



Over the counter drug use: Assessing the perception of the community

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ABSTRACT

The drugs that can be easily purchased from any medical store without prescription are known as "Non Prescription" drugs. Such non prescription drugs are used for self medication. Non Prescription drugs are commonly termed as "Over the counter" drugs. There is always certain degree of danger in consuming OTC drugs even though some people consider their use as completely safe. The study is designed with an objective to understand the pattern of Over the Counter drugs use in a locality of Dehradun by using a structured questionnaire. An Observational, Descriptive study was conducted. The data was collected using a Questionnaire. The present study was carried out in 350 participants. After analyzing the results it was found that 100% participants follow self medication and consume OTC drugs. The number of females (52%) were more as compared to males(48%). Paracetamol (62%) was the most commonly consumed OTC drug. Fever (37%) was the most common condition for which people use OTC drugs. The most general reason of practicing self-medication that was reported in our study was easy convenience (23%). The study also concludes that the most common source of relevant information about OTC drugs were friends/relatives. (28%). The use of OTC drugs is fast increasing as they are easily available. However, poor awareness about their consumption end up in many side effects. This study will help gain knowledge about peoples perceptive which would ultimately help forming new guidelines for safer use of OTC drugs.

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INTRODUCTION

The practice of purchasing and ingesting drugs without taking advice from a Health Professional is termed as Self-medication. The prime reason of an increase in the use of drugs without taking advice from a medical practitioner is the advancement in the use of internet ([Shankar et al., 2002](#)).

Drugs that can be directly sold without any restriction to the general public is termed as Over the Counter drugs.

Proper and safe use of OTC drugs can be of great help to the health care system, and as stated by the ([WHO, 1995](#)) WHO guidelines practicing safe and responsible self medication can widely cure and prevent those conditions which do not require vigilant medical supervision ([FDA, 2020](#)).

Self medication has become an alarming health care practice in a country like India ([Greenhalgh, 1987](#)).

As it is rightly said that every practice has its own advantages as well as disadvantages, self medication practice is no different. There is always some degree of risk associated with OTC drugs use.

Reduction in the total time spent in waiting outside a physician's clinic, lesser load on the medical service providers and cost saving practice especially in eco-

nomically backward countries of the world where there are rare resources available are some of the positive attributes/ advantages of practicing self medication (Sawalha, 2015).

Some prime disadvantages of using Over the Counter drugs is that the self-medication practices may increase the burden on the patient like certain other expenses as consuming drugs without proper knowledge may many a times lead to side effects and adverse effects that would ultimately require medical attention by a physician.

Many studies have been carried out in the past which have reported that the most widely used OTC drugs have been largely reported to cause a large set of adverse health reactions (Kiyong and Lauwo, 1993) or various other fatalities (Stevenson et al., 2001).

Over the Counter (OTC) drugs can easily be purchased from pharmacies or any other outlet without a prescription.

In earlier times drugs were easily sold without any regulations. But after Food, Drug and Cosmetic Act came into play the sale of drugs became restricted. Even later a procedure was created with the initiation of FD and C Act which further restricted the marketing of certain drugs. These class of drugs were termed as prescription only drugs. (Harrington, 2002) The second category of drugs was the OTC drug class or non prescription drugs.

The general public considers the use of OTC drugs as completely safe because it can be easily purchased without the supervision of a medical practitioner. However, recent studies have shown that Over The Counter medicines have a high possibility for harm (Raynor et al., 2007).

India has no legal authorization for the use and sale of OTC drug products.

In India, all the drugs which are not listed in the category of prescription-only drugs are considered as OTC drugs which can be used for self medication. Drugs and Cosmetic Act and Rules have certain set of schedules. The drugs listed in Schedule X and H of the act comes under the category of prescription-only drugs. While others can be sold without any prescription (Ghosh et al., 2015).

Different Committees are working towards promoting safe and effective use of self-medication and making people as well as the government aware regarding OTC drugs use (Singh et al., 2015).

India is at present among the top 12 countries when it comes to the use of Over The Counter drug size. Looking at the present situation it is expected that India in terms of the OTC drugs use in the coming five years it will probably reach the 9th position.

It is very obvious with the precedent research and reviews that self medication and self diagnosis improves the health concern knowledge of the individuals and reduces the economy associated burden to health care (Bennadi, 2014).

