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Research Article

KNOWLEDGE, ATTITUDE AND PRACTICE OF SELF-MEDICATION AMONG PATIENTS VISITING A DENTAL HOSPITAL IN CHENNAI- A CROSS SECTIONAL STUDY

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ABSTRACT

Background: Self-medication is a common practice worldwide, which is increasing at an alarming rate. Self-medication refers to the usage of medicines for recurrent diseases, disorders by the patients on their own without the concern of the registered practitioners.

Objectives: To assess the knowledge, attitude and practice of self-medication among patients visiting a dental hospital and to find out the most commonly used self-medication and most common condition of using self-medication.

Materials & Methods: A cross sectional study was conducted among the dental patients who visited a dental college during the month of May 2018. A 21 item questionnaire was given to 150 subjects. Data was collected and descriptive statistics were calculated and a simple frequency distribution table was formulated with frequencies and percentages.

Results: Self-medication was found to be practiced by 80% of the patients. The most common condition of taking self medication was cough and common cold by 31.7% of the total participants. Analgesics were the most common drug groups to be used as self medication by more than 50% of the subjects.

Conclusion: There was an alarming rise in the self medication practices among the patients in Chennai. They should be given sufficient knowledge about the medicines they were taking, regarding their indications, contra indications, cross reactions, allergies, and their side effects.

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INTRODUCTION

Medications have a significant role in the public health practice. Medications are medicines which are prescribed by the health care professionals for treating any illness or symptoms. In recent years, lay public are progressively more concerned about their health-care by active involvement in decision making. Plenty of medicines are formulated in this modern era of life, everyday. William Osler once said that “a desire to take medicine is perhaps a great feature which distinguishes man from animals”¹.

The World Health Organization (WHO) defines self-medication “the use of drugs to treat self-diagnosed disorders or symptoms, or the intermittent or continuous use of a prescribed drug for chronic or recurrent diseases or symptoms”². It also includes getting medicines without a valid prescription, or giving old prescriptions to purchase the

medicines, sharing medicines among relatives, friends or using any leftover medicines which are stored at home.³

It is common for people to feel unwell, and humans have an inherent tendency to use herbs, potions, medications, etc for treating themselves. Every day people around the world act on their own to improve their health; they practice self-care.⁴The World Health Organization (WHO) defines self-care as the prime public health resource in the healthcare system².Self-medication is a component of self care, which is shooting up. World health organization has emphasized that self medication must be correctly taught and controlled.^{5,6}

The Indian Health care system was plagued by the unrestricted use of pain killers, antibiotic prescriptions and sales for several years, which eventually resulted in the emergence of resistant microbial strains for certain antibiotics. Disadvantages of using self-medication are the lack of clinical evaluation of the

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condition by a physician, which could result in missed diagnosis, delaying of specific treatments, and increases the risk of drug toxicity as a result of overdose and adverse drug interactions⁷. Medicines for self-medication are often called ‘non-prescription’ or ‘over the counter’ (OTC) and are available without a doctor’s prescription through pharmacies.⁸ Sometimes, over the counter medication is known as “responsible self-medication” whereas “irresponsible self-medication” is known as purchasing a prescription medicine without a valid health care professional prescription.⁹ The prevalence of irresponsible self-medication is high all over the world, and it is a very common practice, both in the economically deprived communities as much as it is in the economically privileged communities.^{4,10} In developing countries like India, where universal access to health care is yet to be achieved, self-medication is an important health issue, as it is one of the most common and preferred mode used by the patients.^{11,12} In India, Schedule H (prescription drugs) and Schedule H 1 (antibiotics and other restricted medications) can be sold by a legally qualified registered pharmacist upon presentation of valid prescription as per Drug and Cosmetics Act of 1940¹³. Though these laws are implemented, they are not strictly followed by the pharmacists which ultimately lead to the development of increased self medication practices. Self-medication practice can lead to Anti Microbial Resistance (AMR) which means a microorganism no longer responds to a drug to which it was originally sensitive; which means that standard treatments no longer work, and the infections are harder or impossible to control. The risk of spread of infection to others is increased and hospital stays are prolonged, with added economic and social costs.¹⁴

Studies of this variety are done to have useful insight on the reasons for which patients select this practice. This may help the regulatory authorities to standardize the process of drug regulations, updating the list of essential medicines and also the safety issues of over-the-counter drugs¹⁵. With this background our present study aims to assess the knowledge, attitude and practice of self-medication among patients visiting a dental hospital in Chennai city.

