

Correlation Between Dysmenorrhea Incidence and Student's Grade Point

Estri Kusumawati¹, Nova Lusiana¹

¹*Faculty of Psychology and Health, UIN Sunan Ampel Surabaya, Indonesia*
Estri.kusumawati@uinsby.ac.id

Keywords: *Dysmenorrhea, Grade Point*

Abstract: Adolescence is a period of transitions children toward adulthood. Teenagers experience many changes to either physical or psychic; physical changes are characterized by the maturity of the reproductive organs. The timeline of these, starting with the onset of menstruation, teen not uncommon experience painful menstruation (dysmenorrhea). Dysmenorrhea often interferes with daily activities including learning activities. Learning activities that disturbed the learning achievements may cause a decline in students. The purpose of this research is to know the correlation of the incidence of dysmenorrhea with the student achievement index. The population in this research is a biology study program of Sunan Ampel Islamic University Surabaya. The sampling techniques used in this research is quota sampling. The number of samples used is 60 respondents. Statistical tests used were chi-square with 0.05 significance level. From the results of the analysis of the data by using the chi-square test results obtained by the significance of 0.722 ($0.722 > 0.05$), so that it can be concluded that there is no correlation between the incidence of dysmenorrhea and grade point of a student.

1 INTRODUCTION

Adolescence is a period of transitions of children towards adults who will pass through the stages of development that is important in life (Lembaga Demografi FEB UI, 2017). According to the projections of population age groups and sexes year 2010-2035, in 2018 the amount of teen female 15-19 age group more than 10 million (Badan Pusat Statistik, 2013). As a teenager, teenagers experience the physical and psychological changes. In addition, it also happens to the maturity of reproductive organs that are marked with the happening of menstruation.

Menstruation is the process of decay of the endometrial wall marked with a discharge of blood from the vagina that occurs periodically. Menstruation occurs due to hormonal changes continuously. Menstruation is not infrequently accompanied by menstrual disorders either cycle, both the old and the incidence of dysmenorrhea (painful menstruation). Dysmenorrhea is one of the menstrual disorders arising due to contraction of the uterine wall that displays one or more symptoms ranging from mild to severe pain (Handayani and Rahayu, 2014). Dysmenorrhea is a health problem that is often experienced by teenagers in school and greatly affect the activities of the vernacular of the

day (Gebeyehu et al., 2017). In addition to affecting daily activities, dysmenorrhea also affects student learning activities. Learning activities is the involvement of a person in the form of attitudes, thoughts and attention in learning activities as supporting success in the process of teaching and learning so that obtained benefits from such activities. Young women who are going through dysmenorrhea can lead to impaired learning, spirit activity decreased, declining even to learn concentration difficult concentrate so that the material presented by the professors could not be well received.

According to research done by Saguni with the title correlation dysmenorrhea with learning activities teenage in Christian Senior High School 1 Tomohon obtained results there were correlation dysmenorrhea with learning activities. Described in the study that the menstrual pain cause students experiencing disruptions in learning activities (Saguni et al., 2013). Dysmenorrhea cause inconvenience to students in the following learning activities. The uncomfortable learning activities cause less maximum results learn students or students. In addition, research results of salsabila also mentioned that there is a significant correlation between menstrual pain with learning activities (Putri, n.d.).

Learning activities that disrupted the learning process does not cause lasting with good results so that learning becomes insufficient or declining learning achievements. This is in accordance with the research conducted by Sinta Afrida who mentioned that statistically there is a correlation between learning achievements with the dysmenorrhea (Afrida, 2016). Other studies conducted by Yuniar ika fajarini, et al, mentions that there is a correlation between learning achievements and primary dysmenorrhea (Fajarini et al., 2018).

A smooth learning activities will lead to a good learning achievement, because the learning achievements are influenced by internal factors that come from self and external factors that come from outside yourself students. Internal factors affecting learning achievement among other factors of Physiology (due to illness, lack of health and disability), psychology (motivation, interests, talent, intelligence, mental health factors), while external factors that affect achievement learning is the family environment, the environment of the school and community environments. (Slameto, 2010).

