



The knowledge and practices of oral hygiene methods in a sample of college students; Baghdad

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Abstract

Back ground: Poor oral health can have a profound effect on general health and the quality of life, the experience of pain, endurance of dental abscesses, problems with eating, chewing, and missing, discolored or damaged teeth, has a major impact on people's daily lives and wellbeing. All these problems can be prevented by good personal oral hygiene practices.

Objectives: The aim of this study was to find out the knowledge and practices of oral hygiene methods and assess any association between these methods with the prevalence of dental caries among the students in different colleges in Baghdad

Methods:

-**Study design:** Cross sectional

-**Study period:** The study was conducted from September, 1st to December, 31st 2005

-**Settings:** Different colleges in Baghdad

-**Participants:** A convenience sample of Four hundred and seventy students, male 236 (50.2%) and female 234 (48.8%).

-**Data collection:** The data were collected by using a specially prepared questionnaire and oral examination.

Results: 73.6% shows a poor and intermediate knowledge and practices methods of oral hygiene, the prevalence of dental caries reaches 66.4%. The proportion of dental carries among students with excellent score for the knowledge and practice methods of oral hygiene was 15.4 % (4 out of 26) only, while those with poor score showed 97.4% (76 out of 78).

Conclusions: There is a need to enhance the knowledge of oral health and disease among our students, early detection and treatment of dental and oral diseases.

Keywords: Oral hygiene, Dental carries, Prevention.

Introduction

Oral hygiene is the practice of keeping the mouth clean, which is necessary for all persons to maintain the health of their teeth and mouth ^[1]. Oral hygiene is considered to be the best means of prevention of more than 200 categories of diseases or

conditions affecting the mouth ^[2]. The mouth contains a number of different tissues which can be affected by infection, trauma, degeneration, or neoplastic changes. These oral diseases are important consideration in public health, preventive dentistry, and preventive medicine for several reasons. First, they are of almost

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universal prevalence. Rarely if ever does anyone go unaffected by at least one of these diseases, and most people are affected by more than one during their life time^[3,4]. Second, most oral diseases do not undergo remission or termination if left untreated, but accumulate a backlog of unmet needs that can ultimately end in loss of teeth. Third, these diseases usually require technically demanding, expensive, and time consuming professional treatment. Fourth, they are in large measure preventable. Oral diseases and conditions also merit consideration because of the effect they can have on the physical health of the remainder of the body as well as the quality of life^[5,6,7]. The impact of oral diseases in pain, suffering, impaired function and reduced quality of life, is both extensive and expensive. Treatment is estimated to account for between 5-10% of health costs in industrialized countries, and is beyond the resources of many developing countries^[8,9].

Maintaining good oral hygiene, by proper knowledge and practice, is one of the most important things we can do for prevention of these diseases. Healthy teeth not only enable you to look and feel good, they make it possible to eat and speak properly as well as your overall well-being^[10]. The American Dental Association (ADA) recommends the following for good oral hygiene:

1. Brush your teeth twice a day with fluoride toothpaste.
2. Clean between teeth daily with floss or an interdental cleaner. Decay-causing bacteria still linger between teeth where toothbrush bristles can't reach. Flossing removes plaque and food particles from between the teeth and under the gum line.
3. Eat a balanced diet and limit between-meal snacks.

4. Visit your dentist regularly for professional cleanings and oral exams^[11,12].

The aims of this study was to investigate the knowledge and practices of oral hygiene methods, estimate the prevalence of dental caries, and find any association between them among college students in Baghdad.

Materials and methods

A convenience sample of four hundred and seventy male and female students from different colleges in Baghdad were included in the study. Each student was interviewed by the investigators, using a specially prepared questionnaire. The questionnaire contained 10 different questions covering the knowledge of tooth decay, gingival disease, oral hygiene methods, healthy diet, frequency of tooth brushing, visit to dentists; the questionnaire was tested before embarking on the study. One score was given for each correct answer and zero for the wrong one. The final score is calculated by summation of all single item scores and can range from 0 to 10 points. Higher scores indicate better knowledge and practice. Based on this score, the individual's knowledge and practice can be classified into four categories: poor (0-4 points); moderate (5-6 points); good (7-8 points); and excellent (9-10 points)^[13,14].

