

Prevalence and impact of OTC drug in the Aalo, Arunachal Pradesh

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ABSTRACT:

INTRODUCTION: Over-the-counter (OTC) drugs are used to treat the vast majority of illnesses in developing countries. According to WHO, OTC drugs is the selection and used by individuals to treat self-identified illness or symptoms. These are major concerns around the world, mainly in developing countries where OTC drugs are frequently available without a prescription. In our society, most ailments are treated by using OTC medicines. Misuse and abuse of such products are also possibilities. Most of the participants are unconscious about the ill effects of prolong and improper use of OTC analgesics, which can lead to toxicity and severe medication interaction.

METHODOLOGY: A retro-prospective observational study was conducted on the people of Aalo, Arunachal Pradesh to study the prevalence and impact of OTC drug. The study was carried out in various area of Aalo, Arunachal Pradesh, India. 500 samples were taken in the study.

RESULTS AND DISCUSSION: In this study, out of 500 samples 232(46.5%) were male and 268 (53.6%) female. Out of 495 samples, 7.87% samples are in 18-20 age group, 25.85% in 21-30 age group, 29.29% in 31-40 age group, 20.60% in 41-50 age group, 12.92% in 41-50 age group and 3.43% subjects more than 60 years. Out of 495 samples 64.04% samples received OTC drug directly from pharmacy, 18.98% of samples from prescription of previous illness, 8.08% of samples from other's prescriptions, 7.07% of samples from Television advertisement, 2.63% of samples from Books and 0.11% of samples from Journals. 19.79% samples used OTC drug for Headache, 13.93% for Stomach-ache, 8.68% for Vomiting, 3.03% for Eye problems, 5.85% for Cough/ cold, 27.67% for Fever, 1.41% for Skin problem, 1.81% for Ear problem, 8.68% for Muscle/ joint pain, 3.43% for Acidity, 4.04% for Indigestion and 1.61% for Helminthic.

CONCLUSION: The findings of this research state that the use of OTC drugs is very common among the people of Aalo, Arunachal Pradesh, India. The authority should implement the solid rules regarding the sales of OTC. In the concern of utilization of OTC medicines can be minimise by taking a steps to make the pharmacist expertise in OTC drugs and to check the potential effects while dispensing the OTC drugs.

Keywords: Samples, drugs, Disease, ailments, Aalo.

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I. INTRODUCTION

Over-the-counter (OTC) drugs are used to treat the vast majority of illnesses in growing countries. According to WHO, OTC medicines are the selection and used by individuals to treat self-identified illness or symptoms [1]. The WHO reports rational medication use as “when patients receive adequate medication for their clinical needs, at the appropriate doses, and at the least possible cost”. An effective drug treatment, according to this definition, necessitates both patient compliance and medical professional supervision. According to this point of view, an effective pharmacological therapy requires both patient compliance and medical professional oversight [2, 3].

Over-the-counter (OTC) drugs refer to drugs that are legally authorised to be dispensed without a prescription [4]. Some OTC medications relieve pain, itchiness, and other symptoms. Others aid in the treatment of chronic conditions such as joint pain and allergies [5].

OTC analgesics have become common place due to their ubiquitous accessibility and discern safety [6]. OTC drugs promote the illegal drug use and drug addiction. Signs and symptoms of underlying diseases are suppressed as a consequence of uncontrolled utilization of OTC drugs, increasing the incidence of delayed diagnosis, compliances, treatment failure, and drug resistance [7, 8]. OTC drugs also benefit healthcare systems by allowing pharmacists to more effectively use their clinical expertise, increasing pharmaceutical access, and possibly lowering prescription drug costs associated with public funded health programmes. Non-prescription drug availability may lead patients to believe that there's a drug for every ailment [9, 10]. Numerous researches finds that incorrect medication use without expert advice increases pathogen resistance, adverse drug reactions, and drug dependence to extremely high levels [11]. These are major concerns around the world, mainly in growing countries where OTC drugs are frequently available without a prescription. In our society, most ailments are treated by using OTC medicines. Misuse and abuse of such products are also possibilities [12]. Most of the participants are unconscious about the ill effects of prolong and improper use of OTC analgesics, which can lead to toxicity and severe medication interaction [13]. They may take analgesics in higher than recommended doses or in combinations without a valid prescription that increase the risk of toxicity [14]. Patients may be unconscious that OTC analgesics can be found in common cold, cough and flu medications. OTC analgesics affect less percentage of people; their widespread use can cause a minor increase in population risk a clinically significant issue [15].

