
Menstrual Painfull (Dysmenorrhea) on Learning Activities Adolescent at Junior High School 35 Batu Aji Batam City

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Abstract

Dysmenorrhea is a gynecological complaint due to the persistence of the hormone progesterone in the blood, causing pain. This study purpose to determine whether there is a relationship between menstrual pain and learning activities in adolescents at SMPN 35 Batu Aji in 2021. The research method uses an analytic observational method with a cross sectional approach. The population taken was young women at SMPN 35 Batu Aji 2021 with a total sample of 57 people. Sampling with purposive sampling technique. The research sample collection technique used a questionnaire, from 57 respondents, 38 people (66.7%) experienced menstrual pain, 27 of whom had learning activities disrupted. The conclusion of this study states that the two variables have a significant effect. Data analysis using chi square, the results of this study indicate that there is a relationship between menstrual pain (dysmenorrhoea) and learning activities, obtained p value = 0.000 (<0.005). It is suggested to teachers to pay special attention to students who experience menstrual pain (dysmenorrhoea) by making regular contact between parents and teachers in dealing with the effects of menstrual pain.

Keywords: Learning Activities; Dysmenorrhea; Adolescent

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Abstrak

Nyeri Menstruasi (Dysmenorrea) Terhadap Kegiatan Belajar Remaja di SMPN 35 Batu Aji Kota Batam. Dismenore merupakan keluhan ginekologi akibat menetapnya hormon progesteron dalam darah sehingga menimbulkan rasa nyeri. Penelitian ini bertujuan diketahuinya hubungan nyeri haid dengan aktivitas belajar pada remaja di SMPN 35 Batu Aji 2021. Metode penelitian menggunakan metode observasional analitik dengan pendekatan cross sectional. Populasi yang diambil adalah remaja putri SMPN 35 Batu Aji 2021 dengan jumlah sampel sebanyak 57 orang. Pengambilan sampel dengan teknik purposive sampling. Teknik pengambilan sampel penelitian menggunakan kuesioner, dari 57 responden, 38 orang (66,7%) mengalami nyeri haid, 27 orang diantaranya mengalami gangguan aktivitas belajar. Kesimpulan dari penelitian ini menyatakan bahwa kedua variabel berpengaruh signifikan. Analisis data menggunakan chi square, hasil penelitian ini menunjukkan bahwa ada hubungan antara nyeri haid (dismenore) dengan aktivitas belajar, diperoleh nilai $p = 0,000 (<0,005)$. Disarankan kepada guru untuk memberikan perhatian khusus kepada siswa yang mengalami nyeri haid (dysmenorrhoea) dengan melakukan kontak secara rutin antara orang tua dan guru dalam mengatasi dampak nyeri haid.

Kata Kunci: Aktivitas belajar; Dismenore; Remaja

Introduction

Adolescence is a dynamic developmental phase in one's life. This period is a period of transition from childhood to adulthood which is characterized by accelerated physical, mental, emotional and social development (Notoatmodjo, 2010).

One sign of youthfulness biologically is that adolescence experience menstruation starting at puberty and a woman's ability

to conceive children or the reproductive period.

Menstruation is the release of the lining of the uterus (endometrium) which is accompanied by bleeding. The first menstruation is called menarche. Usually begins between the ages of 10 and 16, depending on a variety of factors, including the woman's health, nutritional status, body weight relative

to height. Even so, in fact many women experience menstrual problems, including menstrual pain / dysmenorrhea (Manuaba, 2001).

Menstrual pain/dysmonorrhea is a gynecological complaint due to an imbalance of the hormone progesterone in the blood resulting in pain that most often occurs in women. Women who experience dysmenorrhea produce 10 times more prostaglandins than women who do not have dysmenorrhea (Manuaba, 2001).

According to research (Wijayanti, 2009) menstrual pain causes discomfort in daily activities. There are two types of menstrual pain, namely primary dysmenorrhea and secondary dysmenorrhea. This division is based on known causes and unknown reasons. Primary dysmenorrhea usually occurs since menarche and there are no abnormalities in the uterus. Primary dysmenorrhea arises from the first menstruation and will recover on its own over time. Conversely, secondary dysmenorrhea occurs in women over 20 years, menstrual pain that occurs due to gynecological disorders, such as endometriosis (Manuaba, 2009).

