Journal of Bionursing
2024, VOL.6, NO. 2, 217-223

ADOLESCENTS' KNOWLEDGE, ATTITUDES, AND NON-PHARMACOLOGY PRACTICE OF TREATING DYSMENORRHEA

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ABSTRACT
Background : Dysmenorrhea is a disorder of abdominal pain often experienced by adolescents during menstruation. This often interferes with daily activities, so it requires effective treatment, including non-pharmacology techniques. However, many adolescents still do not know how to treat dysmenorrhea. ***Aim :*** This study aims to determine the relationship between the knowledge and attitudes of adolescents toward non-pharmacology practices for treating dysmenorrhea. ***Method :*** The method used in this research are quantitative with a cross-sectional design. The sampling technique used consecutive sampling with a total sample of 106 respondents. Test analysis in this research using the Chi-Square test. ***Results :*** The result showed that knowledge in the medium category with 52 people (14.2%), attitude in the negative category with 59 people (55.7%), and adolescents do not handle practice with 81 people (76.4%). The results of the Chi-Square test between variables showed the adolescents' knowledge with a p-value = 0.230 (p > 0.05) and adolescents' attitudes with a p-value = 0.390 (p > 0. 05) towards non-pharmacology practices in treating dysmenorrhea.
Conclusion : There is no relationship between adolescents' knowledge and attitudes with the non-pharmacology practice of treating dysmenorrhea.

KEYWORDS
Attitude, dysmenorrhea, knowledge, non-pharmacology

INTRODUCTION

The menstrual cycle is a process of maturity of the reproductive organs affected by body hormones intimately associated with fertility (Villasari, 2021). Dysmenorrhea, a disorder in the form of cramps during menstruation or menstrual pain, is the most problem that women consistently encounter throughout their periods (Sinaga et al., 2017). Based on data from World Health Organization (WHO) (2017), the prevalence of dysmenorrhea shows that 1,769,425, or around 90% of women experienced dysmenorrhea. Most cases in Indonesia that experience dysmenorrhea are adolescents, with 64.5% (Rebecca et al., 2019). Risk factors that influence dysmenorrhea are early menarche with age <11 years, rarely doing exercise, menstrual cycles, and duration more than usual (7 days), family history, stress, and poor lifestyle such as consuming junk food or fast food, smoking, and drinking alcohol (Aryanie, 2014).

Knowledge is the most important to take action because an individual needs to know the causes and effects of that action, and the attitude shown by adolescents depends on the knowledge possessed by the individual. Adolescents who have good information about dysmenorrhea will have a positive attitude. Meanwhile, adolescents who lack knowledge about dysmenorrhea will have a negative attitude (Rahmawati, 2016). Adolescents with good knowledge will have a positive attitude toward reducing pain when dysmenorrhea, including using various pharmacology and non-pharmacology therapies. However, many adolescents do not know about treating dysmenorrhea, especially non-pharmacology treatment. The habits to reduce dysmenorrhea are resting in bed, enduring pain, and leaving it without medication (Husna et al., 2018).

The results of research conducted by Arlina et al. (2022) showed that adolescents had good knowledge and positive behavior in dealing with dysmenorrhea. Another research by Agustine et al. (2020) also stated that students had positive attitudes and good actions in handling dysmenorrhea, as evidenced by 91 people with good attitudes in handling dysmenorrhea as many as 59 people (64.8%) and 32 people with poor handled of dysmenorrhea (35,2%) show that the better knowledge adolescents have about dysmenorrhea, the better the treatment they do when they have dysmenorrhea.

The results of the survey at SMPN 9 Purwokerto in September 2022 of 15 students, showed that 66.67% of students had medium knowledge, 33.33% of students had good knowledge about dysmenorrhea; the attitude results in 53.33% of students had a negative attitude, and 46.67% of female students have a positive attitude towards dysmenorrhea, and there are 26.67% of female students who do not take treatment when dysmenorrhea occurs.

The study aims to identify the relationship between adolescents' knowledge and attitudes with the non-pharmacology practice of treating dysmenorrhea.

METHODS

This type of research used quantitative analysis with a cross-sectional approach to know the relationship between variables. by approaching, observing, or collecting data simultaneously to find a connection between variables. This research was conducted at SMP Negeri 9 Purwokerto, Banyumas Regency, Central of Java, from September 2022- February 2023.

The number of samples used in the Lemeshow formula is 106 people with the sampling technique used being Consecutive sampling. The inclusion criteria were female students who experience menstrual pain, measured by the Verbal Multidimensional Scoring System (VMSS) assessment sheet with grades 1, 2, and 3, and are willing to become respondents (Kushwaha, et al., 2021). While the exclusion criteria were incomplete data filling and resigning as respondents.

