

## THE INFLUENCE OF HEALTH EDUCATION USING MEDIA BOOKLETS “MANTAP” (SIAP MENGHADAPI MENSTRUASI PERTAMA) ON READINESS FOR MENARCHE

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#### ABSTRAK

Kesiapan menghadapi *menarche* sangat dibutuhkan oleh remaja putri. Ketidaksiapan menghadapi *menarche* akan berdampak pada masalah fisik dan psikologi. Hal ini disebabkan kurangnya pendidikan kesehatan tentang reproduksi pada remaja putri. Penelitian ini bertujuan untuk mengetahui pengaruh pendidikan kesehatan media booklet MANTAP terhadap kesiapan menghadapi *menarche*. Desain penelitian ini adalah *Quasi Eksperimental* dengan pendekatan *pre-post test nonequivalent control group design* dengan jumlah sampel 32 siswi. Analisis data menggunakan *Paired Sampel T test* dan *Independent Sampel T Test*. Hasil menunjukkan terjadi peningkatan kesiapan menghadapi *menarche* setelah diberikan pendidikan kesehatan menggunakan media booklet. Hasil uji *Paired Sampel T test* kelompok perlakuan dan kontrol dengan  $p \text{ value} = 0,000$  ( $0,000 < 0,05$ ) yang artinya ada pengaruh pendidikan kesehatan terhadap kesiapan menghadapi *menarche*. Kesimpulan dari penelitian ini adalah ada pengaruh pemberian pendidikan kesehatan menggunakan booklet MANTAP karena dapat meningkatkan kesiapan siswi dalam menghadapi *menarche*.

**Kata kunci:** *Kesiapan menarche, pendidikan kesehatan, booklet MANTAP*

#### ABSTRACT

*Readiness for menarche is needed by young women. Unpreparedness to face menarche will have an impact on physical and psychological problems. This is due to the lack of health education about reproduction in young women. This study aims to determine the effect of MANTAP booklet media health education on readiness to face menarche. The design of this study was quasi-experimental with a nonequivalent control group pre-post test approach with a sample size of 32 female students. Data analysis used Paired Sample T test and Independent Sample T Test. The results show that there is an increase in readiness to face menarche after being given health education using booklet media. The results of the Paired Sample T test for the treatment and control groups with  $p \text{ value} = 0.000$  ( $0.000 < 0.05$ ), which means that there is an effect of health education on readiness for menarche. The conclusion from this study is that there is an effect of providing health education using the MANTAP booklet because it can increase the readiness of female students in facing menarche.*

*Keywords: Readiness for menarche, health education, MANTAP booklet*

### INTRODUCTION

Puberty is a time when a child experiences physical changes, attitudes/behavior, and maturation of the reproductive organs. The main feature of puberty in girls is marked by menstruation or first menstruation (Nurhidayati et al, 2018). Menarche is defined as the first menstrual period, when the discharge of blood from the female genitalia is in the form of shedding of the inner lining of the uterus which contains many blood vessels. The initial period usually occurs several years

after pubic hair growth, breast enlargement and rapid growth is known as the "growth spurt". Menarche generally occurs between the ages of 11 and 14 years. Normally it occurs earlier at the age of 9 years or later occurs at the age of 15 (Irfana, 2021). When facing menarche, every young woman needs psychological readiness (Julama, 2021).

Readiness for the first menstruation (menarche) is a condition that indicates that a person is ready to reach physical maturity,

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namely the arrival of the first menstruation (menarche) which comes out of a woman's reproductive organs and will occur repeatedly every month, in a normal cycle. This is indicated by a deep understanding of the menstrual process so that they are ready to accept and experience menarche as a normal process (Triningsih, 2018). Unpreparedness to face menarche will have an impact on physical problems, namely lack of personal hygiene, resulting in the risk of urinary tract infections (UTI), cessation of menstruation and menstrual disorders. While the psychological impact of unpreparedness is feeling anxious and afraid so that it affects self-concept, achievement, deviance and social maturation, as well as young women's unpreparedness to accept sex roles. This is due to a lack of information about menarche among adolescents (Mahmudah & Daryanti, 2021).

