

Evaluation of Self Medication practice among patients attending the Department of Conservative Dentistry, Government Dental College, Kottayam A Cross Sectional Study

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Abstract: Self medication is a universal phenomenon. Self-medication is the use of non-prescribed drugs to treat self-diagnosed disorders or symptoms which results in increased resistance to pathogen and serious health hazards such as adverse drug reaction, prolonged suffering and drug dependence. Here a cross sectional study was conducted among patients attending the Department of Conservative Dentistry, GDC, Kottayam, to determine the prevalence and causes of self medication on 222 patients using questionnaires highlighting age, gender, educational qualification, marital status, socioeconomic status, occupation, reasons for self medication, medications used and the source of medications. 14.9% claimed to be involved in self medication. Pain was the common reason for self medication

Key Word: Self medication, Analgesics, Drug vendor,

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I. Introduction

Self-medication is a global phenomenon and practiced universally with varied frequency upto 68% in European countries¹, 31% in India² and 59% in Nepal³. Self-medication is common both in developed and developing countries, but higher in developing countries due to wider increase of drug availability without prescription⁴. Self-medication can be defined as the use of drugs to treat self-diagnosed disorders or symptoms or the intermittent or continued use of prescribed drug for chronic or recurrent disease or symptoms⁵. Self-medication also includes the irregular use of a prescribed drug or the use of leftover drugs from previous prescription⁶. Since self-medication lacks clinical evaluation of the condition by trained medical professionals, it could result in missed diagnosis, delay in appropriate effective treatment, adverse drug interaction and increased risk of drug toxicity as a result of under or overdosing. Hence self-medication increases the possibility of drug dependency and drug abuse and masks the signs and symptoms of underlying diseases, hence complicating the problem, creating drug resistance, and delaying diagnosis and contributes to human pathogen resistance to antibiotics^{7,8}. Other causes of self-medication also includes poor socio economic status, high cost of modern medical treatment, difficulty in accessing modern health care, easy availability of drugs over the counter, unchecked sales, economic & time constraints, influence of family & friends, media campaign by pharmaceuticals and lack of awareness^{9,10}. Many studies have revealed that young adults are more vulnerable to the practice of self-medication due to their low perception of risk associated with the use of drugs, knowledge of drugs, easy access to Internet, wider media coverage on related health issues, ready access to drugs^{3,11}. The practice self-medication is worrisome because of the easy access to therapeutic products and potential damages to health caused by such practices.

II. Aims and Objectives

To determine the prevalence of self-medication and the factors associated with these practices among patients attending the Department of Conservative Dentistry, GDC, Kottayam

III. Methodology

A cross sectional study was conducted on 222 randomly selected patients of either sex attending the OP of Department of Conservative Dentistry & Endodontics, GDC Kottayam, for a period of six months. The inclusion criteria included adult dental patients aged 18 years or above, who were willing to participate, give informed consent and are able to understand and answer. The exclusion criteria included patients below the age of 18 years. Ethical clearance was obtained from the Institutional Ethics Committee. Patients whose consented to

participate in the study were interviewed on the basis of prestructured questionnaires ,highlighting age, gender, marital status, socio economic status, educational qualification, occupation, reasons for self-medication ,type of self-medication, source of self-medication ,awareness about self-medication &frequency of self-medication. Data obtained were analyzed with SPSS version 16. Frequency tables were generated & statistical relationship between the variables were analyzed using the chi square test. Statistical significance was set at $P < 0.05$

III. Result

A total of 222 respondents participated in the study and 14.9 % claimed that they had been involved in self-medication. The age of the participants ranged between 18 and 77 (figure 1) In this study 39% were males and 61% females (figure 2),85% were married and 15% unmarried (figure 3) .85% had high school and above education and 15% only primary education (figure 4). Socioeconomic status of the participant was 21% APL & 79% BPL (Figure 5)