Dysmenorrhea or painful menstruation is perhaps the most frequent symptom that causes young women to go to the doctor for consultation and treatment. Because this disorder is subjective, it's severity or intensity is difficult to assess. Although the frequency of dysmenorrhoea is quite high and has long been known, until now the pathogenesis has not been resolved and is satisfactory. Therefore, almost all women experience discomfort in the lower abdomen before and during menstruation and often experience nausea, vomiting, headaches, diarrhea, and irritability, forcing sufferers to rest and leave work or daily life (Prawirohardjo, 2006).

In the United States, menstrual pain is reported as the leading cause of repeated absences in female students from school. Epidemiological study on the adolescent population (aged 12-17 years). The results of Klein and Litt's study reported the prevalence of dysmenorrhea reached 59.7% of those who complained of pain, 12% was severe, 37% moderate, 49% mild.

This study also reported that dysmenorrhea caused 14% of adolescents to often miss school. The study also showed that there were no significant differences in prevalence among different populations. In Indonesia, the incidence of dysmenorrhea is 64.25%, consisting of 54.89% primary dysmenorrhea and 9.36% secondary dysmenorrhea.

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Research (Suhartati, 2003) shows that there is a relationship between symptoms during menstruation and the work productivity of nurses at Panti Rapih Hospital, Yogyakarta. Research by Widya (2001) reported that 52% of students in Yogyakarta were unable to carry out daily

activities properly during menstruation.

The results of research by Gunawan (2002), at SMPN in Jakarta 43 showed that in primary dysmenorrhea as much as 76.6% of students did not attend school because of menstrual pain they experienced, then according to Baziad 2008, a study was conducted of 733 respondents, who experienced menstrual pain 543 people (74.1%), while as many as 190 people (25.9%) did not experience menstrual pain. The results of this study also found that 76.6% of female students did not attend school because of menstrual pain they experienced.

The results of research (Ningsih, 2011) at the Batik 1 Surakarta Vocational School found that female students at the school had experienced menstrual pain (dysmenorrhoea) and sometimes some even asked permission to go home because they could not stand the dysmonorrhea they experienced.

The results of research (Dwi Praydnya Iswari, 2014) conducted at PSIK Udayana University Program A obtained data on the number of students in class 2010, namely 74 people, 2011 as many as 54 people, 2012 as many as 75 people, where women dominate from each of these classes. The results of interviews conducted with 55 students of PSIK UNUD program A class of 2010-2013, data obtained that 11% of these students did not experience dysmenorrhea and 89% experienced dysmenorrhea of the students who experienced dysmenorrhea who said

they did not always attend lecture activities when they experienced dysmenorrhea as much as 19%, they were not enthusiastic about attending lectures 73%, they did not dare to attend plenary sessions or achieve the results of discussions in front of the class 63%, decreased concentration 67%, decreased activity such as being unable expressing opinions 61%, and decreased ability when carrying out practicum programs in the laboratory 57%.

Data from the Batam City Education Office with the number of junior high schools totaling 141 schools with a total of 28,944 students. Based on the number of incidents of dysmenorrhea at the Batam City Health Office with an age range of 13-16 years, there are 358 people. Based on 17 Puskesmas in Batam City, only 11 Puskesmas reported the number of dysmenorrhea visits, including Kabil Health Center 17 people, Sambau Health Center 5 people, Botania Health Center 27 people, Baloi Health Center 4 people, Pancur Health Center 4 people, Sei Health Center Langai Health Center 15 people, Health Center Sei Lekop 14 people, Galang Health Center 24 people, Batu Aji Health Center 221 people, Sekupang Health Center 21 people, Tiban Baru Health Center 37 people.

According to the data above, the health center that has the most dysmenorrhea is the Batu Aji Health Center. At the age above teenagers are at the junior high school level of education.

Based on the description above, the researcher is interested in conducting research on Menstrual Pain (Dysmenorrhea) on Learning Activities in Adolescents at SMPN 35 Batu Aji.

