

THE TREATMENT OF DYSMENORRHEA AMONG ADOLESCENT FEMALES

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Abstrak

Dismenore yang dialami wanita setiap siklus menstruasinya memang bukan sesuatu yang sangat berbahaya atau mengancam nyawa saat itu juga, tetapi berdampak pada aktivitas sehari-hari terutama pelajar dan aktivitas belajarnya. Hal ini disebabkan karena nyeri yang timbul cukup mengganggu dan dapat menurunkan kualitas hidup seperti kesehatan, turunnya konsentrasi dan motivasi belajar. Penelitian ini menggunakan metode kualitatif. Wawancara mendalam dilakukan untuk menggali upaya penanganan dismenore informan lebih dalam dengan menganalisis data menggunakan pendekatan fenomenologi. Pemilihan informan dengan metode purposive sampling. Subjek penelitian enam orang remaja putri dismenore, enam orang tua remaja putri, satu orang pengelola UKS dan satu orang PIK R. Alat pengumpulan data pedoman wawancara telah di uji pilot interview. Analisis data dengan bantuan program NVivo. Penelitian ini menemukan 2 (dua) tema yaitu sebagai berikut: (1) Upaya penanganan perspektif kesehatan (2) Upaya penanganan perspektif. Upaya penanganan perspektif kesehatan banyak dilakukan remaja putri secara farmakologi seperti obat ibuprofen, paracetamol dan feminax. Selain itu remaja putri mengatasi dismenore melalui perspektif budaya sebagian besar dilakukan secara herbal jahe susu hangat, kunyit asam, minyak cengkeh dan kompres hangat. Hanya sedikit remaja putri yang melakukan pemeriksaan ke fasilitas kesehatan.

Kata kunci: Upaya, Penanganan, Dismenore, Remaja Putri

Abstract

Dysmenorrhea occurs in women during the menstrual cycle is not highly dangerous or life-threatening. However, it does affect daily activities, especially among students and their learning activities. This negative effect is due to the rising pain, which is highly disruptive and could negatively impact the quality of life, including health, concentration, and learning motivation. This research utilized a qualitative approach in which an in-depth interview was conducted to uncover the informants' strategies for managing dysmenorrhea by applying a phenomenological approach to analyze the data. The informants were selected through purposive sampling. Further, this study included six adolescent females with dysmenorrhea, six informants' parents, one school health unit manager, and one librarian. The data collection tool, an interview guide, was subjected to a pilot interview and the data analysis was facilitated by the NVivo software program. This research generates two themes: (1) Health oriented treatment strategies and (2) Perspective-based treatment strategies. Adolescent females pursue Health-oriented management strategies mainly pharmacologically, which involves using medications such as Ibuprofen, Paracetamol, and Feminax. Besides, these adolescent females alleviate dysmenorrhea through cultural perspectives using herbal remedies such as warm ginger milk, turmeric tamarind, clove oil, and warm compresses, and only a few of them would seek a medical examination from healthcare facilities.

Keywords: Treatment, Dysmenorrhea, Adolescent Females

INTRODUCTION

In 2016, World Health Organization (WHO) 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 (Oktorika *et al.*, 2020)

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 (Sakinah & Ekayanti, 2016). Ignoring the impact of dysmenorrhea may cause significant pain leading to endometriosis or infertility (Prawiroharjo, 2020). 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, 2015).

To mitigate the discomfort from dysmenorrhea, one option could be utilizing analgesic drugs like Aspirin, Mefenamic Acid, Paracetamol, Caffeine, and Feminax. Also consuming, commercially branded medicines such as Novalgine and Ponstan are frequently employed to alleviate the discomfort.

Additionally, some would take traditional remedies, such as drinking betel leaf infusion, papaya leaf, turmeric rhizome, etc., have been utilized to achieve the same purpose (Samba, 2019).

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 and Lemyre, 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 (Susanti *et al.*, 2018)

The treatments addressing adolescent health are regulated by Health Law No. 36 39 of 2009 on Health Concerns, incorporating health reproduction in the sixth section, Articles 71 through 77. Article 77, paragraph 3, stipulates that reproductive health is pursued through various activities, including promotive, preventive, curative, and rehabilitative activities. This statement leads to the establishment of Program Kesehatan Peduli Remaja (PKPR), which has been running since 2003. To promote a healthy lifestyle for students, the government also implemented UKS (Usaha Kesehatan Sekolah), aiming at enhancing the ability to maintain a healthy life within their surroundings (Kemenkes RI, 2018).

