A study on knowledge, attitude and practice of over the counter drugs among 3rd year medical students of a teaching hospital in Dakshina Kannada, South India

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Abstract

Introduction: Over the Counter (OTC) drugs are medicines, available without a prescription, and hence also referred to as ‘nonprescription drugs’. These drugs include tonics, iron preparations, vitamin medications, analgesics, NSAIDS, cough syrups, dermatological products, drugs for pyrexia, laxatives etc. Usage of OTC drugs can lead to unwanted drug interactions, misuse / abuse of drugs and ADRs. So it is important to assess people’s knowledge and understanding about OTC drugs.

Methodology: A cross-sectional study was conducted during October 2017 with a self-structured and pre-validated questionnaire. Study group consisted of ninety 3rd year medical students who have completed the Pharmacology course. Data were analyzed using descriptive analyses.

Results: In this study, it was observed that 94.5% of the students were aware of OTC drugs. Among 90 students, 87 students (96.7%) have used OTC drugs at least once. Fever (43.3%) followed by headache (38.9%) were the most common illnesses for which OTC drugs used. Difficulty in consulting doctor and easy availability of drugs were some of the reasons for using OTC drugs. Medical books and advertisements were the most common source of information used to know about OTC drugs. Most number of students (76.7%) were aware of toxicities and interactions of drugs which could be seen because of irrational use of OTC medications.

Conclusion: This study shows that majority of the students were aware of OTC drugs and used them regularly. Fever, headache was the most common illness for seeking medication. Easy availability, difficulty in consulting doctor were some of the reasons for using OTC drugs. Majority of the students used medical text books and advertisements as the source of information to know about OTC drugs. There is also need to create awareness and educate students regarding advantages and disadvantages of using OTC drugs by the teaching faculties in the institutions.

Keywords: Attitude, Medical students, Knowledge, Over the Counter, Pharmacology, Practice.
interactions, ADRs, misuse / abuse of drugs. So it is advisable to assess people’s knowledge and awareness about OTC drugs.

The prescription drugs are listed under schedule ‘H’ in India. There are about 570 molecules in schedule ‘H’ category that are stocked in a total of 5 – 8 lakh retail chemists. At present non-pharmacy stores can sell a few drugs on the schedule ‘K’ of the drugs and Cosmetics act in rural areas in villages whose populations is less than 1000.6, 7

FDA appoints a team of experts to review the safety and efficacy of all OTC drugs. These OTC team members have been assigned the products on a category basis e.g.: analgesics, antacids and anesthetics. The prerequisites of an NDA for prescription and OTC drugs are similar. A medication to be sold as OTC, according to the FDA regulations, it must be safe and effective.8, 9

An OTC drug is safe when it has low prevalence of adverse reactions and side effects under conditions of widespread accessibility. Safety depends on using medications appropriately, for e.g.; most headaches are not threatening, but in rare cases a headache is an early warning of a brain tumor or hemorrhage. People must use commonsense in determining when a symptom or illness is minor and when it needs medical attention and consult a doctor if they are unsure.10

**Materials and Methods**

A cross-sectional analysis was conducted in the month of November 2017 with a self-structured and pre-validated questionnaire. Study population included 90 medical students who have completed the pharmacology course. This study was a questionnaire based exploratory study. A self-developed questionnaire comprising of both open-ended and close-ended questions was prepared and was given to students of III year medical students. Data was analyzed and associations were tested using the Chi square test. The results were expressed as counts and percentages.

**Results**

Table 1:

| Conditions               | Percentage |
|--------------------------|------------|
| Head ache                | 38.9%      |
| Fever                    | 43.3%      |
| Gastritis                | 13.3%      |
| Skin problem             | 1.1%       |

**Discussion**

In this study, it was observed that 94.5 % of the students were aware of OTC drugs. Among 90 students, 87 (96.7%) students have used OTC drugs at least once. Fever (43.3%) and headache (38.9%) were the most common illness for which OTC drugs used. Difficulty in consulting the doctor and easy availability of drugs were some of the reasons for using OTC drugs. Medical books and advertisements were the most common source of information used to know about OTC drugs. Large numbers of students (76.7%) were aware of toxicities and interactions of drugs, which could be seen because of irrational use of OTC drugs.

**Conclusion**

This study shows that majority of the participants were aware of OTC drugs and used them regularly. Fever, headache were the most common ailments for seeking medication. Easy accessibility, finding it cumbersome to go to doctor were some of the reasons for using OTC drugs. Majority of the participants used
medical text books and advertisements as the source of information to know about OTC drugs.

There is also need to create awareness and educate students regarding advantages and disadvantages of using OTC drugs by the teaching faculties in the institutions.

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