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Research Article

Self-Medication for Dental Reasons in Aseer Region, Saudi Arabia

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Received: July 15, 2016; **Published:** July 27, 2016

Abstract

Objectives: Determining the prevalence and assessing the knowledge and perception of individuals toward self-medication for dental reasons in Aseer region is the aim of the present study.

Method: A cross-sectional study is conducted on Saudi citizens attended at randomly selected five Primary Health Care Center in Aseer region, Saudi Arabia. The subjects were asked to complete the questionnaires that distributed among them in the period between August and October 2015. Thus, data were extracted from the questionnaire and analyzed using version nineteen of SPSS software.

Results: Of the 778 participants, the final sample was cut down to 731 with response rate of 93.96%. The plurality of the subjects (n = 312; 42.68%) were between 20 and 30 years of age. In all, 54.45% (n = 398) of the final sample were males and 45.55% of them (n = 333) were females. The researcher found that a multitude of the subjects (n = 668; 91.4%) had had self-administered medication once or more in the past. 40.9% of the final sample had known about the medications from TV ads and 43.77% from relatives and other people. Most of the subjects 77.42% claimed that dental pain was the most remarkable reason that made them to use the non-prescribed medications.

Conclusion: The present study found that irresponsible self-medication is common in the Aseer region of Kingdom of Saudi Arabia. It is established that antibiotics and pain killers were the most widely used drugs for dental reasons without a medical prescription. It is also found that they relied on unreliable sources of information as well as knowledge of self-medication for dental reasons. Educational campaigns and future studies, therefore, should draw attention to increase the individual's awareness and suitable use of self-medication for dental reasons.

Keywords: *Self-Medication; Dental; Aseer; Saudi; Bariq*

Introduction

The common practice of self-medication, the use of medicine without medical supervision to treat one's own ailment, is an interesting issue worldwide. A great number of individuals practice self-medication for variety of reasons, for example, maintaining good health, managing minor illnesses, avoiding infections and getting relief from pain of dental origin. In general, self-medication has defined by The World Health Organization (WHO) as "the treatment of common health issues with medicines especially planned and labeled for use without medical supervision" and approved and Over the Counter (OTC) medication has defined by The US Food and Drug Authority as "are drugs you can buy without an official prescription" [1,2].

Practically, self-medication involves the use of medicine to treat self-recognized symptoms, reuse an old prescription or sharing medications with others without a prescription by the people themselves. Many benefits of using OTC have been discovered including diminish visits to a physician and diminished costs [3]. The best way of taking medication is by consulting your doctor. Therefore, unaware use of OTC medications may lead to unfavorable consequences and can be attached by interactions with other medications, overdosing, and problems related to other medications [3].

As it appears from reviewing numerous studies, individuals in developing countries have practiced self-medication and they have taken prescription medications without an official prescription [4,5].

In Saudi Arabia, it has been reported that 53% of medications were used without an official prescription and 35% of patients attending primary care centers have some practice with self-medication [6,7]. In all, 49% of medications used without an official prescription should be gained by prescription only, and 51% were OTC medications [6]. A study from Bahrain reported that 44.8% of medical students have self-medicated [8]. Although there are rules for OTC medications and prescription use, it is common in Saudi Arabia to buy prescription medications without an official prescription. This finding differs from different countries internationally reporting high grades of professional status and education as oracular factors for self-medication [7].

Common use of OTC medication for dental reasons in Saudi Arabia is a raised issue. Determining the prevalence of self-medication for dental reasons and the exact reasons hiding behind it will authorize community dentists and policy makers to assure safe use of medications by people or modify the present policies to lessen the risk of misuses.

Preceding studies on self-medication for dental reasons in Saudi Arabia among individuals are limited. The present study, therefore, is the first to assess the knowledge, estimate the prevalence and discover the hidden reasons behind the practice of self-medication for dental reasons. This study aims to estimate the knowledge toward self-medication and speculate the prevalence of self-medication for dental reasons of individuals attending Primary Health Care Centers in Asser region of Saudi Arabia.

Material and Methods

A cross-sectional study conducted on Saudi citizens attended in randomly selected five Primary Health Care Centers in Aseer region of Saudi Arabia throughout 2 months period between August and October 2015. For the study, a self-administered questionnaire used to obtain information regarding self-medication experiences. For this, a structured questionnaire administered to the participants to inquire about their knowledge in regard to OTC medications and self-medication reasons and to collect information regarding their socio-economic status. Coaching on the method of data collection provided to data collectors. The questionnaire consisted of 7 questions with close-ended responses vis-à-vis demographic information. Additionally, the questionnaire included 7 items in the form of Likert scale on origins of medications information, the kind of medication used, the purpose for OTC medication use, individuals' knowledge of self-medication and reasons for using medications for dental reasons without a prescription. The questionnaire pretested on randomly selected 30 individuals attended in Alkhoush Primary Health Care Centre and they said that "it is clear and easy" and the average time was 5 minutes.

Permission to conduct the study obtained from the Institutional Review Board, King Fahad Medical City, Riyadh, Kingdom of Saudi Arabia. Also, verbal consent obtained from all the participants. Data from the survey analyzed using SPSS software and results displayed as counts and percentages. In addition, while continuous variables presented as mean and standard deviation, categorical variables presented as count and percentages.