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 well-being based on partnerships (Rizka, 2018). 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 (Sabaruddin, 2017)

Based on a preliminary study at SMA Negeri 1 Godean Sleman, it was found that 8 of 10 female students (80%) experienced pain during menstruation. The measures to reduce the discomfort were resting in the classroom or at UKS (School Unit Centre) and rubbing their belly using eucalyptus oil. Meanwhile, the measures carried out at home to ease dysmenorrhea were consuming paracetamol (2 students, 20%), 30% (3 students) consuming herbal concoctions (turmeric tamarind and rice ginger) before and after the menstruation, 10% (1 student) applying warm compresses using bottle and 20% (2 students) seek comfort by drinking warm water to handle dysmenorrhea.

RESEARCH METHOD

This research employed a qualitative method to unearth the effort taken by female adolescents in handling dysmenorrhea by direct exploration (intuition), analyzing, and describing the phenomena. This research adopted phenomenology. The informants were selected using purposive sampling with criteria such as female students of eleventh grade, female students with primary dysmenorrhea experiences (mild and severe), voluntary participation, and capable of describing the efforts in managing dysmenorrhea. The study was conducted at SMA Negeri 1 Godean Sleman on June 2023,

employing in-depth interviews with 6 primary informants (female students of eleventh grade), 6 parents, one school UKS manager, and one school health unit manager, and one librarian (PIK-R) as triangulation informant.

In this study, the researchers were the main instrument. Before conducting the research, the researchers constructed some questions as interview guidelines. An in-depth interview was carried out to uncover deep information to seek new insights into how female adolescents manage the discomfort of dysmenorrhea. The interview took approximately 20-30 minutes for each informant, and the interview guideline was piloted before conducting the interview. Informed consent was provided for the female adolescents and their parents to signify their voluntary commitment as informants. The validity method covered credibility, transferability, dependability, and confirmability. In analyzing the data, the researchers utilized the Nvivo software program. Further, this study had undergone an ethical review process from the University of Aisyiyah Yogyakarta, with approval No.2785/KEP-UNISA/IV/2023.

RESULTS AND DISCUSSION

Respondent Criteria

Six informants meeting the research inclusion criteria participated in this study. All of them were adolescent females experiencing varying levels of dysmenorrhea, ranging from mild to severe.

Table 1 Characteristics of female adolescent informants

Primary informant	Age	Religion	Class	Menarche	Family History of Dysmenorrhea	Ethnicity	Dysmenorrhea Category (Kusmiran, 2014)
IU1	17	Islam	XI MIPA IV	12	Mother	Javanese	Mild
IU2	17	Islam	XI MIPA IV	13	Mother	Javanese	Severe
IU3	17	Islam	XI MIPA IV	13	Older Sister	Javanese	Moderate
IU4	16	Islam	XI MIPA IV	12	Older Sister	Javanese	Mild
IU5	16	Islam	XI MIPA IV	14	Older Sister	Javanese	Severe
IU6	17	Islam	XI MIPA IV	12	Younger Sister	Javanese	Moderate

Source: Primary Data in 2023

Table 1 provides the overview of the informants, comprising 6 individuals. Their age ranges from 16-17 years; they are XI MIPA IV class students. They are all Muslim and of Javanese ethnicity. On average, their first menarche occurs within 12 to 14 years old. All informants have familial history of dysmenorrhea. Two informants are classified as having mild dysmenorrhea, and two exhibit moderate dysmenorrhea, and the remaining two experience severe dysmenorrhea.

Discussion

This research discovered 2 (two) themes as follows: (1) treatment effort from a health perspective and (2) Perspective treatment effort. The results of data analysis are presented in descriptive form based on specific purposes with the following scheme:

1. Uncovering information on treatment efforts employed by adolescent females from a health

perspective.

Theme 1: Treatment effort of health perspective

A. IU2 (B): "When I feel the pain, I took Ibuprofen"

B. IU6 (S): "I usually buy Feminax in the pharmacy

C. IU5 (B): "I usually take Paracetamol."

D. IU3 (S): "I went to Local Health Center and got some prescribed medicines.'

Some treatments employed by adolescent females to reduce the discomfort of dysmenorrhea were pharmacology and medical check-up. The pharmacology approach entails using pain relievers like Paracetamol, Proris, and Ibuprofen. Two of the six informants confirmed that ibuprofen was effective in reducing pain. The other two informants took paracetamol and Feminax. The interview results also revealed that the informants went to a local health centre for a medical check-up. The analysis result of the interview in this study conveyed that the informants made the treatment effort by consuming pain relievers like Paracetamol, Ibuprofen and Feminax to reduce the pain. This finding aligns with Rustam's (2015) study stating that to reduce the pain caused by dysmenorrhea, analgesic medicines like Aspirin, Mefenamic Acid, Paracetamol, Caffeine, and Feminax could be used.

