Jetis Sub-Districts (Primary Data, 2019)

Knowledge and Attitude (KAP)	Imogiri sub-district		Jetis sub-district	
	f	%	f	%
Very Ready	20	20,8	47	49,0
Ready	76	79,2	49	51,0
Almost Ready	0	0	0	0
Less Ready	0	0	0	0
Not Ready	0	0	0	0
Total	96	100	96	100

The results of the frequency distribution of the level of knowledge about the majority of disasters fall into the ready category, which ranges from 65 to 79 as many as 76 respondents in the Imogiri sub-district and 49 respondents in the jetis sub-district

Based on data on the frequency distribution of family and disaster preparedness plans, the majority of the two places shows the same category, which is ready for the range of 65-79 with 77 respondents from Imogiri sub-district and 62 respondents from Jetis sub-district.



Table 4. Family and Disaster Preparedness Plans in Imogiri and Jetis Districts (Primary data, 2009)

Emergency planning (EP)	Imogiri sub-district		Jetis sub-district	
	f	%	f	%
Very Ready	0	0	0	0
Ready	77	80,2	62	64,6
Almost Ready	19	19,8	34	35,4
Less Ready	0	0	0	0
Not Ready	0	0	0	0
Total	96	100	96	100

Table 5. Disaster Warning in Imogiri District and Jetis District (Primary Data, 2019)

Warning System (WS)	Imogiri sub-district		Jetis sub-district	
	f	%	f	%
Very Ready	59	61,5	51	53,1
Ready	37	38,5	45	46,9
Almost Ready	0	0	0	0
Less Ready	0	0	0	0
Not Ready	0	0	0	0
Total	96	100	96	100

The results of the majority frequency distribution showed that the category of highly prepared ranges from 80-100 in Imogiri subdistrict with 59 respondents and jetis sub-district with 51 respondents.

Table 6. Resource Mobilization in Imogiri District and Jetis District (Primary Data, 2019)

Resource Mobilization (RMC)	Imogiri sub-district		Jetis sub-district	
	f	%	f	%
Very Ready	0	0	0	0
Ready	54	56,3	60	62,5
Almost Ready	40	41,7	32	33,3
Less Ready	2	2,1	4	4,2
Not Ready	0	0	0	0
Total	96	100	96	100

Based on the data distribution of the frequency of resource mobilization, the majority of categories are in the range of 65-79, 54 respondents in Imogiri sub-district and 60 respondents in jetis sub-district. There are 4 respondents in the sub-district of jetis in the category of less prepared as many as 4 respondents.



Table 7. Preparedness Levels in Imogiri and Jetis Districts (Primary Data, 2019)

Level of Preparedness	Imogiri sub-district		Jetis sub-district	
	f	%	f	%
Very Ready	0	0	0	0
Ready	93	96,9	95	99,0
Almost Ready	3	3,1	1	1,0
Less Ready	0	0	0	0
Not Ready	0	0	0	0
Total	96	100	96	100

Based on the overall frequency distribution the majority level of preparedness in the ready category is 93 respondents in Imogiri sub-district and 95 respondents in jetis sub-district.

Table 8. Differences in Disaster Preparedness Levels in Imogiri and Jetis Sub-Districts (Primary Data, 2019)

Variabel	N	Mean Rank	Sig
Level of Preparedness imogiri sub district	96	97,5	0,313
Level of Preparedness Jetis sub district	96	95,50	

The results of the bivariate test using Mann Whitney showed that there were no differences in the level of earthquake preparedness in Imogiri and Jetis sub-districts with a sig value of 0.313.

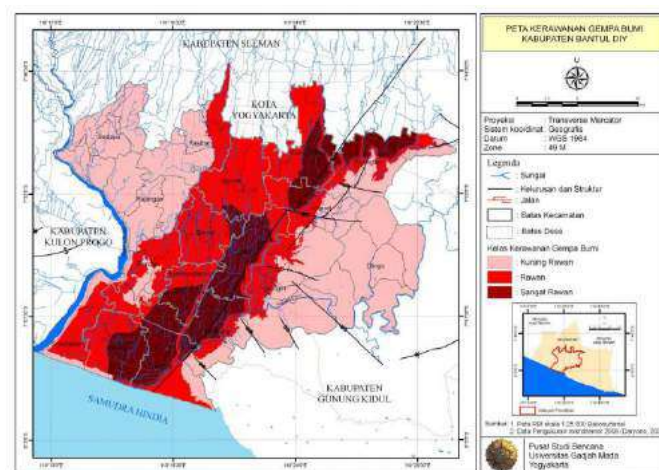


Figure 1. Disaster-prone map of Bantul District (Source: UGM Center for Disaster Studies, 2009)

Bantul district is a legitimate regency in Yogyakarta, based on disaster prone maps, there are several districts that are very at risk of disaster. In this research, the locations used are Imogiri and Jetis sub-districts. Both of these locations have almost the same characteristics as the frequency distribution in the Imogiri sub-district, the majority of ages are in the early elderly category, namely the range (46-55 years), while the jetis massuk sub-district is in the late adult category (36-45 years). The majority of the level of education in the Imogiri and Jetis sub-districts are both at the high school level, while for occupations there are professional differences, the



majority in the Imogiri sub-district as traders and in the Jetis sub-district as private employees. Based on research (Suwaryo & Yuwono, 2017), the results show that there is a significant relationship between age, education, occupation and level of knowledge. The more old enough, the more mature level someone will be more mature in thinking and working. This also affects the cognitive of a person. Then, in terms of public trust, someone more mature will be more trusted than someone who is not yet mature enough. A person's age also affects the person's comprehension and mindset. As you get older you will also develop your grasp and mindset, so that the knowledge you get is better.

According to (Carter, 2011), the higher the level of education a person is, the easier it will be to receive information so that the more experience he has, in this case especially knowledge about natural disaster mitigation. Someone who has extensive experience will have an impact on his cognitive. Education is an increasingly important factor in everyday life. The level of education will affect one's perception of cognitive. Someone who is highly educated also has high reasoning too.

Research conducted by (Pangesti, 2012), explains that one's work will affect one's knowledge and experience. The reason why work affects someone is when the job uses the brain more often than it uses muscles. The performance and ability of one's brain in storing (memory) increases or increases when used frequently, this is directly proportional when one's work uses the brain more than muscle. Another explanation that supports a person's brain or cognitive ability will increase when often used to indulge in and do things in the form of puzzles or reasoning. Earthquake disaster preparedness consists of 4 aspects, namely knowledge of disasters, family and disaster preparedness plans, disaster warnings, resource mobilization. In this study each aspect obtained frequency distribution data for knowledge about disasters in the two regions included in the ready category, but 76 respondents (79.2%) imogiri districts more than in jetis district that is 49 respondents (51.0%), knowledge gained from several components, namely family knowledge in getting information related to disasters whether it comes from TV, radio, newspapers or magazines. Government involvement is very important for disaster mitigation in increasing disaster-related knowledge in collaboration with BPBD in Bantul and central districts. The second point is the family preparedness plan in the disaster of the majority of the two districts included in the ready category. At this point the family prepares important documents for medicines and important cellphone numbers that can be contacted during an earthquake. Most respondents answered that they have not yet conducted evacuation drills or simulations. The third point is included in the ready category (65-79) but there are still many who fall into the category of almost ready is a disaster warning to know the signs of the majority of disasters are still traditionally, while the sources obtained are through the government with TV media, but many have not prepared food, clothing, medicines, important documents etc. The fourth point is the mobilization of resources into the ready category (65-79). The majority have not yet participated in first aid training, evacuation of victims, water treatment and food processing. In general, the two sub-districts fall into the ready category, because the characteristics of respondents are almost the same there is no difference in the overall level of disaster preparedness. To improve preparedness, one of the roles that cannot be ruled out in handling natural disasters is government, both local and central.

CONCLUSION AND RECOMMENDATION

The conclusion of the study are:



1. The level of disaster preparedness in the majority Imogiri sub-districts in the ready category (65-79) was 93 respondents (96.9%), while the Jetis sub-district included in the ready category (65-79) as many as 95 respondents (99%).
2. There is no difference in the level of preparedness between the Imogiri sub-district and the Jetis sub-district with a sig value of 0.313.

From the results above we recommend that :

1. Increase knowledge about earthquake and tsunami disaster preparedness because the target of the government is in the category of very ready, the regions in the Imogiri and Jetis sub-districts increase knowledge related to disasters, preparedness plans, warning of disasters and mobilization of resources by conducting training and simulations.
2. The government and BPBD provide training and routine simulations to the public.
3. Involving educational institutions especially in the health sector in providing training and simulations.

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SEXUAL FUNCTION OF Ca MAMMAE PATIENTS WHOM UNDERGOING CHEMOTHERAPY

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ABSTRACT

BACKGROUND : Ca mammae is one of the first rank in cancer case every year. One of the treatment for Ca mammae is chemotherapy which has an effect of losing interest in sexuality. The purpose of this study was to identify sexual function problems of Ca Mammae patients whom undergoing chemotherapy.

SUBJECT AND METHODE : This is descriptive conducted with cross sectional research design through survey. The sample in this study were 31 respondents and sampling method with purposive sampling. Measurement in this study used FSFI questionnaire, to identify components of sexual desire, sexual arousal, lubrication, orgasm, satisfaction and pain. Data analyzed used SPSS program.

RESULTS : The results of this study found that 2 (6.4%) respondents in normal sexual satisfaction and 29 (93.5%) respondents with sexual impaired function.

CONCLUSION : The conclusion of this study is the incidence of sexual function disorders in patients with Ca mammae still being majority case.

Keywords: sexual function, ca mammae

INTRODUCTION

Breast cancer is the most majority case of cancer in the world and attacks on women. In the last decade, the number of breast cancer survivors has increased globally. The term "breast cancer" is a malignant tumor that has developed from cells in the breast. The growth of cells in the breast that is out of control, which occurs as a result of mutations, or abnormal changes, in the part of the gene responsible for regulating cell growth that maintains to stay healthy (Anna & Maria, 2014). There are 5-10% of cancer caused by abnormalities inherited from the patient's mother or father. 85-90% of breast cancer is caused by genetic disorders that occur as a result of the aging process and lifestyle (www.breastcancer.org).

Breast cancer patients in 2012 around 1.7 million women were diagnosed with breast cancer and as many as 6.3 million women were diagnosed with breast cancer in the previous five years (Ferlay, et.al, 2012). A total of 122 / 100,000 women suffer from breast cancer and resulted in 21.5 / 100,000 women died of breast cancer. The prevalence of breast cancer incidence in the United States in 2013 was 296,890 cases (CDC, 2014). The incidence of breast cancer reached 347,792 (1.4% of the total population) in West Java occurred 6,701 cases (Indonesian Ministry of Health, 2013).



One of the method to handling breast cancer is with chemotherapy. Chemotherapy is the administration of chemicals for the treatment of diseases. The term chemotherapy refers exclusively to the use of cytostatic drugs (Indrawati & Maya, 2009).

Every patient has a different level of compliance. The impact of routine chemotherapy is killing cancer cells. Chemotherapy will make the progression of the disease slower and reduce complaints. Patients who do not do chemotherapy regularly will cause cancer cells spread to other healthy organs (Azwar, 2012). Side effects of chemotherapy include hair loss, weight gain, nausea, vomiting and fatigue. Chemotherapy can cause vaginal irritation and dyspareunia, changes in body image. Breast cancer sufferers are afraid of death and fear of happening rejection of partners (Erica & Don, 2015).

Chemotherapy will cause short-term and long-term effects including sleep disorders, weight changes, bladder disorders, changes in body odor, loss of skin sensation, impaired body image, sexual function disorders, pain during sexual intercourse this will increase anxiety patients who will have an impact on depression (Lindau, et.al, 2015).

Sexuality is the most intimate aspect of a relationship, sexuality is related to emotional feelings, related to one's well-being and experience in a relationship (Walsh et.al, 2005). There are various ways done to achieve maximum sexual function in sexual activity. The inability of a person to fulfill the condition of maximum sexual function is called sexual dysfunction (Tahalele, 2018). Women who experience sexual dysfunction disorders will experience decreased sexual desire / drive, difficulty in sexual arousal, difficulty reaching orgasm and feel pain during sexual intercourse (Bason, et.al. 2010).

A woman who has a good sexual function could has a good sexual relationship and able to create sexual satisfaction (Smith.et.al. 2012). Domains of sexual function include sexual desire, sexual arousal, orgasm, satisfaction, genital mucus discharge and a sense of comfort or pain during sexual intercourse (Rosen, et.al, 2000).

One of the way to handle Ca mamae is using chemotherapy to kill cancer cells. The effects of chemotherapy are very disturbing. One of the most disruption is function of sexuality. From these problems the researcher arises the question of how sexual desire, sexual arousal, orgasm, feeling of satisfaction, genital mucus discharge and a sense of comfort when having sexual intercourse ca mamae patients whom undergoing chemotherapy. Based on this background the researchers wanted to find out how the sexual function of patients with ca mamae who underwent chemotherapy. This study is conduct to identify sexual function problems of Ca Mamae patients whom undergoing chemotherapy.

METHODE

The design in this study was cross sectional through surveys. The sample in this study were 31 patients with Ca mamae whom undergoing chemotherapy in accordance with predetermined inclusion criteria. Measuring instruments use the Female Sexual Function Index (FSFI) questionnaire to find out sexual function in which prayer in FSFI includes sexual desire, sexual arousal, orgasm, satisfaction, genital mucus discharge and discomfort or pain during sexual



intercourse. Pe The study was conducted at a hospital in Yogyakarta. Data collection by filling out the questionnaire that has been given by researchers. All data obtained were analyzed using the SPSS program with a computer

This research was conducted an ethics test on May 6, 2018 with ethical number 210 / KEPK / SG / V / 2019 from the STIKES Surya Global Yogyakarta ethics commission.

RESULTS AND DISCUSSION

Table 1 Frequency distribution of Repondents Characteristics (Primary Data, 2019)

Characteristics	n	%
Age (years old)		
25-30	1	3,2%
31-35	7	22,5%
36-40	9	29,03%
41-45	14	45,1%
Level of education		
Elementary school	11	35,4%
Middle and high school	9	29,03%
Highly education	4	12,9%
University college	7	22,5%
Occupation		
House wife	16	51,6%
Police/ government	3	9,6%
Employee	5	16,1%
Trader	2	6,4%
Farmer	2	6,4%

Table 1 shows that the majority of patients with ca mammae for the age group 41-45 years is 14 respondents (45.1%), elementary school is 11 respondents (35.4%), having children more than 2 is 16 respondents (51.4%).

Table 2. Description of FSFI scores of respondents Ca mammae who undergo chemotherapy (Primary Data, 2019)

Variabel	N	%
Value FSFI		
Disfuction sexual	29	93,5%
Fuction sexual is good	2	6,4%

Table 2 shows that the sexual function based on the FSFI questionnaire is considered low or experiencing sexual dysfunction if the value of the total FSFI domain is lower than 26.55 (26.55). The results of the above table calculation obtained the value of 31 respondents are 29 respondents



(93.5%) experienced sexual dysfunction, and there are 2 respondents (6.4%) with good sexual function.

Table 3. Overview of Sexual Function of respondents Ca mammae who undergo chemotherapy (Primary Data, 2019)

Domain	Mean	Median	Min – Max
FSI	3.11	3.6	1.2 – 4.80
Sexual stimulation	2.25	2.1	0.00 – 6.00
Lubrication	2.09	2.11	0.3 – 6
Satisfaction	3.5	3.6	2 – 6
Pain	2.09	2	0 – 6

From the table above, it can be seen that the average sexual function domain based on the FSFI questionnaire sequentially from the highest is the domain satisfaction = 3.5, sexual desire = 3.11, sexual stimulation = 2.25, lubrication = 2.09 and pain = 2.09.

Ca Mammae patients whom undergoing chemotherapy in this study had an age range of 41-45 years were 14 respondents (45.1%) as majority. Supported by research from Anggraeni (2011) that the majority of Ca mammae sufferers > 40 years old were 52 respondents (39.7%). Chemotherapy measures taken by patients with ca mammae who are more than 40 years old will have an effect on long-term sexual disorders (Krychman & Katz, 2012). The more person's age will affect the interest and decrease sexual relations. The presence of a disease will also affect sexual function (Afiyanti, 2011). One study by Kowalczy et al. (2019) showed a relationship between younger age and good sexual function.

Characteristics of patients with ca mammae in this study was the majority of respondents had an elementary school education of 11 respondents (35.4%). Supported by the study of Pratiwi et al (2017) patients with ca mammae almost half of the respondents mostly elementary school educated. Research conducted by Agustini et al (2015) obtained characteristic data carried out by patients with primary education. The higher a person's education, the easier absorb information (Notoatmodjo, 2010). Knowledge is not only influenced by the level of education but also influenced by non-formal education as well as the ease of accessing information from the internet that will facilitate in getting information and adding knowledge, someone with any background is very likely to get the opportunity to increase the knowledge of ca ca especially about sexual dysfunction problems (Farhani, 2014). Characteristics of most respondents did not work and it was about 16 respondents (51.6%). Research conducted by Rashidi & Dashti (2015) found that the occupational characteristics of respondents were not working as much as 80%. Person who does not work will have a personal time allocation of 10 hours / day the rest of childcare activities and domestic activities, this shows that the workload will have very little (Lestari, 2011). A hardwork will increase the risk of stress this will have an impact on the decline in sexual function (Indrayani & Sofiyanti, 2016). The results of this study showed that the majority of respondents did not work but the data showed there were still many sexual dysfunctions.

Based on the results of this study showed that there were 93.5% who experienced sexual dysfunction (<26.55) and the remaining 6.4% of respondents with good sexual function scores (FSFI > 26.55). Patients who did chemotherapy will be at greater risk of sexual dysfunction (Lara et al, 2012). Supported by Kowalczy et al (2019) showed that 57.1% of Ca mammae patients



experience sexual dysfunction. Chemotherapy has an impact on sexual dysfunction and this will affect the relationship with the patient's partner. A good sexual function will reduce anxiety and increase physical and emotional satisfaction in this relationship will improve the quality of sexual life with a partner. The occurrence of sexual dysfunction will have an impact such as depression, or it can occur because suffering from the disease and caused sexual problems.

Sexual problems have an important role in a relationship, the effects of chemotherapy will cause sexuality problems, one of which is vaginal dryness and an effect on sexual desire and arousal, this will have an impact on disputes in marriage (Rezaei, 2016). Chemotherapy action that affects complaints of sexuality is characterized by decreased libido and will result in sexual dysfunction that will affect life and impact on stress (Krychman & Katz, 2012).

The domain of sexual function in this study was the part that experienced the most problems in the domain of satisfaction. Sexual satisfaction is related to a history of the usual actions of chemotherapy will result in hot and dry sensation in the vaginal area (Zeng & Loke, 2012). Sexual satisfaction can increase if accompanied by a quality communication relationship with a partner (Stephenson & Meston, 2010). Patients whom undergoing chemotherapy will feel pain and this will interfere with sexual satisfaction (Guerin & Hill, 2010)

CONCLUSION AND RECOMMENDATION

Based on sexual function of ca mammae patients whom undergoing chemotherapy found that 2 respondents (6.4%) in the sexual function category and 29 respondents (93.5%) in the sexual dysfunction category. The results of the sexual function domain based on the FSFI questionnaire sequentially from the highest are the satisfaction domain = 3.5, sexual desire = 3.11, sexual stimulation = 2.25, lubrication = 2.09 and pain = 2.09.

The results of this study are expected for health workers to provide health education related to the problem of sexual function of patients with ca mammae who are undergoing chemotherapy. The hospital's policy is needed to provide training to nurses in special programs in health promotion to increase knowledge in education, counseling and interventions related to sexual function, not only patients but husband and wife.

It is hoped that there will be follow-up research related to the sexual function of husband and wife and household harmony in ca mammae patients undergoing chemotherapy.

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INSTRUMENT DEVELOPMENT OF MANPOWER (M1) NURSING MANAGEMENT BASED ON PROFESSIONAL NURSING CARE METHODS AND JCI ACCREDITATION

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ABSTRACT

BACKGROUND : Planning in nursing management is based on the results of the assessment from information about the patient, nursing staff, administration, nursing care models and documentation systems. Nursing students at the nursing management profession stage have an important role in studying the condition of nursing management. A valid and reliable assessment instrument is needed to be able to describe the conditions of work in managing nursing management. The aim of this study is to develop an instrument of manpower (M1) in nursing management based on professional nursing care methods and JCI accreditation.

SUBJECT AND METHODE : The research design combines a qualitative and quantitative approach (mix method) consisting of 2 phase. The population in this study were all nurses (76) at Amelia Hospital. The sample in this study was 20 nurses with purposive sampling technique. The first phase researchers set up the instrument and conduct Small Group Discussions with the head of nursing, the head of the room, and nurses. Phase 2 analyzes the validity and reliability test of the instrument and SGD phase 2 for the delivery of research recommendations.

RESULTS : The results of the validity test show that the Manpower Assessment Instrument (M1) of nursing management has an average $r_{count} > r_{table}$ ($0.643 > 0.423$), and the reliability test result was 0.820. The Manpower (M1) assessment instrument was declared valid and reliable. The Manpower (M1) assessment instrument of nursing management examined the human resources that manage a nursing practice space.

DISCUSSION : With this assessment instrument, the head of the room or the manager of nursing can manage his human resources so as to create a conducive work environment so that the main goal of improving the quality of nursing services can be achieved.

Keyword: instrument, manpower, nursing management, profesional nursing care methods, JCI accreditation

INTRODUCTION

Nursing students at the nursing management profession stage, has an important role in assessing the condition of nursing room management (KBK AIPNI Team, 2010). Implementation of functions management and services in nursing management in the scope of nursing, including management functions such as planning, organization, staffing, direction, and control (Simamora, 2012). Planning is based on the results of the assessment of information about the patient, care staff, administration, models of nursing care and documentation systems. Misperception often occurs between students and the head of nurses at the assessment stage because the nursing management assessment instrument already exists in the form of a simple questionnaire and does not yet have instructions on how to complete it, so the manager often thinks that the instrument is less representative of the conditions that occur in the room.

Basically, education has provided a format for assessment prior to the implementation of nursing management but it has not been standardized so that the depth of assessment in each



room is still often different. Limited references to nursing management make it difficult for students. Changes in development related to the hospital's accreditation system also require continuous updating of management practices so that there is harmony between what students are preparing for and applications in the clinic.

The Professional Nursing Care Method (MAKP) is a framework that defines the four elements: standards, the nursing process, nursing education and the MAKP system. The definition is based on the principles of values that are believed and will determine the quality of production / nursing services (Gillis, 2000). To establish a quality nursing service, of course, based on quality human resources. Therefore management of personnel / human resources in each nursing room is important to do.

There is a need for a valid and reliable assessment instrument as well as standard and standardized guidance with clear instructions on the contents of the nursing management personnel assessment so that it can be used by hospitals and students to be able to describe the condition of the room to be developed better. Based on this, the researcher needs to develop a manpower assessment instrument (M1) of nursing management based on professional nursing care methods and JCI accreditation

METHODE

The research design used is a mix method research that is a qualitative and quantitative research approach. The variable in this study was the development of a nursing management (M1) management instrument based on the Professional Nursing Care Method and JCI accreditation. The research consisted of 2 phases beginning with developing the personnel assessment instrument according to the professional nursing care method through SGD (Small Group Discussion) with participants namely the nursing field, the head of the room, and some nurses with a total of 10 participants.

Phase 2 analyzes the validity and reliability test of the personnel management (M1) nursing management instrument with a population of 76 nurses. Respondents were 20 nurses through purposive sampling technique. The measuring instrument in this research is the instrument of energy assessment developed to test its validity and reliability

Data analysis consists of 2 stages, namely descriptive analysis and inferential analysis. Descriptive analysis in the form of subjective evaluation of the participants during the Small Group Discussion. Inferential analysis in the form of a test of validity and reliability using the SPSS program with the validity test using Pearson Product Moment Correlation with α 0.05. The basis for decision making from this test is if the calculated r value for each question item is greater than r table then the instrument is declared valid. The instrument reliability test analysis is based on the internal consistency of the scale with the Cronbach Alpha technique, otherwise reliable if the Cronbach alpha value > 0.6

RESULTS AND DISCUSSION



Frequency distribution of general data on the participants of the Phase 1 research, out of 10 participants, most (70%) participants were > 40 years old, almost all (90%) participants were female, most (60%) were the last education participants namely D3 Nursing, most (70%) participants worked at Amelia Hospital with > 15 years of service, all (100%) participants were permanent employees of Amelia Hospital.

Frequency distribution of general data 20 respondents carrying out phase 2 research, almost half of respondents (35%) aged > 40 years, almost all respondents (95%) were female, almost half (35%) of respondents worked in Amelia Hospital with years of service > 15 years, almost all (80%) of respondents with the last education were D3 Nursing, and almost all respondents (85%) were permanent employees of Amelia Pare Kediri Hospital.

The Result of 1st Phase

The activity in phase 1 was the implementation of Small Group Discussion which discusses the evaluation of the existing instruments and discusses the development of the manpower (M1) assessment instrument of nursing management. The results of these activities were all participants agree to develop the manpower (M1) assessment instrument Of Nursing Management was carried out by making 2 types of instruments, consisting of instruments with open questions to ask the head of the room and instruments with closed questions addressed to nurses to make it easier to analyze . That was because of the large number of nurses who were asked, if the manpower assessment instrument is in the form of open questions, it will be quite difficult to analyze the results. It is also important that in addition to developing instruments, clear guidelines / instructions for filling in the assessment instruments are made so that it is easier when filling instruments.

The open question instrument was for the head of the room consists of questions about the organizational structure in providing nursing care, the role of each health worker in service to patients, identification of qualifications of health workers in the room, planning of staff development by the head of the room, identification of the level of patient dependence and identification of needs nursing staff.

The closed question instrument intended for nurses is the same as the open question instrument, the form is not in the form of a question but in the form of a statement towards the nurse's opinion about the existing workforce conditions in the room

The Result of 2nd Phase

The results of the validity test of the Instrument Development of Manpower (M1) Assessment on Nursing Management can be seen in table 1.1

Table 1.1 shows the results of the validity of the Manpower (M1) Assessment instrumen of Nursing Management based on the Professional Nursing Care Method through the Pearson Correlation Product Moment Test with a significance level of α 0.05 for 20 respondents.

Table 1.1 Test Validity Development of Labor Assessment Instrument (M1) Nursing Management based on Professional Nursing Care Methode



No.	Question Item	R Count	R Table (N=20)	Conclusion
1	Question 1	0,618	0,423	Valid
2	Question 2	0,535	0,423	Valid
3	Question 3	0,865	0,423	Valid
4	Question 4	0,506	0,423	Valid
5	Question 5	0,659	0,423	Valid
6	Question 6	0,845	0,423	Valid
7	Question 7	0,575	0,423	Valid
8	Question 8	0,630	0,423	Valid
9	Question 9	0,691	0,423	Valid
10	Question 10	0,506	0,423	Valid

In the table 1.1 it was seen that all item items on the instrument have R count > R table (0.423) so that the M1 assessment instrument in Nursing Management is declared valid

Table 1.2 Reliability Test Development of Labor Assessment Instrument (M1) Nursing Management based on Professional Nursing Care Methods

No.	Variable	Cronbach alpha	R Table (N = 20)	Conclusion
1	Manpower (M1) Assessment Instrumen	0,820	0,423	Reliabel

How to make decisions for reliability can be done in 2 ways, namely by comparing the value of r count > from r table or by if the value chronbach alpha > 0.6 then the questionnaire declared reliable. Table 1.3 shows the results of the reliability of the Manpower (M1) Assessment instrumen on Nursing Management instrument based on the Professional Nursing Care Method through the Cronbach alpha test with a significance level of α 0.05 for 20 respondents. In the table it can be seen that the Cronbach alpha value > R table (0.423) so that the Nursing assessment (M1) instrument of Nursing Management is declared reliable. Thus the case r count > 0.6 then the instrument declared reliable.

Evaluation of Nursing Management Employment Assessment Instruments based on the Professional Nursing Care Method and JCI

The evaluation of the assessment instrument begins with the Small Group Discussion (SGD) which is carried out before the instrument trials. It is intended that researchers obtain input from the hospital about the suitability of the contents in the personnel assessment instrument (M1) in nursing management with the conditions and needs that exist in the hospital at this time. The result of SGD is that all participants agree that the development of the Nursing Management (M1) personnel management instrument is due to the development of matters that must be adjusted to the needs of the Hospital accreditation standard.

Accreditation is an acknowledgment of a hospital provided by an independent provider of accreditation institutions established by the Minister, after being assessed that the hospital meets the applicable Hospital Service Standards to improve the quality of hospital services on an ongoing



basis (Permenkes RI, 2012). Accreditation JCI (Joint Commission International) is an independent, non-profit organization that evaluates and accredits health service organizations (Ziegler, 2019). Every hospital is required to carry out accreditation. This is important to do so that patients get the best service while being treated at the hospital. As stated by the National Guard Health Affairs (NGHA), JCI Accreditation is the most sought after accreditation due to the thoroughness of its process that covers everything from patient entry to discharge and assesses all aspects of management, to meet the standards of the best Hospital in the world (NGHA, 2014). Therefore, every hospital needs to manage its hospital so that it can get good accreditation results from national and international accreditation institutions. The assessment instrument is useful for synchronization between the management of the hospital and the education, so that the results of student assessment during nursing management practice can be used as an evaluation and input in determining policies for the hospital. If the assessment instruments used by students are valid and reliable and in accordance with the needs of the hospital, the existence of the practice of professional students will greatly assist the hospital in managing the room

Analyzing Test Validity and Reliability of the Manpower (M1) Assessment Instrument in Nursing Management

The results of the study in accordance with table 1.1 states that each item item has a value of $r_{count} > r_{table}$ (0.423), which means the instrument of Manpower (M1) Assessment Instrument on Nursing Management is declared valid. In accordance with table 1.2 shows that the value of cronbach alpha $> R_{table}$ and also cronbach alpha > 0.6 which means that the instrument is declared reliable.

The principle of validity is measurement and observation which means the principle of instrument reliability in collecting data. The instrument must be able to measure what should be measured. Validity emphasizes more on measuring devices / observations (Nursalam, 2013). Reliability is the similarity of the results of measurements or observations if the facts or facts of life were measured or observed many times in different times. Tools and methods of measuring or observing both play an important role at the same time (Nursalam, 2013). In accordance with the facts and theories, the assessment instruments developed must contain valid and reliable principles in order to truly be able to measure the things that should be measured. The making of item items in the nursing management personnel assessment instrument refers to a measuring instrument that was previously opened by Nursalam (2017) and the researcher develops in accordance with indicators of room management management based on professional nursing care methods and JCI (Joit Commission International) accreditation standards.

CONCLUSIONS AND RECOMMENDATIONS

Nursing management (M1) management instruments based on professional nursing care methods and the Joint Commission International Accreditation Standards are declared valid and reliable.

The suggestion in this research is that in analyzing the results of the instrument it is necessary to synchronize the results of the assessment between the assessment with open questions for the head of the room and the assessment with closed questions for nurses so that they can complement the results of the assessment with each other.



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THE EFFECTIVENESS OF KANGAROO MOTHER CARE (KMC) TECHNICAL TRAINING IN THE GROUP OF HOUSEWIVES ON THE ABILITY TO IMPLEMENT KMC IN CARING FOR LOW BIRTH WEIGHT BABIES AT HOME

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ABSTRACT

BACKGROUND: Low birth weight (LBW) babies are babies weighing less than 2500 grams and they are including to baby at risk due to an immature organ system and lack of body fat reserve. Common problems include respiratory distress syndrome (RDS), dysfunction of immunological system, gastrointestinal system, central nervous systems and temperature problems. Related to the risk of maladaptive temperature LBW infants has a serious risk of hypothermia. Kangaroo Mother Care (KMC) is known as one of LBW baby care strategy in preventing hypothermia at home.

SUBJECT AND METHODE : This study is conducted to analyze the effectiveness of KMC technical training in the group of housewife on ability to implement KMC for LBW babies at home. This is pre-experimental research involving 12 respondents or housewife who having a LBW babies in Sumberjati taken by purposive sampling. The data was collected using intervention of KMC Technique and Likert scale.

RESULTS: the result study show that the average pre test score was 66.25 and score for post test are 80.42. The effectiveness of KMC technical training was analyzed by using paired T – test and show p value of 0,0000.

DISCUSSION : KMC technical training is effective on ability to implement KMC in caring for LBW babies at home. The recommendation of this study are suggested that housewife use the KMC method at home in helping LBW infants adapt to extra uterine temperature changes.

Keywords : Kangaroo Mother Care (KMC), LBW babies, housewife

INTRODUCTION

Low birth weight (LBW) babies are babies weighing less than 2500 grams, which is weighed at birth until the first 24 hours after birth (Saputra, 2014). LBW babies are at risk due to immature organ systems and lack of body fat reserve. Conditions of early adaptation of LBW infants that need attention are the adjustment of body temperature to the environment, as well as thin body fat pads. LBW babies are difficult to adjusting their body temperature because of decreasing of fat insulation and comparison between large body surface area to body weight (Goomela et al, 2013).



To overcome the health problems of LBW infants, comprehensive care is needed. That is, it should be treated in hospital which aims to save the survival of the LBW babies. Kangaroo Mother Care (KMC) is known as one of alternative LBW babies care. This method is very effective and efficient since it can be done by mothers and family members (MCHIP, 2012).

Statistical data show that 90% of LBW babies are in developing country and their mortality are higher than baby weighing more than 2500 grams (Pantiawati, 2010). As many as 15 million babies are born LBW every year. Data in 2013 showed that the number of babies born in 2010 was 4,371,800. Of these, one in six born to experience LBW or 15.5 per 100 live births (675,700 inhabitants) was born LBW (IDAI, 2014). East Java Provincial Health Office in 2012 stated that the number of babies with LBW in East Java reached 3.32% which was obtained from the percentage of 19,712 out of 594,461 newborns weighed. Based on Basic Health Research (Riskesdas) of the Ministry of Health (2007) the etiology of neonatal deaths from 0 – 6 days in Indonesia are asphyxia (37%), LBW (34%) and sepsis (12%). Meanwhile the etiology of neonatal death 7 – 28 days is sepsis (20.5%), congenital abnormalities (19%), pneumonia (17%), respiratory distress syndromes/RDS (14%). So one of the most common etiology of death for newborn is LBW and infection (IDAI, 2014). The mortality rate for neonatal sepsis is quite high, 1350 % of the newborn mortality rate. The problems that often arise as complication of neonatal sepsis are meningitis, seizures, hypothermia, hyperbilirubinemia, breathing and drinking dysfunction (Ministry of Health, 2007). Approximately 57% of infant death occur when infants under 1 month of age and are mainly caused by perinatal disorders and LBW babies. According to estimates, every year around 400,000 babies are born with low weight (Ministry of Health, 2007). Based on the report of the Family Health and Community Nutrition Section of the Jember District Health Office, the number of babies born with low birth weight in 2016 is 1,564 out of 36,260 newborns was weighed (4.3%). The number of LBW babies this year has decreased compared to the previous year (Jember Health Office, 2017).

When a LBW baby is being treated in hospital, the baby's condition will be controlled and get intensive and strict supervision. Various medical efforts were made to improve the health status of LBW infants in order to survive in extrauterine life optimally. The problems will arise when the baby has been declared allowed to go home and require further care at home. Parents readiness level in performing LBW infants after returning from care at the hospital varies greatly. In the other hand the family (housewife) is not yet competent in carrying out baby care and further it will lead an illness to the baby and even threatening the baby's safety.

Morbidity cases in LBW infants after hospitalization are require vigilance and assistance to be resolved. If LBW experiences a condition of illness due to the impact of improper care, this will pose a risk of a worse prognosis compared to babies born with normal condition (Jember Health Office, 2014). Increasing the competence of mothers about LBW babies care is needed to maintain the baby's health status. But the fact is that there is still a lack of knowledge and understanding of LBW infants after hospitalization (Indriyani et al, 2016).