II. METHODOLOGY

STUDY DESIGN:

- A retro-prospective observational study was performed on the people of Aalo, Arunachal Pradesh to study the prevalence and impact of OTC drug.

Study Site

- The study was carried out in various area of Aalo, Arunachal Pradesh.

STUDY CRITERIA

Inclusion Criteria

- Patients of both genders.
- Patients >18 years of age.

Exclusion Criteria

- Patients <18 years of age.
- Lactating and nursing mothers.
- Pregnant women.
- Patients taking prescription medicine.

Sources of Data

- By conducting patient history interview.

Sample size

- 500 samples.

Duration of study

- The study was performed for duration of 6 months.

III. RESULTS AND DISCUSSION

Gender distribution of OTC Drugs

In this study, out of 500 samples 232(46.5%) were male and 268 (53.6%) female are shown fig-1

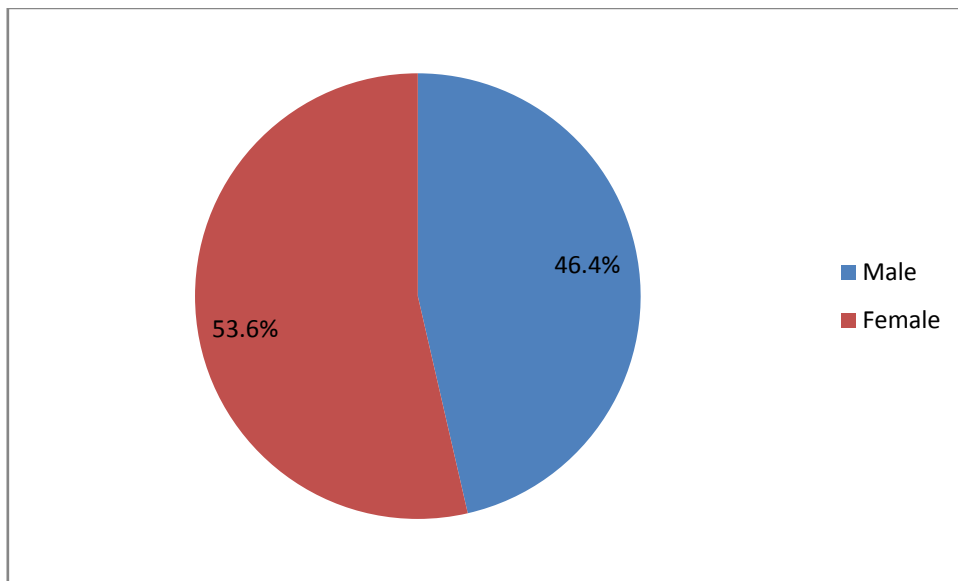


Figure-1: Gender distribution of OTC Drugs

Occupational status of subjects

Out of 500 samples 15% were employed, 19.6% students, 39.2 house wife, 23.8% Self-employed and 2.4% unemployed are shown in figure-2

