



**A STUDY ON KNOWLEDGE AND PRACTICES OF OVER THE COUNTER (OTC) MEDICATIONS AMONG 2<sup>nd</sup> YEAR DENTAL STUDENTS**

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**ABSTRACT**

Over the Counter (OTC) drugs are medicines which are sold directly to a consumer without any prescription from the pharmacy. Trend of using OTC drugs/self-medication is high in India. Self medication increases the chances of illicit use of drug and can lead to drug dependency. Due to uncontrolled use of OTC drugs, signs and symptoms of underlying diseases are suppressed hence incidence of delayed diagnosis, complications, treatment failure and drug resistance are increasing. Use of Over the counter drug as well as self – medication is a very common problem in India. Dental students are of no exception at this malpractice. Hence the objective of this study to assess the knowledge and practices of OTC drugs among the dental students.

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**INTRODUCTION**

It is common for the people to fall ill and to use herbs, medications etc., for treating themselves. Every day, people throughout the world act on their own health through self medication which is now being considered as a component of self care. Some governments encourages use of self education for minor illness [2]. Over-the-counter (OTC) drugs are medicines sold directly to a consumer without a prescription from a healthcare professional, as compared to prescription drugs, which may be sold only to consumers possessing a valid prescription. In India, though there is no legal recognition of the phrase 'Over the Counter' drug, all the drugs which are not included in 'prescription drugs' are considered as OTC drugs [1]. Studies revealed that there is an increase in trends of self- medications particularly among the youth. This can be attributed to socio-economic factors, life style, ready access to drugs, the increased potential to manage certain illnesses through self-care, and greater availability of medicinal products, socio-demographic, epidemiological, availability of healthcare and health professional, law, society and exposure to advertisement; high level of education and professional status[6].

Trend of using OTC drugs is prevalent in India. Though self-medication is not a great threat, it increases the chances of illicit use of drugs. Due to the uncontrolled use of OTC drugs, the signs and symptoms are underlying are suppressed thereby increases the incidence of delayed diagnosis, complications,

treatment failure and drug resistance[1]. These are more prevalent in developing countries as antibiotics are more often available without prescription. Dental students are of no exception at this malpractice. Hence, the purpose of this study is to evaluate the knowledge and practices of OTC drugs among the 2nd year dental students.

**MATERIALS AND METHODS**

A questionnaire for this study was prepared based on the questionnaire by Aritra Ghosh et.al. This questionnaire was given to about 100 students studying in Saveetha dental college. The information pertaining to the pattern of OTC drugs use, reason and indication for OTC drugs use, list of drugs commonly used for self-medication were included in the questionnaire. The results were analysed and studied.

**RESULTS**

In this study, 66% of females and 34% of males were participated. Out of 100, 68% of the students know what OTC drugs are and 61% of the students know the name of some drugs which fall under this category. The students were asked to fill the questionnaire and the responses were studied. The students were asked for the reasons for taking these OTC drugs. About 37% of the students reported that they use these drugs as they are familiar with the disease and it's remedies. About 35% of that they use these drugs as they are familiar with the disease and it's remedies. About 35% of the students reported as it's easy and convenience for use and also thinking disease is not serious. About 19% of the students using it as

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# A Study On Knowledge And Practices Of Over The Counter (Otc) Medications Among 2nd Year Dental Students

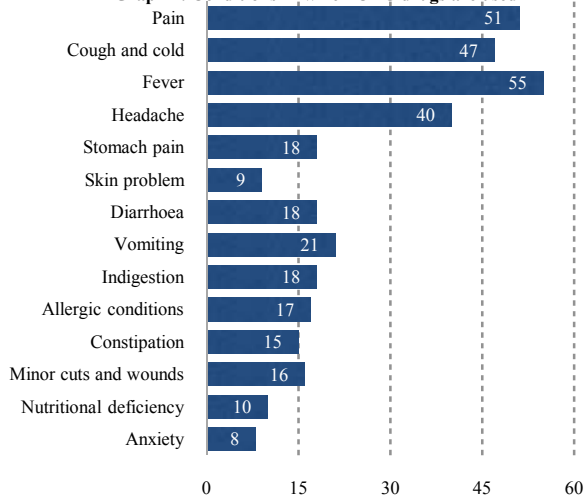
it's time saving and only 10% of the students are using it thinking the cost of physician's service (Table : 1).

