REVIEW ARTICLE

Self-medication among Dental Patients – A Review

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ABSTRACT

Self-medication is a widespread behavior worldwide. Self-medication is defined as the practice of self-diagnosis and drug prescription without seeking professional health-care advice. Nevertheless, this behavior can result in deleterious events, such as drug interactions, toxicity, and bacterial resistance, all of which are caused primarily by poor diagnosis, inappropriate indication, and overdosing. Therefore, the patients should be educated by dentists to avoid self-medication and visit the dentist as soon as possible.

Keywords: Self-medication, Dentists, Prescription, Over-the-counter medications.

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INTRODUCTION

Odontalgia is a painful condition which is commonly associated with self-medication. William Osler mentioned that "a desire to take medicine was perhaps the greatest feature of man which distinguished him from animals." Self-medication is a widespread behavior worldwide. Self-medication is defined as the practice of self-diagnosis and drug prescription without seeking professional health-care advice. Globally, it is a common reported behavior.[1,2] Common cold, headache, cough, fever, and pain are the most common issues for practicing self-medication. Dental health complaints have always been a reason for pursuing this behavior such as toothache, gingival bleeding, halitosis, gingival swelling, tooth mobility, and others. Numerous studies reported that self-medication is a common behavior in both developed and developing courtiers.[3,4] The public health importance of self-medication increased when in the 1980s, the World Health Organization approved some drugs which were to be changed from prescription status to be sold over-the-counter (OTC) drug without any prescription to reduce the burden on health-care professionals.

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WHY DENTAL PRESCRIPTION IS IMPORTANT?

The medical prescription is a valid legal document. The prescription order is an important transaction between the physician and the patient. Prescription writing is both an art and science, which needs to be mastered by the medical professional.[5-7] The word "prescription" derives from "pre" (before) and "script" (writing, written), which denotes that it is an order that must be written down before or for the preparation and administration of a drug. A prescription is defined as a health-care program implemented by a physician in the form of instructions that govern the plan of care for an individual patient. Prescriptions can be used as a measure of the quality of medical education and observance of the laws and regulations. A good prescription writing is to ensure that the dentist writes exactly which drug formulation and dosage to dispense, and the patient has explicit written instructions for self-administration of the prescribed drug. Prescribing is also used to describe certain activities which include delivery of medicines and devices. It is used to describe written information provided for patients or any advice.[8,9]

SELF-MEDICATION AMONG DENTAL PATIENTS

Shifting toward self-diagnosis and medication instead of seeking a proper professional health care is attributed to a lack of time, money, or health-care accessibility, as well as religious or cultural beliefs, and receiving a previous treatment for a similar condition. Several substances were used without professional consultation. These substances ranged from ethnic herbs such as clove and camphor to pharmacological drugs. They include analgesics, the most commonly used medication, followed by native herbs, antibiotics, water with salts, oils, and others. Approaching these substances was found to be through different sources such as pharmacies, native healers, herbal shops, and shopping malls. Nevertheless, this behavior can result in deleterious events, such as drug interactions, toxicity, and bacterial resistance, all of which are caused primarily by poor diagnosis, inappropriate indication, and overdosing. Furthermore, the

source of information and advice of the medications used for self-medication varied widely to include pharmacists, relatives, friends, social media, media websites, traditional practitioners, and person's own knowledge and experience. Adverse drug events, including interactions between drugs and diet, dietary supplements, and other drugs are likely to increase as North Americans live longer, have more chronic conditions and take more medications.[10-15] In the United States, 40% of adults 65 years of age or older regularly take 5–9 medications and 18% take 10 or more.[2] Similarly, recent data from the Canadian Institute for Health Information show that almost two-thirds (62%) of Canadians age 65 and older are using 5 or more classes of prescription drugs.[3]Age-related physiological changes, a greater degree of frailty, a larger number of coexisting and comorbid conditions, and polypharmacy have been associated with increased risk of adverse events.[4,5] Older adults are nearly 7 times more likely than younger people to have an adverse drug event that requires admission to the hospital.[6] Given the prevalence of medication use among consumers and the aging population, drug-drug interactions warrant consideration in dental practice. In addition, as nearly 70% of patients do not discuss their use of supplements, vitamins, and OTC medications with their health-care providers, oral health-care professionals should ask all patients about their use of these medications.[7] Self-medication use by patients can have an impact on care in contemporary dental practice. Research shows that knowledge of a patient's medication use provides information on his or her medical history and diagnoses that may have implications for the oral condition and subsequent delivery of dental care. In addition, oral complications of systemic medications, such as xerostomia, have repercussions in oral care due to their impact on risk of oral disease. Further, concerns include potential interactions between reported frequently used medications and medications that are commonly used in dentistry.[10]

Research has also evaluated allergy risk due to self-medication. From a dental perspective, all allergies to medications are particularly noteworthy as almost every drug class reported in various studies falls into categories of medications that are commonly used in the dental practice.[10] Many of these allergies can have significant implications for planned dental treatment. If noted on a patient record, the nature of the reaction must be investigated as many patients confuse allergic reactions with intolerances, for example, most gastrointestinal symptoms represent side effects of medications rather than true allergic reactions. This is important information as a patient who is considered allergic to a medication should avoid exposure, and clinicians should avoid prescribing such drugs to these patients. Another limitation is the lack of specific investigation into the prevalence of illicit drug use. Self-reporting of such drug use is likely unreliable, and these drugs are prone to interactions with many OTC and prescription drugs and dietary supplements.[11-13] Even in a research setting, few patients are willing to self-report use of illicit medications despite the importance of this information to their safe care.[14-16] There has been a significant increase in research around screening and brief intervention as it applies to patients who are at risk of health problems resulting from substance abuse. As a Public Health Initiative, the aim of this review is to improve community health by reducing the prevalence of self-medication.

CONCLUSION

Given the prevalence of the use of both prescription and OTC drugs, accurate recording of a patient's medication profile is necessary to guide contemporary dental practice and mitigate potential risk. Medication use and medication allergies provide information about a patient's medical history and diagnoses that may affect the oral condition and delivery of dental care. Additional concerns include potential interactions between frequently used medications reported by patients and medications that are commonly used in dentistry, with the result that medication use by patients can impact care in contemporary dental practice. There must also be proper legislation which should limit the scale of drug without prescription. Moreover, professional organizations must create public awareness. Close consideration of these issues is required to provide the best care and optimal patient safety.

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