Effectiveness of the "Ular Tangga" Method Against the Motivation and Activeness of the Class of Pregnant Women in Ngepoh Village Dringu Sub District, Probolinggo Regency

Kasri Astuti[1*], Rahmania Ambarika[2]

[1] Puskesmas Dringu Probolinggo,
[2] Institut Ilmu Kesehatan STRADA Indonesia

[*]**Email:**
kasriastuti82@gmail.com

ABSTRACT

One of the efforts to reduce maternal and child mortality is by implementing classes for pregnant women. However, the number of pregnant women participating in the class for pregnant women in Indonesia is still low. This is because pregnant women class participants feel bored with the method used. The purpose of the study was to determine the effectiveness of the application of the snake and ladder method on the motivation and activeness of attending classes for pregnant women in Ngepoh village, Dringu district, Probolinggo district. This type of research uses a quasi-experimental pre-post test design with a non-equivalent control group. This research was conducted for 3 months. The population in this study were all pregnant women in the second and third trimesters who had their pregnancy checked. The sample of this study amounted to 10 people. The results obtained indicate that based on the Wilcoxon test results indicate that value = 0.038 which means that there is an effect of the snake and ladder method on the motivation of pregnant women to take classes for pregnant women and at value = 0.046 which means that there is an effect of the snake and ladder method on the activity of pregnant women in participating in maternal classes. pregnant. It can be concluded that there is an increase in the motivation and activeness of mothers in attending classes for pregnant women.

Keywords: activity, class for pregnant women, motivation, snake and ladder method

INTRODUCTION

Mother's Class is one of the important activities in the implementation of the MCH Handbook in the community as a learning effort for mothers, their husbands and their families to understand MCH Handbooks through the method of group learning activities in class facilitated by health workers to prepare pregnant women for safe and comfortable childbirth. According to data from the East Java Provincial Health Office, the Maternal Mortality Rate in East Java in 2016 increased after the previous three years decreased. This is due to the support factor, both in terms of MCH program management and the recording and reporting system which is getting better. The Health Office has a program to improve the clinical skills of officers in the field by involving many from the Penakib Forum of East Java Province and District/City. According to Supas 2016, the target for MMR is 305 per 100,000 live births. In 2016, the MMR in East Java Province reached 91.00 per 100,000 live births. This figure has increased compared to 2015 which reached 89.6 per 100,000 live births (Dinkes, 2017).

The maternal mortality rate (MMR) in Probolinggo City in 2015 was 81.54/100,000 live births, with details of 3 maternal deaths with a live birth rate of 3,679. Compared to the MDgS target of AKI

102/100,000 KH in Probolinggo City, it is still high, this is caused by lupus, anemia, pulmonary TB and post partum hemorrhage. Formation of classes for pregnant women in all urban villages, improving P4K (Department Planning and Complications Prevention Program) with stickers and increasing partnerships between midwives and traditional healers and increasing cross-sectoral collaboration (Probolinggo, 2019).

According to the results of Wulan's research (2016), it shows that there is a relationship between interest and class participation of pregnant women in the Candiroto Health Center Work Area, Temanggung Regency, with a p-value of 0.037 ($\alpha = 0.05$). There is a relationship between family support and class participation of pregnant women in the Candiroto Public Health Center, Temanggung Regency, with a p-value of 0.033 ($\alpha = 0.05$). There is a relationship between motivation and class participation of pregnant women in the Candiroto Public Health Center, Temanggung Regency, with a p-value of 0.045 ($\alpha = 0.05$) (Astuti et al., 2016). According to research (Longgupa, 2020) it was found that before and after using the snake and ladder method in the pregnant women class there was a difference between knowledge and activity in the pregnant women class so that it could be concluded that there was an increase in knowledge about pregnancy and the mother's activity in participating in the pregnant women class. (Longgupa, 2020).

Based on a preliminary study in Ngepoh Village, Dringu District, Probolinggo Regency from interviews conducted with 10 pregnant women, it was found that most mothers (60%) were not actively participating in pregnant women classes. This is due to the mother's lack of motivation. Lack of motivation is caused by one of the mothers working.

