
Level of Community Knowledge and Self-Medication Practices Regarding Analgesic Drugs Among Residents of Sukorejo Hamlet, Tempeh Subdistrict, Rw 05 Rt 39, Lumajang

Margareta Cahyaning Arum¹⁾, *Rudy Mardianto²⁾, Rakhmadani Gadis Aprilianti³⁾
^{1,2,3)} Institut Teknologi, Sains, dan Kesehatan dr Soepraoen Malang

*Corresponding Author

Email : rudymardianto@itsk-soepraoen.ac.id

Abstract

Health is a state of physical, mental, spiritual, and social well-being that enables everyone to live productively socially and economically. In health maintenance efforts, self-medication, also known as swamedikasi (self-medication), is an alternative taken by the community to increase the affordability of treatment. Improper implementation of self-medication can lead to risks such as medication errors, drug side effects, resistance, and increased treatment costs. For quality self-medication, the community requires correct and clear information. This information must be objective, complete, and not misleading. This study aims to determine the level of knowledge and self-medication of the community about analgesic drugs in the Sukorejo hamlet, Tempeh district, RW 05, RT 39, Lumajang. The research design was descriptive quantitative with a cross-sectional approach. A sample of 55 respondents was selected using purposive sampling. Data were collected using a questionnaire that had been tested for validity and reliability, then analyzed using descriptive tests. Based on the results of research on the level of knowledge and self-medication behavior of the community regarding analgesic drugs in Sukorejo Hamlet, Tempeh District, it was found that the level of respondents' knowledge was in the sufficient category, with a total average value of 4.73 (SD = 1.407).

Keywords: Knowledge, Analgesics, Self-Medication.

INTRODUCTION

Health is a state of well-being, encompassing physical, mental, spiritual, and social aspects, that enables individuals to live socially and economically productive lives (Indonesian Ministry of Health, 2009). Health is a crucial aspect of life; individuals who feel ill will make efforts to restore their health. In efforts to maintain health, self-treatment or self-medication has become an alternative adopted by the community to improve access to treatment. However, inappropriate self-medication practices can lead to risks such as medication errors, adverse drug reactions, drug resistance, and increased healthcare costs (Munarsih et al., 2022). One indicator of self-medication behavior is the practice of households storing medicines for self-treatment (Riskesdas, 2013). To ensure high-quality self-medication, the public requires accurate and clear information. Such information must be objective, comprehensive, and not misleading (Indonesian Ministry of Health, 1994). Information about medicines can be obtained from various sources, including community members and mass media such as television, radio, mobile phones, newspapers, and other media.

Previous studies are reviewed to provide comparisons and references, as well as to avoid assumptions of similarity with the present study. Therefore, this literature review includes findings from earlier research as follows. A study by Taufiq (2022), entitled "Description of the Level of Knowledge on Analgesic Self-Medication among the Community in Tidung Subdistrict RT 1 RW 3, Makassar City," aimed to determine the community's level of knowledge regarding the use of analgesic drugs in self-medication. This study employed a descriptive method with an accidental sampling technique, involving 37 respondents from Tidung Subdistrict. The results showed that the community's level of knowledge reached 52.2%, which falls into the good category. These findings indicate that most community members have an understanding of analgesic drug use; however, there are still deficiencies in selecting appropriate medications and in knowledge of drug side effects. The study emphasizes the importance of education on the rational use of pain-relief medications to prevent misuse in self-medication practices.

Another study was conducted by Rini Irawati, Amelia Rumi, and Firdawati Amir Parumpu (2021), entitled “Description of the Level of Knowledge on Analgesic Self-Medication among Students of Tadulako University in Palu City.” This study used a non-experimental (observational) method with a cross-sectional design and involved 745 respondents, consisting of 349 health-related students and 396 non-health-related students. The results showed that health-related students had a good level of knowledge at 47.28%, moderate at 49.28%, and poor at 3.44%. Meanwhile, non-health-related students had a good level of knowledge at 16.16%, moderate at 72.98%, and poor at 10.86%. The Mann–Whitney test indicated a significance value of $p < 0.05$, meaning that there was a significant difference between the knowledge levels of health and non-health students. Overall, health-related students demonstrated better knowledge in the use of analgesic drugs compared to non-health-related students.

Another previous study conducted by Divano Andryan Febrianto (2022), entitled “Community Knowledge Level of Analgesic Drugs toward Self-Medication among Housewives in Perumnas, Jatiroto Village, Lumajang (July 2022 Period),” aimed to determine the extent of community knowledge, particularly among housewives, regarding the use of analgesic drugs for self-medication. This study employed a descriptive method with a cross-sectional design, involving 62 respondents selected using a total sampling technique. The research instrument was a questionnaire that had been tested for validity and reliability. The results showed that the community’s level of knowledge regarding analgesic drugs was classified as good, with scores of 82.48% in the knowledge domain, 84.40% in the comprehension domain, and 75.20% in the application domain. Based on these findings, it can be concluded that the community has good knowledge of analgesic drugs; however, improvements are still needed in the correct and rational application or use of these medications. This previous study is relevant to the current research because both discuss community knowledge levels regarding analgesic drugs and self-medication behavior, differing only in research location and respondent characteristics.

