

Self-medication practice and its associated factors among the residential of Helembhu Gaupalika

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Abstract

Self-medication is done for the self-care. It is common practice in our surroundings as many people has been involving for the self-medication practice for the emergency condition and feeling less severity of disease according to their past experience is been the main focusing reasons for this practice in their own.

This study focuses on two-way perspectives of self-medication i.e., allopathic and traditional healing. Similarly, this study highlights the age, sex, education and occupation and its association with self-medication. The aim of this study was to know the self-medication practice and its demographic factors among the residential of *Helembhu Gaupalika*. A cross sectional study was conducted among residents after obtaining prior consent from those willing to participate. Three hundred and seventy-one individuals participated in the study. Among 371 participants 334 (90%) practice self-medication during illness.

The result shows that self-medication is mostly used in 51-60 age group (30.7%), sex (male 52.6% and female 47.4%), education (literate to higher secondary 86.3%), occupation (56.1%) and traditional healing practices (38.4%). The study reveals self-medication is commonly used by the resident of *Helembhu Gaupalika*. The self-medication is being one of the major problems in developing country.

Keywords: *self-medication, traditional healing, allopathic*

Introduction

According to the World Health Organization (WHO), self-medication can be acceptable if it is well explained and managed until it becomes ingrained in society's

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norms. If it is not controlled, nevertheless, it might pose a risk to the general public's health (Khadim et al., 2020). Choosing and using medications for one's own self-diagnosed ailments or symptoms is known as SM (Akinawo et al., 2020). In many underdeveloped nations, self-medication is very common; prevalence estimates range from 12.7% to 95% (Ghazawy, 2017). A study found that self-medication is frequently used and is positively related to the psychological distress brought on by the Covid-19 pandemic (Tan et al., 2023).

Self-medication is taken in two ways in Nepalese culture. People use to diagnose their illness as according to their past experience. They prefer to take allopathic or choose to go traditional healers or sometimes prefer both to cure their physical or mental illness. In Nepalese rural society, the cause of physical and mental illness is based on natural calamities and God's anger. They believe in "bokshi" (witch) who supposed to keep ghost with them and order it to enter in person's body which create minor illness (Baniya, 2014). The majority of the Thai people's healthcare is provided by traditional healers in Thailand. Traditional healers with extensive expertise tend to be elderly individuals. Traditional healers continue to hold a high social status in most communities and are an integral component of culture and tradition, having an impact on local health practices (Junsongduang et al., 2020).

The majority of the community members, particularly those with low socioeconomic status, first went to the traditional healers with their medical issues, according to a qualitative investigation conducted in Bangladesh. They only shifted to skilled doctors for contemporary medicine once such treatment failed. In practically all nations in the world, traditional healing practices form a significant and essential component of healthcare systems. Very few researches have looked at how conventional healing methods can be used holistically (Haque et al., 2018).

The chance of self-medication dramatically grown over the past year due to factors such as declining age, declining years of experience, growing working hours, lack of health insurance, fear of confidentiality, and dissatisfaction with health services (Adewoye et al., 2019) . According to a study done at Jimma University, self-medication was used by 45.9% of the students who had symptoms of disease. In other similar research, the incidence of self-medication among university students was found to be 76% in Karachi, 54% in Turkey, 88% in Croatia, and 94% in Hong Kong (Bekele et al., 2016).

Self-medication was prevalent (78%) among people. By examining the practice among residents of the Kathmandu Metropolitan city, the study revealed that many people self-medicate (Ghimire et al., 2023) . The study that was conducted

to evaluate the prevalence of SM and its causes in the Pokhara valley of Nepal discovered that most people were unaware of the dangers of medications (Paudel & Aryal, 2020).

Self-medication practice is being leading cause to deteriorate the physical and mental health condition. Study helps to know the self-medication practices and traditional healer's practices in community level .For the local government to create a plan of action for the sensible use of medications. The federal government and regulatory organizations would also benefit from this study's findings in developing rigorous regulations governing the use of over-the-counter and prescription medications.

Objectives

1. To analyze self-medication practice according to age.
2. To analyze self-medication practice according to sex.
3. To assess self-medication practice according to education.
4. To access the self-medication practice according to occupation.
5. To study the existing situation about the traditional healing practice.