Learning as a measure of accomplishment late in the assessment process the success of a student in following the process of learning. One of the learning achievements can be seen from the grade point obtained by students every semester. Based on the description, the purpose of this research was to know correlation of incidence of dysmenorrhea and grade point of student.

2 METHOD

This research is a descriptive analytic study with cross sectional approach. This research was carried out in April-May 2018 at Islamic university of Sunan Ampel Surabaya. The population used in this research were students of biology study programs at Sunan Ampel Islamic University Surabaya.. The sampling techniques used in the study was the accidental sampling. The samples are teenagers who had experienced menstruation. The number of sample are sixty respondents.

The data used in this research is the primary data and secondary data. Primary data in this study are dysmenorrhea, while the secondary data is student grade point of the biology program Sunan Ampel Islamic University Surabaya. Research instrument used in this study is a questionnaire sheet contain statements about the incident dysmenorrhea. This research consists of two variables namely variables and variables are bound. Independent variables in this study was the incidence of dysmenorrhea, whereas the variable dependent is grade point of student. Data processing uses the *SPSS for windows* applications. Data analysis techniques using the chi square test

with a 95% degree of confidence. This statistical tests to know the correlation of the incidence of dysmenorrhea and grade point of student..

3 RESULT AND DISCUSSION

a. Result

Table 1 Characteristics of Respondents Based on Age

No	Age	Total	Percentage (%)
1	18	2	3,3
2	19	9	15
3	20	34	56,7
4	21	9	15
5	22	4	6,7
6	23	2	3,3
Total		60	100

Source: Primary data, 2018

Based on table 1 above shows the age of most respondents is 56.7% (34 respondents) was 20 years old. The next age of 19 years and 9 years respectively 15% (9 respondents). A number of 4 22 year old respondents (6.7%), 2 respondents 18 years of age (3.3%) and 23-year-old respondents 2 (3.3%).

Table 2 Menarch Age Frequency Distribution

No	Age	Total	Percentage (%)
1	10	5	8,3
2	11	9	15
3	12	17	28,4
4	13	12	20
5	14	11	18,3
6	15	4	6,7
7	16	2	3,3
Total		60	100

Source: Primary data, 2018

Based on the table 2 above shows amounted to 28.4% (17 respondents) are experiencing the first menstrual period at the age of 12 years. By 20% (12 respondents) experience of the first menstrual period at the age of 13 years, amounting to 18.3% (11 respondents) are experiencing the first menstrual period at the age of 14 years. The first menstrual period also experienced at the age of 16 by 2 respondents (3.3%), fifteen years of age amounted to 6.7% (4 respondents). Youngest age of first menstruation suffered at the age of 10 years amounted to 8.3% (5 respondents).

Table 3 Description of The Results of Statistical Tests Associated with Menarch

Value

N	60
Range	7,00
Minimum	10,00
Maximum	17,00
Mean	12,6333
Std. Deviation	1,50667

Source: Primary data, 2018

Based on the above, table 3 shows that the average age of menarche 60 respondent is around the age of 12-13 years. Menarche occurs most rapidly at the age of 10 years and the slowest occurs at the age of 17 years.

Table 4 Distribution of Frequency of Occurrence Dysmenorrhea

No	Menstrual disorders	Total	Percentage (%)
1	Dysmenorrhea	28	46,7
2	No dysmenorrhea	32	53,3
	Total	60	100

Source: Primary data, 2018

Based on table 4 above shows that 28 respondents (46.7%) felt dysmenorrhea and a number of 32 respondents (53.3%) experienced no dysmenorrhea.

