



Prevalence of Self-Medication for Oral Health Problems: A Cross-Sectional Study

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ABSTRACT

Aim: This study was conducted to find out the prevalence of self-medication practices for oral health problems among adults attending the Institute of dental education & advance studies. All the factors like why they were using i.e reason for using the self-medication, what types of medication they were using, what was the duration of using as well as where from they get those medications i.e the source of medication were recorded.

Methods: This cross-sectional study was conducted among adult patients attending the Institute of dental education & advance studies (IDEAS). After using the inclusion and exclusion criteria total of 565 subjects were included in this study. A self-administered closed-ended questionnaire was used for collecting the data. Statistical analysis was done by using SPSS software version 22.

Results: Among the total 500 samples, 445 were practicing self-medication. About 26-35years mean age group was using self-medication for oral health problems and among them 51% were men and 47% were women. Although the majority (47%) of the subjects were having higher education, they were not having any medical link. The most common reason for using this method of medication was toothache (56.4%). While asking them the reasons for self-medication we got the answers like the concept of dental diseases being not so serious (36.7%) as well as time constraints for dental visits (37.5%). During our study, it was found that the most common medicine used was Analgesics.

Conclusion: It was found that the use of Self-medication for oral health problems is a common practice. The concept of dental diseases being not so serious as well as constraints for dental visits being the most common reason for self Analgesics.

Keywords: Analgesics; Dentists, Oral Health; Self-Medication.



Introduction

In both developed as well as developing countries self-medication is commonly practiced.^{1,2} Self-medication is a method of self-treatment by individuals without any professional prescription.^{3,4} Because of lack of proper regulation on self-medication antimicrobial resistance is the most common adverse effect, besides that incorrect self-diagnosis, dangerous drug interactions, drug dependence, etc are the other effects of self medication.^{5,6} In the case of dental disease patients often use over-the-counter medication. By using these medicines they are unaware of their contraindications and side effects.⁷

There are various factors leading to this habit of medication like they think dental diseases are not so serious diseases, because of low economic status they are not able to afford the dental visits and anxiety as well as dental phobia.⁴ It was by WHO in the 1980s in order to reduce the burden on Health care Professionals some drugs were approved for over-the-counter supply without any professional prescription.^{8,9} Various studies have been conducted on the prevalence of self-medication and it was found that elderly people were using this practice more.¹⁰ Not only the non-medicos but medicos also have the habit of self-medication.¹¹ Studies have been conducted to find out the difference between the educated and non-educated people they concluded that educated people as well have the practice of self-medication.¹² It has been found that not only the elderly but the adults are also practicing self-medication, common reasons might be the easy availability of drugs, increasing awareness of diseases because of the higher level of education, multimedia use for drug dosage, and use, etc.¹³ Studies have found that most commonly self-medication has been used for cough, pain, fever, and headache but in the case of dental conditions like toothache, gingival bleeding, discomfort, and halitosis are the common conditions for self medication.^{14,15} Few studies have found out the impact of self-medication on dentition.⁴ Hence this study was conducted to find out the prevalence of self-medication for oral health problems by investigating the factors like reasons, types, duration, and sources of self-medication.

Materials and Methods

A cross-sectional study was conducted from March to May 2021 in the dental opd of the Institute of dental education & advance studies (IDEAS). Patients between the age group of 18-60 were randomly selected who can read and understand Hindi or English. Patients having chronic diseases or other disabilities were excluded from the study. After taking the written consent from the study subjects total of 445 sample size was selected. Then the questionnaire was given to the study subjects in which 1st questions were regarding the use of self-medication and those patients not practicing the self-medication were dropped from the study. All the subjects were properly explained the objectives of the study and data were collected by giving them the self-administered closed-ended questionnaire. The questionnaire used for the study was taken from the studies conducted previously.^{25,26} A pilot study was conducted on 50 individuals not included in the sample to find out the specificity and sensitivity of the questionnaire used for this study. The questionnaire used for this study consists of two main sections one section was regarding the demographic characteristics including age, gender, education level, and marital status and in the case of the second section questions regarding self-medication were given. Data analysis was done by using SPSS version.²²

Results

Among the total 500 samples, 445 were practicing self-medication for health problems. In our study highest prevalence was found in the age group of 18-30 years (78.7%) with a mean age of 26.1+ 9.3 table I. As shown in table II highest number of subjects were having bachelor's degrees using the self-medication method for common ailments. It was found that the most common drug used were analgesics (45.4%). As per the source of the medication was investigated it was found that (39%) subjects were using self-medication under the advice of their relatives and the majority of subjects (70%) bought the medicine from the local drugstore.

