

THE EFFECT OF REPRODUCTIVE HEALTH EDUCATION ABOUT MENSTRUAL DISORDERS ON ADOLESCENTS AT THE AL-MADINAH INTEGRATED ISLAMIC BOARDING SCHOOL, MALATI JONGGOL VILLAGE IN 2024

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Abstract

Menstruation usually occurs for 3-7 days. The time period from the first day of menstruation to the first day of menstruation the following month is called the menstrual cycle. The menstrual cycle pattern is said to be normal if it occurs not <21 days and not >35 days. Menstrual cycle disorders that many women experience are cycles that last >35 days (oligomenorrhea), short menstrual cycles <21 days (polymenorrhea), and even not experiencing menstruation for 3 months in a row (amenorrhea). Objective: The aim of this research is to determine the influence of polymenorrhea education in adolescents on adolescent knowledge at the Terpadu Al-Madinah Jonggol Islamic Boarding School in 2024. Research Method: This research is quantitative with a quasi-experimental type of research through pretest and post-test activities. Results: The results of the study showed that there was an increase in knowledge after being given reproductive health education about polymenorrhea in adolescents. Conclusion: There is an effect of increasing knowledge after providing education to adolescents on reproductive health.

Keywords: education, polymenorrhea, adolescents.

INTRODUCTION

Menstruation is periodic bleeding that is an integral part of a woman's biological function throughout her life cycle (Kek et al., 2025). Menstruation can cause potential female reproductive health problems related to fertility, especially menstrual patterns (Shandily et al., 2024). Menstrual cycle disruptions such as the length of the menstrual cycle can increase the risk of chronic diseases (Rugvedh et al., 2023). Menstruation is a natural process that occurs in women, the presence of menstruation indicates that hormones in women have worked (Critchley et al., 2020). Menstruation usually occurs for 3-7 days. The period of time from the first day of menstruation to the first day of menstruation of the following month is called the menstrual cycle. The pattern of the menstrual cycle is said to be normal if it occurs no <21 days and no >35 days (Kesehatan Reproduksi Remaja Dan Napza, 2022)

Menstrual cycle disorders that many women experience are cycles that last >35 days (oligomenorrhea), short menstrual cycles <21 days (polymenore), and even no menstruation for 3 months in a row (amenorrhea). There are two types of amenorrhea: primary amenorrhea, which is often caused by congenital and genetic abnormalities, and secondary amenorrhea, a condition in which a woman has had her period but then does not have her period again (Muhammad Ilham, 2023)

Factors that often play a role in the regularity of the menstrual cycle in women include hormonal changes, genetics, serious medical conditions, and body mass index (BMI) (Tayebi et al., 2018). Efforts that can be made to keep the menstrual cycle regular are by maintaining a healthy diet and implementing a healthy lifestyle (Yan et al., 2021). A regular diet and eating a balanced nutritious diet are solutions so that the menstrual cycle runs regularly (Loftus & Radomski, 2021). There are several foods that can help speed up the menstrual cycle, namely broccoli, salmon, green vegetables, fish oil, almonds, sesame seeds, yogurt, soy milk, and eggs (Cabeca, 2022). Implementing a healthy lifestyle by exercising regularly

and not smoking is also a solution so that the menstrual cycle runs regularly (Anderson et al., 2016). However, applying excessive exercise can affect the balance of estrogen and progesterone hormones (Khan et al., 2025). Disruptions in the levels of this hormone cause irregular menstruation. The nicotine content in cigarettes can affect the hormones estrogen and progesterone, so it is recommended not to smoke so that the menstrual cycle runs regularly. (Nessi Meilan et al., 2019)

Based on the results of a survey that has been conducted to the Al-Madinah Integrated Islamic Boarding School, there are problems in adolescents such as lack of cleanliness, vaginal discharge and menstrual pain in these students because in the pesantren environment there are still limited time for other activities and lack of health information. Young women's understanding of their reproductive system and function is very important. A teenager who does not have enough knowledge about reproductive health, will tend to neglect his reproductive health and will end up committing actions that harm himself. Knowledge about reproductive health is also an important factor in determining women's hygienic behavior during menstruation.

RESEARCH METHODS

The design of this study is quantitative, namely *Quasi Experiment* with a one-group pretest-posttest design approach to measure and compare the level of knowledge before and after being given reproductive health education about menstrual disorders using independent and dependent variables as well as taking primary data taken from the Al-Madinah Melati Integrated Islamic Boarding School – Bogor.

