

KNOWLEDGE AND AWARENESS ABOUT ORAL CANCER AMONG UNDERGRADUATE DENTAL STUDENTS

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ABSTRACT

Objective: To assess the knowledge and awareness about oral cancer among undergraduate dental students.

Methods: A validated questionnaire of 10 questions, regarding the basic knowledge and awareness about oral cancer was distributed among the 3rd year, final year, and internship (5th year trainee) of undergraduate dental program in Saveetha Dental College and Hospital, Saveetha University, Chennai. The data extracted were tabulated, statistically analyzed, and results obtained.

Results: About 41% of participants were unaware about the treatment costs for oral cancer and 33% of them said that they do not inform the patients about the risk factors of oral cancer. 36% of participants were unsure about where to refer the patients with oral cancer. 96% of students preferred to have more training toward oral cancer diagnosis methods and treatment options available.

Conclusion: Although the basic knowledge of the students is good, it is not adequate enough and practices about risk factors had to be reinforced among these students so that they can help the patients in tobacco and alcohol cessation and contribute in the prevention of oral cancers. The dental curriculum for students should lay more emphasis on diagnostic and prognostic factors of oral cancer. Morbidity and mortality are likely to be reduced if future dentists know how to prevent and detect oral cancer.

Keywords: Knowledge, Awareness, Oral cancer, Dental students.

INTRODUCTION

The incidence of oral cancer is rising in most countries, especially in developing countries. In the general male population, oral cancer is the sixth most frequent cancer [1]. Squamous cell carcinoma (SCC) accounts for 95% of oral cancers, and it is associated with avoidable etiological risk factors [2,3]. Familial history of oral cancer is also documented as a risk factor for SCC of the head and neck [4,5]. It affects the tissue lining of the mouth which is perfectly visible to dentists during routine examination. Dentists being the first to encounter such changes in the oral cavity, have the responsibility to counsel, diagnose and effectively treat the disease in its initial stages.

Although there is ease of access for examination of the oral cavity, around 60% of oral cancer cases are detected only at later stages (Stage III and IV). Despite therapeutic advances in recent years, this type of cancer has very poor survival rates worldwide with very less average of 5-year survival rates. Many variables affecting the prognosis of oral cancer, such as nutritional or immune status of the patient, tumor sites, and oncogene expressions, are reported, but the stage at diagnosis remains the most important prognostic indicator for oral cancer. The higher the stage, poorer the prognosis [6].

Deficiencies in training, which hinder the recognition of lesions, contribute to the delayed diagnosis. The early diagnosis is essential to achieve better results. Early identification of oral cancerous lesions reduces rates of morbidity, mortality and mutilation, increases the quality of life and lowers treatment costs [7]. To achieve this, it is important that health professionals, especially dentists, perform oral cancer examinations as part of their clinical practice and especially be aware of not only the pathogenesis of the disease but also about the first clinical signs.

It is expected that dentists, because of extensive understanding of the etiology and clinical aspects of cancer, can make a prompt diagnosis of this condition. Nevertheless, some studies have suggested that dentists are not able to adequately detect oral cancer in its early stages due to their ineffective attitudes and lack of knowledge. Thus, the rationale of this study is to assess the level of knowledge and awareness about oral cancer among undergraduate students of our dental college.

METHODS

Year of study

The study was conducted during the academic year in January 2016.

Study population and location

This study was conducted among the dental students who were attending the 3rd year, final year, and internship (5th year trainee) of the graduate program in Saveetha Dental College and Hospital, Saveetha University, Chennai.

Study sample size

A total of 100 students were enrolled in the study including 3rd year, final year, and intern students who were present at the day of study.

Questionnaire

For the survey, a validated questionnaire of 10 questions was distributed among all the students of the study [8], and the questions were designed to assess their basic knowledge and awareness about oral cancer. The data so obtained from the survey were analyzed using Statistical Package for Social Sciences (SPSS) version 17 and results obtained [8].

RESULTS

Among 100 students who participated in the study, 97% of students agreed that family history plays an important role in oral cancer. 86% of students said that they ask for relevant family history for oral cancer while taking a case history 100% of students said that they routinely ask about the personal history for all patients. 84% of students were aware about the various treatments available for management of oral cancer, and only 59% of participants were aware about the treatment costs for oral cancer. 96% of students preferred to have more training toward oral cancer diagnosis methods and treatment options available. 93% of students were aware of the risk factors for oral cancer, but only 67% of them said that they inform the patients about the risk factors of oral cancer. 64% of students were aware of where to refer the patients with oral cancer, but 36% were not sure. All of the participants (100%) agreed that dentists are the first personnel to identify oral cancerous lesions at its early stage (Fig. 1).

DISCUSSION

In our study, 100% of students said that they routinely ask about the personal history for all patients like use of tobacco and alcohol and dietary habits but only 67% of them said, they inform the patients about the risk factors of oral cancer which in comparison to the study by Fotedar *et al.* [9] in which only 67.7% of subjects used to take history regarding use of tobacco and alcohol from their patients and 62.4% of the students educate the patients about adverse effects of tobacco and alcohol, which clearly reflects the students lack of knowledge about the role of tobacco and alcohol in causing oral cancers.

