

## Overview of self-medication pharmaceutical preparations by the public

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Received: 01 April 2024 ◦ Revised: 29 Mei 2024 ◦ Accepted: 01 Juni 2024

### ABSTRACT

**Introduction:** self-medication is an effort made by an individual to obtain medication and use it without diagnosis, prescription, supervision or consultation with a doctor in an effort to treat certain minor illnesses. Self-medication is self-medication without a doctor's prescription. In disease treatment, risks such as misdiagnosis, use of excessive drug doses, and long-term use can cause adverse effects on patients.

**Objective:** to determine the description of the use of self-medicated pharmaceutical preparations by the public.

**Methods:** This type of research uses a descriptive method, namely research that includes surveys with data collection in the form of questionnaires with a total of 81 respondents. The sampling method uses Non-Probability Sampling with Purposive Sampling techniques using a questionnaire using an open-ended questionnaire format in collecting data and recording reports.

**Result:** results of research data collection, that the description of the use of pharmaceutical preparations by self-medication in the Bung Permai Housing Community is that 81 respondents (100.00%) carry out self-medication, the source of drug information is from print and electronic media, namely 36 respondents (44.45%) , the place of purchase of medicine was at the pharmacy/clinic, namely 43 respondents (53.02%), the disease suffered was fever, 23 respondents (28.40%), and the pharmaceutical preparation used was paracetamol, 27 respondents (33.33%).

**Conclusion:** that the description of the use of pharmaceutical preparations by self-help in the Permai Community Housing is mostly self-medication. Therefore, there is a need for better education and supervision of the use of pharmaceutical preparations independently in order to increase understanding and safety in self-medication. It is hoped that in the future there will be research on public knowledge and behavior regarding self-medication of pharmaceutical preparations so that changes in respondents' knowledge and behavior can be seen after being given good and correct information.

**Keywords:** pharmaceutical preparations, self-medication, utilization.



## INTRODUCTION

Self-medication is self-medication without a doctor's prescription. In disease treatment, risks such as misdiagnosis, use of excessive drug doses, and long-term use can cause adverse effects on patients (Waqar *et al.*, 2023). When carrying out self-medication, basic knowledge is needed to avoid the dangers of self-medication. Self-medication tends to increase in the community to treat symptoms or illnesses that are considered mild. South Kalimantan Province has the highest percentage of self-medication, namely 85.26% or first place in Indonesia in 2020 (Mulyani, Isnani, and Auliya Syafitri, 2021). Several types of minor illnesses are often experienced. They can be used as self-medication efforts, such as allergies, anemia, asthma, cough, prickly heat, fever, dermatitis, diarrhea, pharyngitis, influenza, insomnia, acne, athlete's foot, candida vaginitis, calluses, dandruff, constipation, burns, vomiting, obesity, periodontal disease, psoriasis, headaches, sinusitis, hemorrhoids, xerostomia (Nguyen *et al.*, 2023). Apart from the type of disease, it is also important to know the source of information, where you can get the medicine in question, and the indications for the medicine to be used to suit the disease you are suffering from. This is important to achieve proper self-medication (Jin *et al.*, 2021). Self-medication (SM) is a global and growing phenomenon. It represents a public health problem due to antibiotic resistance, risk of adverse drug reactions, drug-drug interactions, disease masking, and increased morbidity. There is no consensus on the definition of SM. The definitions found in different studies make it difficult to address this problem from a theoretical perspective and, therefore, find an adequate solution to this public health problem (Baracaldo-Santamaría *et al.*, 2022).