RESEARCH METHODS

The research design employed in this study is descriptive quantitative. Quantitative research is characterized by the collection of measurable data that can be statistically analyzed. In this study, the data are presented as they are, based on factual findings in the field. Descriptive research is a research method used to clarify social phenomena through various research variables. This study applies a cross-sectional approach, which is a research design that involves measurements or observations conducted at a single point in time or simultaneously (Sartana et al., 2023). The research instrument used was a questionnaire that had been tested for validity and reliability and was therefore deemed appropriate for use. The research was conducted among the community of Sukorejo Hamlet, RT 39 RW 05, and the study period took place from June to August 2025.

The population of this study consisted of 123 residents from 40 households in Sukorejo Hamlet, RT 39 RW 05. The research sample included community members who met the inclusion criteria, which represent the general characteristics of the study subjects within the accessible target population. The inclusion criteria were residents of Sukorejo Hamlet, RT 39 RW 05, aged from adolescence (17 years) to older adulthood (50 years), willing to participate as respondents, and having previously used analgesic drugs. The sample size was determined using the Slovin formula, resulting in a total of 55 respondents after rounding. Sampling was conducted using a purposive sampling technique, in which participants were selected based on the research objectives and inclusion criteria.

Data processing was carried out through several stages, including data checking, coding, scoring, tabulation, and data analysis using SPSS version 25. Validity testing was conducted using the correlation method, while reliability testing employed Cronbach’s Alpha. The data were analyzed using descriptive statistical tests, which are appropriate for ordinal data derived from the same source.

Research ethics in this study included respect for human dignity, protection of participants' privacy and confidentiality, justice and inclusivity, and careful consideration of the potential benefits and risks arising from the research.

RESULTS AND DISCUSSION

General Characteristics of the Study

This study was conducted among the residents of Sukorejo Hamlet, RT 39 RW 05, with the number of respondents determined based on the inclusion criteria. Respondent characteristics were examined in terms of age, gender, level of education, and occupation. These characteristics are important for understanding the respondents' backgrounds, which may influence their level of knowledge and self-medication behavior related to analgesic drugs. The majority of respondents were within the productive age group, with a diverse distribution of educational backgrounds ranging from primary education to higher education. Most respondents worked as farmers or housewives; therefore, their exposure to health-related information was likely obtained mainly through healthcare services or personal experience.

Presentation of Research Results

Validity and Reliability Testing of the Instrument

Based on the results of the validity test, all items in Questionnaire 1 and Questionnaire 2 had calculated r values greater than the r table value (0.361), indicating that all items were valid. The reliability test results showed Cronbach's Alpha values of 0.771 for Questionnaire 1 and 0.785 for Questionnaire 2, both of which exceeded the acceptable threshold of 0.70. Therefore, the research questionnaires were considered valid and reliable.

Table 1. Reliability Test Results

Reliability Statistics		Reliability Statistics	
Cronbach's Alpha	N of Items	Cronbach's Alpha	N of Items
.771	10	.785	10

Data presentation results

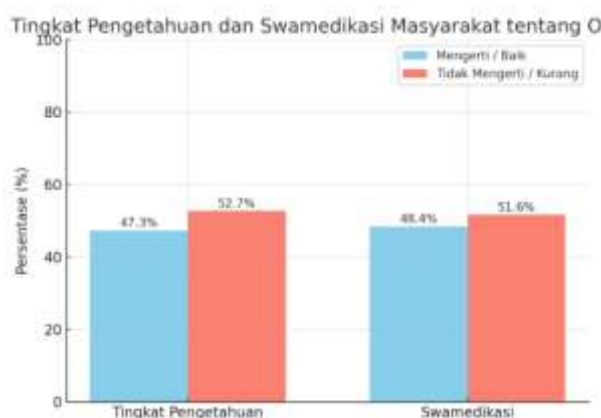


Figure 1. Distribution of Knowledge Levels and Self-Medication Practices of Analgesic Drugs

Based on Figure 1, it is shown that the level of community knowledge regarding analgesic drugs in Sukorejo Hamlet, Tempeh Subdistrict, RW 05 RT 39 indicates that 47.3% of respondents had a good level of knowledge, while 52.7% had a poor level of knowledge. Meanwhile, in terms of self-medication practices, 48.4% of respondents were categorized as having good practices, whereas 51.6% were categorized as having poor practices.

These results indicate that in both aspects knowledge level and self-medication practices the proportions of respondents classified as good and poor are relatively balanced, with the percentage in the poor category being slightly higher than that in the good category.



