The Effect Of Prenatal Attachment Health Education With Audiovisual On Readiness To Be Parents At Sleman Primary Health Care

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Abstract— **The unpreparedness of being a parent has an impact on anxiety during pregnancy and after childbirth, abuse and neglect of care. The purpose of this study was to determine the effect of prenatal attachment health education with audiovisual media on the readiness to become parents at Sleman Primary Health Center. This study uses the quasi-experimental method with the design of a non-equivalent control group. The sample in this study was married couples who came to do a prenatal checkup at Sleman Primary Health Center and were divided into two groups, namely the intervention group and the control group wherein each group the sample was 23 respondents. Analysis using the Wilcoxon Signed Rank Test and Mann-Whitney. The results showed that the use of audiovisual media was better than conventional methods because it had a mean difference value after the provision of higher health education.**

Keywords—prenatal attachment; readiness to be parents; audiovisual

I. INTRODUCTION

Being a parent means creating periods of change and instability for men and women who decide to have children [1]. In this period it will involve changing the roles they play to achieve the function of parenthood [2]. Unpreparedness to become a parent influences pregnancy, postpartum depression, child abuse and neglect of care [3]. The number of child abuse in Indonesia in 2015 was 4,309 cases and increased in 2016 by 4,620 cases. The types of situations experienced by children were highest in sexual violence by 35%, 28% physical violence, 23% psychological violence, 7% neglect, trafficking 2%and 1% exploitation. Different from parents who have been preparing since the pregnancy. Relationships that have been built since pregnancy will result in children being able to think critically, interact socially well, not show negative behavior, and be more independent[4][5].

Being a parent is the most crucial period of development for mothers and fathers. The unpreparedness of prospective fathers and mothers can cause refusal to care for and care for their children. Many ways have been done to help potential fathers and mothers to be ready to become parents, one of which is through information provided by health workers during pregnancy, but the high number of anxiety that is present in pregnant women requires health workers to change the way information is delivered.

Prenatal attachment is a concept that describes the relationship between parents and fetuses. The relationship between parents and fetuses is built in early pregnancy which has the potential to influence cognitive, emotional, and child behavior after birth [6]. Improving the process prenatal attachment can be through the support given to parents. The intended support is information support, various information provided during pregnancy, one of which is through electronic media audiovisual. Media Audiovisual contribute significantly to changes in a person's behavior. This method stimulates hearing and vision so that the results obtained are far more maximal [7].

Audiovisual media is the best way to convey complex health messages to the public [8]. Barzani's research shows that audiovisual media has a creative aspect that can increase respondents' interest. Based on this background the researchers were interested in examining the effect of health education prenatal attachment with media audiovisual on the readiness to become parents at the Sleman Primary Health Care.

II. METHOD

The design in this study used a quasi-experimental non-equivalent control group. The semple population was all husbands and wives who had prenatal cheek-up at Sleman Primary Health Care. The sampling technique used continuous sampling with a sample of 23 respondents in the intervention group (the group that received health education about prenatal attachment through audiovisual media) and 23 respondents in the control group (the group that received health education about prenatal attachment with conventional methods). Instruments for measuring parental readiness were developed based on the theory of Brisbane and tools for measuring social support were developed based on Schwarzer. Bivariate tests in this study used the Wilcoxon Signed Rank Test and Mann-Whitney

III. RESULT

Distribution of readiness to be parents before and after being given prenatal attachment health education

Table 1 Average Value of Preparedness to Parents Pre-test and Posttest Health Education Prenatal attachment

Preparedness for Parents	Pre-test		Posttest	
	Mean ± SD	Min-Max	Mean ± SD	Min-Max
Control	8.00 ± 1.382	5-11	9.85 ± 0.942	8-11
Intervention	8.22 ± 1.365	6-11	10.1 ± 0.83	8-11

Based on table 1 show that the average value control group before being given health education at 8.00 and increasing to 9.85 after being given health education. The intervention group before being given health education obtained an average score of 8.22 and increased to 10.1 after being given health education.

