The Relationship Between Knowledge Level and Accuracy of Primary Menstrual Pain Self-Medication in Tahfidz Qur'an Islamic Boarding School Students Nurul Huda Joyosuko Metro, Malang

Maulina Novia[1*], Dela[2], Sugihantoro H[3], Hakim A[4], Ma'arif B[5]
Department of Pharmacy, Faculty of Medicine and Health Science, Maulana Malik Ibrahim State Islamic University
Corresponding author: Maulina Novia novia.maulina@uin-malang.ac.id

A R T I C L E I N F O

A B S T R A C T

Self-medication is the preferred method for treating minor illnesses based on individual decision. The method used is descriptive analysis. Distributing questionnaires directly to a sample of 85 respondents was used to collect data. This research is a correlational analysis research with a cross-sectional design. Samples were collected using a non-random sampling method with a total sampling method. The research results showed that 93% of respondents had a high level of knowledge, 3% had a medium level, and 4% had a low level. In terms of behavior or acquisition, 88.24% had a good rating, 10.59% had a medium rating, and 1.18% had bad behavior. Spearman's rank correlation analysis produced a calculated r value of 0.537 and a p value of 0.000, indicating a strong and significant positive relationship between knowledge of the adequacy of self-assessment and treatment of primary dysmenorrhea and the feasibility of self-treatment.

INTRODUCTION

Self-medication is a step in choosing light medicines such as traditional medicines, modern medicines or other herbal medicines that can relieve pain (WHO, 2010). According to the Indonesian Ministry of Health, in 2012, Indonesians carried out self-medication at a rate of 44.4%. According to the Central Statistics Agency (BPS) in 2019, as many as 71.46% of Indonesians carried out self-medication, and BPS in 2020 showed the percentage of the population doing self-medication in Indonesia was 72.19%, and in 2021, BPS showed the self-medication rate in Indonesia was 84.23%.

Every woman has a different experience of menstruation, some are painless and vice versa, so that this pain causes discomfort and interferes with daily activities. In general, women aged 9-12 years are most susceptible to menstruation, but there are also those who are late, namely in the 13- 15 year age range (Riyanti and Jannah, 2020). The duration of menstruation is 3–8 days, some even up to 13 days, with a cycle of 28–35 days each month (Wagiyo & Rahmawati, 2018).

In Indonesia, cases of menstrual pain are mild or even severe. According to the World Health Organization (WHO), in 2020, there were 1,769,425 people (90%) experiencing primary menstrual pain, and 10–15% suffered from primary menstrual pain of women experienced severe menstrual pain. Menstrual pain is pain or tenderness in the lower abdomen during menstruation. This pain often appears before, on the first day or even after menstruation (Sinaga et al., 2017). There are two types of menstrual pain, namely secondary menstrual pain and primary menstrual pain (Noor et al., 2010). Secondary menstrual pain is pain accompanied by abnormalities in the genitals due to pathological conditions such as cysts, ovaries, endometriosis and the like. while primary menstrual pain is normal pain resulting in the secretion of prostaglandins and contractions of the uterine muscles. Menstrual pain occurs within 6 to 12 months. after menarche, with the duration of pain generally 8 to 72 hours (Ningsih, 2012).

Accuracy in self-medication or self-medication for menstrual pain among adolescents must be considered because of inappropriate use, inappropriate administration, and inappropriate dosage. So there will be high and fatal risks associated with using it, so accuracy in self-medication can reduce the number of cases of primary menstrual pain (Octavia et al. 2020). One of the things that can create a person's actions is knowledge. Actions will be better if accompanied by good knowledge and will be different from actions that are not based on knowledge (Notoadmojo, 2012).

In Islamic boarding schools, especially among students, self-medication is often carried out, especially among female students who experience pain when menstruation approaches because the majority of students' lives are known to be independent and far from the reach of their parents. According to Sandra (2015), to follow up on cases of primary menstrual pain, it is very necessary for Islamic boarding schools to carry out this case either with educational methods such as counseling or outreach to increase the knowledge of teenagers or students in Islamic boarding schools.

