OVERVIEW OF KNOWLEDGE AND ACTIONS OF "POLITEKNIK BAUBAU" STUDENTS AGAINST MENSTRUAL PAIN *(DYSMENORRHEA)* AND HOW TO DEAL WITH IT

Hafiza Udin[1], Ratih Nurwanti[2], Wa Ode Syafriah[3]*

[1,2,3] Politeknik Baubau, Baubau, Indonesia

ARTICLE INFORMATION

Received: 10 March 2025
Revised : 15 March 2025
Accepted: 30 April 2025
DOI:

Keywords : *Dysmenorrhea,; Knowledge; Action*

CORRESPONDING AUTHOR

Nama : Ratih Nurwanti
Address: BTN Inulgi Blok No 20, kota Baubua
Email : ratih.nurwanti03@gmail.com

A B S T R A C T

Adolescence is a transitional phase that begins from childhood to adulthood, with a biological age range of 10 to 19 years. One of the significant events experienced by adolescent girls is their first menstruation, which usually occurs between the ages of 10 and 16. Menstruation is characterized by the release of blood and body cells through the walls of a woman's uterus periodically. Many women experience discomfort or intense pain during menstruation, known as dysmenorrhea. Menstrual pain is experienced by more than 50% of women in various countries. In America, around 60% of women experience it, while in Sweden the figure reaches 72%. Dysmenorrhea is a common disorder experienced by women during menstruation, including pain, cramps, and back pain. This study aims to assess the level of knowledge and actions of Baubau Polytechnic female students regarding menstrual pain (dysmenorrhea). There are two treatment methods that can be used to overcome menstrual pain: first, treatment with pain relievers (analgesics) and second, non-medical therapy. The study was conducted in June 2024 involving 68 randomly selected respondents. This study uses a quantitative descriptive method, with data collection through questionnaires whose results are presented in tabular form. Based on data from the first questionnaire, the level of knowledge of Baubau Polytechnic students about dysmenorrhea is considered good, which is 85.44%. However, the actions taken by students in dealing with dysmenorrhea are considered inadequate, with a percentage of 56.74%.

INTRODUCTION

Adolescence is a period that starts from childhood to adulthood, biologically between 10 and 19 years old. The most important event that occurs among girls is the arrival of the first menstruation or menstruation, usually around 10 to 16 years old (Santi, 2019).

Menstruation is the process of regular blood and tissue discharge from the uterus through the vagina which is part of the natural cycle in the female body every month. The average duration of menstruation lasts 3-8 days with a cycle of about 28 days per month and a maximum of 15 days. As long as the blood that comes out does not exceed this limit, then the blood is menstrual blood (Rustam, 2014).

One of the common problems that women experience during menstruation is discomfort or pain, known as dysmenorrhea. Dysmenorrhea is caused by contractions of the uterus during menstruation, and this pain usually starts at the beginning of menstruation, lasting for a few hours to a few days. Dysmenorrhea consists of two types: primary dysmenorrhea, which is not caused by a specific medical condition, and secondary dysmenorrhea, which results from medical conditions such as endometriosis or ovarian cysts (Larasati, 2016).

Menstrual pain is experienced by more than 50% of women in various countries. In the United States, about 60% of women experience it, while in Sweden the figure reaches 72%. Although this pain is generally harmless, for some women it can be very annoying, with varying levels of pain. Some women can still do activities even though they feel uncomfortable, while others may not be able to do activities because the pain is very severe (Proverawati, 2009).

There are two main methods to treat menstrual pain: first, treatment with pain relievers (analgesics); second, non-medical treatments such as exercise, hot or cold compresses, music therapy, relaxation, and the consumption of herbal drugs or drinks (Anggriani et al., 2021).

Nonsteroidal anti-inflammatory drugs (NSAIDs) and combination oral contraceptives are the main therapies for treating dysmenorrhea. NSAIDs work by reducing menstrual pain through a decrease in intrauterine pressure and levels of F2-alpha prostaglandins in menstrual fluids. Research shows that 80-85% of patients experience improvement after using NSAIDs. Medications such as ibuprofen, mefenamic acid, and other NSAIDs have been shown to be effective in inhibiting the enzyme cyclooxygenase, which reduces the production of prostaglandins and, ultimately, relieves symptoms of dysmenorrhea (Sari et al., 2018).

Students at Baubau Polytechnic themselves may have a variety of knowledge, attitudes and actions related to the use of anti-inflammatory drugs as a reliever for menstrual pain (*dysmenorrhea*). First of all, their knowledge of anti-inflammatory drugs can be influenced by a variety of factors, including education, information they receive from various sources and personal experiences. Some female students may have a fairly deep understanding of the drug, including how it works in relieving menstrual pain and possible side effects. They may have heard about the recommendations for the use of anti-inflammatory drugs from medical personnel or read about them on the internet or social media.

