

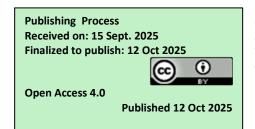
# Self-medication: do it yourself (DIY) medicine

Jyoti Acharya
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# Self-medication: do it yourself (DIY) medicine

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**Abstract:** Self-medication is not a new phenomenon in the history of humankind. The earliest forms of self-medication were based on traditional and herbal medicines. Ayurveda (India, ~1500 BCE) and Traditional Chinese Medicine emphasized balance in the body through herbs and minerals.

Hippocrates (460–370 BCE). Self-medication refers to the practice of using medicinal products to treat self-diagnosed symptoms or conditions without professional guidance. It has increased since the medicine has been readily available in the pharmacy. While self-medication can be convenient and cost-effective, especially for minor health issues, it carries serious risks when done irresponsibly. Europe (Eastern) had the highest incidence rate of self-medication, and in Asia, it ranged from 7.3 % to 85.59 % with an average of 42.64%. 'In Nepal, the common reasons for the practice of self-medication were mild illness (64.1%), and the main source of self-medication was the chemist (73.6%). Self-medication sometimes results in fatal consequences; therefore, people should abstain from self-medication.

Keywords: Health, Pharmacist, Self-medication, Risk

**Declaration:** There is no conflict of interest.



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### Introduction

Self-medication, sometimes called Do It Yourself (DIY) medicine, is increasingly becoming a global concern, affecting both developed and developing nations, including Nepal (1). According to the World Health Organization (WHO), self-medication refers to the practice of using medicinal products to treat self-diagnosed symptoms or conditions without professional guidance (2). This may involve using over-the-counter drugs, leftover prescriptions, or advice from non-medical sources. While self-medication can be convenient and cost-effective, especially for minor health issues, it carries serious risks when done irresponsibly (3). In university settings, especially among students, self-medication is a common behaviour. Medical students are often believed to self-medicate more confidently due to their academic exposure to healthcare, whereas non-medical students might rely on hearsay, advertisements, or past experiences. Studies show that medical students may have better access to health information and resources, potentially making their self-medication practices more informed (4).

However, across both groups, common reasons for self-medicating include lack of time, financial constraints, difficulty in accessing medical professionals, and peer influence<sup>1</sup>. Despite the occasional benefits of quick relief and cost-saving, self-medication can lead to delayed diagnoses, misuse of drugs, resistance to antibiotics, and even serious side effects. It also places a burden on the healthcare system and contributes to public health issues (5). Similarly, in community settings, the literacy rate is increasing day by day, resulting in a wide awareness about various medications, particularly over-the-counter drugs, among people. On the other hand, the use of the internet and various information technologies has supported people in searching for different medication uses online and practicing by oneself (6).

### Rationale

The majority of pharmaceuticals are sold "over the counter" at pharmacies without a prescription. Self-medication is common in Nepal, even among students. Instead of consulting medical specialists to learn about their health issues and treatment, students in this digital age rely primarily on the internet (7). Since undergraduate medical students will soon be practicing medicine, self-medication has a big impact on them. According to earlier research, the percentage of medical students in Nepal who self-medicate ranged from 61.5% to 83.3% (3). From the study, self-medication practice is 59% in the general population, which indicates SM practice is increasingly prevalent among the general population (8).



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Self-medication is own choice of individuals in using various over-the-counter drugs without a professional prescription, which could save their time and money. However, this is risky, having chances of misdiagnosis, side effects, and more complications due to delayed treatment. For this reason, self-medication is important to be studied more and clarified among people across the country.

**Methodology:** It is a narrative literature review based on the documents published on the internet and academic articles, and institutional documentation to comprehend the historical background and situation of self-medication.

### **Findings**

History of Self-Medication: The earliest forms of self-medication were based on traditional and herbal medicines. Ayurveda (India, ~1500 BCE) and Traditional Chinese Medicine emphasized balance in the body through herbs and minerals. Hippocrates (460–370 BCE), the Greek physician, advocated natural healing and diet-based treatment, which empowered individuals to care for themselves (9). The concept of self-care emerged post–World War II, with increasing consumer autonomy. The WHO formally recognized self-medication as part of self-care in the 1970s. WHO (1998) defined responsible self-medication as the use of approved drugs to treat self-recognized conditions (2). The WHO has emphasized the importance of self-medication research, particularly in local contexts, to understand the realities of self-treatment practices. In Nepal, the Department of Drug Administration (DDA) was designated as the focal point (National Pharmacovigilance Centre) in 2004 to collaborate with the WHO and monitor adverse drug reactions (2). Self-medication is not attributed to a single individual but rather has evolved through the work of various researchers and organizations. It's influenced by various disciplines like Medicine, Public Health, and Anthropology.