The common use of Prostaglandin medicines to treat dysmenorrhea is NSAID (Non-Steroid Anti-inflammatory Drugs) which hinders the work and production of Prostaglandin. Two of them are Ibuprofen and Naproxen, which are marketed everywhere. Consuming NSAID like Naproxen or Piroxicam could treat severe cramps. Other NSAID medicines include Aspirin, Ibuprofen, Naproxen, Sodium, and Ketoprofen (Adzkie, 2020). NSAID, or hormonal contraception, is the first therapy to reduce prostaglandin dan leukotriene (Ryan, 2017). The analysis result in this study also discovered that female teenagers search for medical facilities, including public health centres or hospitals, for further treatment to see and consult with the doctor to prevent severe disease complications. Dysmenorrhea is the most common gynaecological condition for females, also known as cramping pain in the lower abdomen before or through menstruation (Omidvar *et al.*, 2015).

Handling menstrual pain that you experience, apart from being able to do it at home or at school, can also be done at the health center, or where the medical personnel practice it. But unfortunately, currently the motivation and desire of adolescents to check or come to health services related to dysmenorrhea is still very low. This was proven from the results of the study, where only two informants said they had visited a health service related to their dysmenorrhea. They said they could still handle the dysmenorrhea they experienced on their own, so they did not need help from health workers. In fact, visiting health services does not have to wait for us to be sick, because prevention is better than cure. The low motivation and desire of adolescents to carry out health checks can be caused by several factors where one of the most important factors is the knowledge of adolescents about dysmenorrhea. Adolescents who have good knowledge about dysmenorrhea will have high motivation to visit health services when they experience dysmenorrhea, whereas adolescents who have less knowledge about dysmenorrhea have low motivation to check up on health services.

The menstrual symptom is the emotional and physical problems suffered through menstruation. Dysmenorrhea has various effects, so it is crucial to treat it. Dysmenorrhea is a painful menstrual disorder for adolescent females that could lead to complications, so it is necessary to see a gynaecologist to reduce complications in female adolescent reproductive health (Folabomi *et al.*, 2017). Health workers are required to take care of the adolescent females' changes and teach them about stress management to help them cope with menstrual anxiety. (Altangarvdi *et al.*, 2019). The doctor should detect menstrual abnormality as soon as possible to prevent the remaining effects and symptoms and to tell accurate health information (Sarah K. Rogers *et al.*, 2018).

Efforts to deal with each person's complaints are different. Dysmenorrhea can be overcome with various efforts. Efforts that can be made by young women are handling through a health and

cultural perspective. Treatment efforts from a health perspective include medical check-ups and pharmacology. Efforts to treat dysmenorrhea from a cultural perspective include herbs and alternative therapies. behavior carried out by young women according to the theory of Lawrence Green (1980) is formed from predisposing factors (predisposing factors) factors that are embodied in the knowledge, attitudes, beliefs, beliefs, values, educational level, and social level contained in the individual. Other factors that can influence behavior in dealing with complaints of dysmenorrhea are traditions, beliefs and value systems adopted by the community.

2. Exploring the treatment effort done by female teenagers from a cultural perspective.
 - A. IU2 (B): "I usually use sour turmeric (kunir asem)"
 - B. IU6 (S): "I drink Kiranti"
 - C. IU5 (B): "I like to serve hot ginger milk."
 - D. IU4 (R): "I usually use the hot compress to reduce the pain."
 - E. IU1 (B): "Hot compress using ifree pad bought from the pharmacy."
 - F. IU3 (S): "I just smear with clove oil."

Female teenagers treat the cultural perspective through alternative and herbal therapy. From the interview results, most informants stated that they use sour turmeric drinks, hot ginger milk, and Kiranti to reduce the pain. Main informant 2 cooked the sour turmeric drink by herself to treat dysmenorrhea, while main informant 6 said she consumed Kiranti, which she bought from the food stall. The main informant 5 stated that she often consumed hot ginger milk to treat the pain. Based on the study's analysis, informants mentioned that herbal drinks could strongly reduce the pain of menstruation by consuming hot ginger milk, sour turmeric, and Kiranti. This finding aligns with Rustam's (2015) mentioning that the herbal medicines used by the respondents to treat dysmenorrhea were betel leaves, turmeric rhizome, and papaya leaves. The result showed that turmeric effectively reduces dysmenorrhea pain for female teenagers, and the pain reduction felt on average 15 minutes after the treatment.