Research by Wahab et al (2018) explains that there was a significant decrease in the age of menarche in Indonesia from the 1970s to 2010. The 2010 RISKESDAS results show that the average age of menarche in Indonesia is 13 years and some experience it earlier at the age of less than 9 year. In East Java, the average age of menarche is 36.5% for 13-14 years, 25.3% for 11-12 years, 2.3% for 9-10 years and 0.1% for 6-8 years. %. Based on Purnamasari's research (2016) of grade 5 and 6 girls (10-12 years old) at MI Al Islam Banjarejo Madiun, it showed that 95% of respondents felt unprepared to face menarche, and 5% felt ready. This unpreparedness is caused by a lack of information so that they feel worried and confused about what to do during menstruation later. Based on research by Retnaningsih et al (2018) girls in grades 4, 5 and 6 (age 9-12 years) at SDN Plalangan 01 Semarang showed that 77.8% were not ready to face menarche and 22.2% were ready to

face menarche. The young woman is not ready because she is afraid to face menarche, confused to face menarche, considers menarche as a troublesome thing, and menarche causes discomfort to her. From the conclusions above, most young women stated that they were not ready because they felt afraid, anxious and confused due to a lack of information.

Many factors affect the age of menarche including genetics (age of the mother's menarche), exposure to mass media, social environment, economic status, and nutritional status (Devi Partika Sari et al., 2019). Young women are not ready to face their first menstruation, it can be caused by various reasons, including the role of parents and educators. The lack or even the lack of reproductive health education for women is caused by a sense of taboo to convey matters that discuss sexual organs (Nirman Julama, 2021). Efforts that can be made to overcome this unpreparedness are by providing health education about menarche (Novita et al., 2020)

Based on a preliminary study conducted at an elementary school in Batu City, it was found that there were 54 female students in grades V and VI, 16 of whom had experienced menarche and 38 had not yet experienced menarche. The results of interviews with 10 young female respondents who had not yet menarche found that 70% of respondents were not ready to face menarche. Most of the 60% of respondents said they were worried and afraid of facing menarche because they had never received information about menarche. Meanwhile, 30% of respondents said they were ready because they had received information from their mother and the Koran teacher so they knew what to do during menarche later. This lack of information has

an impact on personal hygiene problems that often occur in these students, namely frequent itching in the genital area because they do not know how to maintain proper personal hygiene. Based on this description, the author is interested in researching the effect of health education through the booklet "Ready to Face First Menstruation (MANTAP)" media on readiness to face menarche

## METHODS

The research design used in this study was quasi-experimental with a pre-post test nonequivalent control group design approach. This research was conducted at SDN Dadaprejo 1 with a class V population who had not experienced menstruation in April-June as many as 32 children. The sampling technique used was total sampling with a sample of 32 female students. Data collection in this study used MANTAP booklet media instruments, UNICEF Menstruation Pocket Book Media and questionnaires. Analysis of statistical test results using the Paired Sample T test and the Independent Sample T Test.

## RESULT AND DISCUSSION

**Table 1. Characteristics of Respondents by Age**

Age (Year)	Treatment group		Control Group	
	F	%	F	%
10	1	6,3	1	6,3
11	11	68,8	11	68,8
12	4	25,0	4	25,0
<b>Total</b>	<b>16</b>	<b>100,0</b>	<b>16</b>	<b>100,0</b>

From table 1 it can be seen that the characteristics of respondents based on age found that the highest age was in the treatment group, namely 11 years at 68.8% and the lowest, namely 10 years at 6.3%, while the age in the control group was the most, namely 11 years at 68.8 % and the lowest is 10 years old at 6.3%.