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### **Situation of Self-Medication**

**Global Context:** Europe (Eastern) had the highest incidence rate of self-medication (74%, 95% CI, 56%-86%). 71% of the subjects purchased drugs from pharmacies (95% CI, 61-80%). Regarding the condition that led to self-medication, 48% of the patients turned to self-medication due to neurological problems (95% CI, 40-55%).

**Asian Region context:** The Asian region overall has 71.2% of Self-Medication<sup>10</sup>. At the country level, self-medication rates range from 41.5 to 75.5% in Asian nations like India, Bhutan, Bangladesh, and Saudi Arabia, 53.7% in Ghana, Africa.

**Nepal Context:** According to recent studies, Self-medication was common among people  $(78\%)^{11}$ . Self-medication practice is 59% in the general population and 26.2% medical students of Pokhara (8). Another study found that in Nepal, the common reasons for the practice of self-medication were mild illness (64.1%), and the main source of self-medication was the chemist  $(73.6\%)^{13}$ .

### Conclusion

In Nepal as well as throughout the world, self-medication is becoming more and more common due to several factors, including time or financial constraints, easy access to over-the-counter medications, rising health literacy, and internet use. Inappropriate self-medication can result in major health risks like misdiagnosis, drug resistance, and delayed treatment, even though it can be convenient for minor illnesses. Its widespread use among students, especially medical students, emphasizes how urgent awareness, legislation, and additional research are needed to encourage responsible use and protect the public's health.

#### References

- 1. Kokabisaghi F, Emadi MSM, Tajik A, Sharifi F, Houshmand E, Varmaghani M. The prevalence and causes of self-medication among medical university students in Iran during COVID-19 outbreak and its implications for public health and health systems: A cross-sectional study. Heal Sci Reports. 2024;7(3):1–10.
- 2. Ummah MS. No, Urban growth and access to opportunities: A challenge for Latin America.

  2019;11(1):1–14. Available from:

http://scioteca.caf.com/bitstream/handle/123456789/1091/RED2017-Eng-



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8ene.pdf?sequence=12&isAllowed=y%0Ahttp://dx.doi.org/10.1016/j.regsciurbeco.2008.06.005%0Ahttps://www.researchgate.net/publication/305320484\_SISTEM\_PEMBETUNGAN\_TERPUSAT\_STRATEGI\_MELESTARI

- 3. Sherpa AT, Yadav RK, Bajracharya M. Journal of KIST Medical College. KistmcthEduNp [Internet]. 2019;1(2):52–5. Available from: http://kistmcth.edu.np/uploads/ckfinder/files/Final1\_JKMC Vol\_1\_1\_7th draft.pdf#page=37
- 4. Amponsah SK, Odamtten G, Adams I, Kretchy IA. A comparative analysis of pattern and attitude towards self-medication among pharmacy and non-pharmacy students in University of Ghana. Pan Afr Med J. 2022;41.
- 5. Shah K, Halder S, Haider SS. Assessment of knowledge, perception, and awareness about self-medication practices among university students in Nepal. Heliyon [Internet]. 2021;7(1):e05976. Available from: https://doi.org/10.1016/j.heliyon.2021.e05976
- 6. Paudel S, Aryal B. Exploration of self-medication practice in Pokhara valley of Nepal. BMC Public Health. 2020;20(1):1–5.
- 7. Raja A, Bin Amin S, Azeem B, Raja S, Aftab Y, Rafi M, et al. Self-diagnosis and self-medication based on internet search among Non-Medical University students of Karachi. Ann Med Surg [Internet]. 2024;86(11):6507–13. Available from: http://www.ncbi.nlm.nih.gov/pubmed/39525746%0Ahttp://www.pubmedcentral.nih.gov/articlerender. fcgi?artid=PMC11543220
- 8. Shankar P, Partha P, Shenoy N. Self-medication and non-doctor prescription practices in Pokhara valley, Western Nepal. Am J Med [Internet]. 2002;104(2):170–8. Available from: http://www.biomedcentral.com/1471-2296/3/17%25
- 9. Bradley C, Blenkinsopp A. Over-the-counter Drugs: The future for self-medication. Bmj. 1996;312(7034):835.
- 10. Ghasemyani S, Roohravan Benis M, Hosseinifard H, Jahangiri R, Aryankhesal A, Shabaninejad H, et al. Global, WHO Regional, and Continental Prevalence of Self-medication from 2000 to 2018: A Systematic Review and Meta-analysis. Ann Public Health. 2022;(January).
- 11. Ghimire P, Pant P, Khatiwada S, Ranjit S, Malla S, Pandey S. Self-medication practice in Kathmandu Metropolitan City: A cross-sectional study. SAGE Open Med. 2023;11.
- 12. https://www.jcmc.com.np/jcmc/index.php/jcmc/article/view/688



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https://www.jcmc.com.np/jcmc/index.php/jcmc/article/view/688

<sup>13</sup> https://www.jcmc.com.np/jcmc/index.php/jcmc/article/view/688