

Correlation between level of knowledge about dysmenorrhea with dysmenorrhea management behaviour in Sleman

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ABSTRACT

Introduction: Adolescence is a period of development that begins with the maturity of the physical (sexual) organs so that later they are able to reproduce, including puberty in young women, namely menstruation. Most women feel pain during menstruation, even the presence of discomfort and even severe pain is what is often called menstrual pain *dysmenorrhea*. Knowledge and treatment of *dysmenorrhea* is needed by young girls, physical problems that may arise are a lack of personal hygiene (personal hygiene) so that it risks causing disease, therefore women also have a responsibility regarding personal hygiene to themselves. Preliminary study found that some female students did not know about *dysmenorrhea*. This study was to determine the relationship between knowledge about *dysmenorrhea* and behavior in handling *dysmenorrhea* in adolescents at school in Sleman. **Methods:** Analytical survey method with a cross sectional approach, taking samples by total sampling using a questionnaire. **Results:** The results of the research on the relationship between the level of knowledge of adolescent *dysmenorrhea* and the behavior of handling *dysmenorrhea* at school in Sleman. Paste lack of knowledge as many as 23 respondents (41.1%), The behavior of handling *dysmenorrhea* with the highest percentage is the behavior of handling *dysmenorrhea* with only 26 respondents (51%). **Discussion, and Conclusion:** The statistical test results showed a correlation coefficient of 0.426 so that it can be stated that there is a relationship between knowledge about *dysmenorrhea* and behavior in handling *dysmenorrhea* in young women at school in Sleman with a low closeness relationship. It is hoped that the school can provide facilities or facilities to increase young women's knowledge about *dysmenorrhea* by holding programs and being able to work with health facilities. 426 so that it can be stated that there is a relationship between knowledge about *dysmenorrhea* and the behavior of handling *dysmenorrhea* in young women at school in Sleman with a low closeness relationship. It is hoped that the school can provide facilities or facilities to increase young women's knowledge about *dysmenorrhea* by holding programs and being able to work with health facilities. 426 so that it can be stated that there is a relationship between knowledge about *dysmenorrhea* and the behavior of handling *dysmenorrhea* in young women at school in Sleman with a low closeness relationship. It is hoped that the school can provide facilities or facilities to increase young women's knowledge about *dysmenorrhea* by holding programs and being able to work with health facilities.

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1. Introduction

World Health Organization (WHO) (2016) reported that *dysmenorrhea* cases increased rapidly, and more than 50% of women had experienced it. The number grew among female adolescents from

30% to 60%, of which 7% to 15% of females reported could not attend school. The prevalence of dysmenorrhea among female adolescents reached 20-45% (2 years after menarche) and 80% (4-5 years after menarche) which the number decreases as one grows older (World Health Organization (WHO), 2023). Primary dysmenorrhea among adolescent females causes uncomfortable sensations during menstruation due to the pain in the lower belly, disrupting daily activities. It also affects the quality of life-productivity and the use of health services during the female reproduction period (Anikwe et al., 2020). Ignoring the impact of dysmenorrhea may cause significant pain leading to endometriosis or infertility (Lail, 2019). Research in Ghana regarding the handling of dysmenorrhea and coping mechanisms used during dysmenorrhea. The coping mechanisms they use are by planning activities before the pain occurs, instilling a mindset that pain can be handled and seeking social and spiritual support (Aziato et al., 2014).

Government Regulation of the Republic of Indonesia Number 61 of 2014 concerning Reproductive Health in article 11 explains that the government implementing Adolescent Reproductive Health Services aims to prepare adolescents to live a healthy and responsible reproductive life (Fitriana., 2017). Society's view of menstrual pain can disappear on its own when women get married, so they just ignore the disturbance. The government is trying to improve the quality of the government's Adolescent Care Health Services (PKPR) assisted by health workers. Health workers including midwives who provide health information in the form of counseling to adolescents and counseling services in all health service places, parents and schools work together to increase knowledge of young women about reproductive health including menstruation and how to handle dysmenorrhea by providing information in the form of counseling to adolescents and services counseling in all health care settings and schools. One of the roles of midwives for reproductive disorders, especially dysmenorrhea, is in efforts to prevent and treat reproductive disorders, according to competency standards for midwives according to the Minister of Health RI No 1464/Permenkes/SK/III/2010, namely in the 3rd competency standard that midwives provide quality care high level, comprehensive reproductive health services (Suwarsih et al., 2023).