Methodology

Study Design. This research is an analytic research with cross sectional design using primary data collected through questionnaires. The population in this study were all students at SMPN Kota Batam 2021, and the population for this study were all students at SMPN 35 Batu Aji class VII and class VIII, totaling 130 people. The sample in the study with the criteria of students who are registered as SMPN 35 Batu Aji students, students aged 12-15 years, female students, students who are willing to be respondents. The sample size using the Slovin formula is 57 respondents. The population sampling technique in the unit of analysis (reachable population) was carried out by non-random sampling using purposive sampling method.

Measures. The data collection tool in this study used a questionnaire consisting of the independent variable dysmenorrhea which consisted of 10 questions with yes or no answer choices. It was said to have dysmenorrhea if the respondent's score was above the median value and said not to have dysmenorrhea if the respondent's answer score was below the median value.

The dependent variable is teaching and learning activities which consist of 10 questions with yes or no answer choices. It is said to interfere

with activities if the respondent's questionnaire answer score is above the median value and is said not to interfere with learning activities if the respondent's answer to the questionnaire score is below the median value. The questionnaire was made by the researchers themselves.

Analysis. Data analysis using univariate analysis explained or described the characteristics of each of the variables studied and bivariate analysis was carried out on two variables, namely the dependent variable and independent variables which were thought to be related or correlated (Notoadmodjo, 2010).

Researchers want to measure the relationship dysmenorrhea and learning activities in adolescents at SMPN 35 Batu Aji by using the Chi Square statistical test.

Ethical Consideration. Ethical approval was obtained from the Faculty of Medical, Universitas Batam.

Results

Based on the table 1. Shows that from 57 respondents, it was found that 38 people (66.7%) experienced dysmenorrhea during menstruation, and 19 people (33.3%) did not experience dysmenorrhea during menstruation.

Based on the table 2, it can be seen that of from 57 respondents, it was found that 27 people (47.4%) experienced learning activities during menstruation, and 30 people (52.6%) did not experience learning activities during menstruation.

Furthermore, table 3. It was found that 38 respondents experienced dysmenorrhea, it was found that 27 people (52.6%) had learning activities disrupted, and 11 people (28.9%) who experienced dysmenorrhea were not disturbed by learning activities. The results of the statistical test in this study obtained a p -value <0.05 , which is 0.00 so that there is an effect of dysmenorrhea on student learning activities.

Table 1. Frequency distribution of dysmenorrhea adolescents at SMPN 35 Batu Aji Batam City (n = 57).

Dysmenorrhea	Frequency	Percentage (%)
1. Experienced dysmenorrhea	38	66.7
2. not experience dysmenorrhea	19	33.3
Total	57	100

Source: primary data 2020

Table 2. Frequency Distribution of Learning Activities Adolescent at SMPN 35 Batu Aji Batam City (n = 57).

Learning Activity	Frequency	Percentage (%)
1. Experienced	27	47.4
2. Not Experienced	30	52.6
Total	57	100

Source: primary data 2020

Table 3. The correlation between menstrual pain (dysmenorrhea) and learning activities adolescents at SMPN 35 Batu Aji Batam City (n = 57).

Dysmenorrhea	ARI Incidence in toddler				Total	%	p-value
	Experienced	%	Not Experienced	%			
1. Experienced dysmenorrhea	27	52.6	11	28.9	38	66.7	0.000
2. Not Experienced dysmenorrhea	0	0	19	33.3	19	33.3	
Total	27	52.6	30	47.4	57	100	

Source: primary data 2020

Discussion

Incidence of Dysmenorrhea in Adolescents at SMPN 35 Batu Aji.

The results of the study based on table 1. can be concluded about the distribution of the frequency of dysmenorrhoea incidents at SMPN 38 Batu Aji, some respondents experienced pain during menstruation with a percentage of 57 respondents who experienced dysmenorrhea 38 people (66.7%) and did not experience dysmenorrhea 19 people (33.3%). This is in accordance with the theory that menstrual pain is caused by high levels of prostaglandins in the blood.

During menstruation or menstruation, there are physiological changes in the body, namely changes in reproductive hormones. Due to an imbalance of the hormone progesterone in the blood resulting in pain that occurs most often in

women. Women who experience dysmenorrhea produce 10 times more prostaglandin than women who do not have dysmenorrhea (Manuaba, 2001).

