IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)
e-ISSN: 2279-0853, p-ISSN: 2279-0861.Volume 17, Issue 6 Ver. 3 (June. 2018), PP 82-84
www.iosrjournals.org

Prevalence of Self-Medication Behavior for Oral Health Problems among Population Living in Alkharj, Saudi Arabia

Abdulmajeed Alanazi [1], Amal Alshehri [2], Nouf Aljami [2], Nashaat Magdy [3]
1 Intern, College of Dentistry, Prince Sattam Bin Abdulaziz University, KSA
2 Dental General Practitioner, Alkharj Military Industries Corporation Hospital, Alkharj, KSA
3 Assistant Professor of Conservative Dental Science, College of Dentistry, Prince Sattam Bin Abdulaziz University, KSA
Corresponding Auther: Abdulmajeed Alanazi

Abstract:*Objective: To determine the patterns and predictors of self-medication practice for oral health problems among population living in Alkharj city, Saudi Arabia.*
Methods: A cross-sectional study based on a structured close-ended questionnaire was distributed among population visiting shopping malls in all different regions of Alkharj. A two-stage sampling technique was used: cluster and simple random sampling. The questionnaire was composed of two main sections: demographic characteristics and questions assessing the behavior of self-medication.
Results: The prevalence of self-medication was found to be 63.25%, with a higher prevalence among females than males. Gender and nationality were significantly associated with self-medication. Pharmacy shops were the main source of these medicaments. Lack of time was claimed to be the main reason for practicing self-medication with abscess, toothache, and gingival bleeding being the main predictors.
Conclusion: Self-medication was found to be a common practice among the population of Alkharj city.
Keywords*: Self-medication; Dental problems; Oral health problems; Alkharj*

Date of Submission: 26-05-2018 Date Of Acceptance: 08-06-2018

I. Introduction

Efforts to promote the rational use of drugs have mainly been targeted at the formal health care services. These efforts started in the 1970s, when the World Health Organization (WHO) introduced the concept of essential drugs. The principle of this concept is that a limited number of drugs would lead to a better supply of these drugs, better prescribing and lower costs for health care.1 Self-medication can be defined as the use of drugs to treat self-diagnosed disorders or symptoms or the intermittent or continued use of a prescribed drug for chronic or recurrent disease or symptoms without seeking professional healthcare advice.2,3

Oral health problems were a reason for practicing this behavior such as toothache gingival bleeding, halitosis, gingival swelling, tooth mobility and others.4,5 Numerous studies reported that self-medication is a common behavior in both developed and developing courtiers.6-8 For instance, In European countries, the prevalence of self-medication for general health issues is 68%, 9 while it was found to be 94.5% in Saudi Arabia, 92% in Kuwait, 76% in Karachi, 55% in Egypt, and 44.8% in Bahrain 10,11. Furthermore, in Cameroon a total of 67.8% were found to be self-medicating for oral health problems, a finding that supports similar reports in Indian and Nigerian populations, 100% and 80.6%, respectively.12,13

In Saudi Arabia, 80% of the populations were found to be self-medicating for dental pain of which antibiotics were the main medications used.6 Several substances were used without professional consultation. They include analgesics, the most commonly used medication, followed by native herbs, antibiotics, water with salts, oils, and others.14-15 Approaching these substances was found to be through different, sources such as pharmacies, native healers, and herbal shops.16

Moreover, sources of information and advice of the medications used for self-medication varied widely to include pharmacists, relatives, friends, media sites, traditional practitioners, and person's own knowledge and experience. Shifting towards self-diagnosis and medication instead of seeking a proper professional healthcare is attributed to a lack of time, money or healthcare accessibility, as well as religious or cultural beliefs, and receiving a previous treatment for a similar condition.5,12 The aim of the present study was to assess the patterns of self-medication prevalence for the management of oral health problems among population living in Alkharj, Saudi Arabia.

II. Methods

An observational cross-sectional study using self-administered, close-ended questionnaire adapted by Agbor et al.5 was conducted. The questionnaire was composed of the demographic characteristics and items related to assessing the behavior of self-medication, including type of oral/dental problems they previously experienced, sources of medication recommendation, types of medication used, duration of use, duration of symptoms relief, and reasons for not seeking proper dental consultation.

The questionnaire was distributed to people visiting shopping malls. The shopping malls were selected from all regions of Alkharj city. The participants were selected at random during their visit to the shopping malls and of any age, gender, or nationality. Participants who have never experienced oral health problems were excluded. The definition of self-medication was explained to the visitors as well as the aim of the current study. Privacy and confidentiality were completely protected, no identifiers or information were collected, including participants names, IDs, and others. Gender, nationality, marital status, education, occupation, household income, and type of oral health problem were compared using a chi-square test. Logistic regression was used to identify the predictors of self-medication. The data was analyzed using SAS V9.3 (SAS Institute Inc., Cary, NC, USA).