The pharmacological treatment of dysmenorrhea entails using medication such as analgesics, prescription pharmaceuticals, and herbal medicines. Conversely, non-pharmacological treatment involves therapeutic interventions without using pharmaceutical substances. These involve techniques such as knee-chest positioning, applying warm water compress, consuming warm water, taking rest, abdominal oil application, and suggestions from teachers to diver focus (Wong, 2020). The standard approach to primary dysmenorrhea treatment could involve regular exercise, warm compress application, nonsteroidal anti-inflammatory drugs (at regular dosages), and hormone therapy with careful consideration of possible contraindications (Burnett & Lemrye, 2017). Dysmenorrhea occurs in women during the menstrual cycle is not life-threatening or highly dangerous, but it does impact daily activities, particularly among students and their learning activities. This condition attributes to the pain, which causes significant disruption and the decline of life quality, including health concerns, reduced concentration and learning motivation (Lee & Frazier, 2011).

Midwives are facilitators in promoting health by providing education on menstruation during adolescence and treating dysmenorrhea within their scope of practice. Midwives deliver continuous and holistic services which emphasize preventive measures, management, and promotion of wellbeing based on partnerships (Hinobayashi et al., 2013). The problem of menstruation is still considered taboo in people's lives, people think that menstrual pain is a pain that is exaggerated by women as painful, even though menstruation is a normal thing that is experienced by every woman so this perception needs to be straightened out and this is responsibility of health workers. Women in Indonesia who experience dysmenorrhea mostly overcome it by taking painkillers on the market. People also think that this pain will go away after women get married, so they allow this disturbance (Gultie et al., 2014).

Based on a preliminary study conducted at school in Sleman because it is located in the border area with Central Java Province so the cultural elements are still very strong so that teenagers still believe in myths about the behavior of handling dysmenorrhea, one of which is when menstruation then experiences dysmenorrhea they just let it go, because they assume that when you experience dysmenorrhea it will eventually go away on its own. And no one has conducted research on dysmenorrhea, from the results of interviews conducted on September 26 2022 of 15 (29%) respondents, there were 6 (11%) who knew about dysmenorrhea and 9 (17%) who did not know about dysmenorrhea, 12 (23) % of respondents who experienced dysmenorrhea they handled it in various

ways including buying drugs at pharmacies, compresses with cold water and warm water, drink herbal medicine, and some leave it alone (Chang et al., 2018; Gebeyehu et al., 2017). Based on the background above, researchers are interested in conducting research on the relationship between the level of knowledge of adolescent dysmenorrhea and the behavior of handling dysmenorrhea at school in Sleman. The distance from health facilities has made school in Sleman never received counseling about health, especially reproductive health (Bernardi et al., 2017; Samba et al., 2019). When the researchers conducted this study, female students at school in Sleman had never received formal lessons on reproductive health. Based on the background above, researchers are interested in conducting research on the relationship between the level of knowledge of adolescent dysmenorrhea and the behavior of handling dysmenorrhea at school in Sleman.

2. Methods

This research is a cross-sectional quantitative study using a survey to explore adolescent knowledge about dysmenorrhea and the behavior of dysmenorrhea coping. Cross-sectional research measure or collect data regarding the level of knowledge about dysmenorrhea as an independent variable and the behavior of handling dysmenorrhea as the dependent variable at the same time. This research uses correlation which aims to find whether there is a relationship.

3. Discussion

Table 1. Distribution of frequency characteristics of respondents based on age

No.	Category	Frequency	Percentage
1	15-17	43	84.3
2	18-19	8	15.7
	Total	51	100

Based on table 1, it was found that out of 51 respondents, most of the respondents of the respondents were aged 15-17 years, as many as 43 respondents (84.3%).