Table 5 Distribution of The Frequency Index of Achievements

No	Grade point status	Total	Percentage (%)
1	Cum Laude	0	0
2	Very satisfactory	17	28,3
3	Satisfying	43	71,7
	Total	60	100

Source: Primary data, 2018

Table 6 Analytical Results of Chi-Square Tests

	Value	df	Asymp.Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig.(1-sided)
Pearson Chi-Square	.449 ^a	1	.503		
Continuity Correction ^b	.127	1	.722		
Likelihood Ratio	.453	1	.501		
Fisher's Exact Test				.547	.363
Linear-by-Linear Association	.441	1	.506		
N of Valid Cases ^b	60				

Source: Primary data, 2018

Based on the above table 5 shows the results of the index achievement of respondents is very satisfactory a number of 17 respondents (28.3%), and a number of 43 respondents (71.7%) with satisfactory results. Based on table 6 obtained value significance

is 0.722 (< 0.05), so there were no conclusions obtained by the correlation between the incidence dysmenorrhea and grade point of student.

b. Discussion

Teens experiencing the first menstrual period (menarche) when entering the age of 9-12 years of age, most adolescents are experiencing menstruation when aged 13-15 years. Sooner or later the onset of menses is influenced by several factors, one of them is hormonal factors (Anurogo and Wulandari, 2011). The hormone effect on the age of onset of menarche is estrogen and progesterone. The hormone estrogen regulates the menstrual cycle function, whereas progesterone effect on uterine contractions, i.e. during the menstrual cycle (Proverawati, 2009).

Based on the study results in table 3, the average respondent experienced menarche at age 12-13 years. In addition, there are some who experience menarche at age 10 years and 17 years. It shows that the onset of menarche is influenced by several factors, so not all teens experience menarche at the same age.

Menstruation is not seldom followed by pain when the menstruation, the perceived ahead of or during menstruation to interfere with daily activities. From the results of the above studies (table 4) obtained results as much as 46.7% experienced dysmenorrhea and 53.2% experienced no dysmenorrhea. Dysmenorrhea occurs due to an increase in the production of prostaglandins. Doing so will result in uterine contractions and vasoconstriction of the blood vessels. Blood flow to the uterus decreases so that the uterus does not get oxygen supply adekuat that cause the onset of pain. The intensity of the pain is different on each individual, it is affected by the individual descriptions of pain, the perception and experience of pain (Kelly, 2007).

Based on the results of the analysis with the use of chi-square test, obtained results the value significance of 0.722, that value is more than 0.05 ($0.05 > 0.722$) so that it can be concluded that there is no correlation the incidence of dysmenorrhea and grade point of student. The index is one of the learning achievement of students learning achievement parameter. This is in accordance with the results of research conducted by sumartini, dkk, mentioning that there is no significant correlation between dysmenorrhea with learning achievements (Sumartini et al., 2018).

Learning is a process of changing human behaviour gained from life experience, by exerting all my potential and skills in him becoming a man of noble character (Wijaya, 2010). The State of one's health will have an effect on a person's learning activities. A body tired cause less concentration in

learning activities so that learning does not take place properly (Hamalik, 2009). However, a person who does not have health problems would not necessarily succeed in his studies. It is caused due to the results of one's learning is not only influenced by internal factors one of which is the degree of a person's health, but also influenced by external factors. External factors, among others, the learning environment and support others. Learning environment includes environment of family, school, or community. Family environment in the form of support to parents, how to educate parents, correlations and the concern of parents and the family economy. School environment comprises infrastructure, methods of teaching, correlation with other students. Environment of the community in the form of students interaction with the media, the community, the friends hang out and shape life in the society (Slameto, 2010). It shows that the achievement of student learning is not only determined by the degree of a person's health, in other words that if a student experiencing dysmenorrhea is not necessarily an index of his achievements will decrease. Grade point of student will remain high as long as the other factors influencing learning achievement remain well so as to provide comfort in following the process of learning. This is in accordance with the research conducted by HM Farid Nasution who mentioned that there is a significant correlation between the method of teaching lecturer, learning skills, learning tools and learning environment with the learning achievements of students (Nasution, 2016).