Herbal remedies are supplementary options involving peppermint, ginger, cinnamon, and other botanical plants. The effectiveness of utilizing ginger powder within the range of 750 to 2000 mg for 3-4 days during the initial phase of the menstrual cycle for primary dysmenorrhea has been validated (Daily *et al.*, 2015). Jenabi's study (2013) reported that the group who received ginger infusion therapy significantly decreased pain compared to those who received a placebo. Around 82.85% of females in the first group consuming ginger infusion therapy reported that the accompanying symptoms of dysmenorrhea significantly decreased afterwards. Ginger (*Zingiber officinale roscoe*) offers various benefits, such as a culinary spice, a warming beverage, an essential oil, an aromatic enhancer, and a medicine (Bartley and Jacobs, 2000 in Amir, 2014). Ginger contains a high concentration of antioxidant compounds and effectively inhibits cancer cells' free radicals and hydroxyl. Moreover, it also has a high concentration of anticarcinogenic properties, non-toxicity, and non-mutagenicity.

Alternative therapy employed by adolescent females includes warm water compresses and rubbing clove oil. The interview results of 4 primary informants revealed that they would do warm compresses using a bottle to ease the discomfort of dysmenorrhea. Informant 1 stated that she reduced the pain by compressing using pad ifree at the pharmacy. Informant 3 said that the treatment to ease the discomfort was to rub clove oil on the lower part of the belly and massage it gently. Based on the analysis results of this study, the adolescent females undertook various alternative treatments, including applying warm abdominal compresses, massaging the lower abdomen using clove oil, and employing eucalyptus oil. These practices are coherent with Rustam's study (2015), where the participants employed non-pharmacological treatments like sleeping, massaging, and refreshing. To reduce the discomfort of dysmenorrhea during the menstrual cycle, they preferred to go to bed rather than being massaged, as some dislike massaging.

Women would undertake non-pharmacology therapy, complementary and alternative medication, and pharmacology to treat dysmenorrhea. A previous study found that 20% to 25% of analgesic medicines pursued failed pharmacological approaches. This failure might be due to the ineffectiveness of treatment (prescribed or free sales), causing women to shift to complementary and alternative medications practised for ages (Midilli *et al.*, 2015). The formulated mixture utilized in the prior research has the potential as a reference for complementary and alternative medication for primary dysmenorrhea. Aromatic oil massage evokes comfort in adolescents who experience primary dysmenorrhea and shortens the duration of menstrual pain in the essential oil group (Nursangadah and Hidayah, 2021). The finding above is supported by Jeung Im (2013), who discovered that applying warm water compresses using red bean pillows effectively eases the pain before and during menstruation. Another study by Bonde *et al.* (2004) demonstrated a significant correlation between warm compresses and reduction of menstrual discomfort ($P=0,00$). The study concluded that warm compresses affected the reduction of menstrual pain degree experienced by female SMA and SMK Yadika Kopandakan II students.

RESEARCH LIMITATION

This research has addressed adolescent females' behaviours in treating dysmenorrhea. Employing a mix-method approach might uncover more information on treating dysmenorrhea among female adolescents. Since this research only focused on female adolescent students of the eleventh grade, the result cannot be generalized to a larger scope of all SMA Negeri 1 Godean Sleman classes. Further, the researchers, as the key instruments in collecting the data, still lack experience in qualitative research.

CONCLUSION AND SUGGESTIONS

The specific purposes of this study were answered through 2 (two) themes, (1) Treatment effort utilized by adolescent females in health perspectives and (2) Treatment effort employed by the adolescent females in cultural perspectives. Pharmacologically, adolescent females have consumed substances such as Ibuprofen, Paracetamol, and Feminax. Conversely, others have undertaken cultural perspectives by utilizing herbal remedies, including ginger milk, turmeric tamarind, clove oil and warm compresses. Only a small percentage of them opt for medical consultation at a healthcare facility. Future studies are recommended to adopt a mix-method approach to enable comprehensive and extensive data analysis, which could yield a more profound understanding of dysmenorrhea treatment behaviours among adolescent females.

Statement of Conflict of Interest.

The authors declare no conflict of interest.

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