In this study 49% were skilled workers,24% unskilled, 18% were unemployed & 9% were students. (Figure 6).40% of the respondents attributed the fact that dental visits being expensive as the reason for self-medication.21% claimed that dentists were not available and 15% stated long queue in the hospital as reason for self-medication.12% claimed lack of access as reason for self-medication. 12% were of the view that prescription was not at all necessary for treatment. (Figure 7)

91% of the respondents sought to analgesics when in pain, 6% took antibiotics and 3% unknown drugs(Figure 8).70% of the respondents got drugs for self-medication from drug vendors and 30% from family and friends(Figure 9).52% were aware of of the hazards of self-medication, 45% were unaware of the hazards and 3% knew it would worsen the illness(figure 10).15% sought to self-medication frequently while 85% took to self-medication once or twice(Figure 11)

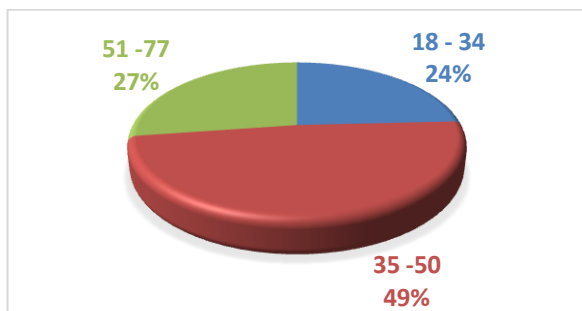


Figure 1: Age Group

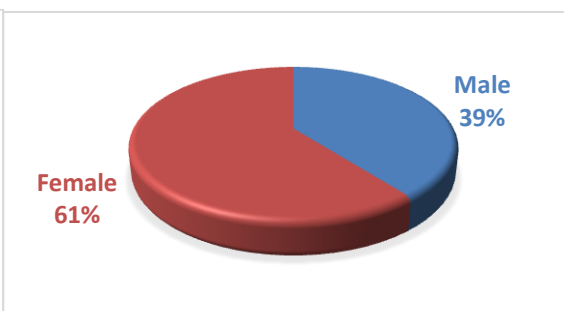


Figure 2: Gender

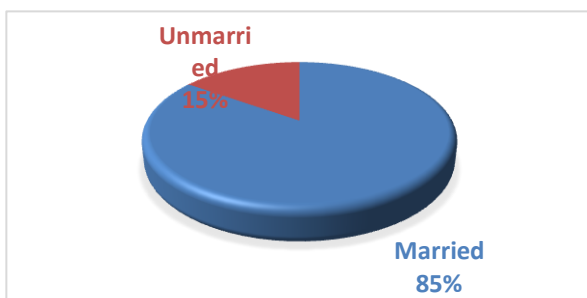


Figure3: Marital status

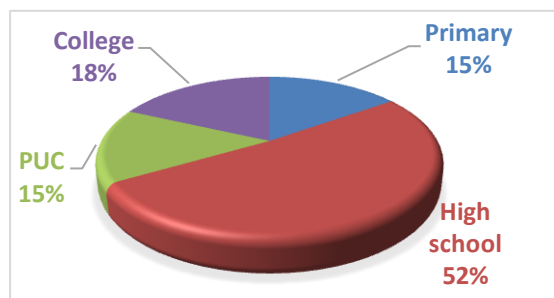


Figure 4: Education

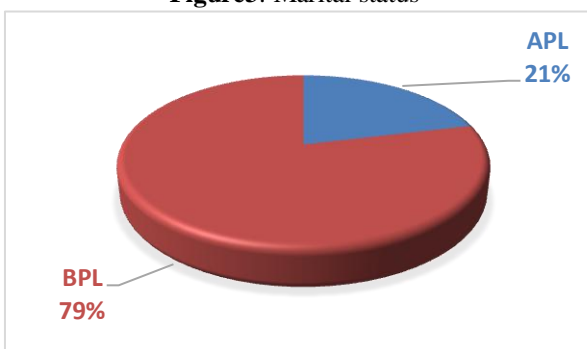


Figure 5: Socio-economic status

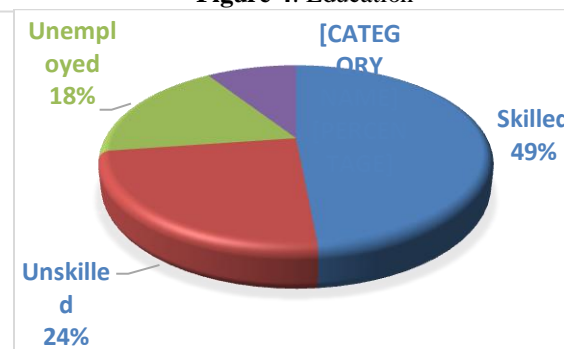


Figure 6: Occupation

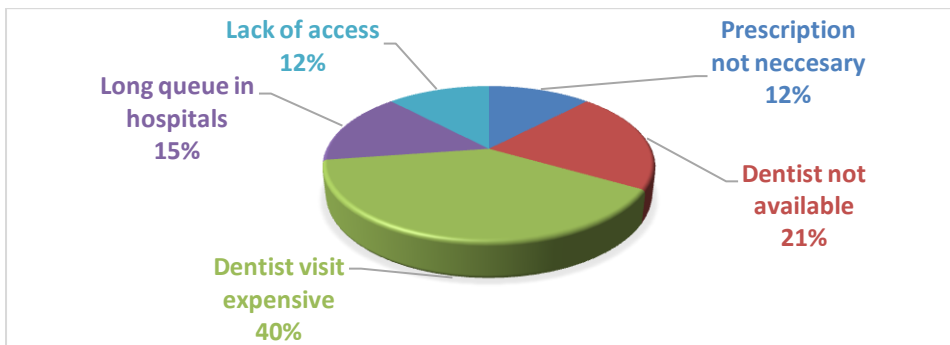


Figure 7: Reasons for self-medication

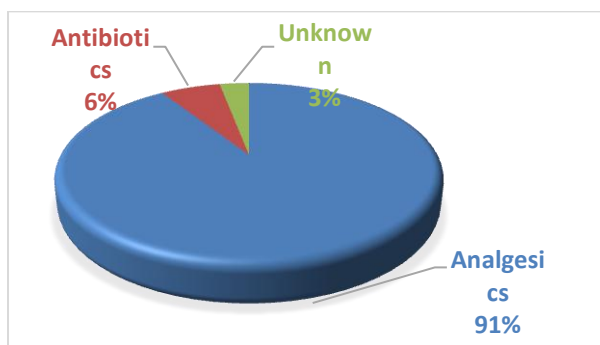


Figure 8: Drugs used for self medication

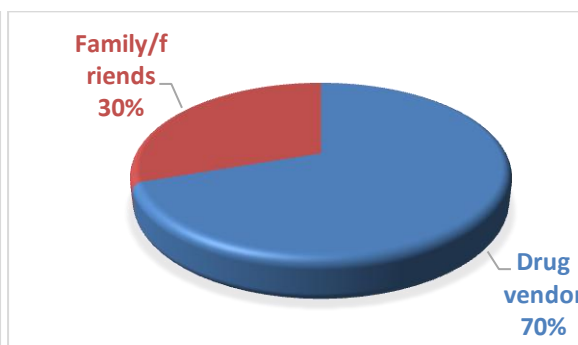


Figure 9: Source of drug

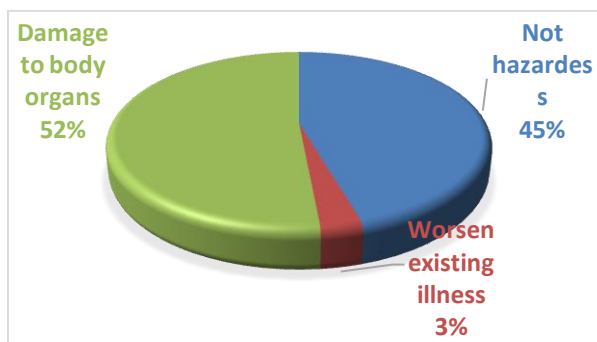


Figure 10: Awareness of self-medication hazards

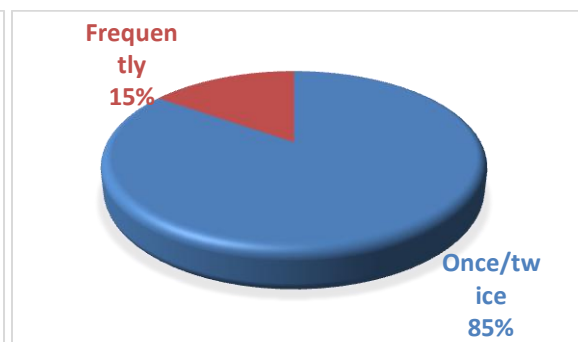


Figure 11: Frequency of self-medication

IV. Discussion

