PUBLIC AWARENESS AND ATTITUDE TOWARD ORAL CANCER SCREENING IN UNITED ARAB EMIRATES

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Abstract

Cancer is a major health problem in both developed and developing countries. Fighting against cancer require health care professionals to be well trained in diagnosing as well as organizing public education programs. In most Asian countries including UAE, there are no organized oral cancer screening and education programs. The aim of this study is to evaluate public knowledge of oral cancer risk factors, to assess their awareness toward oral cancer examination.

A self-administered questionnaire was designed to collect information regarding subject's awareness of oral cancer, knowledge of other conditions associated with alcohol and tobacco use and perceived risk for oral cancer and subject's attitude regarding oral cancer screening.

A convenient sample of 1055 subjects agreed to participate and answered the questionnaire. The majority of the participants (68.99%, n=692) were below 30 years of age. More than 2/3 of them were non-local (residents from other nationalities) and were well educated (71.81%). We found significant difference in the subject's awareness of the existence of an oral cancer examination at Bivariate levels among age, gender, educational levels and those who had higher risk factor knowledge scores. Regarding knowledge about early signs of oral cancer 26% of respondents choose sore lesions in mouth that does not heal as an early sign of oral cancer followed by red patches in mouth that are not painful (20.8%) then white patches in mouth that are not painful (16%).

Our results demonstrate that subject's awareness in UAE population have relatively little accurate knowledge about oral cancer. This lack of knowledge could result in simply ignoring a sign of oral cancer that, in turn, would have serious consequences. Without accurate and appropriate information, people can neither make nor be expected to make informed, intelligent decision about their own health or seek professional help.


Keywords: Oral cancer, screening, knowledge, attitude.

Received date: 22 August 2012 Accept date: 10 December 2012

Introduction

Cancer is a major health problem in both developed and developing countries. The estimated number of new cases of cancer each year is expected to rise from 11 million in 2002 to 16 million by 2020 with more than half of cases arising in developing countries.1 Cancer is the third leading cause of death in the United Arab Emirates (UAE) following cardiovascular diseases and road traffic accidents.2 Data from the UAE ministry of health indicates that cancer accounts for approximately 500 death per year. Epidemiological observations indicate that environment and life style are the major determinants of the geographical pattern of cancer.3 During the last two decades, UAE like other Arabian Gulf countries had witnessed a rapid development in many aspects of life. As a result of increasing development and civilization, the major public health problems have also increased.4

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Fighting against cancer requires well trained health care professionals as well as organizing public education programs to raise awareness about this disease. Worldwide, oral cancer is responsible of 130000 deaths annually. Oral cancer experts believe that early diagnosis of oral cancer greatly increases the probability of cure and survival rates in addition to minimizing morbidity. Relatively little attention has been given to educate the general public about risk factors, signs and symptoms of oral cancer. In most Asian countries including UAE, there are no organized oral cancer screening and education programs. Such programs can improve the population’s knowledge about risk factors and screening. In developed countries, public knowledge about oral cancer is inadequate even among health care providers and professionals. Hence before landing any screening program in the UAE, it is very important to obtain basic data from a population about their knowledge of cancer. Oral cancer screening and education programs could improve the population’s knowledge about risk factors and screening related to such dreadful disease. Relatively little attention has been given to educating the general public about risk factors, signs and symptoms of oral cancer. Without accurate and appropriate information, people can neither make nor expected to make informed, intelligent decisions about their own health. Given the lack of public awareness of the signs and symptoms and risk factors associated with oral cancer, which has been considered as potent barrier for early detection of oral cancer, we conducted this study to determine subject’s knowledge of oral cancer risk factors, to assess their awareness toward oral cancer examination.

Materials & Method

A self-administered questionnaire was designed to collect information regarding the sociodemographic characteristics such as age, gender, nationality and educational level, in addition to survey instrument comprised of 10 items that assesses the subject’s awareness of oral cancer, knowledge of other conditions associated with alcohol and tobacco use, perceived risk for oral cancer and subject’s attitude regarding oral cancer screening. A single investigator administered all the questionnaires to minimize bias and standardize recording. Oral cancer awareness was assessed by asking the following questions: “have you ever heard of Oral Cancer?” and “have you ever heard of an oral cancer examination?” Oral Cancer examination history was also assessed by asking this question: “Have you ever had Oral Cancer examination? Response categories for all three questions were: “Yes”, “No” and “Don’t know/Not sure”. Other questions were designed to determine the level of knowledge about signs and risk factors of Oral cancer.

For analysis of this report, accurate knowledge was defined as “definitely increases” responses for all items in question except for eating hot spicy foods and frequently biting the cheek or lip, which were correctly answered as “definitely does not increase”. Definitely increases” is the correct response for all items in question (3&4).

Other response categories were combined to reflect an absence of knowledge ("don’t know") or a “lack of confidence of knowledge” ("Probably increases" or “Probably does not increase”). Refusal was not included.

Subject’s attitude about oral cancer screening was also tested by asking the following questions: “How likely would you agree to have an oral health screening to check your mouth for...
...cancer?”. The response categories for this question were “extremely unlikely, unlikely, likely, extremely likely. The last two questions were about the subject’s response to oral cancer screening test (table 2). The response categories for this question were “strongly agree, agree, disagree, and strongly disagree”.