Mother's Class is one of the important activities in the implementation of the MCH Handbook in the community as a learning effort for mothers, their husbands and their families to understand MCH Handbooks through the method of group learning activities in class facilitated by health workers to prepare pregnant women for safe and comfortable childbirth. The cause of the mother's inactivity to attend this class for pregnant women is due to work, limited time, opportunities, education, knowledge, lack of self-motivation and lack of support from her husband. Pregnant women do not understand and understand the class of pregnant women, because of the lack of socialization about the class of pregnant women. But there are also people who do not support pregnant women class activities because people lack knowledge about pregnant women classes. (Utami, 2019). Socialization of the guidelines, objectives and benefits of pregnant women classes, including independent practice midwives to organize classes for pregnant women and motivation to increase midwives' attitudes towards pregnant women classes so that they are more positive can help increase maternal visits to pregnant women classes. Make a mapping based on the area and place of residence of pregnant women, make an agreement on time and place based on the needs of pregnant women, midwives adjust and spend time according to the agreement of the class group for pregnant women, increase competence and use the snake and ladder learning method. increasing knowledge about pregnancy, childbirth, the puerperium, and family planning as well as infant care and child development, can increase the enthusiasm of pregnant women to visit pregnant women classes. (Ministry of Health of the Republic of Indonesia. Directorate General of Nutrition and MCH, nd). The purpose of this study is to analyze the effectiveness of the snake and ladder method on motivation and activity in the class of pregnant women in Ngepoh Village, Dringu District, Probolinggo Regency in 2021.

METHODS

This type of research uses a quasi-experimental pre-post test design with a non-equivalent control group. This research was conducted in the village of ngepoh, Dringu sub-district, Probolinggo district in 2021. The sample in this study was a number of pregnant women TM III in the village of Ngopoh, Dringu sub-district, Probolinggo district, totaling 10 respondents. This research has been conducted an ethical test by the Health Research Ethics Commission of IIK Strada Indonesia with the number 2464/KEPK/VIII/2021.

The flow of this research is making a snake and ladder prototype, collecting pregnant women and cadres to provide input based on the snake ladder prototype that has been compiled, making a snake ladder pilot project based on input and suggestions from pregnant women and cadres, conducting trials from the results of the pilot project, collecting data pregnant women in the second and third trimesters with gestational age 20-32 weeks who are in the village of ngepoh, Dringu sub-district, probolinggo district, designed the formation of a class for pregnant women in coordination with the coordinating

midwife and village midwife as facilitators using the snake and ladder model that has been modified by the researcher, held a meeting class for pregnant women for 3 months with a frequency of meetings once a month with a duration of 2x45 minutes. In each class of pregnant women, the activities carried out were in the form of pretest, learning process and posttest. The participation of pregnant women in the class for pregnant women was assessed from the presence of each pregnant woman for 3 meetings.

The variables used in this study were the snake and ladder method, motivation and active participation in classes for pregnant women. The instrument used is the standard questionnaire contained in the guidelines for implementing the class for pregnant women. This research has passed the ethical review and obtained information on ethical clearance from the Health Research Ethics Commission of IIK Strada Indonesia. The statistical test in this study used the Wicoxon test on the effect of the snake and ladder method on the motivation of mothers to attend classes for pregnant women and using the Mann Witney method on the effect of the snake and ladder method on the activity of pregnant women.

RESULTS
Characteristics of Respondents Based on Age, Education and Occupation
Table 2. Frequency Distribution of Respondents by Age, Education and Occupation

Variabel	**Category**	**n**	**%**
Age	< 20 Years Old	2	20
	20-35 Years Old	5	50
	>35 Years Old	3	30
Education	Based	2	20
	Midle	5	50
	College	3	30
Profession	Housewife	2	20
	Private	7	70
	Self-Employed	1	10

Source: Primary Research Data for 2020

Based on table 2, it was found that half of the 10 respondents (50%) were aged 20-35 years, half (50%) had secondary education, and most (70%) worked as private companies.

Motivation to do a class for pregnant women before using the snake and ladder method
Table 3. Frequency Distribution of Respondents Based on the motivation to conduct classes for pregnant women before using the snake and ladder method

Motivation	Very Good		Good		Not God		Not Good		Very		Total Number	
	$\sum$	%	$\sum$	%	$\sum$	%	$\sum$	%	$\sum$	%	$\sum$	%
	1	10	4	40	5	50	0	0			10	100

Source: Primary Research Data for 2020

Based on table 3. above, it shows that of the 10 respondents, half (50%) before using the snake and ladder method, the motivation to take classes for pregnant women was not good, namely 5 respondents.

The activity of doing classes for pregnant women before using the snake and ladder method

Table 4. Frequency Distribution of Respondents Based on the activity of doing classes for pregnant women before using the snake and ladder method

Class Activity For Pregnant Women	Active		Not Active		Total Number	
	Σ	%	Σ	%	Σ	%
	4	40	6	60	10	100

Source: Primary Research Data for 2020

Based on table 4. above, it shows that of the 10 respondents, most (60%) before using the snake and ladder method were not active to take classes for pregnant women, namely 6 respondents.