Based on the explanation above, it is necessary to provide training on baby care skills in the form of the Kangaroo Mother Care (KMC) technique to facilitate the mother's ability to adapt the ambient temperature to LBW infants at home. Therefore it is necessary to conduct research on the effectiveness of training on Kangaroo Mother Care (KMC) techniques on the ability of housewives to implement KMC in LBW infants at home.



METHODE

This is quantitative study conducted with pre-experimental pre-post test design. Data collected by using an extension program unit KMC intervention and likert scale. This study involving 12 housewives in Sumbesari Jember taken by purposive sampling technicque start at May to June 2019. Data analysis was conducted using dependent t – test.

RESULTS AND DISCUSSION

This study were focused on group of hosewives in Sumbesari Jember who has LBW babies. The trainin were held at May 25, 2018 start at 09.00 to 12.00. The topic is about Kangaroo Mother Care (KMC) technicque. The repondents's knowledge were identified before and after the training. Pretest were done before the training and posttest were done a month after the training. The training were given trough lecture, demonstration and redemonstration. Picture 1 below are describing the KMC training activity at group of housewives.



Picture 1. Kangaroo Mother Care (KMC) Technicque in Group of Housewives.

The following table will shows the results of Kangaroo Mother Care training.

Table 1. Age Frequency Distribution of Housewives in Sumbesari Jember May-June 2019 n=12

Age	Frequency	Percentage
< 20 years old	2	16,7
20-35 years old	10	83,3
>35 years old	0	0.0
Total	12	100.0

Based on the data in table 1 it seen that majority if housewives is 20 -35 years old, which is 10 respondents (83,3%).



Table 2. Educational Degree Frequency Distribution of Housewives in Summersari Jember May-June 2019 n=12

Educational Degree	Frequency	Percentage
Elementary – junior high school	1	8,3
Senior high school	9	75
College	2	16,7
Total	12	100.0

According to the data from table 2 we can see that majority of respondents were graduated from senior high school, counted 9 respondents (75%).

Table 3. Tribal Frequency Distribution of Housewives in Summersari Jember May-June 2019 n=12

Tribe	Frequency	Percentage
Javanese	8	66,7
Madurese	4	33,3
Total	12	100.0

From the data on table 3 we see taht majority of respondents are javanese, counted 8 respondents (66.7%).

Table 4. Frequency Distribution of Information of LBW Ever Obtained in Group of Housewife May – June 2019, n = 12

Exposure	Frequency	Percentage
Yes	1	8,3
No	11	91,7
Total	12	100.0

The data on table 4 shows that majority of respondents have never been exposed to information about LBW babies care.

Table 5. Effect of Kangaroo Mother Care (KMC) technicque Training to Ability to Implement KMC in Caring LBW Babies in Group of Housewife in Summersari

Variabel	Min	Max	Mean	Std. Deviation	SE Mean	P value
Pretest	60	75	66.25	4.827	1.393	0,00
Posttest	75	90	80.83	4.687	1.353	

According to the data about the training activity in table 5, it seen that average score at pretest is 66.25. And average score at posttest is 80.33. And also the p value is obtained 0.00 which means that KMC training in is effective to improve housewives ability in performing LBW babies care at home.



Table 5 also told us that the pretest average score is 66.25 and after pretest the average score is become 80,83. Statistical analysis of effectivity of KMC training was obtained p value as 0,00.

The respondents are very responsive at the training, it is proven that they can redemonstate the KMC technicque according to the direction conveyed. This training is significantly effective to improve housewive knowledge in doing KMC technicque to the LBW babies.

Experience of being a mother of a risky baby such as LBW baby require some skill to maintain the baby's survival. It is because the LBW babies are having a risk that related to immunity where the immunity is succceptible to infection process including the inability to adapt to the changes in ambient temperature spontaneously. This happen due to immaturity of hipotalamus which is functions is to regulate body temperature and also the tin body fat pads (Indriyani, Asih and Wahyuni, 2019).

One thing that make it possible to help maintain body temperature is by providing a warm environment, by doing Kangaroo Mother Care (KMC) technicque. It was obtained that 91,7% respondents never exposed to information about this technicque. That is why this technicque is very important to inform them about the KMC technicque. Improvement of undestanding up to this stage can be done in the form of skill training. The advantage of KMC implementation is that this tehcnicque is not only performed by mother, but alsı by other member of family including the father. Related to the importance of mother's ability in performing KMC at home to help the LBW adapt the body temperture is the study conducted by Lestari, Arif and Alit (2019) which obtain that knowledge, mother's perception and family support are correlate to the implementation of KMC signifiacntly. Kurniatin and Mufdhilah (2013) also stated conducted a study about the effect of KMC care to the body tempereature of LBW babies. The number of LBW babies are contue to decrease every year. Teh data released by SDKI in 2010 stated that the number of LBW babies are 7.5%. nutritional improvement targets towards healthy Indonesia 2010 was 7% (Ministry of Health, 2010). Based on this data, the LBW babies are need to be treated so that their survival could be maintained. Changing in body temperature can lad to hypothermia condition is very dangerous for LBW babies. Accordiing to WHO in Bebasari, Aginwardi and Nandiati (2010) LBW babies could increase mortality , morbidity, diasbility of neonatus, infant and children and also have a long term impact on their lives in the future. The result of study which is conducted by Solehati et al (2018) stated that putting KMC in LBW treatment is significantly influence the improvement of LBW phsyscosocail response. KMC is recommended as a therapy for LBW care that can be done directly by the mother, no charge and preceded by health education from health provider. This was confirmed by research by Anggriani, Fransiska and Kasim (2014) that LBW body temperature and implementation of KMC has significant correlationship. Some of the aforementioned studies are very encouraging that these technicque helps to adapt body temperature in LBW babies and one of which is to improve the mothers skill about KMC methode, so that this methode can be applied at home. The success of maintaining health status in LBW infants is not only depend on baby care at the hospital, but the continuation of LBW infants at home is also important to get proper attention and care. Impelementing KMC at home require an optimal attitude from the mother and all family member.

This is in line with the study conducted by Kusumawardani and Cholifah (2019) which is stated that there is significant correlationship between mother's attitude and the implementation of



KMC in LBW babies. So that health workers and community are expected to performing KMC methode to the LBW babies di health care and home. Researcher believe that the success of LBW babies care at home in maintaining the normal body temperature are required collaboration from mother and family supoorted by health education by health worker. The result show that the ability of mother in performing KMC before training is in moderate level (66.25) and improving became good level after the training (80.83). The mother is also need to be convinced that she is the best care giver for LBW babies. This belief will encourage the mother to behave properly when caring at the baby.

CONCLUSION AND RECOMMENDATION

The ability of housewives in implementing KMC technicque show average score of 66.25 and after training the average score is 80.83. Training in performing KMC technicque in housewives is effective in improving housewife ability to caring for LBW babies at home. From the result above it recommended that health workers and family should supporting the mothers to implementing KMC technicque at home. The ability of housewives could improved through training and health education.

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THE GERMAS INFLUENCE OF GYMN BRAIN COMBINATION EXERCISE ON THE STRESS LEVEL OF XI ADOLESCENT STUDENTS IN SMK 17 PARE

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ABSTRACT

BACKGROUND : Stress is an inevitable part of everyone's life. Stress in school adolescents can result in decreased learning achievement. Therefore, it is necessary to do therapy, one of which is a combination of Gervas stretching and brain exercise. This study aims to determine and prove the effect of Gervas Exercise Combination Brain Gymn on the Stress Levels of Adolescent in Class XI SMK 17 Pare.

SUBJECT AND METHODE : *Quasi Experiment* research design, the number of samples of 40 adolescents using *purposive sampling* techniques, uses a stress scale measurement tool of DASS 42 modification.

RESULTS: Almost all (90%) of respondents' stress conditions before the intervention were in the mild stress criteria, whereas after the intervention, the majority were obtained (55%) with mild stress criteria. Statistical test results with the *Wilcoxon* signed rank test ($p\text{-value} = 0.003$), means that there is an effect of Gervas Exercise Combination Brain Gymn.

DISCUSSION : Stress is characterized by signs and symptoms of feeling difficult to relax, pessimistic, easily offended. Gervas Exercise Combination Brain Gymn can cause the pituitary gland to stimulate the hypothalamus so that the endorphins are raised and the cortisol hormone decreases which makes the feeling relaxed and happy so that the stress decreases. Gervas Exercise Combination Brain Gymn can be an alternative solution as an innovative and applicative effort to reduce stress levels that can be done easily and independently.

Keywords: Gervas Exercise, Brain Gym, stress level, adolescents

INTRODUCTION

Stress is an inevitable part of human life. Stress is a process that assesses an event as something that is threatening and even dangerous and the individual responds to the event on a physiological, emotional, cognitive and behavioral level (Richard, 2010). According to Needlman, (2008) stress that occurs in adolescents is usually caused by several factors including biological, family, school, peer, and social environmental factors. The population of adolescents in Indonesia who are 10-24 years old is around 66.3 million people out of a total population of 258.7 million (Chandra, 2017), according to Basic Health Research data (Rikerdas, 2018) the prevalence of stress events in adolescents increases in the age by more than 15 years. About 6.1% of Indonesian people over the age of 15 experience mental emotional disorders in the form of stress, anxiety and depression. East Java Province itself adolescents who experience emotional mental disorders are (7%). According to Priscilla (2017) globally, suicides are the second leading cause of death worldwide among 15-19 year adolescents.



Based on preliminary study data in the XI Pharmacy Vocational Class Bhakti Mulia Pare on October 29, 2018 there were 15 children as respondents from 40 children. They feel stress with symptoms that lead to physical, cognitive, affective responses. Percentage of physical response weariness was 60%, restlessness and sleeplessness was 46.6%, increasing neck and shoulder strain was 53.3%, pulse rate was 33.3%, decreasing appetite was 40%, while response from cognitive and affective marked by daydreaming 13%, hard to focus during lessons 33.3%, easy to forget, difficulty in concentrating, changing emotions, changing habits and daily activities 60%.

Adolescents are prone to experiencing problems and stress because adolescents are still in an unstable state and emotions have not formed fully. Adolescents, who experience stress or the burden of their mind if they try very hard, will cause stress in the brain, so that the brain's integration mechanism is weakened and certain brain parts are less functioning. Information received by the back of the brain becomes difficult to express, so people feel less successful and stress will result in reduced enthusiasm for learning and working (Feist, 2010).

The solution to help reduce stress is by doing GERMAS Stretching (Healthy Living Movement) and Brain Gymnastics training. The results of research conducted previously by providing brain training exercises on stress levels in students before and after treatment for 6 days was found that before and after given brain exercises there is a decrease in the value of stress levels (Nuridin, 2015).

Brain Gym is a series of exercises based on simple body movements. The movement was made to stimulate the left and right brain (lateral dimension), ease or relax the back and front of the brain (the focusing dimension), stimulate the feeling or emotional system, namely the midbrain (limbic) and cerebrum (dimension of concentration). In Brain Gym, there is a movement to increase energy and support a positive attitude (centering dimension) reactivating the neural connections between the body and brain so it is easy to facilitate the flow of electromagnetic energy throughout the body). Humans are chemical creatures under certain conditions at the behest of the brain, and their body produces chemicals. Producing and releasing these chemicals in times of fear and stress, the brain instructs the body to produce and release the cortisol and adrenaline hormones (Dennison, 2011).

Germas Exercise Combination Brain Gymn can reduce the cortisol and adrenaline hormones and then increase the endorphin hormone. The function of endorphins is creating a sense of well-being, comfort and safety. Germas Exercise Combination Brain Gymn can release endorphins, which calm the nerves to create a feeling of calm and peace, to help in stabilizing emotions. These substances can cause relaxation, blood pressure and declined pulse. All feeling diseases associated with pressure on our feelings such as anger, sadness and depression can be reduced or even eliminated (Harry, 2008). As a result, psychosocial and physical stress is reduced and the mind is clearer, relations between humans and the atmosphere of learning or working are more relaxed and happier (Isnaini, 2009).

It can be concluded that research on the provision of Germas Exercise Combination Brain Gymn intervention is still really needed as a contribution to reduce stress levels. Then based on the description above, the researcher wants to know the effect of Germas Exercise Combination Brain Gymn on the stress levels of adolescents in class XI of SMK 17 Pare.

The objectives of this research is to analyze the the effect of Germas Exercise Combination Brain Gymn in class XI SMK 17 Pare.



METHODS

Based on the research objectives, researchers used a *Quasi Experiment pre-post with control group design* in two groups. The population in this study were 45 respondents. The sample in this study were teenagers in class XI Accounting students of SMK 17 Pare who met the inclusion criteria of 40 respondents divided by 2 namely the treatment and control group. *Purposive Sampling* technique is a sampling technique with certain considerations (Sugiyono, 2008). Inclusion criteria of adolescent students are willing to be the respondent. Adolescents in class XI Accounting students of SMK 17 Pare who had done physical and psychological stress scoring, with mild, moderate and severe criteria, did not have a history of psychiatric disorders, and agreed to be respondents. The research process was begun after obtaining ethical approval with the number 134 / EC / LPP / STIKES / KH / II / 2019, then the researcher conducted a research permission that had been approved by the institution leader, then provided information about the aims and benefits of the study, then requested the respondent's approval as the subject, then the researcher took a stress measurement using DASS 42 modification (depression anxiety stress scales) before the intervention. The intervention was carried out twice a week for 3 weeks within 30 minutes of each meeting. After the 3rd week intervention, the stress measurements were taken by using a modified DASS 42 (Depression Anxiety Stress Scales 42th).

RESULT AND DISCUSSION

Table 1 Distributing Frequency of Respondents by Gender Intervention and Control Groups in XI Adolescent students of SMK 17 Pare

NO	Gender	Intervention Group		Control Group	
		f	%	f	%
1.	Male	1	5	3	15
2.	Female	19	95	17	85
Total		20	100	20	100

Based on table 1, it is known that the characteristics of respondents by gender in the intervention group were almost entirely (95%), namely 19 respondents were female.

Table 2 Distributing Frequency of Respondents by Age Intervention and Control Groups in XI Adolescent Students of SMK 17 Pare

NO	Age	Intervention Group		Control Group	
		f	%	f	%
1.	15-16 years	0	0	2	10
2.	16-17 years	9	45	7	35
3.	17-18 years	11	55	11	55
Total		20	100	20	100

Based on table 2, it is known that the characteristics of respondents based on age in the intervention group, the majority (55%), were 11 respondents aged 17-18 years.

Data analysis used *Mann Whitney* test because the data distribution is not normal according to *Kolmogorov Smirnov* normality test where the results is $P < \alpha$.



Table 3 Frequency Distribution of Stress Level Treatment and Control Groups Before GERMAS Intervention Exercise Brain Gymn Combination in Adolescents of Class XI SMK 17 Pare.

Stress level characteristic	Intervention Group		Control Group	
	Before Intervention		Before Intervention	
	f	%	f	%
Mild Stress	2	10%	6	30%
Moderate Stress	18	90%	14	70%
severe Stress	0	0%	0	0%
Total	20	100%	20	100%
<i>Mann Whitney test p value 0, 118 (=0,05)</i>				

Table 3 shows before the GERMAS intervention Brain Gymn exercise combination in the treatment group, that almost all (90%) 18 respondents had mild stress criteria and a small portion (10%) 2 respondents with soft stress criteria. While the control group was almost entirely (70%) 14 respondents were mild stress criteria and a small portion (30%) 6 respondents were soft stress criteria. *Mann Whitney* test results were obtained 0.118 results so that it can be concluded that if $p \text{ value} > \alpha$, it shows that the two groups before treatment there was no difference in stress levels before the GERMAS exercise combination of Brain gymn.

Table 4 Characteristic Distribution of Stress Level After GERMAS Exercise Combination Brain Gymn in the Treatment and Control Group of Adolescent students Class XI SMK 17 Pare.

Stress level characteristic	Intervention Group		Control Group	
	After Intervention		After Intervention	
	f	%	f	%
Mild Stress	11	55%	4	20%
Moderate Stress	9	45%	16	80%
Severe Stress	0	0%	0	0%
Total	20	100%	20	100%
<i>Mann Whitney test p value 0,024 ($\alpha=0,05$)</i>				

Table .4 shows that in the treatment group after GERMAS intervention was given, the combination of brain gymn was mostly (45%) 9 respondents with mild stress criteria, (55%) 11 respondents with mild stress criteria. In the control group after being given the intervention was mostly (80%) 16 respondents with mild stress criteria and a small proportion (20%) 4 respondents with mild stress criteria. *Mann Whitney* test results were obtained 0.024 so it was concluded that in two treatment and control group there were differences after the intervention.

Based on the frequency calculation of treatment group, it shows that there is a change in the level of stress with the results before the intervention conducted, it is almost entirely (90%) mild stress, after the intervention is most (55%) mild stress.

Based on the calculation of the frequency of the control group, it shows that there is a change in the level of stress with the results before the intervention is almost entirely (7-%) mild stress, after the intervention is almost entirely (80%) mild stress.



Table 5 Frequency Distribution of Treatment and Control Groups Before and After GERMAS Intervention Exercise Brain Gymn Combination in Adolescents Class XI Accounting SMK 17 Pare

Stress Level Characteristic	Treatment Group				Control Group			
	Before intervention		After intervention		Before intervention		After intervention	
	f	%	f	%	f	%	f	%
Soft Stress	2	10%	11	55%	6	30%	4	20 %
Mild Stress	18	90%	9	45%	14	70%	16	80 %
Hard Stress	0	0%	0	0%	0	0%	0	0%
Total	20	100%	20	100%	20	100%	20	100%
<i>Wilcoxon test</i>	<i>p value 0,003 ($\alpha=0,05$)</i>				<i>p value 0,317($\alpha=0,05$)</i>			

Based on table 5.5, the stress level after GERMAS exercise combination of brain gymn in the treatment group before and after the intervention was $p = 0.003$, and the control group before and after without intervention was $p = 0.317$ (there is no difference in the level of stress before intervention). The treatment group had the effect ($p = 0.003$) GERMAS exercise combination of brain gymn on the stress levels of adolescents in class XI Accounting students of SMK 17 Pare.

The results of this study, with data processing using *Wilcoxon test* in the intervention group, used to compare between pre-test and post-test. This analysis yields a p value of 0.003 ($\alpha = 0.05$) meaning that there is an effect of GERMAS Exercise Combination Brain Gymn on the stress level of adolescent accounting students in XI grade of SMK17 Pare. This research was conducted three weeks and with 2x meetings in a week with a total of 6x meetings. In the control group without intervention the p value was 0.317 ($> \alpha 0.05$) meaning that there is no difference in the stress level of adolescents in class XI in Accounting SMK 17 Pare.

The results of research on adolescent stress levels have changed after intervening GERMAS Exercise Combination Brain Gymn namely warming up movement aims to avoid injury before carrying out core activities, facilitate blood flow through active muscles, reduce the presence of muscle tension, core movements aim to increase delivery oxygen, reduce physical and emotional stress and relax the nape of necks and shoulders, increase flexibility, the movement of cooling down, and maintain the limb balance to be relaxed. This study proves there is a change or effect on the treatment group because respondents who are concerned with this study are very enthusiastic, focused and willing to work together to follow the procedures that have been done in doing GERMAS Exercise Combination Brain Gym given.

CONCLUSION AND RECOMMENDATION

Conclusion from the result above are :

1. Stress levels in the treatment and control groups before the intervention are almost entirely stressed.
2. Stress levels in the treatment group after the intervention experienced soft stress while those in the control group without intervention experienced mild stress
3. There is an effect of GERMAS Exercise Combination Brain Gymn on accounting adolescents of class XI SMK 17 Pare

Some of recommendation of these study are :

1. GERMAS Exercise Combination Brain Gymn becomes one of the choices in overcoming adolescent stress as an innovative and applicative effort.



2. Germas Exercise Combination Brain Gymn can be used as an additional alternative intervention strategy in conducting nursing care in adolescents with stress problems

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STUNTING OCCURENCE HANDLING EFFECTIVENESS IN REDUCING STUNTING PREVALENCE IN BOJONEGORO

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ABSTRACT

BACKGROUND : Indonesia is currently facing nutritional problems which seriously affect its human resource. One of the main issues is the high rate of short toddlers (stunting). According to Sustainable Development Goals (SDGs), all kinds of malnutrition, including stunting, must be overcome. This research aimed to reveal driving factors that affect stunting prevalence in Bojonegoro and programmes carried out to handle stunting in the region.

SUBJECT AND METHODE : This study uses phenomenology as its design and retrospective as its time approach. Meanwhile, the subjects observed are main informant and supporting informant related to stunting handling programme. The writers also functioned as the main instruments of the study by using triangulation, including in depth interviews and documentation, as the data collecting technique.

RESULTS: The study results show that stunting prevalence is affected by the decreasing rate of exclusive breastfeeding between 2016 and 2017. The Public Health Bureau of Bojonegoro has made some efforts to accelerate the prevalence reduction by prioritising nursery room provision in offices and stunting audit programme as included in PESTA GITA (Toddlers Nutritional Level Improvement) programme.

DISCUSSION: However, there are several obstacles in its implementation, and they are expected to be fixed soon by creating cross-sector collaboration. Furthermore, organised programmes are expected to be benchmarks and recommendations to be carried out consistently and continuously.

Key words: stunting, handling, nutritional intervention

INTRODUCTION

Nowadays, Indonesia is facing serious issues that affect its human source. One of the most common nutritional problems is stunting. Sustainable Development Goals (SDGs) aims to focus on stunting, wasting, and overweight in children younger than 5 years old (UNICEF, 2018). Stunting itself is caused by malnutrition and/or infections which often occur on children. This condition increases children mortality rate, intelligence, and motoric development, raises susceptibility to diseases, reduce productivity, detains economic growth, and inclines poverty rates and social inequality (Torlesse, Cronin, Sebayang, & Nandy, 2016).

This condition increases children mortality rate, intelligence, and motoric development, raises susceptibility to diseases, reduce productivity, detains economic growth, and inclines poverty rates and social inequality. Stunting decreasing number in Bojonegoro is used as benchmark of the success in stunting handling in the area.

According to National Basic Health Research between 2007 and 2013, there is a concerning fact about this issue in Indonesia: the rate of stunting increased from 36.8% to 37.2% (Andriani, WD, & Nurzalmariah, 2017). Furthermore, stunting prevalence in Indonesia in 2015 rise to 29%, which then



declined to 27.5% in 2016. Meanwhile, the level of stunting occurrences in Bojonegoro was at 7.46% in 2016 and slightly declined to 7.10% in 2017. Additionally, stunting prevalence in Balen Public Health Centre in 2016 was at 16.58%. This rate decreased to 14.38% in 2017 (Nutrition Section of Public Health Bureau of Bojonegoro, 2017).

Up to now, there are several regions in Indonesia which show increasing rates of stunting prevalence. This study aimed to explain effective stunting handling efforts in order to reduce stunting prevalence in Bojonegoro.

METHODS

This research applied qualitative approach with phenomenology as its design. It is a retrospective study whose research subject consists of the head of stunting handling programme in Public Health Bureau of Bojonegoro and the head of nutrition programme of Balen Public Health Centre, Bojonegoro. Meanwhile, the research instruments of this study are a combination of in depth interviews and study of documentation.

RESULTS AND DISCUSSION

Factors influencing stunting in Balen Public Health Centre as well as in Bojonegoro in general

Identification of factors which affect stunting occurrences was carried out by studying documentation and in depth interview of research subject—henceforth shall be referred to as participants. Participant 1 in this research is nutritionist of Balen Public Health Centre who holds the position as the head of stunting handling programme in the centre. Meanwhile, Participant 2 in this research is the head of stunting handling programme of Public Health Bureau of Bojonegoro. The results of the study indicate that factor which affects stunting prevalence in Balen Public Health Centre and Bojonegoro in general is the declining access to exclusive breastfeeding between 2016 and 2017.

Solutions to stunting applied by Balen Public Health Centre

Participant interviews in Balen Public Health Centre reveal that the centre has applied several solutions to overcome stunting, namely socialisation by the public health centre cadres during Public Health Service or nutritional counselling in Balen Public Health Centre.

There was a new innovation applied to handle stunting occurrences in Balen Public Health Centre in 2019. The health centre cadres took training on measuring baby height accurately using standardised measuring instrument called length board.

Balen Public Health Centre also carried out visit and tracking programmes with a team consisting of doctors, nutritionist, midwives, and head of environmental sanitation/health programme. These activities include physical examination, interviews, and observations related to stunting causes.



However, there are several problems in this programme. Length boards are not yet provided in every public health service thus body height measurement has not yet been able to be measured accurately. Furthermore, there is lack of supervision and monitoring by nutritionists in charge because there is only 1 (one) nutritionist in Balen Public Health Centre.

Solutions to stunting applied by Public Health Bureau of Bojonegoro

The percentage of stunting prevalence in Bojonegoro increased between 2016, 2017, and 2018, with 7.1%, 7.46%, and 8.7% respectively. Previously, it had decreased yet it went up through the three year period.

Based on participant interviews, there are several aspects which cause this increase in 2018, such as: 1) the implementations of nutritional post and supporting group for breastfeeding which have not been optimised in villages; 2) low levels of supplementary food provisions for pregnant women and for babies; 3) lack of hygiene of public sanitation; 4) lack of collaboration cross-sector in the society; and 5) lack of nutritionists in the public health centre.

In order to improve nutritional levels in Bojonegoro, the Public Health Bureau of the region implements a programme called 4 (four) Pillars of PESTA GITA (*Perbaikan Status Gizi Balita*), Toddlers Nutritional Level Improvement, namely: 1) Community Empowerment, 2) Nutrition Socialisation, 3) Nutritional Intervention, and 4) Cross-Sector Collaboration.

There was a growth in stunting prevalence level in 2018. Then, the bureau modified PESTA GITA programme by adding nursery room provision programme in offices and stunting programme audit on Nutritional Intervention.

Nursery room provision in offices programme have been socialised through a circular letter issued by Bojonegoro government No. 440/2196/412.202/2019, which instructed village officials, public service offices, municipally-owned enterprise (BUMD) offices, state-owned enterprises (BUMN) offices, and private-owned institutions/offices within Bojonegoro area to provide nursery room in their workplaces.

Stunting Audit Programme includes 7 (seven) evaluation items, namely: a) family identification data including parents and toddlers' identities; b) health and nutritional levels of mothers and toddlers; c) child care patterns (breastfeeding and supplementary foods); d) mothers' knowledge about nutrition; e) family and environmental hygiene; f) pregnancy and labour records; and g) mothers and toddlers' health. This programme is one of national prioritised activities in stunting reduction acceleration programme regulated by the Public Health Bureau of Bojonegoro in accordance to the circular letter issued by the head of the National Public Health Bureau No. 440/2680/412.202/2019 on Operational Instructions on Stunting Reduction Acceleration Programme implementation.

Exclusive breastfeeding is a specific intervention yet is extremely short. The research results show that between 20016 and 2017, the number of exclusive breastfeeding dropped. However, the rate of stunting prevalence within the same period also decreased. This indicates that exclusive breastfeeding is not directly related to stunting prevalence at the time. Nevertheless, it affected the prevalence in the next two years, thus, similar to what was stated in Health Profile of Bojonegoro, the prevalence rose in 2018.



Stunting may occur since the fetus phase, and it is going to be physically apparent when the child is two years old (WHO, 2010). Nevertheless, the possibility rate may decline if the mother provides exclusive breast milk for the baby.

Furthermore, Balen Public Health Centre has applied efforts to overcome the increasing level of stunting prevalence by carrying out socialisation, counselling, and public health service cadre empowerment in measuring toddlers' height using standardised equipment. The cadres, consisting of Human Development Cadres, help villages in facilitating integrated intervention in stunting reduction programme. One of their tasks is to improve public awareness of the issue by measuring babies and toddlers' height as early detection of stunting. The measurement was done using anthropometry provided by the Public Health Centre. Body length of toddlers younger than 2 (two) years old was done in sleeping position using length measuring board. Meanwhile, body height of those older than 2 (two) years old was measured in standing position using microtoise (Indonesian Ministry of National Development Planning, 2018)⁵.

There are several obstacles found in stunting handling programme, such as lack of standardised measuring tools in public health services within Balen Public Health Centre work area, hence measurement inaccuracy. Village budget allocation is required to facilitate public health cadres with the needed equipment to help them measure toddlers' body height/length as early detection of stunting.

Other efforts carried out by Balen Public Health Centre in the stunting handling programme are visit and tracking by a team doctors, nutritionist, midwives, and head of environmental sanitation/health programme. This activity is a part of stunting audit programme socialised and implemented by the Public Health Bureau of Bojonegoro. In other words, Balen Public Health Centre gives great supports for the stunting reduction acceleration programme regulated by the Public Health Bureau of Bojonegoro.

The National Public Health Bureau's main task and authority in health sector is holding a prominent role in accelerating stunting prevention in cities/districts; the task is especially related to specific nutritional interventions (National Team for the Acceleration of Poverty Reduction, 2018). Therefore, in the specific nutritional intervention programme included in PESTA GITA (Toddlers Nutritional Level Improvement), the Public Health Bureau of Bojonegoro adds and prioritises nursery room provision in offices as a support for exclusive breastfeeding programme which in turns gives impacts to stunting prevalence growth in Bojonegoro.

Additionally, Public Health Bureau of Bojonegoro has started socialising the stunting audit programme as an effort to reduce the level of stunting occurrences in all of the Public Health Centres in Bojonegoro. This is in accordance to their role in improving local nutrition surveillance system equipped with accurate, quick, and adequate case detection and reference systems (National Team for the Acceleration of Poverty Reduction, 2018)⁶.

CONCLUSION

Exclusive breastfeeding has no direct relation to stunting occurrences prevalence yet affects future stunting prevalence. Specific and sensitive intervention programme in Bojonegoro is carried out by



prioritising nursery room provision in offices and stunting audit programme as efforts to accelerate stunting prevalence reduction.

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EFFECT OF HEALTH COACHING BASED ON HEALTH BELIEF MODEL THEORY TO PHYSICAL ACTIVITY IN ELDERLY WITH HYPERTENSION

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ABSTRACT

BACKGROUND : Most people with hypertension assume that consumption drugs can control their blood pressure. In fact, lifestyle factor such as physical activity contribute to the burden of account for substantial morbidity, mortality, and rising in hypertension, highlyly the much for prevention afford to curb public health epidemic. Health coaching was one way for the nurse to improve motivation and patient's beliefs concerning their disease so that they would show good compliance behavior. Objective of this study was to analyze the effect of health coaching toward physical activity.

SUBJECT AND METHODE : This study used quasy experiment design with pre-post test control group design. Sample collection technique was by purposive sampling. The amount of sample was 26 person for each group. There were two variables, the dependent and independent variables, the dependent variable was physical activity and the independent variable was health coaching. The location in the work Pandanwangi Public Health Center and the time was April 4th – June 7th , 2019. Statistic analysis used Wilcoxon Signed Rank Test and Mann Whitney.

RESULTS : Health coaching has effect toward physical activities. Difference test in treatment group using Wilcoxon obtain p value 0,025, while differece test with Mann Whitney obtain p value 0,000.

DISCUSSION : There is physical activity differences between treatment and control group. furthermore, physical activity as a management of hypertension. It is expected hypertension patients should be always doing physical activity that has been recommended.

Keywords : health coaching, hypertension, physical activitiys, dietary, blood pressure

INTRODUCTION

Ignorance of hypertensive patients about the dangers and complications of hypertension makes patients with 1st grade hypertension rise to grade 2nd hypertension. Hypertension patients assume that taking medication alone is enough to control their blood pressure. In patients with first-degree hypertension who are able to regulate their behavior such as controlling diet and exercise, it is less likely to increase their degree of hypertension. When someone is diagnosed with hypertension, health workers will ask the patient to adjust his lifestyle. Starting from adjusting eating patterns, natrium intake, limiting coffee and alcohol consumption, increasing physical activity or sports, stopping smoking, managing stress or anger conditions, and following treatment programs. Counseling that has been given so far by health workers does not have a visible effect on changes in compliance behavior of hypertension sufferers because there is no feedback or opportunity for hypertensive sufferers to express what information they really need about their health. Changes in behavior using coercive strategies also cannot be applied to rural communities. Another strategy that can be carried out by force or regulation, but so far there has never been a law in the community both written and unwritten that focus on health issues. Therefore of information and assistance in changing compliance behavior was chosen as an intervention for the hypertension community.

In fact, not all patient with hypertension can adjust their lifestyle. Related to following the advice of health workers, hypertensive patients will conduct an assessment of their health conditions. The difference will appreciation of the disease suffered by hypertensive patients, related to the patient's assessment of the threat of a disease. Based on the Health Belief Model, the likelihood that someone will take precautionary



measures depends on the results of their beliefs or health assessments (Priyoto, 2014). Patients will take actions to prevent, reduce, or control the condition of health problems based on the seven components of the expected health belief model. Behavior compliance can be interpreted as an effort made by the patient in the form, following medical rules, following a diet or lifestyle changes in accordance with medical advice (Sarafino, 2011).

From the results of a preliminary study conducted in the Pandanwangi Public Health Center, the number of hypertension sufferers was 1060 visitors. In fact shows that 23.7% of the population aged 10 years and over smoke every day. Consumption of salt and salty foods in the community is still high, which is 15 grams per person per day, far from the recommended maximum limit of 6 grams per person per day, and as many as 24.5% of people over the age of 10 consume salty food every day. As many as 93.6% of the population consumed less fruits and vegetables (Ministry of Health, 2013). The result shows the proportion of physical activity of the population which is classified as less active in Indonesia by 26.1%. From all provinces in Indonesia there are 22 provinces whose physical activity of the population is classified as less active with a proportion above the national average, including in East Java Province by 33.9% (Ministry of Health, 2013). As well as data from NHANES 2007-2010, there were 47.5% of hypertension sufferers who did not control their blood pressure (American Heart Association, 2013). Hypertensive patients who have poor compliance behavior can increase the degree of hypertension and lead to complications including myocardial infarction, stroke, kidney failure, and death if not detected early and treated appropriately (James, et al., 2014).

The results of studies on the use of health coaching techniques in several previous studies varied including: providing positive experiences for participants, giving maximum results perceived by Priyoto (2014), namely perceived vulnerability (Perceived susceptibility), perceived danger / pain (Perceived severity)), perceived benefits (Perceived benefit), perceived obstacles (Perceived barrier), modification variables (Modifying variables), cues to action (Cues to action), and one's beliefs about the ability he has to do something (Self Efficacy). This HBM component is perfect for overcoming behavioral problems that have consequences for health problems (for example: consumption of unhealthy foods, lack of physical activity). HBM has been widely adapted and successfully applied in the design of health interventions (Orji, Mandryk, & Vassileva, 2012).

METHODS

This study used quasy experiment design with pre-post test control group design. Sample collection technique was by purposive sampling. The amount of sample was 26 person for each group. There were two variables, the dependent and independent variables, the dependent variable was physical activity and the independent variable was health coaching. The location in the area Pandanwangi health public care and the time was April 4th – June 7th , 2019. Statistic analysis used Wilcoxon Signed Rank Test and Mann Whitney.

RESULT AND DISCUSSION

Pandanwangi Public Health Center in Malang is the First Level Health Health BPJS in Malang with Non-Inpatient type, located at Jalan Laksamana Adi Sucipto No. 315, Pandanwangi, Blimbing, Malang City, East Java, with the working area of the Pandanwangi Public Health Center. Health service facilities available at the Pandanwangi Health Center include: Medical, Dental, MCH (Mother and Child Health) Centers, Pharmacies, Laboratories, and Emergency Room (Emergency Unit).

The management of hypertension patients at the Pandanwangi Public Health Center in Malang according to the public health center operational standards in December 2018 namely when new patients are found with blood pressure reaching 140/90 mmHg patients are given education and are encouraged to make lifestyle changes both in dietary settings, increased physical activity, weight loss, limiting even quitting smoking, and stress management for one month. Furthermore, patients are asked to come back to the



health center control, if blood pressure is obtained at a fixed or increased value then proceed to the treatment program. When blood pressure drops, lifestyle arrangements continue at home and are asked to return the following month.

