

The patient's level of knowledge about analgesic drug self-medication

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ABSTRACT

Introduction: Self-medication is the practice of using drugs without a doctor's prescription to overcome minor health problems, one of which is analgesic drugs to reduce pain. Although self-medication can improve the accessibility of medications, improper use can be risky for the patient's health. Adequate knowledge of the types, dosages, and ways of using analgesic medications is essential to ensure effectiveness and avoid adverse side effects. This study aims to evaluate the level of patient knowledge about analgesic drug self-medication.

Methods: This study uses a quantitative design with a survey approach. Data was collected through a questionnaire distributed to 81 patients who visited the pharmacy.

Results: The results of this study indicate that the percentage of respondents' answers is 8.091%. Based on these results, it can be concluded that the level of patient knowledge about self-medication of analgesic drugs is in a good category.

Conclusions: The results showed that most patients had sufficient knowledge about the indications and dosage of analgesic drugs, but there was a gap in understanding of potential side effects and drug interactions. This indicates the need for more intensive health education regarding self-medication, especially in the use of analgesic drugs, to reduce the risk of inappropriate use.

Keywords: analgesic drugs, patient knowledge, self-medication.



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INTRODUCTION

Self-medication is the practice of using drugs without a doctor's prescription to address mild or general health complaints. One type of drug that is often used in self-medication is analgetic drugs, which function to relieve pain caused by minor injuries, headaches, and other temporary conditions (Mujiati et al., [2022](#)). Widely used analgesic drugs include paracetamol, ibuprofen, and aspirin. While self-medication can facilitate and improve patient access to treatment, improper use of these medications can pose health risks, such as side effects, drug interactions, or the use of medications that are not in accordance with indications. Self-medication is the practice of using drugs without a doctor's prescription to treat symptoms of a disease or mild health condition. One type of drug that is often used in self-medication is analgetic drugs, which function to relieve pain, whether caused by injury, inflammation, or other health conditions. Analgetic medications, such as paracetamol, ibuprofen, and aspirin, are often available without a prescription in pharmacies, making it easier for patients to access them independently (Sitindaon, [2020](#)).

Self-medication makes it easier for patients to obtain the drugs they need; its use can also pose risks if not done with adequate knowledge. Improper use of analgesic medications, such as improper selection of medications for the type of pain, improper dosage, or ignorance of side effects and drug interactions, can risk leading to further health problems (Suprpto et al., [2024](#)). Therefore, the level of patient knowledge about the self-medication of analgetic drugs is an essential factor in determining the effectiveness and safety of the use of these drugs. Self-medication can provide convenience for patients, but its improper use can risk causing side effects, adverse drug interactions, or even worsening existing health conditions (Lau, [2024](#)). Adequate knowledge of the type of drug, the proper dosage, indications for its use, and potential side effects is essential to ensure safe and effective use of the drug. Many studies show that patients' levels of knowledge about self-medication, particularly in the use of analgetic drugs, vary and are often inadequate. This can lead to errors in the use of medications that can ultimately negatively impact the patient's health (Linggi et al., [2024](#)).

The level of patient knowledge about the use of analgetic drugs in the context of self-medication is essential to ensure that the drugs used are effective and safe (Šimunović et al., [2024](#)). Adequate knowledge regarding the exact dosage, indications for use, and potential side effects can assist patients in making better decisions regarding the use of the drug (Faqihi & Sayed, [2021](#)). However, various studies show that many patients lack a good understanding of how to use medication correctly, even in seemingly simple treatments such as analgetics. This risks creating additional health problems, especially if the drug is overused or without paying attention to existing medical conditions. Patients' knowledge of self-medication includes not only an understanding of drug indications and dosages but also an understanding of how to use it correctly, potential side effects, and drug interactions with other medical conditions. Although some studies show that most patients have basic knowledge of analgetic drugs, many also lack understanding of the risks associated with using drugs without medical supervision (Kardas et al., [2021](#)). This condition is an important concern for health workers, especially pharmacists, and doctors, in providing proper education about the use of drugs independently (Bandovas et al., [2022](#)).