Literature Review

Self-medication is becoming more and more common among people in developing nations like Nepal, where the expense of healthcare is relatively high and over-the-counter medications are easily accessible. Self-medication was a common practice among all people, regardless of their age, gender, social standing, or level of education. According to a cross-sectional study conducted in the Kathmandu Metropolitan City, self-medication was used by 82.8% of people with bachelor's degrees and higher, compared to 90.9% of illiterate people, 69.2% of literate people, 75% of elementary school students, and 68.8% of high school students (Ghimire et al., 2023).

According to the Journal of Social Psychiatry (2015), most of the patients suffering from mental illness prefer to approach faith healers first. This journal highlights the importance of mental health education and developing a positive collaborative relationship with traditional healers. Similarly, mental illness is health conditions involving changes in thinking, emotion or behavior which is associated with distress or problem. People with mental illness and their family have strong belief which forces them to consult with the traditional healers (Biswal, Subudhi & Acharya, 2017).

According to Rama Krishna Biswal, Chittaranjan Subudhi, and Sanjay Kumar

Acharya (2017), mental illness are health conditions involving changes in thinking, emotion or behavior which is associated with distress or problem. People with mental illness and their family have strong belief in the supernatural power and this strong belief forces them to consult with the traditional healers. Similarly, Ayurveda also serves mental illness in the name of “Unmada”. Due to diet, disrespect to God, mental shock due to emotions and faulty bodily activity are the main causes of “unmada”. Similarly, sexual intercourse during full moon or the new moon, violation of taboos, effect of ancestral spirit, past life activities, etc. are also some causes of mental illness in Ayurveda.

According to Akol, Karen and Ingunn (2018), mental health services are important for primary health care. In Uganda, there are few psychiatric facilities than the global average so up to 60% of patients attend traditional healers who have moderate to severe mental illness. Traditional healers describe the cause of mental illness as spiritual (spirit, witchcraft, unhappy ancestral, God, etc.) and physical (substance abuse and fever) factors. Traditional healers distrust the biomedical but want to collaborate with them for the betterment of their clients.

Medical professionals participated in a descriptive cross-sectional study on self-medication during the pandemic, and the results showed that 50.4% of respondents, or approximately half of the group, were self-medicating (Acharya et al., 2022). Similar to this, 400 nursing and physiotherapy students in Pune, India, participated in a descriptive survey. The study's findings revealed that 75.5% of these students regularly self-medicated (Jagtap, 2021).

Additionally, those with greater levels of education tend to self-medicate more frequently than people with lower levels of education. This is because people are more likely to self-diagnose and use self-medication when they can look up information on the symptoms they are experiencing in books or online. In Ghana's rural areas, a quantitative cross-sectional survey found that traders (44.71%) self-medicated more frequently than farmers (42.07%), teachers (18.52%), and health professionals (35%), in that order (Mensah B N et al., 2019).

Similar to this, a survey of 412 healthcare professionals in Ethiopia found that pharmacists self-medicate at a high level (70.5%), nurses self-medicate at a second level (50.5%), midwives self-medicate at a third level (43.5%), medical personnel self-medicate at a high level (61.1%), and laboratory employees self-medicate at the lowest level (35.3%) (Simegnat al., 2020).

Self-medication Practices Among the Peri-urban Households of Two Communities

in the Dharan Sub-Metropolitan City of Eastern Nepal: A Descriptive Cross-sectional Study found that the prevalence rates of self-medication were 68.44% of men and 78.60% of women, with the majority of respondents involved in the age group of 31 to 49 years (81.96%), suggesting that the middle-aged groups showed a higher frequency of self-medication (Chapagain & Rauniyar, 2020). Prevalence of self-medication practices and its associated factors in Urban Puducherry, India, shows that 17.8% of males and 5.4% of females engage in self-medication. It is higher among individuals aged 50-59 years compared to younger age groups (Selvaraj et al, 2014).

Methodology

Research design

Descriptive study design was conducted.

Study area

There are seven wards in *Helembhu Gaupalika* that have been purposefully chosen, and three of those wards were chosen by simple random sampling in the lottery process. Palchok, Mahagkaal and Churetaar are the respective wards for the study purpose.

Data collection method

Data was gathered using an interview technique and a structured questionnaire.

Sample size and sampling method

There is a dearth of material on Nepal's traditional healers and self-medication. In order to determine the sample size, a recent questionnaire-based study that was conducted in the Pokhara valley revealed that 59% of participants used self-medication (Shankar et al., 2002).