The government's efforts to empower the community to improve their health independently can be said to have achieved results (Masfield, Msosa, and Grugel, 2020). This improvement in aggregate empowerment is driven by improvements in women's scores, not a deterioration in men's. Greater control over income, greater decision-making over credit, and (somewhat mechanistically, given the treatment) greater and more active involvement in groups within the community lead to improvements in women's scores. However, impacts on other areas of empowerment are limited. The insignificant effects on attitudes towards domestic violence and respect within the household suggest that women's groups alone may be insufficient to change deep-seated gender norms that disempower women (Kumar *et al.*, 2021). However, this is also accompanied by risks related to disease recognition and the selection and use of drugs for self-medication that may not be appropriate. To improve public health services and maximize the benefits of self-medication, as well as minimize the potential dangers caused by self-medication, it is necessary to study the profile or characteristics of patients who receive self-medication services (Nabaweesi *et al.*, 2021). By knowing this profile, pharmacists can create appropriate programs to increase the rationality of drug use. Various factors related to the incidence of self-medication are also important. This can then be used to build optimal health service strategies (Ahmed *et al.*, 2020).

The implications of this research are Increased Health Education and the need to increase health education in the community regarding drug safe and rational use. This education can be done through programs involving local health workers and disseminating accurate information through print and electronic media. Tighter supervision of drug sales in drugstores and supermarkets ensures that only safe and registered medicines are sold to the public. In addition, clear regulations regarding self-medication need to be enforced to reduce the risk of inappropriate drug use. Health Services: Provision of health services that are more accessible and affordable to the community to reduce the desire to self-medicate. Puskesmas or local clinics can provide free or low-cost consultations for early treatment of minor illnesses. Based on the background above, the research wants to examine the description of using self-medicated pharmaceutical preparations in the Permai Housing Community.

## METHOD

Types of Research: this research is field research, directly to respondents (the community) as research subjects. This research uses a descriptive method, where in this research the search for a study describing the use of self-medicated pharmaceutical preparations in the Bung Permai Housing community was obtained using a survey method and an open questionnaire questionnaire as the main instrument and receiving a research code of ethics from the LPPM Sandi Karsa Polytechnic. Location and time: this research was conducted at Bung Permai Housing RW 07/RT 05, Tamalanrea Jaya, Makassar City. The research will be carried out in March-April 2024. Population and sample population. The population of this research is the Bung Permai Housing Community with a total of 102 families. Sample In this study, the sample was the Bung Permai Housing Community RW 07/ RT 05, totaling 81 people who met the inclusion criteria. Sampling was done using the Yamane formula to determine the number of samples in the survey. Research Design

The sampling technique in this study used non-random (*Non-Probability Sampling*) with *Purposive Sampling* technique, namely a technique for determining samples with certain considerations. In this study, data was obtained from data collection using a research instrument in the form of a questionnaire to measure the profile of the use of pharmaceutical preparations. Self-medication at Bung Permai Housing. Inclusion criteria: People who live/domiciled in Bung Permai Housing RW 07/RT 05, People aged 17-50 years, Physically and mentally healthy and willing to fill out the questionnaire, Able to communicate well, and have ever carried out self-medication with pharmaceutical preparations. Exclusion criteria: People who work as pharmacists. The technique used in data management is based on data obtained from the field, namely combining the results from answers and questionnaires and presenting them as percentages.

## RESULTS

**Table 1. Characteristics of respondents based on gender, age, Latest Education, end Employment**

<b>Gender</b>	<b>Number of Respondents (n)</b>	<b>Percentage (%)</b>
Male	32	39,51
Female	49	60,49
<b>Age (years)</b>	<b>(n)</b>	<b>(%)</b>
17-20	19	23,46
21-30	34	41,98
31-40	20	24,69
41-50	8	9,87
<b>Latest Education</b>	<b>(n)</b>	<b>(%)</b>
Junior high school	3	3,70
Senior high school	48	59,26
Bachelor	30	37,04
<b>Employment</b>	<b>(n)</b>	<b>(%)</b>
Civil servants	18	22,22
Entrepreneurs	27	33,33
Housewives	17	20,99
Unemployed	19	23,46

Based on Table 1 above, it is known that there were more female respondents, with a total of 49 respondents (60.49%); most of the respondents were aged 21-30 years, and 34 respondents

