

PENGARUH PENDIDIKAN KESEHATAN TERHADAP KESIAPAN MENGHADAPI USIA MENARCHE PADA SISWI DI SDN 020617 BINJAI

THE INFLUENCE OF HEALTH EDUCATION ON MENARCHEAL READINESS AMONG FEMALE STUDENTS AT SDN 020617 BINJAI

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Abstrak

Latar Belakang : Pendidikan kesehatan adalah penambahan pengetahuan dan kemampuan seseorang melalui teknik praktik belajar atau instruksi. Kesiapan menghadapi menarche merupakan suatu keadaan bahwa seseorang siap untuk mencapai salah satu kematangan fisik pada masa remaja yaitu dengan datangnya menstruasi pertama. Menarche merupakan menstruasi pertama yang biasanya terjadi dalam rentang usia 10-16 tahun atau pada masa remaja awal. Penelitian ini bertujuan untuk mengetahui pengaruh pendidikan kesehatan terhadap kesiapan menghadapi usia menarche di SDN 020617 Binjai. Penelitian ini menggunakan jenis penelitian analitik kuantitatif, desain *Quasy Eksperimen* dengan rancangan *One Group Pre Test – Post Test Design*. Besar Sampel dalam penelitian ini berjumlah 36 Responden. Teknik pengambilan sampel yang digunakan adalah teknik *purposive sampling*. Metode pengumpulan data menggunakan kuesioner *PreTest* dan *PostTest* diberikan pendidikan kesehatan. Melalui uji statistik non parametrik dengan menggunakan uji *Wilcoxon Signed Rank Test* diketahui nilai $p=0.024 < \alpha 0,05$ Berdasarkan hasil penelitian dan pembahasan, maka dapat disimpulkan bahwa ada pengaruh pendidikan kesehatan terhadap kesiapan menghadapi usia menarche pada siswi di SDN 020617 Binjai. Untuk penelitian selanjutnya disarankan dapat meningkatkan pengetahuan sekaligus memberikan informasi melalui pendidikan kesehatan tentang kesiapan menghadapi usia menarche dengan metode dan media yang berbeda. Sehingga memberikan kemudahan kepada penelitian selanjutnya dan sebagai bahan perbandingan dengan memberikan hasil yang lebih baik.

Kata kunci: Pendidikan Kesehatan, Kesiapan, Menarche

Abstract

Background: Health education involves enhancing an individual's knowledge and skills through practical learning techniques or instruction. Readiness for menarche refers to a state of preparedness for reaching a specific physical milestone of adolescence: the onset of the first menstrual period. Menarche—the first menstruation—typically occurs between the ages of 10 and 16, or during early adolescence. This study aimed to determine the impact of health education on readiness for menarche among female students at SDN 020617 Binjai. This study employed a quantitative analytical approach using a quasi-experimental design—specifically, a one-group pre-test/post-test design. The sample consisted of 36 respondents selected via purposive sampling. Data collection involved the use of pre-test and post-test questionnaires administered in conjunction with health education. Statistical analysis using the Wilcoxon Signed-Rank Test yielded a p-value of 0.024 ($p < 0.05$). Based on the study results and discussion, it is concluded that health education influences readiness for menarche among female students at SDN 020617 Binjai. For future research, it is recommended to enhance knowledge and disseminate information regarding menarche readiness through health education using different methods and media. Such an approach would facilitate future studies and provide a basis for comparison, potentially yielding improved outcomes.

Keywords: Health education, readiness, menarche.

Introduction

Puberty is a developmental stage characterized by the maturation of sexual organs and the attainment of reproductive capacity. In females, it is marked by menstruation. Female adolescents who enter puberty will experience menarche. Menarche is defined as the first menstrual period, which commonly occurs between the ages of 10 and 16 years, in the form of periodic and cyclical uterine bleeding accompanied by the shedding (desquamation) of the endometrium (Saddiyah Rangkuti, 2021).

The first menstruation is the culmination of a series of primary and secondary changes and is a sign of reproductive maturity in adolescent girls. However, adolescents are still psychologically unstable and are not yet economically or socially independent.

Menarche tends to occur earlier when children have not yet reached cognitive maturity. Combined with a lack of knowledge about menstruation, this may cause children to feel anxious and afraid. In addition, they may feel embarrassed and unclean during menstruation (Mera et al., 2020).