MATERIALS AND METHODS:

The present study was a cross sectional study conducted among the patients visited a dental hospital during the month of May 2018. Patients with age 18 years and above, who were able to read and write local language (Tamil) were selected. A content validated, back translated, and self-administered questionnaire was used to assess the practice, determinants, and attitudes of the self medication practices towards the sample population. The questionnaire was given to 150 patients after the purpose of study explained to them. The participants were given assurance on the confidentiality of their personal information. A total of 21 questions were listed, among them, 4 questions were open ended and remaining were close ended. Each patient underwent an informal educational counselling about the adverse effects of using common responsible and irresponsible self-medication. Procedures were approved by the Institutional review board of Ragas dental college and hospital. Written informed consent was obtained from all participants. The reliability analysis score for the questionnaire across all 150 items was acceptable.

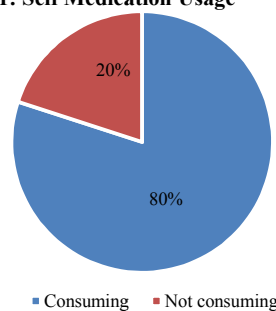
Statistical Analysis

The data was entered in Microsoft Excel 2016 and Data analysis was done using Statistical package for Social sciences Program version 20. (Manufacturer: IBM, Chicago, IL, USA). Detailed descriptive statistics were calculated and a simple frequency distribution table is tabulated and reported as frequencies and percentages.

RESULTS

The present study showed that mean age of the study participants was 43.37 ±17.21 years. Among study participants 43.3% (65) were males and 56.7% (85) were females. The minimum age was 18 and maximum was 82 years. This present study reported that the prevalence of self medication was found to be 80% (Figure 1).

Figure 1: Self Medication Usage



Almost 30% of the participants reported that its instant relief is the reason for taking self medication. The most common condition of taking self medication was Cough, common cold given by 31.7% of the total participants secondly comes fever with a percentage of 24.2% (Figure 2).

figure 2 :Common illness for taking Self medication

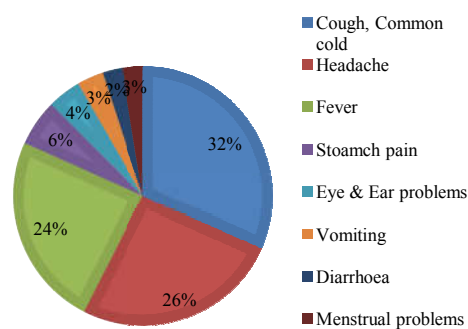


FIGURE 3 : IS SELF MEDICATION PRACTICE A GOOD ONE ?

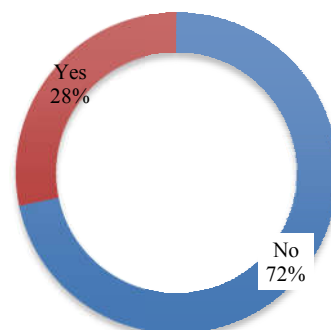
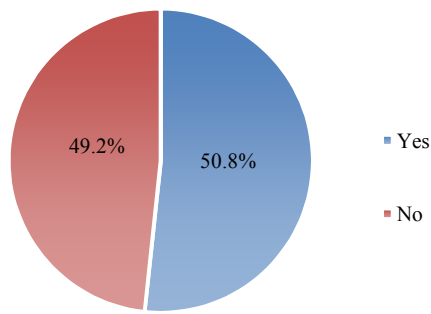


Figure 4 : Are You Aware of The Side Effects of Taking Self Medication ?



