



The Correlation between Dysmenorrheal Pain with Flatus

Lidia Widia^{1*}, Desi Kumala², Rena Oki Alestari³, Ivana Devitasari⁴, Evy Kasanova⁵

^{1,2,3,4,5} Sekolah Tinggi Ilmu Kesehatan Eka Harap, Indonesia

Corresponding author email: mrslidyawidya@gmail.com

Abstract: *Dysmenorrheal is a genetic complaint due to an imbalance of the hormone progesterone in the blood causing the most common pain occurring in women. Women with dysmenorrheal produce prostaglandin in 10 times more than women who are not dysmenorrheal. Prostaglandin causes increased uterine contractions, and excessive levels will activate the large intestine and cause flatus. This condition causes uncomfortable so that daily activities become disturbed. Based on the results of interviews 15 students experienced a sense flatus and defecate at the time of dysmenorrheal pain. This study aims to determine the correlation between dysmenorrheal pain with the occurrence of flatus and defecation. The design of this study by using cross sectional. The sample in this study was 58 students with total sampling technique. The result of this study was chi square test on dysmenorrheal pain with flatus obtained p value <0,05 (0,002) it means that there was correlation between dysmenorrheal pain with flatus. The conclusion of this study that there was a correlation between dysmenorrheal pain with flatus.*

Keywords: *dysmenorrheal; flatus; woman*

I. Introduction

Flatus is gas or air in the digestive tract that is expelled through the anus. Gas that can be found in the stomach, small intestine, and large intestine. Most of the gas in the stomach is excreted through belching. The amount of gas that enters or is formed in the large intestine every day is on average 7 to 10 liters, while the average amount of gas that is released is usually only about 0.6 liters. The remainder is absorbed through the intestinal mucosa. Dysmenorrhea 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. Prostaglandins cause increased uterine contractions, and at excessive levels will activate the large intestine so that this condition causes discomfort and interferes with daily activities. Other causes of dysmenorrhea are experienced by women with certain disorders, such as endometriosis, pelvic infections (pelvic area), uterine tumors, appendicitis, digestive organ disorders and even kidney disorders.

According to the World Health Organization (WHO) the number of dysmenorrhea in the world is very large, on average more than 50% of women in every country experience dysmenorrhea. In Sweden about 72%, in the United States it is estimated that nearly 90% of women experience dysmenorrhea, and 10-15% of them experience severe dysmenorrhea, which causes them to be unable to carry out any activities. Meanwhile in Indonesia, it is estimated that 55% of productive women are tormented by dysmenorrhea (Kementerian Kesehatan, 2020). The prevalence varies widely. Based on data from various countries, the incidence of dysmenorrhea in the world is quite high. It is estimated that 50% of all women in the world suffer from dysmenorrhea in a menstrual cycle. Menstrual disorders require careful evaluation because if left untreated and daily activities. Several ways can be done to reduce or even eliminate pain in dysmenorrhea, both pharmacologically, for example with analgesic class drugs and non-pharmacologically, for example hot compresses. Hot compresses, namely where hot compresses can relieve ischemia by reducing uterine contractions and smoothing blood vessels so that they can relieve pain by reducing tension and increasing feelings of well-

being, increasing menstrual flow and reducing pelvic vasocongestion.

Based on a preliminary study in March 2022 on 31 students in the fourth semester of the Diploma midwifery study program at the STIKES Darul Azhar Batulicin, it was found that 15 students experienced a feeling of wanting to have flatus and defecating when they had dysmenorrhea. Based on the discussion above, the researcher is interested in conducting research with the title "The Relationship between Dysmenorrhea Pain and Flatus Desire.

II. Research Methods

This type of research uses an analytic design with a cross-sectional design, where the research object is only observed once, uses data with the present time and measurements are made on the status of the character or object variables at the time of examination by means of an approach and data collection at once on one moment.