Duration of the self-medication was recorded and it was found that among the 53% of subjects this practice was used for a short period of time only. Data collected for finding the reason for self-medication it was found that 37% were using it because of lack of time to visit the dentist. 36% of the subjects have a concept that dental diseases are not serious health issues **Figure 1**. The most common provoking factor for self-medication was toothache (56.4%) followed by other oral problems.

Sociodemographic characteristics of the participants		
Demographic Factors	Mean (SD)	Categories n (%)
Age (years)	26 (9.3)	315 (78.7%)
	Young aged 18-30 yr	60 (15.5%)
	Adults aged 31-45 yr	23 (5.75%)
	Adults aged 46-60 yr	
Marital status	Single	306 (76.5%)
	Married	94 (23.5%)
Educational level	None	4 (1%)
	High school	94 (23.5%)
	Diploma	119 (29.75%)
	Bachelor/undergraduate	166 (41.5%)
	Master	15 (3.75%)
	Doctorate	2 (0.5%)
Profession	Health-Related	122 (30.5%)
	Not health-related	278 (69.5%)

Table I

Self-medication types, sources, and durations.	
Factors	n (%)
Type of medication used	
Analgesics	181 (45.4%)
Native herbs	80 (20.0%)
Antibiotics	45 (11.3%)
Salt and hot water	85 (21.3%)
Ice pack	9 (2.3%)
Other	0
Source of advice for self-medication	
Relatives	152 (39.0%)
Friends	49 (12.3%)
Personal Knowledge	91 (22.8%)
Pharmacist	62 (15.5%)
Mass media	26 (6.5%)
Traditional healers	9 (2.3%)
Other	11 (2.8%)
Source of medicine	



Local pharmacy	289 (70.0%)
Hospital Pharmacy	74 (18.5%)
I make it at home	37 (9.3%)
Other	0
The duration of self-medication	
Few days	212 (53%)
Few weeks	48 (12%)
Till the condition subsides	140 (35%)
Other	0

