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Awareness on self-medications practices among dental students

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ABSTRACT

Self-medication is indeed a practice where patients select and use drugs for either the management of auto-diagnosed physically or mental health problems. It was defined as the ingestion of drugs without consultation with a qualified doctor. The purpose of the research was to evaluate the perceptions and degree of self-medication practice amongst first-year dental students. This questionnaire-based survey was conducted among 100 first-year undergraduate dental students in Chennai. The questionnaire had 11 questions eliciting the practice of self-medication patterns among the students. The responses were recorded and analysed. 61% of the respondents have the habit of self-medication. 43% said that they take for a headache, 21% said that for stomach pain, for fever 25% take self-medication and the rest said that they visit a doctor without taking any self-medication. 56% preferred allopathic medication, 9% preferred homoeopathy, 12% preferred Ayurveda and the rest 23% preferred the homemade medicines. 41% use antibiotic drugs, 47% use antipyretic drugs and the rest 12% use antihistamine drugs. Around 71% said that they were aware of a drug overdose and the rest 29% said they were not aware. Self-medication was primarily used by dental students mainly for minor ailments with over the counter drugs. From the survey, we can conclude that there is a large number of students 61% have the practice self-medication and so awareness must be created on it.

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INTRODUCTION

Self-medication is indeed a practice where patients select and use drugs for either the management of auto-diagnosed physically or mental health problems. It was defined as the ingestion of drugs without consultation with a qualified doctor and the purchasing of drugs mostly from the counter (Bennadi, 2014; Ruiz, 2010).

Due to the lack of medical services, the unaffiliated availability of over-the-counter (OTC) medications in the regional market is becoming increasingly common in a number of countries around the world. Other factors for self-medication include lack of time to see a physician, impossibility to get a timely appointment, minor illness, a significant distance from home to hospitals, and inevitably high medical fees (Klemenc-Ketis *et al.*, 2010; Kumar *et al.*, 2013). In fact, the acquisition of a plethora of information from internet media, magazines or journals makes people bold enough to manage their own disease. Nevertheless, people are putting their lives at risk by pursuing self-medication because it can escalate to habituation, fatal allergy, the inadequate dosage of medications that could not relieve

the symptoms, and even overdose that can trigger collateral damage (Kumari *et al.*, 2012).

The most commonly self-mediated substances are OTC medications and nutritional supplements. In addition to pain medications, antimalarial drugs, antibiotic drugs, cold syrups have been used sporadically for self-administration (Afolabi, 2008). Often certain psychoactive substances, such as recreational drugs, alcohol, and packaged food, are self-mediated to relieve symptoms of mental illness, stress and anxiety (Harris and Edlund, 2005).

Self-medication activity is becoming well established in the world with a higher prevalence in developed countries (Bennadi, 2014). In addition, studies on the propensity of self-medication practice amongst dental graduates are important as they are impending drug prescribers and health educators. Thus, this research was done to determine the perceptions and degree of self-medication practice amongst first-year dental graduates.

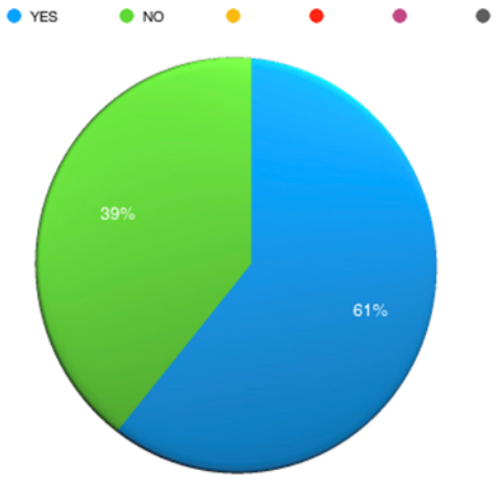

Figure 1: Habit of self-medication

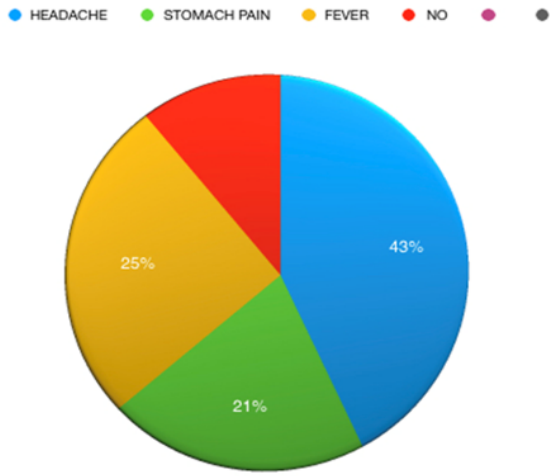

Figure 2: Conditions for self-medication

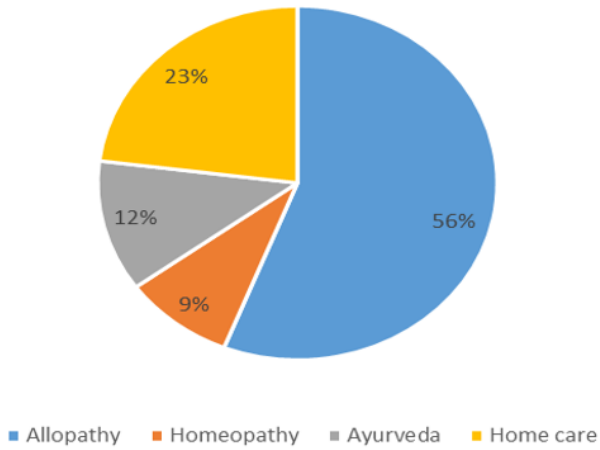

Figure 3: Modality of self-medication

METHODOLOGY

This study is a cross-sectional, questionnaire-based survey conducted among 100 first-year undergraduate dental students in Chennai. A simple random sampling technique was done to select the participants and informed consent was obtained from them. The questionnaire had 11 questions eliciting the practice of self-medication patterns among the students. The responses were recorded and analysed.