**Table 2. Readiness to menarche before and after giving health education to the treatment group and the control group**

Readiness to menarche	Treatment group				Kelompok kontrol			
	Pretest		Posttest		Pretest		Posttest	
	F	%	F	%	F	%	F	%
Not ready	11	68,8	1	6,3	10	62,5	2	12,5
ready	5	31,3	15	93,8	6	37,5	14	87,5
<b>Total</b>	<b>16</b>	<b>100,0</b>	<b>16</b>	<b>100,0</b>	<b>16</b>	<b>100,0</b>	<b>16</b>	<b>100,0</b>

Based on table 2, it shows that the readiness of respondents to face menarche in the treatment group before being given health education there were 11 respondents who were not ready (68.8%), after being given health education using booklet media there was 1 respondent who was not ready (6.3%). While readiness to face menarche in the control group before being given health education there were 10 respondents who were not ready (62.5%), after being given health education using pocket books there were 2 respondents who were not ready (12.5%).

**Table 3. Effect of Health Education in the treatment group and control group on menarche**

Group	Readiness to menarche	Mean	SD	SE	$t_{\text{hit}}$	$p$ value
Treatment group	Pretest	61,69	7,418	1,855	8,141	0,000
	Posttest	73,75	5,961	1,490		
Control Group	Pretest	63,19	5,980	1,495	5,123	0,000
	Posttest	70,81	6,544	1,636		

Based on table 3 shows the readiness of female students in facing menarche after being given health education from the two groups there was an average increase. In the treatment group, the average readiness value of students before being given health education was 61.69 with a standard deviation of 7.418 and after being given health education using the MANTAP booklet of 73.75 with a standard deviation of 5.961. Whereas in the control group the average value of readiness before being given health education was 63.19 with a standard deviation of 5.980 and after being given health education using the UNICEF

menstruation pocket book was 70.81 with a standard deviation of 6.544.

In the treatment group the results of the  $p$  value were  $0.000 < 0.05$ , there was an average difference in the results of pretest and posttest readiness, which means  $H_a$  was accepted and  $H_0$  was rejected, namely there was an effect of health education using MANTAP booklet media on student readiness. In the control group the  $p$  value was  $0.000 < 0.05$ , there was an average difference in the results of pretest and posttest readiness, which means that  $H_a$  was accepted and  $H_0$  was rejected, that is, there was an effect of health education using the UNICEF pocket book media on student readiness.

**Table 4. Differences in readiness to menarche in the treatment group and the control group**

Group	$t_{hit}$	$p$ value	summary
Treatment	1,327	0,194	not signifikan
Control	1,327		

Based on table 4, the results of the Independent Sample T Test for readiness between the treatment group and the control group obtained 1.327 and a significant level ( $p$  value) of 0.194, where  $0.194 > 0.05$ , meaning that  $H_0$  is accepted and  $H_a$  is rejected. It can be concluded that there is no difference in health education using the MANTAP booklet media and the UNICEF menstrual pocket book on the readiness of young women in facing menarche.

#### **Readiness to face menarche before and after being given health education using the mantap booklet media**

Based on research that has been conducted on 16 respondents in the treatment group, it shows that the readiness of respondents in facing menarche before being given health education using booklet media, there were 11 respondents who were not ready to face menarche (68.8%) and 5 respondents who were ready to face menarche (31.3%). While readiness to face menarche after being given health education using booklet media, there were 15 respondents who were ready to face menarche (93.8%) and 1 respondent who was not ready to face menarche (6.3%).

In the treatment group, the average readiness value of students before being given health education was 61.69 with a standard deviation of 7.418 and after being given health education using the MANTAP booklet of 73.75 with a standard deviation of 5.961. The  $p$  value is  $0.000 < 0.05$ , there is an average difference in the results of pretest and posttest readiness, which means that  $H_a$  is accepted and  $H_0$  is rejected, that is, there is an effect of health education using MANTAP booklet media on student readiness.