Motivation to do classes for pregnant women after using the snake and ladder method

Table 5. Frequency Distribution of Respondents Based on motivation to do classes for pregnant women after using the snake and ladder method

Motivation	Very Good		Good		Not God		Not Good		Very	Total Number	
	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	
	5	50	4	40	1	10	0	0	10	100	

Based on table 5. above, it shows that of the 10 respondents, half (50%) after using the snake and ladder method, the motivation to take part in the class for pregnant women is very good, as many as 5 respondents.

The activity of doing classes for pregnant women after using the snake and ladder method

Table 6. Frequency distribution of respondents based on the activity of doing classes for pregnant women after using the snake and ladder method

Class Activity For Pregnant Women	Active		Not Active		Total Number	
	Σ	%	Σ	%	Σ	%
	8	80	2	20	10	100

Source: Primary Research Data for 2020

Based on table 6. above shows that of the 10 respondents, most (80%) after using the snake and ladder method of activity to take part in active pregnant women classes, as many as 8 respondents

The effectiveness of the snake and ladder method on motivation in the class of pregnant women in Ngepoh Village, Dringu District, Probolinggo Regency in 2021

Table 7. Frequency Distribution of Respondents Based on the activity of conducting classes for pregnant women before using the snake and ladder method

Category Of Motivation To Take Classes For Pregnant Women With The Snake And Ladder Method	Before		After	
	Σ	%	Σ	%
Very Good	1	10	5	50
Good	4	40	4	40
Not Good	5	50	1	10
Very Not Good	0	0	0	0
Total	10	100	10	100

ρvalue = 0,038 α = 0,05

Source: Primary Research Data for 2020

Table 7 shows that before using the snake and ladder method, half (50%) of the motivation in attending the class for pregnant women was not good and after using the snake and ladder method half

(50%) the motivation in attending the class for pregnant women was very good. Based on the results of the Wilcoxon test, it shows that value = 0.038, which means that there is an effect of the snake and ladder method on the motivation of pregnant women to take classes for pregnant women.

The effectiveness of the snake and ladder method on activity in the class of pregnant women in Ngepoh Village, Dringu District, Probolinggo Regency in 2021

Table 8. Frequency Distribution of Respondents Based on the effectiveness of the snake and ladder method on activity in the class of pregnant women in Ngepoh Village, Dringu District, Probolinggo Regency in 2020

Active Participation In Classes For Pregnant Women Using The Snake And Ladder Method	Before		After	
	Σ	%	Σ	%
Active	4	40	8	80
Not Active	6	60	2	20
Total	10	100	10	100
ρvalue = 0,046		α= 0,05		

Source: Primary Research Data for 2020

Based on table 8, it was found that before using the snake and ladder method, most (60%) were not active in attending classes for pregnant women and after using the snake and ladder method, most (80%) were active. Based on the results of the Wilcoxon test, it shows that value = 0.046, which means that there is an effect of the snake and ladder method on the activity of pregnant women in attending classes for pregnant women.

DISCUSSION

Motivation to do a class for pregnant women before using the snake and ladder method Based on table 3. above, it shows that of the 10 respondents, half (50%) before using the snake and ladder method, the motivation to take classes for pregnant women was not good, namely 5 respondents. This shows that most respondents have the motivation to take classes for pregnant women in the bad category. (Wulan widi astuti, 2016) Motivation is a tendency (a trait that is the subject of conflict) in a person that arouses enthusiasm and directs his actions. Motivation includes factors of biological and emotional needs that can only be predicted from observations of human behavior (Hasibuan, 2014). Based on the results above, it can be concluded that the motivation of pregnant women towards the class of pregnant women before using the snake and ladder method is half in the bad category because the mother feels bored with the lecture method. Of the 10 respondents studied, there are 5 respondents who have poor motivation.

The activity of doing classes for pregnant women before using the snake and ladder method

Based on table 4. above, it shows that of the 10 respondents, most (60%) before using the snake and ladder method were not active to take classes for pregnant women, namely 6 respondents.

The class for pregnant women is a means to learn together about health for pregnant women, in the form of face-to-face in groups aimed at increasing the knowledge and skills of mothers regarding pregnancy, pregnancy care, childbirth, postpartum care, and newborn care, infectious diseases and birth certificate (Ministry of Health, 2013). Maternity class activities aim to prepare pregnant women for safe, comfortable and safe childbirth, and healthy and smart babies born (Kemenkes RI, 2015). Based on the results above, it can be concluded that the activeness of pregnant women to the class of pregnant women before using the snake and ladder method is mostly in this inactive category because mothers feel bored with the lecture method. Of the 10 respondents studied, there were 6 respondents who were not active in conducting classes for pregnant women.