Analgesics were the most common drug groups used as self medication and 50.8% participants agreed that and also about 51.7% do not know the side effects of consuming self medication (Figure 4). Participants who obtained the information about their self medication from names in the old prescription sheet was found to be 31.7%. All the participants reported that, they bought their self medications from the Medical store or pharmacy.

About 62.5 % of the participants not even knew the name of the tablets they were consuming as self medication for Dental pain. 71.7% of the respondents accepted that taking self medications was wrong (Figure 3). The common reason for people not taking self medication was fear of taking wrong medicines, which was accepted by 53.3% of the participants.

DISCUSSION

This cross-sectional study was carried out among patients visiting a dental hospital in Chennai city, to examine the prevalence and patterns of self medication. Even in developed countries like United States, it has been seen that the misuse of non-prescription drugs causes tens of thousands of unnecessary hospitalizations each year.¹⁶

In this study, the prevalence of self medication was found to be 80%. Several other publications also conforms to the present study results such as Subhashini *et al.* in 2017 (69.32%), Ahmed *et al.* in 2015 (100%), Balamurugan *et al.* in 2011(71%), Joshi *et al.* in 2011(75%)¹⁷⁻²⁰. There are also several studies whose prevalence rates was found to be not consistent with our study (Varadarajan *et al.* 2017 (51.7%), Ahamed *et al.* 2014 (50%), Kalaiselvi *et al.* 2014 (11.9%), Kumar *et al.* 2018 (51.75%), Arun Ksimon *et al.* 2015 (30%), Dutta *et al.* 2017 (23.3%)²¹⁻²⁶. The discrepancy in the results could be due to the variations in the socio-economic backgrounds of the involved participants and also due to the differences in the methodologies adapted by the respective studies. This high prevalence could be due to the easy availability of the drugs in India without proper prescription, from pharmacies or medical stores.

In the present study, when asked about the source of information for practicing self medication, respondents stated that they sought information, from old prescriptions (31.7%). The most common illness for which self-medication practiced was for cough and cold (32%), fever (24%) and headache (26%). Many other studies are in line with our study results^{17,19,21-23,27}. The probable reason being for considering self

medication is minor illnesses, self-limiting in nature and no necessity of doctor's prescription.

The most common group of drugs opted for self-medication was found to be analgesics, as they are widely available and easily procured over the counter. This could lead to increased risk of nephropathy, drug-induced gastric ulceration and chronic toxicity leading to renal failure. This study has revealed that the awareness of participants regarding the side effects of nonprescription drugs was moderate to high. Another study showed that respondents were more aware of side effects as compared to our study^{18,27}. This variation could be due to chronic use of non-prescription drugs by participants in this study which might have exposed them to various kinds of side effects. The other important point that needs to highlight is about 62.5% of the participants don't even know the name of the drugs they consume for their dental pain, they just get some random medications from the nearby pharmacies, just by telling their problems to the pharmacist.

CONCLUSION

This study results showed that there is prevalence of 80%, which indicates there is an alarming rise in the self medication practices among the patients in Chennai. Anti Microbial Resistance (AMR) is the common problem arising as a result of increased self medication practices. The patients should be given sufficient knowledge about AMR and the medicines they are taking, regarding their indications, contra indications, cross reactions, allergies, and their side effects. Pharmacists should also be explaining all the adverse effects of taking these drugs, while dispensing them. The health care laws also should be made strict to control this habit of self medication among the people. Further researches should be made regularly in this topic to find the trends in self medication practices among the patients in Chennai.

The study has its own limitations. The study results cannot be generalized to the normal population because, the patients who were sick and visiting a dental hospital are only involved in the study. The data were solely based on the self-report which increase the likelihood of recall bias, also there could be memory bias in occasional users. This study was restricted to use of self-medication to allopathic drugs only. We found that medications of other systems of medicine were very common in use, which also requires further research in order to find their effects. Future studies should be directed to understand the various factors like education, income, socioeconomic status influencing the self-medication.

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