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Original Research

Assessment of knowledge and attitude and practice regarding oral cancer among dental students

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***ABSTRACT*:**
Background: The incidence of oral cancer is rising in most countries, especially in developing countries. The present study was conducted to assess knowledge and attitude regarding oral cancer among dental students. **Materials & Methods:** 550 dental students of both genders were administered a questionnaire was to all about oral cancers. Students with a score <25% were considered to have weak knowledge, between 25% and 50% to have moderate knowledge, between 50% and 75% to have good knowledge, and more than 75% to have excellent knowledge. **Results:** Out of 550 subjects, males were 230 and females were 220. 90 students had moderate, 140 had good and 320 had excellent knowledge. Interns had maximum knowledge. Knowledge about prevention and detection of cancer is sufficient was responded as strongly agree by 5% only and disagree by 60%, oral cancer examination should be done above 40 years old was responded as strongly agree by 94% , early detection improves survival was responded as strongly agree by 98% and need of additional training was responded as strongly agree by 97%. The difference was significant (P< 0.05). **Conclusion:** Dental students had sufficient knowledge, attitude and practice regarding oral cancer.
Key words: Oral cancer, Knowledge, Attitude.

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INTRODUCTION

It has been well-recognized that the cancers of the oral cavity and the pharynx are a public health problem and as a result, there are a great number of deaths and people suffering from illnesses or disability in many countries.[1] The incidence of oral cancer is rising in most countries, especially in developing countries. Most epidemiological studies have revealed that heavy smoking and alcohol intake are the most important risk factors for oral cavity cancer.[2] Smokeless tobacco use, a common practice in the Indian subcontinent, has also been shown to be a significant risk factor for oral and pharyngeal cancer. In general, early oral cancer is asymptomatic and so around 60% of oral cancer cases are detected at later stages (III and IV). Despite therapeutic advances in recent years, this type of cancer has very poor survival rates worldwide, average of 5-year survival rate of 50%.[3]

It is estimated that around 43% of cancer deaths are due to tobacco use, unhealthy diets, alcohol consumption, inactive lifestyles, and infection. Of these, tobacco use is the world's most avoidable cause of cancer.[4] In addition to lung cancer, tobacco consumption causes cancer of the oral cavity, pharynx, larynx, esophagus, stomach, pancreas, liver, kidney, ureter, urinary bladder, uterine cervix, and bone marrow (myeloid leukemia). Exposure to environmental tobacco smoke (passive smoking) increases lung cancer risk. Tobacco

use and alcohol consumption act synergistically to cause cancer of the oral cavity, pharynx, larynx, and esophagus.[5] The present study was conducted to assess knowledge and attitude regarding oral cancer among dental students.

MATERIALS & METHODS

The present study comprised of 550 dental students of both genders. All were informed regarding the study and their consent was obtained.

Data such as name, age, gender etc. was recorded. A questionnaire was administered to all about oral cancers. Each question answered correctly received a score of 1 and each wrong answer received a score of 0 thus making a maximum score of 5 for a subject. Students with a score <25% were considered to have weak knowledge, between 25% and 50% to have moderate knowledge, between 50% and 75% to have good knowledge, and more than 75% to have excellent knowledge. The answers to questions were given on a five-point Likert scale (strongly agree, agree, neutral, disagree, and strongly disagree). The attitude questions were calculated as percentages for different questions. The fourth category consisted of five closed ended questions on practice items with the answer options as "yes" and "no. Results thus obtained were assessed statistically. P value less than 0.05 was considered significant.

RESULTS

Table I Distribution of subjects

Total- 550		
Gender	**Males**	**Females**
Number	230	220

Table I shows that out of 550 subjects, males were 230 and females were 220.

Table II Knowledge scores of subjects

Year	Poor	Moderate	Good	Excellent	P value
3rd year	0	25	40	20	0.02
4th year	0	20	40	90	
Intern	0	45	60	210	
Total	0	90	140	320	

Table II, graph I shows that 90 students had moderate, 140 had good and 320 had excellent knowledge. Interns had maximum knowledge. The difference was significant (P< 0.05).