The results of general data analysis that researchers got in this study based on gender, age, education, occupation, history of hypertension, and history of kidney disease are as follows:

Table 4.1 Results of general data analysis (Source: Primer Data, 2019)

Respondent characteristic	Intervention group		Control group		Total	
	f	%	f	%	n	%
Gender						
Male	8	30,8%	6	23,1%	14	26,9%
Female	18	69,2%	20	76,9%	38	73,1%
Age						
36-45	4	15,4%	0	0%	4	7,7%
46-55	22	84,6%	26	100%	48	92,3%
Education						
Elementary school	6	23%	12	46,1%	18	34,6%
Junior high school	10	38,5%	6	23,1%	16	30,8%
Senior high school	10	38,5%	6	23,1%	16	30,8%
Bachelor	0	0%	2	7,7%	2	3,8%
Occupation						
Housewife	12	46,2%	16	61,5%	28	53,8%
Private employee	12	46,2%	4	15,4%	16	30,8%
Civil servants	0	0%	4	15,4%	4	7,7%
Entrepreneur	2	7,6%	2	7,7%	4	7,7%
Hypertension history						
Yes	10	38,5%	10	38,5%	20	38,5%
None	16	61,5%	16	61,5%	32	61,5%
Kidney diseases history						
Yes	0	0%	0	0%	0	0%
None	26	100%	26	100%	52	100

Based on table 4.1, it can be seen that in the treatment group in this study the majority were female, with 18 respondents (69.2%) with almost 46-55 years of age (84.6%) and almost half of the education level, namely junior high and high school. with the same number each of 10 respondents (38.5%), almost half of the types of work are housewives and private employees with the same number each of 12 respondents (46.2%), and most have a history of hypertension (61.5%). Whereas in the control group almost all respondents were female as many as 20 respondents (76.9%), with a total age range of 46-55 years (100%), the level of education was almost half as elementary as 12 respondents (46.1%), type Most occupations as housewives were 16 respondents (61.5%), and most had a history of hypertension (61.5%).

Table 4.2 Physical Activity *pre test post test* intervention group and control group in area Pandanwangi Public Health Center

category		Intervention group		Control group		Mann Whitney
		Σ	%	Σ	%	
Pre Test	Mild	14	53.8	12	46.1	α=0.985
	Moderate	6	23.1	10	38.5	
	Heavy	6	23.1	4	15.4	
Post Test	Mild	0	0	12	46.1	α=0.000
	Moderate	8	30.8	10	38.5	



Heavy	18	69.2	4	15.4
	Z = -4.463		Z = -2.236	
	$\alpha=0.0000$		$\alpha=0.025$	

Based on table 4.2 above, it was found to regulate eating behavior in the treatment group of 16 respondents migrating in the moderate and severe categories and none of the respondents were in the poor category. Whereas in the control group physical activity carried out by the permanent group.

While in the control group there were no significant changes because the results obtained were the same. from the table above it can be stated that the value of $\alpha = 0.000$ means that H_0 is rejected or the hypothesis is accepted so that there is a difference between the treatment group and the control group on the physical activity of hypertensive patients given health coaching with the theory of health belief model approach.

Based on table 4.5, the test results obtained with Wilcoxon in the treatment group were found to be different between the pre-test and post-test physical activities after the health coaching action. The results of the post test in the treatment group did not get one respondent in the less category, this indicates an increase in the category, respondents migrated in the moderate and severe categories. During the research process the booklet filling process of physical activity has largely been filled in correctly according to the column, organized, neat, routine, and filled in consciously not feeling burdensome. Some respondents who are not good at writing, took the initiative to ask for help from the family to write down the physical activities they do every day. Respondents themselves also felt helped by filling out this booklet because it could automatically regulate what activities were carried out.

Changes in behavior in this study are physical activities including daily activities and heavier activities with about 30 minutes carried out every day based on DASH activity. In this study, most respondents regularly fill in the booklet for attaining behavior change because they feel helped, respondents can also manage their physical activity. Respondents who are more concerned about their disease are more likely to accept changes in physical activity that must be done to reduce the increase in the degree of hypertension and complications. In this study, most respondents regularly fill out booklets because they find it helpful, respondents can also see what activities have been carried out during the 3 week filling process. Health coaching conducted in this study by increasing the understanding and confidence of patients about the disease that the danger of hypertension that threatens is very dangerous and even lead to death if not followed up with changes in physical activity behavior. Increase respondents' confidence and enthusiasm that there is still time and be able to make changes. Activities undertaken include the selection of recommended physical activities and regular monitoring of physical activity by involving the family.

Based on table 4.4, the test with Wilcoxon in the control group showed no difference in physical activity in the control group before and after the health coaching intervention. The absence of this difference can be seen from the still number of each category at the time of the pre test and post test. This can occur because a person will behave in accordance with the knowledge he has, changes in physical activity also depend on the quality of stimuli or stimuli provided, meaning that the quality of the communication source also determines the success of physical activity changes (Notoatmodjo 2014)

There is no increase in changes in physical activity in the control group because there is no interaction between respondents in the treatment and control groups that can increase respondents' knowledge in the control group. The results of observations of changes in physical activity of the control group were still obtained by respondents with less behavior categories. This can occur because respondents did not get assistance in regulating physical activity.

The results showed the data that most of the sex of the respondents were women with postmenopausal age. As mentioned Udjianti (2011) that several factors supporting the occurrence of hypertension are the sex of women with postmenopausal age. In line with the study of Martiningsih (2011) who analyzed the factors associated with the occurrence of hypertension, it was found that more than half of the study respondents were women with age mostly above the age of menopause. Also reported by Thomas (2007) that the percentage of the incidence of hypertension increased in women over 49 years.



After the age of 45 years, the walls of the arteries will experience thickening due to the accumulation of collagen in the myovascular system, so that the blood vessels will gradually become stiff. Systolic blood pressure increases because the flexibility of large blood vessels decreases with age until the seventh decade while diastolic blood pressure rises until the fifth and sixth decades and then settles or tends to decrease. Along with increasing age, it will cause some physiological changes, such as increased peripheral resistance and catecholamine activity, decreased sensitivity to blood pressure regulation namely baroreceptor reflexes and the role of the kidneys has also been reduced where renal blood flow and glomerular filtration rate have decreased. This causes the kidneys to not be able to eliminate the salt load adequately resulting in salt and water resistance which will cause an increase in plasma volume (Sherwood 2011). In addition, if the kidney filtration rate decreases, apartus granular cells in the kidneys will release the hormone renin which will activate angiotensinogen in the plasma into angiotensin I which then passes through the pulmonary circulation and is converted by Angiotensin Converting Enzyme (ACE) to angiotensinogen II which is a strong vasoconstrictor. In addition, angiotensin II will stimulate the release of aldosterone from the adrenal cortex which will cause an increase in sodium retention resulting in an increase in plasma osmolality which is then offset by an increase in water absorption. This will cause an increase in cardiac output which will then increase arterial blood pressure (Guyton 2007).

The prevalence of hypertension in men is less than in women. But women are protected from cardiovascular disease before menopause. Women who have not experienced menopause are protected by the hormone estrogen which plays a role in increasing levels of High Density Lipoprotein (HDL). High levels of HDL cholesterol are a protective factor in preventing the process of atherosclerosis. The protective effect of estrogen is thought to be an explanation of a woman's immunity at premenopausal age. In premenopausal women begin to lose little by little the hormone estrogen which has been protecting blood vessels from damage. This process continues where the hormone estrogen changes in quantity according to a woman's natural age, which generally begins to occur in women aged 45-55 years. Women over the age of 50 who have experienced menopause have several physical, hormonal, and mental changes. Accompanied by several complaints such as fatigue, nervousness, headaches, insomnia, depression, irritability, joint and muscle pain, dizziness, and palpitations. Unstable emotions can also cause sleep disorders.

Some things that were encountered during the research that could be used as a cause were psychological problems from respondents who caused stress, such as the presence of one family member who was sick, affected by a disaster, sudden economic needs, problems with work and problems with children. This condition appeared at the last study, causing a rise in blood pressure from several respondents.

Stress increases peripheral vascular resistance, cardiac output and parasympathetic central nervous system activity. Stressors can be a variety of things, busyness, infection, trauma, obesity, old age, psychological disorders, drugs, illness, surgery and medical therapy that can cause stress. Stress occurs through the activity of sympathetic nerves (nerves that work when we move). Increased sympathetic nerve activity results in increased blood pressure intermittently. Affirmed by Muhammadun (2010) stress can stimulate the adrenal glands to release the hormone adrenaline and stimulate the heart to beat faster and stronger so that blood pressure will increase.

This can happen because most of the respondents' work is housewives who do the same routine every day, do the same work, and focus on the family and family problems that exist without any distraction of entertainment with a workload for 24 hours. When family problems come, it will become the focus of thought for respondents. This can be a stressor and cause stress for the respondent which can increase the respondent's blood pressure.

In the booklet filling process the achievement of changes in physical activity most of the respondents can consciously and independently fill in the booklet, but a small proportion of respondents are still less consistent in filling booklets, such as not routinely every day with the excuse of forgetting, waiting for researchers to write, other family members all work so no one wrote it down, and there were also some



respondents who felt burdened in filling out this booklet because respondents still worked every day from morning to evening.

Overall, the booklet filling process, the method of writing physical activity activities such as this diary provides great benefits for people with hypertension. People with hypertension are more responsible for organizing activities that are done daily. This method can be applied by people with hypertension to control their blood pressure. Documentation like this is also useful for health workers to find out what factors affect hypertension sufferers' blood pressure.

CONCLUSIONS AND RECOMMENDATIONS

Conclusion

There is an effect of providing health coaching with the health belief model approach to physical activity in the elderly who have hypertension with $\alpha = 0,000$.

Suggestion

People with hypertension are expected to have a blood pressure to control it. The results of this study can be used by nurses to modify nursing interventions by utilizing the diary method to improve the compliance behavior of patients with hypertension. Especially documentation of dietary settings because of the diversity of foods commonly consumed by people with hypertension. Nurses can increase the self efficacy of hypertension sufferers through public health center programs that involve hypertension sufferers such as the elderly public health center. By giving booklets as media promotion can be the one of choices to improve quality of health of hypertension patients. Public health center can be used as a basis for program development by forming a support group to care for hypertension sufferers and involving cadres in it. In further research, health coaching can be done in a more structured, routine, and scheduled manner in hypertensive patients so that results are more optimal.

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THE EFFECT OF BOOKLET EDUCATION ABOUT CHILDREN NUTRITION NEEDS TOWARD KNOWLEDGE OF MOTHER WITH STUNTING CHILDREN IN PUNDONG PRIMARY HEALTH CENTER WORK AREA BANTUL YOGYAKARTA

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ABSTRACT

BACKGROUND : Stunting defined as chronic malnutrition during infancy, that cause height-for-age z score (HAZ) < -2 SD. Children with stunting, has been related to poor cognitive function in late childhood motoric ability, productivity and increasing the risk of degenerative disease in the future. Nutritional problem in children associated with some related factor, one of the factor is lack of knowledge about children nutrition needs. One of the Indonesian governance preventive action on increasing the mother with stunted children knowledge about nutrition needs is a health promotion. This study was aimed to examine the effect of booklet education about children nutrition needs toward knowledge of mother with stunted children.

SUBJECT AND METHODE : Quasi-experimental with non equivalent control group with pretest and posttest was used, 90 mother with stunted children was recruited with simple random sampling. Wilcoxon and Mann Whitney analysis was performed.

RESULTS : Based on Wilcoxon test results obtained mother knowledge was significantly increased ($p < 0.05$) after the intervention, from 29 (64%) was categorized as fair knowledge, increased to 34 (75.6%) categorized as good knowledge after the intervention. Mann Whitney test results showed that mother knowledge improvement in intervention and control group was significantly different ($p < 0.05$).

DISCUSSION : there is an influence of booklet education on the knowledge of mothers of toddlers with stunting

Keywords: mother knowledge, stunting, booklet

INTRODUCTION

Stunting is a condition where a toddler has a length or height that is less when compared to age. This condition is measured by length or height that is more than -2 standard deviations from the median standard of child growth from WHO. Toddler stunting includes chronic nutritional problems caused by many factors such as socioeconomic conditions, maternal nutrition during pregnancy, morbidity in infants, and lack of nutrition in infants. Stunting toddlers in the future will experience difficulties in achieving optimal physical and cognitive development (Kemenkes RI, 2018).

The prevalence of stunting in several countries in Southeast Asia, such as Myanmar by 35%, Vietnam by 23%, and Thailand by 16%. The prevalence of stunting in Indonesia according to the 2013 Basic Health Research was 37.2 percent, an increase from 2010 which was 35.6% and in 2007 it was 36.8%.



Toddlers who experience nutritional problems increase the risk of decreased intellectual ability, inhibit motor skills, productivity, and increase the risk of degenerative diseases in the future. Nutrition problems in infants can be caused by several factors, including low family income, habits that are believed by mothers, and low nutritional knowledge in mothers or caregivers (Shi, et al., 2011, Susanty, 2011; Kulwa, et al., 2014).

In the study of Rajan, et al., 2015 on nutritional knowledge, showed that out of 130 mothers (65%) had average knowledge, 60 mothers (30%) had poor knowledge and only 10 mothers (5%) had good knowledge about nutrition. Low maternal knowledge about nutrition can lead to poor food intake, type and quality, so the incidence of acute malnutrition can increase significantly. (Ambadekar, et al., 2016).

According to Negash, et al., 2014 explained that nutrition knowledge is an individual's understanding of nutrition, including the ability to remember related to information related to nutrition.

One factor that influences knowledge about nutrition is exposure to information sources. Advances in technology provide a variety of media that can influence public knowledge about new information, such as television, radio, newspapers, magazines, counseling, and others. (Yuliana, 2017). One of the efforts made by the government in increasing the knowledge of mothers with stunting toddlers is by providing health education (Ministry of Health Republic of Indonesia, 2011).

Booklet is a media for delivering health messages in the form of books with a combination of writing and pictures. The strengths of the booklet media are information that is more complete, more detailed and clear and is educative. In addition, the booklet that is used as an educational medium can be brought home, so that it can be read over and over again and stored. This is the reason for the selection of booklets as educational media.

This study aims to determine the effect of nutrition education by using a media booklet on maternal knowledge about nutrition in stunting toddlers in the working area of Pundong Bantul Public Health Center in Yogyakarta. Based on some of the considerations above, researchers are interested in examining whether health education using a media booklet about meeting nutritional needs in toddlers with stunting can provide solutions related to problems faced by parents with stunting children.

METHODS

This study using a quasi- experimental, non-equivalent control group design with pretest and post test (Notoatmodjo, 2010, Sastroasmoro, 2011). The sample in this study was mothers of stunting toddlers with a total of 90 respondents, which were divided into two groups, intervention and control groups. The intervention group get education using the lecture method and booklet media, while the control group get education using the lecture method without being given a booklet. The sampling technique uses simple random sampling. Analysis of research data using the Wilcoxon statistical test with a significance level of 95%, to determine the difference in knowledge between pretest and posttest. The instrument in this study used a mothers knowledge



questionnaire about toddler nutrition. Mann Whitney statistical test to see differences in the posttest value of respondents' knowledge in the intervention and control groups.

RESULT AND DISCUSSION

The results of this study present the characteristics of respondents, knowledge before and after the intervention and control groups, as well as differences in posttest knowledge in the intervention and control groups. Data on the characteristics of respondents can be seen in table 1 below:

Table 1. Characteristics of Respondents in the Pundong Public Health Center Work Area Bantul Yogyakarta

Characteristic	Intervention Group (n=45)		Control Group (n=45)	
	n	%	n	%
Mother's age (years old)				
20 - 24	6	13,3	3	6,7
25 - 29	15	33,3	14	31,1
30 - 34	11	24,4	11	24,4
35 - 39	4	8,9	7	15,6
40 - 44	9	20,0	10	22,2
Mothers Educational Level				
Uneducated	3	6,7	0	0
Elementary School	10	22,2	13	28,9
Junior High School	8	17,8	11	24,4
Senior High School	20	44,4	20	44,4
Bachelor Degree	4	8,9	1	2,2
Number of Family Member				
>4	34	75,6	30	66,7
< 4	11	24,4	15	33,4
Occupation				
Farmer	2	4,4	5	11,1
Laborer	6	13,3	8	17,8
Trader	3	6,7	7	15,6
Private Employee	3	6,7	4	8,9
House Wife	31	68,9	21	46,7
Family Income :				
≥ City Minimum Wage (CMW)	11	24,4	16	35,6
< City Minimum Wage (CMW)	34	75,6	29	64,4
Culture in Providing the nutritional needs of toddlers				
Exist	4	8,9	9	20,0
Doesn't Exist	41	91,1	36	80,0
Total	45	100	45	100

Based on table 1, it can be seen that the characteristics of the respondents in the intervention group and the control group are not much different, this can be seen from the characteristics of the age of the respondents most in each group, in the age range of 25-29 years of respondents, the most respondents education level at the high school level as much 20 (44.4%), the most number of families is more than 4 people, most mothers work as housewives, the income



is less than the city minimum wage, and most respondents have no certain culture in providing the nutritional needs of toddler in the control and intervention groups.

Table 2. Mother's Knowledge Before and After Educational Booklets Are Given To Intervention Groups

		n	%	Mean Rank	Z	p-value
Intervention Group	Negative	3	6.7	4.17	-5.496	0.000
	Positive	39	86.6	22.83		
	Ties	3	6.7			
	Total	45	100			

Based on table 2, the results obtained by respondents who have a posttest value greater than the pretest value of 39 respondents (86.6%), 3 respondents (6.7%) increase impairment and contain 3 respondents (6.7%) who do not have a change in value. Can increase the value that occurs with a posttest value higher than the pretest value. Also obtained $p\text{-value} < \alpha$ (0.05), the conclusion can be drawn so that H_0 is rejected, it can be interpreted as difference in the pretest feedback score with the posttest intervention group.

Table 3. Mother's Toddler's Knowledge Before and After Providing Educational Lectures (Without Booklets) to the Control Group

		n	%	Mean Rank	Z	p-value
Control Group	Negative	21	46.7	21.71	-1.586	0.113
	Positive	16	35.6	15.44		
	Ties	8	17.7			
	Total	45	100			

Based on table 3, the results show that respondents who have a posttest value greater than the pretest value of 16 respondents (35.6%), 21 respondents (46.7%) experienced a decrease in value and there were 8 respondents (17.7%) who have no change in value. It can be concluded that the majority of respondents did not experience an increase in knowledge. Also obtained $p\text{-value} > \alpha$ (0.05), it can be concluded that H_0 is accepted, or it can be interpreted that there is no difference in the assessment of knowledge both pretest and posttest in the control group. The results of the pretest and posttest knowledge of mothers in the intervention group who were given booklet education showed a statistically significant increase with a p value of 0.001 ($p < 0.05$). This means that booklet education as a medium in providing education has proven to be effective in increasing mothers' knowledge about the nutritional needs of children under five. Pretest and posttest were conducted to see the difference between the knowledge of mothers who received education with the media booklet and education with the lecture method.

The results showed there were more significant differences in knowledge in the intervention group compared to the control group. This is in line with the results of the study of Setyawati & Herlambang, 2015 that there were differences in knowledge in the treatment and control groups and there was a statistically significant increase in the treatment group ($p = 0.0001$). The same thing was stated by the research of Wulansari, et al, 2019 where there were significant differences between knowledge before and after health education was given with a media booklet with a $p\text{-value}$ of 0,000 < 0.05 . Most respondents have higher posttest scores than pretest scores.



Changes in increased knowledge were higher in the intervention group who were given education by the media booklet compared to the control group that was given education by the lecture method. This can be caused by the distribution of the booklet as an ingredient in discussing matters that would be a problem for mothers of toddlers in meeting the nutritional needs of toddlers. With increasing knowledge about the nutritional needs of toddlers will be more likely to recognize stunting prevention in toddlers. This is in line with the statement made by Wahyudi, et al. (2015) that if the community's knowledge about nutrition is lacking, then the public does not pay attention to good food intake so that the nutritional status of children under five becomes even worse. Conversely, if the public knowledge is good, the community will be better able to manage and prepare nutritious food menus to meet the nutritional status of their children.

Table 4. Mean Difference Analysis Posttest Value of Mother's Toddler Knowledge In the Intervention and Control Groups

Posttest Knowledge	Mean Rank	Z	p-value
Intervention Group	57,92	-4,530	0,000
Control Group	33,08		

Table 4 shows the mean rank of knowledge of the intervention group respondents was 57.92 while the mean rank of knowledge of the control group respondents was 33.08. There is a difference of 24.84 points, statistically obtained p value = 0,000 which means p- value $< \alpha = 0.05$, it can be concluded that H_0 is rejected or it can be interpreted that there is a significant difference in knowledge between the two groups at the posttest, where the group the intervention had higher knowledge than the control group.

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Pretest and posttest were conducted to see the difference in knowledge of mothers who received education by the booklet method. The results showed there were significant differences in knowledge before and after the booklet education was given. This is in line with research conducted by Pratiwi and Puspitasari, 2017 which revealed that there is an influence of booklet education on the knowledge of toddlers, this is evidenced by the significant difference in the value of knowledge ($p = 0.001$), before and after booklet education. Increased maternal knowledge is an influence of booklet education and is not influenced by other factors such as respondent characteristics.

This is supported by data that the characteristics of respondents (age, level of education, occupation, number of family members, family income, and cultural factors) in this study did not differ significantly in the intervention group or the control group. This is in line with the statement of Setyawati & Herlambang, 2015 where if the characteristics of the respondents of the two groups did not differ significantly, then this could meet the matching requirements for an experimental study. In this study, the majority of mothers of children under five have a high school education level. The results of the intervention group and the control group pretest were not much different, where most of the respondents' knowledge was in the sufficient category. According to Arbella's (2013) research a person's level of education can determine the person's way of thinking. This is because respondents with higher education tend to have broader insights than respondents with low education.

CONCLUSION AND RECOMMENDATION

Before the intervention was given as many as 9 respondents (20%) less category, 29 respondents (64.5%) had enough knowledge in the category, 7 respondents (15.5%) good category. After intervention, 34 respondents (75.6%) had knowledge in the good category, 8 respondents (17.7) in the sufficient category, and 3 respondents (6.7) in the poor category. Thus it can be concluded that there is an influence of booklet education on the knowledge of mothers of toddlers with stunting.

Education and health promotion about the nutritional needs of toddler can be done more routinely in the working area of Pundong Health Center as a first step in reducing the number of stunted children. The need for other research to develop educational interventions using media other than booklets and the development of research variables other than knowledge, such as the attitudes and behaviors of mothers about the nutritional needs of children under five.

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PATH ANALYSIS OF FACTORS AFFECTING BULLYING BEHAVIOR IN SCHOOL AGE CHILDREN IN SMPN 1 RAMBIPUJI JEMBER

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ABSTRACT

BACKGROUND : Bullying that is often found in school-age children can have an impact both physically and psychologically on the lives of children in school and the stages of child development. The impact of bullying for children can last a lifetime, both for victims and bullying perpetrators themselves. Many factors contribute to the emergence of bullying behavior in the school environment. However, these factors were never identified by the school to determine the appropriate intervention in overcoming the problem of bullying in children at school. Nurses can act as early case finding through activities to identify factors that can influence the emergence of bullying in schools to be able to determine the handling and prevention of bullying behavior in schools. The purpose of this study was to analyze the factors that influence bullying behavior in school-age children.

SUBJECT AND METHODE : The design of this study used the explanatory research design of the cross-sectional survey with a sample of 74 respondents.

RESULTS : The results showed that (1) biopsychological factors had a significant effect on bullying behavior; (2) cognitive factors had a significant influence on bullying behavior; (3) social factors had a significant effect on bullying behavior.

DISCUSSION : Pathway analysis of factors affecting bullying by considering biopsychological, cognitive and social factors is adequate for nurses to predict in identifying the causes of bullying behavior in school-age children.

Keywords: bullying, children, school-age

INTRODUCTION

The last few years bullying has become a serious threat to the development of children and causes of violence on children. Bullying is any proactive aggressive behavior that is characterized by an imbalance of power between the offender and the victim which usually involves repetition (Erhabor, 2013; Odar Stough *et al.*, 2016; Zakiyah, Humaedi and Santoso, 2017). Bullying that occurs in schools has three integrated characteristics, including (1) actions that are intentionally carried out by the perpetrators to hurt victims, (2) actions taken unbalanced so as to create a sense of pressure on the victim, and (3) action taken repeatedly (Sufriani and Sari, 2017). The phenomenon of bullying is a world problem that can have a negative impact on a lifetime for perpetrators of bullying, victims of bullying and people around it (Polanin, Espelage and Pigott, 2012).

The impact of bullying in childhood can last for a lifetime, both for the victims and perpetrators of it. However the perpetrators of bullying are found to be healthier compared to victims of bullying (Sufriani and Sari, 2017). The case of bullying in Indonesia can occur at all levels of schools including elementary school, secondary schools to tertiary institutions. The Indonesian Child Protection (KPAI) in 2014 noted that of the total complaints of bullying, which occurred in the education sector as many as 1,480 cases. KPAI found that children experienced bullying in the school environment by 87.6% with details : 29.9% bullying was done by teachers, 42.1% was carried out by classmates, and 28.0%



was carried out by other classmate (Putri, 2015). This shows that the prevalence of bullying behavior is still high in the school environment.

Priyatna (2010) suggest there is no single cause of bullying. Many factors contribute to bullying behavior in the school environment. Individual factors, cognitive, social, environmental risk, protection also determine the etiology of bullying behavior, where this can affect the growth and development of children according to age stages (Sufriani and Sari, 2017).

Nursing as an integral part of health services plays an important role in providing nursing services, including in schools through the management of School Health Efforts (UKS) in order to ensure the students can grow and develop according to the age stages. In line with the purpose of UKS, nurses can act as an early case finding through identifying the causes of bullying in schools to be able to determine the handling and efforts to prevent bullying behavior by conducting research on the path analysis of factors affecting bullying behavior in school age children.

METHODE

The design of this study used an explanatory research design survey cross sectional approach. The study was conducted at SMP1 Rambipuji Jember. The time of study was carried out in April 2019. The focus of this study was conducted at the SMP 1 Rambipuji in the age range of 12 – 15 years old. This phase is classified as early adolescents, where students are undergoing a transition period when children are no longer suitable to be treated as small children, but their physical and mental growth is not yet feasible to be considered an adult. In this phase adolescents experience a period of storm and stress, where unstable emotional upheaval is accompanied by rapid physical growth and psychological development that is very susceptible to environmental influences. The sample size after calculation using Slovin formula is at least 74 respondents. In the process, this research through ethical clearance firstly refer to the National Health Research and Development Ethics Commission (KEPPN, 2017) namely respect for persons, beneficence and maleficence and justice. The instrument used in this study is a questionnaire. Data were analyzed using Partial Least Square (PLS)..

RESULT AND DISCUSSION

A. Result of Descriptive Study

Table 1. Distribution Frequency Respondents Characteristics

Variable	Frequency	Percentage (%)
a. Gender		
1) Male	33	44,6
2) Female	41	55,4
Total	74	100,0
b. Age (years old)		
1) 12	11	14,9
2) 13	57	77,0
3) 14	6	8,1



Variable	Frequency	Percentage (%)
Total	74	100,0
c. Personality		
1) Introvert	28	37,8
2) Ekstrovert	46	62,2
Total	74	100,0
d. Knowledge		
1) Bad	32	43,2
2) good	42	56,8
Total	74	100,0
e. Peer support		
1) Bad	26	35,1
2) Good	48	64,9
Total	74	100,0

According to the data in table 1 we see that 55,4% respondents are female; 77% are 13 years old; 62,2 % are extrovert; 56.8% respondents has good knowledge; 64.9% respondents has good peer support.

Table 2. Distribution Frequency of Bullying Behavior in SMPN 1 Rambipuji

Variabel	Frequency	Persentase (%)
Bullying behavior		
1) Low	28	37,8
2) Medium	25	33,8
3) High	21	28,4
Total	74	100,0

According to the data on table 2 show that 37.8% respondents show low bullying behavior.

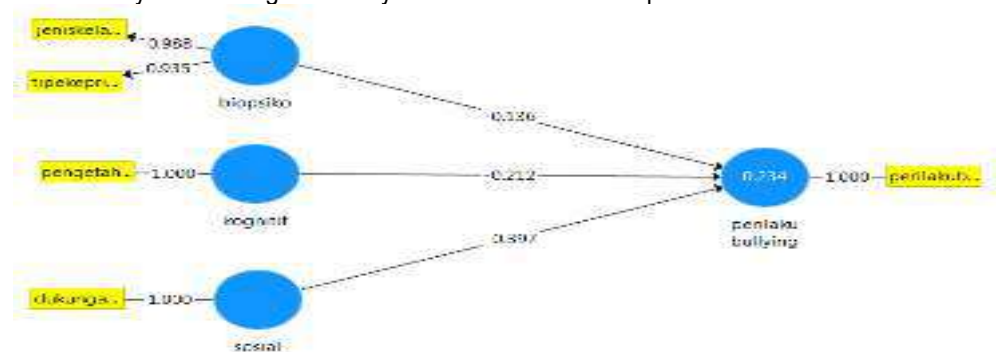
B. Result Study of Interferensial Analysis

1. Hypothesis testing

a. Measurement testing (outer) model

1) Convergent validity

On this study the convergent validity value are shown in the picture below



Picture 1. Path analysis and end outer loading value

Outer loading value for all indicators both from indicator for laten variables such as biopsico, kognitif and social factors that can be seen in this table below :



Table 3. convergent validiy result

No.	Variable	Indicator	Outer Loading	Information
1.	Bipsyco factor	X1.1 gender	0.988	Valid
		X1.2 personality	0,935	Valid
2.	Cognitive factor	X2.1 knowledge	1,000	Valid
3.	Social factor	X4.1 peer support	1,000	Valid

According to the data in table 3 we see that all indicators on the structure has met the validity test

2) Reliability test

Table 4. Result (AVE) composite reliability, cronbachs alpa show > 0.7 so that it can be conclude that all laten variables (biopsycho, kognitif and social factors) has met the reliability test. The next test is convegent validiity is average variance extracted value (AVE). The AVE value above 0.5 is recommended. According to table 4, the AVE value for all laten variables are above 0.5.

b. Structural model testing (inner)

Table 5. Hipotesis Testing Result

No.	variable	Sample origin (0)	T statistic	Innformation
1.	The affect of biopsyco factor to bullying behavior	-0,136	0,927	No effect
2.	The affect of kognitif factor to bullying behavior	-0,212	1,644	No effect
3.	The affect of social factor to bullying behavior	-0,397	3,688	Affecting

According to the data in table 5, ot show that biopsyco (T statistic 2.351 > 2.0) mean that social factors has singnificant effect to bullying behavior. But according to table 5, the association of biopsyco and kognitif factors to bullying behavior are explained as follow:

Table 6. cross tabulation of social and kognitif factirs to bullying behavior

Biophysical	Cathegory	Bullying behavior						Total		P Value
		High		Moderate		Low		N	%	
		F	%	F	%	F	%			
Gender	Male	9	27,3	4	12,1	20	60,6	33	44,6	0,000
	Female	12	29,3	21	51,2	8	19,5	41	55,4	
Personality	Introvert	9	32,1	4	14,3	15	53,6	28	37,8	0,016
	Ekstrovert	12	26,1	21	45,7	13	28,3	46	62,2	
Cognitive	Cathegory	Bullying behavior						total		P Value
		High		Moderate		Low		N	%	
		F	%	F	%	F	%			
Knowledge	Good	11	26,2	8	19,0	23	54,8	42	56,8	0,001
	Bad	10	31,3	17	53,1	5	15,6	32	53,2	



The result of data analysis using chi square test association tabulation biophysical factors (gender and personality) to bullying behavior on the table 6 we could see that p value is 0.000 and 0.0016 with significance value 0.05 and association tabulation cognitive factors (knowledge level) to the bullying factors can be seen that p value 0.001 with significance value 0.05. P value is smaller than significance level, so the H₀ is rejected. It mean there are significant relationship between biophysical and cognitive factors to bullying behavior in school age children at SMPN 1 Rambipuji. So we can conclude that biophysical and cognitive factors has significant effect to bullying behavior of school age children.

C. Biophysical factors to bullying behavior

Biophysical factor analysis (gender and personality) is has no significant effect to bullying behavior at school age children. But according to analysis using chi square test the association of biophysical factors (gender and personality) to bullying behavior shows significant relationship with negative influence direction (original sample -0,136) wich is female respondent with extrovert personality tend to be low in bullying behavior.

This results is supported by the study of Erhabor (2013) which show that boys commit more aggression and intimidation than girls. Male violent behavior tends to be open and does not hesitate to use physical violence. On the contrary, that women tend not to do violence directly and more often to use violence that is closed and difficult to observe (Reed and Submitted, 2007). However, bullying can be found in both boys and girls, but its intensity is influenced by the received socialization porcess. This shows that male gender contributes a lot to bullying behavior.

Personality of bullying behaviors been reported as one of factors that could predict problems of bullying behavior in school age children (Erhabor, 2013). Bullying behavior are affected by individual personality types and tend to happen at teenage boys with extrovert personality (Utomo, 2013). But this study results is showing that the extrovert personality is tend to be low in practicing the bullying behavior. And it is affected by other facors in personality type according to Eysenck (1970: Erhabor. 2013); extrovert and introvert factors are be equipped by others factor such as psycotochism (Eysenck, 1970). The natureof this psychotic factors can be conveyed briefly whisch is characterized (ie, has a high burden): (1) solitary, not caring for others, (2) partial difficulties; (3) cruel; inhumane, (4) Lack of feelings; not sensitive, (5) sensation seeking "arousal jag", (6) hostile to others; (9) fooling others. According to Eysenck there is close relationship between psychosis (especially schizophrenia) and crime or that psychosis has certain important characteristics with crime. In addition, this also influenced by others factors suc as parenting style, where according to the results of research by Sewanna Conner Buchanan (2013) , an active child who is not supervised byparents and shy children, timid with hard discipline shows a high level of aggression. Thus, extrovert personality types which can be influenced by other factors namely psychoticism and parenting patterns.

D. Cognitive behavior to bullying behavior

Cognitive factors analysis is not significantly affected the bullying behavior in school age children. Cognitive factors (knowledge) is affected bullying behavior in school age children. But according to chi aquare test the association if cognitive factor (knowledge) to bullying behavior shows significant correlation with negative influence direction (original sample -0.212) mean that the lower the knowledge the lower bullying behavior. So the cognitive behavior is



significantly affected the bullying behavior. This results is supported by the study conducted by Nurfadli(2012) which shows almost half of (48.3%) which is 42 respondents has good knowledge about bullying has low bullying behavior where the better knowledge of the teenagers it will minimize or get rid of bullying behavior.

E. Social factors to bullying behavior

Analysis social factors is significantly effected bullying behavior at school age children. Social factors (peer group support) is affected bullying behavior in school age children with negative influence direction (original sample -0.397). mean that the better peer group support the bullying behavior tend to minimize. It shows that the role of their peer to do negative thing is almost not exist (Annisa'i Rohimah, 2016). Peer group, teacher, and school environment and uphold religious values are very important in shaping the character of the students. This is contrary to the research from Nathania and Godwin (2012) that the existence of peers has a negative influence by spreading the idea (both actively and passively) that bullying is not a big problem and is a natural thing to do.