Results

Of the 778 participants, the final sample was deduced to 731 with response rate of 93.96%. The plurality of the participants (n = 312; 42.68%) were between 20 and 30 years of age see (see Table-1). Of all, 54.45% (n = 398) of the final sample were males and 45.55% of them (n = 333) were females see (see Table-2). The majority of the participants (n = 680; 93%) were with secondary school level or less education while only 51 of them were awarded an academic degrees or included in an academic program (see Table-3).

Age group	%	N
10 years or less	6	41
From 10 – 20 years	11	81
From 20 – 30 years	43	312
From 30 – 40 years	27	201
More than 40 years	13	96

Table 1: *Distribution of participants based on age group.*

Gender	%	N
Male	54.44	398
Female	45.55	333

Table 2: *Distribution of participants based on the gender.*

Education level	%	N
Primary school or less	8	56
Intermediate school	15	111
Secondary school	70	513
Graduated	6	41
Post graduated	1	10

Table 3: *Distribution of participants based on education level.*

The study revealed that the majority of the participants (n = 668; 91.4%) had self-administered a medication at least once in the past (see Table-4). It has been reported that the most important dental reasons that led to the use of non-prescription medications by the participants were dental pain, i.e. 77.43%, gum inflammation without pain 10% and others 12.57% such as bad smell, teeth whitening and oral ulcers (see Table-5).

Gender	Male		Female		Total	
	N	%	N	%	N	%
Never used	19	4	44	13	63	17
One time	47	12	59	18	106	30
Two times	34	9	102	31	136	40
Three times or more	298	75	128	38	426	113
Total	398	100	333	100	731	200

Table 4: *Distribution of participants according to the gender and frequency of using medications without prescription last year.*

Reasons	N	%
Dental pain	566	77.43
Gum inflammation without pain	73	10
Bad smell	31	4.24
Teeth whitening	17	2.33
Oral ulcers	44	6

Table 5: *Dental reasons that led to the use of nonprescription medications.*

In 40.9% of the reported cases of self-medication, the participants had known the medications from TV ads and 43.77% from other people (see Table-6). From the final sample, it is found that 96% were ignorant of medication and it's side effects. The most commonly used (n = 490; 67.03%) type of medication was antibiotics, followed in decreasing order of prevalence by pain killers (n = 160; 21.88%), anti-fungal (n = 28; 3.83%) and anti-pyretic (n = 3; 0.41%) (see Table-7).

Source	N	%
From TV ads	299	41
From newspaper	7	1
From relatives	320	44
Others	105	14
Total	731	100

Table 6: *Source of participants knowledge about medications.*

Type of medication	N	%
Pain Killer	160	21.88
Antibiotics	490	67.03
Antipyretic	3	0.41
Antifungal	28	3.83
Other	50	6.84

Table 7: *Types of medications used without a prescription by the participants.*

Discussion

Several advantages can be accompanied from the good practice of self-medication which can revealed as a full information and good knowledge of the nature of the disease and the drug profile including cost effective treatment of minor ailments, disease prevention and reduced pressure on medical services when there is a insufficiency in health care staff [9]. In contrast, there are many possible hazards associated with the misapply of medications. For example, studies have revealed that overtaking the maximum recommended doses of analgesics antipyretics and paracetamol can cause hepatic failure [5].

Because we have few conducted studies on self-medication for dental reasons and because the majority of conducted studies was for general reasons, we compared the findings of this study with studies conducted in the same field but for general reasons. Self-care practice with non-prescription medications among the participants was high. The present finding is harmonious with a similar finding in a studies conducted by Bawazir in Riyadh, Kagashe GA in Tanzania, Mumtaz., *et al.* Osemene K and Hussain A [4,10-13]. In contrast, a study by Souza., *et al.* and Jalilian F., *et al.* is also significant [14,15]. The most important factor that enhanced self-medication among Saudi individuals is about the knowledge and consultations from non-qualified persons such as parents and friends followed by the wide coverage of direct TVs, electronic and print media ads on various types of OTC medicines which is similar to findings of study conducted by Almalak H., *et al* [16].

The unauthorized prescribing of antibiotics is accompanied with multiple-drug resistance [17. Antibiotics and pain killers were the medications most frequently used without a prescription among the participants, which is comparable to the findings of several studies carried out in different countries [11,13,18]. There are several issues accompanied with the unsuitable use of some medications. For example, surpassing the maximum recommended dose of paracetamol can result in paracetamol toxicity. Overtime, the chronic use of paracetamol can result in hepatotoxicity. Furthermore, the misuse of antibiotics results in propagated resistance to antibiotic among pathogens, treatment failure and other adverse effects [19,21]. The misuse of NSAIDs is accompanied with several adverse effects including chronic and acute kidney disease and gastrointestinal ulceration [21]. In addition, NSAIDs are accompanied with several interactions with other medications, including loop diuretics, angiotensin converting angiotensin receptor and blockers enzyme inhibitors, resulting in reduced effectiveness and increased risk of renal dysfunction [22].

Conclusion

This study has revealed that irresponsible self-medication is common in Saudi Arabia. Origins of information were not suitable, and perception and knowledge of self-medication for dental reasons were not enough. Similar findings have been reported in several studies conducted among individuals in other countries. In our study, antibiotics and pain killers were the medications used most frequently for dental reasons without a prescription. It is concluded that educational campaigns on accountable self-medication should be reinforced. Coming studies should concentrate on improving the individual awareness of the proper use of medications.

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Volume 4 Issue 6 July 2016