

Profile of Self Medication Practices in the Tarramatekkeng Village Luwu District South Sulawesi

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ABSTRACT

Self medication is the practice of treating oneself using over the counter medicines, limited over-the-counter drugs, or prescription medications obtained from pharmacies. This practice requires adequate knowledge to ensure safe and effective use. Self medication is becoming increasingly common due to its affordability, convenience, and easy access to pharmacies and drugstores, as well as the availability of health information through various media. This study aimed to describe self-medication practices in the community of Kasumang Hamlet, Tarramatekkeng Village, especially in terms of illnesses treated, types of medications used, sources of information, places where medicines were obtained and and they purchased medicines either for immediate use or for future stock. A descriptive research design with a cross-sectional quantitative approach was employed. This study was conducted in Dusun Kasumang, Tarramatekkeng Village, Luwu Regency, from May to June 2025. The sample size was determined using the Slovin formula, resulting in a total of 81 participants. Participants were selected using purposive sampling based on predetermined inclusion criteria. Headaches were the most common reason for self-medication (20%), followed by fever (19%). The most commonly purchased drug was Paracetamol (17%), with 53% of participants buying medication at pharmacies. The main source of information was relatives (47%), and 51% of participants were currently using medication. These findings highlight the need for increased public awareness regarding the safe use of medicines, greater access to professional pharmaceutical guidance, and strengthened regulation of prescription drug sales to reduce the risk of inappropriate self-medication and protect community health

Keywords : Drug Use Profile; Self-medication; Community health; over the counter drug

INTRODUCTION

Self-medication involves using medicines without a doctor's prescription to treat symptoms or illnesses. While convenient, it can lead to medication errors if people lack proper knowledge about the drugs they use. Incorrect use of medications, such as taking the wrong dose or not understanding side effects, can cause health problems like treatment failure, drug resistance, dependency, and adverse reactions(1–4)(26). In Indonesia, self-medication is common for minor ailments like colds, coughs, fever, pain, and digestive issues. It is seen as affordable, effective, and convenient, especially with easy access to pharmacies and the internet. However, many people still lack the knowledge needed for safe and rational drug use(5–8). Self-medication can also involve using leftover prescriptions, buying medications based on advice from family or friends, or using traditional remedies(7–9).

Kasumang Hamlet in Tarramatekkeng Village, Luwu District, is a community where self-medication is frequently practiced for common health issues. People often buy medications directly from pharmacies or small shops without prescriptions. While self-medication offers benefits like cost savings and convenience, it can also pose risks if not done properly. This study aims to explore self-medication practices in Kasumang Hamlet, focusing on the types of illnesses treated, medications used, where they are bought, sources of information, and whether the medications are for immediate use or stored for later.

Despite extensive studies on self-medication in urban and densely populated settings, limited research specifically examines small rural hamlets like Kasumang, where access to health facilities and professional counseling is more constrained, and community advice may play a larger role in medication decisions. Existing studies generally focus on types of drugs used and reasons for self-medication, but rarely analyze whether medications are stored for future use, or how much informal information sources such as relatives or neighbors affect medicine-buying behavior. This study aims to explore self-medication practices in Kasumang Hamlet, focusing on the types of illnesses treated, medications used, where they are bought, sources of information, and whether the medications are for immediate use or stored for later.

MATERIAL DAN METODE

This study employed a descriptive research design with a quantitative approach to investigate self-medication practices in the community of Kasumang Hamlet, Tarramatekkeng Village. The research was conducted in Kasumang Hamlet, Tarramatekkeng Village, Luwu District, from May to June 2025. The population consisted of 413 individuals aged 15 to 55 years living in the village. From this population, a sample of 81 participants was selected based on the inclusion criteria. To determine the sample size, Slovin formula was applied, considering a margin of error of 10%. The sample size was calculated as follows: $n = 413 : 1 + (413 \times 0.1^2)$ resulting in a sample of 81 individuals.¹⁻³