III. Results

A total of 400 participants were enrolled, of which 192 (48%) were males and 208 (52%) were females. The participants were classified into three age groups: less than 25 years (27%); 25–40 years (58%) years, and older than 40 years (15%). More than half of the sample, 270 (67.5%), were Saudi. According to the marital status, (45%) participants were single while (55%) were married.

For the majority of the participants, (58%) their educational level was above high school while (42%) were below high school.

According to the household income, (24%) participants their income was <3000 SR, (25%) between 3000–6000 SR, (29%) between 6000–9000 SR, (17%) between 9000–12000 SR, and (5%) for their income was more than 12,000 SR. Upon their previous experience of oral problems, toothache and abscesses were experienced by (75%) and (13%) participants respectively, p-value < 0.05.

The majority of the samples (70%) indicated Ibuprofen (45%) and antibiotics (25%) was the main medication introduced and the usage was for less than a week. Symptom relief was experienced by 75% of the sample. However, 10% reported no effect while the symptoms got worse with 2.5% of the participants. When the participants were asked about the next step in case their symptoms did not resolve or become better, 80% stated that they will visit a dentist, 10% will continue the same medication.

Pharmacists were the main source of recommending the usage of these medications (60%). Several reasons for practicing this behavior with lack of time being the main reason (70%). Many variables were assumed to be predictors for practicing self- medication of which toothache, abscess, gingival bleeding and gingival swelling showed significant p-values < 0.05 (Table 1).

Table 1. Predictors for practicing self-medication

Risk factors of self-medication	OR	95% CI	*P*-value
Gender (Males vs. Females)	0.581	0.526-1.122	0.133
Age	0.999	0.978-1.113	0.344
Nationality (Saudi vs. non-Saudi)	1.344	0.812-2.444	0.211
Education (Above high school vs. High school or below)	1.277	0.866-2.244	0.311
Marital Status (Married vs. Single)	1.171	0.640-1.777	0.794
Occupation (employed vs. unemployed)	1.031	0.381-2.786	0.704
Income (≥3000-≤6000 vs. less than 3000)	0.675	0.316-1.443	0.769
Income (≥6000-≤9000 vs. less than 3000)	0.500	0.215-1.161	0.136
Income (≥9000-≤12000 vs. less than 3000)	0.630	0.300-1.326	0.574
Income (≥12000 vs. less than 3000)	0.907	0.401-2.050	0.330
Toothache (yes vs. no)	2.006	1.162-3.518	0.011*
Gingival bleeding (yes vs. no)	1.772	1.115-3.145	0.018*
Abscesses (yes vs. no)	3.240	1.590-2.601	0.002*
Bad breath (yes vs. no)	0.869	0.449-1.797	0.552
Mouth ulcer (yes vs. no)	1.230	0.535-2.835	0.555
Gingival swelling (yes vs. no)	0.555	0.331-0.898	0.022*

*P-value ≤0.05 is considered significant

IV. Discussion

The prevalence of self-medication to treat oral and dental problems in Kharj city was found to be high (59%). This finding supports the global reported prevalence in the literature, 100% in India 12, 80.6% in Nigeria13, 80% in Saudi Arabia 6, 67.8% in Cameroon 5, and 21.7% in Brazil 17.

In the current study, females were found to be significantly more self-medicating than males ($p \leq 0.05$). In contrast, similar studies found that gender was insignificantly associated with the practice of self-medication5,13. Toothache was the main trigger which is in agreement with the findings among Indian and Cameroonian populations5,12. Analgesics were the main medications used and this in agreement with a study findings among Indian and Cameroonian populations,

Pharmacy shops were found to be the main source for medications (70%). However, similar findings might indicate this issue to be experienced worldwide as reported in previous studies: Saudi Arabia (93.6), India (86%) 12, Cameroon (55.6%) 5, and Brazil (45.7%) 17. The duration for practicing self-medication by the majority of the sample was less than a week (70%) which agrees with the finding in Indian population (60.6%) 12 and disagreement with Nigerian population, of which the majority practiced self-medication for 2–3 weeks (37.3%) 13. In addition, most of the sample (75%) reported a symptoms relief which supports the finding in Cameroonian population (86.4%) 5. Many reasons were claimed by the participants for practicing this behavior, of which lack of time was the main reason (70%) followed by their belief of the minority of the symptoms and dental fear, with the latter being a serious issue receiving extensive investigations 18. In case of symptom persistence, the majority of the participants will seek a dentist (80%), which is agreed upon by Indian population as well (84.6%) 12.