The results of this study are in line with the results of research that has been conducted by (Freta Cicilia, 2013) entitled The Relationship of Disminorea with Learning Activities for Young Women at SMA Kristen I Tomohon. At SMA Kristen I Tomohon, it was found that respondents who experienced menstrual pain (dysmonorrhea) showed a fairly large percentage, namely 121 respondents (91.7%). This data illustrates that young women at Tomohon I Christian High School who are already menstruating generally experience menstrual pain (dysmenorrhoea). This happens in general, teenagers who are in Senior High School cannot be separated

from menstrual problems such as dysmenorrhea.

According to researchers, menstruation experienced by young women can cause problems, some women get menstruation without complaints, but not a few of them get menstruation accompanied by complaints.

One of the menstrual disorders that causes physical discomfort, namely menstrual pain (dysmenorrhoea), where menstrual pain is felt in the lower abdomen and radiates to the pelvis. From the results of research and existing theories, the cause of the many dysmenorrhea experienced by adolescents is that they are experiencing a stage of growth and development, both physically and psychologically.

The unpreparedness of young women in dealing with the development and growth in themselves, results in psychological disorders which eventually cause physical disorders, for example menstrual disorders such as dysmenorrhea. Of the 57 respondents studied, 38 people experienced pain during menstruation, and 19 people did not experience pain during menstruation. Learning Activities Experiencing Menstrual Pain (Disminorea) in SMPN 35 Batu Aji.

Learning Activities Adolescent

The results of the study are based on table 2. regarding the frequency distribution based on learning activities with the percentage of learning activities disrupted during menstrual pain (dysmonorrhea) by 27 respondents (47.4%) and not

learning activities during menstrual pain (dysmenorrhoea) by 30 respondents (52.6%).

This is in accordance with the theory, Education cannot be separated from the learning process. In the learning process, without the activity of the subject concerned, what is called learning is not possible. The learning process is the transformation of input, then the input is described, stored, recovered, and utilized. Furthermore, it is explained that learning begins with individual contact with the outside world (Notoatmodjo Soekidjo, 2007).

According to Notoatmodjo Soekidjo (2007) there are 2 factors that influence the success of an education; (1) Internal Factors. Internal factors are those that exist within individuals who are learning, these factors include physical factors (health factors, disabilities, and other diseases). While psychological factors (intelligence factors, attention, interests, talents, maturity and readiness); (2) External Factors. External factors are those that affect learning, this includes teaching methods, curriculum, teacher-student relations, student-student relations, discipline, learning tools and school time.

It is undeniable that the health factor is very important for us, if our condition is not healthy then the activity will be hampered. Likewise with adolescents if their health condition is maintained physically and psychologically then the education process will run well.

The results of this study are in line with previous research by (Dwi Praydnya Iswari, 2014) which was conducted at PSIK UNUD Program A, obtained data on the number of students class of 2010, namely 74 people, 2011 as many as 54 people, 2012 as many as 75 people, where women dominate each of these forces. The results of interviews conducted with 55 students of PSIK UNUD program A class 2010-2013, obtained data that 11% of these students did not experience dysmenorrhea and 89% experienced dysmenorrhea.

Students who experienced dysmenorrhea who said they did not always attend lecture activities when they experienced dysmenorrhea as much as 19%, they were not enthusiastic about attending lectures 73%, they did not dare to attend plenary sessions or achieve the results of discussions in front of the class 63%, decreased concentration 67%, decreased activity such as being unable expressing opinions 61%, and decreased ability when carrying out practicum in the laboratory 57%. Therefore, almost all women experience discomfort in the lower abdomen before and during menstruation and often experience nausea, vomiting, headaches, diarrhea, and irritability, forcing sufferers to rest and leave work or daily life (Prawirohardjo, 2006).

According to researchers, the disruption of learning activities in young women who experience menstrual pain (dysmenorrhoea) because they feel weak and lazy can interfere with learning. A person's learning process will be disrupted if

the health of that person is disturbed. Because of the pain, they cannot concentrate on learning and their interest and motivation to learn becomes decrease. If someone has difficulty concentrating while studying, then the learning received will also not be effective.

The number of respondents who experienced disruption in learning activities was caused by menstrual pain that was felt in the learning process. This causes young women to find it difficult to concentrate because of the discomfort they feel when they have menstrual pain. In learning it is necessary to have learning activities. Without activity, learning is not possible to take place properly.