This was followed by an oral examination under good illumination. The occurrence and severity of dental caries were compared regarding the score of knowledge and practice of oral health.

Results

Among the 470 students, the males constituted 236 (50.2%) and the females constituted 234 (49.8%). The mean age of the whole sample was 20.34 years (range 18-25 years).

Regarding knowledge of students for the cause of dental caries, 86% of male and 90% of female students responded that it is due to tooth brushing by a wrong method. Ninety percent of males and 98% females were aware of role of sugar and sugary drinks in dental caries. Almost 78% male and 88% female thought that it might be due to not visiting dentist. Almost 43% of male and 45% female did not know that bacteria are the cause of dental caries.

Regarding oral hygiene practices, 34% male and 48% female students used regular brushing (3 times a day after meal), and 58% of the whole students brush before sleep, while 18.0% brushed in the morning only. The majority of the students (78%) who regularly brushed their teeth used vertical brushing. Only 8% of females and 6% of male students were regular visitors to the dentist. The majority of the males 86% and females 83% visited the dentist only on feeling pain.

The final score for the knowledge and practice of oral hygiene showed that only 5.5% and 20.9% were having excellent and good score respectively, while 57% and 16.6% were scored moderate and poor respectively (Table 1).

The prevalence of dental caries in our sample was 66.4%; one or more tooth might be decayed in the same student. Minimal differences in the prevalence of dental caries were noted between male (62.2%) and female (61.7%).

The proportion of dental carries regarding the score for the knowledge and practice of oral hygiene showed in table 1. Those with excellent score showed 15.4 % (4 out of 26) caries only, while those with poor score showed 97.4% (76 out of 78) caries.

Discussion

An important starting point for designing proper prevention tools is to know how much people know, especially among the educated persons and those who give education to the general population. Thereafter, the knowledge and practice can be established within the community as a whole^[15, 16].

The oral diseases are known to exist in each community. The knowledge and practices regarding these diseases must be assessed in this way in order to develop programmes appropriate to community needs. Despite the lack of recent, reliable and comparable data on oral health, Opportunities exist to expand oral disease prevention and health promotion knowledge and practices among the public through community programmes and in health care settings. The major challenges of the future will be to translate knowledge and experiences about disease prevention into action programmes^[17, 18, and 19].

In this study, the response rate of 73.6% shows a poor and intermediate knowledge and practices methods of oral hygiene among the college students with prevalence of dental caries reaches 66.4%. Our study showed that almost half of the students did not have knowledge regarding bacterial relationship of caries and oral diseases. These alarming results need great attention as the study sample represents the educated group in Iraqi community.

Both male and female students had a very high level of knowledge regarding tooth brushing, role of sugar in dental caries, but only 41% of them practicing the proper brushing method. The majority of the students visited the dentist in the dental pain (toothache) rather than having a regular pattern of visit to dentist. These responses emphasize that there is a need of

delivering the basic knowledge and information of health sciences especially the knowledge of oral health, hygiene practices that would help to improve the oral health^[20, 21].

In conclusion, there is a need to enhance the knowledge of oral health and disease among our students who are the cornerstone of our community. The distribution of proper health information through health curriculum and mass media are the best way to achieve this objective.

There is a need to educate the students about dental self care, to pay attention to signs of caries even there was no pain, to visit the dentist regularly and not only on having toothache, so early detection and treatment of dental and oral diseases can be provided. A research should also focus the barriers to visit dentist regularly among the students in order to remove them. Further, researches can be carried out to look into the effects of socioeconomic status and other variables in this subject,

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Table 1: The proportion of dental caries regarding the score for the knowledge and practice of oral hygiene

No. of Dental caries	knowledge and practice of oral hygiene				Total
	Poor	Moderate	Good	Excellent	
absent	2	77	57	22	158 (33.6%)
1	15	152	25	3	195 (41.5%)
2	36	9	7	1	53 (11.3%)
3	18	18	6	0	42 (8.9%)
More than 3	7	12	3	0	22 (4.7%)
Total	78(16.6%)	268(57%)	98(20.9%)	26(5.5%)	470 (100%)