Readiness to face menarche in female students using booklet media from before and after being given treatment has increased. This is in line with the theory (Kholid, 2012) which says booklets are special prints, with more presentation and content compared to books in general, and the arrangement of booklets with material as attractive as possible, and the display side of the booklet that can attract attention. If you want to be competent in understanding the contents of the reading, booklet media is an effective choice to use. The results of the study (Lubis, et al. 2022) also say that providing counseling using booklet media can increase knowledge and information that is effectively understood by

respondents, so that the value before and after being given counseling increases. Therefore, booklets about menstruation are one of the learning media that can be read repeatedly and can increase knowledge and change a more positive attitude related to menstruation.

There is a change in readiness in dealing with menstruation in young women because respondents get additional information or knowledge through the MANTAP booklet media. Change occurs because of a process that is receiving new information. However, this booklet does not fully increase the readiness of all respondents.

#### **Readiness to face menarche before and after being given health education using pocket books (UNICEF)**

Based on the results of research conducted on 16 respondents, it showed that the readiness of respondents to face menarche in the control group before being given health education using pocket books, there were 10 respondents who were not ready to face menarche (62.5%) and 6 respondents who were ready to face menarche (37, 5%). While readiness after being given health education using the UNICEF menstrual pocket book media, there were 14 respondents who were ready to face menarche (87.5%) and 2 respondents who were not ready to face menarche (12.5%).

Whereas in the control group the average value of readiness before being given health education was 63.19 with a standard deviation of 5.980 and after being given health education using the UNICEF menstruation pocket book was 70.81 with a standard deviation of 6.544. The  $p$  value is  $0.000 < 0.05$ , there is an average difference in the results of pretest and posttest readiness, which means that  $H_a$  is accepted and  $H_0$  is rejected, that is, there is an effect of health education using the

UNICEF pocket book media on student readiness.

The results of this study are in line with research conducted by Badi'ah and Mandiri (2018) which stated that there was an effect of using a pocket book about menarche on readiness for menarche in young women at Patran Gamping Sleman Elementary School, Yogyakarta. Providing information through the method of using pocket book media prioritizes the quality of pocket book writing and the method of delivery which prioritizes the independence of young women to understand it, so that the respondent's mastery of the information provided becomes more effective.

The use of the UNICEF menstrual pocket book is in the form of a comic so that the delivery of information is through conversations between individuals. For those who don't like reading comics, the message conveyed in it is difficult to accept. However, the pictures provided attract attention so that young women are interested in reading it.

#### **Differences in the effect of health education on readiness for menarche using booklets and pocket books**

The results of the study showed that there were differences in the value of readiness in facing menarche before and after being given health education to students of SDN Dadaprejo 1 Junrejo, Batu City. Respondents experienced increased readiness in facing menarche after being given health education. It was concluded that there was an effect of health education on readiness for menarche in both the treatment group and the control group.

The results of the questionnaire obtained before being given health education about menstruation were that many respondents felt afraid and worried when facing their first menstruation such as being afraid when blood came out of the genitals, afraid of having their



activities disrupted, feeling worried about the process of their first menstruation, embarrassed if their friends found out when they were menstruating, ashamed to talk about menstruation with friends or teachers, considering menstruating women to be dirty, uncomfortable and troublesome. Many respondents did not know and were confused about what to do when facing their first menstruation, such as how to use pads properly and how to care for and dispose of used pads. This unpreparedness is due to a lack of knowledge or information about menstruation.

This is in line with research conducted by Retnaningsih, ddk (2018) explaining that students who were not ready to face menarche in their questionnaire answers stated that students were afraid of facing menarche, confused about facing menarche, considered menarche as a troublesome thing, and menarche caused discomfort to them. . So to overcome the unpreparedness of students in facing menarche they should get earlier information or explanations about menarche, both at school by teachers in collaboration with health workers to provide education about menarche and outside of school by mothers who can help provide a good picture of manarche so that children more understanding and ready to face menarche. If menarche is not overcome with correct information, it will cause fear and anxiety.