METHODOLOGY

This research method uses descriptive analytics with a cross sectional approach. The object of this research was carried out at Tahfidz Qur'an Nurul Huda Joyosuko Metro Islamic Boarding School, namely in July-December 2022. The sampling technique used a total sampling technique with non-random sampling. The total sampling in this study was 121 female students, but the sample that was considered was only 85 respondents because the rest did not do self-medication. This technique has gone through the inclusion and exclusion criteria stages. The inclusion criteria in this study were students at the Tahfidz Qur'an Nurul Huda Joyosuko Islamic Boarding School, Malang City, students who were willing to be respondents, students who had treated menstrual pain themselves. The exclusion criteria in this study were students who returned home or students who were not at the Islamic boarding school when this research was conducted and students who did not carry out self-medication. This research instrument uses a questionnaire.

RESULTS

Table 1. Results of the characteristics of the respondents

Variable	N	(%)
Use of self medication		
Self medication	85	70.25%
Not doing self-medication	36	29.75%
Age		
19-20 Years	28	32.94%
21-22 Years	40	47.06%
23-24 Years	17	20%
Education		
S1	77	90.59%
S2	8	9.41%

Characteristics of respondents

Information on the characteristics of respondents, namely students who seek independent treatment, age and education. Information on respondent characteristics includes students who seek independent treatment, age and education. The characteristic table above illustrates that the number of students who carry out independent treatment is greater than students who do not carry out independent treatment. It can be seen from the results of the questionnaire that many students experience preliminary menstrual pain. Most of the age data is between 21 and 22 years old. According to WHO, this age includes adolescence. From the results of this information, it can be seen that the majority of respondents have a bachelor's degree. The higher a person's education, the easier it is to receive information so that they have more

knowledge, such as when carrying out self-medication, where the better the knowledge, the better the behavior (Restiyono, 2016).

Level of knowledge results

Table 2. Knowledge results

Knowledge level	Frequency	
	(n)	(%)
High	79	93
Medium	2	3
Low	4	4
Total	85	100%

Based on Table 2, it can be seen that of the 85 respondents who had a high level of knowledge there were (93%), respondents who had an average level of knowledge (3%), and respondents who had an average level of knowledge (3%) and a low type (4%). These results show that the level of knowledge is mostly high regarding primary treatment of dysmenorrhea, including understanding, symptoms, causes, therapy, management and procedures, side effects and monitoring.

Results of the level of accuracy

Table 3. Results of the level of accuracy

Accuracy Level	Frequency	
	(n)	(%)
Good	75	88.24%
Enough	9	10.59
Not enough	1	1.18%
Total	85	100%

Results of the level of accuracy

Table 4. Correlations

Correlation	Level of knowledge	Level of Accuracy
Level of knowledge	1	0.537
		0.000
Level of Accuracy	0.537	1
	0.000	

Based on table 4, it can be seen that of the 85 respondents who had a good level of accuracy or behavior 88.24%, sufficient level of accuracy or behavior 10.59% and poor level of accuracy or behavior 1.18%. These results

indicate that the majority of the high level of accuracy or behavior in the self-medication category of primary menstrual pain includes precise indications, directions for use, duration of administration, method of storage, side effects, and follow-up

Between Knowledge Level and Accuracy of Primary Menstrual Pain Self-Medicationin Tahfidzul Qur'an Islamic Life experience School Understudies Nurul Huda Joyosuko Metro Malang City

The following consequence of this study is the computation of the connection among information and self-medicine conduct of essential feminine torment in PPTQ Nurul Huda Joyosuko Metro Malang understudies. In this review, the examination of survey information that had been gathered utilized the SPSS programming or application form 25. In the part on the connection between the degree of information and the way of behaving of right self-drug for feminine torment, a relationship test was utilized utilizing the Spearman rank.