Table 2. Distribution of frequency characteristics of respondents based on grade

No.	Grade	Frequency	Percentage
1	10	19	37.3
2	11	32	62.7
	Total	51	100

Based on table 2, it was found that of the 51 class respondents with female students the most were in class 11 with 32 respondents (62.7%).

Table 3. Univariate analysis of knowledge about dysmenorrhea in young women

Knowledge level categories	frequency	Percentage (%)
Good	6	11.8
Enough	22	43.1
Not enough	23	45.1
Total	51	100

Based on table 3, it was found that knowledge about dysmenorrhea with the highest percentage was lacking knowledge of 23 respondents (45.1%) and the lowest percentage was good knowledge of 6 respondents (11.8%).

Table 4. Univariate analysis of treatment of dysmenorrhea in adolescents daughter

Behavior category	Frequency	Percentage (%)
Good	6	11.8
Sufficient	26	51
Insufficient	19	37.3
Total	51	100

Based on table 4, the results of dysmenorrhea treatment behavior were obtained with the highest percentage being adequate behavior by 26 respondents (51%) and the lowest percentage being lacking behavior by 19 respondents (37.3%).

Table 5. Relationship between knowledge about dysmenorrhea and behavior in handling dysmenorrhea in young women

Knowledge of dysmenorrhea	Dysmenorhea handling behavior						Total	P Value
	Good		Enough		Not enough			
	F	%	F	%	F	%		
Good	6	100	0	0	0	0	6	0.001
Enough	0	0	14	53.8	8	42.1	22	
Not enough	0	0	12	46.2	11	57.9	23	
Total	6	100	26	100	19	100	51	

Source: Primary data, 2023

Based on table 5, 14 respondents (53.8%) had sufficient knowledge about dysmenorrhea, and 12 respondents (46.2%) had insufficient knowledge about dysmenorrhea, and 11 respondents had less dysmenorrhea handling behavior. (57.9%) and have sufficient behavior as many as 8 respondents (42.1%),

It is known that the significant value or sig (2-tailed) is 0.001 because the sig (2-tailed) value is $0.001 < \text{than } 0.05$, which means that H_a is accepted and H_o is rejected, meaning that there is a significant relationship between the variable knowledge of dysmenorrhea and the behavior of handling dysmenorrhea. Based on Kendall's results The above data shows a correlation coefficient of 0.426, meaning that the level of strength of the relationship between knowledge variables and dysmenorrhea treatment behavior is 0.426 indicating low strength.

3.1 Knowledge of dysmenorrhea

The results of the study obtained knowledge about dysmenorhea that knowledge about dysmenorhea with the highest percentage was lacking knowledge of 23 respondents (43.1%) and the lowest percentage was good knowledge of 11 respondents (11.8%). The value or score in this study is in accordance with the opinion (Notoatmodjo, 2012) the category of a person's level of knowledge is divided into three levels based on the percentage value, namely the good category if the value is 76-100% (13-18 correct statements), the sufficient category is 56-75% (10-12 questions correct) and less category <56% (<10 questions correct).

The level of knowledge of adolescents who are sufficient can influence the development of the times. Adolescents can already access through the media regarding dysmenorrhea, so that adolescents can learn on their own, in addition to environmental factors or experiences from their parents, they can also help gain knowledge. Information will influence one's knowledge. Even though someone has low education, if they get good information from various media, for example TV, radio or newspapers, it will increase one's knowledge(Dawood, 2016; Shirvani et al., 2017).

Young women's lack of knowledge about dysmenorrhea is influenced by the lack of information obtained by respondents from their parents, peers, the internet and nearby health workers, causing their low knowledge about dysmenorrhea (Lee & Frazier, 2011).

Knowledge can influence behavior because a person who has a good level of knowledge about menstruation will prepare himself both mentally and healthily, so that good behavioral readiness is formed in dealing with things that can occur in menstruation, namely dysmenorrhea. Meanwhile, respondents who have a low level of knowledge tend to experience indecision, because they do not know what to do in dealing with dysmenorrhea, so that respondents who have low knowledge about menstruation tend to be unprepared to face dysmenorrhea.

3.2 Dysmenorhea handling behavior

The results of this study showed that the behavior of handling dysmenorhea with the highest percentage was moderate behavior by 26 respondents (51%) and the lowest percentage was good behavior by 6 respondents (11.8%).