The instrument used in this research is a questionnaire. The questionnaire measures adolescents' knowledge level and determines the attitude variable adopted by Yohana (2018). The knowledge questionnaire contains 20 questions with a Guttman scale and a closed-form questionnaire with two alternative answers. The attitude questionnaire contained 20 positive and negative attitudes during dysmenorrhea using the Likert scale and consisted of 10 favorable and 10 unfavorable questions. For data on the non-pharmacology practice of treating dysmenorrhea, the questionnaire was adopted from the research of Ni Kadek (2021) by having 10 forms of questions regarding non-pharmacology practice.

Data were collected on menstruating respondents who experienced menstrual pain as measured by the VMSS score sheet for students in grades VII, VIII, and IX. The researcher gave an informed consent sheet taken home to be filled in by the respondent's parents or guardians. The next day, the respondent returned the informed consent sheet to be collected. If the parents or guardians of the respondents agree with the informed consent, students are taken as respondents and gather in a lobby room that had been prepared and explained the purpose, benefits, and research procedures to the respondents. Afterward, the researcher gave the respondents a Google form link to fill out with their respective cell phones. In the Google form, there is an informed consent that needs to be filled

in by the respondent, followed by data on the respondent's characteristics and questionnaires.

Data were analyzed using SPSS 21. Univariate analysis was used to show demographic characteristics, level of knowledge, attitude, and non-pharmacology practice. The Chi-Square correlation uses bivariate analysis to measure the relationship between variables (Dahlan, 2014).

This research has received research ethics approval from the FIKES UNSOED ethics committee with number 980/EC/KEPK/XII/2022

RESULTS AND DISCUSSION

Table 1 shows that the majority category of dysmenorrhea pain degrees felt by respondents is grade 1 (81.1%), and most respondents' parents had senior high school education (49.1%). Most of the respondent's parents' occupations were private employees (26.4%) and entrepreneurs (26.4%), and most parents' income was less than the minimum wage (54.7%). The age of respondents ranged from 12 to 16 years old, and the age of menarche, the respondents ranged from age 9 to 14.

Table 1. Characteristics of Respondents (N=106)

Variables	n	%	Median	Minimum-Maximum
Degree of Dysmenorrhea				
Grade 1	86	81.1		
Grade 2	20	18.9		
Parents' Education				
Elementary School	6	5.7		
Junior High School	20	18.9		
Senior High School	52	49.1		
University	27	25.5		
Unfinished School	1	.9		
Parents' Occupation				
Private Employee	28	26.4		
Government Employee	16	15.1		
Entrepreneur	28	26.4		
Laborer	23	21.7		
Not Working	11	10.4		
Parents' Income				
> Regional minimum wage in Banyumas	48	45.3		
≤ Regional minimum wage in Banyumas	58	54.7		
Age			13	12-16
Age of Menarche			11	9-14

Table 2 shows that most adolescent knowledge is included in the medium category, namely as many as 52 people (14.2%). Most adolescents' attitudes are in the negative category, namely as many as 59 people (55.7%). For most adolescents, 81 people (76.4%) don't handle dysmenorrhea with non-pharmacology.

Table 2. Adolescents' Knowledge and Attitude with Non-Pharmacology Practice of Treating Dysmenorrhea

Variable	n	%
Adolescents' Knowledge		
High	15	14.2
Medium	52	49.1
Low	39	36.8
Adolescents' Attitude		
Positive	47	44.3
Negative	59	55.7
Non-Pharmacology Practice		
Do handling	25	23.4
Do not handling	81	76.4

Table 3 it shows the data analysis results for the relationship between adolescents' knowledge with non-pharmacology practices in treating dysmenorrhea, p-value = 0.230 (p-value <0.05), so there was no relationship between adolescent knowledge and non-pharmacology practices. Another variable for the relationship between adolescents' attitudes with non-pharmacology practices in treating dysmenorrhea resulted in a p-value = 0.390 (p-value <0.05), so there was no relationship between adolescent attitudes and non-pharmacology practices in treating dysmenorrhea.

Table 1. Relationship between adolescents' knowledge and attitude with the non-pharmacology practice of treating dysmenorrhea.