Motivation to do classes for pregnant women after using the snake and ladder method

Based on table 5. above, it shows that of the 10 respondents, half (50%) after using the snake and ladder method, the motivation to take the class for pregnant women is very good, as many as 5 respondents. Pregnant women class is a learning tool together for pregnant women to gain knowledge about health for pregnant women in the form of face-to-face in groups that aims to increase knowledge, change attitudes and behavior of mothers to understand pregnancy, body changes and complaints during pregnancy, pregnancy care, childbirth , postpartum care, postnatal family planning, newborn care, myths, beliefs, local customs, infectious diseases and birth certificates. In this class for pregnant women,

mothers will study together, discuss and share experiences about maternal and child health (MCH) thoroughly and systematically and can be carried out on a scheduled and continuous basis so as to increase the coverage of pregnant women's visits and delivery to health workers (Kemenkes RI, 2014).). Snake and ladder game as a health promotion media is an effective tool in providing information and educational interest to adolescents and is able to improve their knowledge and attitudes and has been proven to make students more enthusiastic in implementing learning and students can enjoy the movement of snake and ladder games from beginning to end. Zamzami, 2014; Yusniarita and Sari, 2019). The study of Gedeon, et al (2016) in Thailand showed that peer training using snakes and ladders of transmitted information significantly affected the increase in knowledge and self-confidence.

Based on the results of the study, it was shown that after using the snake and ladder method, there was an increase in the motivation of mothers to do classes for pregnant women, namely most of them had very good motivation to do classes for pregnant women. This is because the mother does not feel bored because there is a game in the form of questions every time she jumps and there is also a reward for winning the game.

The activity of doing classes for pregnant women after using the snake and ladder method

Based on table 6. above, it shows that of the 10 respondents, most (80%) after using the snake and ladder method were active to take active pregnant women classes, namely 8 respondents. Snake and ladder game as a health promotion media is an effective tool in providing information and educational interest to adolescents and is able to improve their knowledge and attitudes and has been proven to make students more enthusiastic in implementing learning and students can enjoy the movement of snake and ladder games from beginning to end. Zamzami, 2014; Yusniarita and Sari, 2019). The study of Gedeon, et al (2016) in Thailand showed that peer training using snakes and ladders of transmitted information significantly affected the increase in knowledge and self-confidence. The snake and ladder game has the advantages of being flexible, having feedback, being competitive, and having active participation (Kurniawati, et al., 2017). Snakes and ladders media has been chosen for the types of games that are educational, interesting and familiar to be played at all ages. Snakes and Ladders is a board game which is divided into several small plots and some plots draw the "ladder" or "snake" it is related to other plots and there are certain rules that players must obey (Ariesta, 2011).

One method that can be used in the implementation of classes for pregnant women to develop creativity is by playing snakes and ladders. Snakes and ladders game is an effective counseling media to increase the activity of pregnant women to take classes for pregnant women, it is proven that after using the snake and ladder method, most pregnant women actively participate in classes for pregnant women.

The effect of the Snake and Ladder Method on motivation to take classes for pregnant women

Based on table 2. above, it shows that of the 10 respondents, half (50%) before using the snake and ladder method, the motivation to take classes for pregnant women was not good, namely 5 respondents. Based on the results of the Wilcoxon test, it shows that value = 0.038, which means that there is an effect of the snake and ladder method on the motivation of pregnant women to take classes for pregnant women.

Motivation is a tendency (a trait that is the subject of conflict) in a person that arouses enthusiasm and directs his actions. Motivation includes biological and emotional needs factors that can only be predicted from observations of human behavior (Hasibuan, 2014). regarding the health of mothers and children. Of the 10 respondents who were examined, there were 5 respondents who had poor motivation. Based on research by Svensson, Barclay & Cooke (2008), it is known that the participation rate of pregnant women in attending classes for pregnant women is less than 50%. Further studies of the study identified the impact of not participating in classes for pregnant women in the form of ignorance about the risks or danger signs of pregnancy. The motivational factor is thought to be the main cause of the non-participation of pregnant women in the class of pregnant women. Motivation itself is influenced by many factors, including the level of education and knowledge, age, employment status, parity, husband's support, and so on (Indah & Julyarni, 2014; Impartina, 2017; and Masini, 2015).