And even though Over the Counter drugs are supposed to be totally harmless and effective, but they are still not completely free of risks. They may many a times cover the primary diseases and may sometimes result in several adverse effects.

After an extensive review about the present situation of OTC drugs use in India a study was planned in order to understand the pattern of OTC drugs use in a locality of Dehradun.

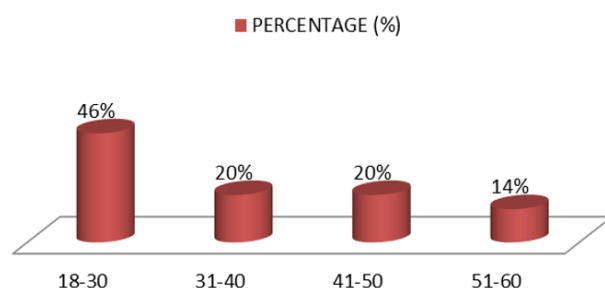


Figure 1: Age distribution of individuals taking OTC drugs

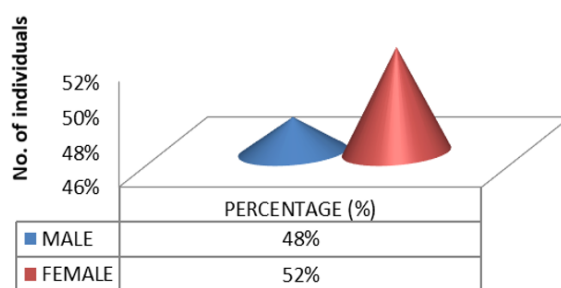


Figure 2: Gender distribution of individuals taking OTC drugs

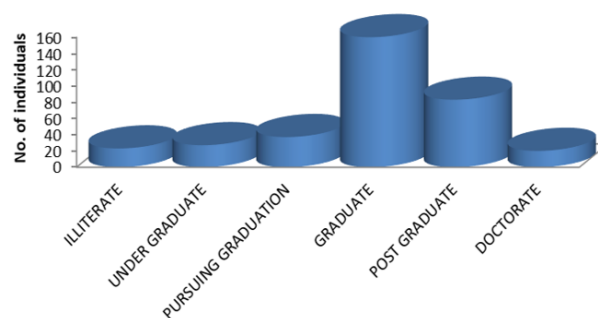


Figure 3: Qualification level of individuals taking OTC drugs

Table 1: Most commonly reported side effects

Side effects reported	No. of individuals(116)*
Back pain	07*
Skin allergies	08*
Sleepiness	10*
Acidity	37*
Stomach Upset	19*
Headache	22*
Nausea, vomiting	13*