CONCLUSION AND RECOMMENDATION

According to the result of study, it can be conclude that :

1. Female tend to be low in bullying behavior
2. Extrovert personality is tend to be low in doing bullying behavior if compared with introvert behavior which affected by others factor such as psychotisme and parenting type
3. The higher knowledge the bullying behavior tend to be low
4. The better support from peer support the bullying behavior tend to be low

The next study are expected to do further study that can be developed on bullying victims such as the impact of bullying on children's growth and development

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NUTRITIONAL STATUS AND QUALITY OF LIFE OF PEOPLE WITH DIABETES MELLITUS TYPE 2

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ABSTRACT

BACKGROUND: Diabetes mellitus is a kind of metabolic disease characterized by increasing of blood glucose related to insulin resistance. Controlling the risk factor has proven to be effective in controlling the pathophysiology of the disease. In the other hand, diabetes mellitus has an effect in quality of life. The purpose of this research are to find out the correlational relationship between the nutritional status and quality of life of people with diabetes mellitus.

SUBJECT AND METHODE : Its'a acorrelational research conducted by cross sectional approach. The population are people with diabetes who came to Holistic Care clinic at December – Februari 2019 counted 100 people. There are 30 respondents taken by simple randim sampling. The data taken using a questionnaire Revised Diabetes Quality of Life (Revised DqoL). Then the data analysed by using by statistical analysis using Spearman correlational test.

RESULT : It show that the mean of respondent's body mass index as nutritional status were 32,606 which mean that the respondents has ideal body weight. Then the mean of DQoL show 3,66 means that respondent has good quality of life. Statistical analysis show p value 0,587 means that there are no significant correlational between nutritional status and quality of life people with diabetes mellitus.

DISCUSSION : Psychological and social aspect has bigger part in forming quality of life in people with diabetes.

Key words : nutritional status, quality of life, diabetes mellitus

INTRODUCTION

Diabetes mellitus (DM) is one common metabolic disease in Indonesia. It is divided into two type. DM type 1 or IDDM is metabolic disfunction that occurs due to damage of pancreatic beta cells so that the body does not secrete insulin at all and the client absolutely needs insulin. Whereas type 2 diabetes mellitus or NIDDM occurs due to pancreatic incompetence in secreting insulin which is needed in glucose metabolism so that it is characterized by an increase in abnormal glucose levels in the blood.

The incidence of diabetes mellitus continues to increase every year. The last estimate of the International Diabetic Federation (IDF) in 2013 was 382 million diabetic worldwide. Of the 382 million people 175 million of them have not been diagnosed so that they are threatened to progresively develop into unconscious and uncomplicated complications. The result of a household health survey (SKRT) in 2001 found the prevalence of people with diabetes mellitus in the population age 25-64 years old in Java and bali by 7.5%. The results of the Riskesdas 2013 mention the proportion of people with diabetes mellitus of 6.9% (Infodatin DM, 2014).



The development of diabetes mellitus in Indonesia has increased every year. Azila (2016) said based on IDF data in 2011 Indonesia ranked tenth in the world. Data released by BPS in 2003 totaled 133 million people. The prevalence of diabetic patients will continue to increase and it is predicted that by 2030 it will reach 21.3 million. East Java Province is one of the provinces with type 2 diabetes mellitus prevalence above the national prevalence, reaching 1.3% with a fairly high number of patients. In 2012 in Jember District there were 8,619 people with diabetes mellitus.

In the course of the diabetes mellitus is also known as silent killer due to the complications it causes. Complications of diabetes mellitus can cause visual disturbances, heart disease, renal failure, impotence, difficult to heal wounds, lung infection, stroke, and so forth. Even diabetes mellitus can cause amputation in limbs.

Various studies have proven that diabetes mellitus has various risk factors such as obesity/body mass index, hypertension, cholesterol, physical activity. Control of risk factors have been shown to influence the process of controlling the course of diabetes mellitus. In the other hand, diabetes mellitus which is a chronic disease will affect the quality of life. Quality of life is an individual's perception of his position in life in the context of culture and value systems and their religion to existing goals, expectations and standards.

The results of previous studies conducted by Azzila (2016) about quality of life of people with diabetes mellitus stated that 52.6% people with diabetes have good quality of life. Another study conducted by Meidikayanti and Wahyuni (2017) showed significant correlation between family support and quality of life of people with diabetes mellitus. Alcubierre et al (2016) also conducted a study and stated that obedience in Mediterranean diet does not have significant effect on general quality of life of people with diabetes but has some significant correlation to some dimension of people with diabetes mellitus.

The treatment of diabetes mellitus consists of 4 main pillars which are education, medical nutritional therapy, exercise and medication. Those 4 pillars are conducted to control the diabetes mellitus risk factors to prevent the complications. In other words, obedience to medical treatment programme will control diabetic risk factors to improve health perception of people with diabetes mellitus that will lead them to form a good quality of life. That is why we are interested in conducting the study about the correlation between nutritional status and quality of life of people with diabetes mellitus.

METHOD

This is a correlational study conducted by cross sectional approach. The population are people with diabetes who came to Holistic Care clinic at December – February 2019 counted 100 people. There are 30 respondents taken by simple random sampling. The data taken using a questionnaire Revised Diabetes Quality of Life (Revised DqoL). Then the data analysed by using statistical analysis using Spearman correlational test.

RESULT AND DISCUSSION



The data collection were held at May 2019 involving 30 respondents which is the client of Holistic care Clinic Bondowoso. The characteristic of respondents was shown as follow :

Table 1. General Characteristics of Respondents (Primary Data, 2019)

Characteristics	Frequency	Percentage
Age (years old)		
31 – 40	3	10
40 – 50	10	33
50 – 60	15	50
60 – 70	2	7
Gender		
Male	4	13
Female	26	87
Level of education		
Elementary school	3	10
Junior high school	8	27
Senior high school	17	66
College	2	7
Occupation		
Government employee	2	7
Entrepreneur	20	67
Labor	3	10
Housewife	5	16
Marital status		
Married	30	100
Health Insurance		
Yes	10	33
No	20	67
Comorbid		
Yes	10	33
No	20	67
Complication		
Yes	20	67
No	10	33
Length of illness		
Less than a year	5	16
More than a year	25	84
Fasting blood glucose		
< 120 mg/dl	8	27
>120 mg/dl	22	73

According to the data on table 1 we see that majority of respondents are 50 – 60 years old, female, graduate from high school, working as entrepreneur, has no health insurance, no comorbid, has complication which is diabetic foot, got diabetes mellitus for more than a year and has fasting blood glucose level higher than 120 mg/dl. All of respondents were married.



Table 2. Average of Body Mass Index (BMI) and Quality of Life (QoL) of Respondents (Primary Data, 2019)

Parameter	Mean
Body Mass Index	23,609 ± 4,4177
Quality of Life	3,66 ± 0,515
Satisfaction about diabetes mellitus	3,88 ± 0,498
Social perspective due to diabetes mellitus	3,25 ± 0,926
Diabetes mellitus perspective	3,85 ± 0,671
Impact of diabetes mellitus	3,56 ± 0,794
P value 0,587	

According to the data in table 2 we see that the average of BMI is 23.609 means that the BMI of respondents is considered to be normal. Diabetes mellitus is one of the disease that affected by obesity, especially central obesity. It causes by insulin resistance due to excess fat accumulation in the body that will lead to the increase of blood glucose. These result study show the mean of BMI of respondents is 23.609 which mean the BMI is normal.

Majority of the respondents are 5 – 60 years old. This age are at risk to have obesity compared with the age group under 40. But these study is shown different result, it can be happen due to majority of respondents has diabetes mellitus for more than a year. History of having diabetes mellitus for a long time will make a possibility to increase the catabolism of glucose and fat as source of energy to occur.

The other factors that affect the BMI is physical activity. Majority of respondents is working. Their occupation a little bit affected their physical activity. Most of respondents are working as an entrepreneur. These kind of job will make them possible to mobilization so that they will actively move. These study is in line with the study of Fitriyani (2012) which stated that occupation and physical activity are affected the BMI.

Beside that respondents are the client of Holistic Crae Clinic Bondowoso. They often received health education about diabetes mellitus or health in general. Supported by the level of education of respondents. Majority of respondents are graduated from high school so it will make them easy in receiving the new information.

Quality of life of respondents in general has the average score 3.66 bigger than median value 2.5 so that it can be conclude that the respondents has good quality of life. Quality of life is an individual's perception of his position in life in the context of culture and value systems and their relation to existing goals, expectation and standards. Quality of life is also multidimensional concepts involving physical. Social and psychological aspects that connected with illness and therapy.

Satria in Dzuztura (2012) stated that diabetes mellitus is a chronic disease need long term therapy. Diabetes mellitus complication is an impact of physical problem that faced by people with diabetes mellitus. Another problem due to diabetes mellitus that could have big impact to quality of life of people with diabetes is psychological burden from the people with diabetes mellitus itself and also their family that can be seen through their negative emotional behavior like rejection and



depression. Beside that the decreasing of productivity and social interaction due to complication of diabetes mellitus.

The results show the average score of quality of life show that respondents has good quality of life. Some factors contribute to quality of life is age. Majority of respondents are 50 – 60 years old, in this phase, individuals has pass the young age, so that in this periode the individuals has pass the phase and evaluate live they are live in positively compared with the younger one. This in line with the study results of Wahyuni (2014) which is said that quality of life according to the characteristics of people with type 2 diabetes mellitus stated that older individuals has better quality of life.

Beside that the respondents's occupation as an entrepreneur making them possible more intens in doing mobilization, met others and make an achievement. When individuals has a job then it will make him could afford the treatment he need to maintain his health status. Then it will bring positive effect to the perception of quality of life than the job less respondents. Marital status is also could increase the quality of life of people with diabetes since marriage could predetermine family support during the treatment.

Level education of respondents is also contribute to the perception of quality of life. Most of respondents are graduated from high school. High education could stimulate individuals to find more information about the disease they have got. The observation show that the openness attitudes of health providers also encourage the client to not to be embarrassed to ask about their disease or the treatment.

Wahyuni (2014) stated that length of having diabetes mellitus is also affect the quality of life due to the anxiety. Periode of having disease and duration of treatment are affected to functional capacity, psychological capacity health status and prosperity level of respondents. Physiological changes due to long term hyperglycemia will lead to microvascular and macrovascular complication. Majority of respondents are having diabetic foot but it is not decreased their quality of life. It is because of advance wound care technique applied by health providers to improve their condition. The wound heals quickly coupled by the acceptance of their condition could improve the quality of life.

Statistical analysis using Spearman correlation technique show p value of 0.587 greater than α 0.05 means that there is no significant correlation between nutritional status and quality of life of people with diabetes mellitus. Nutritional status is parameters in fulfill nutritional needs indicated by the weight and height the individuals. Nutritional status is also define as health status which is make up from the balance between the need and input of the nutrients, measuring nutritional status will describe to us about a risk condition of all disease, which is obesity. Waspadji, in Adnan (2013) said that central obesity is an etiological factors that could lead to diabetes mellitus. Fat accumulation in the body could lead to insulin resistance that make the blood glucose is about to increase. When blood glucose are increase the patient will have hyperglycemia which could worse his health status.

There is no significant correlation between nutritional status and quality of life could occurs due to so many factors. Quality of life is formed of physical, psychological, activity, social, and environmental aspects. BMI is one of indicators that could affect physical health which is one of domains in quality of life through blood glucose regulation. But psychological and social aspect has more part in determining the quality of life in people with diabetes mellitus.



Some respondents are having normal BMI and some are havin diabetic foot too. When the diabetic foot is not care properly it wil affect the body image and social interaction so it will worsen the quality of life. But in the location of this study, the health care provider has provide wound care for diabetic foot and the wound are become better. The improved wound condition will help respondents to have personal confidence to socially interact and has some hope to be back in normal life again.

CONCLUSION AND RECOMMENDATION

From the results above it can be concluded that majority of respondents has normal body mass index and has a good quality of life. But statistical analysis show no significant correlationship between nutritional status and quality of life of people with diabetes.

From the results above the recommendation of this study is that the client should has a full commitment during the period of treatment so that the diabetic foot will heal and they could make an intens social relationship that coul maintain their quality of life.

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LEVEL OF ANXIETY AND INCIDENCE OF HYPERTENSION IN ELDERLY AT GAPURANA VILLAGE TALANGO SUMENEP

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ABSTRACT

BACKGROUND : Hypertension is one of the most common diseases in developing countries such Indonesia. Some researcher said hypertension happens if after several measurements, the blood pressure value remained high, with systolic blood pressure ≥ 140 mmHg and diastolic blood pressure ≥ 90 mmHg. Elderly people who have hypertension are at the big risk of experiencing anxiety compared to elderly people who don't have hypertension. The purpose of this study was to determine the relationship between anxiety levels and the incidence of hypertension on the elderly in Gapurana Village, Talango, Sumenep.

SUBJECT AND METHODE : Method of this research is Cross Sectional approach. The population in this study were all elderly who suffer from hypertension as many as 56 people and the sample of this study was elderly who suffer from hypertension with a total of 36 people, with the sampling technique using purposive sampling. The independent variable in this study is the levels of anxiety while the dependent variable is the incidence of hypertension on the elderly.

RESULTS : The results of the study between the levels of anxiety and the incidence of hypertension on the elderly showed that most of the elderly experienced mild anxiety are 20 people (55.5%) and most of the elderly suffered stage 1 of hypertension are 20 people (55.5%). The results of statistical tests using the Spearman Test obtained p value = 0,000 ($p < 5$ 0.05), so H_0 was rejected and H_1 was accepted, which that means there was a relationship between anxiety levels and the incidence of hypertension on the elderly in Gapurana Village, Talango.

DISCUSSION : Therefore, the elderly who suffer from hypertension and experience anxiety, should be more responsive in controlling hypertension by maintaining a healthy lifestyle and also interacting with the surrounding environment so that they do not always feel anxious about their condition about health problems.

Keywords: Anxiety, Hypertension Incidence.

INTRODUCTION

Elderly is an individual aging process marked by increasing age that make a changing in organ function such as brain, heart, liver and kidney and at the same time tissue disfunctions are increase. The number of elderly in Indonesia is increasing which means that it will bring seious problems physically or psychosocially. Individual are said to be elderly if they are 65 or older. Old age is not a problem, but it is a life proccess characterized by body disfunction to adapt to the social environment. An old age are said to be the final stage of life. Everyone will experienced the so-called aging process and the body function can not run normally.

Elderly who experience health problems will cause unexplained fears continously, making them think that they are no longer able to do their daily activity that will make them feel disturbed, lonely, sad, depressed, affraid or even anxious. Anxiety is a mental health problem that is often arises for individual, especially in the elderly. Fear and anxiety in the elderly will indirectly lead to psychological problems, where the elderly will feel stressed about their condition so that it can cause new, more serious problems such as hypertension which is more common in elderly.



Hipertension is common in elderly. hypertension is also known as silent killer with unknown etiology. Hypertension or high blood pressure is a condition of individuals who have a history of blood pressure above normal, causing the risk of morbidity and mortality.

According to the data from World Health Organization (WHO), there were about 972 million of people or 26.4% people are suffering hypertension worldwide. This number is likely to increase to 19.2% in 2025. There were 333 million people with hypertension who lived in developed countries, including Indonesia. The prevalence of hypertension increases with age. The number increases as much as 7% at age 25 – 34 years old, 16% at age 35 – 44 years old and increasing reach to 29% in the age 60 years or more (WHO, 2011).

Based on the data of Riskesdas on East Java the prevalence of hypertension reached 26.2%. The highest prevalence of hypertension is found in the age older than 75 years old as much as 62.4% (BPPK Ministry of Health, 2013). Prevalence of hypertension in elderly in Sumenep in 2014 were 17,621 people with highest prevalence at the age 60 – 69 years old. Based on the in 2017 at the Puskesmas Talango there were about 118 people with hypertension aged 45-59 years old, while for people aged 60 years old over as many as 171 people.

Based on preliminary surveys conducted during interviews in the village of Gapurana, Talango District, out of 10 elderly people who have hypertension, there are 5 elderly people who say that they are more sensitive, irritable, dizzy, easily offended by other people's words, and there are 3 elderly always asking about his current illness. Besides that, there were 2 elderly people who said that they were fien with their illnesses so they did not take their illness seriously. Elderly with hypertension often experienced anxiety, because they thought they could not accomplish their daily activities as usual.

Anxiety is very influential in the elderly with hypertension, since it causes narrowing blood vessels so that the blood pressure increases and exceeds the normal limit. About 90% etiology of hypertension is unknown and it is known as essential hypertension. Even though the etiology is known, there are several theories that say that hypertension is caused by genetic factors, hormonal changes and sympathetic changes. While secondary hypertension refers to hypertension caused by health problem or certain disease (Arif Muttaqin, 2009).

Elderly's health status will return to normal if the elderly could manage the etiologic factors. However psychological factors are significantly affected the preventing process of hypertension. Physicist ability will frighten the elderly and could make them feel anxious since the illness suffered cannot be cured as before and even worsened and the hope for recovery is decreasing. As the elderly getting anxious they will feel uncomfortable, afraid and even panic and starting to think negatively about surrounding environment.

Hypertension in elderly can be minimized by avoiding the factors that can lead to hypertension such as regulating healthy life style and eating patterns, regulating weight loss, limiting alcohol, sodium, tobacco, reducing excessive salt consumptions and exercise to reduce anxiety. Anxiety in elderly could relieve by doing some relaxation technique like breathing exercise which is conduct to reducing anxiety and also music therapy in order to make them feel peaceful and more prosperous (Arif Muttaqin, 2009).

Based on the interview and finding about the incidence of hypertension in Gapurana village Talango district, the researcher are interest in conducting study "Correlation Between Anxiety Level and The Incidence of Hypertension in Gapurana village, Talango district Sumenep. The study is expected to be one of the efforts to prevent or reduce anxiety level in the elderly with hypertension and maintain quality of life of the elderly.

METHODE

This study is analytical study conducted with cross sectional approach. The study involving 36 respondents taken by purposive sampling. The data were taken by questionnaire then analyzed by Spearman rho statistical test.



RESULT AND DISCUSSION

Gapurana village is one of 8 villages or subdistrict which is located in the east of the Talango District area. The boundaries of the Gapurana Village in the Talango District are as follows :

1. North side : bordering the sea
2. East side : bordering Palasa Village
3. Southern side : bordering Cabbiya Village and Essang Village
4. West side : bordering the village of Talango

The distance to the capital district is about 5 km and the total area of Gapurana Village is 894,489 ha.

Tabel 1. Respondent's Characteristic in Gapurana Village Talango District Sumenep (April, 2019)

Characteristic	Frequency	Percentage (%)
Age (years old)		
61 - 63	12	33,3
64 - 66	11	30,5
67 - 69	3	8,3
70 - 72	2	5,5
73 - 75	2	5,5
76 - 78	6	16,6
Gender		
Male	9	25
Female	27	75
Marital Status		
Single	0	0
Married	36	100
Educational Level		
Uneducated	24	66,6
Elementary school	12	33,3
Occupation		
Unoccupied	5	13,8
Trader	10	27,7
Farmer	21	58,3
Total	36	100

According to the data the result study show that majority of respondents experiencing mild anxiety. This condition is affected by respondents occupational status. According to the table 1 it can be seen that most respondents work as farmer. Working as a farmer making the respondents feel no worry about their life because their energy is spent to do their activity on a farm. The activity could distract them from anxiety.

Previous study conducted by Octavianus (2018) titled "Correlation of Hypertension and Level Anxiety in Elderly in Elderly Health Center in Bajarejo Ngantang, Malang" revealed that 51% respondents has moderate anxiety, 36.1% has mild anxiety and 13,9% has severe anxiety.

Researcher opinion stated that anxiety experienced by the elderly in Gapurana is due to the ignorance about the illness so that they keep thinking about and questioning the health problem that are coming to occur. Occupation and age are belief to become the etiology of anxiety. Individuals whose age is 60 years and over, it is definitely experiencing their inability to socialize with the surrounding environment, causing the elderly to be depressed and silent. This situation will make them feel fear and anxiety.



Table 2. Correlation Between Level of Anxiety and Incidence of Hypertension In Elderly at Gapurana Village (April, 2019)

Level of Anxiety	Hypertension						Total	
	Stage 1 Hypertension		Stage 2 Hypertension		Stage 3 Hypertension		Σ	%
	Σ	%	Σ	%	Σ	%		
Mild anxiety	19	95	1	5	0	0	20	100
Moderate anxiety	1	11,11	6	66,67	2	22,22	9	100
Severe anxiety	0	0	0	0	7	100	7	100
Total	20	55.6	7	19,4	9	25.0	36	100

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

The elderly who experience problems like that feel confused about the condition. So the researcher suggest the elderly to do more activity outside such as helping other elderly who are farming, looking for the cows that are being raised so that the health problem that occur and cause anxiety does not always hunt.

According to the data of result study 55,6% respondents are experiencing stage 1 hypertension. Hypertension of elderly in Gapurana is most likely influenced by factor such as the age since it can be seen from blood pressure observation that elderly with hypertension are likely 61-63 years old.

Hypertension is silent killer. It can trigger other disease such as stroke, heart disease and kidney failure that lead to mortality. Blood pressure will arise as individuals get older. Individuals age 60 years old and above, usually has blood pressure higher or equal to 140/90 mmHg.

Previous study conducted by Octavianus (2018) titled "Correlation of Hypertension and Level Anxiety in Elderly in Eldery Health Center in Bajarejo Ngantang, Malang" show that 5 respondents is having stage 2 hypertension, 13 respondents is having stage 1 hypertension and 8 elderly is having stage 3 hypertension.

It is assume that hypertension of elderly in Gapurana is due to the age and unhealthy life style. As the people get older the blood pressure is arise due to decreasing of organ function and become abnormal so it lead to hypertension. Unhealthy lifestyle is also lead to hypertension. Lifestyle management such as doing body exercise, stop smoking, stop drinking alcohol and limited salty food could minimize hypertension.

According to the data it is show that elderly with mild anxiety most of them are having stage 1 hypertension and the blood pressure is counted 140/90 mmHg. It can be conclude that anxiety could affect elderly with hypertension. Statistical analysis spearman correlation show significance p value 0.000 ($p < \alpha 0.05$) means that H_0 is rejected and H_1 accepted and it can be conclude that there is a significant correlation between anxiety level and incidence hypertension in elderly. Coefficient correlation show value of 0.920 means that correlation between anxiety level and incidence of hypertension is strong.

Previous study conducted by Octavianus (2018) titled "Correlation of Hypertension and Level Anxiety in Elderly in Eldery Health Center in Bajarejo Ngantang, Malang" show that level of anxiety can affect the hypertension. Level of anxiety is not only affected by hypertension but also the other factors as well. In this study the elderly with stage 2 hypertension are having moderate anxiety.

The anxiety experienced by the elderly could be minimize by looking for activities outside such as filling free time by working or doing activities they like. So as to reduce the level of hypertension the elderly are asked to fulfil their time by working or do their favourite activity. It will reduce the anxiety. And forget what happen to them.



Hypertension in elderly is also minimize by doing some physycal exercise. It will help the elderly to lowering thier blood pressure. The other way to lowering blood pressure is by doing relaxation. Relaxation will help the elderly to not thinking over their condition.

CONCLUTION AND RECOMMENDATION

Most of eldely in Gappurana are having mild anxiety and stage 1 hypertension. The statistical analysis show that corraltion between level anxiety and hypertension. So it is recommended that the elderly should lowering the anxiety they experienced by having conversation with family and good friend.

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CORRELATIONAL OF MOTHER'S KNOWLEDGE ABOUT NUTRITION WITH NUTRITIONAL STATUS AND DEVELOPMENT OF CHILDREN IN THE APPLE PUBLIC HEALTH IN JAMBEARJO VILLAGE, TAJINAN SUB-DISTRICT, MALANG

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ABSTRACT

BACKGROUND : Children are the population groups that show very rapid growth that requires high nutrients in every kilogram of their body. To get the proper nutrition needed a knowledge in terms of selection, and providing nutritional balanced menu (Devi, 2012) The purpose of research to determine the relationship between mother knowledge about nutrition and nutritional status and the level of early childhood development.

SUBJECT AND METHODE : The study design was *correlational*, Its population is mothers who have children in the village of Apple Integrated Health Post of Jambearjo numbered 89 mothers, samples were taken by purposive sampling technique, totaling 58 people. Research variables include; mother's knowledge about nutrition, nutritional status and level of development. The research instrument used a questionnaire, KPSP, anthropometric measurements with a Z-Score table. Data were analyzed using univariate and bivariate analysis using spearman rho test with a significance level of 95%.

RESULTS : Based on the analysis of Spearman Rho test was obtained p Value $0.000 < 0.05$ then H_1 accepted meaning there is a relationship between knowledge and nutritional status and the level of early childhood development. Value coefficient correlation with nutritional status .590 knowledge, knowledge with the development .515

DISCUSSION : Based on the results above, it should be cadres of Apple public health and public health center of workers provide health information, coaching, food availability and nutrition simultaneously to the mothers and developmental delays with the provision of PMT, stimulation of early childhood development and monitoring and early detection of growth and development of infants.

Keyword: mother's knowledge, nutritional status, level of development, toddler

INTRODUCTION

The role of parents, especially mothers is very important in terms of nutrition, because when in 1000 the first day of a child's life is in dire need of support and maternal care in the provision of balanced nutrition to support the development of the child.

State of Indonesia are in serious public health problem in the case of infant stunting. 30,323, of a total of 154,188 children under five in Malang who experience chronic malnutrition due to lack of nutrition in a long time due to improper feeding nutritional needs. While the results of interviews of 10 mothers stated that 2 moms say pay attention to the nutritional content of the food their children, three mothers say breastfeeding until the child is 6 months old, 1 mother gave weaning food (PASI) since infancy because mothers work and 4 mothers had given food bananas when their children were aged less than 6 months.

Maternal knowledge is important in terms of meeting the nutritional intake for the family, especially when pregnant mothers and children under five who are experiencing rapid development body. Balanced nutrient intake in infants is very important in supporting the growth of children appropriate growth chart in order to avoid failure to thrive (growth faltering) that can cause stunting.



Stunting is one of the targets of Sustainable Development Goals (SDGs), which includes the sustainable development goals of the 2nd ie eliminate hunger and all forms of malnutrition in 2030 as well as food security. The target set is to reduce stunting cases up to 40% in 2025. Besides, the Indonesian state has become part of the SUN Movement (Scaling Up Nutrition), motion SUN Movement is an effort to improve public nutrition and the prevention of at least 20 million children not experiencing stunted growth in 2020, in line with global targets for comprehensive implementation plan in 2025 (WHO, 2014 in Atmarita 2015). Implementation of the program may be realized in the form of movement activities a healthy community through the provision of information about socialization and early detection of growth and development of young children, supplementary feeding in infants, giving Fe tablets and folic acid in pregnant women, but the success of the program depends on the strategy of intervention at a time right. This study has the objective to determine the relationship and how strong the relationship between mother knowledge about nutrition and the nutritional status of early childhood development.

METHODE

This research is an observational analytic studycross-sectional design. The study population was mothers who have children in the village of Apples Integrated Health Post of Jambearjo working area of PKM Tajinan Malang, with 98 mothers. Samples were taken by purposive sampling technique and the amount of sample is 58 mothers. The independent variable of research is mother knowledge about nutrition while the dependent variable is the nutritional status and the development of research instruments used questionnaires mother's knowledge, anthropometric measurements and calculation of Z-scoreserta Pre-Screening Questionnaire Development (KPSP). The study was conducted during the months of April to July 2019 in the village of Apple IHC of Jambearjo working area of PKM Tajinan Malang. Data retrieval begins from the bureaucratic process of licensing of the Polytechnic of dr Soepraoen to Kesbangpolinmas then to PKM Tajinan. Data collected the raw data that is to be organized in such a way that can be presented in tables or charts/graphs so easily analyzed and conclusions drawn. Data processing is conducted through the editing stage, coding, scoring and data analysis. Univariate analysis of the data will be presented in the form of pictures and tables as well as do interpretations based on the data obtained. The bivariate analysis conducted on two variables that were related (correlated). The bivariate analysis is done by looking at the relationship between the dependent and independent variables. The bivariate analysis that will be used is spearmen Rho with α of 0.05. The research was carried out with due regard to the principles of research ethics.

RESULTS AND DISCUSSION

Knowledge is the result of individual learning through the sensing process. In conducting the early stimulation of early childhood development and the provision of food sources that meet the nutrient content for toddlers, requires a process of learning, understanding and practice.



The data above results supported by data characteristics of respondents, among others, the majority of maternal education level is primary education that is SD 9 (15.5%) and secondary school 29 people (50%), the rate of maternal age fraction 9 (15.5%) is late adult age, respondents who did not work a total of 11 people (19%) and income of respondents <Rp.1.000.000 number of 13 (22.4%) as describe in diagrams below.

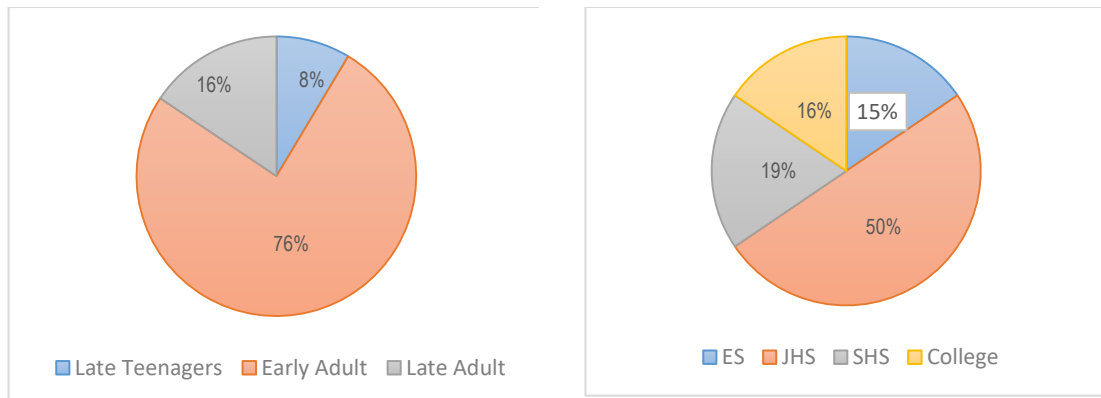


Diagram 1 and 2. Distribution if Respondents in Posyandu Apel Jambearjo Working Area of PKM Tajinan Malang Based on Age and Educational Level

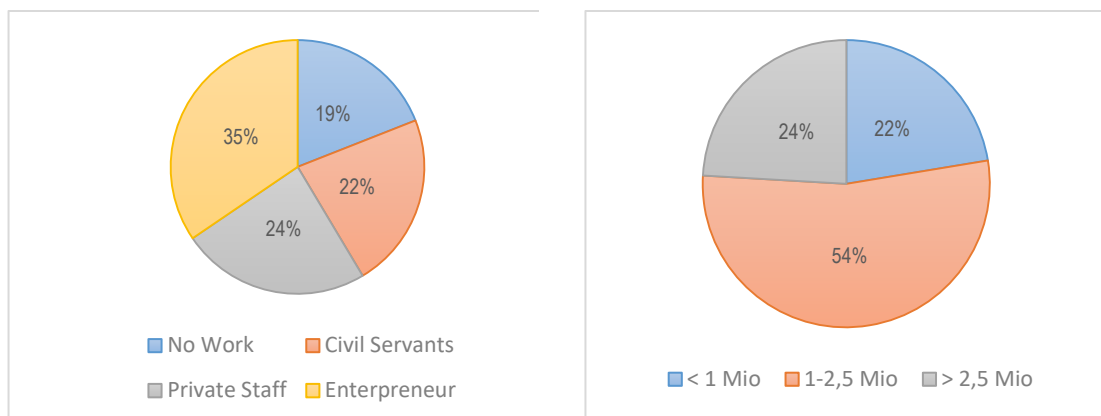


Diagram 3 and 4. Distribution if Respondents in Posyandu Apel Jambearjo Working Area of PKM Tajinan Malang Based on Occupation and Income

Based on the analysis test of knowledge of mothers about nutrition with nutritional status of children, using spearmen rho test (α 0.05) was obtained p Value 0.000 < 0.05 then H1 is accepted so that it can be interpreted that there is a relationship between mother knowledge about nutrition with nutritional status of children. coefficient correlation value of 0.590 means that the lack of knowledge of the nutritional status of children is also getting worse.

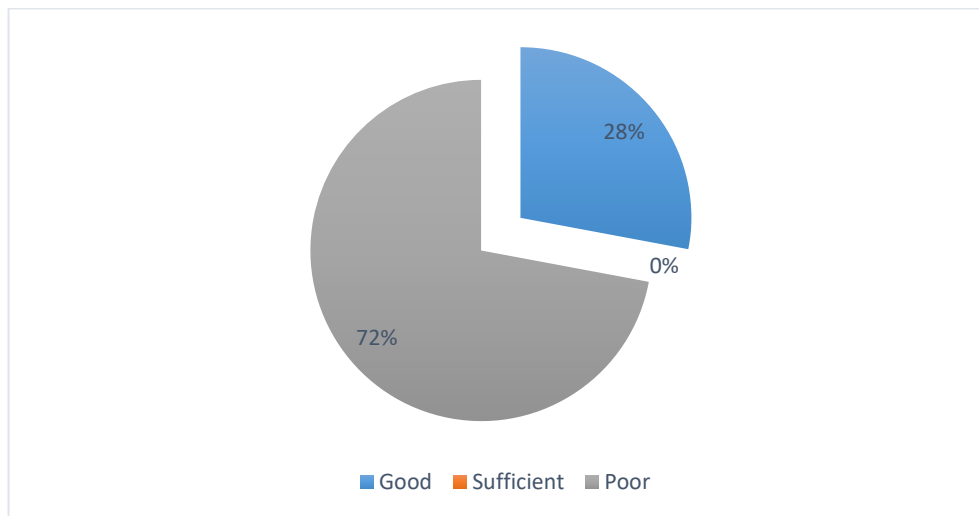


Diagram 5. Mother's Knowledge About Nutrition in Respondents in Posyandu Apel Jambearjo Working Area of PKM Tajinan Malang

Test analysis of the nutritional knowledge of mothers with early childhood development, test spearman rho (α 0.05) was obtained p Value 0.000 < 0.05 then H1 is accepted so that it can be interpreted that there is a relationship between mother knowledge about nutrition in early childhood development. 590 0.515 coefficient correlation value means that the lack of knowledge of the mother early childhood development will be increasingly at risk of delay

Based on the results, the p value 0.000, which means there is a relationship between knowledge and nutritional status and level of development in the work area PKM Integrated Health Post Tajinan Apel Malang regency. The above results are supported by research data knowledge of mothers about nutrition is mostly 53% less knowledge, toddler in Posyandu Apple Tajinan Health Center own growth with the status of anthropometry below the red line which is calculated by the formula Z score is malnutrition 27 infants (47%) and Malnutrition number 3 toddlers (5%) and early childhood development in more than half of Apple Integrated Health Post 34 infants (59%) is doubtful.

According Notoadmojo (2012) states that knowledge is the result of out and this happens after someone is doing the sensing. Based on Big Indonesian Dictionary (2011) knowledge is everything that is known to be associated with the learning process. This learning process is influenced by various factors from the inside, such as motivation and external factors in the form of means of information provided, as well as socio-cultural circumstances. Socio-economic status of a person will determine whether or not the necessary facilities available for the continuity of certain activities so that socio-economic status will affect knowledge. Age affects comprehension and reasoning power a person, but according to Agus, 2013 states that a person's IQ will decrease quite rapidly with age. The level of education affect the learning process, the higher the level of



education a person is more accepting of information. Conditions mothers in Integrated Health Post Apples are in the socio-economic conditions intermediate level down so it will affect mothers toddler in obtaining exposure information, limitation of infrastructure learning and the ability of mothers toddler in the provision and fulfillment of nutrition that is needed to grow and thrive, Sociodemographic conditions like these that can support the growth failure condition in toddlers.

