

Prevalence and pattern of self medication practices in rural areas of Baharaich

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Background: Self-medication (SM) is the act of obtaining and using one or more drugs for treatment, diagnosis, or prescription without a doctor's prescription or recommendation. In percentage, SM is growing in rural areas. Since the prevalence and pattern of SM use are not well established, a cross-sectional survey was conducted, and 400 individuals were randomly chosen from district Baharaich's rural areas.

Method: Each participant underwent a face to face interview with the help of a structured questionnaire; data collected was analyzed using descriptive and inferential statistics in Epi info version 7 software.

Result: Overall, out of 400 participants, 70 % of them reported that they have used SM in the past. The frequency of SM use varied among the subjects with a minimum of at least one time to maximum of 5 times and above. When the participants were asked about the reasons for SM use, the majority of them 33% stated lack of time to visit a doctor as the main reason followed by Ease and convenience (17%), Avoiding crowd in visiting doctor (14%) and Economical (14%). The major source through which the participants learned to use SM were as follows, directly from pharmacist (61%) followed by television/media/google (18%), prescription of previous illness (12%), friends (12.5%). The main indications for SM use were headache (35%) followed by fever (32%), then cough/cold/sore throat (21%). The most commonly used drugs for self-medication were paracetamol (34%) followed by nonsteroidal anti-inflammatory drugs (NSAIDs) (30%) and cold remedies (21%).

Conclusion: Self-medication is an alarming sign for society. Self-medication can be prevented or minimized by increased awareness and education in society.

Keywords: Self-medication, Prevalence and pattern, Baharaich

Introduction

Self medication can be defined as obtaining and consuming one (or more) drug(s) without the advice of a physician either for diagnosis, prescription or surveillance of treatment. In practice, it also includes use of the medication of family members, especially where the treatment of children or the elderly is involved. Pharmacists and pharmacy attendants play an important role in fostering self-medication among the public.¹⁻⁴

In percentage, Self medication is growing in rural areas. Use of self-medication is highly

prevalent in rural communities varying from 32.5% to 81.5%.¹⁻⁷

The irrational use of medications in SM is a major source of public and professional concern. Increased proportions of medicines taken as SM compared to prescribed drugs occur in developing nations like India due to easy access to a broad variety of drugs and insufficient health services. Although over-the-counter (OTC) medications are intended for SM and have been shown to be effective and safe, improper use due to ignorance of their interactions and side effects can have serious consequences, especially in the case of extreme ages (children and the elderly) and unique physiological conditions like pregnancy and lactation. There is always a chance that the active chemicals in concealed OTC drug preparations will interact with those in prescription drugs, and there is also a higher chance that the pathology of an already-existing disease will get worse.^{1,2,5,6}

We did this cross-sectional study in the rural parts of the Baharaich District of Uttar Pradesh to determine the prevalence and pattern of SM use because there haven't been many studies about its use in our community.

Materials and methods

The current study was a cross-sectional survey carried out in Uttar Pradesh's Baharaich District. For this study, 400 patients were chosen at random from rural areas of Baharaich District and enrolled for a six-month period beginning in 2022. After receiving informed consent and being told of the study's goal, patients who were at least 18 years old and could read and write Hindi or English were enrolled in the study. Participants with intellectual, psychological, or emotional disorders that would impair the validity of their answers were not allowed to participate in the study. After conducting a thorough literature study, a structured questionnaire was created to gather information about the use of social media. The 25 -item structured questionnaire was composed of both closed- and open-ended questions. The tool was initially verified by a group of public health professionals for the relevance of each item, assessment of content validity (0.92), and re-test reliability coefficient (0.91). The Institute ethics committee gave the study its blessing before any data were gathered. Face-to-face interviews were conducted with each participant to gather data, and these interviews were followed by informal educational counselling regarding the possible negative effects of taking common SM. Software known as Epi Info version 7 was used for the analysis of the data. Statistics were used to present the data (i.e. numbers, percentage).

Results

Socio-demographic details:

A total of 400 respondents from rural areas of Baharaich District were participated in the study. Among the participants of the majority 262(65.5%) were males, 171(42.75%) were between 18-30 years, 152(38%) were Graduate, 263 (65.75%) were employed, 231(57.75%) were married and 388 (97%) were Hindu.

Socio-demographic Variables		Frequency	Percent
Gender	Males	262	65.5
	Females	138	34.5
Age	18-30	171	42.75
	31-40	134	33.5

	41-50	63	15.75
	51-60	31	7.75
	61-70	1	0.25
Education	Graduate	152	38
	Intermediate	124	31
	Matriculate	58	14.5
	Middle	27	6.75
	Post Graduate	39	9.75
Occupation	Employed	263	65.75
	Unemployed	137	34.25
Marital status	Married	231	57.75
	Unmarried/ Divorce	169	42.25
Religion	Hindu	388	97
	Muslim	2	0.5
	Sikh	5	1.25
	Others	5	1.25
Total		400	100

Table-1: Socio-demographic characteristics of study participants

Findings related to usage of SM:

Seventy percent of the 400 participants in the study said they had previously used SM. The subjects' use of SM varied depending on their age, from once or less to five times or more as Seen in Figure 1.