The estimated sample size was to be calculated by using the following formula.

$$\text{Sample size (n)} = Z^2 p (1-p) / d^2 \text{ (Size, n.d.)}$$

Where, $Z = 1.96$ at 95% CI

$$p = 59\% = 0.59$$

Non-response rate = 10%

Allowable error (d) = 0.05 the final required sample size will be 371.71

Development of instrument (tools and technique)

Helembhu Gaupalika was used to choose the study's participants. In the seven wards of *Helembhu Gaupalika*, which were chosen on purpose, three wards were chosen

through simple random sampling in the lottery system. The study population was selected using simple random sampling. The individuals were chosen from a list of houses from the three wards.

Validity and reliability

- Reliability refers to the extent to which the same answers can be obtained .The preparation of study proposal and questionnaire was done by the close guidance of the experts.
- The set of questionnaires was checked, commented and edited for necessary modifications.
- The research tool was being cross validated against previous established tools from previous studies.
- The questionnaire was being prepared in Nepali language and necessary information was provided to fill up so that the participants could understand clearly and wrong interpretation will be minimal.
- Confidentiality was maintained in questionnaire to encourage honest answers.

Data management and analysis

Data was analyzed and interpreted according to the objectives of study. All the collected data was reviewed, checked and verified daily for its completeness, consistency and accuracy. Chi square test was applied to see the association factors of self-medication.

P-value will be reported at 95% confidence level. Descriptive statistics was used to report socio demographic characteristics. Data was analyzed using Epi Data version 3.1 and Statistical Package for Social Sciences (SPSS) version 23.0 and presented in the table form.

Exclusion criteria

Some of the interviewees' subjects had mistrust for them and feared that they could encounter difficulties when providing answers. Recall bias may also play a role in why some of the responses weren't used, as it is explained in more depth later. The female interviewers who mostly questioned the respondents may encounter resistance from young boys. A 16-year-old participant's ability to understand and reply appropriately to questions on self-medication was uncertain, thus that participant was excluded from the study.

Ethical consideration

- Permission for carrying out the study was asked from the Gaupalika authoritarians and informed consent for approval of study was taken.
- Informed verbal consent and consent was taken in the written form were taken from every respondent before participating them in the research study.
- Information received from the study sample was disclosed to unauthorized person. The information was kept confidential and anonymity will be maintained.
- The purpose of the study was being explained to the respondents and written consent was taken before collecting data.

Limitation of the study

This study had several limitations since it was recall bias of the respondent, involvement of primary decision maker only gave limited information.

Results

Table 1: Distribution of the respondents according to age group

Age	Frequency	Percentage
11-20	15	4.0
21-30	68	18.3
31-40	101	27.2
41-50	73	19.7
51-60	114	30.7
Total	371	100.0

Source: 2023

This table shows the majority of age group is 51-60 i.e. 30.7% and least age group is 11-20 i.e. 4% participated in study N=371.

Table 2: Distribution of the respondents according to sex that are participated

Sex	Frequency	Percentage
Male	195	52.6
Female	176	47.4
Total	371	100.0

Source: 2023

This table shows that the male respondent were more as compared to female respondent as in participated in this study=371

Table: 3 Distribution of the respondent according to education.

Education	Frequency	Percentage
Illiterate	51	13.7
Literate	98	26.4
Primary level	174	46.9
Secondary level	41	11.1
Higher secondary	7	1.9
Total	371	100.0

Source: 2023

The table shows that most of the respondents completed their primary level i.e. 46.9% and least of the respondent completed their higher secondary level that is 1.9%.N=371

Table 4: Distribution of the respondents according to occupation.

Occupation	Frequency	Percentage
Business	76	20.5
Job	87	23.5
Farmer	208	56.1
Total	371	100.0

Source: 2023

This table shows the respondents were mainly engaged in agriculture i.e. 56.1%, 23.5% respondents engaged in service and the rest of the remaining respondents engaged in business i.e. 20.5%.N=371

Table 5: Distribution of the practice of self-medication of the respondent.

Practice of self-medication	Frequency	Percentage
Yes	334	90.0
No	37	10.0
Total	371	100.0

Source: 2023

Among the total respondent self-medication was practice by 90% and remaining 10% do not practice self-medication .N=371.

Table 6: Distribution of the self-medication practice preceding six months.

Practice of self-medication	Frequency	Percentage
Yes	154	46.1
No	180	53.9
Total	334	100.0

Source: 2023

46.1% of the respondent practices' medication within six months and 53.9% respondents did not practice self-medication within six months. N=334.