Table 1. Frequency Distribution of Toddler in Apple IHC in Working Area of PKM Tajinan

General characteristics	total (F)	percentage (%)
Age		
0-12 Months	2	3.4
13- 36 Months	20	34.5
37-60 Months	36	63.1
Gender		
Boy	24	41.4
Girl	34	58.6
Hospital History		
Ever	28	48.3
Never	30	51.7
Exclusive breastfeeding		
Yes	41	48.3
Not	17	29.3
Birth History		
pre Term	12	20.7
term	42	72.4
Post Term	4	6.9
total	58	100

Apples Integrated Health Post childhood development in more than half of 34 infants (59%) is doubtful. The data above results are supported by a common data among others: children ages 0-12 months a number 2 (3.4%) and aged 13-36 months some 20 people (34.5%), history of pre-term birth 12 (20, 7%) and post-term 4 (6.9%), infants with a history of exclusive breastfeeding was not given a number of 17 infants (29.3%), infants with a history of illness a number of 28 people (48.3), mothers who do not work a total of 11 people (19%) and family income <Rp.1.000.000 number of 13 (22.4%).

Growth and development is very important for living organisms in an effort to preserve the survival and offspring. In general, growth (Growth) showed quantitative changes as a result of the maturation of the physical organ and system complexity nerve and muscle tissue. Changes can be measured validly growth through changes in the size, proportions change, the loss of the characteristics of the old and the emergence of new traits. Growth occurred simultaneously with the development. Development occurs progressively from phase to phase in a stable and qualitative nature characterized by physical readiness for action tertentu. perkembangan rated of cognitive, gross and fine motor skills, language and communication, as well as the ability of personal, social and emotional.

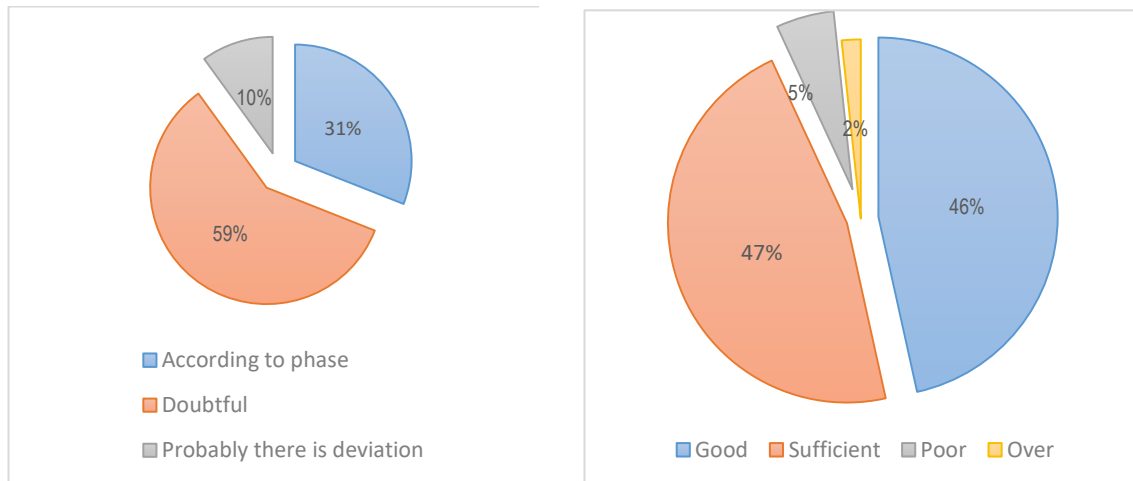


Diagram 6 and 7. Nutritional Status and Development of Toddler in Posyandu Apel Jambearjo Working Area of PKM Tajinan Malang

Acceleration of toddlers development influenced by many factors such as age, too young an age can affect an individual's ability to take action, history of illness or health conditions when screening can affect the outcome of the screening, supported also on other factors such as the condition of stunting and obstacles to the practice of parenting as minimal stimulation of development in children, due to lack of knowledge of the mother.

CONCLUSION AND RECOMMENDATION

Based on the results of research show that there is a significant relationship between mother's knowledge about nutrition with nutritional status, growth and the incidence of stunting in children under five in IHC Apples village Jambearjo working area PKM Tajinan Malang regency, as evidenced by the p value 0.000 and there is a close relationship between variable as evidenced by coefficient correlation value between 0.5 to 0.7.

From the above results it is expected that health workers and cadres should Integrated Health Post toddlers can support government programs in the handling of cases of malnutrition, develop healthy living movement and provide health information in the form of counseling about nutrition, treatment and prevention of malnutrition in order to improve knowledge of mothers. Midwives and volunteers can cooperate better cross-program and cross-sectoral in handling cases of children malnutrition.

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SELF EFFICACY, POSTURAL BALANCE AND FALL RISK ON ELDERLY IN UPT PSTW JEMBER

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ABSTRACT

BACKGROUND : Self efficacy is a cognitive control system which affect someone's believe to do an activity in a special condition. This research conduct to find out the relationship between self efficacy and postural balance with fall risk in elderly.

SUBJECT AND METHODE : It's a correlational research with cross sectional approach that followed by 40 elderly as the respondents. The respondents taken by simple random sampling from total number of 120 elderly in nursing home of Jember Social Ministry. The data taken by using Falls Efficacy Scale (FES) to measure self efficacy, Timed Up and Go Test to measure postural balance and Tinetti Balance and Gait scale to measure the fall risk of the elderly. Then the data are analysed using Spearman Correlation Analysis.

RESULTS: The results show p value of correlation between self efficacy and fall risk as 0,067 which means there is no correlation between those two variable. In the other hand, the p value of correlation between postural balance and fall risk of elderly are 0,0341 which means there is correlation between those two variables.

CONCLUSION: The inconsistency of self efficacy and physical performance could happen when there is ambiguity of task or environment or when someone has little information to learn a new ability. But, postural balance is require to support someone's ability to move and to function independently.

Key words : elderly, self efficacy, postural balance, fall risk

INTRODUCTION

One indicator of the success of development is the increasing life expectancy of the population. Increased population life expectancy causes an increase in the number of elderly people from year to year. Law number 13 of 1998 concerning Elderly Welfare states that what is meant by the elderly is a population over the age of 60 years.

The elderly population continues to grow. The development of this group population occurs very quickly, even compared to toher age group. Starting in 2010, there will be an estimated explosion of the elderly population in Indonesia. Prediction shows that the percentage of the elderly population will reach 9.77% of the total population. This number will increase to reach 11.34% or recorded at 28.8 million in 2020.

Province with more life expectancies also have more elderly population. An area is said to have an old structure if it has a percentage of elderly exceeding 7%. East Java is one of eleven old structured province in Indonesia. The number of elderly people in East Java in 2016 reached 4.4



million. In Jember Regency life expectancy reached 68.73 years with the number of elderly reaching 656,952 people (Yuliati, 2014).

The growing of elderly population can not be separated from increasing various problems in the medical, psychological, economic, and social fields. Following up on this, it is necessary to improve the elderly health services that are started when the client is in the pre-elderly stage. The development of elderly health as early as possible aims to realize an independent, active and productive elderly according to the WHO health program.

The age of the elderly is often associated with independence, a decreased in safety and quality of life. One of functional decline that occurs in elderly s decreasing in the functioning of musculoskeletal system where there is a decrease in muscle mass, ligament stiffness and osteoporosis. This condition causes a decrease in lower limb muscle strength, endurance and coordination and limiter raneg of motion (ROM). Weakness of the lower extremity muscle can cause a disruption of the body's balance resulting in moving lags, short strides, feet unable to step firmly and anticipate too late when slipping or tripping. This condition will cause a risk of falling (Dewi, 2014).

Falling is one of the most common incidents in the elderly. This creates fear and loss of self confidence so they limit their daily activities. The main cause that often causes elderly to fall often is a balance disorder. A good balance is needed by someone to support their daily mobility. Postural balance is an important factor in carrying out functional activities. In every activity, the body always needs postural balance control with the aim of achieving a stable standing posture, because basically every physical activity both static and dynamic will palce a person in an unstable position with a great risk of falling. Balance is the ability to maintain the projection of the center of the body on the supporting foundation both when standing, sitting, transit and walking. Their are are several factors that play a role in body balance in body balance disorders in the elderly due to the aging proccess, including sensory diorders, neurological disorders and motor disorders.

Bandura's self efficacy theory is one of the factors that can explain this. Self efficacy or beliefe is related to the abilitythat is expected to owned by someone to complete the task that must be completed. Self efficacy is a cognitive control system that leads to the individual's belief in performing a task in a certain situation.

Previous research conducted by Mc Auley et al (2006) with the title Physical Activity and Functional Limitation in Older Women : Influence of Self Efficacy shows that physical activity is much associated with self efficacy for excercise, beliefe in stepping and appearance of physical function. Whereas research conducted by Ehler et al (2017) with the title Effect of Self Efficacy and Lower Physical Strength Function on Dual Task Performance in Older Adult shows that physical function can predict the ability of the elderly to complete tasks with complex stimulation and perception functions (such as self efficacy) has much bigger role. This resesarch is conducted to examining the relationship of self efficacy and balance function with the the risk of falling in the elderly.

METHODE



This study is a correlation study with a cross sectional approach. This study involved 40 elderly people as respondents selected by simple random sampling technique from a total of 120 elderly. The instrument used in this study is the Falls Efficacy Scale (FES) to measure self efficacy, Timed Up and Go Test (TUG) to measure postural balance and Tinetti Balance and Gait Scale to measure the risk of fall in he elderly. The data is then analyzed using the Spearman correlation technique to measure the correlation between self efficacy and postural balance with the risk of falling in te elderly.

RESULT AND DISCUSSION

Data retrieval was conducted at UPT PSTW Jember on November 20 – 30, 2017 involving 40 asissted eldelry people selected through simple random sampling technique. The general data of reesearch repondents are shown in the table below.

Table 1. General Data of Respondents

Respondents Characteristic	Total (%)
Age (year old)	
60 - 64	5 (12,5)
65 – 69	6 (15)
70 - 74	12 (30)
75 - 79	15 (37,5)
80 - 84	2 (5)
Gender	
Male	25 (62,5)
Female	15 (37,5)
Educational Degree	
Uneducated	16 (40)
Elementary school	12 (30)
Junior high school	12 (30)
Senior high school	0
Fall history in the last 1 year	
Yes	5 (12,5)
No	35 (87,5)
The use of walking aid	
Yes	0
No	40 (100)

Based on the data seen in table 1 it can be seen that majority of respondents in this study were 75 – 79 years old (37.5%), male (62.5%), never attended school (40%), did not have a history of falls in the last 1 year (87.5%) and no respondent using walking aid while walking.

Table 2. Average of Self Efficacy, Dynamic Balance and Tinetti Balance and Gait Scale

Variable	Mean	Std. Deviation
Self efficacy	48,5750	± 3,22560



Postural balance	12,7250	$\pm 1,10911$
Fall Risk	22,3500	$\pm 2,17857$

Based on the data shown in table 2 shows the average value of the respondent's self efficacy is 48.575. The score shown for FES on each item shows that the lower points per item means the elderly become more confident or confident of being able to do an activity. The lower total FES score indicates that respondents have good efficacy in carrying out an activity and the higher the FES score of the respondents, the lower the self efficacy of the respondents. Elderly with a score FES of more than 70 is considered to have a risk of falling. Thus it can be said that the research respondents did not risk falling.

Self efficacy is an individual's belief in his abilities and this will affect the way individuals support certain situations and conditions. Decreasing body functions experienced by the elderly will cause changes in physical function. However, self efficacy is able to provide an explanation of the landscape that is able to make various kinds of activities in the midst of the decline in physical function they experience.

The mean of self efficacy shown by respondents shows that respondents have good self efficacy in activities and respondents has a good self efficacy in activities and respondents do not have a fear of falling. This means that respondents in this case are still able to carry out activities such as bathing, walking, getting up from bed or chair, preparing food, grooming, dressing and going in and out of the bathroom independently or with minimal assistance.

Some things that can be proposed as factors that influence self efficacy in elderly are consist of age, gender and level of education. The majority of respondents are 75 – 79 years old. The older the age, the decrease in function will be increasingly visible and the risk of experiencing degenerative disease will be even greater. The declining in function experienced by the elderly aging and degenerative disease causes a decrease in motivation in activities and impact on decreasing the activity of elderly. The majority of respondents are male. Man who always served will not be accustomed to doing domestic task will experienced a decrease ability due to aging process. Educational factors also influence the thinking foundation of the elderly in their decision making efforts about their ability to engage in activities.

Postural balance in this study was measured using TUG which showed the dynamic balance ability of the respondents. TUG measurement results that show the completion time of a task in less than 13 seconds indicate that the respondents has a good postural balance and risk of falling. The data in table 2 shows the average TUG of the respondent is 12.275 seconds which means the respondent has a good postural balance function.

Postural balance in the elderly is a factor that influences the ability of the elderly to maintain their position. A good postural balance can reduce the risk of falling in the elderly. The average postural balance of the elderly shows 12.725 seconds. This shows that the average respondent still has a good dynamic balance function.

Postural balance in the elderly is a significant factor. In term of age, it can be seen that the majority of respondents are 75 – 79 years old. In line with increasing age, the elderly will experience various degenerative functions that have an impact on the decline in sensory functions that have an



impact on declining sensory function which is characterized by a decrease in the functioning of vision and hearing experienced by the elderly. But this condition can still be overcome by environmental conditions in PSTW which have good lighting and non-slippery road conditions.

Other demographic data shows that the majority of respondents are male. Compared to women, men have better muscle strength and coordination than women so that they have a better balance function. In addition, all respondents in this study did not use a walking aid. This reinforces the assumption that the elderly who live in PSTW have a good dynamic function.

In addition to the anatomical and physiological factors of the respondents, the researchers also argued that the daily activities sought by the PSTW had an effect on the balance function of the elderly. Every two times a week the PSTW always does physical activities by doing exercise to maintain the fitness of elderly. Besides being able to improve fitness of elderly, exercise is able to maintain balance function of elderly.

The risk of falls experienced by the elderly is measured using Tinetti Balance and gait Scale. The total score of this instrument is the sum of the elderly balance and gait score. A total score of more than 24 indicates that the elderly are not at risk of falling. The results in table 3 show that Tinetti's mean score is 22.35 which means that respondents have a low risk of falling.

Falling is an event that can cause catastrophic effects on the elderly. Falling can be influenced by various factors. Such as age and gender. Respondents in this study were male. Males have better muscle strength and coordination than women so that they have a better balance function. None of the respondents are using walking aid so it can be concluded that respondents had a good balance. In addition, it can be seen that only 12.5% of respondents have a history of fall. A history of falls in the elderly can increase the risk of repetitive falls in the future. But since the number of falls are low so does the risk of fall in the elderly.

Table 3. Correlation of Self Efficacy and Falling Risk for Respondents in UPT PSTW Jember

Variable	Means	Std. Deviation
Self efficacy	48,5750	± 3,22560
Risk fall	22,3500	± 2,17857
p value 0,670		

According to the data in table 3 it can be seen that the correlation between self efficacy and risk of falling respondents shows a p value of 0.607. The value of p value is greater than α 0.05 which means that the hypothesis was rejected. There is no relationship between self efficacy and the risk of falling in the elderly.

Feltz (2005) states that self efficacy is believed to be the main factor that influences individuals' behavior only when individuals have sufficient ability to act and have sufficient skill to achieve a specific goal. The existence of discrepancies between self efficacy and physical performance can occur when there are ambiguities in task or performance in task or environment or when individuals have little information that can be used as a benchmark in making decision when individuals must learn a new ability.



There are several things that can cause the absence of a relationship between self efficacy and the risk of falling in the elderly. Among them is a statement from the caregiver that the elderly often show dependency and demotivating behavior in carrying out activities in order to get the attention from the caregiver. Physically the asisted elderly have good abilities and are supported by cognitive functions that are quite good so that the respondents should have good self efficacy. However, the respondents also confirm that if they show their weakness, they will get more attention from the caregiver. So it can be concluded that the proccess of loss is more influential on elderly's motivation in doing activities and has an impact on the decline in self efficacy of the elderly.

Table 4. Correlation of Postural Balance and Risk of Fall for Respondents in UPT PSTW Jember

Variable	Mean	Std. Deviation
Postural balance	12,7250	$\pm 1,10911$
Risk fall	22,3500	$\pm 2,17857$
p value 0,0341		

According to the data in table 4 it can be seen that the correlation between postural balance and the risk of falling on the respondets show s p value of 0.0341 smaller than $\alpha 0.05$ which means it can be concluded that the hypothesis is accepted. There is a relationship between postural balance and the risk of falling in the elderly.

Spearman correlation test between postural balance function and fall risk show p value of 0.0341 smaller than $\alpha 0.05$. This shows that the hypothesis is accepted, namley there is a relationship between the function of dynamic balance and the risk of falling in the elderly. This is inline with the research of Oddson et al (2007) which states that balance control is absolute requirement in supporting individuals ability to move and function independently. Good balance control can help the elderly to move actively, optimize gait, and maximize sensory impulses to the center of gravity so that the elderly could minimize the risk of falling.

CONCLUSION AND RECOMMENDATION

The correlation between self efficacy and risk of falling respondents shows a p value of 0.0607. The value of p value is greater than $\alpha 0.05$ which means that it can be concluded that the hypothesis was rejected. There is no relationship between self efficacy and the risk of falling in the elderly. The correlation between postural balance and the risk of falling on respondents shows p value of 0.0341. The value of p value 0.0341 is smaller than $\alpha 0.05$ which means that the hypothesis is accepted. There is a relationship between postural balance and the risk of falling in the elderly.

From this results, elderly are expected to improving their postural balance to prevent fall through activity like the exercise. The elderly also expected to maintain their self efficacy since it needed to be the main factor that influences individuals behavior only when individuals have sufficients ability to act and have sufficient skill to achieve a spesific goal.

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EFFECTIVENESS OF BREATHING RELAXATION TO RELIEVE ANXIETY IN ELDERLY AT UPT PSTW BONDOWOSO

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ABSTRACT

BACKGROUND : Human aging process undergoes a change toward physical and mental dependence. Complaints that accompany the aging process become a sign of disease, usually accompanied by feelings of anxiety. Anxiety also arises in certain situations such as public speaking, high job pressures, facing exams. Anxiety disorders arise when the anxiety lasts a long time, changes in behavior, or the occurrence of changes in body metabolism. This study is conducted to determine the effectiveness of breathing relaxation to reduce anxiety in elderly.

SUBJECT AND METHODE : This is a quasy experimental research conducted with two groups pre test and post test design. This study involving 43 respondents divided into control group for 20 respondents and the rest become the experimental group. The data collected using questionnaire and analyzed by using Man Whitney test.

RESULTS : Based on the results of the research before the breathing relaxation in the mean score in the experimental group was 2.35 and in the control group was 2.2. While after breathing relaxation in mean value in experiment group is 2.70 and in control group is 2.70 Then obtained result p value: $0.000 < \alpha 0.05$ concluded H1 accepted, meaning there is influence of deep breath relaxation

DISCUSSION : Based on the research results, deep breath relaxation can be used as an alternative to lower anxiety levels

Key words : anxiety, relaxation breathing, elderly

INTRODUCTION

Anxiety is an emotional response which full of worry and the source of threats or thoughts about something that is coming is unclear and not defined (Geist and Jeverson, 2011). Aging is a human process going through a period physical and mental dependence. Accompanied by complaints in the aging process is a sign of disease such as anxiety, depression or denial of the disease. Anxiety can also arise in certain situation such as public speaking, high work pressure, or facing exams. These condition can trigger anxiety to fear. Anxiety disorder arise if the anxiety continuous for a long time, there are changes in behavior, or changes in the metabolism in elderly.

In 2050 it is estimated that the elderly population will increase 3 times from 2013. In 2000 the number of elderly people was around 5,300,000 (7.4%) of the total population whereas in 2010 the number of elderly was 24,000,000 (9.77%) of the total population, and by 2020 it is estimated that the number of elderly people reaches 28,800,000 (11.34%) of the total population. Data from



Central Statistic Agency (BPS) show that the elderly population in Indonesia in 2007 was reached 18.7 million, increased to 23.9 million in 2010 (9.77%). In 2020 it is estimated to reach 28.8 millions of people. Data from BasicHealth Research showed that 11.6% of adult population are facing emotional disorder such depression and anxiety (Ministry of Health, 2009). Hermawan (2007) stated that ten or twenty years later by 2020 the estimated elderly population in Indonesia reached 28.8 million or 11.34% with life expectancy of around 71 years. As life expectancy increases, the number of depression in elderly is also increases. Elderly is a process of growth and development of humans, starting from the baby, the age of children, adulthood and aging. The US census bureau estimates that Indonesia will experience an increase in the number of elderly in 1990 – 2025, which is 41.4% (Maryam, 2008).

Preliminary study held in UPT PSTW Bondowoso found that total number of elderly is 89 elderly. The results show that 7 out of 10 elderly experiencing anxiety characterized by increased blood pressure, increased pulse rate, increased breathing frequency, and experiencing sleep disturbance. In this case the treatment to handling anxiety is needed. Interview results obtained that breathing relaxation techniques have not been implemented at UPT PSTW Bondowoso. From this phenomenon, researchers are interested to bring up material on deep breathing relaxation therapy for elderly. This study is conducted to determine the effectiveness of breathing relaxation technique to relieve anxiety in elderly.

METHODE

This is a quantitative experiment, conducted with quasi experimental design with pre test and post test with control group approach. This study involving 75 elderly living in UPT PSTW Bondowoso as participants who taken by purposive sampling. The data collected by using HARS (Hamilton Anxiety Rating Scale). The respondents were divided into control group and experimental group. Breathing relaxation technique were given to experimental group for a week. Pretest was done a day before treatment followed by post test. The collected data then was analyzed using Mann-Whitney analysis.

RESULTS AND DISCUSSION

The results show that in experimental group 13 respondents (56.5%) are 61-70 years old; 9 respondents (39.1%) are 71 – 80 years old and 1 respondent (4.3%) is 81-90 years old. While in the control group 11 respondents (50%) are 61-70 years old, 8 respondents (36.4%) are 71-80 years old and 1 respondent (4.5%) is 81 – 90 years old.

Based on research on anxiety before treatment, it was found that the elderly who experienced anxiety has mean value of 2.35; median value was 2.00; the mode value was 2; deviation standard is 0.487;



the minimum value is 2 and the maximum value is 3. Statistical analysis using Mann Whitney show p value smaller than α 0.05 which mean that H_0 rejected and H_1 accepted, that deep breathing relaxation technique affected level anxiety of elderly.

Based on the results study, the experimental group show the mean is 2.35, the median value is 2.00, the mode value is 2 with deviation standart of 0.487 and minimum and maximum value are 2 and 3. While in the control group it is found that the mean value is 2.70; the median value is 3,00 ;the mode values is 3; deviation stadart 2.70, the minimum value is 2 and the maximum values is 3.

Relaxation breathing is the breathing activity by using abdomen muscle characterized by slow frequency, rhythmic and comfortable which is done by closing the eye. Relaxation techniques can be used with several methods. Relaxation breathing technique can be used with several methide to achieve optimal results with addition of other technique such as guided imagery. Guided imagery is a technique by means of one's imagination to achieve certain positive tranquility effect (Smelter, Bare, Hinle and cheever, 2010).

The results of pre test show that the respondents show that the anxiety level is severe. Then the researchers applied the deep breathing relaxation technique since it has been known can relieve level anxiety by relieve resporatory disorder llike hyperventlation, hypertension, heart disease, insomnia, dizziness or headache due to pressure and asthma.

Because of this techniques, slow breathing can hold the inspirationto the maximum so that it can reduce the intensity of pain. The data obtain that the applied techniques could relieve the anxiety level.

CONCLUSION AND RECOMENDATION

Before deep breathing rlxation techniques applied in to the respondents the mean value is 2.35 and after the treatment the mean value decrease to 2.00. So it can be conclude that deep breathig relaxation technicque is effective in relieving the anxiety in elderly.

Recommendation from this study is that the nurse should teach and applied deep breathing relaxation technique to the eldelry so that their anxiety will relieve.

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ROLE TRANSITION APPLICATION OF PARENTHOOD IN ADOLESCENT

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ABSTRACT

BACKGROUND : role transition is a role changing process to become a parents in adolescents, and it is common to occur due to early marriage or married by accident. New role as a parents need a good preparation since this changes need certain period of time. But when an adolescents faced those situation due to their sexual behavior they will face role transition spontaneously and not ready in all aspect, physically and psychologically. This transition will lead into role insufficiency as a parents. This study is conducted to analyze the role application of parenthood in adolescent.

SUBJECT AND METHOD : This is a qualitative study with thematic analysis. This study including 5 participants and 5 respondents for triangulation taken by purposive sampling. The participants is mother who is married by accidents with a minimum of 6 months parenting experience. The research was conducted in 6 months.

RESULTS : This study found several themes, including difficulty in adapting as a parents, changing habits, new forms of experience, form of support.

CONCLUSION : based on the results of this study, the experience of adolescent as parents is expected to improve their awareness and their involvement with their child through the interaction of inherent meaning so that role supplementation can be fulfilled to produce a healthy role transition to feel connected, interact, have a situation, develop self confidence and coping.

Key words : role transition, parenthood, adolescent

INTRODUCTION

Adolescent is a pleasant period, maintaining relationship with peers to learn and develop themselves optimally. It is also a volatile period because it is a transition period from childhood to adulthood due to psychological changes both physically and psychologically.

Changes in attitude and behavior during adolescence are parallel with the level of physical change (Hurlock, 2009). If this change not followed by positive environment, then it will affect their behavior and their life instead. Since basically human development are affected by four environment, one of them is the microsystem which is family, school, neighborhood, social media and peer or play mate (Berns, 2010).

Negative microsystem environment that often affected teen's life peer, especially in having relationship with the opposite sex. Dating is become trending in early teen nowadays. The problem adolescent tend not to know the limits when dating so that pregnancy occurs as a teenager.

Health study center of Universitas Indonesia (UI) stated that the study conducted in Jakarta, Tangerang and Bekasi involving 3006 teen respondents show 20.9% of respondents were pregnant and giving birth before they're married. the study conducted by Muktingrum and Budiati (2014) show 12.4% of respondents tend to have high risk sexual behavior and 44.7% have active sex derive



in adolescence. In Kediri regency, at the past tenth month 119 marriage dispensation applicant 85% on the grounds of pregnancy outside marriage (Jawa Pos, 2017). Most phenomena occurs are girls are getting married because she giving birth before married.

Basically role transition requires preparation both physically and psychologically. However with a situation that is not ready yet but the demands of the situation require a role transition, there will be a risk of experiencing role insufficiency. Changes in these situation and condition require adolescents to take on new roles in their lives. When the age is still inadequate to be a parent, teenagers are required to undergo the role of parent.

Awareness of role transition is the initial stage of accepting change, in order to show appropriate behavior as a parent. It also requires involvement during the role of parent, both in carrying out the care, compassion and care for their children. So difficult in displaying the role or known as role insufficiency does not occur (Alligood, 2014). From this description of the problem, researchers are interested in analyzing the application of the role transition to parenthood in adolescent.

METHODE

This study is qualitative study using thematic analysis. It is involving 5 mothers who were married by accident and experienced caring for children for at least 6 months. Triangulation participants were 5 people namely partners or husbands of each mother, taken by purposive sampling technique. Researchers stimulate one's experience of role transition so that they can explore, analyze and explain phenomena directly and do not limit them. Data was collected by indepth interview both the main participant and triangulation. In addition, the data is taken from observations made on physical or non physical phenomena that appear during interview.

RESULTS AND DISCUSSION

Table 1. Characteristic of Main Participant

No	Education	Occupation	Age	Date of Marriage	Child's Date of Birth	Pregnancy
1	Junior high school	Housewife	19	5 February 2017	21 July 2017	3 month
2	Junior high school	Housewife	17	28 February 2018	8 March 2018	8 month
3	Junior high school	Housewife	16	19 August 2018	15 November 2015	Children 3.5 years old
4	Junior high school	Housewife	19	2 February 2017	21 August 2017	2 month
5	Junior high school	Housewife	18	5 Mei 2017	5 August 2017	4 month



Table 2. Characteristic of Triangulation Participant

No	Education	Occupation	Age	Living Place
1	Junior high school	Farm worker	20	Parent
2	Junior high school	Farm worker	18	Parent
3	Senior high school	Sales	20	Parent
4	Junior high school	Farm worker	19	Parent
5	Junior high school	Farm worker	20	Parent

According to the data in table 1, it is show that all partisipants graduated from junior high schools, has no job (housewife), geting married after pregnant and one participant is married after her child is 2 years old. According to the table 2 almost all of the respondents is graduated grom junior high school, working as farm worker and all of them are living with parents.

This study found several theme such as adolescents have difficulty in adaptating, changes in habits, form of new experiences and forms of support.

1. Adaptation difficulties as parents

Adaptation of adolescent as parents experiencing difficulties about the new environmet which is living with the new family who has different pattern, difficulties in caring for the children; has not be able to meet their children's need. Dificuties in raising children such as not being able to bath the baby, carry and suckle the baby, lack of support from a partner and one participant does not want to suckle her baby. This was conveyed by the participants as follows :

"... after giving birth I still cannot take care of my child" (P1)

"... First, it was difficult, yes I'm happy but confused too. I can't take care of babies" (P2)

"... I have to take care of my parents in law when I live with them"(P3)

".... i do not dare to hold the baby in the range of 2 month for fear, so my mother take care of him" (P4,5)

This difficulties was experienced on average for 2 moths post partum. This is experienced by adolescents at certain timescale, at the beginning of becoming a parents. Adaptation of adolescents require more time to care for their children independently than primiparous mothers with normal reproductive periods (Oktaviani, Fajarsaro and Maulidah, 2014). This is also in accordance with the Meleis theory in Alligood (2014) which said that the transition is flowing and moving at any time, the transition character as a time span start from anticipation, perception or shows behavior through an unstable period, confusion, stress to the final phase with a new beginning or a stable period.

2. Change of habits



The habits that adolescent do before becoming a parent is meeting their own needs, there are no spesific responsibilities that need to be fulfilled so that they are free to paly, leave the house and do many fun activities with peers. These habits change after becoming a parents, adolescents even have to leave school so they have to lose the habit of going to school every morning. The change in habits was conveyed by the participants as follow :

"... After birth become different than before" (P1, 3)

"... If you sleep at night, you have to take care of your children too. I used to relax before..." (P5)

"...Now I do not go to school anymore. I used to go to the school in the morning with my firends" (P2)

One of the characteristics of role transition experience is change. Changes in habits experienced by adolescents occur due to mismatches between expectation and reality. Adolescents experiencing transition condition (facilitators and inhibitors), which is a condition that make teens experience movement and chnge to achieve a healthy transition (Pangesti and WD., 2017). This change occurs because of a change in identity as mother for her child, who has improtant role for her child. According to the results of the study conducted by Alfianti (2003) being a good mother according to the perception of 10 mothers is having the responsibilities of caring for her chils, able to divide time and prioritize the needs of children.

3. Form of new experience

New experiences of adolescents as parents according to the research study are independence in caring for their child, fulfill children daily need and teaching their children. New form of experience were delivered by 5 main participants and triangulation.

"... I share my task with my husband when making milk or the baby get fussy "(P5).

"... If my baby get sick, i will usually have it checked by physician accompanied by my mother" (P1).

".... I used to make baby food and i have my baby daily needs prepared by myself" (P3).

These experience is occur because of the the awareness become a prents is rising and it also effected by their involvement with their child everyday. The involvement occur is the involvement of physical and psychological (Pangesti and WD, 2017). The awareness and involvement is very important since the the awareness level affecting the level of involvement. As happened to participant as follow :

"...I used to take my baby if I going somewhere"(P1)

This is a new kind of role awareness as a mother so that she want to be with her child all the time and it will lead to the improvemnet of involvement and inherent meaning. Besides



closeness and relationship with her child need competence approach including the expression of satisfaction and role appreciation (Okatfiani, Fajarsari and Mulidah, 2014). With those experience it will affect role transition so that it will developed healthy transition.

4. Form of support

Support experienced by adolescents as parents in the form of material and non material support. According to the participant's statement :

"...As long as my husband has not worked, all my children's needs are fulfilled by my husband's parents". (P2)

"... My husband are still study so that to buy milk and others need i had it bought by his grandmother" (P5).

While non material support among others, delivered as follow :

"...When i'm pregnant I always have my pregnancy checked by midwives accompanied by my mother" (P1)

"... After giving birth my baby were bathed by my mother until 2 month old"(P3)

Support from the family as a form of accepting the state of adolescents as parents. So this is useful as a support for the adolescent during transition time.

CONCLUSION AND RECOMMENDATION

This results of this study has several theme, namely : 1) difficulty adapting as parents, 2) changing habits, 3) form of new experience, and 4) form of support. This study recommend that the participant should improve themselves in interpreting the role of parents so that involvement and interaction with their child getting tighter so that foster care can be realized more optimally. Educational institution is also expected to educate the adolescent about reproductive education so that they will understand the impact of free sex. Parents are expected to increase their supervision during the development time of their son and daughter.

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COMMUNITY EMPOWERMENT IN REDUCING ENVIRONMENTAL POLLUTION THROUGH PROCESSING OF TERASI (DRIED SHRIMP PASTE) WASTE INTO ORGANIC LIQUID FERTILIZER

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ABSTRACT

BACKGROUND : Community empowerment is a systematic action and involves various formal and informal organizational components in the community. Community empowerment must be based on the assumption, that the community is the owner of the authority that determines the needs and strategies to achieve those needs.

SUBJECT AND METHODE : The KKN-PPM (Kuliah Kerja Nyata-Pembelajaran Pemberdayaan Masyarakat) activity involves the entire community to reduce pollution from dried shrimp paste by processing it into fertilizer which can improve the welfare of the Puger Kulon community. The manufacturing process of liquid organic fertilizer using the method of fermentation technology by bio activators/decomposer agents Effective Microorganism 4 (EM4) which aims to accelerate the formation of liquid fertilizer from dried shrimp paste waste.

RESULTS : Providing alternative solutions to reduce pollution of dried shrimp paste by processing it into fertilizer that can improve the welfare of the Puger Kulon community.

CONCLUSION : This program is able to reduce the impact of environmental pollution by processing dried shrimp paste waste into an organic liquid fertilizer that both can be produced by the community itself and used to support natural greening program.

Keywords: dried shrimp paste waste, organic liquid fertilizer.

INTRODUCTION

Community empowerment is a systematic action and involves various formal and informal organizational components in the community (Timur, 2014). The implementation of community empowerment requires programs and activities that can directly involve the community's participation (Perkins & Zimmerman, 1995).

Conceptually, community empowerment must be based on the assumption, that the community is the owner of the authority that determines the needs and strategies to achieve those needs, so that all processes including planning, implementation, and supervision have to be carried out by the community themselves so that the continuity of this empowerment can be perceived by the community (Perkins & Zimmerman, 1995).

Indonesia as an archipelago has a lot of fishery product processing industry which will produce tons of waste. Utilization of waste in the fisheries and marine sector not only provides added value to the community but also can overcome the problem of environmental pollution that is caused,



especially the issue of odor produced and poor environmental aesthetics(Tanaka, Taku, Lin, & Kobayashi, 2005).

The district of Jember which is part of the southern coast of Java also has the potential of the fishery and marine product processing industry, namely "Terasi Puger". Terasi (dried shrimp paste) is one of the spices that come from the fermentation of fish or shrimp, but the problem faced by the industry is waste that pollutes the air and the environment(*Anaerobic Fermentation of Food Waste in Phuket Province using Yeast Jutarat Suwannarat A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Science in Technology and Environmental Management Prince of Songkla Universit*, 2014).

Reducing environmental pollution requires joint efforts through community empowerment in tackling dried shrimp paste waste. One of the empowerment methods that can be done to manage dried shrimp paste waste is to process waste into organic liquid fertilizer. Fertilizer is a material used to add nutrients to the soil and provide the needs of plants so that it can grow optimally(Ma et al., 2018).

Team of KKN-PPM (Kuliah Kerja Nyata-Pembelajaran Pemberdayaan Masyarakat) University of Muhammadiyah Jember together with the community tried to provide alternative solutions to reduce pollution of dried shrimp paste by processing it into fertilizer that can improve the welfare of the Puger Kulon community.