In this study, most of the respondents had a secondary education level, namely Senior High School. Given the medium level of education, the motivation of respondents to take classes for pregnant women before and after using the snake and ladder method showed different results and an increase was shown in the positive results of the SPSS test of 5 people.

Age of pregnant women also has an influence on motivation has been identified in several studies. Respondents in this study, both the case group and the group in this study, showed that half of them were at a mature age to undergo pregnancy, namely aged 20-35 years. The same conditions also apply to the employment status factor. Respondents of this study both have private jobs and have high motivation to take classes for pregnant women. Thus, the age of pregnant women and work status are not considered the dominant factors forming motivation. However, a number of previous studies have shown conflicting results. This can occur as a result of differences in the characteristics of each region and individual differences.

The effect of the Snake and Ladder Method on the activity of doing classes for pregnant women

Based on table 8. above, it shows that of the 10 respondents, most (80%) after using the snake and ladder method were active to take active pregnant women classes, namely 8 respondents. Based on the results of the Wilcoxon test, it shows that value = 0.046, which means that there is an effect of the snake and ladder method on the activity of pregnant women in attending classes for pregnant women.

Communities must actively think about, plan, implement, and evaluate their own health programs. Health institutions only motivate and guide them. The implementation of the class for pregnant women with the snake and ladder method is expected to provide a different atmosphere compared to the conventional method. In 2011, Hastuti's research concluded that class training for pregnant women is effective in increasing ANC visits. After the respondent attended the class training for pregnant women, the antenatal care visit that achieved the ideal was significantly higher than before participating in the class training for pregnant women (Hastuti, et al., 2011). Evaluation of changes in antenatal care visits in this study was carried out after respondents received knowledge about maternal and child health in the class of pregnant women using two methods, namely the snake and ladder method and the conventional method, and it is hoped that the changes that occur will be maintained until the end of pregnancy. The results of the 2016 National Health Indicators (Sirkesnas) survey reported that although the coverage indicators of puskesmas that had implemented the pregnant women class program had reached 94%, in general, mothers who were pregnant while participating in the pregnant women class program only reached 19% (Sasnitiari, et al., 2017). During this time, the implementation of class activities for pregnant women in health centers has been the responsibility of the midwife, but actually the class for pregnant women is a team work, not an individual. The success of the activity is the success of the team, because of the teamwork that is compact, coordinated, synchronized and harmonious.

Snake and ladder game as a health promotion media is an effective tool in providing information and educational interest to adolescents and is able to improve their knowledge and attitudes and has been proven to make students more enthusiastic in implementing learning and students can enjoy the movement of snake and ladder games from beginning to end. Zamzami, 2014; Yusniarita and Sari, 2019). The study of Gedeon, et al (2016) in Thailand showed that peer training using snakes and ladders of transmitted information significantly affected the increase in knowledge and self-confidence. One method that can be used in the implementation of classes for pregnant women to develop creativity is by playing snakes and ladders. Snakes and ladders game is an effective counseling media to increase knowledge of pregnant women. The snake and ladder game has the advantages of being flexible, having feedback, being competitive, and having active participation (Kurniawati, et al., 2017). Snakes and Ladders Media has been chosen for the types of games that are educational, interesting and familiar to be played at all ages. Snakes and Ladders is a board game which is divided into several small plots and some plots draw the "ladder" or "snake" it is related to other plots and there are certain rules that players must obey (Ariesta, 2011).

According to Novarina (2010), the snake and ladder game is a light recreational toy that is quite popular in Indonesia, such as monopoly, ludo, and chess. Snakes and ladders are part of the traditional game in Indonesia although there is no comprehensive data on the game. These games are light, simple, educational, entertaining and highly interactive when played together. Everyone can make their own board, as many boxes, snakes and ladders as desired (Novarina, 2010).

CONCLUSION

1. Half (50%) before using the snake and ladder method the motivation to attend classes for pregnant women is not good.
2. Half (50%) after using the snake and ladder method, the motivation to attend classes for pregnant women is very good.
3. Most (60%) before using the snake ladder method, they were not active during the class for pregnant women
4. Most (80%) after using the snake and ladder method of activity to take active pregnant women classes
5. Based on the results of the Wilcoxon test, it shows that value = 0.038, which means that there is an effect of the snake and ladder method on the motivation of pregnant women to take classes for pregnant women.
6. Based on the results of the Wilcoxon test, it shows that value = 0.046, which means that there is an effect of the snake and ladder method on the activity of pregnant women in attending classes for pregnant women.

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