The sampling method used in this study involved selecting participants who had engaged in self-medication and met the inclusion criteria, which included individuals aged 15 to 55 years who were willing to participate in the study. The exclusion criteria included individuals who refused to participate and those with a background in healthcare education or working as healthcare professionals. Data were collected using a structured questionnaire that was distributed to respondents meeting the inclusion criteria.⁴⁻⁶ The questionnaire was designed to gather information self-medication history (types of illnesses treated and medications used), locations where medications were purchased (pharmacy, drug store, stall, or minimarket), sources of medication information (family members, advertisements, the internet, pharmacy staff, or previous prescriptions), and the purpose of medication use (current use or stockpiled for future use). The questionnaire had been previously validated in earlier studies. Ethical approval for this study was obtained under the registration number: B.097/PT19.2.1/PP/I/IV/2025.

RESULT

Table 1. Medication Purchase

Medication Name	Quantity	Persentase (%)
Bodrex	10	12
Antalgin	3	4
Amlodipine	3	4
Promag	3	4
Paramex	4	5
Simvastatin	7	9
Omeprazole	2	3
Ambeven	2	3
CTM	3	4
Mylanta	5	6
Entrostop	3	4
Allopurinol	1	1
Paracetamol	14	17
Ibuprofen	4	5
Loperamide	1	1
Meloxicam	5	6
Ketoconazole	2	3
Ambroxol	2	3
Procold	1	1
Asam Mefenamat	1	1
Super Tetra	2	3
Sangobion	2	3
Siladex	1	1
Total	81	100

Source: Primary Data

Table 2. Disease report

Disease Name	Quantity	Persentase (%)
Headache	16	20
Menstrual Pain	3	4
Hypertension	3	4
Gastritis	11	14
Cholesterol	7	9
Anemia	2	3
Hemorrhoids	2	3
Itching	5	6

Disease Name	Quantity	Persentase (%)
Gout	6	7
Fever	15	16
Diarrhea	4	5
Cold	1	1
Cough	1	1
Stomach Ache	2	3
Low Blood	2	3
Toothache	1	1
Total	81	100

Source: Primary Data

Table 3. Medication Purchase Locations

Medication Purchase Location	Quantity	Persentase (%)
Pharmacy	44	54
Stall	33	41
Minimarket	4	5
Total	81	100

Source: Primary Data

Table 4. Sources of Information

Source of Information	Quantity	Persentase(%)
Relatives	37	46
Internet	25	31
Pharmacist/Pharmacy Staff	19	23
Total	81	100

Source: Primary Data

Table 5. Medication Purchased for Current Use or Stockpiling

Medication Purchased for Current Use or Stockpiling	Quantity	Persentase (%)
Current Use	41	51
For Stockpiling	40	49
Total	81	100

Source: Primary Data

Based on the table 1-5, the most commonly used medications were Paracetamol (17%). The majority of participants reported using self-medication for treating headaches (20%). Most individuals purchased medications from pharmacies (54%), followed by stall (41%). The primary source of information for selecting medications was relatives (47%). Additionally, 51% of respondents purchased medications for immediate use.

DISCUSSION

Self-medication is a common practice among communities as a means of treating various health complaints using over the counter (OTC) medications or prescription drugs available at pharmacies.⁷⁻¹⁰ This study, conducted in Kasumang Hamlet, Tarramatekkeng Village, Luwu District, aimed to assess the self-medication practices of the local population, including the types of medications used, diseases treated, medication sources, and associated factors. The findings of this research are discussed in comparison with previous studies and relevant literature.

The most frequently reported health issue in Kasumang Hamlet was headache, with 16 individuals (20%) reporting this condition. Headache is commonly associated with environmental factors such as high humidity and temperature, which can trigger dehydration. Furthermore, lifestyle factors like physical exhaustion, irregular eating patterns, and undiagnosed hypertension may contribute to the frequency of headaches in this community.