The objective of this activity is to overview of the impact of waste on environmental health, as well as solutions to overcome dried shrimp paste waste pollution through the manufacture of organic liquid fertilizer.

LITERATURE REVIEW

a. Organic liquid fertilizer from dried shrimp paste waste

Terasi (dried shrimp paste) is one of the very popular food seasonings in Indonesia. The basic ingredients of dried shrimp paste are fish and shrimp(*Anaerobic Fermentation of Food Waste in Phuket Province using Yeast Jutarat Suwannarat A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Science in Technology and Environmental Management Prince of Songkla Universit*, 2014). The final product in dried shrimp paste industry will produce waste that risk of polluting the environment and one of the waste is shrimp shells(Sutapa, 2018). Shrimp shells waste contains main constituents consisting of protein, calcium carbonate, chitin, phikmen, dust, etc. In addition, the waste of dry head shrimp contains high protein and high levels of minerals, especially Cu, P, Mn and Zn which are important nutrients for plant growth. Shrimp shells waste consists of three main components including protein (25-44%), calcium carbonate (45-50%), and chitin (15-20%). Chitin content in shrimp shell waste is around 20% -50% dry weight. One of the functions of chitin in agriculture is to increase nitrogen fixation, where it affects plant growth. The dried shrimp paste waste treatment can help the community in reducing environmental pollution and the results can support the family economy(Hapsari & Welasih, 2015).

Organic liquid fertilizer is a one of form processed shrimp waste into an economically valuable material and can reduce environmental pollution. The advantages of organic fertilizer are (1) improves chemical properties of the soil, (2) improves physical properties of the soil, (3) increase soil microorganisms, (4) food source for plants, (5) environmentally friendly, (6) organic fertilizers are cheaper, and (7) increase production quality(Febrianna, Prijono, & Kusumarini, 2018).



The addition of banana stems aims to create the composition of organic liquid fertilizer from shrimp waste complete nutritional content for plants. The content in banana stems according to various studies including dry matter 87.7%, dust 25.12%, crude fat 14.23%, crude fiber 29.40%, crude protein 3% including amino acids, amine nitrate, glycosides, containing N, glycolipids, B vitamins, nucleic acids, including carbohydrates, sugars, and starches (Febrianna et al., 2018).

b. The manufacturing process of organic liquid fertilizer

Plants in the process of growth and development require two types of nutrients, macro, and micronutrients in the soil. However, sometimes these two nutrients are not available in sufficient quantities. Both nutrients needed by these plants can be fulfilled through proper and balanced fertilization. Excess and lack of nutrients both micro and macronutrients can cause plant growth less optimal. Macro and microelements that must be available for plants are only N, P, and K elements which needed in greater quantities than other elements. Therefore, these three elements are often called the main (primary) macronutrients (Astuti & Mahatmanti, 2018). One type of fertilizer that can provide the needs of nutrients N, P, and K and also environmental friendly is organic liquid fertilizer, which is obtained from the process of composting (decomposition) of organic materials in the composter container.

The manufacturing process of liquid organic fertilizer using the method of fermentation technology by bio activators/decomposer agents Effective Microorganism 4 (EM4) which aims to accelerate the formation of liquid fertilizer from dried shrimp paste waste from 3 months to 7-14 days. EM4 contains fermented and synthetic microorganisms consisting of lactic acid bacteria (*Lactobacillus sp.*), Photosynthetic bacteria (*Rhodopseudomonas sp.*), *Actinomycetes sp.*, *Streptomyces sp.* and yeast.

The fermentation process of organic liquid fertilizer is carried out in an anaerobic condition. The materials and tools needed for this shrimp waste processing include:

A. Ingredients

- Shrimp waste (shell or head)
- Banana stems
- EM4
- Glucose solution
- EM4
- Rice washing water
- Coconut water

B. Tools

- Container with cover
- Measuring glass
- Stirrer or wooden stick

C. Process

- Dissolve 200 cc bio activators such as EM4 as microbes in sufficient water (5 liters of coconut water and 2 liters of rice washing water)
- Put shrimp/fish/ shrimp paste waste into buckets or container
- Add ingredients that we have chopped and mix it gently into buckets or container
- Add all the other solid ingredients and mix well
- Pour a bio activator solution that has been prepared before and add shrimp paste to further speed up the process of decomposing organic liquid fertilizer if necessary



- Add rice washing water, fish marinade and liquid ingredients, other coconut water into a bucket, stir until evenly distributed
- Add enough water, the ratio of water is 35 percent liquid and 65 percent solid. Stir gently using a wooden stick
- Let stand for approximately 10 days, after 10 days see whether the liquid organic fertilizer is ripe if it is not yet ripe close again tightly until the odor from the fertilizer resembles the scent of fermented cassava

The advantage of organic liquid fertilizer is rich in a variety of minerals, and essential substances needed by the soil and plants, as well as plant growth hormones. In addition, organic liquid fertilizer can also stimulate plant growth and can effectively increase the cation exchange capacity of the soil, when compared to chemical fertilizers (Ma et al., 2018). Cation exchange capacity is the ability of the soil to increase interactions between ions in the soil so that it is able to provide various elements needed by plants. The organic material used for organic liquid fertilizer will be able to reduce the number of nutrients that are bound to soil minerals so that more nutrients are available to plants (Tanaka et al., 2005).

CONCLUSION AND SUGGESTION

a. Conclusion

The community empowerment program through the KKN-PPM program is able to reduce the impact of environmental pollution by processing dried shrimp paste waste into an organic liquid fertilizer that can be produced by the community and for natural greening program.

b. Suggestion

The basic ingredients of making organic liquid fertilizer must be adapted to the purpose of fertilizing plants for optimal use.

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FAMILY SUPPORT AND RECURRENCE OF HYPERTENSION IN ELDERLY IN GONDORUSO VILLAGE PASIRIAN LUMAJANG

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ABSTRACT

BACKGROUND : hypertension is one of common disease in elderly. Family support is require to prevent the recurrence of hypertension in elderly. This study is conduct to determine correlationship between family support and the recurrence of hypertension in elderly.

SUBJECT AND METHODE : this study is a descriptive correlational study conduct with cross sectional approach involving 40 elderly taken from 198 elderly in Gondoruso Village. The respondents are taken by puposive sampling. The data the analyzed using Spearman Rank statistical analysis with α 0.05.

RESULT : Spearman rank analysis test show p value of 0.01 less than α 0.05. Meaning that there is significant correlationship between family support and the recurrence of hypertension in elderly.

DISCUSSION : support and encouragement from family is essential for elderly in forming a coping mechanism to overcome stress felt by the elderly. So that family need to involve in treatment of hypertension in eldery since it play important roles in depress the recurrence of disease in elderly.

Key words : family support, recurrence, hypertension, elderly

INTRODUCTION

Health and economical problems are common in elderly since the declining of body function naturally and correlate with the fulfillment of dailiy needs. It does not mean that the problems in other sector is not important. Other sectors such as demographical structure, education, social activity, and violence in elderly are also need comprehensive attention (Elderly National Comission, 2012).

Elderly as an end life cycle is a normal stage of development and no one could avoid it (Stanley, 2007). The number of elderly are predict more than 629 million worldwide and projected to be 1.2 billions of people at 2025 (Nugroho, 2012). Indonesia is one of country which has high number of elderly people. Statistical Center of Indonesia projected that between 2005 – 2010 the number of elderly is about 19 million or 8.5% from the total number of citizens. WHO is also predict that Indonesia will face the largets increasing of elderly in worldwide at 2025, which is counted as 41.4% (Maryam, 2012).

WHO and the Law Number 13 of 1998 about elderly's welfare in article 1 paragraph 2 stated that 60 years old is the beginning of old age. Aging is not a disease, but it is a process that gradually results in cumulative changes. Aging is a declining body function process from inside to outside of the body and ended with death (Padila, 2013).

The number of pre elderly and elderly in Regency of Lumajang during 2012 who get health services is counted 60, 663 from total of 118,366 elderly or 51.25%. (Health Office of Lumajang, 2012). Many efforts has been taken by the health office of Lumajang to improve elderly's quality of life. Those are by conduct a posyandu which is included elderly excercise that could lower the anxiety level and effective in decreased hypertension in elderly. Another effort is by conduct a health promotion especially to organize and providing



care to the elderly. According to the study conducted by Chandra (2006) stated that there is a significant differences between level of anxiety of male and female elderly. The female elderly tend to have severe anxiety to all aspect of her life compared to male elderly.

Hypertension is a common disease in elderly. This condition wa characterized systolic pressure is above 140 mmHg an the diastolic is less than or in point of 90 mmHg that could lead to emerge of continued sign and symptoms such as stroke and coronary heart disease (Keliicker, 2010).

Elderly with hypertensoin tend to have difficulties in doing self care management to themselves and it could worst their condition. Healthy people 2010 for hypertension recommended the use of an comprehensive and intensive approcach to achieve controlled blood pressure. One factor that affect self care management is family (Flynn et al, 2013; Ho TM, Maryam et al, Stanhope and Lancaster). Family support is the application of four characteristics of family social support, such as informational support like giving advice, direction, and required idea; emotional support like symphaty, emphaty, love, trust, and respect; intrumental support including cost. Transportation, medication, and asesment for example family giving praise for what have been done by the patients (Setiadi in Indah, 2012).

Most people with hypertension are feeling healthy. Sign and symptoms like headache are consider not a problem. They believe that taking medicine could help them feel better. Family support is an imprtant thing that has to be done to prevent hypertension in elderly especially hypertension controlling in elderly. Those statement is the background for the author to takes the title Family Support and Recurrence of Hypertension in Elderly in Gondoruso Village, Pasirian, Lumajang. This study is conducted to determine the correlationship between family support and the recurrence of hypertension in elderly.

METHODE

Research design adjusts to the research goals and problems. Observational can be descriptive corelative. The research design uses a correlative descriptive method to describe two interrelated variables, namely the correlationship of family support and recurrence of hypertension in Gondoruso Village, Pasirian, Lumajang.

The research design is a concept or model that describes how the research is carried out to achieve the research objectives. There are various kind of research design, and this study using cross scctional approach becaause the researcher take measurements or observations at the same tome(once in a while, 2012).

Population in this study are some elderly aged 45 years in Gondoruso Village. The population counted as 198 elderly. While sample is a part of population studood. The respondents was the edlderly who fulfilled the middle aged requirements (45-59 years old) in Gandoruso village. The respondents was taking by purposive sampling.

To apply a statsistical test it must be adjusted to the measurement scale, type of measurement and type research conducted. The statitital test apply in this study is Speraman Rank analysis to determine the correlationaship between family support and recurrence of hypertension in elderly.



RESULTS AND DISCUSSION

1. Family Support

After the observation, it was found that respondents with good family support 12 respondents (30%) does not experience the recurrence of hypertension. While respondents with lack of family support, 8 respondents (20%) is often experience hypertension recurrence. And 20 respondents who got sufficient family support seldom experience the recurrence of hypertension.

Nawawi (2010) stated that there were some factors affected elderly's mental health which is declining physical function, declining sexual function, psychological changes, and shifting role in community and changes in occupation. If those factors does not responded wisely, it will bring some problem in elderly's mental health.

Mental unpreparedness in facing retirement, make individuals become anxious, stressed and depressed. This phenomenon clearly brings a number of consequences that will cause psychological problems in the elderly, namely stress (Hutapea, 2012). Individual who experiencing stress can be seen from the changes that occur in his physical condition. Signs and symptoms of stress including angry, moody, anxious, sad, depressed, pessimistic, crying, shifting mood, declining self esteem or feel insecure, succumbed easily and has hostile attitudes, nightmare and experience impaired concentration and memory (Hawari, 2010).

Support system is required to deal with stress and this support could come from family. When experiencing a problem, someone will seek support from people around to help and reawaken the spirit and confidence in facing the difficulties. So that, individuals feel valued, cared for, loved and do not feel alone in facing a problem (Koentjoro, 2012).

2. Recurrence of hypertension

From the total of 40 respondents, majority of respondents are seldom experiencing the recurrence of hypertension which is counted 20 respondents (50%).

According to The Health belief model theory the effort that has been done by the respondents in Gondoroso village is categorized as good.

Any effort to prevent the recurrence is done according to the individual perception about the threat, seriousness, history of disease and consideration of advantages and disadvantages. Individual perception is affected by modificational factors including demographic variables (age, gender, and culture background), sociological factors (personality, social classes, and social stress), and structural variables (knowledge and previous experience) (Heri, 2009). Modification factor in this study including age, gender and knowledge about the disease.

Health belief model stated by Rosenstock (2012) is one of cognitive model that can be used to determine health behavior. Health belief model provides a framework for understanding specific measure as preventive measure (Sumijatun, 2006 in Kumoboyono, 2011). In health belief model, preventive behavior is determined by individual believe that he is vulnerable to health problems, consider the health problem is serious, believe in effectiveness of prevention and medication, affordable and accepting advice to take action (Rochadi, 2013).

Effort to prevent recurrence in term of perceived vulnerability are also based on the ability of individuals to feel how likely it is that they will recur if prevention is not done. So that if the individual does not feel that what he is suffering is a risk and becomes a threat and becomes a threat to him then that individual will not seek treatment and take precautions.



Age and sex factors also affect vulnerability. Where the elderly age group and female sex have a higher susceptibility to recurrence of hypertension. According to Hegner (2013) body changes due to the aging process make the elderly vulnerable to disease. Old age has a less immune system against disease because of a low immune system in line with increasing age.

Aspect of gender, women are more vulnerable than men where the highest percentage of people with hypertension are women. This is consistent with the research conducted by Khoman (2010). Harrison (2000) stated that extraordinary human race also affect the disease and also the incidence and clinical sign of the disease.

3. Correlationship between family support and recurrence of hypertension

Analytical statistic show p value of 0.01 smaller than 0.05 mean that there is a significant correlation between family support and the recurrence of hypertension.

According to Walker et al (2005) humans are one of the social creatures that live in families in which they are interconnected with one another. When dealing with problems in general, sharing and giving assistance. This was done as a form of support.

Family refers to two or more people who are united by the ties of togetherness and emotional ties and who identify themselves as part of family (Friedman, 1998). It is generally accepted that people who live in a supportive environment are far better off than those who do not have them. More specifically family support can weaken the impact of stress and can directly strengthen the mental health of individuals and families (Friedman 1998).

Rasmun (2004) stated that a family support system that is given to both listening, giving advice and encouraging emotions is very useful for someone who is in a state of hypertension. In general, people who live in a supportive environment, conditions are much better than those who do not have it. Support is considered to weaken the impact of stress in the study mentioned that support is a buffer and directly strengthen the mental health of individuals and families. Support is said to be an important coping strategy for families to deal with stress. Support can also function as a preventive strategy to reduce stress and its negative consequences (Friedman, 1998)

CONCLUSION AND RECOMMENDATION

Family support is an interpersonal relationships that provide assistance to individuals in the form of attention, emotions, instrumental assistance, providing information and assessment to individual in their social environment. The result of this study show that respondents with good family support 12 respondents (30%) does not experience the recurrence of hypertension. While respondents with lack of family support, 8 respondents (20%) is often experience hypertension recurrence. And 20 respondents who got sufficient family support seldom experience the recurrence of hypertension.

Effort to prevent relapse in terms of the ability of individuals to feel how likely they will suffer a recurrence if prevention is not done. So that if the individual does not feel what he is suffering, it is a risk and become a threat to him. He will not seek treatment and take precautions. From the total of 40 respondents, majority of respondents are seldom experiencing the recurrence of hypertension which is counted 20 respondents (50%).

Analytical statistic show p value of 0.01 smaller than 0.05 mean that there is a significant correlation between family support and the recurrence of hypertension.



From all the conclusion above, we recommend that :

1. Health care provider should aware that support, motivation and attention from family could be a therapy to minimize the risk of hypertension recurrence in elderly. An approach based on family could be one of treatment to suppress the incidence of hypertension in the family.
2. Family should be aware and sensitive in monitoring family member who has hypertension, to be able to find out early treatment in case of recurrence.

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**COMMUNITY KNOWLEDGE LEVEL ABOUT THE UTILIZATION OF INTEGRATED COACHING
POS OF NONCOMMUNICABLE DISEASE (POSBINDU PTM) WITH THE PREVALENCE OF
NONCOMMUNICABLE DISEASE AT AGE 15 – 59 IN WORKING AREA OF WONOSOBO
HEALTH CENTER IN SRONO BANYUWANGI 2018**

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ABSTRACT

BACKGROUND : Integrated coaching pos of noncommunicable disease(POSBINDU PTM) is a form of services that involves community participation through promotive preventive effort to early detection and control of the non communicable disease risk factors. This study is conduct to determine the correlation of community knowledge level about the utilization of POSBINDU PTM with the incidence of non communicable disease at the age of 15 – 59 years in the working area of Wonosodo Health Centre, Srono, Banyuwangi

SUBEJCT AND METHODE : the study was conducted with a cross sectional design using a quantitative approach. This study involving 100 respondents age 15 – 59 years old taken by propotional random sampling. The data collected by using a questionnaire.

RESULTS : statistical analysis using chi square show that 67 (67%) respondents has good kowledge and prevalence of noncommunicable disease is accounted in 25 respondents (25%). P value counted at 0.000 smaller than α 0.05 which is significantly positive between knowledge level and the utilization of Posbindu PTM. It means that there are significant correlationship between knowledge level about Posbindu PTM with the prevalence of non communicable disease.

DISCUSSION : the conclution of the study stated that sufficient knowledge about the utilization of Posbindu PTM services could decreasing the prevalence of non communicable disease.

Key words : knowledge, utilization, Posbindu, non communicable disease

INTRODUCTION

The current pattern of disease has changed and it marked by an epidemiological transition. Changes in disease pattern that were originally dominated by inectious disease are turn to non coomunicable disease. Global attention to non communicable disease is increasing along with the increasing frequency of occurence. Two of the ten main causes if death in the world are caused by non communicable disease such as stroke and ischemic heart disease. These two disease even become the top two etiologic of mortality in developed country and developing country (WHO, 2014).

Non coomunicable disease have become the leading death globally at the moment (Shilton, 2013). The data taken from WHO show that as many as 57 million (63%) mortality rates occur in the



world and 36 million (43%) morbidity is caused by non communicable disease. Global status report on NCD World Health Organization (WHO) in 2010 reported that 60% of etiologic of morbidity of all age in the world were due to non communicable disease and 4% died before the age of 70 years. All death due to PTM occur on people aged of 70 years. All death due to non communicable disease occur in people ages less than 60 years and 29 % in developing countries while in developed countries by 13% (Remais, 2012).

Data about non communicable disease in Banyuwangi Regency listed in the book of Banyuwangi in Figure for 2012 and 2013 stated that hypertension is the fifth highest disease in Banyuwangi Regency in 2012 and 2013 as many as 31,952 and 31,080 people (Central Statistics Agency, 2013 and 2014). The number of people with hypertension per year continues to decline but there are still many patients who die. Based on the report by section of Disease Prevention and Eradication (P2P) Banyuwangi Health Office (2015) stated that the number of people with hypertension in 2014 was 18,689 people with a case fatality rate (CFR) of 0.22% and people with diabetes mellitus as many as 6,167 people with CFR of 0.49%.

Wonosobo health center in one of 45 health centers in Banyuwangi that has implemented Posbindu PTM from 2017. Wonosobo health centre is the health centre that will be investigated because it has Posbindu coverage that is far from the target set (10% of target) even under 1% which includes coverage of risk factors for abdominal circumference (0.99%), BMI (0.95%), blood pressure (0.91%), cholesterol (0.34%) and blood glucose (0.31%) of the target activity as many as 20,658 inhabitants. The proportions of non communicable risk factors categorized as red in Wonosobo Public Health Centre are central obesity (57.85%) and general obesity (40.34%) indicating the proportion is above the district average. The problem found was the lack of community knowledge about the utilization of Posbindu PTM, because the respondents did not understand who the target of posbindu was and what activities were in posbindu PTM. Based on preliminary studies, the average respondents answered that the target of Posbindu was adults residents. This shows that respondents did not understand the actual target of Posbindu is healthy, risky people and people with non communicable disease aged over 15 years. In addition respondents responded that Posbindu activities were only free medical treatment. This phenomenon shows the lack of health information about Posbindu PTM and education about non communicable disease.

The implementation of non communicable disease countermeasure priorities as referred to the Regulation of the Minister of Health of the Republic of Indonesia number 71 year 2015 regarding the prevention of non communicable disease article 7, the Central and Regional Government must appoint a working unit or management unit responsible for carrying out planned, directed, and sustainable countermeasures. The designated working unit or management unit as referred to in paragraph (1) of the Central Government shall prepare an action plan or roadmap for the prevention and guideline for the implementation of countermeasures (Permenkes RI, 2015).

Based on this background researchers are interested in conducting research on the Correlation Between Community Knowledge about the Utilization of Posbindu PTM and prevalence of non communicable disease in the age of 15 – 59 years in the Wonosobo Health Centre, Srono, Banyuwangi in 2018. This study is conducted to determine the correlation between the community knowledge about Posbindu PTM with the prevalence of non communicable disease at the aged of 15 – 59 years in Working Area of Wonosobo at Srono Banyuwangi at 2018.



METHODE

This study is analytic survey with cross sectional approach. This study involved all people aged of 15- 59 years old totaling 20,685 people. The respondents were taken by proportional random sampling. The coorelation of these two variables were analyze by using Chi Square test.

RESULTS AND DISCUSSION

Knowledge about Posbindu is one of the factors that determine individual's coming to Posbindu. If the community's knowledge of Posbindu is lacking, then the community will tend to prefer to stay at home because they do not know about Posbindu. Therefore, if the community has good knowledge about posbindu, the community will also have a positive attitude about Posbindu, so that the community will be able to utilize Posbindu in their area (Nurizka, 2017).

Based on the results of the study according to the age group of the majority respondents are the age group 33 – 38 years, which is as amny as 27 respondents (27.0%) , while the lowest age group is the group of 15 – 20 years, which is as much as 7 respondents (7.0%). Age is one of the predisposing factors that plays a role in the utilization of health services. Wibisana (2007) in her thesis revealed that age really determines the utilization of health services. Because it deals with age spesific disorders and the ability of aged based individuals to overcome health problems

Table 1. Frequency Distribution of Respondents by Age

Age (Years Old)	Number of Respondents	Percentage (%)
15-20	7	7,0
21-26	17	17,0
27-32	12	12,0
33-38	27	27,0
39-44	16	16,0
45-50	10	10,0
51-59	11	11,0
Total	100	100

Table 2. Gender Frequency Distribution of Respondents

Gender	Respondents	Percentage (%)
Male	29	29,0
Female	71	71,0
Total	100	100

Based on the results of the study conducted by Putra (2010) which has number of respondents as gender as 29% for male respondents and the rest (71%) are women. Gender is one of the factors that influence the utilization of health services because in terms of the level of human vulnerability that originates from the gender itself, it makes teh utilization level of health services also different in each sex. Female respondents use more health services compared to male respondents since women have more time at home as a housewife than men who have to work outside home as



the head of family. This is also seen because women have a greater degree of concern than men who are slightly less concerned so that women pay more attention to health condition.

In addition to the previous study results obtained last respondent education results that most respondents are graduated from senior high school as many as 40% respondents. According to Notoatmodjo (2003) education is any effort that is planned to influence other people, whether individuals, groups or communities, so that they do what is expected by education practitioners. Feldstein (1983) stated that the high level of family education enables early recognition of symptoms of the disease thereby increasing efforts to seek treatment. According to Mubarak (2006), education factors influence the utilization of modern health services. Respondents with a high education level tends to reduce the use of informal health services (traditional healers) and increase the use of modern health services (doctors or paramedic). Education is the basis of one's intellectual knowledge, the higher the education the greater the ability to absorb and receive information. So that knowledge and broad insight are the factors underlying the actions taken and will further affect a person's behavior.

Table 3. Frequency Distribution of Respondents Based on Educational Level

Gender	Respondents	Percentage (%)
Elementary school	20	20
Junior high school	31	31
Senior high school	40	40
College	9	9
Total number	100	100

Educational level is related to a person's ability to absorb information and recognize symptoms of the disease so that they have the desire to utilize health services and actively play a role in overcoming their health problems. In other words, educated people value health as an investment. Educational status is closely related to one's awareness and knowledge, so that educational status has a significant influence on the utilization of health services. Usually people with low education, lack of awareness and good knowledge about the benefits of health services (Rumengan et al, 2015).

Table 4. Frequency Distribution of Respondents Based on Knowledge Level

Knowledge	Respondents	Percentage (%)
Good	67	67,0
Lack	33	33,0
Total	100	100

Based on table 4 it is known that the percentage of the number of respondents with a good level of knowledge category is 67 respondents (67.0%) and respondents with lack of knowledge are 33%.

According to the table 5 it can be seen that from 100 respondents, 25% are having non communicable disease and 75% are does not have. From those results, most of respondents are do not have non communicable disease.



Table 5. Frequency Distribution of Respondents Based on Health Status

Health Status	Number of Respondents	Percentage (%)
Having non communicable disease	25	25
Do not have non communicable disease	75	75
Total	100	

This could explain why people do not use Posbindu PTM since they feel healthy. In fact, Posbindu PTM is not only focused on those who are suffering from non communicable disease to control their health and prevent complication but also to those who are healthy for having a screening and or early detection of non communicable disease.

Table 6. Frequency Distribution of Respondents Based on The Disease

Disease	Number of Respondents	Percentage (%)
Hypertension	16	64
Diabetes mellitus	2	8
Heart disease	3	12
Kidney disease	4	16
Total	25	100

Table 6 shows that based on the disease, 25 respondents have non communicable disease and most of them are having hypertension as many as 64%. The activity of Posbindu is held for some reason. For individual who has risk factors of non communicable disease, the aim of activity is to minimize the risk factors so that the individual is in normal condition. And for individual who live with non communicable disease the activity was done to controlling the risk factors of non communicable disease to prevent the complications. Most of respondents who live with non communicable disease are not utilize Posbindu since they prefer to go to the physician in health centre than to go to Posbindu. This result is in line with the study conducted with Fauziyah Purdiani (2016) which stated that there are significant relationship between respondent's health status and the utilization of Posbindu PTM in Cilongok Health Centre with p value as many as 0.000.

Table 7. Cross Tabulation of Community's Knowledge Level about The Utilization of Posbindu PTM and The Prevalence of Non Communicable Disease

Knowledge Level	Prevalence of Non Communicable Disease		Total
	Having	Do not have	
Good	52	15	67
Less	4	29	33
Total	56	44	100
P value 0.000 $\alpha = 0.05$			

Table 7 shows that the result of chi square analysis has p value of $0.000 < \alpha 0.05$ which mean that there are significant correlation between community knowledge level about utilization of posbindu PTM and the prevalence of non communicable disease. This result is in line with the study conducted with Nurizka Rayhana Nasruddin (2017) which shows a significant correlation between knowledge and utilization of Posbindu PTM services with p value $0.000 < \alpha 0.05$.

Knowledge about Posbindu become one of factor that determine individuals to come to the Posbindu. If community has lack of knowledge about Posbindu they might be tend to not come to the Posbindu and prefer to stay at home. But if the community has sufficient knowledge about Posbindu,



they might be has positive attitude towards Posbindu, so that the community could utilize the service given (niriza, 2017). In this case knowldege about non communicabl disease are need to be improved. Especially for people with hypertension, those knowledge are needed to prevent hypertension and they are could optimize the utilization of Posbindu when the hypertension is relapse. This results is in line with the study conducted by Handayani (2012) which show that there are significant relationship between kowledge and utilization of elderly posbindu services (p value 0.000 and OR=61.5)

CONCLUSION AND SUGGESTION

According to the results of the study it can be conclude that the community has good knowledge about Posbindu PTM. The prevalence of non communicable disease is 25% and there are significant correlationship between community knowledge level about Posbindu PTM and prevalence of non communicable diasease at peopel aged 15 – 59 years old in Wonosobo Health Centre, Srono, Banyuwangi.

Health provider of Wonosobo Health Centre are expected to improve community knowldege about the utilization of Posbindu PTM through health education or socialization of Posbindu's schedule. And for the development of community health science this results are expected to increase the utilization of Posbindu PTM and also improve the knowledge about non communicable disease.

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SELECTION OF POST LABOR CONTRASEPTION IN SUCI VILLAGE PANTI JEMBER

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ABSTRAK

BACKGROUND: family planning (KB) is one of the efforts made to prevent pregnancy, both traditionally and modernly which aims to improve the welfare of mother and her child and realize the norms of small, happy and prosperous families that are the basis for the realization of a prosperous society through birth control and control population growth. Post delivery is a transition period to determine contraception. The space between pregnancy and childbirth is important for the health of the mother and child. It is a resting phase in waiting for the recovery phase. This study aims to determine the description of postpartum contraceptive choice and background of the selection.

SUBJECT AND METHODE : this study is a descriptive explorative study involving 33 mother who has baby aged 6 months old in Posyandu in Suci Village.

RESULT : the age of most respondents is the age of healthy reproduction that is 20 – 35 old; most respondents are graduated from elementary school and senior high school and their activity is become a housewife; most of respondents are multiparous; all respondents choose injection contraception since it is easy and practice to use.

DISCUSSION : selection of injectional contraception by all respondents is a reproductive right of women that must be respected. Easy and practical injection applications on a long period of time that is 3 months make respondents choose injection contraception compared to other contraceptives.

Key words : injectional contraception, post delivery

INTRODUCTION

Population problem is a problem faced by all countries both developed and developing countries, including Indonesia, this can be seen from the world population which is increasing rapidly with a higher population growth rate. To reduce the rate of population growth, the government conducted a national Family Planning Program (Murdiyanti, 2007). Population control is done through the family planning program (KB). The family planning program is carried out to spell out, delay and stop pregnancy or fertility. Contraception comes from the words counter which means to prevent or fight, while conception means the meeting between a mature egg cell which results in pregnancy. So the notion of contraception is to avoid/prevent pregnancy due to the conception of mature egg cell and sperm cell (BKKBN, 2005).

Family planning (KB) is one of the efforts made to prevent pregnancy, both traditionally and modernly, the aims of which is to improve the welfare of mothers and children and realize the norms of small, happy and prosperous families that are the basis for the realization of a prosperous society through birth control and control population growth (Arum, NS, Dyah, 2001). Post delivery is a transition period to determine contraception. The distance between pregnancy and childbirth is important for



the health of the mother and child. Post partum mother is a resting phase in waiting for the recovery phase.

Postpartum periode is a period that begins after labor is over and ends for about 6 weeks. However the entire uterine uterus will recover to its state before pregnancy within 3 months. Ideally couple must wait at least 2 years to get pregnant again (Prawirohardjo, 2005). Consultation of contraception in the post partum period is improtant to regulate the space of pregnancy, provide education to mothers about the forms of contraception, and also when it is safe to be able to return to having sex. The right choice of contraception requires knowledge of patients motivation and the eefficacy, safety, and ease of vaious contraceptives (Rayburn, 2001). Therea are several types of contraceotion that mothers can choose during the postpartum period. Examples include mini pill, IUD, implant, injection contraception, lactation amenorrhoea method and etc. In this case, a mother must also be observant iin seeing the level of effectiveness of contraception and its effect on lactation (Saifuddin, 2005). Based on the background above, the author conduct this study to describe the selection of contraception device among reproductive women in Suci village.

METHODE

This study is decriptive explorative metode. This study involving 33 respondents which is a mother who has baby aged 6 months old and having contraception and do some asesment in Posyandu. The respondents are taken by total sampling.

RESULTS AND DISCUSSION

Table 1. Characteristic of Respondent by The Age

Age	Frequency	Percentage
< 20 years old	3	9%
20 -35 years old	21	64%
>35 years old	9	27%
Total	33	100%

According to the table above it can be seen that most respondents are 20 – 5 years old as many as 21 people (64%).

Age is a factor that has improtant role in the choice of contraception. Based on the results of the study most respondents had ages between 20 to 35 years . categorically the age of respondents is in the range of adult and healthy reproduction so taht in the selection of contraception it can be said to be mature and behave. Another condition that must be considered is the healthy reproduction period, so this condition ia a golden period of reproduction. This in line with with research conducted by Bernadus et al (2013) which is stated that increasing age of an individuals is said to be more mature in mind and behavior. Age above 20 years is period of sparing and preventing pregnancy so that the choice of cintraception is more aimed at long term of contraception.

Table 2. Characteristic of Respondent by the Education

Education	Frequency	Percentage
SD	11	33%
SMP	9	27%
SMA	11	33%



Sarjana	2	7%
Total	33	100%

According to the table above we see that most respondents are graduated from elementary school and senior high school.

Education has an important role in performing behavior, especially related to health. The results of the study showed that only a small proportion possessed undergraduate education and the majority of respondents' education was elementary and high school. Behavior in choosing certainly has a background one of which is education. One's education is very decisive in one's thought process. Provision of information when in school will shape the character of each individual and ultimately will have an impact on behavior.

Table 3. Characteristic of Respondents by The Occupation

Occupation	Frequency	Percentage
Housewife	30	91%
Farmer	1	3%
Trader	1	3%
Teacher	1	3%
	33	100%

Based on table we can see that majority of respondents are housewives. Occupation is a supporting factor of someone in carrying out a behavior. The results showed that most respondents were housewives. Housewives spend more time at home. In contrast to working mothers. Interaction done by the mothers with others is more limited. This condition is supported by education that is still low and the location of areas that are not urban areas, so mothers rarely interact with the outside world. Provision of information obtained from health workers.

Table 4. Characteristic of Respondents by Parity

Parity	Frequency	Percentage
1	15	45%
2-3	17	51%
>3	1	4%
	33	100%

According to table 4, most respondents are multipara. Parity is the number of live births. The higher parity illustrates that the thinning process or family planning is lower. Based on the results of the study most of the respondents have parity 2-3 or are categorized multipara. The experience of the first child in the selection of contraception will certainly have an influence on the choice of further contraception. Angoi (2012) in Semarang stated that there was a significant relationship between parity (number of children) and contraceptive selection.

Table 5. Contraception Selection After Post Partum Periode

Selection Contraception	Frequency	Percentage
Injection	33	100%
Pil	0	0
IUD	0	0
Condom	0	0
Implant	0	0
MOW	0	0
MOP	0	0



Abstinence periodically	0	0
	33	100%

According to table 5 can be seen that all of respondents choose injection for their contraception. The choice of postpartum contraception is something that must be done. This is useful in the process of thinning children. Based on the results of the study all respondents chose injection contraception. This condition shows that the respondents already has the awareness to choose independently the best contraception shows a positive behavior in the respondent. The level of education, experience, occupation, and age all have a role. In the process of choosing injection contraception, of course the factors above have their respective roles, which contribute to building a positive behavior. Many of the reason chosen by respondents why all respondents chose injection contraception as if discussed in the next chapter.

Table 6. The Reason of Contraception Chosen

Reasoning	Ferquency	Percentage
Breat feeding	5	15
Menstruation smoothly	3	10
Easy to remember	9	27
Easy and practical	12	36
Suitable	4	12
	33	100%

Based on table 6 most of respondents choose the contraception because the ease and practical. The background of selection certainly affect the action of a behavior. In this study the reason for choosing injection contraception are easy and practical. This condition can be understood because injecting contraception has characteristics performed every 3 minths and 1 month is different from pill contraception. The pill must be taken every day so that the acceptors experience forgetting to drink it will be very possible so that contraceptive failure can occur. IUD contraception has weaknesses that must be inserted into the womb so how many people have their own worries even though the time period is very efficient.

CONCLUSION AND RECOMMENDATION

All respondents choose the injectional contraception since it is easy and practical. From the result the authors recommend to helath prvider to improved health education about contraception so that the community understanding is better. Contraception is the reproductive rights of every individual. Injectable contraception is ahormonal contraceptiive which also has side effects when used on women over the age of 35 years. So for acceptors aged over 35 years, respondents should change to other contraceptives.

