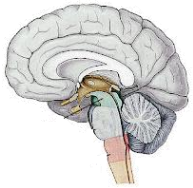
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NURSING CARE FOR ACUTE PAIN IN ADOLESCENTS REGARDING THE INCIDENT OF DYSMENORRHEA WITH HEALTH EDUCATION INTERVENTION OF DYSMINORRHEA EXERCISES

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ARTICLE INFORMATION

Keywords:
Dysmenorrhea, Acute Pain, Dysmenorrhea Exercise

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ABSTRACT

Dysmenorrhea is a common menstrual pain experienced by adolescents that can interfere with daily activities. This pain is caused by uterine muscle contractions due to increased prostaglandin hormones. Many adolescents cope with it using medication and warm compresses, but the use of medication carries the risk of side effects. One effective non-pharmacological alternative is dysmenorrhea exercise, which helps reduce pain intensity by triggering the release of endorphins and promoting muscle relaxation and comfort during menstruation (Oktarini, 2019). This final nursing scientific paper uses a descriptive research design with a case study approach to nursing care. The case study includes a series of nursing processes: assessment, diagnosis, intervention, implementation, and evaluation. The sample involved three adolescent female subjects experiencing dysmenorrhea. Data were collected through interviews, direct observation, and documentation. The assessment of the three subjects resulted in a nursing diagnosis of acute pain, with initial pain scores of 5 to 6 (moderate pain) before performing dysmenorrhea exercise, which then decreased to 2 to 3 (mild pain) after the intervention. a non-pharmacological therapy to relieve the pain.

INTRODUCTION

Many women experience menstrual pain, including pain known as dysmenorrhea, which is the most common and most frequently experienced complaint among women. In adolescents, the pain caused by dysmenorrhea causes discomfort and prevents them from participating in activities, but many adolescents simply use warm compresses and medication to manage their pain. Adolescence, also known as puberty, is a transitional period between childhood and adulthood. During the life cycle of puberty, it is a crucial phase in sexual development (Rahmawati, 2019). One health problem that can occur in adolescent reproductive health during menstruation is dysmenorrhea, or pain during menstruation (Utari, 2018 in Yuliani et al., 2022). Meanwhile, the incidence of women who have experienced dysmenorrhea is as high as 90%. This problem affects at least 50% of women of reproductive age and 60-85% of adolescents, resulting in high absenteeism from school and work (Sarwono, 2019). Data from the World Health Organization (WHO) shows that the number of dysmenorrhea sufferers is very high worldwide. More than 50% of women in every country experience it, with an average of 72 percent in Sweden, 85 percent in Saudi Arabia, 85 percent in Ethiopia, 64 percent in Mexico, 89 percent in Iran, and 90 percent in the United States (Hu et al., 2020; Santi, 2019). In a study conducted on adolescent girls at SMK YPIB Majalengka in 2019, it was found that more than half (66.7%) of the girls experienced moderate pain intensity before dysmenorrhea exercises and more than half (77.3%) of the girls experienced mild pain intensity after dysmenorrhea exercises. Anxiety arising from menstruation can be reduced by doing dysmenorrhea exercises, which can reduce the intensity of pain before and after exercise. To reduce dysmenorrhea, light exercise is highly recommended (Oktarini, 2019).

Menstrual pain/dysmenorrhea is an imbalance of the hormone progesterone in the blood, resulting in pain. Psychological factors also play a role in the occurrence of *dysmenorrhea* in some women. When menstruation arrives, there are sometimes abnormalities or disorders related to menstruation, including *premenstrual tension* (tension before menstruation), mastodynia, mittelschmerz (pain during ovulation), and dysmenorrhea (pain during menstruation) (Manuaba, 2019). The uterus consists of muscles that also

contract and relax. Generally, uterine muscle contractions are not felt, but strong contractions often cause blood flow to the uterus to be disrupted, causing pain. Some non-pharmacological methods to relieve dysmenorrhea include warm compresses, massage, distraction, physical exercise, adequate sleep, a low-salt diet, and increased use of natural diuretics (Sarlis, 2020).

A literature review (Wulanda, Luthfi, and Hidayat, 2020) found that some people suffering from dysmenorrhea use analgesic drugs to reduce their pain without a doctor's prescription or consultation. If analgesic drugs are consumed excessively without supervision, they can cause liver damage, bleeding, diarrhea, nausea, gastric problems, and even hypertension. The most dangerous long-term effect is an increased risk of developing Alzheimer's disease (a disease characterized by confusion, disorientation, memory loss, speech disorders, and dementia). Some things that some women do to cope with menstrual pain include compresses with a hot water bottle, warm baths, drinking warm drinks containing high calcium, rubbing the stomach/lower back, while in a prone position so that the uterus hangs down and taking slow, deep breaths for relaxation (Misaroh, 2009 in Purba, Rompas, & Karundeng, 2014). But there are also some who cope by sleeping, and some even just leave it alone (Februanti, 2017).