The sampling technique is a sampling technique. The sampling technique used in this study is total sampling, meaning that the sample used is the total population of 55 respondents all students of the Darul Azhar Batulicin STIKES Midwifery Diploma study program in 2022. The independent variable that will be used in this study is dysmenorrheal pain and the dependent variable in this study is the desire to flatus. Operational Definition Dysmenorrhea pain is pain or cramping in the abdomen that is felt before or during menstruation and Parameters are (1-4) pain can still be tolerated, (5-6) requires painkillers, (7-10) complains of burning and needs to rest while the Measuring Scale is Ordinal and Pain Scale Measuring Tool, variable Feeling like flatus Operational definition is gas or air in the digestive tract that is expelled through the anus while the parameters are (intestinal peristalsis, abdominal muscle contractions, warm temperature or intra-red irradiation) the measuring scale is Nominal and the measuring tool is the Questionnaire.

The data collection tool in this study used the Numerical Rating Scale (NRS). Univariate analysis was used to analyze each of the variables used to describe dysmenorrheal pain and a feeling of wanting to have flatus. After all the data is collected, the data is processed manually, then the research results are presented in tabular form by collecting data, grouping data, entering data in tables and in narrative form. The research analysis consisted of univariate and bivariate analysis, to test the hypothesis using the chi square test.

III. Discussion

3.1 Univariate Analysis

Univariate analysis aims to explain or describe the characteristics of each research variable. Univariate analysis in a study conducted at STIKES Darul Azhar Batulicin was to describe the percentage of dysmenorrhea pain and feeling of wanting to have flatus most (64%) of the respondents experienced mild pain, a small proportion (5%) of the respondents experienced severe pain and almost half (49%) of the respondents did not experience the urge to flatus, and most (51%) of the respondents experienced the urge to flatus.

3.2 Bivariate Analysis

Bivariate analysis, namely the analysis carried out on two variables that are suspected to be related or correlated. Bivariate analysis in a study conducted at STIKES Darul Azhar Batulicin was essentially to determine the relationship between dysmenorrhea pain and a feeling of wanting to have flatus.

Analysis of the relationship between dysmenorrheal pain and the desire to flatus was obtained by the majority (51%) of the respondents who experienced the urge to flatus during dysmenorrheal pain. The test used was the chi square test with a value of $P = 0.002 (<0.05)$ so it can be concluded that there is a relationship between dysmenorrheal pain and a feeling of wanting to flatus.

IV. Conclusion

Based on data analysis, it was found that most (64%) of the respondents experienced mild pain, and a small proportion (5%) of respondents experienced severe pain. whereas almost half of the respondents (49%) did not experience a feeling of wanting to flatus and most (51%) of the respondents did experience a feeling of wanting to flatus.

The results of the analysis of the relationship between dysmenorrheal pain and the desire to flatus were obtained by the majority (51%) of respondents who experienced the urge to flatus during dysmenorrheal pain, and almost half (49%) of the respondents who did not experience the urge to flatus during dysmenorrheal pain. The test used was the chi square test with a value of $P = 0.002 (<0.05)$ so it can be concluded that there is a relationship between dysmenorrheal pain and a feeling of wanting to flatus.

The suggestions in this research are:

1. Most (64%) of the respondents experienced mild pain and a small proportion (6%) of the respondents experienced severe pain.
2. Most (51%) of the respondents experienced a feeling of wanting to flatus and almost half (49%) of respondents did not experience a feeling of wanting to flatus during dysmenorrhea.
3. There is a very close relationship between dysmenorrheal pain and the feeling of having flatus.

