



Relationship between anxiety and knowledge levels about primary dysmenorrhea with prevention of illness in adolescents Bosar Maligas district, Simalungun district[☆]



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KEYWORDS

Anxiety level;
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Abstract

Background: Anxiety is a psychological response to stress that contains physiological and psychological components. Psychological response is related to the presence of anxiety in all complaints felt by adolescents during menstruation due to ignorance of the signs, symptoms and ways to prevent primary dysmenorrhea.

Method: This research is an observational study. The location of the study was SMA Negeri 1 Bosar Maligas, Bosar Maligas District, Simalungun Regency. Data collection was carried out in the period June to July 2014. Data was collected using a cross sectional study. The population in this study were all young women in class X and XI, while class XII was not included as the study population considering that at the time the research was conducted class XII students had finished carrying out the national examination.

Results: This research is an observational study with cross sectional design. The sampling technique used was simple random sampling with a sample size of 76 people. The results showed that there was a correlation between anxiety level and knowledge about primary dysmenorrhea with the prevention of taste experienced by young women during menstruation.

Conclusion: It was concluded that there was a significant relationship between anxiety levels and knowledge about primary dysmenorrhea with pain prevention during menstruation. It is necessary to encourage and improve the guidance and counseling program with material related to the level of anxiety that is often experienced by young women so that it will increase their understanding of prevention efforts that can be done when experiencing pain during menstruation.

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Introduction

Dysmenorrhea is a symptom and not a disease. Besides bleeding and infection, Dysmenorrhea is one of the symptoms of almost all gynecological abnormalities in women aged 15–45 years. This is because in this age range there is an insufficiency of ovarian sex steroids without pathology. Known for two types of dysmenorrhea, primary dysmenorrhea is menstrual pain that is found without any abnormalities in the genital devices that are real or without identifiable pelvis. Whereas secondary dysmenorrhoea is menstrual pain associated with obvious anatomic abnormalities or pelvic pathology. Of the two types it turns out that the concern is primary dysmenorrhea because this type is most often found to be more complaints and treatment is much more difficult. So far the basic treatment for primary dysmenorrhea is often not firm because only the symptoms that are the end product of a series of processes are handled so that the results obtained are often unsatisfactory as many as 40 people from 76 students.¹

Anxiety is a psychological response to stress that contains physiological and psychological components. Physiological reactions to anxiety are the first reactions that arise in the autonomic nervous system, including increased pulse frequency and respiration, shifts in blood pressure and temperature, relaxation of smooth muscles in the bladder and intestines, cold and moist skin. The typical manifestations in adolescents with dysmenorrhea depend on each teenager being able to experience discomfort during menstruation, such as discomfort in the lower abdomen and usually accompanied by nausea, dizziness, and even fainting. Psychological responses generally relate to anxiety about all complaints felt by adolescents during menstruation because of adolescent ignorance of the signs, symptoms, and ways of preventing primary dysmenorrhea² how to handle anxiety in adolescents with dysmenorrhea can be done by providing health education, because health education is a process to increase the knowledge and ability of adolescents in maintaining and improving health. Health education is a form of health intervention that must be provided to assist adolescents in overcoming existing problems

such as anxiety experienced by adolescents who experience primary dysmenorrhea. One study states that due to dysmenorrhea around 10%–18%, dysmenorrhea is the main cause of school absences and disrupted by other activities. Based on preliminary surveys and initial interviews with class X and XI students, the majority expressed discomfort and excessive pain in the lower abdomen during menstruation which resulted in disruption of learning activities, extracurricular activities, and ultimately led to absence in class.

Methods

This research is an observational study. The location of the study was SMA Negeri 1 Bosar Maligas, Bosar Maligas District, Simalungun Regency. Data collection was carried out in the period June to July 2014. Data was collected using a cross sectional study design. The population in this study were all young women in class X and XI, while class XII was not included as the study population considering that at the time the research was conducted class XII students had finished carrying out the national examination. The sample size included in this study was 76 teenage girls. The sampling technique used is simple random sampling.

Results

Descriptive analysis results of the characteristics of respondents, the distribution of variables of knowledge, anxiety and pain prevention measures presented in the form of tabulations.

Table 1, it is known that the minimum age is 16 years and a maximum of 19 years. The average age of respondents spreads to 17 years.

Table 2 shows that the majority of respondents' knowledge about dysmenorrhea is quite good (65.8%), followed by respondents with a relatively poor distribution of knowledge (26.3%).

Table 1 Characteristics of respondents by age.

No.	Age	<i>n</i>	%
1.	16	24	31.6
2.	17	15	19.7
3.	18	17	22.4
4.	19	20	26.3
Total		76	100.0

Table 2 Knowledge distribution of respondents.

No.	Category	<i>n</i>	%
1.	Good	6	7.9
2.	Good enough	50	65.8
3.	Not good	20	26.3
	Total	76	100.0

Table 3 Distribution of respondents' anxiety levels.

No.	Category	<i>n</i>	%
1.	No worry	4	5.3
2.	Minor anxiety	7	9.2
3.	Moderate anxiety (quite heavy)	65	85.5
	Total	76	100.0

Table 4 Distribution of dysmenorrhea pain prevention actions.