Spearman Rank Correlation Test

The connection between the degree of information and self-prescription way of behaving of pain relieving drugs in this review was tried utilizing Spearman's Position relationship. For this situation, the Spearman Rank Test is utilized to test the speculation between two factors with ordinal information (Sugiono, 2017). Dynamic in this test depends on the determined r value and the correlation of the importance esteem with the genuine level. On the off chance that r count > 0.000 or importance value (*p-value*) < 0.05 importance level, then, at that point, Ho is dismissed, and that implies there is a huge relationship, and on the off chance that r count = 0.000 or importance esteem (*p-value*) > 0.05 importance level, then, at that point, Ho is acknowledged, and that implies there is no critical relationship.

Based on Table 4. it can be explained that the results of the correlation are the significance level obtained by 0.000, where the number is smaller than 0.05. It can be concluded that there are accurate results between the variable level of knowledge of primary menstrual pain treatment at the Tahfidzul Qur'an Nurul Huda Joyosuko Islamic Boarding School, metro Malang City and it also has a significant correlation.

From the above calculation, it is obtained that p-value (0.000) < α (0.05), and the decision taken is to reject H0. It can be concluded that there is a significant correlation or relationship between the level of knowledge and self-medication behavior for primary menstrual pain. The correlation coefficient was found to be 0.537, which means the value is below the range 0.51–0.75, meaning it is in the strong relationship category, and the results of the correlation direction show a positive correlation figure of +0.537. This means that the relationship between the two variables is unidirectional, so it can be concluded that the higher the respondent's level of knowledge, the better the self-medication behavior will be, and conversely, the lower the respondent's knowledge level, the worse it will be. self-medicating behavior will occur.

This is in line with previous research that knowledge in carrying out self-medication, including knowledge of how to choose the right medicine according to the symptoms felt, is absolute. Knowing that 69.5% have good knowledge regarding the use of pain medication, namely analgesic drugs such as paracetamol (Hakim et al., 2023).

CONCLUSIONS

The level of self-medication knowledge of primary menstrual pain in Tahfidz Qur'an Nurul Huda Islamic Boarding School students is known to be (93%) in the high category, (3%) in the medium category, and (4%) in the low category. The level of accuracy or self-medication behavior of primary menstrual pain in Tahfidz Qur'an Nurul Huda Islamic Boarding School students is known to be as much as 88,24% in the good category, as much as 10,59% in the sufficient category, and as much as 1,18% in the poor category. There is a relationship between the level of knowledge and the accuracy or self-medication behavior of primary menstrual pain at Tahfidz Qur'an Islamic Boarding School Nurul Huda Joyosuko Metro Malang City with a significance level of 0.000 and a correlation coefficient value of 0.537, which is included in the strong category.

REFERENCES

Ammar, R.U. 2016. Risk Factors for Primary Dysmenorrhea in Women of Reproductive Age in Ploso Village, Tambaksari District, Surabaya. *Journal of Epidemiology Periodical.* Vol. 4, No. 1 pp. 37–49.

Arikunto, S. 2006. *Research Procedures A Short Approach*. Jakarta: Rinneka Cipta.

BPOM RI Food and Drug Supervisory Agency. 2006. *Towards Safe Self-medication*. Info Pom Vol 15 No 1.

Ernawati. 2016. Relaxation therapy for dysmenorrhea pain in university students Muhammadiyah Semarang. Available *http://jurnalunimus.ac.id.vol.1.no.1* accessed on October 2, 2018.

Ghina randi, G. Ferrari, S, Xholli, A. 2021. Prevalence of Menstrual Pain in Young Women: What is dysmenorrhea. *Journal of Pain Research*, 5 (2) :169- 174.