These findings are consistent with a study by Patala et al, which highlighted that headache, particularly in tropical climates, is a prevalent health condition linked to lifestyle factors.^{11,12}

Regarding the types of medications used, Paracetamol emerged as the most commonly purchased medication, with 14 individuals (17%) using it. Paracetamol is widely available and used for relieving mild to moderate pain and fever, making it an ideal choice for self-medication. Its accessibility and affordability contribute to its high usage, which aligns with previous studies Yusuf Mashuri et al⁸, which noted that Paracetamol is the preferred choice for self-medication due to its safety profile and easy access. The widespread use of Paracetamol is further supported by the low cost and availability without the need for a prescription, making it a popular option in resource-limited settings.¹³

However, the study also revealed that some individuals purchased medications that should ideally be used under medical supervision. Medications such as Amlodipine, Simvastatin, Omeprazole, and others are listed as prescription drugs, yet they were bought by individuals without consulting a healthcare professional. This is concerning, as these drugs require medical supervision due to potential side effects and complications, such as blood pressure monitoring, liver function testing, or risk of drug interactions.^{11,14} Previous studies have raised similar concerns about the misuse of prescription medications for self-medication, emphasizing the risks associated with inappropriate drug use without medical oversight.^{2,7}

In terms of medication purchase locations, the majority of respondents (54%) bought their medications from pharmacies, followed by 42% who purchased from kiosks, and only 5% from minimarkets. This indicates a relatively high level of awareness among the community about the importance of obtaining medications from trusted sources like pharmacies. Pharmacies, in addition to offering a wide range of medications, ensure that the drugs sold are authentic and that consumers have access to pharmacist consultations, which is critical in preventing the misuse of medications. Similar findings were reported by Sitindaon, who noted that pharmacies are the preferred place for purchasing medications due to their reliability and professional oversight.^{15,16}

The sources of information for medications in Kasumang Hamlet were predominantly family members (47%), followed by the internet and advertisements (31%), and pharmacists or healthcare professionals (22%). In self-medication practices, the community of Dusun Kasumang relies mostly on information from family members, reflecting strong social trust. They tend to use medicines that have previously been used by their relatives and proven effective in treating similar conditions. There has not yet been a critical reflection on the high-risk finding of using prescription drugs without medical supervision. It is therefore recommended that future research explore the underlying reasons for the continued use of prescription drugs without authorization in this community. This issue is echoed in the study by Irma Yanti et al¹⁷, which indicated that self-medication practices based on non-professional sources, such as family or friends, can result in inappropriate drug choices and health risks. The importance of seeking advice from qualified healthcare providers, especially pharmacists, is crucial to improving self-medication practices.¹⁸

Regarding the purpose of medication use, the study found that 51% of respondents bought medications for immediate use, while 49% purchased them for stockpiling. This behavior reflects a common practice in which individuals prefer to be prepared for potential future health issues, particularly when access to healthcare facilities is limited. While stockpiling medications may offer convenience in emergency situations, it can also pose risks, such as the inappropriate storage of medications or the potential misuse of expired drugs. A study by Yusuf Mashuri et al. highlighted the importance of proper medication storage and the risks associated with using expired medications. Educating the public on the safe storage and proper use of medications can help mitigate these risks.^{8,19}

The use of prescription drugs such as Simvastatin, Amlodipine, and Omeprazole without proper medical supervision poses significant health risks. These medications are intended to treat specific conditions: Simvastatin for lowering cholesterol, Amlodipine for hypertension, and Omeprazole for gastric acid disorders. When used incorrectly, they may cause harmful effects. For instance, inappropriate use of Simvastatin can lead to muscle pain, liver problems, or drug interactions. Uncontrolled use of Amlodipine may result in excessively low blood pressure, dizziness, or swelling. Meanwhile, long-term or unnecessary use of Omeprazole can cause nutrient deficiencies, stomach infections, and kidney issues. These findings indicate that some people still use prescription-only drugs without consulting healthcare professionals. Therefore, public awareness and government regulation should be strengthened to prevent the misuse of prescription medicines and ensure safer self-medication practices.

This study highlights the need for improved awareness and education regarding self-medication practices in Kasumang Hamlet. While self-medication provides convenience and affordability, it also poses significant risks, particularly when medications are purchased without medical advice. The reliance on family members for medication information and the inappropriate use of prescription drugs underscore the need for better public health education and increased accessibility to healthcare professionals.

