Original Research Article

Pattern of self-medication among dental students in private institute

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Abstract

Self-medication is basically the practice of taking of drugs or medication without any prescription from the health care providers. A prospective, cross-sectional, questionnaire-based study carried out on 181 Dental students, selected by simple random sampling from January-June 2014. Data was collected and analyzed for number and percentage. We found that 90.5% students reported SM in the preceding one year, 83.8% students followed allopathic system of medicine. Cough and cold were the most frequent (84.9%) reported illness and the commonly used drugs for SM were antipyretics and analgesics (95.6%). It is alarming pace and is important factor for increased resistance to drugs. To eradicate this problem, education of students, public and health professionals should be carried out.
Keywords: Awareness, Dental students, Questionnaire, Self-medication.

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INTRODUCTION

Since long numerous herbs, medications etc have been used by human beings to treat themselves. This practice of self care which is associated with self-medication (SM) is being practiced throughout the world. Self-medication is basically the practice of taking of drugs or medication without any prescription from the health care providers. Evidence suggests that self-medication is being widely practiced in both the developed[1] and developing countries[2]. This trend is more so in the developing countries and the factors attributed include lack of access to health care and easy availability of drugs in the open market as over-the-counter drugs and due to the poor regulatory practices[3]. SM involves drugs which have the potential of doing both good and bad to the health of the individual and thus has both positive and negative aspects. On one hand, appropriate SM can readily relieve from acute medical conditions, may be cost effective, can be a time saver while on the other, increased resistance to pathogens, adverse drug reactions, wastage of resources, drug dependence are the disadvantages[4]. Of the numerous factors that favour SM, high level of education and professional status is said to influence the practice of SM. Students of health sciences differ from the general population in that they are exposed to knowledge about diseases and drugs and hence are the most vulnerable individuals for SM. Though many studies have been associated with practice of SM in medical students, little is known regarding the same in the students perusing dental courses. With this in mind, it was thought worth-while to study the common ailments, pattern and reasons of SM practices since they are the future prescribers and health educators of the society.

MATERIALS AND METHODS

A cross-sectional questionnaire based study was carried out from January 2014 to December 2014 in 200 students pursuing dental course. After obtaining approval from the institutional ethics committee, the students were selected by simple random sampling. A structured and validated questionnaire was used as the instrument. Initially, the students were addressed regarding the purpose and the process of the data collection. Voluntary participation and

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informed consent was taken into consideration. Information regarding age, gender, awareness of self medication practice, type of drug self medicated, was gathered through the instrument. Data was analyzed using the Epi- info software for numbers and percentage.

RESULTS

The present study was carried out in 200 dental students who consented for the study. The mean age of the students was 19.8 years (SD=1.4 years) ranging from 17 to 23 years. A total of 181 (90.5%) students [102 (56.4%) females and 79 (43.6%) males] reported that they practiced SM in the preceding one year. Among them, the majority followed allopathic system of medicine i.e. 156 (83.8%) (Table 1).

Table 1: Demographic Data

Year of study	No. of students (%)
I BDS	32(17.7%)
II BDS	43(23.8%)
III BDS	51(28.2%)
IV BDS	55(30.3%)
Total	**181(100%)**

Cough and cold were the most frequent 158 (84.9%) reported illness followed by fever and headache 15 (8.1%), acidity 6(3.2%), gastrointestinal ailments like diarrhea 3 (1.6%) and acidity, nausea/vomiting 2 (1.1%), eye and ear problems 1(0.6%) and skin problems 1 (0.6%) for which SM was practiced (Table 2). The commonly used drugs for SM were antipyretics and analgesics 178 (95.6%), antacids 23 (12.4%), anti-histaminic 132 (70.9%), antibiotics 12 (6.5%), topical ointments 5 (2.6%) and ear/eye drops 12 (6.5%).

Table 2: Indications for self-medication

Indications	No. of students (%)
Fever and headache	15(8.1%)
Cough and cold	158(84.9%)
Acidity, nausea and vomiting	2(1.1%)
Diarrhea	3(1.6%)
Skin problems	1(0.6%)
Eye / ear problems	1(0.6%)

For frequency of SM, most of the students 147 (79.03%) had taken medication as and when required basis, followed by once daily 23 (12.6%), only once 11 (5.9%) and every week 5 (2.6%). Route of administration for medicine preferred was oral 178 (95.7%), topical 22 (11.8%) and inhalational 1 (0.5%). In our study, most common source of information for self- medication found was reading material 128(68.8%), pharmacist 40 (21.5%), previous prescriptions 11 (5.9%), and family members and relatives 8 (4.3%) (Fig. 1).

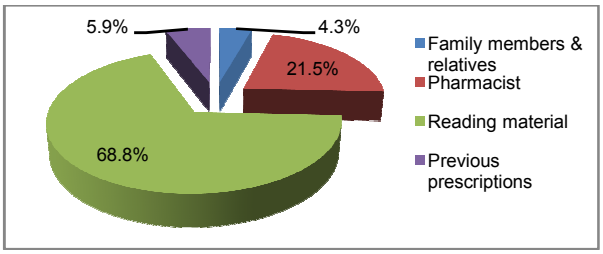

Figure 1: Sources of information

The reason for self- medication reported by respondents were useful for minor ailments 132 (70.9%), quick relief 23 (12.3%), urgency 37 (19.8%), time saving 24 (12.9%), previous expertise 31(16.6%). We found that 123 (66.2%) were aware about dose and frequency of drugs and 20 (10.7%) of the students were aware about adverse effects of medicines and expiry date.

DISCUSSION

The availability of over-the-counter drugs in developing countries has resulted in the age old practice by humans of utilization of medicine without the supervision and guidance of a proficient health professional. This practice is found far more in undergraduate students perusing health science courses and could result in more inappropriate medication due to incomplete knowledge[5-6]. Our study depicts that 90.5% students enrolled in dental sciences practiced SM in the preceding one year, though numerous studies have shown a variation from 43-91%[7-8]. Difference in the demographic characteristics, methodology and socioeconomic status may be the factors responsible for the difference in the prevalence of SM in students. It was found in our study that the prevalence of SM was more in senior students so as the students went into higher classes, which could be because of the knowledge gained as they progressed. This finding is in concordance with that of Abay SM[7]. Females were found to practice more SM than males which is similar to the studies of Gutema *et al*[9] and Patel *et al*[10]. However, Gaikwad NR *et al*[11] and Girish HO *et al*[12] in their studies associated the practice of SM slightly more in males. The present study reveals that the majority of the students followed the allopathic system of medicine, may be attributed to the easy accessibility of the same as over the counter drugs is in concordance with the study of Kumar N *et al*[13]. We found that cough and cold were the commonest illness, antipyretics and analgesics were the commonest medicines, and oral route was the most preferred route of administration. The commonest source of information for SM was reading material followed by pharmacist in our study. Other studies have reported self decision[9], seniors[12] and previous prescriptions[13] as the major source of information. Though our study suggested that the major reason for practice of SM in dental students

was to get relief from minor ailments; previous expertise, time saving, lack of time to consult a doctor were the other major reasons found in other studies[4,10,14].

CONCLUSION

Although the senior students are indulged in SM more, junior students who are not yet exposed to facts of drugs are also indulged; the reason might be easy accessibility of drugs, increased awareness of drugs through media. It is alarming pace and is important factor for increased resistance to drugs. To eradicate this problem, education of students, public and health professionals should be carried out.

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