Table II

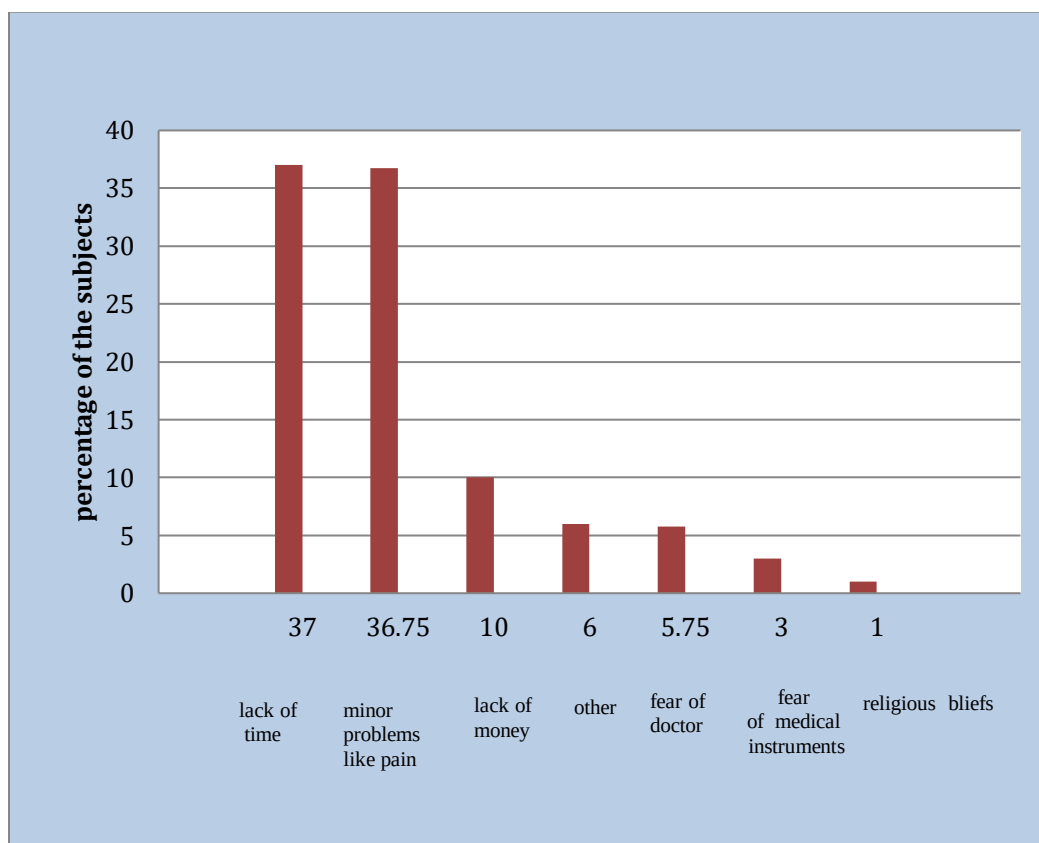


Figure I

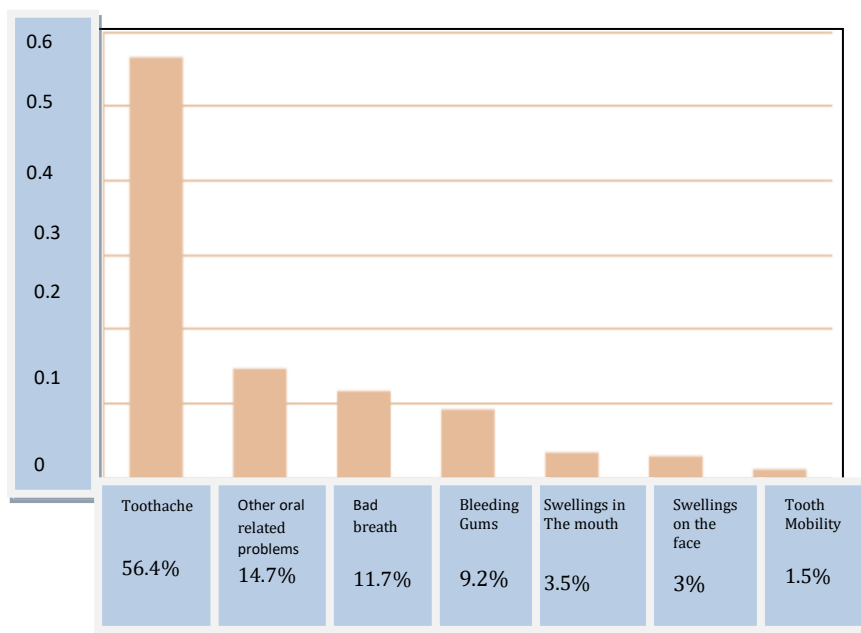


Figure II

Discussion

This study was done to find out the prevalence of self-medication for oral health problems by investigating the reasons, types, duration, and sources. It was found that about 70% of the subjects were practicing this method. Our data were similar to the other studies like Cameroon with the prevalence of 67%¹⁴, Buenos Aires University with a prevalence rate of 77%¹⁶. In the study conducted in Riyadh, the KSA prevalence rate was found 63.2% almost similar to our study.¹⁷ In contradict to our study some studies found lower results than our study as in the case of a study conducted in Serbia prevalence of self-medication was found to be 27%¹⁷, similarly in Mekelle, Ethiopia it was 43.24%¹⁸ and Ibadan, Nigeria 48.9%.¹² As in our study highest prevalence was found among the age group of 18-30 years were as in the case of Jordanian study prevalence was highest among the age group of 36-55 years² and in the case of Nigerian study it was found in the age group of 20-40 years.⁴ About 37.6% of subjects were practicing this method because of lack of time to visit a dentist and these results were similar to the results found in the case of a study conducted in Nigeria, they also found that the population does not give importance to the dental problems.⁴ Other studies conducted in Palestinian medical and non-medical university students found similar results for the reason of practicing self-medication as found in our study.¹⁹ In contrast to our study Mekelle, Ethiopia found that the most common reason found was economic status because of less expensive than a dental visit.²⁰ In case of provoking factor found in our study it was toothache 56% which was in agreement with the study conducted in Cameroonian population 54%. In the online surveys conducted in the UK, Russia, and Australia data collection found 2.54% were practicing self-medication for toothache.³ The limitation of this study was that we have collected the data from the one hospital only and the correlation between self-medication and sociodemographic factors was not discussed. Hence further studies are required to involve more populations and find out the correlation between self-medication and sociodemographic factors.

Conclusion

It was concluded that self-medication no doubt is a common practice. The most common reasons were lack of time and concept about the dental diseases being not so serious. It was found that the most provoking factor

for self-medication was toothache and advice for the same was taken from the relatives and the source was a local drugstore.

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