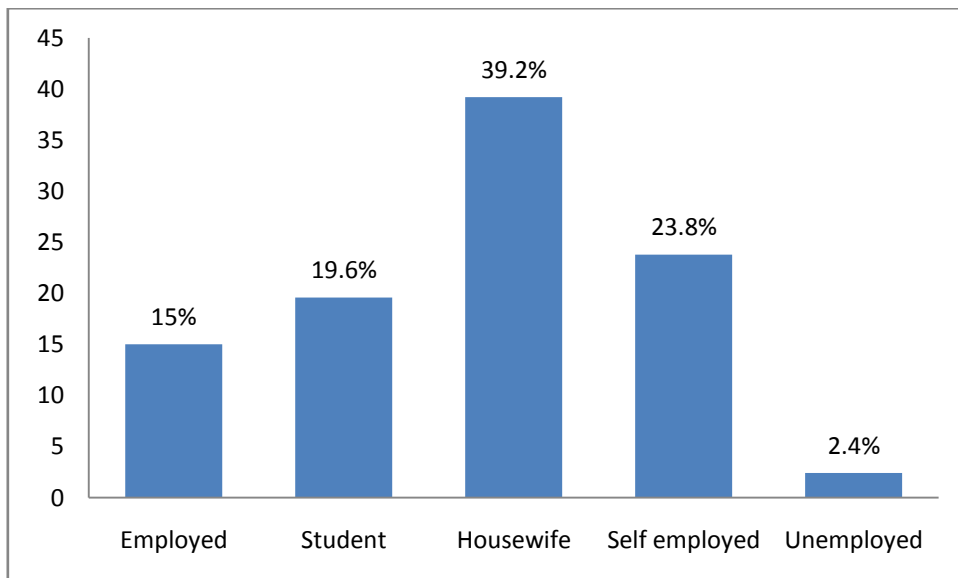


Figure-2: Occupational status of subjects

Distribution of subjects according to age group

Out of 495 samples, 7.87% samples are in 18-20 age group, 25.85% in 21-30 age group, 29.29% in 31-40 age group, 20.60% in 41-50 age group, 12.92% in 41-50 age group and 3.43% subjects more than 60 years are shown in table-1

Table-1: Distribution of subjects according to age group

Age group (years)	Number(n)	Percentage (%)
18-20	39	7.87
21-30	128	25.85
31-40	145	29.29
41-50	102	20.60
51-60	64	12.92
>60	17	3.43

Source of OTC Drug

Out of 495 samples 64.04% samples received OTC drug directly from pharmacy, 18.98% of samples from prescription of previous illness, 8.08% of samples from other’s prescriptions, 7.07% of samples from Television advertisement, 2.63% of samples from Books and 0.11% of samples from Journals are shown in figure-3.

Out of 500 samples used OTC drug and 5 samples never used OTC drugs.