**Table 1.** Demographic characteristics among screening participants

The ages of the respondents ranged from 18 to 70 years. The majority of the participants (68.99%, n=692) were below 30 years of age. More than 2/3 of them were non-local (residents from other nationalities) and were well educated (71.81%). The total knowledge risk factors scores vary, 15.96% of the subjects had a total score of 1 and 44.69% had a total score of 3 and only 3% had a total score of 4 or more. Most of the subjects (64.5%, n=678) had heard about oral cancer, however, only (21.6%, n=227) reported having heard of an oral cancer exam, and only (5%, n=52) reported ever having had an oral examination (table 2).

**Table 2.** Knowledge of awareness of oral cancer and existence of oral screening exam and history of oral exam and risk factor scores

Knowledge concerning risk factors varied greatly, 71.5% of the subjects (n=751) know that tobacco is a risk factor for oral cancer, whereas less participants knows that alcohol use is also a risk factor (57.9%, n=609) know that alcohol was. Knowledge of excessive sunlight as a risk factor...
for lip cancer was reported by 23.4% (n=246) participant only. Moreover, only 8.5% (n=89) knew that eating hot, spicy food was not a risk factor, and 9.7% (n=102) know that frequently biting the cheek or lip does not increase the chance of getting mouth or lip cancer. Across all groups, there was a higher level of knowledge about tobacco use as a risk factor than about other conditions. (Figure 1)

Figure 1. Knowledge about various risk factors related to cancer.

About 61-79% of participants know that smoking cigarettes places an individual at risk for emphysema, lung cancer, chronic bronchitis and cancer of larynx. (Figure 2) Regarding the question about whether heavy alcohol drinking definitely increases the chance of getting cirrhosis, 69.4% have answered “yes” and about 50% of them also knew that heavy alcohol drinking definitely increases the chance of getting throat cancer as well as mouth cancer. (Figure 3)

Figure 2. Subject’s knowledge about smoking effects

Figure 3. Subject’s knowledge about alcohol effects.

We found significant difference in the subject’s awareness of the existence of an oral cancer examination at Bivariate levels among age, gender, educational levels and those who had higher risk factor knowledge scores (table 3).

Table 3. Bivariate analysis for awareness of existence of an oral cancer exam and history of oral cancer exam

Regarding knowledge about early signs of oral cancer 26% of respondents choose sore lesions in mouth that does not heal as an early sign of oral cancer followed by red patches in mouth that are not painful (20.8%) then white patches in mouth that are not painful (16%).

Oral cancer attitude was also assessed in this study and 21.6% of the respondent (n=222) were strongly agree to have an oral health screening to check their mouth for cancer. However, when asked about dentist check for mouth cancer, there was multiple answers, 12.6%(n=128) of them said that it is a waste of time and 35.7% (n=360) said it gives them discomfort and 89% (n=914) said that it gives
early diagnosis of mouth cancer and 90.6% (n=960) said that this test reassure them. Regarding respondent feeling about oral cancer check, about 36.3% were not concerned or worried about it.

Discussion

Oral cancer is largely preventable, earlier diagnosis greatly increases a patient’s chances of survival as the mouth is very accessible for a clinical or even self-examination. However, there is poor public awareness of the signs and symptoms of oral malignancies and premalignant lesions. In 1996, the National Strategic Planning Conference for Prevention and Control of Oral and Pharyngeal Cancer recommended that members of the public be informed that an examination for oral cancer exists and that they should request one routinely from a variety of health care providers. Few studies have investigated the knowledge and opinions of general public about oral cancer. This is the first study done in UAE regarding oral cancer public awareness. In our study, knowledge levels about oral cancer and its risk factors was more in females than in males and among younger than older participants. In the present study only 4.97 % of the respondents reported that they had been examined for oral cancer. UAE population has relatively little accurate knowledge about oral cancer. The overall lack of knowledge was reflected by the proportions of “don’t know” responses and incorrect responses. For example, 13.73 % (n=145) of adults admitted that they could not identify one early sign of oral cancer and another 4.73 % (n=50) had incorrect responses. In conclusion, this lack of knowledge could result in simply ignoring a sign of oral cancer that, in turn, would have serious consequences. Without accurate and appropriate information, people can neither make nor be expected to make informed, intelligent decision about their own health. Consistent with other international studies, we found that there was a lack of knowledge of the risk factors associated with oral cancer among elderly peoples, with the exception of tobacco and alcohol use. Furthermore, there was a lack of awareness of the existence of an oral cancer examination. In this study, less than 5% of the respondents reported that they had been examined for oral cancer. We can speculate that if individuals do not know enough information about risk factors and signs oral cancer they will not seek oral cancer examination.

For decades, we have known that the use of tobacco products and alcohol is detrimental to health. A variety of educational and informational campaigns have urged people who use tobacco products to stop. It is not common to include that the use of tobacco may cause oral cancer. This survey found that most participants know that smoking is detrimental to health and that heavy drinking contributes to liver cirrhosis. This suggests that some educational massages have successfully imparted correct information. Adults were reasonably knowledgeable about the link between tobacco products and oral cancer.

References