V. Conclusion

Self-medication was found to be a common practice among the population of ALKharj. Educational campaigns to raise the awareness of potential hazards of self-medication and consequences of delaying the intervention among general population are needed. Further studies, including other populations at different regions of the Kingdom of Saudi Arabia, to detect other reasons for practicing this behavior and possible other predictors are recommended.

References

[1]. le Grand A, Hogerzeil HV, Haaijer-Ruskamp FM. Intervention research in rational use of drugs: a review: Health Policy Plan 1999, 14: 102.

[2]. Awad A, Eltayeb I, Matowe L, Thalib L. Self-medication with antibiotics and antimalarials in the community of Khartoum State, Sudan. J Pharm Pharm Sci 2005, 8:326-331.

[3]. Bown, D.; Kisuule, G.; Ogasawara, H.; Siregar, C.; Williams, G. World Health Organization Guidelines for the regulatory assessment of Medicinal Products for use in self-medication. WHO Drug Inf. 2000, 14, 18–26.

[4]. Montastruc, J.L.; Bagheri, H.; Geraud, T.; Lapeyre-Mestre, M. Pharmacovigilance of self-medication. Therapie 1997, 52,105-110.

[5]. Agbor, M.A.; Azodo, C.C. Self medication for oral health problems in Cameroon. Int. Dent. J. 2011, 61,204-209.

[6]. Khalil, H.; Abdullah, W.; Khawaja, N.; AlSalem, A.; AlHarbi, S.; Salleeh, H.B.; Shah, A.H. Self-prescribed antibiotics by Saudi patients as a routine self-management of dental problems. Life Sci. J. 2013, 10, 1939–1942.

[7]. Shankar, P.R.; Partha, P.; Shenoy, N. Self-medication and non-doctor prescription practices in Pokhara valley Western Nepal: A questionnaire-based study. BMC Fam. Pract. 2002, 3, 17.

[8]. Bretagne, J.-F.; Richard-Molard, B.; Honnorat, C.; Caekaert, A.; Barthélemy, P. Gastroesophageal reflux in the French general population: National survey of 8000 adults. Presse Med. 2006, 35 Pt 1, 23–31.

[9]. Zafar, S.N.; Syed, R.; Waqar, S.; Irani, F.A.; Saleem, S. Prescription of medicines by medical students of Karachi, Pakistan: A cross-sectional study. BMC Public Health 2008, 8, 162.

[10]. Ezz, N.F.E.; Ez-Elarab, H.S. Knowledge, attitude and practice of medical students towards self medication at Ain Shams University, Egypt. J. Prev. Med. Hyg. 2011, 52.

[11]. James, H.; Handu, S.S.; Khaja, K.A.A.; Otoom, S.; Sequeira, R.P. Evaluation of the knowledge, attitude and practice of self-medication among first-year medical students. Med. Princ. Pract. 2006, 15, 270–275.

[12]. Komalraj, M.R.; Bhat, P.K.; Aruna, C.N. Self Medication Practices for OralHealth Problems among Dental Patients in Bangalore: A Cross Sectional Study. IOSR J. Pharm. 2015, 5, 68–75.

[13]. Anyanechi, C.; Saheeb, B. Toothache and self-medication practices: A study of patients attending a niger delta tertiary hospital in Nigeria. Ann. Med. Health Sci. Res. 2014, 4, 884–888.

[14]. Souaga, K.; Adou, A.; Amantchi, D.; Kouame, P.; Angoh, Y. Self medication during orodental diseases in urban Ivory Coast. Results of a study in the region of Abidjan. Odontostomatol. Trop. 2000, 23, 29–34.

[15]. Afolabi, A.O.; Akinmoladun, V.I.; Adebose, I.J.; Elekwachi, G. Self-medication profile of dental patients in Ondo state, Nigeria. Niger. J. Med. 2010, 19, 52488.

[16]. Schlenker, T.; Raedsch, R.; DeVries, J.X.; Schmitz-Kummer, E.; Walter-Sack, I.; Rothe, E.M.; Kommerell, B. Self-medication for abdominal discomfort resulting in life-threatening consequences. J. Am. Coll. Cardiol.1993,72,74-75.

[17]. De Lima, B.R.; Ferreira, M.B.C.; Casagrande, L. Self-medication in Children and Young Patients at University Dental Service. Pesqui. Bras. Odontopediatria Clin. Integrada 2016, 16, 229–234.

[18]. Wide Boman, U.; Carlsson, V.; Westin, M.; Hakeberg, M. Psychological treatment of dental anxiety among adults: A systematic review. Eur. J. Oral Sci. 2013, 121 Pt 2, 225–234.

Abdulmajeed Alanazi "Prevalence of Self-Medication Behavior for Oral HealthProblems among Population Living in Alkharj,Saudi Arabia "IOSR Journal of Dental and Medical Sciences (IOSR-JDMS), vol. 17, no. 6, 2018, pp 82-84