Readiness to face menarche from the results of the questionnaire obtained after being given health education indicated that most of the respondents felt not afraid, worried, and embarrassed to tell their friends or teachers. Respondents already know what to do when they are about to face their first menstruation, such as how to use the correct sanitary pads,

how to dispose of used sanitary napkins and know the myths and facts during menstruation.

Readiness in dealing with menarche can be positive as shown by a sense of sincerity, confidence, not fear and not worry (Fitriani, 2011). Young women who view menarche as an interesting experience will respond or act positively in dealing with it (Maramis, 2019). Adolescents who have a positive attitude will be happy and proud to experience menarche because they consider them biologically mature (Syriani, E., & Widyasih, 2012).

The increase in readiness to face menarche was due to the provision of information by conducting health education through the media of booklets and pocket books. The results of the study (Rizkia & Ungsianik, 2019) show that reproductive health education regarding menarche preparation is effective in increasing knowledge, emotional responses, attitudes of young women towards readiness for menarche. Notoadmodjo's theory (2012) explains that health education about menarche for children really needs to be done to increase children's knowledge, so that they are better prepared to face menarche. Health education or counseling in schools is important, especially reproductive health issues, and so on

In this study, improvements occurred in all aspects, both indicators of understanding, indicators, appreciation and indicators of willingness. The understanding aspect shows the condition of a person knowing and understanding the events he is experiencing so that it becomes a guarantee that the individual will feel ready to face the things that happen. Aspects of understanding related to menarche include the age at which menarche occurs, the physical changes that occur during menarche,

and the signs and symptoms of menarche. The appreciation aspect shows that a person is naturally ready to be experienced by almost everyone, which is normal, natural and nothing to worry about. The aspect that is understood is one's feelings in facing menarche. In the aspect of willingness, it shows a psychological condition, that is, a person is able and willing to do something so that he can receive and experience directly everything that should be experienced as a process. The readiness aspect that is understood is a person's ability to face menarche, someone is willing to accept the changes that occur during menarche, and someone is willing to access menarche information (Sulistioningsih, 2014).

A correct understanding of menstruation causes young women to not feel afraid of facing menarche. Based on the research results of Novita, et al (2020) it shows that information about menarche can increase the level of readiness for respondents, the more information they get, the higher their readiness to face menarche. Health education is directly very influential in increasing psychological readiness to face menarche.

Independent Sample Test Results T Test readiness between the treatment group and the control group obtained 1.327 and a significant level ( $p$  value) 0.194, where  $0.194 > 0.05$ , meaning that  $H_0$  is accepted and  $H_a$  is rejected. It was concluded that there was no difference in health education using the MANTAP booklet media and the UNICEF menstruation pocket book on the readiness of young women in facing menarche.

In practice, it was found that the control group using the UNICEF pocketbook media was more active in asking about material they did not understand in the UNICEF pocketbook

compared to the treatment group using the MANTAP booklet media. Both media have their own advantages. Booklet media has several advantages, namely, the information conveyed in the booklet can be more detailed and clear, so that more can be reviewed about the information conveyed. While the advantages of the UNICEF pocket book media are that they are designed like comic books with illustrated stories that attract students' attention and provide a brief description of the contents of a message. From the description above it can be seen that the MANTAP booklet media and the UNICEF menstruation pocket book are media in the form of printed books so that they have the same effectiveness in increasing readiness for menarche in young women. Therefore there is no difference in the use of MANTAP booklet media and UNICEF pocket book media.

## CONCLUSION

The conclusions of this study are 1) There is an increase in readiness to face menarche after being given health education using the MANTAP booklet media, 2) There is an increase in readiness to face menarche after being given health education using the UNICEF menstrual pocket book media, 3) There is an effect of health education with the booklet media "ready to face first menstruation (MANTAP)" and a menstrual pocket book on readiness for menarche at SDN Dadaprejo 1 Batu City. The results of the different tests showed that there was no difference in health education using the MANTAP booklet and the UNICEF menstrual pocket book on readiness for menarche.

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