RESULTS

61% of the respondents have the habit of self-medication (Figure 1). 43% said that they take for a headache, 21% said that for stomach pain, for fever 25% take self-medication and the rest said that they visit a doctor without taking any self-medication (Figure 2). 56% preferred allopathic medication, 9% preferred homoeopathy, 12% preferred Ayurveda and the rest 23% preferred the homemade medicines (Figure 3). 41% use antibiotic drugs,47%use antipyretic drugs and the rest 12% use antihistamine drugs (Figure 4). Around 71% said that they were aware of a drug overdose and the rest 29% said they were not aware (Figure 5).

DISCUSSION

While self-medication, when followed specifically, could save time which is also price-effective for patients when medical treatment is fairly costly

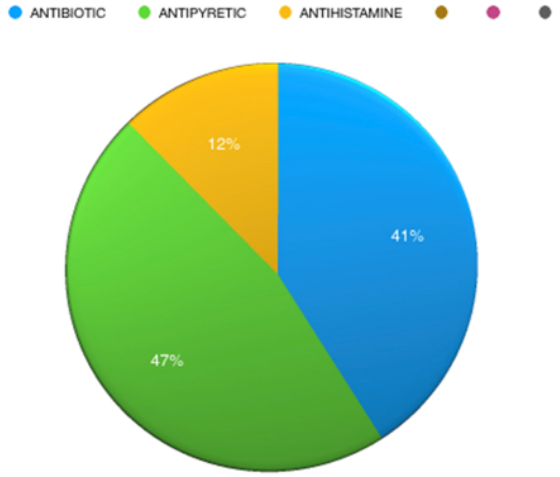

Figure 4: Drugs for self-medication

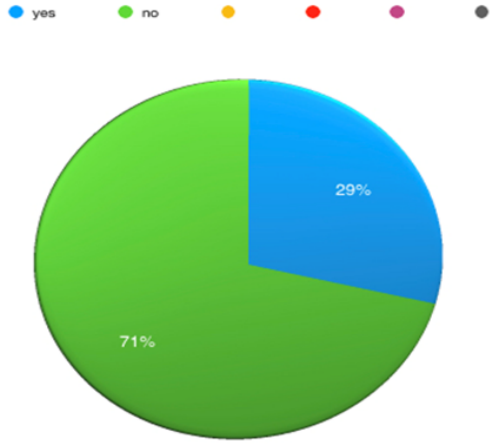

Figure 5: Awareness of overdose in self-medication

and not easily available, there are many important health hazards that need to be addressed before supporting the possible advantages of self-medication (Alam *et al.*, 2015). This may also lead to a waste of energy, increase resistance to infection, and exacerbate severe health conditions, including the adverse drug events, addiction, and eventually death.

Research by health care undergraduates in Pakistan found that the tendency for self-prescribing drugs among medical students was about 77.7% and 83.3% for the non-medical students. The research on the self-practice of drugs amongst graduates is therefore crucial since they are those segments of the well-educated population and also have access to all knowledge on their wellbeing. In addition, a study of the propensity of self-medication practice amongst dental graduates is important, because they are the impending drug prescribers and also health educators (Babu, 2008).

In our research, we found 88.0 percent of students use various types of drugs on their own. Similar research was performed by Kumar et al. in India, suggesting that the range of self-medication practice amongst medical students was 78.90 per cent. Other analogous studies have demonstrated that the prevalence of self-medication varied between 57.1% and 92% among medical students in India. Numerous research studies in other developing nations have shown the prevalence of self-medication is 38.5 per cent and 43.2 per cent among medical, pharmacy and biomedical sciences graduate in Ethiopia, 51 per cent of people in Slovenia, 55.3 per cent and 55 per cent of medical graduates in Pakistan and in Egypt, 56.9 per cent of Nigerian medical university students and 80.9 per cent of female Malaysian undergraduate students. Unmonitored simple availability of all types of non-prescription drugs may be the key explanation underlying the increased tendency for self-medication (Zafar *et al.*, 2008; Ali *et al.*, 2010).

According to a few initially published papers, headaches, common colds, fatigue, pain, fever and nausea have been the most typical problems of self-administration of the drugs reported by participants. This is also the prime duty of health care practitioners and drug regulators to facilitate the healthy use of medications and to monitor the self-administration of drugs by explaining the overall effect of drugs and their impact. Self-medication leads to neglect of attending doctors in the event of any signs of any disease that can lead to serious complications (Bogner, 2018).

The persistent practice of self-medication often contributes to a reduction in the individual's natural immunity. The administration of these medications, such as paracetamol, cetirizine and aspirin, contributes to vital organs failure in some patients. This survey will raise awareness amongst young dentists who, in effect, will educate and empower patients about avoiding the practising self-medication (Sarahroodi *et al.*, 2012).

CONCLUSION

Self-medication has been widely used by dental students, especially for minor conditions with over-the-counter drugs. From the study, we may infer students have 61% self-medication experience and thus need to be made aware of it. While this is an unavoidable occurrence for the students, it ought to be viewed as an essential public health issue because this practice can amplify the misuse and irrational usage of medications.

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Conflict of Interest

The authors declare that they have no conflict of interest for this study.

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