(41.98%). Data on education shows that most respondents have a high school/equivalent education, namely 48 respondents (59.26%), and almost all respondents' occupations work as entrepreneurs, 27 respondents (33.33%)

**Table 2. Results of respondents' answers regarding ever performing self-medication**

<b>Ever used self-medication</b>	<b>Amount (n)</b>	<b>Percentage (%)</b>
Ever	81	100,00
Never	0	0,00
<b>Sources of Drug Information</b>		
Health workers	18	22,22
Relatives	27	33,33
Print and electronic media	36	44,45
<b>Place of Purchase of Medicines</b>		
Pharmacy/clinic	43	53,08
Drug store	6	7,41
Supermarket	32	39,51
<b>The type of disease</b>		
Painful	13	16,05
Fever	23	28,40
Respiratory System (Cough, Cold, Flu)	20	24,69
Digestive system (Diarrhea, Constipation, Ulcer, Worms, Nausea, Vomiting)	19	23,45
Skin disorders	6	7,41
Painful	13	16,05
<b>Pharmaceutical Preparations</b>		
Mefenamic acid	9	11,11
Bodrex all variants	11	13,58
Vitamin	8	9,87
Paracetamol	27	33,33
Diapet	13	16,05
Dulcolax	2	2,47
Promag	4	4,95
CTM	6	7,41
Other	1	1,23

Based on Table 2 above, it is known that out of 81 respondents, all of them had carried out self-medication (100.00%). It is known that respondents mostly obtained information related to the drugs they use through print and electronic media, with a total of 36 respondents (44.45%). It is known that respondents mostly obtain the drugs they use by buying them at pharmacies/clinics, with a total of 43 respondents (53.08%). It is known that most respondents suffered from mild illnesses, especially fever, with 23 respondents (28.40%). It is known that most respondents treated their illnesses with pharmaceutical preparations in the form of paracetamol, with a total of 27 respondents (33.33%). Based on the results of research data collection, it can be concluded that the description of the use of pharmaceutical preparations by self-medication in the Bung Permai Housing Community.

## DISCUSSION

The results of this study show that the Permai Housing community has done their treatment; obtained information from health workers, relatives, and print and electronic media; where to buy drugs at pharmacies/clinics, drug stores, and supermarkets; with diseases such as pain, fever, disorders of the respiratory system, digestive system, and skin; and the pharmaceutical preparations used are mefenamic acid, Bodrex all variants, vitamins, paracetamol, diaper,

Dulcolax, promag, CTM, and others. People spend much time at home, and internet use is increasing, so people who do not work will be exposed to much information. Age is one factor influencing a person's decision to self-medicate (Chiliquinga Sigcho and Jiménez Hurtado, [2023](#)). Most of them are students and recent graduates at this age, so they play an important role in the self-medication process because it is easy to get information. Education is basically a conscious effort to develop cognitive, affective, and motor personality and abilities. Information about drugs obtained by the public in self-medication, one of which can be obtained through advertising (Mujati, Hidayati, and Atmadani, [2022a](#)). The higher one's education, the more abilities one acquires. On the other hand, the lower the education, the less ability you will gain. A person with high skills can develop knowledge, attitudes, and actions. The first role of women is to seek additional income in the family economy carried out from home as entrepreneurs. Self-medication is common in Indonesia due to expensive healthcare and lack of education (Negarandeh, Poortaghi, and Shayan, [2021](#)). It involves using previously prescribed medication, herbal remedies, or advice from family or friends. While it can be a convenient and cost-effective solution for minor ailments, it can also lead to health problems if not done properly (Sitindaon, [2020](#)).