*Results show number of individuals experiencing different side effects

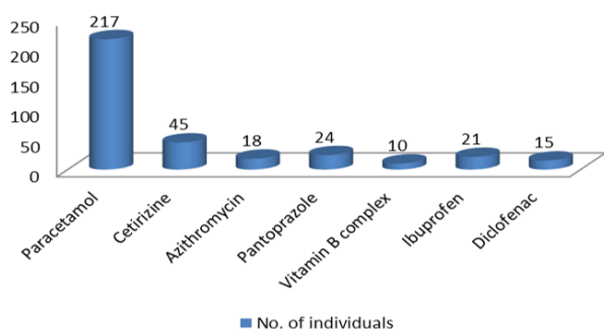


Figure 4: Most commonly consumed OTC drugs

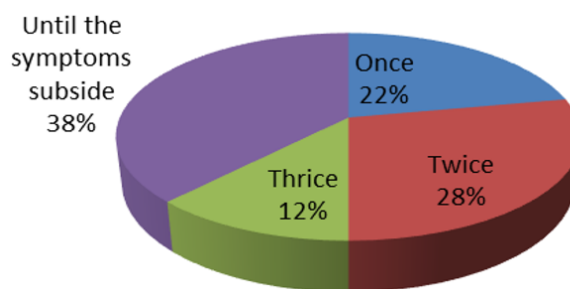


Figure 7: Frequency of taking OTC drugs in a day

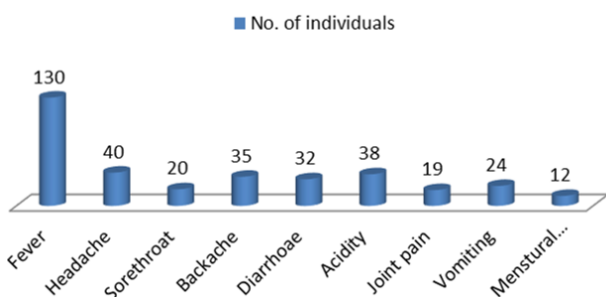


Figure 5: Most common condition for consuming OTC drugs

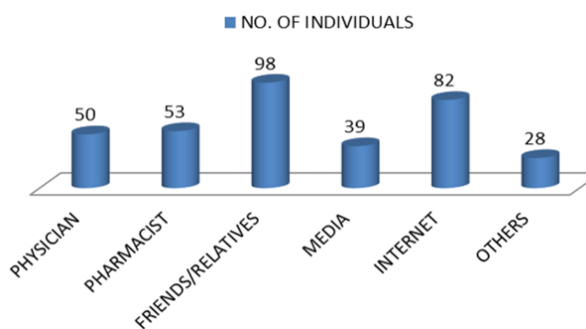


Figure 8: OTC drugs information source

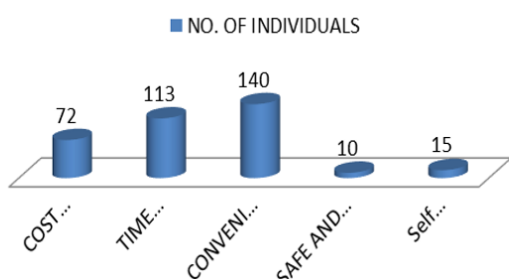


Figure 6: Most common reason for consuming OTC drugs

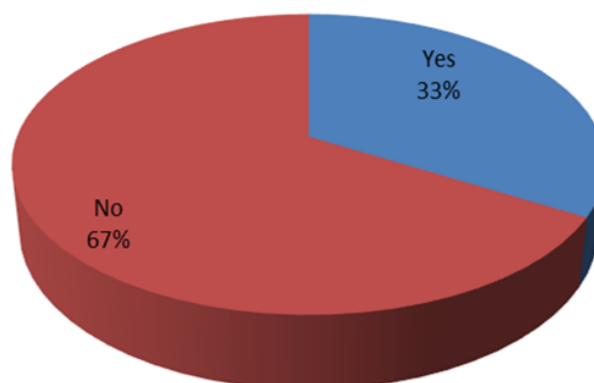


Figure 9: Distribution on side effects experienced by individuals

METHODOLOGY

An observational, descriptive study based on a questionnaire designed was conducted in a locality of Dehradun, Uttarakhand among the general public. The study was designed to be of three months.

The data was collected from the general public. The study population was randomly selected. Questionnaire was constructed for the people participating in the study. The questionnaire designed for the individuals participating in the study consisted of 15 questions. Questionnaire for the general public includes questions regarding the socio-demographic characteristics and questions to evaluate the knowledge of the general public regarding the use of OTC drugs.

The individuals who took part in the study were individuals over the age of 18.

The raw data which was obtained through the survey was analyzed using SPSS for statistical analysis and the results were calculated.

RESULTS AND DISCUSSION

During the 3 months study period, in all 350 individuals were a part of the survey study. Out of 350 valuable data obtained, 100% individuals practiced self medication.

The individuals who took part in the study 18 years to 60 years was the range of the age group.

Age group of 18 to 30 years was the group in which highest percentage (46%) of participants were found taking OTC drugs. While, the lowest percentage (14%) of individuals were found in the age group of 51 to 60 years as shown in Figure 1.

The study carried on 350 general public shows a positive correlation between the use of OTC drugs with respect to age.

The number of female (52%) individuals taking OTC drugs was more as compared to the male (48%) individuals as shown in Figure 2. This particular finding is comparable to the conclusion of the study carried by (Badiger *et al.*, 2012) where male individuals were 39% and 40% respectively.

The study showed that maximum number of individuals taking OTC drugs were graduates as shown in Figure 3.

In accordance with the data collected Paracetamol (62%) was the most widely consumed Over The Counter drug which was followed by Cetirizine, Pantoprazole, Ibuprofen and Azithromycin as depicted in Figure 4.

In the study fever (37%) was found to be the most common reason of consuming OTC drugs which is clearly shown in Figure 5, which is similar to the result of the study conducted by (Mourya *et al.*, 2019).

In the study the most common benefit for consuming Over the Counter drugs was "convenience" (40%) followed by "time saving" (32%) and "cost saving" (21%) advantages of OTC drug use which is clearly shown in Figure 6. The results were similar to study carried out by (Das *et al.*, 2017) in which "convenience" were the most widespread reasons for which people prefer the use of OTC drugs.