METHODOLOGY

This research was carried out in May 2024 at the Baubau Polytechnic Campus. The population of this study is 211 Baubau Polytechnic students. The sample selection technique used in this study is *random sampling* , namely samples are taken randomly from the population without paying attention to population stratification because they are considered homogeneous (Notoatmodjo, 2016).

To calculate and determine the sample correctly, the Slovin formula was used to obtain a representative sample from all Baubau Polytechnic student populations.

Formula: $n = \frac{N}{1+N(e^2)}$

Description: n = Many samples
N = Many populations
e = Error margin

Account: $n = \frac{211}{1+211\ (10\%^2)}$

$$n = \frac{211}{1 + 211\ (0{,}1^2)}$$
$$n = \frac{211}{1 + 211\ (0{,}01)}$$
$$n = \frac{211}{1 + 2{,}11}$$
$$n = \frac{211}{3{,}11}$$
$$n = 68$$

So, the sample that will be used is as many as 68 Baubau Polytechnic students. The type of data used in this study is primary data, namely data collected directly from respondents through questionnaires. The questionnaire contains a series of questions with predetermined answer options for respondents to choose from.

The data collected was based on a questionnaire, in which respondents were given a sheet containing a number of questions that they had to answer. This technique allows the collection of data directly from respondents with a pre-arranged question format. The data processing process is carried out through the editing stage, which aims to ensure that the information obtained is accurate and appropriate. In this process, we check each answer to ensure the correctness and completeness of the data collected. The assessment of the knowledge of Baubau Polytechnic students was carried out using 10 questions on the questionnaire with the Guttman scale.

The correct answer is given a score of 1
Incorrect answers are given a score of 0
The total score for correct answers is calculated based on the number of questions multiplied by the highest value, which is 10 x 1 = 10
The total score for the wrong answer is 10 x 0 = 0.
According to Arikunto (2006), knowledge is divided into three categories:

- Good: 76%-100%

- Enough: 60%-75%
- Less : <60%

To calculate the percentage of score for each question, the following formula is used (Arikunto, 2006):

$P = \frac{x}{N}$ x 100%

Information:
P : Percentage
X : Total correct answers
N : Total item soal

Action Variable Data Analysis

The assessment of knowledge of Baubau Polytechnic students was measured using 12 statements in a questionnaire with the Guttman scale.
Correct answer is given a grade of 1
Incorrect answer is given a value of 0
The total score for correct answers is calculated based on the number of statements multiplied by the highest value, which is 12 x 1 = 12
The total score for an incorrect answer is calculated by multiplying the number of statements by the lowest value, which is 12 x 0 = 0.
According to Arikunto (2006), knowledge is categorized into three levels as follows:

- Good: 76%-100%
- Enough: 60%-75%
- Less : <60%

Formula to find out the percentage score of each item (Arikunto, 2006):

$P = \frac{x}{N}$ x 100%

Information:
P : Percentage
X : Total correct answers
N : Total item soal

RESULTS & DISCUSSION

This study aims to find out the overview of knowledge and actions of Baubau Polytechnic students on menstrual pain (*dysmenorrhea).* The number of samples used was 68 people as respondents who met the criteria.

Table 1. Overview Of Respondents' Knowledge Of *Dysmenorrhea*

No	Category	Respondent's Answer				Number of Respondents
		True		Wrong		
		Sum	%	Sum	%	
1	The meaning of menstruation	65	95,58% 79,41%	3	4,41%	68
2	Duration of menstruation	54		14	20,58%	68
3	Menstrual cycle	48	70,58%	20	29,41%	68
4	Hormones that affect the menstrual cycle	60	88,23%	8	11,74%	68
5	Limbs	66	97,05%	2	2,94%	68
6	Age of frequent *dysmenorrhea*	57	83,83%	11	16,17%	68
7	When does *dysmenorrhea occur*	54	79,41%	14	20,58%	68
8	Parts of the body that feel pain during menstruation	68	100%	0	0%	68
9	Degree of *dysmenorrhea*	53	77,94%	15	22,05%	68
10	Causes of *dysmenorrhea*	56	82,35%	12	17,64%	68
Sum		581		99		680
%		85,44%		14,55%		100%

Source : Primary data, 2024

Based on the results of filling out the questionnaire by 68 female respondents, the following information was obtained: Meaning of menstruation 95.58%, Length of menstruation 79.41%,

Menstrual cycle 70.58%, Hormones that affect menstruation 88.23%, Meaning of dysmenorrhea 97.05%, Age that often experiences dysmenorrhea 83.83%, When dysmenorrhea occurs 79.41%, Parts of the body that feel pain when dysmenorrhea is 100%, Degree of dysmenorrhea 77.94% and Causes of dysmenorrhea 82.35%.

Respondents' knowledge of the meaning of menstruation (95.58%) and the length of menstruation (79.41%) is high because they experience menstruation directly. Menstruation is understood as a monthly natural cycle in a woman's body. Respondents' knowledge of the menstrual cycle (70.58%) and hormones that affect menstruation (88.23%) is in the category of quite good because it is related to science.