According to WHO in 2018, the global population aged 0–14 years was estimated at 1.93 billion, or 25.6% of the world's population. Adolescence is generally considered to occur between the ages of 10 and 18 years, while the average age of menarche varies around 12 years (Hanifa & Dewi, 2022).

Approximately 95% of girls in the United States show signs of puberty after the age of 12 years. In France, puberty generally occurs between 13 and 14 years, whereas in Saudi Arabia it begins earlier, around 11–12 years, possibly because of the hot climate. In the cold regions of Siberia, it occurs later, around 17–19 years. The average age of menarche is reported to be 13 years in Russia and Norway, while in India the average age has decreased to approximately 11.4 years (Putri et al., 2021). The distribution reported was 24.92% for early menarche at ages 10–11 years, 64.77% for ideal menarche at ages 12–13 years, and 10.30% for late menarche at ages 14–15 years (Hartatik et al., 2022).

The 2018 National Health Survey showed that the average age of menarche among Indonesian women was 12.96 years. Indonesia ranked 15th among 67 countries in the decline in age at menarche, with a decrease

of 0.145 years per decade. Most Indonesian girls experienced their first menstruation at age 12 (31.33%), age 13 (31.30%), and age 14 (18.24%). The 2019 Basic Health Research (RISKESDAS) reported that the overall proportion of menarche among adolescents aged 10–19 years was 78.6%, with the average age of menarche being 12.96 years. In North Sumatra, 25.3% of adolescent girls experienced menarche at the age of 11–12 years (Abdullah & Anissa, 2022).

In North Sumatra, particularly in Medan, there are notable differences in the age of menarche between populations with middle-to-high socioeconomic status and those with middle-to-low socioeconomic status. The average age of menarche among girls with middle-to-high socioeconomic status was 11.45 years (SD 0.92), while among those with middle-to-low socioeconomic status it was 12.19 years (SD 0.98). Menarche also occurs earlier in urban areas than in rural areas. The average age was 11.93 years among urban adolescents and 13.08 years among rural adolescents (Saddiyah Rangkuti, 2021).

A study by Ningrum and Fitriana (2020), entitled “The Effect of Edutainment Using Snakes and Ladders Media on Readiness to Face Menarche Among Female Students at SDN 01 Jungke,” used a quasi-experimental pretest-posttest design without a control group. Before the intervention, 71.9% of students were not ready to face menarche; after the intervention, all students (100%) were categorized as ready. The Wilcoxon test showed $p = 0.000 < 0.05$, indicating an effect of the intervention on readiness.

Fatmawati et al. (2022) also found an increase in knowledge and readiness to face menarche. Before health education, 100% of respondents had poor knowledge and were not ready. After health education, 100% had good knowledge and were ready to face menarche. The Wilcoxon test showed $p = 0.000 < 0.05$, indicating that health education affected both knowledge and readiness.

Psychological changes experienced by

many children when facing menarche in Indonesia are often observed when menstruation begins unexpectedly, such as during school activities or play, without prior preparation or knowledge. Menstruation at school may cause leakage through the school uniform, leading children to cry, feel embarrassed, afraid, anxious, uncomfortable, or

unable to accept the experience (Mera et al., 2020).

A preliminary study conducted on January 24, 2023, through interviews found that there were 43 female students in Grades V and VI. Five Grade V students and four Grade VI students had already experienced menstruation, while 34 had not. The average age of Grade V students was 10–11 years, and that of Grade VI students was 11–12 years. Among the nine students who had experienced their first menstruation, five experienced it at age 11 and four at age 12. Interviews with 10 students showed that only three could correctly answer questions about menstruation and considered it a normal occurrence, three had limited understanding, and four said they were not ready and were afraid because they had never received health education on readiness to face menarche.

Based on the above description, the researchers were interested in conducting a study on the effect of health education about menarche on readiness to face menarche among Grade V and VI female students at SDN 020617 Binjai.

Research Methods

This study was a quantitative analytical study using a quasi-experimental method to determine the effect of an intervention, namely health education, on readiness to face menarche (Notoatmodjo, 2017). The design used was a one-group pretest-posttest design without a comparison or control group. Measurements were conducted twice: first before health

Classes A and B, for a total population of 43 students.