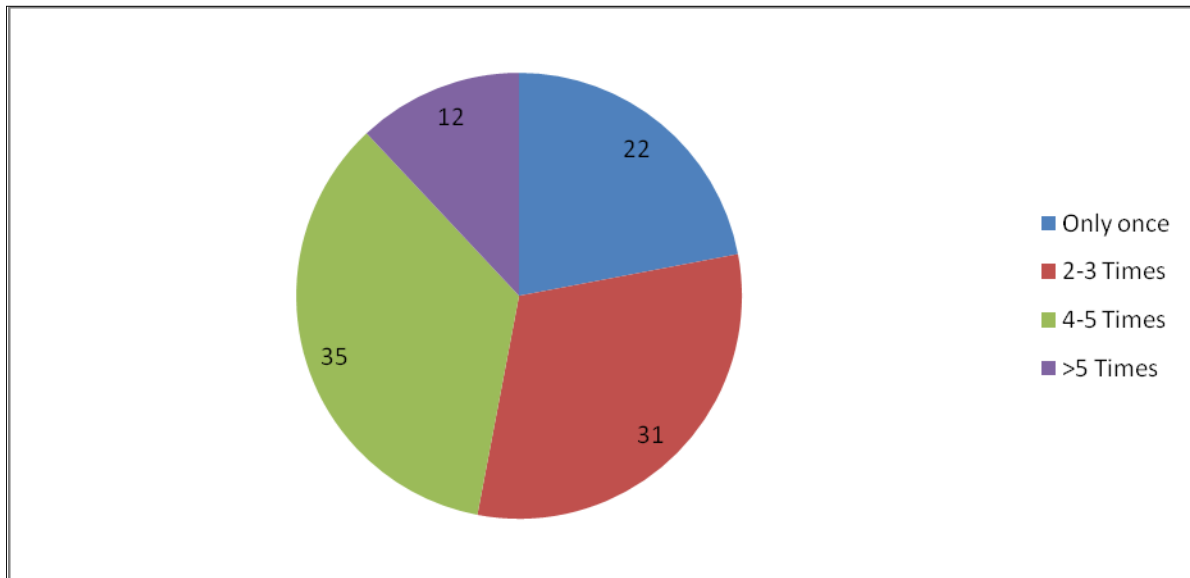


Table-1: Frequency of SM use among the Study Participants

When the participants were asked about the reasons for SM use, the majority of them 33% stated lack of time to visit a doctor as the main reason followed by Ease and convenience (17%),

Avoiding crowd in visiting doctor (14%) and Economical (14%) as Seen in Table 2.

Reasons	Frequency	Percentage (%)
Lack of time	132	33
Minor illness	40	10
Economical	56	14
Quick relief	32	8
Learning opportunity	4	1
Ease and convenience	68	17
Avoiding crowd in visiting doctor	56	14
Unavailability of doctor	12	3

Table 2: Reasons for Self Medication Use

The major source through which the participants learned to use SM were as follows, directly from pharmacist (61%) followed by television/media/google (18%) , prescription of previous illness (12%), friends (12.5%) as Seen in Table 3.

Sources for self medication use	Frequency	Percentage (%)
Directly from pharmacy without prescription	244	61
Prescription of previous illness	48	12
Friends prescription	32	8

Television /media/Google	72	18
Book	4	1

Table 3: Sources of Self Medication Use

The main indications for SM use were headache (35%) followed by fever (32%), then cough/cold/sore throat (21%) as Seen in Table 4

Indications for self medication use	Frequency	Percentage (%)
Headache	128	32
Stomach ache	20	5
Vomiting	12	3
Eye symptoms	4	1
Diarrhoea	32	8
Cough, cold, sore throat	84	21
Fever	112	28
Skin symptoms	4	1
Ear symptoms	4	1

Table 4: Indications for Self Medication Use

The most commonly used drugs for self-medication were paracetamol (34%) followed by nonsteroidal anti-inflammatory drugs (NSAIDs) (30%) and cold remedies (21%) as seen in Table-5.

Drugs/Drug group	Frequency	Percentage (%)
Paracetamol	136	34
Other NSAIDs	120	30
Cold remedies	84	21
GIT drugs	36	9
Antimicrobials	8	2
Herbs/Ayurvedic drugs	8	2
Homeopathic drugs	8	2

Table-5: Frequency of Drugs/Drug Groups Used by the Respondents for Self-medication

Discussion

A sizeable portion of the population in many underdeveloped countries self-medicates. The practise of self-medication is widespread throughout the world, particularly among rural populations. The range and depth of local knowledge on self-medication must be assessed.^{1,2} The current study looked into the frequency and usage patterns of SM in the rural areas of the Baharaich District of Uttar Pradesh.

The study's findings showed that 70% of those who said they had used SM in the past; this prevalence percentage is comparable with earlier findings.¹⁻¹¹ The significant percentage of participants who use SM necessitates prompt care. In keeping with the findings of numerous

studies, the frequency of self-medication use in our study ranged from a minimum of one time to a maximum of five times and above.^{1,2,12}

Lack of time, quick recovery from illness, ease and convenience, avoiding crowds when seeing the doctor, and cost were among the many reasons given by participants for using SM. Similar explanations were given in other Indian research.^{1,2}

The most often utilised classes of medications were paracetamol and analgesics, which is consistent with many previous research.^{2,13}

Participants in the current study mentioned using SM for a variety of ailments, including headaches, fevers, coughs, and stomachaches, among others. These results align with those of other studies.^{1,2,14}

Conclusion

Self-medication is a concerning social indicator. The main cause of irrational drug use in SM is easy access to a broad variety of medications without a prescription, which will lead to future health issues (antimicrobial resistance, an increase in mortality and morbidity), as well as financial loss. Not only for financial reasons, which are typically of utmost concern to policy makers and managers, but also for patient and community health and medical care, it is necessary to promote responsible drug usage in the healthcare system. To ensure the sensible sale and use of OTC medications, authorities must improve the current laws. Additionally, particular pharmacovigilance is required, and any adverse events must be reported by the patient, pharmacist, and doctor. Self-medication can be avoided or reduced in society by raising awareness and educating people about it. Periodic research on people's attitudes, knowledge, and use of SM could shed light on how society's drug use patterns are evolving.

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