	Non-Pharmacology		Total	p
	Do Handling	Don't Handling		
Adolescents' Knowledge	6 (5.7%)	9 (8.5%)	15	.230
High	12 (11.3%)	40 (37.7%)	52	
Medium	7 (6.6%)	32 (30.2%)	39	
Low				
Adolescents' Attitude	12 (11.3%)	29 (27.4%)	41	.390
Positive	13 (12.3%)	52 (49.1%)	65	
Negative				

The analysis of adolescents' knowledge of non-pharmacology practices in treating dysmenorrhea showed no significant relationship between the two variables, with a p-value = 0.230 (p-value <0.05). The results showed that 12 people (11.3%) had a medium level of knowledge in non-pharmacology practices for treating dysmenorrhea with adolescents' who did not practice non-pharmacology, namely 40 people (37.7%). With a medium level of knowledge about dysmenorrhea, these adolescents are still determined to carry out treatments to reduce dysmenorrhea. Based on the characteristics results, the respondents' age was in the early and middle adolescent categories. At this stage, adolescents are curious about what is experienced and how to solve it. When experiencing dysmenorrheal pain, they started to find how to reduce it. However, most adolescents still need help to do it directly in their daily activities (Bobak, 2012)

The other characteristic data that influences the level of knowledge in non-pharmacological treatment is the last education level of parents. Parents have a role in the form of responsibility to educate, nurture and guide their children in a better direction. Parents' education level affects adolescents' knowledge because parents are the closest people in everyday life. Parents also play a significant role in providing education to understand dysmenorrhea better (Purba, 2013). This study's results align with the results of Fitriani's research (2019), namely that there is no significant relationship between knowledge and treatment of primary dysmenorrhea.

The analysis of adolescent attitudes with non-pharmacology practices in treating dysmenorrhea showed no significant relationship between the two variables, with p-value = 0.390 (p-value <0.05). The results showed that the attitudes of adolescents in the negative category who handle non-pharmacology practices 13 people (12.3%). The results of the characteristic data that influence adolescents' negative

attitudes are that the respondents' age is relatively still in the early and middle adolescent categories who have just experienced the pain of dysmenorrhea, so adolescents cannot choose the correct behavior with the consequences obtained from that behavior. This new experience makes adolescents still in the developmental stages, so early and middle adolescents tend to be negative when handling dysmenorrhea. This statement, supported by Purba's (2013) research, states that experience can influence adolescent behavior in dealing with a problem.

The influence of other people as the closest people, such as parents, teachers, and peers, can certainly shape attitudes toward good dysmenorrhea handling in respondents. This influence can be in the form of giving examples or experiences regarding the perspective of managing dysmenorrhea. If the impact of the closest people and the environment shows negative things, then the attitude demonstrated by adolescents becomes negative and vice versa (Husna, 2018). The degree of pain of the respondents in this study is primarily mild, which could negatively affect adolescents' attitudes. At the level of mild pain, pain sometimes appears in mild intensity, so treating dysmenorrhea only when pain occurs or even choosing not to treat it. Compared to adolescents who experience moderate or severe pain, they tend to start looking for appropriate treatment to reduce pain, so it does not interfere with activities. The more adolescents start looking for the right knowledge, the more the attitude shown becomes positive (Nurwana et al., 2017). This study's results align with Saputri's research (2019), namely that there is no relationship between attitudes and the treatment of primary dysmenorrhea. Attitude is not only influenced by knowledge. However, it can be affected by many things, including events/experiences, the information provided by people closest to them, communication media, and the place of the respondent study, both formally and religiously (Meylawati, 2021).

RESEARCH LIMITATION

The characteristics of the respondents in this research were less diverse. In the parents' education and occupation characteristics, the data do not focus on the respondent's father or mother, so there is a possibility of a significant difference in the results. The knowledge and attitude questionnaire in this study has limitations in discussing non-pharmacology, so the results of the questionnaire do not describe the non-pharmacological treatment that the respondent has. Adding other characteristics such as menstrual period, BMI, physical activity, and menstrual cycle is necessary for other purposes

CONCLUSION AND RECOMMENDATION

This research shows adolescents' knowledge about dysmenorrhea in the medium category, adolescents' attitude is negative, and most adolescents do not handle non-pharmacology. There is no relationship between adolescents' knowledge and attitude with the non-pharmacology practice of treating dysmenorrhea. Adolescents can start improving their ability to perform treatment and add insight when dysmenorrhea occurs in non-pharmacological ways to reduce the pain. The nursing profession can create an alternative in providing health education regarding dysmenorrhea in women's and adolescent health nursing. Other researchers can be used as a reference for further research related to other factors. Questionnaires for knowledge and attitudes that the

other researcher will use can be a focused questionnaire on non-pharmacology practices so that it can describe the knowledge and attitudes of adolescents towards non-pharmacology treatment.

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