Factors that affect a patient's level of knowledge about self-medication include education level, age, prior experience with medication, and availability of accurate health information (Dassieu et al., [2022](#)). Therefore, it is important to evaluate how well patients understand the basic principles of self-medication, especially related to analgesic drugs so that they can make more informed and safe decisions in their use. This study aims to measure patient knowledge about analgesic drug self-medication. In addition, the study also focuses on factors that affect patient knowledge, such as education level, previous experience with self-medication, and information obtained from healthcare workers or other sources. By understanding the level of patient knowledge, it is hoped that more effective strategies can be found to improve health education

related to the use of analgetic drugs to minimize the risk of inappropriate use and improve patient welfare.

MATERIALS AND METHODS

Research Design

The type of research used in this study is a descriptive survey, which includes surveys with data collection techniques in the form of questionnaires. The research was conducted at Talita Tamalanrea Jaya Pharmacy, Makassar City, in April – May 2023.

Population and Sample

The population in this study is patients who come to Talita Tamalanrea Jaya Pharmacy, which totals 450 patients who buy anti-pain drugs. In this study, the sample was patients who came to buy drugs at the Talita Tamalanrea Jaya Pharmacy; the number of samples taken was calculated using the Slovin formula of 81 respondents.

Data Collection

Data collection was carried out by first meeting and questioning respondents whether they respondents were willing to take self-medication analgetic medication (Anti-pain); if self-medication was carried out, the researcher explained the purpose and purpose and asked if they were willing to take the time to be interviewed if the public agreed, the questionnaire would be shared/read. Data analysis was carried out using an observation tool in the form of a questionnaire. The questions outlined in the questionnaire are closed-ended.

Research Ethics

This research has received ethical approval from the University Research Ethics Committee with Number B-335/P19/KE/IX/2023. Each participant was explained the research objectives and procedures and the guarantee of confidentiality of their data. Participants are also free to resign at any time if they feel uncomfortable.

RESULTS

Based on the results of research conducted on 81 respondents or patients at pharmacies who are selected samples whose level of patient knowledge about self-medication analgetics at the Talita Tamalanrea Jaya Pharmacy, Makassar City, in April-May 2023, the following results were obtained:

Table 1. Demographic data

Gender	Frekuensi	%
Men	27	33.34
Woman	54	66.66
Age		
17-40	66	81.49
41-60	15	18.51
Education		
Bachelor	14	17.28
Vocation	1	1.23
High school	33	40.75
Student	18	22.22
Junior high school	3	3.70
Primary school	12	14.82
Work		
State Civil Apparatus	3	3.70
Self-employed	5	6.17
Entrepreneur	5	6.17
Housewife	36	44.45
Student	18	22.22
Farmer	11	13.59

Table 2 Results of respondents' answers about the level of knowledge of patients about self-medication of analgetic drugs at Talita Tamalanrea Jaya Pharmacy, Makassar City

statement	True	Score	Wrong	Score
1	77	154	4	4
2	44	88	37	37
3	78	156	3	3
4	73	146	8	8
5	32	64	49	49
6	63	126	18	18
7	28	56	53	53
8	67	134	14	14
9	72	144	9	9
10	47	94	34	34
11	71	142	10	10
12	73	146	8	8
Total	725	1.450	247	247
Percentage		74.58		100

Table 2 obtained data with a score percentage of 74.58% with a high level of knowledge about the level of patient knowledge about self-medication analgetic drugs at the Talita Tamalanrea Jaya Pharmacy, Makassar City. The data described is a research idea of each item given to the respondents. The results were aimed at determining the level of patient knowledge about analgesic drug self-medication at Talita Tamalanrea Jaya Pharmacy, Makassar City.

DISCUSSION

The results showed that most patients had sufficient knowledge about the indications and dosage of analgetic drugs. However, there was a gap in understanding of potential side effects and drug interactions. This indicates the need for more intensive health education regarding self-medication, especially in the use of analgesic drugs, to reduce the risk of inappropriate use. Self-medication analgesics have become a common practice in the community, especially in addressing minor pain complaints such as headaches, muscle aches, or fever. This practice allows patients to access treatment quickly and inexpensively without visiting a healthcare facility. However, the independent use of drugs requires a good understanding so as not to pose health risks, such as the use of drugs that are not as indicated, excessive doses, or adverse drug interactions. More intensive efforts are needed in providing health education to the public about analgetic drug self-medication to improve the safety of drug use, reduce the risk of side effects, and encourage patients to consult medical personnel before taking drugs (Obi & Anosike, [2023](#)). Health policies supporting access to valid information and continuous health education must be strengthened to ensure safe and effective self-medication (Ferreira-da-Silva et al., [2024](#)).