Comparison of the Average Value of Readiness to Parents Pre-test and Posttest of Intervention Groups

Table 2 Comparison of Average Values of Readiness to Parents Pre-test and Posttest Intervention Groups

Dimensions	Pre-test (Mean ± SD)	Posttest (Mean ± SD)	MD	P-value
Emotional	0.73 ± 0447	0.87 ± 0339	0.14	
Financials	0.76 ± 0431	0.85 ± 0.363	0.09	
Physical	0.80 ± 0.399	0.96 ± 0.205	0.16	
Social	0.60 ± 0493	0.87 ± 0339	0.27	0000
Knowledge	0.67 ± 0471	0.95 ± 0.228	0.28	
Relationship	0.92 ± 0.267	0.97 ± 0.179	0.05	
Total	8.22 ± 1.365	10.1 ± 0.827	1.88	

Based on table 2 about the comparison of the average value of parental readiness before and after being given prenatal attachment health education through audiovisual media, the average readiness is obtained. Becoming a parent after being given health education about prenatal attachment using media audiovisual (video) is higher than before it was bought to provide health education with a mean difference of 1.88. Based on statistical analysis, the value of p = 0.000 (p <0.05) can be concluded so that it can be concluded that there are significant differences after the provision of health education about prenatal attachment using audiovisual (video) to readiness to parent.

Comparison of Mean Meanings of Preparedness to Parents Pre-test and Posttest Control Group

Table 3 Comparison of Mean Value of Readiness to Parents Pre-test and Posttest Control Group

Dimensions	Pre test (Mean ± SD)	Post test (Mean ± SD)	MD	P-value
Emotional	0.67 ± 0.471	0.89 ± 0.313	0.22	
Financial	0.65 ± 0.482	0.85 ± 0.363	0.2	
Physical	0.85 ± 0.361	0.92 ± 0.267	0.07	
Social	0.52 ± 0.502	0.86 ± 0.350	0.34	0,000
Knowledge	0.70 ± 0.463	0.84 ± 0.371	0.14	
Relationship	0.95 ± 0.228	0.99 ± 0.104	0.04	
Total	8.00 ± 1.382	9.85 ± 0.942	1.85	

Based on table 3 show that the average willingness to become a parent after being given health education about prenatal attachment uses a traditional method greater than before being given health education with a mean different of 1.85. Based on statistical analysis, the p-value = 0.000 (p <0.05) can be concluded so that it can be concluded that there are significant differences after the provision of health education about prenatal attachment using conventional methods to readiness to become parents.

Differences in Average Value of Readiness to Parent Between Control Groups and Interventions

Table 4 Differences in Mean Values of Becoming Parents Between Control Groups and Interventions

Dimension	Intervention Mean ± SD	Control Mean ± SD	p-value
Emotional	0.87 ± 0.339	0.89 ± 0.313	
Financials	0.85 ± 0.363	0.85 ± 0.363	
Physical	0.96 ± 0.205	0.92 ± 0.267	
Social	0.87 ± 0339	0.86 ± 0350	0.271
Knowledge	0.95 ± 0.228	0.84 ± 0.371	
Relationship	0.97 ± 0179	0.99 ± 0.104	
Total	10:07 ± 0825	9.85 ± 0942	

Based on table 4 show that the results of p-value = 0.271> 0.05, so it can be concluded that there is no difference in the use of audiovisual media and conventional methods to increase parental readiness. However, the average value of preparedness to be parents in the intervention group was higher than in the control group and values mean different were higher in the intervention group.

IV. Discussion

Effect of health education prenatal attachment with media audiovisual on readiness to be parents

The results of the study in table 3 about the comparison of the average value of parental preparation before and after being given health education through audiovisual media obtained p = 0.000 <0.05. Based on this, health education with media audiovisual in the readiness to become parents can improve the skills and abilities of parents in caring for children [11], because media audiovisual can stimulate thoughts, feelings, attention, interests, and motivations so that the goal is to increase the achievement of roles father and mother can be implemented well [12].