Researchers argue that adolescents have sufficient behavior in the treatment of dysmenorrhea influenced by their low awareness of the treatment of dysmenorrhea. According to researchers, adolescents often ignore what they experience when dysmenorrhea and think that it can go away on its own. Efforts to treat dysmenorrhea can be done in a positive way, such as applying warm compresses to the stomach and back, bathing with warm water, getting enough rest, consuming more fruits and vegetables, doing light daily activities and doing other therapies by administering analgesics (Larasati & Alatas, 2016; Samba et al., 2019).

From the results of the research above, it can be influenced by several idfactors, namely the role of the family in explaining dysmenorrhea, exposure of individuals to information, socio-cultural factors, environment, motivation and also health workers. All of these factors are closely related to adolescent decision making about dysmenorrhea (Bajalan et al., 2019; Durand et al., 2021). This is also supported by a statement in one of the behavioral characteristics that behavior is personal societal significance, which means that behavior involves relationships between a person and other people and also between people and goods or situations. It can also be interpreted that the goods and situations here include family, socio-cultural and influential factors (Devi, 2020).

3.3 The relationship between knowledge about dysmenorrhea and the behavior of handling dysmenorrhea

The results showed that young women with good knowledge about dysmenorrhea had good dysmenorrhea handling behavior by 6 respondents (11.8%) and sufficient behavior by 0 respondents (%), young women who had sufficient knowledge about dysmenorrhea had sufficient handling behavior by 14 respondents (53.8 %) and less behavior as many as 12 respondents (46.2%) and young women who have less knowledge with less handling behavior as much as 11 respondents (57.9%).

The results of the statistical test using Kendall Tau obtained a p-value of 0.001, meaning that there is a relationship between knowledge about dysmenorrhea and behavior in handling dysmenorrhea in young women at school in Sleman. Then the Kendall Tau correlation coefficient is 0.426, which means that knowledge about dysmenorrhea and the behavior of handling dysmenorrhea in young women at school in Sleman has a positive relationship, namely the better the level of knowledge, the better the level of behavior.

The results of this study are in line with the research of Lail (2019) where the results of this, which obtained a value of $p = 0.001$ with a significance level of $\alpha = 0.05$, so $p < 0.05$ so that the results of this study indicate that there is a significant relationship between knowledge and behavior in handling dysmenorrhea then H_a is accepted and H_0 is rejected.

The knowledge that students have about dysmenorrhea becomes the basis for the formation of behavior to deal with dysmenorrhea. good knowledge about dysmenorrhea, can develop the ability to make decisions to handle dysmenorrhea properly. The better the knowledge about dysmenorrhea possessed by young women, the better the attitude shown to deal with dysmenorrhea. With good knowledge will influence the attitude of young women to handle dysmenorrhea properly. Factors that influence behavior are not only determined by knowledge, but there are many other factors that influence behavior in dealing with dysmenorrhea. Other factors that influence behavior are personal experience, other people who are considered important, the mass media and the social and cultural influences of the surrounding environment. The influence of other people is considered important in influencing our behavior because individuals tend to have behavior in the direction of the attitudes of people who are considered important. Information obtained from the mass media that controls something provides the foundation for the formation of this behavior (Bajalan et al., 2019; Salamah, 2019).

The results of this study indicate that there is a relationship between the level of knowledge about dysmenorrhea and behavior in treating dysmenorrhea at school in Sleman. The research results are also relevant to the research results of (Das et al., 2021) which states that knowledge is one of the predisposing factors such as attitudes, beliefs, values that influence behavior. Another more dominant factor is behavior in treating dysmenorrhea which is influenced by a combination of predisposing factors, supporting factors and reinforcing factors. These three factors will strengthen each other.

4. Conclusion

The specific aim of this research is to determine the relationship between knowledge about dysmenorrhea and dysmenorrhea management behavior in adolescents. Pharmacologically, young women have consumed substances such as Ibuprofen, Paracetamol, and Feminax. Future research is recommended to adopt comprehensive dysmenorrhea treatment and can produce a deeper understanding of dysmenorrhea treatment behavior among adolescent girls.

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