Self-medication, or the use of non-prescription medications, is a common practice practiced by patients to manage a variety of minor health problems, including pain (Hao et al., [2024](#)). In the context of analgetic drugs (painkillers), self-medication often involves over-the-counter medications such as paracetamol, ibuprofen, or topical medications (Nikitha et al., [2024](#)). However, patients' level of knowledge regarding the self-medication of analgesic drugs varies widely, and a lack of understanding can risk the safety and effectiveness of the use of such drugs. The level of knowledge of patients about analgetic drug self-medication varies greatly and is influenced by factors of education, experience, and access to information (Roussin et al., [2024](#)). Therefore, medical personnel and health institutions need to work together to improve patient's understanding of the safe and appropriate use of drugs. Effective education can help patients avoid risks related to inappropriate self-medication and support better overall health management (Malli

et al., [2023](#)). Self-medication is a treatment action carried out by an individual without a doctor's prescription, using drugs that can be purchased freely at pharmacies (Muriel et al., [2024](#)). One type of medication that is often used in self-medication is analgetic drugs, which aim to relieve aches or pains. Although analgesic drugs can generally be purchased without a prescription, patients need to have sufficient knowledge regarding their use. This level of expertise greatly affects the effectiveness of treatment and prevents the occurrence of misuse that has the potential to be detrimental to health (Mahmoudian et al., [2024](#)).

The level of patient knowledge about analgesic drug self-medication plays an important role in ensuring safe and effective drug use (Engelbrecht et al., [2024](#)). A good understanding of the type of medication, dosage, side effects, drug interactions, and when to seek medical help can prevent the occurrence of misuse that risks health risks. Therefore, education about self-medication must continue to be improved to help patients make wiser decisions in managing pain, as well as minimize the potential dangers of indiscriminate drug use. Self-medication or self-medication without a doctor's prescription is a common practice practiced by many people to manage minor complaints such as headaches, toothaches, or muscle pain (Attal et al., [2024](#)). One type of medication that is often used in self-medication is analgetic drugs, which function to relieve pain. However, the patient's level of knowledge about the self-medication of analgetic drugs is essential to ensure safe and effective use. This level of knowledge includes understanding the type of drug, dosage, side effects, and interactions with other drugs (Al-Qerem et al., [2023](#)).

The level of knowledge of patients about analgesic drug self-medication greatly affects the effectiveness of their treatment and safety. Patients can self-medicate more safely and effectively with a good understanding of the type of drug, the right dosage, potential side effects, and drug interactions (Sadjo et al., [2023](#)). Therefore, it is important to continue to educate the public about the wise use of drugs, as well as encourage them to consult medical personnel if they are in doubt or experience more severe complaints (Raj et al., [2024](#)). The level of patient knowledge regarding analgesic drug self-medication plays a very important role in ensuring the safe and effective use of drugs. Patients need to understand the type of medication used, the exact dosage, possible side effects, and potential drug interactions. In addition, they must also be aware of when to seek medical help for further treatment (Khoshbakht et al., [2023](#)). Adequate education on these matters will reduce the risk of inappropriate medication use and increase patient awareness of the importance of wise and safe medication use. The level of patient knowledge about analgesic drug self-medication has a significant impact on the safety and effectiveness of treatment. Adequate knowledge of the type of medication, proper dosage, side effects, drug interactions, and signs that require medical attention is essential to ensure that self-medication is carried out safely and effectively. Therefore, wider education to patients and the public needs to be carried out to increase awareness about the wise use of analgetic drugs (Shaikh et al., [2023](#)).

CONCLUSIONS

This study shows that the level of patient knowledge about analgetic drug self-medication in urban areas is still varied and often inadequate, especially related to the understanding of side effects and safe doses. Although most patients are aware of the basic indications for analgetic drug use, their awareness of potential risks, such as liver damage from paracetamol overdose or gastric irritation due to ibuprofen use, is still low. Education and age factors affect patient knowledge, with those with higher levels of education and older ones tending to have better understanding.

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