In a study by Okoh and Enabulele [8], although the graduating dental students easily identified alcohol and tobacco as risk factors for oral cancers, knowledge of other risk factors such as poor nutrition, oral sex and sunlight was on the average, and a total of 96.7% of the dental students routinely ask patients on the use of alcohol and tobacco, whereas in our study 93% of students were aware of all the risk factors for oral cancer and 100% of students said that they routinely ask about the personal history for all patients.

In relation to cancer prevention and risk factors for oral cancer, 67% dental students of our study routinely give advice to their patient whereas in a study conducted in Spain it was found that 51.4% dentists give such advice to their patient [10] and 65% dentists in a study by Bhati *et al.* [11].

In a study by Anderson Rocha-Buelvas *et al.* [12] over half the respondents (59.14%) believe that it is important to evaluate the patient's personal history of tumors, but that less than a quarter (22.58%) evaluate family history of cancer. In our study, 97% of students agreed that family history plays an important role in oral cancer and 86% students said that they ask for relevant family history for oral cancer while taking case history.

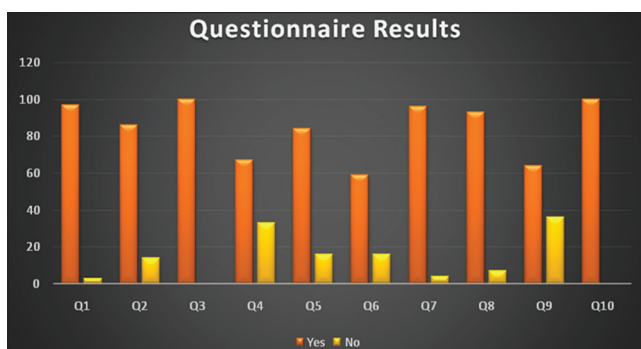


Fig. 1: Knowledge about oral cancer among undergraduate dental students

In our study, 41% of participants were unaware about the treatment costs for oral cancer and 33% of them said that they do not inform the patients about the risk factors of oral cancer. 36% of participants were unsure about where to refer the patients with oral cancer. This highlight that the dental students' knowledge though good is not adequate enough, and a more positive attitude must be emphasized when treating oral cancer patients.

A 96% agreed, there is need for additional training/information regarding oral cancer which is comparable to 90% as reported by Carter *et al.* [13] and 94.6% according to Fotedar *et al.* [9] Also in a study by Bhati *et al.* [11] on attitude and practice of dentists in Belgaum city, regarding oral cancer prevention suggest strongly that educational interventions and training for practitioners are necessary. Studies by Anderson Rocha-Buelvas *et al.*, [12] and Ariyawardana and Ekanayake [14] agree that dentists feel; they need more and better training regarding prevention and detection of oral cancers. In countries like the USA, it has been shown that there is a need for educational programs on oral cancers, for further training of primary care providers [15]. Various studies emphasize the need for continuing dental education on oral cancer prevention and treatment for the undergraduate dental students [16,17].

Increasing the knowledge of graduating dental students will increase the number of practicing dentists who are trained to provide proper oral cancer examinations for their patients, and who are knowledgeable about the risk factors for oral cancer [18].

CONCLUSION

Although the basic knowledge of the students about oral cancer is good, it is not adequate enough and practices about risk factors had to be reinforced among these students so that they can help the patients in tobacco and alcohol cessation and contribute in the prevention of oral cancers. Educational programs should focus on risk factors, screening, behavior modification, counseling, physical examination of oral cancer and criteria for referral to specialist for biopsy to facilitate definitive diagnosis and management [19,20]. Morbidity and mortality are likely to be reduced if future dentists know how to prevent and detect oral cancer.

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Questionnaire

STUDY OF KNOWLEDGE AND AWARENESS ABOUT ORAL CANCER AMONG UNDERGRADUATE STUDENTS OF DENTAL COLLEGE:

1. Is family history important in oral cancer?
A) Yes B) No
2. Do you ask for relevant family history for oral cancer in history taking?
A) Yes B) No
3. Do you ask for personal history of patients regularly?
A) Yes B) No
4. Do you inform the patients on the risk factors of oral cancer?
A) Yes B) No
5. Are you aware about the treatments available for oral cancer?
A) Yes B) No
6. Are you aware of the treatment cost for oral cancer?
A) Yes B) No
7. Would you like more training towards the diagnosis treatments available and prognosis of oral cancer?
A) Yes B) No
8. Are you aware of the risk factors for oral cancer?
A) Yes B) No
9. Do you know where to refer the patients with oral cancer?
A) Yes B) No
10. Do you think dentist are the first personal to identify oral cancer/oro-facial lesions at its early stage?
A) Yes B) No