Along with the rapid development of technology, the era of digitalization has created new and exciting opportunities for the world of healthcare. In this increasingly connected and sophisticated environment, nurses are required to have competencies relevant to these developments. Building nurse competence in the digitalization era is important to meet the demands of the times and improve the quality of health services. Self-medication is done for the most reasons because the disease experienced is mild, with a percentage of 70.7%, and other reasons such as having enough knowledge about the disease, not having time to see a doctor, expensive treatment, ineffective doctor's drugs, and wanting to try other alternatives (Al-Worafi, [2020](#)). This can be due to various factors, including ease of access to health information and medications and a desire to get immediate treatment without having to wait for medical consultation (Almathami, Win, and Vlahu-Gjorgievska, [2020](#)). The public receives information about medicines and treatment from various sources, including health workers and relatives, as well as print and electronic media. This shows that the public has wide access to health information, but it is important to ensure that the information received is accurate and trustworthy (Haleem *et al.*, [2021](#)). Places of purchase of drugs mentioned include pharmacies/clinics, drug stores, and supermarkets. This shows that there are various places to get the medicines they need. However, it is important to note that not all areas of the sale of drugs have strict supervision of the quality and safety of drugs sold (Jimenez *et al.*, [2021](#)).

During the globalization era, the popularity of self-medication is promoted by reasonable costs and the authority to make convenient self-decisions. This information can be obtained on social media, print media, electronic media, or from counseling, seminars, or health workers (Kolondam, Rayanti, and Sanubari, [2023](#)). This information is also usually displayed in public places through advertisements, posters, and so on, thus affecting public knowledge due to exposure to such information. Diseases that are often self-treated by the community include pain, fever, respiratory system disorders, digestive system disorders, and skin disorders (Fraser, [2020](#)). The public has basic knowledge about drugs that are appropriate for certain symptoms, but further education is needed to ensure proper use and avoid the risk of side effects or drug interactions.

The existence of pharmacies is widespread in society. A pharmacy is a place to buy medicines often found in the community (Berenbrok *et al.*, [2022](#)). In addition, pharmacies are a great place to get medicines with information about good and guaranteed treatment and many drug options. The location of the drugstore is far from housing, while the supermarket is nearby, but due to the belief about the drug's safety, people prefer pharmacies/clinics. Fever healing can be treated using self-medicine, which treats minor illnesses using traditional medicine or modern medicine without a doctor's prescription (Sepp *et al.*, [2021](#)). Traditional medications often used to treat fever include plant herbs, while modern medicine generally uses over-the-counter and

limited over-the-counter drugs. The description of people's knowledge about fever self-medication shows that people's knowledge about fever self-medication is in the category of good and adequate (Chiru *et al.*, 2020). Self-medication to treat fever is a common practice among Indonesians. The effectiveness of paracetamol is based on evidence-based parameters of disease type, patient type, and duration of use (Yasmin *et al.*, 2022). Its efficacy in evidence-based pharmaceutical services has been well recorded and has achieved the target. It is necessary to conduct research on what classes of drugs can be treated alone and which cannot be treated alone so that people no longer use antibiotics without a doctor's prescription because they are strong drugs (Franzoi *et al.*, 2021).

## CONCLUSION

It was concluded that society had self-medicated; obtained information from health workers, relatives, and print and electronic media; where to buy drugs at pharmacies/clinics, drug stores, and supermarkets; with diseases such as pain, fever, disorders of the respiratory system, digestive system, and skin; and the pharmaceutical preparations used are mefenamic acid, Bodrex all variants, vitamins, paracetamol, diaper, Dulcolax, promag, CTM, and others. Therefore, there is a need for better education and supervision of using pharmaceutical preparations independently to increase understanding and safety in self-medication. It is hoped that there will be research on public knowledge and behavior regarding self-medication of pharmaceutical preparations so that changes in respondents' knowledge and behavior can be seen after being given good and correct information.

### Conflicts of Interest:

The authors declare no conflict of interest.

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**How to cite this article:** H. Ambo Lau, S. (2024) "Overview of self-medication pharmaceutical preparations by the public", *Jurnal Ilmiah Kesehatan Sandi Husada*, 13(1), pp. 124-130. doi: 10.35816/jiskh.v13i1.1187.