The results show that maximum (38%) individuals consumed OTC drugs on a daily basis until their symptoms subside, as shown in Figure 7.

The study also concludes that information from relatives and friends was the most familiar source (28%) which is well depicted in Figure 8.

In our study it was found that maximum individuals (67%) did not experience any side effects by consuming OTC drugs however a small proportion of 33% individuals had experience some side effects on consuming OTC drugs as clearly shown in Figure 9.

The most commonly reported side effect was acidity (32%) followed by headache (19%) and stomach upset (16%) as reported by the individuals who participated in the study which is indicated in Table 1.

CONCLUSION AND FUTURE SCOPE

Various factors are responsible for the rise in the use of Over the Counter drugs by the general public. There are instances where there is inapt use of OTC drugs. Therefore, there is a necessity to educate the individuals about the pros and cons of practicing self medication with OTC drugs.

Appropriate measures need to be taken and a proper prescription system has to be streamlined and implemented. Safe and effective OTC drugs use can be practiced if proper awareness programs are conducted among the general public. Such awareness programs can also make the people more adaptive.

The present study can be further carried out on a larger level taking a large sample size which would help us to understand the perception about OTC drug use of individuals and help make laws that would make the OTC drug use safer for the general public.

Conflict of Interest

None.

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REFERENCES

- Badiger, S., Kundapur, R., Jain, A., Kumar, A., Pattan-shetty, S. 2012. Self-medication Patterns Among Medical Students in South India. *5(4):217-220*.
- Bennadi, D. 2014. Self-medication: A current challenge.
- Das, M., Choudhury, S., De, R., Roy, R. K. 2017. The Extent and Factors Associated with Non-Prescription Medicine Use in Eastern India—A Cross-Sectional Survey. *Journal of Young Pharmacists, 9(4)*.
- FDA 2020. Understanding Over-the-Counter Medicines. [Last updated: 16/05/2018. Accessed on: 28/03/2020]. *U.S. Food & Drug Administration*.
- Ghosh, A., Biswas, S., Mondal, K., Haldar, M., Biswas, S. 2015. A study on knowledge and practices of over the counter medications among 2nd year medical students. *World J Pharm Pharm Sci, 4:1074-81*.
- Greenhalgh, T. 1987. Drug prescription and self-medication in India: An exploratory survey. *Social Science & Medicine, 25(3):307-318*.
- Harrington, P. 2002. Analysis of the movement of prescription drugs to over-the-counter status. *Journal of Managed Care Pharmacy, 8(6):499-508*.
- Kiyong, K. S., Lauwo, J. A. K. 1993. Drugs in home: danger and waste. *World Health Forum, 14:381-384*.
- Mourya, A., Mary, C., James, C., Jose, J., Srinivasan, R. 2019. A Survey on Over The Counter Drug usage in the Community. *Journal of Drug Delivery and Therapeutics, 9(2-s):406-416*.
- Raynor, D., Blenkinsopp, A., Knapp, P., Grime, J., Nicolson, D., Pollock, K., Dorer, G., Gilbody, S., Dickinson, D., Maule, A., Spoor, P. 2007. A systematic review of quantitative and qualitative research on the role and effectiveness of written information available to patients about individual medicines. *Health Technology Assessment, 11(5)*.
- Sawalha, A. F. 2015. Assessment of self-medication practice among university students in Palestine: therapeutic and toxicity implications. *IUG Journal of Natural Studies, 15(2)*.
- Shankar, P. R., Partha, P., Shenoy, N. 2002. Self-medication and non-doctor prescription practices in Pokhara valley, Western Nepal: a questionnaire-based study. *BMC Family Practice, 3(1)*.
- Singh, N. K., Trivedi, N., Elnour, A. A., Patel, I. 2015. Evaluation of knowledge, attitude and practice about self-medication among rural and urban north Indian population. *Age, 18(30):31-40*.
- Stevenson, R., MacWalter, R. S., Harmse, J. D., Wilson, E. 2001. Mortality during the Winter Flu Epidemic — Two Cases of Death Associated with Self-Medication. *Scottish Medical Journal, 46(3):84-86*.
- WHO 1995. contribution to updating the WHO guidelines for developing national drug policies. *World Health Organization, pages 19-23*.