Self-medication is defined as the use of medication for self-treatment without consulting a physician or without prescription and taking medicines on advice of and from friends and relatives. Although, self-medication can help treat minor ailments that do not require medical consultation and hence reduce the pressure on medical services particularly in the underprivileged countries with limited health care resources¹², the availability of the more complex drugs groups such as antibiotics without prescriptions is a source of great concern¹³. Moreover, the practice of self-medication often has many adverse effects and can lead to many problems, including the global emergence of Multi-Drug Resistant pathogens¹⁴, drug dependence and addiction¹⁵, masking of malignant and potentially fatal diseases¹⁶, drug interactions¹⁷ and tragedies relating to the side effects of specific drugs^{4,18}.

The present study was an attempt to study the prevalence, pattern and awareness of self-medication practices at Government Dental College, Kottayam for a period of six months. Even though drugs are easily available over the counter in India, Kerala being a highly literate state, may be the reason for only 14.9% turning to self-medication. An association between age of respondents and practice of self-medication was observed. 49% of the respondents between the age 35-50 years (figure 1) were into self-medication which is similar to the study by Lawan et al¹⁹. In this study an association between gender and self-medication was also observed, where females (61%) were more likely to indulge in self-medication (figure 2). This finding is consistent with other studies, which demonstrated high prevalence of self-medication among females, which may be due to lower threshold towards pain and fear of dental treatment^{11,20,21}. A positive correlation between

marital status and self-medication (figure 3) was observed in this study, which is similar to study by Lawan et al¹⁹