RESULTS AND DISCUSSION

Descriptive Statistics From Pre and Post Treatment Knowledge Scores

The analysis of the level of knowledge of adolescents before and after the provision of reproductive health education at the Al-Madinah Melati Integrated Islamic Boarding School – Bogor can be seen in the table below

Table 1. Statistical descriptive of *pre* and *post-treatment* knowledge scores

Variable (score 100)	(score	Statistical size				Data normality test (p*)
		Average	SD	Median	Range	
Knowledge						
Pre		54,47	28,66	80,00	13,33-	<0.001
Post		84,57	19,03	93,33	100,00 26,67- 100,00	<0.001

Information:

*) based on the Kolmogorov-Smirnov test.

Score of 100 for knowledge = $100 \times (\text{number of correct answers}) / \text{number of statements}$

Based on table 1, the results of the normality test of adolescent group data for knowledge before and after being given health education showed a value of $p < 0.001$, meaning that the data was not normally distributed, so to see the difference *between pre* and *post-test*, a *non-parametric test* was used.

Knowledge Score Comparison

Table 2. Comparison of Knowledge Scores

Knowledge score (score 100)		N = 86
Pre	80,00	(13,33-100)
Post	93,33	(26,67-100)
Comparison of pre vs post	p<0,001**	
Increased	13,33	

Caption: *) Mann-Whitney test; **) Wilcoxon test.

Table 2 presents a comparison of the adolescent group's knowledge scores and between the results of pre and *post-test intervention measurements*. From the results of the difference in knowledge scores for *pre-test and post-test data*, there was a significant difference of $p < 0.001$, an increase of 13.33. From these results, it can be concluded that the score of increasing adolescent knowledge after being given education related to reproductive health is higher to maintain the cleanliness of the reproductive organs, as well as a good nutritional pattern to facilitate the menstrual cycle.

Discussion

Based on the results of data processing and data analysis on the effect of reproductive health education about menstrual disorders on adolescents at the Al-Aadinah Integrated Islamic Boarding School, Malati Jonggol Village in 2024. The discussion in this chapter is to compare the results of the research with theoretical concepts, previous research and the researcher's assumptions.

The Effect of Reproductive Health Education on Menstrual Disorders on Adolescents

Based on the results of the study, it can be seen that the level of knowledge of adolescent girls increased after being educated about reproductive health about menstrual disorders. The results of statistical data processing are that there is a significant difference between knowledge before and after health education is given, there is an increase in the median value, which is 80.00 before being given health education, while for the median value after being given education, it is 93.33. Therefore, it can be concluded that in the adolescent group, there is an increase in reproductive health knowledge about menstrual disorders.

This is in accordance with the theory that the level of knowledge of the Adolescent Girls of the Al-Aadinah Integrated Islamic Boarding School in Malati Jonggol Village is the result of knowing, and this happens after people sense a certain object. Sensing occurs through the five senses of humans, namely the senses of sight, hearing, smell, taste, and touch. Most of human knowledge is acquired through the eyes and ears. Knowledge or cognition is a very important domain in shaping a person's actions (over behavior). And if everyone knew the condition of a woman during menstruation, they would definitely take care of, take care of, and pay attention wholeheartedly, including to find out if there are abnormalities that may occur in the woman. (Muhammad Romadhon et al., n.d.)

This is in line with the research conducted by Yuniati, et al, mostly adolescent girls who have enough category knowledge as many as 17 adolescent girls (56.7%), this is influenced by the sources of information obtained and most of the lessons they get in school are about biology (the science of living things) including menstrual knowledge and some about the disorders of menstruation (Yuniati & Sari, 2015)

CONCLUSION

Based on the results of the research and discussion conducted by the researcher on the Effect of Reproductive Health Education on Menstrual Disorders on Adolescents at the Al-

Madinah Integrated Islamic Boarding School, Malati Jonggol Village in 2024, it can be concluded as follows: The level of knowledge of adolescent girls at the Al-Madinah Integrated Islamic Boarding School in Malati Jonggol Village is still lacking regarding reproductive health about menstrual disorders. Health education using powerpoint media has an effect on increasing adolescent knowledge scores on menstrual disorders. There is an increase from pre-test results to post-tests that have been carried out at the Al-Madinah Integrated Islamic Boarding School, Malati Jonggol Village

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