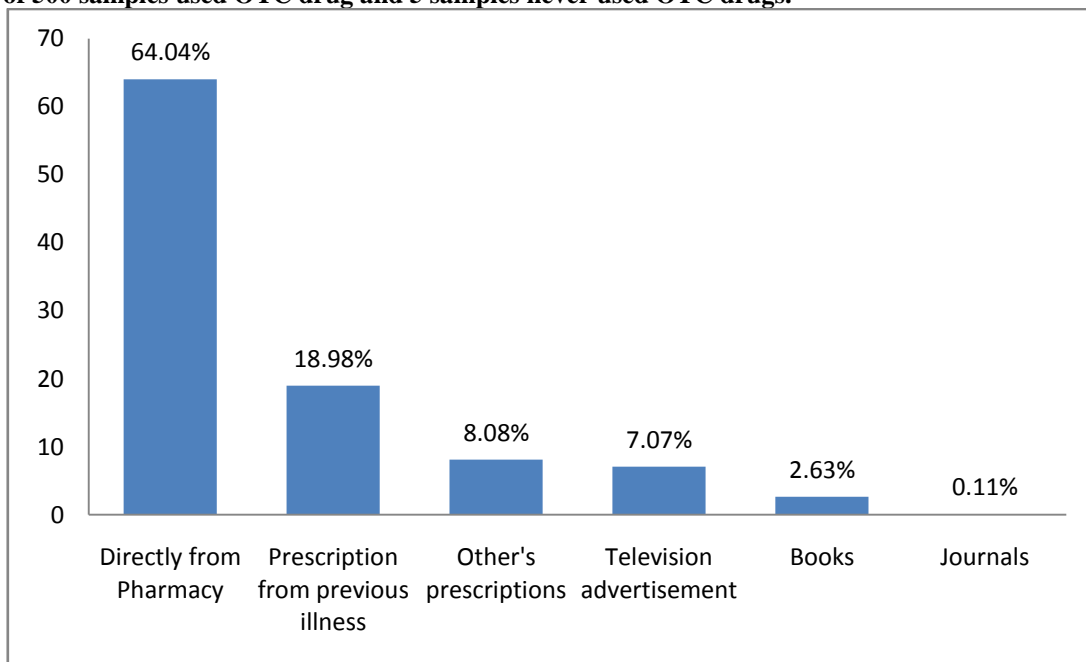


Figure-3: Source of OCT Drug

Aliment for which OTC drug is taken

19.79% samples used OTC drug for Headache, 13.93% for Stomach-ache, 8.68% for Vomiting, 3.03% for Eye problems, 5.85% for Cough/ cold, 27.67% for Fever, 1.41% for Skin problem, 1.81% for Ear problem, 8.68% for Muscle/ joint pain, 3.43% for Acidity, 4.04% for Indigestion and 1.61% for Helminthic respectively are shown figure-4.

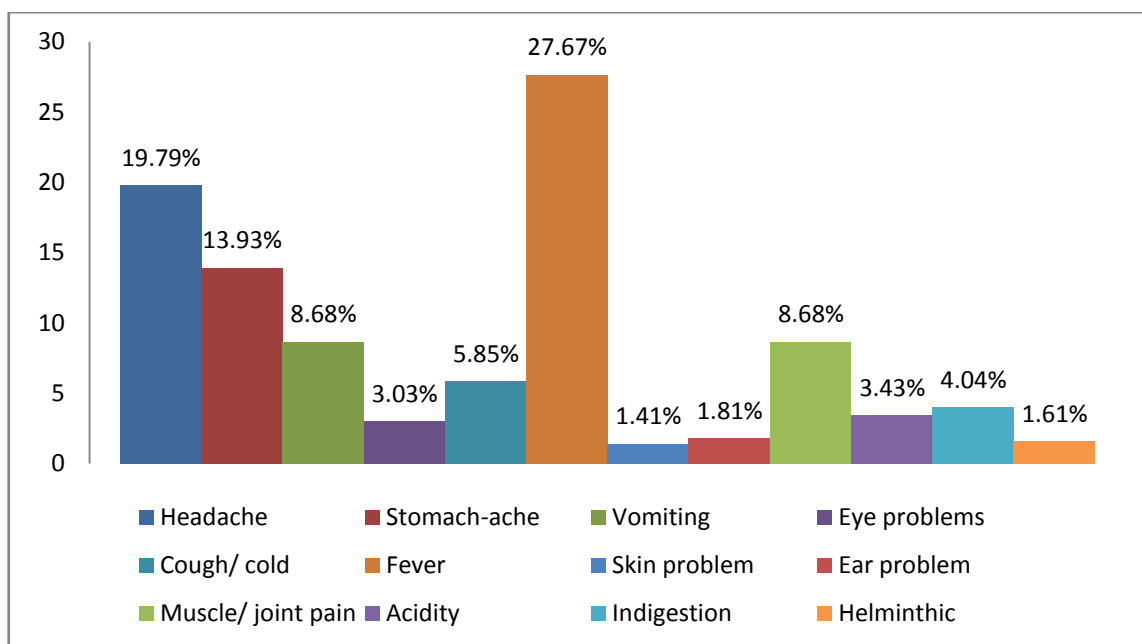


Figure-4: Ailment for which OTC drug is taken

Distribution of frequency of OTC drug

20.2% samples used OTC drug once a week, 4.84% once in 15 days, 35.75% once a month and 19.19% rare respectively are shown in table-2.

Table-2: Distribution of frequency of OTC drug

Frequency	Number(n)	Percentage (%)
Once a week	100	20.2
Once in 15 days	123	24.84
Once a month	177	35.75
Rare	95	19.19

Distribution of Reasons of OTC drug taking

11.11% taking OTC drug due to Lack of time, 40.2% due to Minor illness, 1.61% due to Economical, 32.52% due to Quick relief, 12.52% due to Ease and convenience, 1.41% due to Avoid Crowding and 0.6% due to Un availability of doctor are shown in table-3.