The effect of the media method is audiovisual very significant. This is because the provision of health education provided utilizes all the senses. This is also following Achsin's findings [13], which is about 90% of one's learning outcomes are obtained through the mind of view, and only about 5% is accomplished through the sense of hearing and another 5% with other reasons. Stimulation through audiovisual will produce good results in remembering, recognizing, recalling and connecting facts and concepts.

Another study conducted by Scott and Freeman with the title of one night stands in mental health education obtained a value of p = 0.001 <0.05, which means that health education has given once through audiovisual affected improving mental health. This means that audiovisual has a role in changing a person's behavior. According to Campbell [14], audiovisuals have the advantage of using the senses of sight and hearing to receive information

The effect of health education prenatal attachment with conventional methods on readiness to become parents

The results of the study in table 5 about the comparison of the average value of parental preparation before and after being given health education with the conventional method obtained a value of p = 0.000 <0.05. Health education carried out in Sleman Primary Health Care is usually carried out by midwives and midwives try to answer all questions raised by patients. This method is very useful because between health workers, and patients can dialogue with each other and respond to one another at the same time by utilizing relevant visual aids or media [15].

Another study using conventional methods conducted by Alhayek et al [16] in Saudi Arabia showed that through conventional methods children were more active in giving questions about material that they felt needed repetition with a value of p = 0.002 <0.05. Traditional methods are more dependent on educators or informants and the breadth of knowledge possessed by educators.

Based on the findings in this study, general education given directly to respondents can significantly improve readiness to become a parent. Conventional methods have the advantage of allowing respondents to ask directly to health workers about material that is not yet understood.

According to Stetson & Davis [17], conventional health education focuses more on individual knowledge, attitudes, and beliefs. The mental process is emphasized in thinking, reasoning, hypothesizing or expecting. Conventional health education considers that the biggest obstacle to better health is ignorance and thus the job of the provider is to provide accumulated knowledge and instill technical skills.

Based on theory The Learning Pyramid Edgar Dale learning outcomes by seeing and hearing will increase the ability to remember by 50%. Researchers assume that material about prenatal attachments that are still considered new by the community will be easier to understand if delivered directly by health workers. Through conventional methods involving the senses of vision and hearing, so that it can increase the activity of patients to discuss together with health workers.

Differences in health education using media audiovisual and conventional

The results of the study in table 4 about the differences in the average value of readiness to be parents between the control and intervention groups obtained a p-value = 0.271> 0.05. So that it can be concluded that both using audiovisual and conventional will increase the readiness to become parents. This is because the two groups have received health education even though using different media. Another similar study was carried out by Parvin [18] which showed results that both methods audiovisual and conventional did not show superiority with the acquisition of outcomes in education audiovisual by 50% and conventional 50%. The use of the way does not have a significant influence, but in his research, it was found that the teacher had a substantial impact in improving student achievement and motivation.

The use of the right method and time according to the respondent's time will significantly increase knowledge in understanding parents' readiness and can have an impact on increasing knowledge from those who do not know to know [19]. The process of health education will be more effective if it is supported by the presence of media or teaching aids and can use the media by following the development of the world.

Video more interesting and less annoying because it can be played by respondents anytime and anywhere. A video makes it easy for respondents to obtain information, especially health information. This finding is in line with the precise results of a review conducted by Goad, Huntley-dale & Whichello [20] which explains that audiovisuals can be seen and heard and can be used as a tool to convey messages. The advantages of audiovisuals involve the five senses, more interesting because there are sounds and images, the words delivered are easily understood and can be played over and over again.

Health education using audiovisuals also benefits health workers in terms of time, energy and similarity in conveying information [21]. It can be concluded that audiovisual media is more helpful to health workers, especially midwives in providing health education because it can minimize the time and use of audiovisual media to provide patients with real experiences.

V. CONCLUSION

Health education about prenatal attachment with audiovisual media and conventional methods affects the readiness to become parents. The use of audiovisual media is better in increasing parents' willingness than traditional methods with mean different after being given higher health education.

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