METHOD

This study used a descriptive design with a case study approach in nursing care. A case study is a series of scientific activities aimed at gaining an in-depth understanding of a program, event, or activity, both for individuals and groups. The case used as the object of the study is a real -*life event* that is currently taking place. In its implementation, 2 to 4 visits are conducted; the first visit is conducted for initial screening and assessment, while the second to fourth visits focus on the further assessment process, intervention implementation, and evaluation. The purpose of this study was to determine the effectiveness of providing dysmenorrhea exercise education in dealing with acute pain due to dysmenorrhea in adolescents in Kepanjen District, Malang Regency, East Java Province, after the intervention was carried out.

RESULTS AND DISCUSSION

General data in this research includes name, age, religion, address, class, date of study and source of information.

Table 1. Client Identity

Client Identity	Client 1	Client 2	Client 3
Name	Mr. F	Mr. L	Mr. J
Age	20	20	18
Religion	Islam	Islam	Islam
Education	Students	Students	Students
Work	Not yet working	Not yet working	Not yet working
Address	Pringu	Pringu	Pringu
Status	Not married yet	Not married yet	Not married yet
Review Date	May 28, 2025	May 30, 2025	June 1, 2025

Table 2. Client Assessment Data

Assessment	Client 1	Client 2	Client 3
During the Review	The client reported lower abdominal pain, nausea, thigh pain, and abdominal cramps, as if she needed to defecate. She reported increased pain when walking, and became easily upset. She reported feeling slight pain in her lower abdomen and breasts a week before her period. She reported the pain usually	The client reported lower abdominal pain that radiated to her waist. She felt nauseous and reported vomiting every time she menstruated. She reported experiencing dysmenorrhea pain from the first day of her period to the second day. She	The client reported lower abdominal pain that radiated to her waist and thighs. She said the pain usually occurred on the first day of her period and lasted until the third day. She stated she never dared to take painkillers.

	lasts for three days during her period. She reported never taking painkillers.	reported not taking any painkillers.

To address the specific research objectives, the researchers discussed the discrepancies between the cases found and the theory in the literature review. The results showed a congruence between the facts on the ground and the theory, which states that dysmenorrhea is characterized by lower abdominal pain, nausea, emotional instability, and disruption of daily activities.

The assessment was conducted on three clients with a primary complaint of menstrual pain. All clients experienced lower abdominal pain radiating to the waist or thighs, with moderate pain intensity (5–6 on a scale), particularly on the first to third day of menstruation. None of the clients used painkillers. This data aligns with the theory that dysmenorrhea often occurs in the early days of menstruation, with the primary symptoms being abdominal pain, nausea, and discomfort.

The established nursing diagnosis is *acute pain related to physiological injuring agents* based on subjective and objective data in the three clients. This diagnosis is consistent with nursing theory, which states that dysmenorrhea is a physiological response due to excessive uterine contractions.

Nursing interventions were carried out through health education and the application of dysmenorrhea exercises as a non-pharmacological technique. Dysmenorrhea exercises have been shown to help relax muscles, improve blood flow, and increase endorphins, which function to reduce pain intensity. This aligns with previous research that found dysmenorrhea exercises can reduce pain intensity from moderate to mild.

Implementation and evaluation were conducted over three visits. Results showed a decrease in pain scores in all clients: from a 6 to a 3 in clients 1 and 2, and from a 5 to a 2 in client 3. Clients were also able to understand the educational material and independently practice dysmenorrhea exercises. These results are consistent with previous research that found dysmenorrhea exercise interventions to be effective in significantly reducing menstrual pain and can be used as a safe and easy-to-implement non-pharmacological management alternative.

CONCLUSION AND SUGGESTIONS

The results of the study indicate a correspondence between the facts on the ground and the theory that dysmenorrhea is characterized by lower abdominal pain, nausea, emotional instability, and disruption of daily activities. The established nursing diagnosis is *acute pain related to physiological injury agents.* Nursing interventions are carried out through health education and the application of dysmenorrhea exercises as a non-pharmacological technique. Dysmenorrhea exercises have been shown to help relax muscles, improve blood flow, and increase endorphins, which function to reduce pain intensity.

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