Hakim, A., Maulina, N., Sugihantoro, H., & Ramzi, H. (2023). Profile of Self-Care and Self-medication during the COVID-19 Pandemic at Madrasah Aliyah Boarding School in Aceh Besar. *JURNAL MANAJEMEN DAN PELAYANAN FARMASI (Journal of Management and Pharmacy Practice)*, *13*(1), 1. https://doi.org/10.22146/jmpf.71639

Hasmi, S. 2012. *Adolescence: An Age of Storms and Stress*. American Research Institute for Policy Development. 2(1): 19.

Larasati TA, Alatas F. *Primary dysmenorrhea and risk factors for primary dysmenorrhea in adolescents*. 2016 Majority. 5(3): 79-84.

Minister of Health of the Republic of Indonesia. 2011. *Basic Health Research.* Jakarta: Ministry of Health.

Ministry of Health of the Republic of Indonesia. 2009. *Law of the Republic of Indonesia Number 36 of 2009 concerning health*. The year 2009.

Moechtar, 1989. *Pharmacy Physics Solution and Dispersion System Section*, 57-60, Gadjah Mada University Press, Yoyakarta

Ningsih R. 2012. The effectiveness of relief packages on pain intensity in adolescents with dysmenorrhea at Curup sub-district high school. *thesis*. Jakarta: University of Indonesia; 5. Ju H, Jones M, Mish

Noor MS, Yasmina A, Hanggarawati CD. 2010 *Comparison of the incidence of dysmenorrhea among birth control pill acceptors and 1 month birth control injection acceptors in the working area of the Pasayangan Health Center*. Indonesian Public Health Media. 9(1):14-17.

Notoatmodjo, S. 2014. *Health Behavior Science*. Jakarta: Rineka Cipta

Notoatmodjo, Soekidjo. 2012. *Health Behavior Science*. Jakarta: Rineka Cipta.

Octavia, DR, Zakaria, M.S., Nurafifah, D. 2019. Level of Public Knowledge about Rational Self-medication in Lamonga: *Journal of Health Science Communication Media*. 11(3): 1 – 8.

Ratnasari, E., Sari, M. I., & Fajrin, N. 2019. *Description of Factors Associated with Young Women's Knowledge of Handling Pain During Menstruation*

Restiyono, A. 2016. Analysis of Factors Influencing Antibiotic Self-Medication for Housewives in Kajen Village, Pekalongan Regency, *Indonesian Journal of Health Promotion*, 11(1), p. 14.

Riyanti, N., & Jannah, M. 2020. The relationship between knowledge of young women about the implementation of dysmenorrhea, *Babul Ilmi Scientific Journal of Multi Science Health*, 12(2).

Rusli and Ismail, I. S. 2017. *Level of Public Knowledge of Drug Use*. Pharmaceutical Media Vol. XIII. No. 2, 45

Sandra. 2015., *An overview of the knowledge of pokutri youth regarding the handling of dysmenorrhea*: Kedungwinong Village

Simanjuntak, P. 2008. *Menstrual Disorders and Cycles*. Library Development Sarwono Prawirohardjo, Jakarta

Sinaga, E., Saribanon, N., Suprihatin., Sa'adah, N., Salamah, U., Murti, A. Y., & Trisnamiati, N.A., and Lorita, S. 2017. *Menstrual Health Management*. Jakarta: National University.

Sugiyono. 2017. *Research Methods*. Bandung : Alphabet.

Team Medical Mini Notes, 2017. *Basic Pharmacology and Drug Notes*. Makassar: MMN Publishing

Wagiyo & Rahmawati. 2018. The Effect of Abdominal Stretching Exercise on Dysmenorrhea Pain Levels in Students at SMP N 30 Semarang. *Nursing Scientific Journal*.

WHO. 2020 *http://ojs.uho.ac.id/index.php/JIMKESMAS/article/download/2873/2143.* Retrieved 25 September 2020

Winkjosastro, H 2005. In Midwifery.

World Health Organization. 1998. *The Role of The Pharmacist In Self-care Self-medication. The Hague, The Netherlands*:

World Health Organization. 2010. *Guidelines for the regulatory assessment of medicinal products for use in self-medication*. Geneva : World Health Organization.