**Table 1** Reasons of using OTC drugs

Reasons of using OTC drugs	Response no.(%)
Thinking disease is not serious	35%
Familiar with the disease and it's remedies	37%
Easy and convenience	35%
Time saving	19%
Cost of physician's service	10%

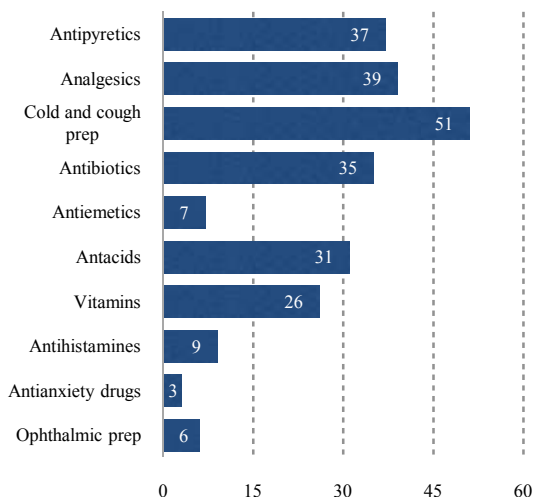
They were asked about the conditions for which they are using these OTC drugs. They used OTC drugs for fever (55%), pain (51%), Cough and cold (47%), headache (40%), vomiting (21%), stomach pain (18%), diarrhoea (18%), indigestion (18%), allergic conditions (17%), minor cuts and wounds (16%), constipation (15%), nutritional deficiency (10%), skin problems (9%), and anxiety (8%) (Graph :1).

**Graph 1: Conditions in which OTC drugs are used**



Graph.2 shows the commonly used drugs which were cough and cold prep (51%), analgesics (39%), antipyretics (37%), antibiotics (35%), antacids (31%), vitamins (26%), antihistamines (9%), antiemetics (7%), ophthalmic prep (6%) and anti-anxiety drugs (3%).

**Graph 2: Drugs used commonly as self medication**



About 45% of the students reported that they use self-medication after 1 day of medical illness and 32% of the students used it after 2-3 days of illness. Remaining students reported that they use OTC drugs within few hours of illness.

Out of 100, only 70% of the students were aware of the harmful effects in self-medication. Only 43% of the students experienced adverse effects after using these drugs. Out of 43, 21 students experienced got vomiting (48.8%), 17 students experienced both diarrhoea and nausea, and few experienced allergy (10%), abdominal cramps (8%) and sedation (6%). Out of 100, 81% of the students are aware of the contraindications of these drugs during pregnancy and in children. About 45% of the students got these drugs in pharmacy by mentioning their names and 42% of the students by mentioning the symptoms. Remaining got these drugs by showing old prescriptions. Out of 100, 64% of the students consumed these drugs as per the instructions in the package insert while remaining by asking the people who previously used these drugs.

## DISCUSSION

Before discussing the results, it's better to discuss about the limitations of this study. This study was only taken across the 2<sup>nd</sup> year dental students of a registered dental college. This study does not include the students of other colleges and the results are applicable only to the students who has participated.

Doctors and pharmacists play a very important role in creating awareness about self-medication by educating the patients. Prior to suggesting any OTC medications, they should thoroughly assess the nature and extent of the patient's condition and recommend that they seek expert care when needed. The motivating factors of self-medication could be: easy availability of drugs in the pharmacy without any valid prescription, lack of proper control over medical advertising and low medical knowledge among people [3].

The trend of using OTC drugs is prevalent among dental practitioners too. In our study, all students are using OTC drugs. It is clear that, most common reasons for using OTC drugs were knowing remedy of the diseases (37%), minor ailments (35%) and easy and convenient availability of drugs (35%). Most common reason of knowing remedy of the disease is unique reason for this study group leading them too far to inappropriate self-medication and can expose the participants to risk associated with inappropriate medication. From graph.2 it's clear that most common drugs used by the participants were cold and cough prep (51%), analgesics (39%), antipyretics (37%) and antibiotics (35%). Inappropriate use of antibiotics also leads to harmful effects like antibiotic resistance which is a major concern these days [1].

About 23% of the students used self-medication within few hours of illness. This shows their complete unawareness in harmful effects of OTC drugs. About 30% of the students are not even aware of the harmful effects in self-medication. About 43% of the students experienced adverse effects after using these drugs. About 19% of the students are not aware of the contraindications of these drugs with pregnancy and

children. All these awareness may lead to harmful effects of these drugs.

There are many reasons for the increased likelihood of self-medication among dental students. These students have easy access to information from medical books, drug indices, literature, internet search and from other senior dental students, so they irrationally use drugs more commonly than general population. In addition, as they are dental students, they can have medications more easily than other general people from pharmacy.

## CONCLUSION

From this study, it is clear that usage of OTC drugs is more prevalent among dental students, facilitated by books and information from internet. A significant number of students are unaware of the adverse effects of the medication that they themselves take and suggest to others. Being dentists, this use of OTC drug emerge as a great issue as they are the one who suggest medicine to patients and other family members who seek their help. Problems related to the appropriate usage of these drugs should be emphasised to the students. Efforts must have to be taken to educate people about these drugs.

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