Figure 2. Overview of the level of public knowledge about analgesic drugs



Figure 3. Overview of community self-medication regarding analgesic drugs

Discussion

Based on the analysis presented in Figure 1, the average level of respondents' knowledge regarding analgesic drugs shows variation across each question item (Q1–Q10). The highest mean scores were observed for items Q9 and Q10, with a mean value of 0.56, followed by Q6 with a mean of 0.53. Meanwhile, the lowest mean scores were found for items Q4 and Q5, each with a mean value of 0.42. These findings indicate that respondents demonstrated better understanding of the aspects measured in Q9 and Q10 compared to other items. Overall, mean values below 0.60 suggest that the respondents' level of knowledge regarding analgesic drugs remains in the low to moderate category.

Furthermore, the results shown in Figure 2 illustrate the average level of respondents' knowledge regarding self-medication with analgesic drugs. The highest mean values were obtained for items Q8 and Q10, each with a mean of 0.53, while the lowest mean value was found for item Q4, at 0.38. In general, the mean values across items indicate that respondents' knowledge of self-medication varies but tends to fall within the low category. This suggests that respondents' understanding of the independent use of analgesic drugs has not yet reached an optimal level.

When comparing these two aspects, respondents' knowledge of analgesic drug use in general appears to be slightly higher than their knowledge of analgesic self-medication. This condition indicates that although most respondents possess a basic understanding of the function and types of analgesic drugs, there are still limitations in applying this knowledge in the context of proper and safe self-medication.

These findings are consistent with previous studies reporting that public knowledge regarding the use of over-the-counter drugs, including analgesics, remains low due to insufficient pharmaceutical education and a lack of accurate information from healthcare professionals (Sari &

Hidayat, 2022; Putri et al., 2023). Therefore, efforts to enhance community education through health counseling and information media are necessary to promote rational and responsible self-medication practices.

CONCLUSIONS

Based on the results of the study, it can be concluded that the research instrument in the form of a questionnaire was proven to be valid and reliable, with Cronbach's Alpha values exceeding 0.70. The findings regarding the level of knowledge and self-medication behavior of the community toward analgesic drugs in Sukorejo Hamlet, Tempeh Subdistrict, indicate that the respondents' level of knowledge falls within the moderate category, with a total mean score of 4.73 (SD = 1.407).

In general, respondents demonstrated a basic understanding of the use of analgesic drugs; however, misconceptions were still found in aspects related to dosage, indications, and side effects. Therefore, continuous health education and counseling by healthcare professionals are necessary to ensure that the community can practice safe and rational self-medication

REFERENCES

- Amalia RN, Dianingati RS , Anisa E. 2021. Gambaran perilaku swamedikasi nyeri,diare, batuk dan maag oleh masyarakat. *Jurnal of research in pharmacy*. 1. 2. 53-59.
- Badan POM RI., 2011. Laporan Tahunan. Badan Pengawas Obat dan Makanan RI. Jakarta Obat Bebas. Jakarta.Putra AP, Mulyana I, Maryana S dan Susanti F. 2019. Implementasi multiclass support vector machine pada system rekomendasi obatberdasarkan gejala penyakit. 1. 1. 211-222.
- Departemen Kesehatan, 1994. Surat Keputusan Menteri Kesehatan Republik Indonesia Nomor 386/Menkes/SK/IV/1994 tentang Pedoman Periklanan
- Kurniawan F. 2020. Analisis kebiasaan balita dan ibu dengan kejadian diare pada balita di Puskesmas Lingkar Timur Kota Bengkulu. *Journal health care media*. 4. 2.50-54 Lestari T, Suqya F, Budianingsih J dan Trisnia N. 2022. tingkat pengetahuan swamedikasi pada ibu. *Jurnal Kesehatan Muhammadiyah*. 3. 2. 103-108.
- Munarsih E, Rahajeng VN dan Wibowo VD. 2022. Hubungan tingkat pengetahuan dan perilaku swamedikasi diare pada mahasiswa sekolah tinggi ilmu farmasi Bhakti Pertiwi Palembang. *Jurnal Ilmiah Bakti Farmasi*. 7. 1. 1-6.
- Proposisiwi N, 2021. Gambaran tingkat pengetahuan swamedikasin demam pada masyarakat di desa x Kabupaten Kediri. *Jurnal Inovasi Farmasi Indonesia*. 3.1. 27-37.
- Tuang A. 2021. Analisis faktor yang berhubungan dengan kejadian diare pada anak.*Journal Ilmiah Kesehatan Sandi Husada*. 10. 2. 534-542.
- Wulandari A, Madhani A. 2022. Hubungan tingkat pengetahuan dan perilaku ibu dalam swamedikasi diare pada balita di Jagakarsa. *Jurnal ilmu kefarmasian*. 15. 2. 718.