References

- Ariani, A.P. (2014). Aplikasi metodologi penelitian kualitatif dan kuantitatif dalam bidang kesehatan. Yogyakarta: Nuha Medika. Hal: 62, 167.
- Arikunto, S. (2010). Prosedur penelitian. Jakarta: PT. Rineka Cipta. Hal: 173.
- Budiyanto. (2010). Rahasia di balik kentut. <http://nina9yuli.student.umm.ac.id/2010/02/11/rahasia-di-balik-kentut/> Diunduh 20 Mei 2023. Hal: 2, 3-4, 21-22.
- Calis, Anton, Karim. (2011). Dysmenorrhea. <http://emidicine.medscape.com>. Diakses tanggal 30 oktober 2022. Hal: 4, 8, 6-10.
- Depkes RI. (2020). Angka Kejadian Dismenore. Hal: 15.
- Dharma, K.K. (2011). Metodologi penelitian keperawatan. Jakarta: Trans Info Media. Hal: 79, 80, 135.
- Dianawuri, (2009). Arti Defekasi. <http://dianawuri.multiply.com/journal>. Diakses tanggal 22 januari 2023. Jam 12.49 WIB. Hal: 6-10, 6-18.
- Ernawati. (2010). Terapi Relaksasi Terhadap Nyeri Dismenore Pada Mahasiswi Universitas Muhammadiyah Semarang. [http://jurnalunimus.ac.id.vol 1 no 1](http://jurnalunimus.ac.id.vol%201%20no%201). Diakses tanggal 27 Oktober 2013. Hal: 9, 13, 15.
- Fitriani. (2011). Hubungan Antara Pengetahuan Kesehatan Reproduksi Remaja Dengan Perilaku Reproduksi Sehat Di SMA Dharma Pancasila Medan 2008. <http://repositori.usu.ac.id.handle/123456789/23768>. Diakses tanggal 16 Mei 2013. Hal: 11-16.

- Gagua, D., Gagua, T., Tkeshelashvili, B. (2012). Primary dysmenorrheaprevalence in adolescent population of Tbilisi, Georgia and risk factors. *Medical Sciences*, 13(3): 162–168.
- Hartanto. (2010). Pendidikan Kesehatan Reproduksi. Jakarta: Salemba Medika. Hal: 6-7.
- Hidayat, A.A.A. (2007). Metode Penelitian KebidananTeknik Analisis Data. Salemba Medika. Jakarta. Hal: 58.
- _____ (2008). Pengantar Kebutuhan Dasar Manusia: Aplikasi Konsep dan Proses Keperawatan. Jakarta: Salemba Medika. Hal: 20, 22, 29.
- _____ (2011). Metode Penelitian Kebidanan & Teknik Analisis Data. Jakarta: Salemba Medika.
- _____ & Musrifatul Uliyah. (2012). Buku Ajar Kebutuhan Dasar Manusia (KDM), Pendekatan Kurikulum Berbasis Kompetensi. Surabaya: Health Books Publishing, 7-8.
- Iswari, P.D., Surinati, A.K., & Mastini, P. (2014). Hubungan Dismenore Dengan Aktifitas Belajar Mahasiswi PSIK FK UNUD. Skripsi. Bali: Fakultas Kedokteran Universitas Udayana.
- Jones, D.I. (2009). Paduan Terlengkap Tentang Kesehatan, Penyakit Kandungan Dan Keluarga Berencana Untuk Pendidikan Bidan. Jakarta: EGC. Hal: 11.
- Kosasih, C.E & Solehati, T. (2015). Konsep Dan Aplikasi Relaksasi Dalam Keperawatan Maternitas. PT. Rafika Aditama. Jakarta. Hal: 7-8.
- Kumalasari, Intan. (2012). Kesehatan Reproduksi Untuk Mahasiswa Kebidanan dan Keperawatan. Jakarta Selatan: Salemba Medika.
- Kusmiran, Eny. (2011). Kesehatan Reproduksi Remaja Dan Wanita. Jakarta: Salemba Medika. Hal: 16.
- _____ (2013). Kesehatan Reproduksi Remaja Dan Wanita. Jakarta: Salemba Medika
- Margareth. Z.H & Sukarni, I. (2013). Buku Ajar Keperawatan Maternitas. Yogyakarta: Nuha Medika. Hal: 17-20.
- Marmi, (2015). Kesehatan Reproduksi. Yogyakarta: Pustaka Pelajar. Hal: 1-2, 2-5, 13, 14, 15, 193.
- Misaroh, S. & Proverawati, A (2009). Menarche Menstruasi Pertama Penuh Makna. Yogyakarta: Nuha Medika. Hal: 2-3, 20.
- Muhammad, Ali. (2012). Psikologi Remaja Perkembangan Peserta Didik. Jakarta. Bumi Aksara. Hal: 4, 5.
- Ningsih, (2011). Buku Ajar Kesehatan Reproduksi Wanita. Jakarta: PT Grafindo Persada. Hal: 25-26.
- Notoatmodjo, Soekidjo. (2012). Metodologi Penelitian Kesehatan. Rineka Cipta. Jakarta. Hal: 23, 182, 232.
- Omidvar, S., Salmalian, H., & Begum, K. (2015). The Relationship between Dysmenorrhea and Menstrual Attitudes among Adolescent and Young Females in Urban Area, South India. *Medical Sciences*, 12 (1): 56-61.
- Prawihardjo, Sarwono. (2011). Ilmu Kandungan.Jakarta: P.T Bina Pustaka sarwono Prawihardjo. Hal: 12.
- Rakhma, Astrida. (2012). Gambaran Derajat Dismenore dan Upaya Penanganannya Pada Siswi Sekolah Menengah Kejuruan Arjuna Depok Jawa Barat. Skripsi. Jakarta: Universitas Islam Negeri Syarif Hidayatullah Jakarta. Hal: 3-7.
- Renggonowati, A., & Machmudah. (2014). Pengaruh mobilisasi dini terhadap peristaltik usus pasca operasi sesar dengan anestesi spinal di rsud tugurejo Semarang. Skripsi. Semarang: Universitas Muhammadiyah Semarang. Hal: 2, 13.
- Riyanto, Agus. (2011). Aplikasi Metodologi Penelitian Kesehatan. Yogyakarta: Nuha Medika
- Riwidikdo, Handoko. (2013). Statistik Kesehatan dengan Aplikasi SPSS Dalam Prosedur Penelitian. Hal: 26.

