

PREVALENCE OF SELF MEDICATION AMONG DENTAL PATIENTS

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ABSTRACT

Self-medication is a common practice in developing countries but little is known about its determinants. Self-medication leads to drug resistant pathogens and serious health hazards. The aim of this study was to determine the prevalence and factors associated with self-medication among dental patients. A cross-sectional survey was conducted on 400 outdoor patients. The objective was to determine the extent and pattern of Self medication, to identify their knowledge and practice against purchased drugs and to assess factors associated with it. Data were collected by interviewed based questionnaire and analyzed using SPSS. Among 430 outdoor patients, 400 participated (response rate 93%) in this survey. The Self mediators were reported to be 57.3% (229 patients). Teenagers were found to be less self medicated (33.3%, non Self medicated were 66.6%, $p < 0.001$) as compared to adults (57.8%, non Self medicated were 42.2%). Female patients were more prone towards Self medication (66.4%) as compared to male patients (45.4%). Among various reasons, cost and expenditure is in lower class, Laziness and Lack of time in middle while Dental phobia in upper class is the main reasons of Self Medications. The self motivators were Graduates (32.7%, $p = 0.002$) while patients who consider dental phobia as a reason of SM has completed high school / intermediate education (32.3%). A need was felt to focus on counseling and create awareness about negative aspect of self-medication. Though self-medication is hard to eliminate, drug law enforcement and educating the public at large is vital.

Key words: Self Medication; Dental Patients

INTRODUCTION

Self-care is understood as what a person does by himself to establish and maintain health, preventing and dealing with diseases. This concept includes health, nutrition, lifestyle, socioeconomic and environmental factors as well as Self-medication.^{1,2} Self-medication is defined as use of medications without consulting a doctor regarding indication, dose and duration of drug.³

Medications are important tool in combating diseases. The public health importance of self-medication increased when in 1980s World Health Organization approved some drugs which were to be changed from prescription status to be sold over-the-counter without any prescription in order to reduce the burden on Health care Professionals.^{4, 5} Most common reasons towards self medication practice is to avoid long waiting periods in hospitals, minor illness^{6, 7, 8} and reduce cost, to save money.

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In the dental profession, pain is the most likely symptom. Dentists are aware that patients with dental pain often use analgesics on their own to treat their symptoms in order to avoid the need for dental treatment or consulting dentist. In addition, antibiotics are routinely used in combination with analgesics. This had developed problems like side effects, drug interaction, expenditures and global emergency of drug resistant pathogens.

In many developing countries, the major benefits of self-medication go to pharmacists. The issue of self-medication has always been subject of concern among health care professionals. There is no doubt that prescribing drug/s without consultation should be stopped to minimize the harm.⁹

METHODOLOGY

This quantitative, pilot, cross-sectional study was conducted on 400 patients visiting out-patient department at Fatima Memorial Hospital College of Dentistry, Lahore from March to May 2010.

A structured questionnaire was used for the purpose of data collection.¹⁰ Consent for participation in the study was obtained from patients. This questionnaire was designed and divided into two major sections as follows: Section 1: sought information on the socio-demographic data of respondents such as age, gender, marital status, level of education, socio-economical status and place of residence. Section 2: request information on health seeking behavior and self-medication practice by respondents through close ended questions about the types of medications, duration, frequency and who recommended the self-treatment for the respondent. A few questions were included to ask respondents about reasons for self-medication and any complications associated with the use of self-treatment by the respondents.

The collected data were analyzed using SPSS version 14. Descriptive statistics were used and the chi-square test was used where applicable.

RESULTS

Out of 450 patients attending Dental OPD in Fatima Memorial Hospital, College of Dentistry, 400 participated in the study (Respond rate 93%).

Fifty seven percent respondents committed that they were involved in self medication practice. Teenag-

ers were found to be less self medicated (33.3%) while non self medicated (66.6%), as compared to adults (57.8%) $p < 0.001$. Among 229 self-medicates, 150 (65.5%) were females and 79 (34.5%) were males.

Table 1 provides detail about the types of drug used as self medication. The sources of drugs used, numbers and percentage of the study subjects are shown in Table 2.

According to Fig.1 when the respondents were asked reason towards self-medication, a significant association exists towards Socio-economic status (SES). The respondents from lower class mentioned the reason of self-medication as majorly (40%) cost of treatment. Middle class claimed laziness/Lack of time (55.6%) leading to self-medication while Upper Class considered Dental Phobia (42%) as reason of self-medication. When asked about who recommended self-medication to them, the majority of the respondents were relying self decision (38.3%) by themselves by using their old prescriptions.