To enhance the safety of self-medication practices, healthcare authorities should focus on promoting public education campaigns that emphasize the importance of consulting with pharmacists and healthcare providers before using any medication. Additionally, policies aimed at regulating the sale of certain medications and ensuring that individuals understand the risks of self-medication will contribute to better health outcomes in

communities like Kasumang Hamlet. This study has several limitations. The research was conducted only in Kasumang Hamlet, which may not represent other communities with different characteristics. The data were obtained through self-reported questionnaires, which may lead to recall bias or inaccurate responses from participants. In addition, this study used a descriptive design, so it did not explore causal relationships between self-medication behavior and other influencing factors. The exclusion of individuals with a health-science background also limited comparison between knowledgeable and non knowledgeable respondents. Future studies should involve a wider population, include different locations, and consider using mixed methods to obtain more comprehensive and accurate results.

CONCLUSION RECOMMENDATIONS

This study identified that self-medication is a prevalent practice in the Kasumang Hamlet community, with Paracetamol being the most commonly used medication (17,3%), primarily to manage frequent complaints such as headaches (20%) and fever (19%). Pharmacies were the main source for medication purchases (53%), while relatives represented the dominant source of drug use information (47%). Most individuals practiced self-medication to address immediate symptoms (51%), reflecting a need-based pattern of medicine use. These findings underscore the importance of enhancing community awareness through targeted health promotion focusing on healthy lifestyle behaviors and rational medicine use. Strengthening pharmacists' roles in counseling, empowering the local Health Office to provide structured public education, and reinforcing BPOM regulations on over-the-counter and prescription drug access are essential strategies to ensure safe self-medication practices and minimize potential health risks. Future studies are encouraged to examine adherence to clinical guidelines for headache management to further promote safe and appropriate medication use.

AUTHOR'S CONTRIBUTION STATEMENT

Conceptualization, Methodology, Software, Data curation, Writing - Original draft preparation; Funding acquisition, Project administration, **Rina.Asrina**; Software, Validation, Conceptualization, Writing – Review & Editing, Methodology, Project administration; **A.R .M.B. H. R.**

CONFLICTS OF INTEREST

Confirms that the authors have declared any potential conflicts that could influence the impartiality of the research. The authors explicitly state that they have no financial or personal relationships with entities that might unduly affect their objectivity. This declaration ensures the integrity of the study by transparently addressing any possible influences on the research outcomes, contributing to the credibility and trustworthiness of the article.

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REFERENCES

1. Pratiwi UA. Hubungan Tingkat Pengetahuan terhadap Perilaku Swamedikasi Analgesik di Kecamatan Jatiyoso Karanganyar. *J Kesehat Poltekkes Kemenkes RI Pangkalpinang*. 2024;12(1):19–28.
2. Taufiq T. Gambaran Tingkat Pengetahuan Swamedikasi Obat Analgesik Pada Masyarakat Di Kelurahan Tidung Rt 1 Rw 3 Kota Makassar. *J Kesehat Yamasi Makassar*. 2023;7(1):114–22.
3. Togatorop BJE, Manurung DYS, Manurung MEM, Sianipar R. Hubungan Pengetahuan Terhadap Sikap Remaja Desa Ujung Tanduk Kecamatan Laguboti Kabupaten Toba Tentang Swamedikasi Jerawat Tahun 2021. *Herb Med J*. 2022;5(2):38–42.
4. Kusumaningtyas Siwi Artini HAC. Hubungan Tingkat Pengetahuan Pasien Terhadap Perilaku Swamedikasi Nyeri yang Rasional di Apotek Harish Farma Kabupaten Sukoharjo. *INPHARNMED J*. 2020;4(2):34–42.
5. Teodhora, Ainun Wulandari, Kinanthi Kusumawardhani. Hubungan Tingkat Pengetahuan Terhadap Perilaku Swamedikasi Batuk Masyarakat Kelurahan Serua Tangerang Selatan. *Keluwih J Kesehat dan Kedokt*. Desember 2024;6(1):9–17.
6. Rahmadhanty EP, Daniar A, Setiawan B. Perancangan Desain Karakter dalam Komik Strip Instagram untuk Edukasi Penyakit Asam Lambung pada Remaja. *J Strateg Desain dan Inov Sos*. Mei 2024;5(2):159.