Graph I Knowledge scores of subjects

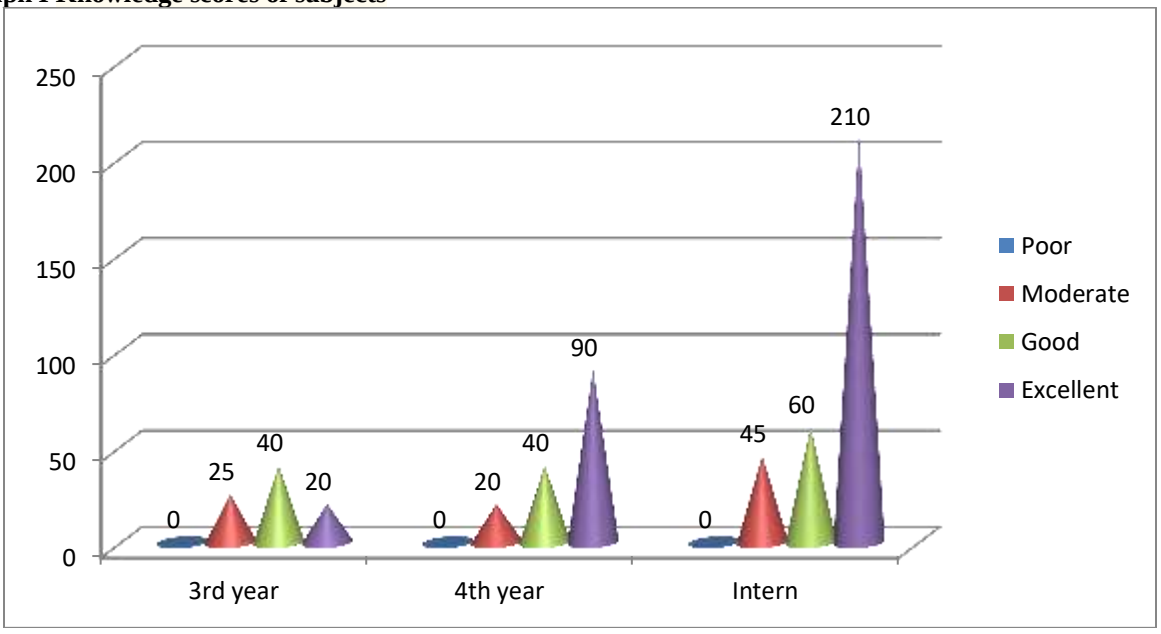

Table III Assessment of attitude and practice

Questionnaire	Strongly agree	Don't know	Strongly disagree	P value
Knowledge about prevention and detection of cancer is sufficient	5%	35%	60%	0.01
Oral cancer examination should be done above 40 years old	94%	2%	4%	
Early detection improves survival	98%	2%	0	
Need of additional training	97%	2%	1%	

Table III shows that knowledge about prevention and detection of cancer is sufficient was responded as strongly agree by 5% only and disagree by 60%, oral cancer examination should be done above 40 years old was responded as strongly agree by 94% , early detection improves survival was responded as strongly agree by 98% and need of additional training was responded as strongly agree by 97%. The difference was significant (P< 0.05).

Table IV Assessment of practice

Questionnaire	Yes	No	P value
Do you examine oral cavity properly?	85%	15%	0.01
Do you take history of tobacco and alcohol?	90%	10%	0.02
Do you refer patients to oral surgeon?	92%	8%	0.01
Have you attended any educational programme?	7%	93%	0.04

Table IV shows that 85% examine oral cavity properly, 90% take history of tobacco and alcohol, 92% refer patients to oral surgeon and 7% have attended educational programme. The difference was significant (P< 0.05).

DISCUSSION

The incidence of oral cancer is highest in India and South and Southeast Asian countries. In India, 90%–95% of the oral cancers constitute squamous cell carcinoma.[6] The International Agency for Research on Cancer has predicted that India's incidence of cancer will increase from 1 million in 2012 to more than 1.7 million in 2035.[7] This indicates that the death rate because of cancer will also increase from 680,000 to 1–2 million in the same period. Cancer mortality can be reduced if cases are detected and treated early. There are two components mainly for early detection efforts which include early diagnosis and screening.[8] Studies have shown that dentists and other health-care providers are in desperate need of systemic educational updates in oral cancer prevention and early detection, as they are remiss in the provision of oral examinations and in the detection of early oral cancers. Clinicians can increase survival rates if a cancerous lesion is detected at an early stage, or if a precursor lesion (dysplasia) is discovered and treated prior to malignant progression.[9] The lack of prevention and early detection of oral cancer by health-care providers is a worldwide problem. Most dentists claim to perform an oral cancer examination on their patients, but several studies indicate dentists' lack of knowledge in the area of oral cancer etiology and diagnosis.[10] The present study was conducted to assess knowledge and attitude regarding oral cancer among dental students.

In present study, out of 550 subjects, males were 230 and females were 220. 90 students had moderate, 140 had good and 320 had excellent knowledge. Interns had maximum knowledge. Srivastava et al[11] investigated the awareness and knowledge of prevention and early diagnosis of oral cancer among dental undergraduate students. A cross-sectional questionnaire study was conducted. A total of 139 undergraduate students who received teaching on oral diseases were included. The present study showed that the participants had average awareness and knowledge of oral cancer and its clinical presentations. The awareness and knowledge toward oral cancer protocols revealed a decreasing trend from final-year students to 3rd-year and interns. Nearly 66.2% of the undergraduates felt less well informed regarding oral cancer. All the undergraduates (100%) requested further information about oral cancer.

We found that knowledge about prevention and detection of cancer is sufficient was responded as strongly agree by 5% only and disagree by 60%, oral cancer examination should be done above 40 years old was responded as strongly agree by 94%, early detection improves survival was responded as strongly agree by 98% and need of additional training was responded as strongly agree by 97%.

We found that 85% examine oral cavity properly, 90% take history of tobacco and alcohol, 92% refer patients to oral surgeon and 7% have attended educational programme. Fotedar et al[12] assessed the knowledge,

attitude and practices among undergraduate dental students about oral cancer. The response rate of the study was 90.6%. There were 23 (21.5%) males and 84 (78.5%) females in the study. There was a predominance of females (78.5%). The average knowledge percentage for the entire population is 81.9% (excellent knowledge). Tobacco and alcohol were correctly identified by 63.5% of the subjects. Squamous cell carcinoma was described as the most common type of oral cancer by 105 (98.3%) of the students. 60.7% of the subjects strongly disagreed that their knowledge regarding the prevention and detection of oral cancer is current and adequate, and 99% agreed that there is a need for additional training/information regarding oral cancer. About 92.5% of the subjects used to educate their subjects about the harmful effects of tobacco and alcohol.

The shortcoming of the study is small sample size.

CONCLUSION

Authors found that dental students had sufficient knowledge, attitude and practice regarding oral cancer.

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