Data collection began with obtaining a research permission letter from Flora College of Health Sciences. The letter was submitted to SDN 020617 Binjai to obtain approval for the study site. After approval was obtained, the researchers prepared the materials and instruments for the study. Data were collected before health education (pretest) and after health education (posttest) by distributing the same readiness-to-face-menarche questionnaire.

During the pretest, respondents were given 10–15 minutes to complete the questionnaire, after which the questionnaires were collected. The researchers then provided health education about menarche and readiness to face menarche using leaflets in the classroom. The education session lasted approximately 60 minutes. After the health education session, respondents completed the same questionnaire again as a posttest.

Results and Discussion

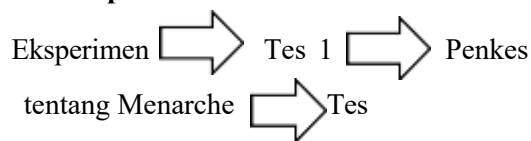
SDN 020617 is a public elementary school located at Jl. Sei Musi No. 11, Binjai City, under the Ministry of Education and Culture. The study population consisted of 43 Grade V and VI female students. During data collection, three respondents were absent; therefore, the final sample consisted of 36 respondents.

Demographic Distribution of Respondents

education using a pretest questionnaire and then after the intervention using a posttest questionnaire to assess changes in knowledge and readiness to face menarche (Sugiyono, 2017).

Tabel 3. 1 Rancangan Penelitian

Kelompok *Pretest* Perlakuan *Posttest*



Population refers to all objects or subjects with particular qualities and characteristics determined for study. The population consisted of all Grade V and VI female students at SDN 020617 Binjai: 19 Grade V students from Classes A and B and 24 Grade VI students from

at SDN 020617 Binjai

Demographic	Frequency	Percentase
<u>Characterics</u>		
Age: 10 years	5	13,9
Age: 11 years	21	58,3
Age: 12 years	10	27,8
Total	36	100,0
<u>Class</u>		
Class 5a	7	19,4
Class 5b	5	13,9
Class 6a	11	30,6
Class 6b	13	36,1
Total	36	100,0

3 Information source:

Parents and friends	28	77,8
Family	8	22,2
Total	36	100,0
Response: Fearful/anxious	8	22,2
Response: Neutral	20	55,6
Response: Confused	2	5,6
Response: Embarrassed	6	16,7
Total	36	100,0

The analysis showed that most respondents were 11 years old (21 students; 58.3%). By class, the largest group was Class 6B (13 students; 36.1%). Most respondents obtained information from parents and friends (28 students; 77.8%), and most reported feeling neutral about the topic (20 students; 55.6%).

Frequency Distribution of Students' Readiness Before and After Health Education

Readiness	Pre		Post test	
	test			
	N	%	N	%
Ready (>50%)		83,3	36	100,0
Ready (>50%)	6	16,7	-	-
(<50%)<50%				
Total	36	100,0	36	100,0

Before health education, most students were ready to face menarche (30 students; 83.3%), while six students (16.7%) were not ready. After health education, readiness increased, and all 36 students (100.0%) were categorized as ready.

Before the health education intervention, readiness was measured using a questionnaire, with a pretest mean score of 8.47. The finding that 16.7% of students were not ready is consistent with previous studies reporting limited readiness before health education.

The findings are consistent with Sripatni (2023), who reported that most Grade V and VI female students at SD Negeri 1 Konda

menarche-related health education.

Conclusions and Recommendations

Conclusion

Before the health education intervention on readiness to face menarche, among 36 respondents, 30 students (83.3%) were categorized as ready and six students (16.7%) as not ready. After the health education intervention, readiness increased, and all 36 students (100.0%) were categorized as ready. Health education had an effect on readiness to face menarche among female students at SDN 020617 Binjai. The Wilcoxon Signed-Rank Test showed a p-value of $0.024 < \alpha 0.05$.

Recommendations

The results of this study can serve as input and information regarding readiness to face menarche and may be used as additional material in providing health education to adolescents, particularly concerning menarche.

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were not ready before receiving health education, and with Saddiyah Rangkuti (2021), who also found that many elementary school students were not ready before receiving

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