Activities in learning are a series of activities that include the activeness of students in participating in lessons. In this study, many respondents who experienced menstrual pain disrupted learning activities and resulted in the learning process not running effectively, and when attending lessons they were absent or allowed to go home to rest. So that their learning achievement decreases.

The correlation between menstrual pain (dysmenorrhea) and learning activities for young women at SMPN 35 Batu Aji.

The results of the study based on table 3. can be seen that there were 38 respondents who experienced dysmenorrhea, 27 people (52.6%) had learning activities disrupted, and 11 people (28.9%) who experienced dysmenorrhea were not disturbed by learning activities.

The results of the chi square test analysis obtained a p-value = 0.000 (p-value<0.05) meaning that statistically there is a relationship between menstrual pain (dysminorhoea) and student learning activities. The results of this study indicate that young women who experience dysmenorrhea tend to experience learning disorders. The results of this study indicate that the learning activities of the respondents were quite disturbed by the incidents of dysmenorrhea that they experienced.

According to Hecker and Moore Cit (Kurniawati, 2008) dysmenorrhea is one of the main causes of school absences in young women for several hours or several days. This is associated with a negative influence on social activity in young women mostly. Adolescent girls who experience dysmenorrhea during menstruation have more time off from school or are absent and perform less well at school than those who are not affected by dysmenorrhoea. This proves that dysmenorrhea can affect learning in young women. The reasons that support the results of this study are that young women say that when dysmenorrhea occurs their bodies feel weak and the learning process is disrupted because they do not concentrate on studying.

Their concentration is divided between pain and the learning process, causing learning disorders. In the researcher's analysis, the number of respondents who experienced interference in learning activities was caused by menstrual pain that was felt in the teaching and

learning process. This causes young women to find it difficult to concentrate because of the discomfort they feel when they have menstrual pain.

The results of this study are in accordance with research that has been done (Dwi Pranya, 2014) there is a relationship between menstrual pain (dysminorea) and learning activities, obtained a confidence level of 95% or p<0.005, obtained a value of p=0.01, which is less than 0.05 which means means that Ho is rejected and Ha is accepted. The results of the analysis in a study at Tomohon I Christian High School who experienced disminorhoea occurred when learning activities were disrupted, this caused young women to find it difficult to concentrate because of the discomfort they felt when they had menstrual pain.

The results of the study using the Fhiser test obtained a value of p = 0.000<alpha 0.05, which means that Ho was rejected and Ha was accepted. There is a relationship between dysmenorrhoea and the learning activities of young women at SMA Kristen I Tomohon. The difference between the previous research and the current one is the sample studied, namely early youth (SMP), place and time of research.

In this study, which was conducted at SMPN 35 Batu Aji, there was a significant effect where the result p <0.05, namely=0.00, which means there is a relationship between menstrual pain (disminorhoea) with learning activities. This study shows that a teenager who experiences

dysmenorrhea will feel disturbed by their activities and often limit their activities.

Conclusions

From the results of research that has been conducted at SMPN 35 Batu Aji concerning the relationship of menstrual pain (dysmenorrhea) to learning activities in young women, it can be interpreted that. Obtained the incidence of menstrual pain (dysmenorrhea) in young women at SMPN 35 Batu Aji, experiencing menstrual pain (dysmenorrhea) as many as 38 young women (66.7%) and not experiencing menstrual pain as many as 19 young women (33, 3%) and disturbed learning activities during menstrual pain (Disminorea) in adolescents, namely out of 38 respondents who had menstrual pain (Dismenorrhea) and who did not have menstrual pain (dysmenorrhea), 27 people (52.6%) had learning activities disrupted and 11 students (28.9%) who experienced menstrual pain (dysmenorrhea) were not disturbed by their learning activities.

The obtained a correlation between menstrual pain (dysmenorrhoea) and learning activities where the results of the Chi Square statistical test with the Fisher's Exact Test obtained a value of $p=0.000$ ($p\text{-value}<0.05$) which means that H_0 is rejected and there is a relationship between menstrual pain (dysminorrhoea) and activity studying young women at SMPN 35 Batu Aji.

Suggestion

Adolescents are more active in seeking information so they can overcome menstrual pain, so it does

not interfere with their learning activities.

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