Table 7: Distribution of visit practice for consulting traditional healers preceding six months.

Visit practice	Frequency	Percent
Yes	143	38.4
No	228	61.6
Total	371	100.0

Source: 2023

This table shows that 38.4% of the total respondent visit traditional healers during feeling sick before taking any medication .N=371

Table 8: Factors associated with self-medication according to age.

Age group	Practice of self-medication		P-value
	Yes	N0	
11-20	15	0	
21-30	66	2	0.019
31-40	86	15	
41-50	63	10	
51-60	104	10	
Total	334	37	

Source: 2023

This table shows that the majority of the self-medication is practiced by the 51-60 age group, the age group were divided into five categories in which p-value is less than 0.5 that self-medication is not associated with age group of the respondent.

Table 9: Factors associated with self-medication according to sex

Sex	Practice of Self medication		P-Value
	Yes	No	
Male	177	18	0.615
Female	157	19	
Total	334	37	

Source: 2023

The table shows majority of the male respondent were found to practice of self-medication as compared with female respondents .The p-value of this association is 0.615 which shows there is association with sex in self-medication practice.

Discussion and Conclusion

In the present study, found residents of *Helembhu Gaupalika's* use of self-medication. Based on the study's results, 90% of the respondents reported using self-medication. Numerous other studies done in different countries including those from Sri Lanka (60.8%), Thailand (88.2%), India;s Pune (75.5%) have found that more than 50% of people self-medicate (Chautrakarn et al., 2021)

According to this study, Self-medication is used by 30.7% of adults between the ages of 50 and 60 and is least common (4%) among those under the age of 19. Studies by (Paudel & Aryal, 2020) shows that the age group between 50 and 60 has the highest rate of self-medication (9.45%), with 1.99% of those under the age of 19 engaging in self-medication which lends weight to this conclusion. A similar study in Syria by (Abdelwahed et al., 2022) shows that young adults are less likely to self-medicate.

The age group of 51 to 60 years old practices self-medication the most, and self-medication was not found to be associated with respondent age group in any of the five categories where p-value was less than 0.5. Male respondents were more likely to practice self-medication than female respondents. This association's p-value of 0.61 indicates that self-medication habit is associated with sex. Self-medicate was consistent with a study by (Ghimire et al., 2023) that showed 53% of males and 47% of females self-medicated. An Ethiopian study by (Simegn et al., 2020) revealed similar results, showing that women self-medicated to a lesser amount than men, at 51% and 57.7%, respectively.

According to a study, both educated and uneducated people practice self-medication. However, those with only a primary level of education self-medicate more frequently

(46.9%). Similar findings were made in a study conducted in Ghana by Mensah et al., 2019 who found that 44.6% of respondents with only an elementary education were self-medicating. The same study supports that farmers are engaged in self-medication i.e. 40.2%.

Among different forms of practicing self-medication visiting traditional healers is one form to treat them. Traditional healing aims to restore harmony and balance within the individual through a symbiosis of the body, mind and spirit. Through this process traditional healing offers a holistic conceptualization of wellness and well-being, both within the individual and between the individual and his or her environment. Like psychologists, traditional healers typically diagnose and treat the psychological basis of an illness before prescribing medicines.

According to traditional belief, human beings are made up of various aspects-physical, spiritual, moral and social. When these parts function together harmoniously, a person will be in good health. On the other hand, if any of these features is out of balance, a person will become physically, or even spiritually ill. Thus, illness is not viewed as just a physical disorder, but could also be spiritual, moral, or social disorder. Traditional healers offer information, counseling and treatment to patients and their families by understanding the patient's broader environment.

Self-medication is frequently the patient's most convenient alternative in Nepal due to the accessibility issues with healthcare providers. People also go to traditional doctors since they are readily available for their medical needs. The right time to recommend a patient for more advanced medical treatment needs to be understood by conventional practitioners. Additionally, they can aid in introducing contemporary ideas to the rural populace, such as psycho education. The use of educational interventions to assist patients in determining if self-medication is suitable may be beneficial.

The experiences trigger's individual to have perception regarding particular things which in enhancing to use self-medication practices. The mental schemas are formed to regulate the individual behaviors. The attitude is formed from the community practices which are being one of the greater factors to have self-medication in the community level. The youth groups are more likely to use self-medication with the help of search engines thus promoting self-diagnosis.

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