7. Feli F, Pratiwi L, Rizkifani S. Analisis Tingkat Pengetahuan Mahasiswa Program Studi Farmasi Terhadap Swamedikasi Obat Bebas dan Bebas Terbatas. *J Syifa Sci Clin Res*. April 2022;4(2):275–86.
8. Yusuf M, Widodo S, Irwansyah AR. Analisa Tingkat Pengetahuan Dan Perilaku Terhadap Penggunaan Obat Influenza Dan Batuk Secara Swamedikasi Di Desa Muara Burnai I Kabupaten Ogan Komering Ilir An Analysis Of The Level Of Knowledge And Behavior Towards The Use Of Influenza Medicine And Cough Swamedication In Muara Burnai I Village Ogan Komering Ilir District. Vol. 9, *JFL Jurnal Farmasi Lampung*. 2020.
9. Warsidah W. Edukasi Swamedikasi yang Rasional pada Masyarakat Wilayah Pesisir Kakap Kalimantan Barat. *Sasambo J Abdimas (Journal Community Serv*. Mei 2024;6(2):344–54.
10. Zahro Ilyas Z. Peranan apoteker dalam pelayanan pemberian swamedikasi terhadap pasien peserta bpjs kesehatan. Vol. 3, *Maliki Interdisciplinary Journal (MIJ) eISSN*. 2025.
11. Patala R, Megawati M, Hidayah S. Pengetahuan dan Perilaku Swamedikasi Obat bebas dan Bebas Terbatas di Era Pandemi COVID-19 di Desa Sejahtera, Kecamatan Palolo, Kabupaten Sigi, Sulawesi Tengah. *J Abdi Masy Indones*. Mei 2022;2(3):891–8.
12. Susilo, Avrilya I, Pudiarifanti N, Muslim Z, Laksono H. Trend Penyimpanan Obat Keras Pada Rumah Tangga Di Kota Bengkulu Behavior Of Storing Prescribing Medicine In Households In Bengkulu City. Vol. 12. 2024. 226–232 hal.
13. Simatupang UT, Simarmata ER, Lumbantoruan G. Perancangan Sistem Informasi Persediaan Obat Pada Toko Obat Anugerah Jaminpa. 2021;1(2).
14. Riyanti A, Emelia R. Analisis Tingkat Pengetahuan Swamedikasi Obat Batuk pada Pasien ISPA di Apotek Siaga-24 Cikampek. *J Heal Sains*. November 2021;2(11):1392–407.
15. Sitindon LA. Perilaku Swamedikasi Pendahuluan. *J Ilm Kesehat Sandi Husada*. 2020;9(2):787–91.
16. Azizah SN. Pengaruh Edukasi Swamedikasi Dari Rumah Ke Rumah Menggunakan Leaflet Dalam Meningkatkan Pengetahuan Masyarakat Desa Telaga Bidadari Hulu Sungai Selatan. 2020;(November):22.
17. Sueni, Haniarti, Ayu Dwi Putri Rusman. Analisis Penyebab Faktor Resiko Terhadap Peningkatan Penderita Gout(Asam Urat) Di Wilayah Kerja Puskesmas Suppa Kecamatan Suppa Kabupaten Pinrang. *J Ilm Mns Dan Kesehat*. 2021;4(1):1–9.
18. Jayanti M, Arsyad A, Program S, Farmasi S, Ratulangi M, Farmasi J, et al. Profil Pengetahuan Masyarakat Tentang Pengobatan Mandiri (Swamedikasi) Di Desa Bukaka Kecamatan Kotabunan Kabupaten Bolaang Mongondow Timur. Vol. 9, *PHARMACONJurnal Ilmiah Farmasi-UNSRAT*. 2020.
19. Manihuruk A, Handini M, Sinaga T, Wandra T, Sinaga L. Swamedikasi Obat: Studi Kualitatif Pelaksanaan Pelayanan Swamedikasi di Apotek Kecamatan Doloksanggul, Kabupaten Humbang Hasundutan Tahun 2023. *PREPOTIF J Kesehat Masy*. 2024;8(1):301–29.