- Saryono & Mekar, DWI Anggraeni. (2013). *Metodologi Penelitian Kualitatif dan Kuantitatif dalam Bidang Kesehatan*. Yogyakarta: Nuha Medika.
- Sarwono, Sarlito, Wirawan. (2011). *Psikologi Remaja*. Jakarta. PT Raja Grafindo Persada.
- Sativa, Lilahi, Rahma. (2015). Menstruasi Bikin Anda Makin Sering Buang Air Besar? Ini Sebabnya. Di akses pada tanggal 2 Juni 2015, dari <https://m.detik.com/health/read/2015/06/02/145632/2931470/762/5/menstruasi-bikin-anda-makin-sering-buang-air-besar-ini-sebabnya#jdl>, 1-6.
- Schorge, J.O, et al. (2008). Cervical Cancer. In: *William Gynecology*. USA: McGraw Hill, 646-663.
- Setiawan, Ari & Saryono. (2010). *Metodologi Penelitian Kebidanan DIII, DIV, S1 dan S2*. Yogyakarta: Nuha Medika. Hal: 20.
- Sugiyono, (2015). *Metode Penelitian Dan Pengembangan*. Bandung: Alfabeta. Hal: 117, 122, 176, 190.
- Tarwoto & Wartonah. (2011). *Kebutuhan Dasar Manusia dan Proses Keperawatan Jakarta*. Salemba Medika. Hal: 7-8, 12.
- _____ (2010). *Kebutuhan Dasar Manusia dan Proses Keperawatan Edisi ketiga*. Jakarta: Salemba Medika. Hal: 16.
- Unsal, A., Ayranci, U., Tozun, M., Arslan, G., & Calik, E. (2010). Prevalence of dysmenorrhea and its effect on quality of life among a group of female university students. *Journal International*.
- Wijayanto, K & Hakim, L. (2013). *Pengaruh ambulasi dini terhadap waktu platus pada pasien post operasi sectio caesarea dengan anastesi spinal di RSUD kraton kabupaten pekalongan*. Skripsi. Jawa Barat: STIKES Muhammadiyah Pekajangan Pekalongan. Hal: 4, 5-6.
- Yuliani, Surika (2015). *Tingkat pengetahuan siswi tentang dismenore di SMKN jumantono*. Skripsi. Surakarta: STIKes Kusuma Husada.