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SOCIAL ECONOMY AND POSYANDU SERVICES IN DESA KALIANYAR, BONDOWOSO DISTRICT AS VILLAGE WITHOUT STUNTING

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ABSTRACT

BACKGROUND : Stunting has the highest prevalence compared to malnutrition, lack of nutrition, and fat. Stunting is identified characteristic of a child's length or height. Stunting is a nutritional problem that affects human resources. Stunting can happen due to many factors as posyandu services and socio economic. This study is conducted to determine the socioeconomic characteristics and posyandu services in Kalianyar village where there are no cases of stunting.

SUBJECT AND METHODE : This research used GIAN questionnaire through the East Java Provincial Health Office to collect the data. The subjects were 15 mothers from Kalianyar Village selected by data of posyandu. The result of this study showed that the important things to prevent stunting were water sources, mother's education, visits to the posyandu and the need to pay attention to posyandu services.

RESULTS : (93.3%) had taken their children to go to Posyandu and there were 6.7% of subjects who had never taken their children to go to Posyandu, 73.3% subject familiar with emo-demo and 26.7% never knew about emo-demo. Almost (66.7%) subject attend in emo-demo activity and 33.3% never attend in emo demo.

CONCLUSION : Some things that can be considered to prevent stunting, are water sources, mother's education, visits to the posyandu and the need to pay attention to posyandu services

Keyword : Stunting, Socio economy, posyandu services

INTRODUCTION

Indonesia is having a serious nutritional problem, namely stunting. Stunting is a nutritional problem that affects human resources (HR) (Kementrian Desa, Pembangunan Daerah Tertinggal, dan Transmigrasi, 2017). Based on Nutrition Status Monitoring (PSG) data, stunting has the highest prevalence compared to malnutrition, lack of nutrition, and fat (Buletin Jendela Data dan Infomasi Kesehatan, 2018).

The prevalence of stunting is increasing at 2017. The increase in short toddlers occurred from 2016 (27.5%) and 29.6% in 2017. The prevalence of toddlers is very short and short age 0-59 months in 2017 is 9.8% and 19.8%. This condition has increased from 8.5% and 19% the previous year (Buletin Jendela Data dan Infomasi Kesehatan, 2018).

The government has set policies related to stunting. Prevention of stunting includes the 2015-2019 RPJMN. The prevention policy faces five obstacles including, 1) ineffective stunting prevention program, 2) ineffective coordination of specific and sensitive intervention providers, 3) ineffective and efficient allocation and utilization of resources and 4) limited capacity and quality of program



providers, 5) lack of advocacy, campaigning, and dissemination related to stunting and other stunting prevention efforts (Tim Nasional Percepatan Penanggulangan Kemiskinan, 2018).

Prevention of stunting can be through several ways, namely prevention by fulfilling the nutrition of pregnant women, exclusive breastfeeding until the age of 6 months and providing complementary feeding (MPASI) after 6 months of sufficient quality, bringing toddlers to control growth in Posyandu, and increasing water access clean and sanitary facilities, and protect the surrounding environment (Sutarto, Mayasari, dan Indriyani, 2018).

The results of the stunting consultation with Bondowoso government on 9 July 2019, showed that Bondowoso was ranked the third highest in East Java related to stunting rates (Kabar Jatim, 2019). Posyandu in Bondowoso Regency showed that there are several villages where there are no stunted toddlers and stunts. One of them is Kalianyar village.

Therefore, the researchers conducted a study in Kalianyar Village to determine the socioeconomic characteristics and posyandu services in Kalianyar village where there were no cases of stunting. So the results of research related to village conditions can be a picture for other villages.

METHODE

The variables examined in this study were social economy and posyandu services. Socio-economics is a variable that describes social and economics, namely the last education, type of work, home ownership, type of building materials and house walls, type of lighting, waterways, sanitation, to fuel oil used.

Posyandu service variables consist of the existence of KMS, KIA, frequency of inviting children to come to posyandu, type of posyandu services provided, provision of vitamin A and intestinal worms, frequency of implementing emodemo to the topic of emodemo.

This study involving 15 mothers in the village of Kalianyar have children under five years old and under two years old. Subject data were obtained from surrounding Posyandu. Data collection was used a GAIN questionnaire through the East Java Provincial Health Office. Data processing was coding that used Excel and descriptive analysis by SPSS Program.

RESULT AND DISCUSSION

The results showed that the average mother had a junior and senior high school education. Ni'mah and Nadhiroh's research (2015) shows that maternal education is related to stunting cases, in which more than half of stunting cases occur in mothers with low education. The level of education will affect the nutritional status, because someone who is highly educated will know more about healthy lifestyles and how to maintain health (Hidayat and Ismawati.).

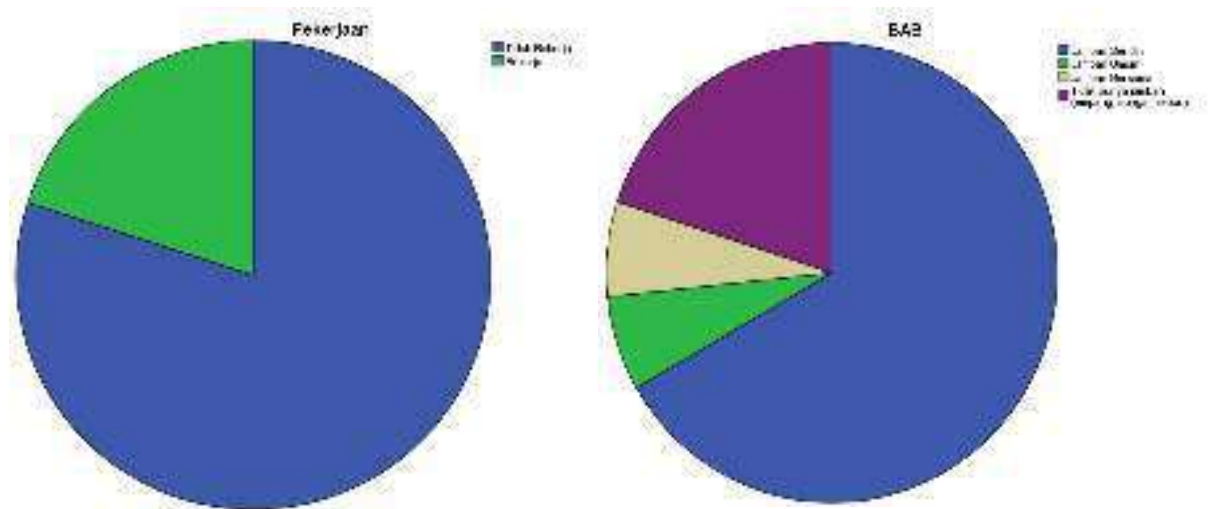
Table 1. Data on educational characteristics

Education	N (person)	Percentage (%)
Bachelor degree	1	6,7
Senior High School	5	33,3
Junior High School	5	33,3
Elementary school	2	13,3
Uneducated	2	13,3
Total	15	100



The results of figure 1 showed that there were 20% of working mothers. The status of working mothers is not related to the nutritional status of children, because children can still be fulfilled their nutritional intake even with caregivers (Wulanta, Amisi, Punuh, 2018).

In Figure 2, more subjects (66.7%) had a toilet and 20% did not have a toilet, so they defecated in ponds or rivers.



(1)

(2)

Figure 1 and 2. Frequency Distribution of Respondent based on Occupation and Latrin Ownership

Table 2 Characteristics of home ownership, lighting, and water sources data

Characteristict	N (Person)	Percentage (%)
House Ownership		
Own house	7	46,7
Parents house	8	53,3
Total	15	100
Source of Water		
Protected dug well	13	86,7
Unprotected dug well	2	13,3
Total	15	100

More than half of the subjects lived in the homes of parents (53,3%) and 46,7% lived in own homes. The whole subject used PLN (Perusahaan Linstrik Negara) lighting. Water sources were obtained from protecct dug wells in 86,7% of subject and water sources by unprotected dug wells as much 13,3%.

The results showed that 86.7% of subjects obtained water from protected dug wells and 13.3% obtained water from unprotected dug wells 13.3%. Poor sanitation effected of infectious diseases such as diarrhea and intestinal worms. Infectious diseases made weight loss and made stunting if they occur for a long time and are not balanced with adequate intake. Proper drinking water sources are protected drinking water namely tap water public hydrants, water terminals,



penampungan air hujan(PAH), boreholes or pumps a distance of 10 meters from the landfill of sewage, waste, and garbage (Buletin Jendela Data dan Informasi Kesehatan, 2017).

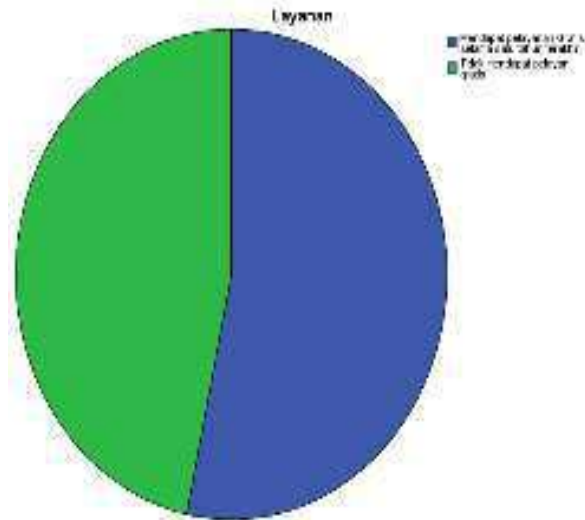


Figure 3 Data of obtained services

Figure 3 showed that more subjects have received free services (53.3%) compared to subjects who did not get free services (46.7%).

Table 3 Data on subjects obtained RASKIN (Beras Miskin)

Characteristic	N (person)	Percentage (%)
Get RASKIN	12	80
Not getting RASKIN	3	20
Total	15	100

Table 3 showed that more subjects received RASKIN (80%) compared to those who did not get RASKIN (20%).

The results also showed that the whole subject had a book-shaped KMS

Figure 4 showed that almost all subjects had a Kartu Ibu dan Anak (KIA), namely 86.7% of the subjects and there were 13.3% of the subject's children who did not have a KIA.



Figure 4 and 5. The ownership of KIA and Posyandu Visit in Kaliantar Village

Figure 5 showed that almost all subjects (93.3%) had taken their children to go to Posyandu and there were 6.7% of subjects who had never taken their children to go to Posyandu.

Types of posyandu services provided according to the subject, including weight weighing, height measurement, supplementary food (PMT), immunization, health checks, breastfeeding



counseling, supplementary feeding counseling, breastfeeding counseling, supplementary feeding counseling, administration, giving zinc when diarrhea, other drugs.

The results showed that almost subjects had taken children to the posyandu. Posyandu is a place that intervenes in cases of stunting because mothers can monitor the growth of children (Ministry of villages, development of disadvantaged areas, and transmigration, 2017). The results of Destiadi, Nindyia, and Sumarmi's research obtained the results of the study that children who were less active in coming to the Posyandu were at 3.1 times the risk of being stunted compared to children who were actively coming to the posyandu. This is because the posyandu is a place to monitor the nutritional status and growth of the right child because the child will be measured first in weight and height every month (Destiadi, Nindyia, and Sumarmi, 2015).

Tabel 4 Data of getting Vit A, cacingan drug , and taburia

Characteristict	N (person)	Percentage (%)
Getting Vit A		
Getting Vit A	14	93,3
Never getting Vit A	1	6,7
Total	15	100
Getting cacingan drug		
Getting cacingan drug	14	93,3
Never getting cacingan drug	1	6,7
Total	15	100

Tabel 4 showed that almost subjects getting vit A and cacingan drug (93,3%). All subjects never getting or never consumption of taburia (multivitamin that spread on child food).

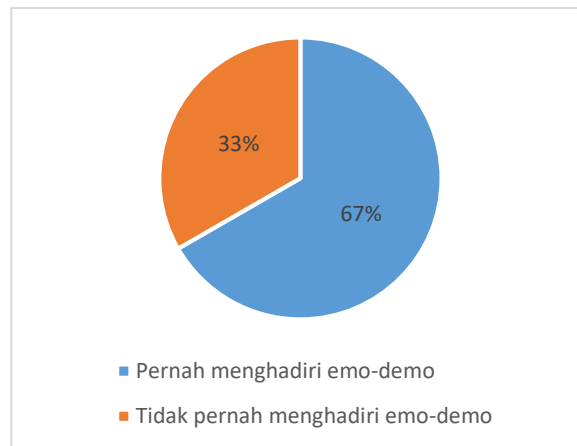


Figure 5 Data of presence in emo-demo activity

Figure 5 showed that 73,3% subject familiar with emo-demo and 26,7% never knew about emo-demo. Almost (66,7%) subjectattend in emo-demo activity and 33,3% never attend in emo demo. The topic of emo demo were 1) Giving ASI (Air Susu Ibu), 2) Attachement between mother and child, then 3)Siap berpergian.



The existence of posyandu has many benefits, including being able to carry out cadre education to provide knowledge related to the importance of nutrition the first 100 days of birth, monitoring nutritional status related to stunting. Posyandu can be carried out with the role of the posyandu cadres, including preparing the place and equipment for posyandu activities, recording KMS results or, weighing infants and pregnant women, providing health and family planning services, such as providing vitamin A, iron tablets, ORS, family planning devices, and others. Posyandu cadres work closely with health workers on duty in the village. So the existence of posyandu is very important to overcome nutritional problems (Purwanti, 2019).

CONCLUSIONS AND SUGGESTIONS

Some things that can be considered to prevent stunting, are water sources, mother's education, visits to the posyandu and the need to pay attention to posyandu services.

. Pregnant women, mothers with toddlers and young people need to be diligent in coming to the posyandu to obtain health-related services and can participate in other activities such as emodemos that can increase knowledge to prevent stunting.

For health workers to remain defensive in providing services for pregnant women under five, baduta, paud as a form of support in preventing stunting. It is also necessary to provide awareness for pregnant women, mothers with toddlers and baduta to regularly come to the posyandu.

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PARENTAL NUTRITIONAL KNOWLEDGE AND NUTRITIONAL STATUS OF PRE SCHOOL CHILDREN (3 -5 YEARS OLD)

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ABSTRACT

BACKGROUND : Parental nutritional knowledge will form an attitude towards children nutritional status. Good knowledge are expected to improve the nutritional intake of the children so that they could grow and develop as they aged. The preliminary study through interview obtained that there are still mothers who still do not understand about the right nutrition for children accordance with children's age. This study conducted to determine the relationship between parental nutritional knowledge and nutritional status of pre school children.

SUBJECT AND METHOD : This study is a correlational study conducted with cross sectional approach, this study involving 40 respondents who is taken by proportional random sampling from 60 population. The data collected by using a questionnaire and analyzed using correlation test.

RESULTS : Analysis using Chi Square test show p value $0.001 < \alpha 0.05$ means that there are significant relationship between parental nutrition knowledge and nutritional status of pre school children.

CONCLUSION : Parental attention about nutrition plays an important role in creating qualified generation in the future. children nutritional status will determine with child's intelligence.

Key words : parent, nutritional status, knowledge, pre school.

INTRODUCTION

Children are an age group who shows the fastest growth so that they need a high caloric nutrition accordance with their age. Parent plays an important role to make sure that the child get the nutrition they needed since in this situation children need attention and support in facing fast growth and development. To make sure that the children get sufficient nutrition the parent should have good knowledge about nutrition so that the parent could provide a balanced diet menu for their children (Devi, 2012).

Beside food consumption and infection factors, availability of family resources such as education and parent's knowledge, family income, parenting pattern, sanitation and clean environment, availability of time and family support were other factors that could determine the nutritional status (Karyadi, 2005).

Parental nutritional knowledge is things parent know about healthy food for certain group age, and how parents choose, process and prepare the food correctly. Parents knowledge will determine the food selection behavior and ignorance will cause an error to choose and prepare the food correctly. Knowledge about how to keep the food healthy is determinant factors of individuals



health. Family support also plays a role in the magnitude of nutrition problem in Indonesia (Notoatmodjo, 2007).

Based on 2017 Nutrition Status Monitoring (PSG) conducted by the Ministry of Health, the under five (toddler) who experienced nutritional problems in 2017 reached 17.8%, the same as the previous year. The number consisted of toddler with malnutrition as many as 3.8% and 14% are toddler with nutritional disorder.

According to preliminary survey conducted in RT 04/RW 39 Kebonsari Village, Summersari Subdistrict, Jember Regency, shows that 15 (3.4%) toddlers was found malnutrition. From the results of the preliminary survey the researcher wanted to find out whether the situation was related to parental knowledge about the nutritional status of children under five. This study was conducted to determine the relationship between parental nutritional knowledge and nutritional status of preschool children.

METHOD

This study is a correlational study conducted with cross sectional approach, this study involving 40 respondents who is taken by proportional random sampling from 60 population. The data collected by using a questionnaire and analyzed using correlation test.

RESULT AND DISCUSSION

The study conducted on a sample that met research criteria as many as 40 respondents. The respondents were a mother who has preschool children and living in working area of Galdak Pakem health center. The descriptions of respondents consisting of maternal age and mother's education as follow.

Table 1. Respondent Characteristics

Characteristics	Frequency	Percentage (%)
Mothers's age (years old)		
20-30	24	60
31-40	13	32,5
>40	3	7,5
Education		
SD	1	2,5
SMP	7	17,5
SMA	23	57,5
Perguruan Tinggi	9	22,5
Children's age (month old)		
<12	5	12,5
12-23	13	32,5
24-36	9	22,5
37-48	5	12,5
49-59	8	20
Children's sex		
Male	28	70



Female	12	30
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Data in table 1 shows that majority of respondents are 20 -30 years old, graduated from senior high school, has children age 12-23 month old and has a boy.

The variable tested in this study is the correlationship between the parental nutritional knowledge and the nutritirional status of preschool age children. Knowledge was measured using a questionnaire about improving the nutritional status of preschool children. Nutritional status is measured by Z – score asesment. For body weight measured by the steel balance and micotoa for height.

Table 2. Frequency Distribution of Parental Knowledge about Nutrition

Knowledge	Frequency	Percentage
Good	3	80
Less	1	20
Total	4	1

According to the data in table 4 majority of respondents has good knowledge about nutrition. While the nutritional status of pre school age will shows below :

Table 3. indicators of Children Nutritional Status

Indicators	N	%	N	%	N
BB/U	24	60	16	40	40
TB/U	22	55	18	45	40

According to the data we see that most of respondent has good nutritional status

Table 4. Cross Tabulation of Parental Nutritional Knowledge and nutritional status of pre school children

Parental knowledge	Good	Percentage	Bad	Percentage
Good	21	53.2	7	14.9
bad	4	6.4	9	25.5
P value 0.001				

Table 4 shows that there are significant correlationship between parental nutritional knowledge and nutritional status of pre schoo children which has p value of 0.001.

According to the research that has been done, it is found that the nutritional status of children under five based on weight/age and body height/age majority is good compared to the bad one which is 60% and 55% compared to 40% and 45%. While the education majority was graduate from senior high school, which is 57.5%. this is in accordance with previous research conducted by Trimanto (2008) which says the higher parents education they will be more concern for health, especially infromation about maintaining the nutritional status of children so that children's nutritional fulfillment is monitored.



In addition, based on the results of research that has been done, the results show that the age of most parents is in range of 20 -30 years old as many as 24 people (60%). These results are consistent with research conducted by Munthofiah (2008) which stated that the age of parents has a significant influence in the nutritional status of the children under five, where younger mother (29 years old) are 3 times more likely to have children better nutritional status when compared to older mothers ($p = 0.004$, $OR = 0.32$).

Based on Chi Square statistical test results to determine the correlation between the parental nutritional knowledge and nutritional status of pre school children show p value 0.001. This result is in accordance with the results of research from Kurniawati (2012), obtained a p value = 0.001 there is a correlation between maternal nutritional knowledge and nutritional status of children under five in Baledono Village Purworejo District. In addition, according to the research conducted by Yudi (200) where the p value is 0.026 which means that there is a significant correlation between maternal knowledge and nutritional status of children aged 6 – 24 months in Medan Area district.

Yudi (2008) stated that parents' attention to toddler nutrition will make parents better understand the fulfillment of balanced nutrition for toddlers. Parental knowledge about toddler nutrition could change at any time depending on what is influencing, such as knowledge obtained from nurses, midwife posyandu cadres, physicians, as well as informative things like social media that can influence the knowledge itself, especially parents.

Ernawati (2006) stated that nutritional status has a very big role in creating a quality generation in the future. Nutritional status is related to children's intelligence, the formation of intelligence at an early age depends on the nutritional intake received. Poor nutrition in infancy and children, especially at the age of less than 5 years can cause disruption of physical growth and intelligence of children.

Good nutritional status is the main requirement for the realization of quality human resources, especially for toddlers. Toddlers who experience disorders or malnutrition at an early age will disrupt growth and development, causing pain and death. Nutritional disorders are generally caused by lack of nutrition, infection and the most important is the lack of parental attention (Junaidi, 2012).

CONCLUSION AND RECOMMENDATION

Based on data analysis and discussion in this study the authors conclude that there is a significant relationship between parental knowledge and the nutritional status of preschoolers.

Health workers are expected to provide counseling to the parents routinely about the importance of knowledge about nutrition for pre school age children. And parents are expected to always pay attention to the nutritional status of pre school by bringing them to the posyandu every month.



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SELF EFFICACY ADOLESCENTS IN PREVENTION OF RISKY BEHAVIOR OF DRUG ABUSE IN BALUNG JUNIOR HIGH SCHOOL

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ABSTRACT

BACKGROUND : Drug abuse is a problem that must be solved because it is related to the future of the nation in this case is teenagers. Prevention of drug abuse can be done from within adolescents through increasing self-efficacy (self-confidence) to take preventive drug abuse measures. This study aims to identify adolescent self-efficacy in the prevention of drug abuse in Balung Junior High School.

SUBJECT AND METHODE : This research is a descriptive analytic study with 77 samples.

RESULTS : Result of this research found self efficacy variable the majority showed high self efficacy by 42 respondents (54.4%) and others showed moderate self efficacy by 45.5%. In risk behavior, it is found that there are mostly risk behaviors among respondents, namely 64 respondents (83.1%) and only 13 respondents (16.9%) who are not at risk.

CONCLUSION : Recommendation of this study To the parties involved in this case are the family, school, health workers, government, law enforcement and other parties there needs to be an increase in the socialization of increasing understanding of youth in preventing drug abuse

Key Word : Adolocent, drug abuse, self efficacy

INTRODUCTION

The problem of drug abuse (narcotics, psychotropic substances and other addictive substances) is a complex problem and causes losses that cover various aspects and are related to the future of the nation. Although the prevalence of drug abuse tends to decrease in the last 10 years, both for use and a year of use. In 2016, there were an estimated 167 to 315 million people worldwide (around 5.6% of the world's population aged 15-64 years) who had abused drugs at least once. The prevalence rate ever used decreased from 8.1% (2006) to 3.8% (2016) Or it can be interpreted, if in 2006 there were 8 out of 100 students who used drugs then now there are only 4 people who use drugs in in 2016). (Badan Narkotika Nasional Republik Indonesia & Pusat Penelitian Kesehatan Universitas Indonesia, 2017)

The large number of drug abuse cases becomes an important source to pay attention to adolescents as those who are at risk of drug abuse. Nearly 36% of adolescents are at risk of drug abuse.(Purwandari, 2015). Behavior risk of drug abuse is influenced by other behaviors that can be a stimulus that affects drug abuse such as smoking, drinking alcohol and premarital sex (Badan Narkotika Nasional Republik Indonesia & Pusat Penelitian Kesehatan Universitas Indonesia, 2017)



Based on the literature review risk behavior in adolescents is influenced by knowledge, attitudes, age, sex, education, economic status, access to information media, communication with parents and the presence of friends who behave risky (Muslihatun & Santi, 2015). Factors of drug abuse by adolescents come from individual factors (internal), family factors and peer factors. Adverse influences from the social environment, especially the influence and pressure of a group of peers often become a source of causes of drug abuse. The peer group serves as the initial media for introductions to narcotics (Afiatin, 1998).

Risk behaviors in adolescents can also be caused by negative psychological attributes such as self-esteem and low efficacy and loss of ability to control health. (Arifa Insani Anggai, 2015). Efficacy plays a very important role in daily life, a person will be able to use his potential optimally if self-efficacy supports it. Self-efficacy is a belief in a person to be sure of being able and successful in doing something until the final goal is reached. Self-efficacy has a strong relationship with risky behavior, one of which is drug abuse (Rustika, 2016; Wilandika, 2017)

Based on the description above, the researcher wants to identify how self-efficacy in adolescents in preventing risk behavior of drug abuse in Balung Junior High School Jember

METHODE

This research is descriptive analytic. The population in this study were 130 respondents in Balung Middle School. The sample size in this study was 77 respondents taken using simple random sampling technique. Data collection instruments used in this study were self-efficacy questionnaire and risk behavior questionnaire. The risk behavioral questionnaire consists of 10 questions Is your residence very close to drugs? Do you like to hang out with drug addicts? Do you have a smoking habit? Do you make smoking as a stress reliever? Do you like to hallucinate? Do you have bad habits to increase your confidence? Have you ever seen a form of drugs? Do you always spend time hanging out with friends without clear goals? Have you ever been offered to try drugs? Did you ever intend to try drugs? The self-efficacy instrument consisted of 26 questions with a Likert scale.

RESULT AND DISCUSSION

Table 1. Distribution of Characteristics of Respondents from students of Balung Junior High School (n = 77)

Characteristics	Total	Prosentase
Age		
12	2	2.6
13	4	5.2
14	56	72.7
15	15	19.5
Gender		
Boy	27	35.1
Girl	50	64.9
Type of Residence		
With Both Parent	73	94.8
One Parent	1	1.3
Alone	3	3.9



Parent marital Status		
Maried	75	97.4
widower / widow died	1	1.3
widower / widow alive	1	1.3
Father's occupation		
PNS	13	16.9
Entrepreneur	46	59.7
Private	12	15.6
Farmer	6	7.8
Mother's occupation		
PNS	11	14.3
Entrepreneur	39	50.6
Private	20	26.0
Farmer	7	9.1
father's education		
Elementary School	5	6.5
Junior High School	14	18.2
Senior High School	40	51.9
Collage	18	23.4
Mother's education		
Elementary School	6	7.8
Junior High School	16	20.8
Senior High School	34	44.2
Collage	21	27.3

Based on the results of the study found that most risk behaviors are risk behaviors among respondents, as many as 64 respondents (83.1%) and only 13 respondents (16.9%) who are not at risk. Respondent's risk behavior in this study shows a high number this can be caused because the respondent is said to be at risk if it intersects with 1 condition out of 10 questions.

Based on the analysis of the National Narcotics Agency smoking, alcohol and free sex become one of the triggers in drug abuse. (Badan Narkotika Nasional Republik Indonesia & Pusat Penelitian Kesehatan Universitas Indonesia, 2017). In addition, risk behaviors that affect the level of risk of narcotics use are smoking, visiting nightlife, hangout behavior, school attendance behavior and alcoholic drinks.(Azmiardi, Taufik, & Abrori, 2015)

Based on research conducted by afandi (2009) Factors that influence drug abuse are gender, residence, marital status of parents, academic achievement, smoking habits, smoking friends, peer group members and extracurricular activities. The involvement of free time activities as an effective mediator becomes a position between the school's commitment to risk behavior for drug abuse. This means that the involvement of positive free time activities must be carried out among adolescents and well managed so that the commitment of the school as a social control institution is able to function properly to prevent risk behaviors of drug abuse (Purwandari, 2015). Based on this research the characteristics of the respondents most teenagers live with parents, where control is still exercised by parents. Only a small proportion of families get divorced so that parents' love or attention is gained by teenagers. Both parents' knowledge is high with an average high school and



above. Although supported by the characteristics of respondents as above, communication and attachment in the family are not reflected in this study so that it can be confounding in this study.

According to Nevid, dkk. (1997) in (Afiatin, 1998) drug abuse is very closely related to the role of a number of factors that involve cognitive factors such as expectations and beliefs about drugs, the decision making process and self-awareness. Expectations and beliefs about drugs are greatly influenced by individual knowledge about drug problems. Adolescents who have drug knowledge about the negative effects of drugs, so they tend to have positive hopes and beliefs and this makes teens have a tendency to use drugs to be smaller.

Table 2. Distribution of self efficacy variables and risk behaviors among students of Balung Junior High School (n = 77)

Variabel	Total	Persentase
Self Efficacy		
Moderate	35	45.5
High	42	54.5
Risk Behavior		
Risk	64	83.1
No Risk	13	16.9

In addition to hopes and beliefs, the influence of individual beliefs is also very important in drug abuse. Teenagers who doubt their ability to be easily attracted to drug abuse will be easily attracted to be able to change their conditions. The appeal of adolescents to drugs lies in their ability to increase self-efficacy expectations, both directly, for example by increasing feelings of being more powerful, stronger, and more prosperous; or indirectly, for example by reducing feelings of anxiety and stress.(Afiatin, 1998)

Based on the results of the analysis of the efficacy of adolescents in this study showed self-efficacy in the majority of respondents showed a high self-efficacy of 42 respondents (54.4%) and moderate self-efficacy of 45.5%. While the results of research on risk behavior, there are mostly risk behaviors among respondents, as many as 64 respondents (83.1%) and only 13 respondents (16.9%) who are not at risk. Efficacy plays a very important role in daily life, a person will be able to use his potential optimally if self-efficacy supports it.(Rustika, 2016)

In this study the division of self efficacy into 3 is high, medium and low. The results showed that there were no respondents who showed low self efficacy. This is caused in social cognitive theory, low self-efficacy will cause increased anxiety and avoidance behavior. Individuals will avoid activities that can worsen the situation, this is not caused by threats but because they feel they do not have the ability to manage aspects of risk (Rustika, 2016).

According to Schwarzer dan Renner (1995) there are 3 dimensions that describe a person's self-efficacy. The first dimension is the belief to persevere, in the form of a belief in continuing to carry out tasks in all situations and conditions. The second dimension is the belief to increase ability in the form of belief to be able to learn certain abilities in all situations and conditions. The third dimension is the belief to control oneself in the form of beliefs still perform positive behaviors despite the relatively large challenges faced, the belief to be able to learn all the abilities to avoid risky behavior, and the confidence to control oneself from risky behavior despite internal and external pressure is



very strong. Self-efficacy has a positive correlation with risk behaviors in adolescents, although in this study the dominance of high self-efficacy is not supported by risk behaviors that are raised by adolescents. Most adolescents have the risk to get into drug abuse (Wilandika, 2017)

Adolescents can avoid risky behavior if adolescents are embedded in self-efficacy to prevent risky behavior. High self-efficacy in adolescents makes adolescents have the personal confidence to keep behaving healthy despite the tough challenges. Self-efficacy makes teenagers also have the confidence to be able to learn all the abilities to avoid risky behavior. Self-efficacy is an individual's evaluation of his ability or competence to complete a task, achieve goals, or face a challenge. Individuals who have high self-efficacy will be able to motivate themselves and control the surrounding environment so that they can display certain behaviors as they wish.

CONCLUSION AND RECOMMENDATION

In the self efficacy variable the majority showed high self efficacy by 42 respondents (54.4%) and others showed moderate self efficacy by 45.5%. In risk behavior, it is found that there are mostly risk behaviors among respondents, namely 64 respondents (83.1%) and only 13 respondents (16.9%) who are not at risk.

To the parties involved in this case are the family, school, health workers, government, law enforcement and other parties there needs to be an increase in the socialization of increasing understanding of youth in preventing drug abuse

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EFFECTIVENESS OF PARENTING EDUCATION TOWARDS PARENTS ROLE IN GROWTH AND DEVELOPMENT OF PRE SCHOOL CHILDREN

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ABSTRACT

BACKGROUND : the importance of early education in children has come to the attention of the government. If at that age the child's brain does not get maximum stimulation then all child development both physically and mentally will not develop optimally. Care has the aim to encourage the growth and development of children, both physical and psychological, parenting is also a process of interaction that is carried out continuously between parents and children. The process of care cannot be separated from the influence of culture where the child is raised. Parents has important role which is begin since their child is in the womb untill they die to nurture their children. Profile of Banyuwangi District Health Service explain that there are 2.9% or 457 out of 15,762 ore school age children who experienced speech and language disorders. The purpose of this study was to determine the effect of providing parenting education on the development of pre school age children in PAUD 05 Klaibaru Cluster.

SUBJECT AND METHODE : this study is quasy experimental design conducted with pretest – post test group approach. The data anayzed by using chi square and wilcoxon sign rank test to determine the differences before and after treatment for both control group and experimental group.

RESULT : the result show obtained from chi square test show p value of 0.05 which mean that parenting has significant effect toward independency and emotional regulation skill to pre school children. Although when compared between pre and post results is not too different.

CONCLUSION : Parenting is a reflection of parent in caring for, raising, caring for and educating children directly so that children become independent in learning.

Key words : character building, parenting, pre school children

INTRODUCTION

Parenting is a process that brings the final result, protect ang guides to a new life, provides basic resources, love, attention and values. Parenting has the aim to encourage the growth and development of childre, both physical and psychological. Parenting is also a process of interaction that is carried out continuously between parent and children (Erlanti et al, 2015). The process of care cannot be separated from the influence of culture where the child in raised. Parent playas an important role and that the function of that role start since the childs has not being born untill the parents die to nurture their children in a better way. This process should involving all element like the family (especially the parent), teachers, student it self, and peers must support each other so that what is expected could be achieved optimally (Noeraeni,2017).

Unicef states that the high incidence of developmental disorders in children under five, especially motoric development is arrounf 27.5% or 3 million children experience motor development



disorders. In Indonesia there are 16% of children under five experiencing intelligent impairment, and it is caused by brain developmental disorders (Ministry of Health, Republic of Indonesia, 2008). Banyuwangi District Health Office Profile explains that there are 2.9% or 457 out of 15,762 pre school aged children who experience speech and language disorders (Health Office of banyuwangi District, 2015).

Parenting style determines how the child will grow and develop later, and the wise parents will influence the child to achieve balance in learning and reach maturity biologically and emotionally. But if the parent are not wise in performing parenting style it will bring wrong impact significantly. These make the child to have poor emotional regulation, difficulties in adapting to a new environment and will experience some psychological problems when they are growing up.

Another opinion suggest that the basic character values that must be taught to children from an early age are trustworthy, respectful and caring, responsibility, courage, sincerity, honesty, visionary, diligent, disciplined, having integrity and being fair. Character is formed through three stages, namely knowledge, implementation and habits. Children who have good knowledge may not be able to carry out according to their knowledge, and if they are not accustomed to being trained to do good (Suwartini, 2017).

Good character quality should be formed and fostered from an early age, because at that age is a critical age for the formation of children's character. A child is like an empty bottle with no stains at all, something that is poured into the empty bottle that will fill the the empty bottle. As the time flies children will meet, learn and do many things from what they see, touch, hear, smell and feel (Robiah, 2018).

Parenting children would be ideal if carried out by both parents. The parents cooperate each other in providing care and education to their children so that they can monitor and evaluate their children development optimally. Parenting is a reflection of parent in caring for, raising and educating their children directly so that children become independent in learning. Something that can affect parenting are the background of parents and teachers, such as parental education and economic status, teachers perception and parental perception of parenting. This study was conducted to determine the effect of parenting education towards development of pre school age children.

METHODE

This study is quasi experimental research, conducting with pretest – post test control group design. Independent variables is parenting education that was given through seminar and dependent variables are knowledge and parenting pattern. The study conducted in PAUD 5 Kalibaru and involving 46 of parents selected by simple random sampling. The instrument was tested for validity and reliability by population outside the respondents which was conducted by pretest and posttest questionnaire. The univariate analysis were conducted using Chi Square analysis while the bivariate analysis were conducted by using Wilcoxon sign data test.



RESULTS AND DISCUSSION

Based on the results of data collection conducted on PAUD 05 Kalibaru were analyzed by using chi square test to see the effect of parenting education towards the implementation of parents role in growth and development of preschool age children. The results are listed in the following table :

Table 1. Frequency Distribution of Respondents Based on The Knowledge

	Observed N	Expected N	Residual
Less	2	23.0	-21,0
Good	44	23.0	21.0
Total	46		

Based on the table 1 it is known that respondents with good knowledge level was 44 respondents(95%) and some them were has lack of knowledge.