No.	Category	<i>n</i>	%
1.	Good	4	5.3
2.	Good enough	38	50.0
3.	Not good	34	44.7
	Total	76	100.0

Table 3, it can be seen that the distribution of respondents' anxiety levels is mostly classified as moderate (quite heavy) anxiety levels.

Table 4 shows that the majority of the efforts to prevent pain from dysmenorrhea are quite good (50.0%) followed by the unfavorable category (44.7%). The results of bivariate analysis between levels of anxiety, knowledge with dysmenorrhea pain prevention in this study are presented as follows.

Table 5 shows the results of the analysis of the relationship between anxiety levels with dysmenorrhea pain prevention measures showed that there were as many as 65 (85.5%) female teenage respondents who experienced severe anxiety, preventive measures against pain were classified as less good and those who did not feel anxious during menstruation were 4 (5.9%) young women have unfavorable actions. Statistical test results obtained p -value = 0.027, so it can be concluded that there is a difference in the proportion of anxiety levels with the prevention of dysmenorrhea pain during menstruation.

The results of the analysis of the relationship between knowledge and dysmenorrhea pain prevention measures obtained that as many as 20 (26.3%) respondents of young women who lack knowledge, prevention measures against pain majority are not good and those who have good knowledge as much as 6 (7.6%) young women have pain prevention measures that tend to be good. Statistical test results obtained p -value = 0.021, it can be concluded that there is

a difference in the proportion of knowledge with dysmenorrhea pain during menstruation (Table 6).

The typical manifestations in adolescents with dysmenorrhea depend on each teenager being able to experience discomfort during menstruation, such as discomfort in the lower abdomen and usually accompanied by nausea, dizziness, and even fainting. Psychological responses generally relate to anxiety about all complaints felt by adolescents during menstruation due to lack of adolescent knowledge of the signs, symptoms, and ways of preventing primary dysmenorrhea.²

The results of the bivariate analysis showed that there was a significant relationship between the level of illness with the prevention of primary dysmenorrhea pain with a value of p = 0.027. This is supported by several studies, namely that there is a relationship between anxiety levels and efforts to prevent dysmenorrhea during menstruation, and the majority of young women studied have an anxiety level that is quite severe.³ Ref.⁴ shows that nearly 10% of adolescents who are dysmenorrhea experience an absence rate of 1–3 days per month or the inability of adolescents to do their daily work due to severe pain. The results of the Ref.⁴ also stated that the majority of young women stated that the level of pain they experienced was classified as severe pain. Furthermore, to relieve pain, these teens tend to use their own medication without consulting a doctor, taking analgesic medication, doing compresses with hot water and most often they take a break at home which

Table 5 Analysis of the relationship between anxiety levels and primary dysmenorrhea pain prevention measures in respondents.

Anxiety level	Pain prevention measures						<i>p</i> -Value
	Good		Good enough		Not good		
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	
No worry	0	0	3	3.9	1	1.3	0.027
Minor anxiety	2	2.6	1	1.3	4	5.3	
Moderate anxiety (quite heavy)	2	2.6	34	44.7	29	38.2	
Total	4	5.3	38	50.0	34	44.7	

Table 6 Analysis of relationship between knowledge and pain prevention measures the main dysmenorrhea in respondents.

Knowledge	Pain prevention measures						p-Value
	Good		Good enough		Not good		
	n	%	n	%	n	%	
Good	2	2.6	3	3.9	1	1.3	0.021
Good enough	2	2.6	24	31.6	24	31.6	
Not good	0	0	11	14.5	9	11.8	
Total	4	5.3	38	50.0	34	44.7	

means they do not go to school. Knowledge is the result of human sensing or the result of knowing someone about objects through their senses (eyes, nose, ears and so on). Most of one's knowledge is obtained through the sense of hearing (ears) and the sense of sight (eyes). Most of human knowledge is obtained through education, one's own experience or experience gained from others, so knowledge is very important to shape one's behavior. So that behavior based on knowledge is more permanently adopted by someone than behavior that is not based on knowledge.⁵

The results of bivariate analysis, the results show that there is a significant relationship between knowledge and prevention of dysmenorrhea pain. The results of this study were supported by Ref. [6], who stated that there was a significant relationship between the knowledge of adolescent girls with the prevention of dysmenorrhea pain during menstruation with a value of $p=0.0005$. In order for adolescents to be able and willing to handle dysmenorrhea that occurs, adolescents need to have knowledge that supports the handling of dysmenorrhea itself, by finding information relevant to dysmenorrhea from various sources of information, as well as adequate information facilities for young women.

Conclusion

There is a significant relationship between the level of anxiety, knowledge with precautions against dysmenorrhea pain during menstruation.

It is necessary to promote and improve the guidance and counseling program by the school, in this case the School Health Business Unit with materials related to efforts to increase the knowledge of young women about the pain experienced during menstruation, as well as psychologically routine guidance so as to minimize the occurrence of excessive anxiety before menstruation. Thus, young women can take precautions against pain that is very painful (dysmenorrhea) when experiencing menstruation.

Conflict of interests

The authors declare no conflict of interest.

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