Table-3: Distribution of Reasons of OTC drug taking

Reason	Number(n)	Percentage (%)
Lack of time	55	11.11
Minor illness	199	40.2
Economical	8	1.61
Quick relief	161	32.52
Ease and convenience	62	12.52
Avoid Crowding	7	1.41
Un availability of doctor	3	0.6

Distribution of OTC drugs

Total OTC drug used are 1265, out 1265 13.2% Pain killer , 16.6% Antibiotics , 11.77% Vitamins/minerals, 12.64% Antacid, 0.55% Skin care product, 8.93% Cough, 10.83% Fever product, 3.39% Harvals product, 2.21% Laxatives, 1.18% Eye care product, 0.94% Ear care product, 8.45% Anti-diarrhoeal, 6.4% Haemorrhoids and 2.84% Anti-helminthic are shown in figure-5.

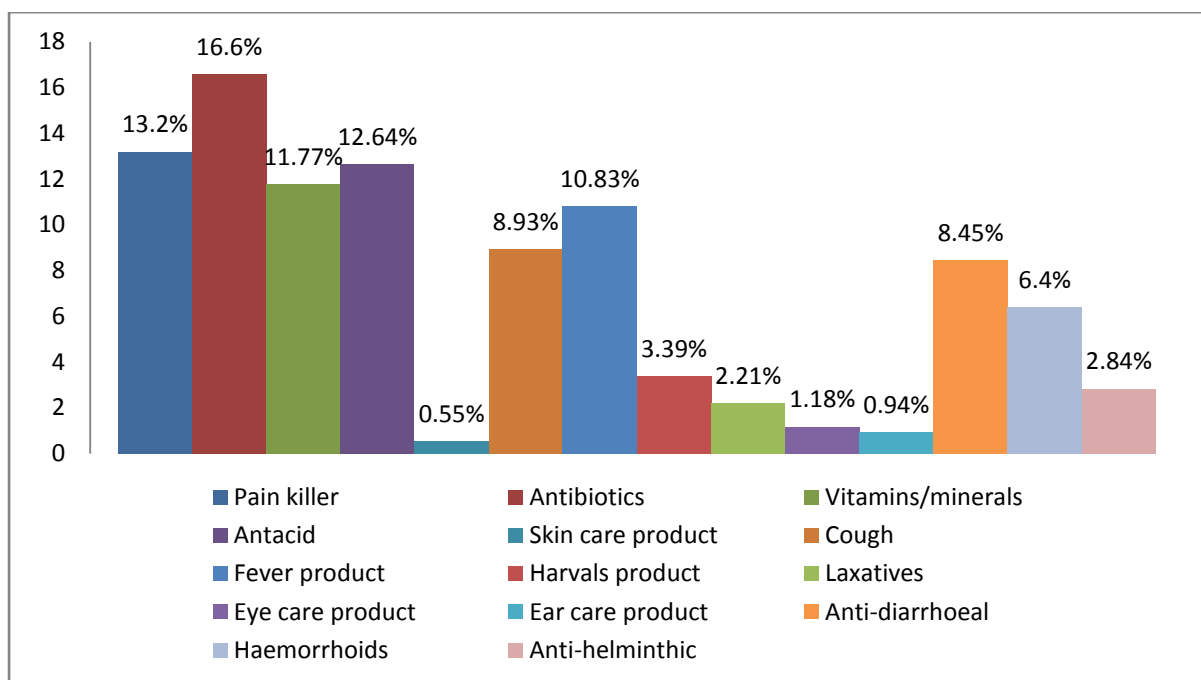


Fig-5: Distribution of OTC drugs

IV. CONCLUSION

This research has found that the use of OTC drugs is very common among the people of Aalo, Arunachal Pradesh, India. Expiate by the smooth abundant of drugs and sources of OTC drugs are directly from pharmacy by the most of the samples. A large number of samples do not have a minimum knowledge about the adverse effects of OTC drugs. Potential concern of abuse of OTC drugs could be overstated to the people of Aalo to decrease the risk. The authority should implement the solid rules regarding the sales of OTC. In the concern of use of OTC drugs, can be minimise by taking a steps to provide knowledge of OTC dugs to the pharmacist to check the potential effects while dispensing the OTC drugs.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

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