Knowledge about parenting education could be accessed at school since the school is formal institution that involving teh interaction betweenb these two. The teacher will teach the students about maturity. The application of concepts of Parenting Education in everyday life is the best and most effective way. Parents is also play an important role in determining the education for their children since condition of family will affect the decion making about children's education. It also affected by the knowledge about children's higher education. The better parent knowledge about education it will push them to send their children to school to extend their children education, and it will make the children success in the future. Some of data finding shows that after getting involved in parenting education, the parents are expected to to appllied it at home and this knowledge is expected to be used py parents to prepare their children's education for tertiary education.

Table 2. Frequency Distribution of Respondnt Based on Parent's Perception of Growth and Development

	Observed N	Expected N	Residual
Less	5	23.0	-18.0
Good	41	23.0	18.0
Total	46		

According to the data in table 2 it is known that respondent with good perception were 41 respondents (89.1%). It is implied that mother already has good attitudes towards childrens growth and development.

Educational process are involving every one in the circumstance so that the teacher, students and parents should supporting each other to reach the goal optimally. Most of parents thought that education is teacher's responsibilities (Reskia, 2014). Inablity to understand children's need will triggers a conflict between the parents and children in parenting. Conflict arises as the parents belief that good or bad the children will be is parents responsibility. Parents believe that if they nurturing their child in the "right" way the the children will become a perfect individual. Children behavior (adolescent) which become a dissident to the parents will and it was a failure in educating children (Missiliana, 2014).

The aims and advantages of positive parenting is helping the children to have a positive confident and love to their parents, harmonize the relationship of children and their parents through



attention when then obey the rules, giving help and show some affection, and forming a discipline through consistent education accompanied by consequences from the parents. The main aims of parenting is helping the parents to set a comfortable and peaceful liveor their child and supporting their child to have high welfare and able to achieve life satisfaction so that their children will live in happiness. Nurturing in oarenting has some principal things whic are : (1) fulfillment of children's nutrition since nutrition has big impact to childrens development, consentrarion and other mental ability, (2) create a balance life where the children has same chance to play, learning and explore the environmet and having quality time with parents, (3) developing a safety and security in daily live to protect the child from the negative effect of environment, a situation not yet understood and create a positive environmet, (4) maintaining an open communication to the children, their friends, schools, and environment surround them, (5) being an active parents so that the children knows that they are loved, having a strong bonding and it will used as a reference for children to behave.

Table 3. Frequency Distribution of Respondents Based on Parent Perception of Parenting

	Observed N	Expected N	Residual
Less	12	23.0	-11.0
Good	34	23.0	11.0
Total	46		

According to the table 3 it is known that respondents with good parenting pattern are 34 rspndents (74%). We can see that there is still some parents who have not delivered a good parenting to their child.

Authoritarian parenting is a parenting pattern where tha parents obtruding their children, nurturing the kids with some strict roles , force the children to behave like the parents and limit the child to behave at their own. Permissive parenting is the opposite of authoritarian parenting, focusing to the child where the child has board freedom so that there is no restriction on rule from the parents. Democratic parenting is signed by parents recognition towards children ability. Children are given chance to be independent. The parents always supporting the children to talk about what they want openly (Khaira, 2016).

Implementing parenting need an extra attention since parenting has an urgent role in creating children personality like the level activity of fine motoric development. Parenting is about how the parents understanding their child characteristics so that the children do not feel stressed at the ralationship with the parents. The parenting pattern chosen by the parents should adapting and understanding the children since every child is unique. There are some parents who threat their child in the same way for all the children. It will bring up oppsition from the children, complaining and the results will dissapointed (Sari, 2015).

Based on Chi Square analysis result it is showed that the p value is $0.000 < \alpha = 0.05$ which mean that there are significant correlationship between knowledge, perceptionm and parenting education towards parents role on growth and development of children.



Tabel 4. The Effect of Parenting Education towards Parents Role on the Growth and Development of Pre School Age Children

Test Statistics						
	pre pengetahuan	pre sikap	pre pola asuh	post pengetahuan	post sikap	post pola asuh
Chi-Square	25,130 ^a	10,522 ^a	5,565 ^a	38,348 ^a	28,174 ^a	10,522 ^a
df	1	1	1	1	1	1
Asymp. Sig.	,000	,001	,018	,000	,000	,001

a. 0 cells (,0%) have expected frequencies less than 5. The minimum expected cell frequency is 23,0.

The result with significancy of 95% means that implemented parenting by the parents has significant effect to the in, adependency and emotional regulation ability of pre school age. The p value of 0.000 mean p value < α 0.05. Parent role plays important part in the growth and developmental of pre school age children so that the child will be able to finish their assignment (homework), has a healthy competition, feel happy to gather arround with their peers and having a best friend, taking part in group activities. Parents as stimulator should direct the children to behave industry.

It is in line with the study conducted with Tuegeh, Rompas and rasun (2011) who stated that family role determine children independency even in children with mental retardation. At the same time family with little attention will slow down the independency of children with mental retardation. This argument is supported bu Purnomo (2013) which said that family role in optimize children growth and development to build children character.

CONCLUSION AND RECOMMENDATION

The result obtained from this study is parenting has significant effect toward independency and emotional regulation skill to pre school children. From those conclusion, the reccoemend that the next study should explain deeply about children growth and development by using true experimental methode and observations are conducted continously in spesific range of time so that the impact of parenting will observe clearly and this training is also need to be shared with the the teacher.

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NUTRITIONAL SURVEILLANCE FOR STUNTING AMONG CHILDREN UNDER FIVE YEARS OLD IN JEMBER DISTRICT

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ABSTRACT

BACKGROUND : Stunting is a nutritional problem in children, where the child has a significantly shorter body compared to the average age of the child. Stunting affects an individual's educational and wage-earning potential and can even affect the next generation of children. The aim of the study was undertaken to assess the risk factors associated with stunting among children under five years old in Jember district.

SUBJECT AND METHODE: this study was descriptive survey in the working area of Sukowono Public Health Center. A total of 249 children were selected for nutritional assessment in terms of stunting using the new World Health Organization growth standards.

RESULTS : Hierarchical logistic regression was used to examine the risk factors for adverse nutritional status. Hierarchical logistic regression analysis showed that the risk factors for stunted children were duration of exclusive breastfeeding (<6 months), low birthweight, and pregnancy anaemia. These results indicate that malnutrition especially stunting is still a major public health problem among children under five years old.

CONCLUSION: The government should implement appropriate nutritional intervention strategies to help reduce the prevalence and risk factors of stunting in children.

Keywords: Stunting, Risk Factors, Children Under Five Years

INTRODUCTION

Stunting is a nutritional problem in children, where the child has a significantly shorter body compared to the average age of the child in his time. Stunting is still a major nutritional problem in both developed and developing countries. WHO estimates that the prevalence of stunting in Latin America in 2015 was 11.3%, affecting 6.1 million children under five years (WHO, 2014).

The prevalence of short toddlers in Indonesia continues to increase from year to year (in 2007 by 18%, in 2013 as many as 19.2%, and in 2018 a number of 19.3% of short toddlers), with the total number of toddlers very short and short of 30, 8% (Riskesdas, 2018). Indonesia is included in 17 countries among 117 countries that have three nutritional problems, namely stunting, wasting, and overweight (Achadi, 2015). East Java is one of the provinces with a high prevalence of stunting under five (30% - <40%) at 32% (Riskesdas, 2018). Whereas in Jember the number of stunted children was 80,359 or around 44.1% (TNP2K, et.al, 2013).



Nutritional problems, especially stunting (short children), can hamper children's development, with negative impacts that will take place in the next life. Studies show that short children are strongly associated with poor educational performance, decreased length of education and low income as adults. Short children face a greater likelihood of growing into adults who are less educated, poor, less healthy and more vulnerable to non-communicable diseases. Therefore, short children are a predictor of the poor quality of widely accepted human resources, which in turn reduces the productive ability of a nation in the future (UNICEF, 2012). This condition is a major public health problem (Prendergast & Humphrey 2014).

Although Indonesia has shown a steady reduction in poverty, nutrition problems in children still show a slight improvement. From 2007 to 2011, the proportion of poor people in Indonesia decreased by 16.6-12.5%, but nutrition problems did not show a significant decrease. The prevalence of short children is very high, affecting one in three children under five, which is a proportion that is a public health problem according to WHO criteria (UNICEF, 2012).

The proportion of short children in the poorest population quintile is almost double the proportion of children in the highest wealth quintile. Rural areas have a greater proportion of short children (40%) compared to urban areas (33%). The prevalence of short children living in households with uneducated household heads is 1.7 times higher than the prevalence among children living in households with highly educated household heads (Kemenkes RI, 2018).

Under these conditions it is necessary to have a strategy to tackle stunting, one of which is through nutritional surveillance. Nutrition surveillance is the act of observing the state of nutrition continuously and regularly for decision making for efforts to improve and prevent the deterioration of the nutritional state of the community. Surveillance actions include conducting Nutrition Status Monitoring (PSG), situation analysis, and growth monitoring. The results of surveillance can be a strong and appropriate basic data in formulating policies and intervention plans that are appropriate and in accordance with the conditions of the community. Thus, from surveillance activities will be found the prevalence and risk factors for stunting in infants.

METHODS

This study was a cross-sectional descriptive survey using a structured questionnaire and measurements of height to determine the nutritional status of children under five years old and to examine the impact of socioeconomic, demographic and child feeding practice on nutritional status of children. The study was carried out in the working area of Sukowono Public Health Center. The respondents were taken by multi-stage stratified cluster random sampling method, 20 posyandu were chosen from 8 villages. Simple random sampling was used to select 249 children under five years from posyandu. Research data collection was conducted from May to June 2019. Anthropometric Measurements include all information including the child's age, gender and other data, was obtained by interviewing the caregivers. The nutritional status of children less than 5 years old was measured anthropometrically. Measurement of recumbent length (height with child over 2 years) were taken to the nearest of 0.1 cm (World Health Organization, 1995). The height-for-age measurement status was calculated showed in standard deviation (SD) units (Z-score) from the median of the reference population. Children with a measurement of <-2 SD units below the median of the reference population were considered short for their age (stunted) and children with



measurement of <-3 SD units below the median were considered to be severely stunted. Socio-demographic and child development variables were adopted from conceptual framework of Jiang, et.al (2014). In this model variables were divided into three groups: distal factors were indicated by the socioeconomic variables (caregiver's education, occupation, marital status, income, number of people in household). Intermediate factors included maternal variables (pregnancy anaemia, nutrition improved during pregnancy, premature birth, mode of delivery, initiation of breastfeeding, mother's age at delivery) and proximal factors which include birthweight, diarrhea in previous 2 weeks, coughing in previous 2 weeks, duration of exclusive breastfeeding (classified as exclusive breastfeeding for 6 months or not), time of weaning, children's food cooked alone and whether children were given calcium supplements. The SPSS version 23.0 program was used to analyse the data and statistical significance was set at $P < 0.05$. Hierarchical logistic regression was used to analyse the effects of socioeconomic, demographic and child feeding practice on nutritional status of children.

Ethical approval

Ethics committee of Faculty of Health Science University of Muhammadiyah Jember approved the study. The aim and objectives of the study, as well as a detailed explanation of the procedures to be employed, were explained to the caregiver of the selected child both verbally and in the form of an information sheet. Informed oral consent was obtained from the child's caregiver prior to the measurements.

RESULT AND DISCUSSION

A total of 249 children were included in the sample. Demographic details are shown in Table 1.

Table 1. Demographic variables of the study participants by descriptive statistic

Variabel	n	%
Caregiver's education		
Uncompleted elementary school	6	2.4
Elementary school	94	37.8
Primary school	67	26.9
Middle school	66	26.5
High school or higher	16	6.4
Caregiver's occupation		
Housewives	200	80.3
Farmers	16	6.4
Entrepreneurs	18	7.2
Private employees	7	2.8
Government employees	6	2.4
Other	2	0.8
Annual household income		
< Rp. 2.100.000	207	83.1
> Rp. 2.100.000	42	16.9
Caregiver's marital status		
Married	246	98.8



Divorce	3	1.2
Number of people in household		
1-3 members	63	25.3
3-6 members	165	66.3
> 6 members	21	8.4

Based on table 1 it is known that majority of caregiver's education were elementary school. In terms of work the average mother does not work or become a housewife. Household income is still relatively low (below the minimum wage). Marital status of majority married but there were 3 respondents who were widowed. The number of family members is the majority of extended family because the number of family members averages 3-6 people.

Table 2. Maternal History of Respondents with Statistical Descriptions

Variabel	n	%
Mother's age at pregnancy		
< 20	77	30.9
20 – 35	164	65.9
> 35	8	3.2
Pregnancy anaemia		
Yes	46	18.5
No	203	81.5
Premature birth		
Yes	31	12.4
No	218	87.6
Mode of delivery		
Spontaneous labour	214	85.9
Vacum	31	12.4
Sectio Caesarea	4	1.6
Initiation of breastfeeding		
Within 0.5 hours	153	61.4
0.5 – 1 hours	48	19.3
> 1 hours	48	19.3

Table 2 shows that the majority mother's age at pregnancy 20 - 35 years, but the percentage of mothers at risk of pregnancy is still high (<20 years and > 35 years). Judging from the history of maternal health, it turns out there are still mothers who have anemia and a history of premature birth. Type of labor the majority of spontaneous and as soon as possible initiation of early breastfeeding.

The research results seen from the demographic data of mothers showed that the majority of mothers had low levels of education. The low level of maternal education is one of the risk factors for stunting in infants (Jiang, et.al, 2016). The level of education contributes to the incidence of stunting because the level of education is a good measure of whether or not the mother's knowledge is adequate for her toddler nutrition. Mother's behavior in providing nutrition to toddlers is a factor causing stunting in toddlers (Ministry of Health, 2012). The prevalence of short children living in households with uneducated household heads is 1.7 times higher than the prevalence among children living in households with highly educated household heads (Ministry of Health, 2018).



The demographic data of mothers is seen from the types of work of the majority of housewives. But it turns out that mothers who do not work is not a guarantee that more free time to care for children compared to working mothers will ensure that their toddler nutrition will be fulfilled. In fact, although the majority of mothers do not work, there are still many stunted toddlers. These results differ from studies which state that working mothers are more at risk of having stunting toddlers because of the lack of time to care for children (Chunling, et.al, 2016). Parenting is indeed the main key to the fulfillment of a toddler's nutrition. Mothers who are not working should make use of free time to provide the best parenting for their toddlers. However, due to the low level of maternal education, this becomes very contradictory despite the free time, so that inadequate knowledge of mothers regarding the fulfillment of toddler nutrition also contributes to stunting.

In terms of family income the majority is still below the Regional Minimum Wage (UMR). This is very related to the fulfillment of family nutrition. The lower the household income, the more risk is the fulfillment of underfive nutrition. Toddlers must get a variety of foods to introduce flavor and obtain nutrients from the food consumed (Ministry of Health, 2012). One factor that contributes to the occurrence of stunting is the family's financial condition (Chunling, et.al, 2016). To obtain family food needs, of course, sufficient financial conditions are needed so that toddler food in accordance with the guidelines for balanced nutrition. Adequate nutrition for infants will minimize the risk of stunting. This family's financial condition is also related to the number of family members. The majority of family members are large families so this also has an impact on the amount of living expenses to be incurred by the family.

The impact of this family demographic condition causes the high prevalence of stunting in children under five, even there is still a condition of nutritional status of children under five that is very short. The prevalence of short children is very high, affecting one in three children under five, which is a proportion that is a public health problem according to WHO criteria (UNICEF, 2012).

Not much different from the results of the study that the proportion of short children in the poorest population quintile is almost double the proportion of children in the highest wealth quintile. Rural areas have a greater proportion of short children (40%) compared to urban areas (33%) (Ministry of Health, 2012).

Table 3. Individual Variable with Statistical Descriptions

Variabel	n	%
Child's gender		
Boy	128	51.4
Girl	121	48.6
Low birthweight		
Yes	5	2.01
No	244	97.9
Diarrhoea in previous 2 weeks		
Yes	41	16.5
No	208	83.5
Coughing in previous 2 weeks		
Yes	85	34.1
No	164	65.9
Duration of exclusive breastfeeding		



Exclusif breastfeeding (≥ 6 months)	179	71.9
No (< 6 months)	70	28.1
Time of weaning		
< 4 months	15	6.0
4 – 6 months	33	13.3
7 – 8 months	34	13.7
> 8 months	167	67.1
Children's food cooked alone		
Yes	216	86.7
No	33	13.3
Whether children were given cod liver oil		
Yes	115	46.2
No	134	53.8
Whether children were given calcium supplementary		
Yes	84	33.7
No	165	66.3

Based on table 3 it is known that the child's gender of male babies is not much different in number from female babies. Judging from the baby's medical history, there are still babies who have a history of diarrhea and cough in the last 2 weeks. For exclusive breastfeeding, it turns out there are still babies who are not given exclusive breastfeeding. The average weaning time for babies is over 8 months. Most babies who have been given MP-ASI are self-cooking, but apparently there are still many mothers who do not provide extra fat and calcium for baby's growth and development even though these components are important to give to babies.

Table 4. Risk Factors for Stunting with Regression Logistic Analysis

Variabel	P value	OR (95% CI)
Pregnancy Anaemia	0.047	4.656 (1.018;21.296)
Duration of exclusive breastfeeding (< 6 months)	0.05	3.190 (0.983;10.355)
Low birthweight	0.035	4.090 (1.063;3.601)

Based on table 4 it is known that mothers who have a history of anaemia during pregnancy have a 4.6 chance of having a stunting baby compared to mothers who have no history of anemia during pregnancy after being controlled by a variable duration of exclusive breastfeeding and low birthweight (95% CI OR: 1,018; 21,296). Duration of exclusive breastfeeding (< 6 months) have a 3.1 chance of suffering from stunting compared to exclusive breastfeeding (> 6 months) after being controlled by a variable pregnancy anemia and low birthweight (95% CI OR: 0.983;10.355). Low birthweight have 4.0 chance experiencing stunting compared to non low birthweight after being controlled by a variable pregnancy anemia and duration of exclusive breastfeeding (95% CI OR: 1.063;3.601).

Based on logistic regression it is known that the risk factor for stunting in terms of maternal history is maternal anemia during pregnancy. This is related to the fulfillment of maternal nutrition during pregnancy. In line with the results of the 2013 Riskesdas mention the condition of food consumption of pregnant women and toddlers in 2016-2017 shows in Indonesia 1 in 5 pregnant women are malnourished, 7 out of 10 pregnant women are lacking calories and protein (Ministry of



Health, 2012). Prolonged malnutrition that occurs from the fetus in the womb until the beginning of the child's life (First 1000 Days of Birth). The reason is due to low access to nutritious food, low intake of vitamins and minerals, and poor diversity of food and animal protein sources.

Maternal factors and poor parenting, especially in the behavior and practice of feeding children, are also the cause of child stunting if the mother does not provide adequate and good nutrition. Mothers whose adolescents lack nutrition, even during pregnancy, and lactation will greatly affect the growth of the child's body and brain.

Low levels of hemoglobin in the blood for a long time will result in low nutritional intake by the mother during pregnancy. Anemia occurs when the body lacks red blood cells that function to spread oxygen throughout the body. Mothers who have a history of anemia are more at risk of having a stunting baby than healthy mothers. This is related to other risk factors, namely mothers who have a history of anemia during pregnancy will be at risk of giving birth to babies with low birth weight, so this condition is also closely related to long-term stunting as a side effect due to chronic malnutrition. in toddlers.

The WHO (WHO/UNICEF 2006) suggests that breast milk should be the only food for the first 6 months after birth. The present study supports this recommendation of WHO that the exclusive breastfeeding less than 6 months is a protective factors for children. Low birthweight was a significant risk factor for stunting, again similar to other studies (Ricci & Becker 1996; Nojomi et al. 2004).

CONCLUSION AND RECOMMENDATION

Mothers who have a history of anaemia during pregnancy have a 4.6 chance of having a stunting baby compared to mothers who have no history of anemia during pregnancy after being controlled by a variable duration of exclusive breastfeeding and low birthweight (95% CI OR: 1,018; 21,296). Duration of exclusive breastfeeding (<6 months) have a 3.1 chance of suffering from stunting compared to exclusive breastfeeding (>6 months) after being controlled by a variable pregnancy anemia and low birthweight (95% CI OR: 0.983;10.355). Low birthweight have 4.0 chance experiencing stunting compared to non low birthweight after being controlled by a variable pregnancy anemia and duration of exclusive breastfeeding (95% CI OR: 1.063;3.601).

The results of this study indicate that malnutrition is still a major public health problem among children under 5 years of age in Jember. These results highlight the need for early intervention programmes aimed at reducing malnutrition in children.

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TREND OF TYPE 2 DIABETES MELLITUS DATA STUDY (2015 – 2019)

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ABSTRACT

BACKGROUND : Diabetes mellitus (DM) is degenerative disease and non communicable disease which need the right treatment. DM is a condition which is the blood glucose is increase above the normal or called hyperglycemia. The prevalence of DM tend to increase in Indonesia until 2030. Inadequate treatment will lead to serious complication. DM is the biggest thread for human health. Tendency to increase is correlate with change of lifestyle and urbanisation.

SUBJECT AND METHODE : This study is using reference from previous journals and publications and then analyse using decriptive analysis.

RESULTS : the results from journal description reveal that there were several factors, which is the enabling and risk factors of DM including age, gender, obesity, lack of activity, unhealthy life style, prevention using HbA1C which is not optimal, not optimal medication and not making good use of existing facilities.

CONCLUSION : the treatment and prevention of diabetes mellitus are needed good collaboration from the patients itself, family and health care team including physician, nurse and dieitian.

Key words : trend of type 2 diabetes mellitus

INTRODUCTION

1. Background

The shifting form communicable to non communicable disease are brings up degenerative disease, and one of them is diabetes mellitus (DM). Based on the data from Perkeni (2015) from epidological perspective Indonesia has been on type 2 diabetes mellitus epideic. The tendency of increasing prevalence are due to changing of life style and urbanization. The prediction stated that 50% of people with diabetes are undiagnosed and two third who get treatment both pharmacological and non pharmacological so that they could control the blood glucose and prevent complication. One of clinical sign of diabetes mellitus is elevating blood glucose or hyperglycemia.

At 20130 the prevalence of diabetes mellitus is predicted to increase 1t 4.4% or reach to 366 millions of people and Asia are contributin to 60% from all of populations (Diagnosis and Classification of Diabetes Mellits, 2011). The data from WHO stated that in 2015 Indonesia is in the seventh place for highest prevalence in the world. The prevalence in Indonesia is tend to increase to 6.9% in 2013 from 5.7% in 2007. Basic health research (Riskesdas) 2013 stated that overweight is the trigger of diabetes mellitus and it increase to 15.4% in 2030.

Diabetes is metabolic disease characterized by hyperglycemia due to insulin secretion disorder, impaired insulin work, or both. Impairment of carbohydrate, fat and protein metabolism used



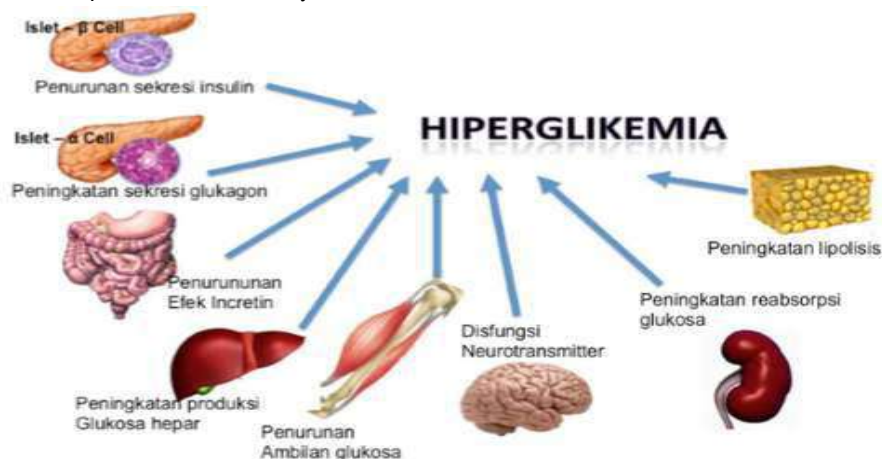
to happen in type 1 diabetes mellitus, the forth category of diabetes including type 1 diabetes mellitus, type 2 diabetes mellitus, gestational diabetes and other type diabetes mellitus (Krenel and Brukel, 2014).

2. State of Problem

The problem faced by Indonesia in treating diabetes mellitus is that not all of people with diabetes mellitus have access to adequate health facilities, including availability of oral and injection drugs at primary health care and limited facilities at health care services. The limitation of health care personnel's ability in treating diabetes and its complication in all aspects of promotive, preventive, curative and rehabilitative still became the obstacle in delivering primary health services.

LITERATURE REVIEW

Diabetes mellitus is a chronic disease characterized by elevated blood glucose at 200mg/dl for randomized blood glucose and 126 mg/dl for fasting blood glucose. Diabetes is known as silent killer because it is often not realized by the person and when it is known the complication has occurred (Ministry Of Health Indonesia Republic of Indonesia, 2014). Diabetes mellitus could attack almost all system of human body, from the skin through the heart and it could lead to complication. The pathogenesis of hyperglycemia in type 2 diabetes mellitus is due to some dysfunction of organs such as liver, pancreas and kidney.



Pict 1. The pathogenesis of hyperglycemia

The diagnosis of diabetes mellitus is made based on the assessment of blood glucose taken from the vein.

Diabetes suspicion if there is a classic complaint of diabetes : polyuria, polydipsy, polyphagia and unexplained weight loss plus other complaints such as weakness, tingling, itching, blurry eyes and pruritus in the vulva region.

The Diabetes Mellitus Diagnosis Criteria

Fasting plasma blood glucose examination ≥ 126 mg/dl. Fasting is no calorie intake of at least 8 hours, or

Or



Plasma glucose examination ≥ 200 mg/dl after the glucose tolerance test (TTGO) with a glucose load of 75 grams, or

Or

HbA1c examination ≥ 6.5 using a standardized method by the National Glycohaemoglobin Standardization Program (NGSP)

Laboratory Bloods Levels for Diagnosis of Diabetes and Prediabetes

	HBA1C(%)	Fasting Blood Glucose (mg/dl)	Plasma Glucose 2 Hours After TTGO (mg/dl)
Diabetes	$\geq 6,5\%$	≥ 126	≥ 200
Prediabetes	5,7 -6,4	100-125	140-190
Normal	$<5,7$	< 100	>140

Diabetes Management Target

Parameter	Target
BMI (kg/M ²)	18,5 - <23*
Sistolic (mmHg)	< 140
Diastolic (mmHg)	< 90
Capillary pre prandial blood glucose (mg/dl)	80-130**
Capillary post prandial blood glucose (mg/dl)	$< 180^{**}$
HBA1c	< 7
Cholesterol LDL (mg/dl)	< 100 (<70 bila risiko KV tinggi)
Triglycerides (mg/dl)	< 150

*The Asia Pacific Perspective Redefining Obesity and Its Treatment, 2000

**Standards of Medical Care in Diabetes, ADA 2015

Complication

Complication of Diabetes Mellitus that are often found are stroke, heart disease, neuropathy (nerve damage). Kidney failure, and diabetic foot which can manifest as ulcers, infections and gangrene, managing requires a long and continuous time. This is done to control blood glucose levels so that diabetes does not develop into other disease.

Diabetes Management

Diabetes management include four pillars :

Pillar 1. Knowledge of diabetes mellitus.

As a result of lifestyle and behavior patterns, especially diet and inadequate activities, procedures for taking medication, eating pattern, complications, and emergency signs need to be owned by the patients and family. Knowledge of independent blood glucose monitoring need to be taught in hypoglycemia or hyperglycemia.

Pillar 2. A balance diet.

Physical exercise is very important to do at least 3 -4 times a week, for 30 minutes.

Adhere to the schedule and procedures for taking medication.



Diabetes mellitus is a chronic disease that needs serious treatment, one of planning of them is through optimal diabetes controlling behavior planning. The implication of this study is a needed of a continuous diabetes controlling program for people with diabetes.

According to the data from WHO and International Diabetes Federation (IDF), the problems of diabetes in Indonesia has some same and differences characteristics with the problem of DM in the world. The same problems are (1) the increasing prevalence, (2) bad achievement of glycaemic control, and (3) big cost for caring.

Based on study conducted by Prabaningrum, Kusumawati and Nugroho (2014) stated that urban lifestyle has brought negative impact to the changing of dietary changes such as salty foods, preserved foods, snack consumption and fast food consumption, high consumption of instant noodle, the use of seasoning and lack of physical activity as a result of technological advances, one of which is the delivery order icon, either food or other needs, making people reluctant to travel or move. Lifestyle that is influenced by socioeconomic changes and appetite can result in people's eating patterns that tend to keep the concepts of balanced diet so that it has a negative impact on health and nutrition.

Results study of Engkartini in 2015 showed that diabetes mellitus tend to increase at average of 3.8%. Patients with type two diabetes mellitus are mostly female and aged over 45 years. Different test results showed differences in sex, age, and residence with a value $p < 0.05$. Hypertension and cholesterol factors have the same proportions ($p > 0.05$).

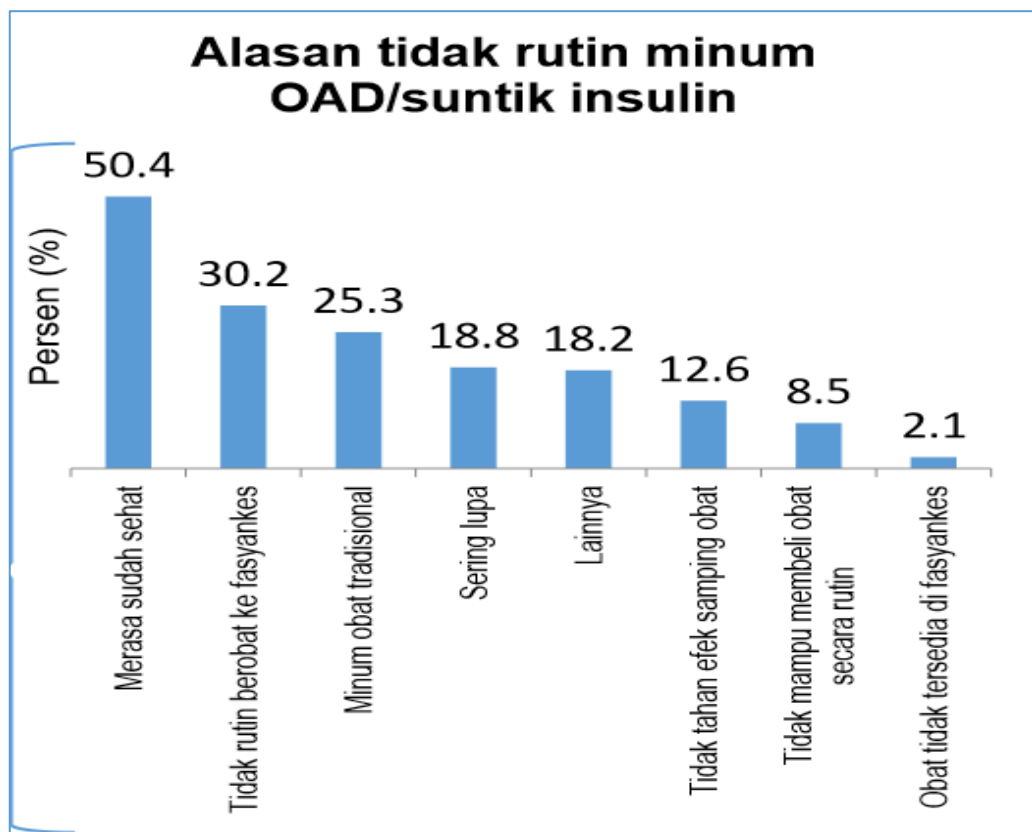
Ariesda's study in 2018 found that the trend of type 2 diabetes mellitus is age ≥ 46 years, female, and do not have a history of hypertension. The prevalence and incidence of events in changes of type 2 diabetes mellitus occurs annually, and their distribution is described using a spatial analysis of GIS.

Based on the results of study showed that people with type 2 DM are more common in women. According to Sletzer and Bare (2013), physically women have the opportunity to increase body mass index that is greater than men, add to this the results of hormonal processes such as premenstrual syndrome and post menopause. Increasing the hormone estrogen can reduce sensitivity to the action of insulin in the muscles and liver. Increased age is also a risk factor for diabetes. This is in accordance with the theory which states that the increasing age of person, the blood circulation towards the peripheral area decreases. Another possibility is because the body's tissue cells are not sensitive or resistant to insulin due to aging. Increased incidence of type 2 DM associated with control of the 4 pillars that some patients do not know about diabetes mellitus education, poor food management, exercise 3 times a week with a frequency of > 30 minutes, and most people who are not adherent to treatment (Son and Berawi, 2015).



(Source : Riskesdas, 2018)

The proportion of obesity with an indicator of a woman's belly circumference of 80 cm and behavior of a man of 90 cm found a rising trend from 2007 to 2018.



(Source : Riskesdas 2018)

According to the picture, we see that the reason of people with diabetes didn't take their medicine routinely is because they already feel healthy and because they didn't visiting the health care routinely.



The increasing prevalence of type 2 diabetes is correlate significantly with the controlling of the forth pillar which some patients has no idea about education of diabetes mellitus, do not have good eating arrangements, do not do exercise for more than 3 times a week with frequency of more than 30 minutes and most of people with diabetes are not obey the medication (Putra and Berawi, 2015).

The management of therapy that is not optimal also triggers the high complications of diabetes. Due to the community's lack of active participation in scheduled programs (PROLANIS) and lack of adherenceto type 2 diabetes mellitus treatment. This can be caused by several factors including the community not taking drugs on time or regularly checking blood glucose, not maintaining their diet, delaying their schedule routine control to Puskesmas or health services (Fathirohman, Fadhilah and Kunci, 2016). The tendency of increasing diabetes risk factors and the occurence of complications increase every year in diabetics. In addition to showing less than optimal program implementation, effective immediate action is needed to deal with this phenomenon, such as policy making that can maximize the performance of program implementers. This is consistent with efforts to achieve the SDGs indicator. National diabetes policy making and developing policies to promote and support a healthy lifestyle.

CONCLUSION AND RECOMMENDATION

Data from results and discussion have an upward trend in the coming year. There are several groups at risk including : increased age, female sex, heredity, ineffective glycemic control, obesity, activity, excessive carbohydrate consumption and irregularities in treatment and not using health care facilities for treatment.

Diabetes is a mentabolic disease that can cause comlications and this condition greatly affects the quality of life of people with diabetes. Diabetes can be controlled by diet arrangement, exercise and using anti diabetic drugs (OAD) properly and correctly in accordance with the expected target. Treatment of diabetes is spesific and individual. Modification of a healhty and clean lifestyle (PHBS) with a balance menu is needed in regulating the number of calorie and nutritional needs needed by diabetics. Diabetes is very influential in the quality of life and increased health costs.

Suggestions form researchers are that community plays an active rolein programs such as PROLANIS to prevent complications, health care providers can screen patients with type 2 diabetes, patients with DM complications, or patients with hypertentsion and DM to improve quality of life and reduce the incidence and new cases, especially type 2 DM. The next researcher is expected to study more detail to find out the factors contributing to the highest incidence.

The role of all parties both society and goverment is even more active in efforts to prevent diabets, especially in prevention efforts since this disease id chronic and will be carried for life. In addition to the community, health care teams such as physicians, nursesm and dietician play an important role and prevention and treatment of diabetes. Patients and families also has an important role to plaay because diabetes mellitus requires ongoing care and ongoing patient self management education and support to prevent acute complication and reduce the risk of long term complications.



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