According to the Education status, the self motivators were more in number with a qualification of

TABLE 1: TYPE OF DRUG USED

Drug Type	Percentage (%)
Oral Analgesics	58.8
Anti-inflammatory	0.5
Topical	2.3
Muscle Relaxant	0.9
Miscellaneous	3.2
Oral Analgesics + Antibiotics	13.4
Other combinations	51.5

TABLE 2: SOURCES OF DRUGS USED IN SELF-MEDICATION

Sources	Number	Percentage (%)
Self Medication	153	70.8
Previous Prescriptions	31	14.4
Parent's/Guardian	8	3.7
Relatives	10	4.6
Friends	14	6.5

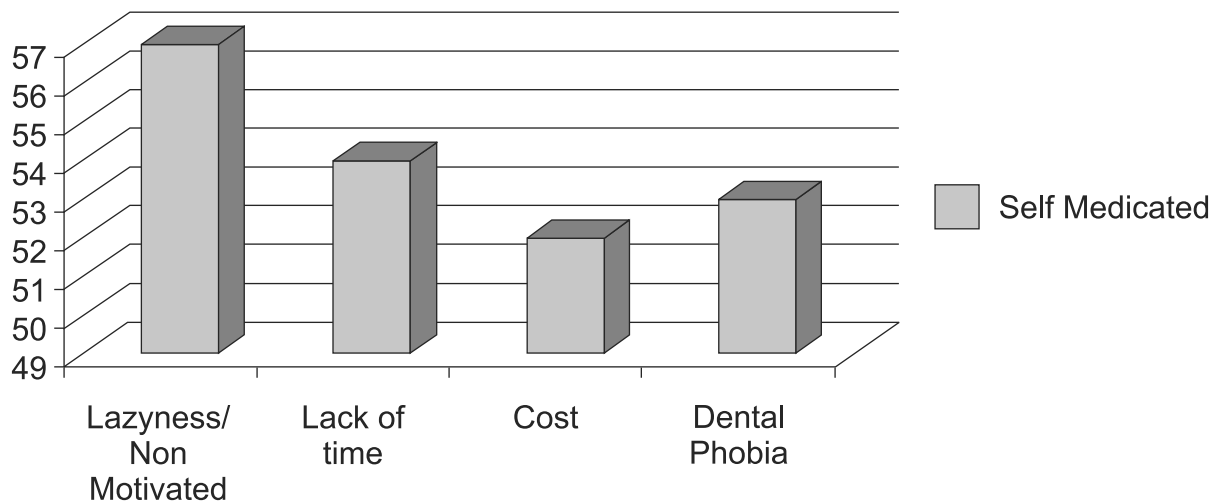


Fig.1 Reasons of Self Medication

Graduation (32.7%, $p=0.002$) while patients who consider dental phobia as a reason of self medication has completed high school/intermediate education (32.3%).

DISCUSSION

The discussion part of this article includes interpretation of the result in close context of the topic selected. This portion will discuss the key findings of this study in the relation to previously published literature.

This study suggests high prevalence regarding self drug consumption for dental ailments among the patients visiting Fatima Memorial Hospital College of Medicine and Dentistry. In this study the prevalence of self medication was 70.8% (Table 2). This is higher as compared to the findings reported in China (32.5%), India (34.5%),¹¹ Turkey (45%)¹² but less when compared with studies done in Sudan (73.9%)¹³ and in Kuwait 92%.¹⁴

Previous local studies conducted in Pakistan showed prevalence from 46% to 76%^{15, 16} however, this prevalence was among the medical students or patients visiting medical outpatient department. Apparently no data is available in Pakistan regarding prevalence of self medication among dental patients.

In 2003, a study was conducted in Jimma Town; Nigeria¹⁷ which shows high prevalence of self-medication among female (61.9%) while in another study conducted in Mexico showed prevalence of 47% in females.¹⁸ The prevalence of self-medication in this study among females was 66.4% ($n=400$). The most

likely reason considered to be that female tends to have lower threshold towards pain and tend to seek medical help more promptly as compared to males.

The education level of respondents in this study indicates that 28.4% of graduates were practicing self-medication in comparison to result found in Egypt (52.5%), India (26%) and in Sir Lanka (83.3%).¹⁹ In the present study, 8.3% were uneducated, 6.5% had primary, 20.5% secondary, 33.3% were graduates and 7.3% were postgraduates. The association of educational level of respondents and recognition of drug/s show that patients who are uneducated recognize medicines by means of color and common usage names. Among educated respondents, the ability to read label of consumed medicines is the likely reason. The common reason given by graduate dental patients related to self medication was belief that to attain dental treatment is un-necessary (57%). In Egypt it was reported as (44.5%).¹⁹ Forty Percent considered cost for dental treatment to be the reason for self medication while in India 60.5% for the same reason.²⁰ Respondents belonging to middle class considered lack of time (55.6%) for self-medication which is similar to the finding in Saudi Arabia (58%).²¹ Other reason was found as Dental phobia (52%) commonly associated with upper class.

It is understandable that significant number of respondents used oral analgesic either alone (58.8%) or in combination with antibiotics (13.4%) which is similar to the study conducted in Nigeria with oral analgesic (55.1%) and in combination with antibiotics was 27.3%.²²

CONCLUSION

The issue of usage of self medication has not been considered enough. It was distressing to find that every other patient attending dental department for treatment was been indulges in self-medication in the past or presently. Dental professionals should keep educating their patients about the hazards of self medication. There must also be proper legislation which should limit the scale of drug without prescription. Moreover professional organizations must create public awareness.

Conflict of interest

This article was presented in poster form in 1st IADSR Conference in April 2011.

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