4 CONCLUSIONS

The results of the above study shows the results of the average age of menstruation of the respondents is 12-13 years. Of 60 respondents, there were 46.7% experiencing dysmenorrhea and 53.3% of the respondents do not experience. Index of achievement students showed 28.3% get the results very satisfactory and 71.7% obtain satisfactory results.

Based on the results of the statistical tests by using the test of chi-square significance value obtained of 0.722 ($0.722 > 0.05$), then the research entitled correlation the incidence of dysmenorrhea and grade point of student can be concluded that there is no the correlation of the incidence of dysmenorrhea and grade point of student.

REFERENCES

- Afrida, S., 2016. Hubungan Disminore dengan Prestasi Belajar pada Siswi SMA Negeri 5 Kota Banda Aceh. ETD Unsyiah.
- Anurogo, Wulandari, 2011. Cara Jitu Mengatasi Nyeri Haid. ANDI, Yogyakarta.
- Badan Pusat Statistik (Ed.), 2013. Proyeksi penduduk Indonesia 2010-2035. Badan Pusat Statistik, Jakarta.
- Fajarini, Y.I., Nurdianti, D.S., Padmawati, R.S., 2018. Prestasi Belajar Pada Remaja Yang Mengalami Dysmenorrhea Primer. Jurnal Kesehatan Reproduksi 5, 24–31.
- Gebeyehu, M.B., Mekuria, A.B., Tefera, Y.G., Andarge, D.A., Debay, Y.B., Bejiga, G.S., Gebresillassie, B.M., 2017. Prevalence, Impact, and Management Practice of Dysmenorrhea among University of Gondar Students, Northwestern Ethiopia: A Cross-Sectional Study. International Journal of Reproductive Medicine 2017, 1–8. <https://doi.org/10.1155/2017/3208276>
- Hamalik, O., 2009. Proses Belajar Mengajar. PT. Bumi Aksara, Jakarta.
- Handayani, E.Y., Rahayu, L.S., 2014. Faktor - Faktor Yang Berhubungan Dengan Nyeri Menstruasi (Disminore) Pada Remaja Putri Di Beberapa SMA Di Kabupaten Rokan Hulu 1, 11.
- Kelly, T., 2007. 50 Rahasia Alami Meringankan Sindrom Premenstruasi. Erlangga, Jakarta.
- Lembaga Demografi FEB UI, 2017. Brief Notes.
- Nasution, H.F., 2016. Hubungan Metode Mengajar Dosen, Keterampilan Belajar, Sarana Belajar dan Lingkungan Belajar dengan Prestasi Belajar Mahasiswa. Jurnal Ilmu Pendidikan 8.
- Proverawati, 2009. Menarche Menstruasi Pertama Penuh Makna. Penerbit Mulia Medika, Yogyakarta.
- Putri, S.A., n.d. Hubungan Antara Nyeri Haid (Disminore) Terhadap Aktivitas Belajar Pada Siswi Kelas XI SMA Negeri 52 Jakarta. Universitas Negeri Malang.
- Saguni, F.C.A., Madianung, A., Masi, G., 2013. Hubungan Disminore Dengan Aktivitas Belajar Remaja Putri di SMA Kristen I Tomohon 1, 6.
- Slameto, 2010. Belajar dan Faktor-Faktor yang Mempengaruhinya. Rineka Cipta, Jakarta.
- Sumartini, Hasnah, Risnah, Syisnawati, 2018. Hubungan Dysmenorrhea Dengan Prestasi Belajar Mahasiswi Jurusan Keperawatan. Journal of Islamic Nursing Volume 3 Nomor 1.
- Wijaya, D., 2010. Pengaruh faktor Internal dan Eksternal Terhadap Prestasi Siswa Menggunakan Path Analysis. Fakultas sains dan Teknologi Universitas Islam Negeri Syarif Hidayatullah, Jakarta.