The informants have good knowledge about the meaning of dysmenorrhea (97.05%) and the degree of dysmenorrhea (77.94%) because the term comes from the medical field and the dysmenorrhea degree group is based on a pain-specific assessment for health. Their knowledge of the age at which dysmenorrhea often occurs (83.83%), when dysmenorrhea occurs (79.41%), the parts of the body that feel pain during dysmenorrhea (100%), and the causes of dysmenorrhea (82.35%) are also good, because they experience this condition personally.

According to Arikunto (2006), the knowledge scale is:

Good: 76%-100%

Enough: 60%-75%

Less : <60%

With an average score of 85.44% of respondents' knowledge, the category of respondents' knowledge about menstrual pain (*dysmenorrhea*) was included in the good category. This illustrates that female students have solid knowledge on this topic, supported by the education and information they receive.

The description of respondents' knowledge of menstrual pain *(dysmenorrhea)* is in the good category of 85.44%.

$= \frac{581}{680} \times 100\%$

$= 85{,}44\%$

Table 2. Description Of Respondents' (Non-Pharmacology) Actions Towards *Dysmenorrhea*

No	Category	Respondent's Answer				Number of Respondents
		True		Wrong		
		Sum	%	Sum	%	
1	Using distraction techniques such as listening to music or watching movies	57	83,83%	11	16,17%	68
2	Compressing the sore spot with warm water	33	48,52%	35	51,47%	68
3	Take a warm shower	16	23,52%	52	76,47%	68
4	Treatment of herbs/herbs	28	41,17%	40	58,82%	68
5	Technically *guided imagery*	52	76,47%	16	23,52%	68
6	Smearing with balm or warming lotion	43	63,23%	25	36,76%	68
7	Rubbing on the painful area	48	70,58%	20	29,41%	68
8	Doing the knee chest position	44	64,70%	24	35,29%	68
9	Doing activities or sports	35	51,47%	33	48,52%	68
10	Complete rest or sleep	62	91,17%	6	8,82%	68
11	You take pain medication from shop medicines such as Feminax, Panadol or other drugs	21	30,88%	47	69,11%	68
12	You take prescription pain medications such as Acetaminophen, Mefenamic Acid or other medications	24	35,29%	44	64,70%	68
Sum		463		353		816
%		56,74%		43,25%		100%

Source : Primary data, 2024

Filling out a questionnaire to 68 female respondents regarding actions taken to overcome dysmenorrhea revealed two categories of actions: non-pharmacological actions and pharmacological actions. Based on the scale proposed by Arikunto (2006), it is stated that good knowledge (76%-100%), sufficient knowledge (60%-75%) and lack of knowledge (<60%). Meanwhile, for non-pharmacological actions, a score of (61.47%) was included in the category of quite good and pharmacological actions were (34.55%) included poor.

Respondents indicated that non-pharmacological measures were done quite well in overcoming dysmenorrhea, as these measures could be taken immediately when feeling menstrual pain. On the other hand, pharmacological actions are not optimal, as can be seen from the number of female students who do not use drugs to overcome dysmenorrhea.

Non-pharmacological actions carried out by respondents included total rest or sleep (91.17%), using distraction or diversion techniques such as listening to music or watching movies (83.83%), performing *guided imagery* techniques, namely imagining pleasant things to distract from pain (76.47%), rubbing the painful area (70.58%) and doing *a knee chest* positionnamely lying down in a flat place where the knees are bent and brought closer to the chest (64.70%).

Respondents combed around the painful area with warm water (48.52%), bathed using warm water (23.52%), treated with herbal herbs or herbs (41.17%), smeared with balm or warming lotion (63.23%) and did activities or sports (51.47%).

The results of filling out the pharmacological action questionnaire carried out by the respondents were taking anti-pain drugs from stall drugs such as Feminax, Panadol or other drugs (30.88%) and taking painkillers from a doctor's prescription such as Acetaminophen, Mefenamic Acid or other drugs (35.29%). Then the overall results for the actions taken by female students in overcoming menstrual pain were not good (56.74%).

The description of respondents' actions towards menstrual pain *(dysmenorrhea)* was included in the poor category (56.74%).

$$= \frac{463}{816} \times 100\%$$

$$= 56{,}74\%$$

CONCLUSION

From the data obtained based on filling out the questionnaire, it was concluded that the picture of Baubau Polytechnic students' knowledge of *dysmenorrhea* was good, namely 85.44%. For the actions of Baubau Polytechnic students in overcoming *dysmenorrhea* , which is 56.74% is not good. The limitations of this study include that the respondents could not provide answers or further information because the respondents' answers were limited to the questions contained in the questionnaire only.

ACKNOWLEDGMENTS

A big thank you to Mrs. Apt. Ratih Nurwanti, S.Farm., M.Si and Mrs. Apt. Wa Ode Syafriah, S.Farm., M.Si as supervisors who have provided guidance and advice and motivation so that this Scientific Paper can be completed properly Thank you also to family, friends and friends who always provide support in compiling Scientific Papers and always patiently accompany the author in research.

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