A positive association between level of education and self-medication was also observed in this study (figure 4). 85% of the respondents had high school and above education, which points to the fact that increased education makes people confident of self-medication^{3,19,20,22}. Also prevalence of self-medication was higher among those in lower economic status (figure 5) which may be due to financial burden, which is supported by other studies in literature^{11,19}. Occupation may be considered as source of income level, with self-medication practiced more by skilled workers in this study (figure 6).

In this study, the high cost of dental treatment was the most common reason for self-medication (40%) followed by the excuses like dentist was not available and long queue in dental office (figure 7). This is similar to studies by Lawan et al^{19,20,21}. Frequently self-medicated drugs were analgesics (figure 8) which is similar to observations from other studies^{20,22}. The drug vendors were the most common source of drugs (figure 9), which shows the need to control the sale of prescription drugs as over the counter drugs²³.

More than half of the respondents (52%) knew that self-medication cause damage to body organs, while 45% identified that self-medication may not be hazardous (figure 10) which was a similar finding to other studies¹⁹. In this study 15% took to self-medication frequently which shows that self-medication cannot be overlooked (figure 11).

V. Conclusion

This study concluded that the prevalence of self-medication was 14.9%. Dental treatments being expensive was the main reason for self-medication, which can lead to people neglecting oral health. This causes severe damage to oral health, which in turn affects not only oral health but also overall health. Drug authorities must ensure stricter regulations and public enlightenment programs need to be intensified to make people aware of the dangers of self-medication

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