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Oral Cancer Awareness Among Undergraduate Dental Students of Kantipur Dental College and Hospital

Premit K Pokharel,¹ Bandana Khadka¹¹Kantipur Dental College and Hospital, Kathmandu, Nepal.

ABSTRACT

Background: Oral Cancer is one of the most common form of cancer in the world. The early diagnosis and identification of cancerous lesions are necessary to reduce the morbidity and mortality of oral cancer. Today's dental students are tomorrow's dental surgeons and specialists who identify and manage the oral cancer patients. The aim of the study is to assess the knowledge and attitude regarding etiology and clinical features of oral cancer.

Methods: The study was a descriptive cross-sectional study conducted at Kantipur Dental College, Kathmandu, Nepal after the ethical approval by Kantipur Dental College Institutional Ethical Review Committee. The study population were clinical students from third, fourth and fifth year of Bachelor of Dental Surgery.

Results: Out of 101 participants, 67.3% students always examined their patient's oral mucosa. Only 3.0% students felt very well-informed about clinical appearance of oral cancer. Of total, 54.5% students identified floor of mouth as most common site of oral cancer and 60.4% identified border of tongue as most common site of oral cancer. Of total participants, only 22.8% students had examined oral cancer lesion before the study. Almost all (99%) students reported they wanted lacked knowledge and wanted more information on oral cancer.

Conclusions: The undergraduate students lacked knowledge on the identification and detection of oral cancer. They were also not examining patient's oral mucosa routinely. Many students did not have sufficient information on risk factors and associated oral cancer lesions.

Keywords: Cancerous lesions; dental students; oral cancer; oral mucosa

INTRODUCTION

Oral Cancer is the eleventh most common cancer in the world.¹ It is more common in developing countries and has particularly higher incidence in male.¹ In south central Asia, it is the third most common type of Cancer. Approximately 263,900 new cases and 128,000 deaths occurred from oral cancer in 2008 worldwide.² The burden is increasing as the risk behaviour is in rise worldwide.³ The prevention of increasing burden of oral cancer can be performed by early detection and intervention by dental health workers.

Smoking alone is responsible for 42% of deaths from cancers of the oral cavity and heavy alcohol consumption for 16% of the deaths; the corresponding percentages in high-income countries are about 70% and 30%, respectively.⁴ Smokeless tobacco products and betel quid with or without tobacco are the major risk factors for oral cancer in Taiwan, India, and neighbouring countries.⁴

Dentists have extensive understanding of the aetiology of oral cancer and is required be able to make correct

diagnosis.⁵ Dental school curriculum although had included oral cancer, details knowledge and practise seems lacking in students before they start seeing the patients. The aim of the study is to assess the knowledge and attitude regarding aetiology and clinical features of oral cancer.

METHODS

A descriptive cross-sectional study was conducted at Kantipur Dental College, Kathmandu Nepal. The study population were clinical students from third, fourth- and fifth-year students of Bachelor of Dental Surgery (BDS). The students who were included were provided with a written informed consent regarding the study aims and procedures involved. The demographic and socioeconomic data included age, sex, years of study. The self-administered questionnaire adapted and modified from Carter and Ogden was provided to the participants.⁶

Anyone aged above 18 years who was studying BDS and were in 3rd, 4th and 5th year at Kantipur Dental College with a consent to participate in the study were included

Correspondence: Premit K Pokharel, Kantipur Dental College and Hospital, Kathmandu, Nepal. Email: pokhrelpremit@gmail.com, Phone: +9779841369202.

in the study. Students not willing to participate were excluded from the study. The study was carried out after approval by the Institutional Ethical Review Committee of Kantipur Dental College. The study also included the informed written consent from the subjects. Strict confidentiality of the information was maintained. For the confidentiality, personal information as full name was not included in the questionnaire. The SPSS version 25.0 software was used to analyse the data.

RESULTS

There were 101 participants in our study. The mean age of participants was 22.28 years. 72.3% students were female and 20.8% were male in our survey. There were 25 students from third year, 24 students from fourth year and 46 students from final year with 6 students from unknown year of study.

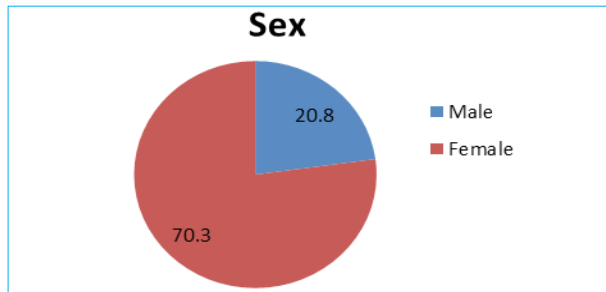


Figure 1. Gender characteristics of students.

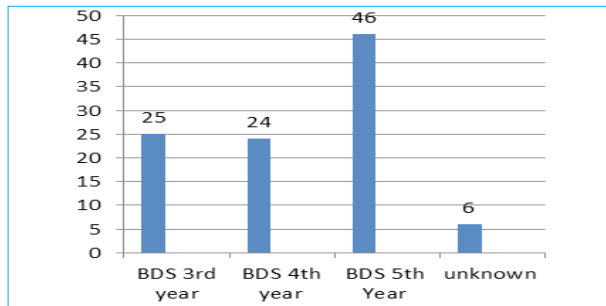


Figure 2. Distribution of students among different academic years.

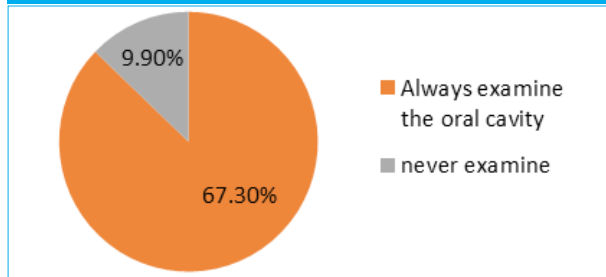


Figure 3. Students attitude for oral examinations.

Among 101 participants, 67.3% students always examined their patient’s oral mucosa but 9.9% never examined the oral mucosa routinely.

For high risk categories patient, 57.4% students always

screened their patient’s oral mucosa whereas 9.9% never screened oral mucosa of high-risk category patients. 86.1% students considered smoking as a risk factor for oral cancer. Only 20.8% students considered alcohol is a risk factor for oral cancer whereas 56.4% selected smokeless tobacco as a risk factor for oral cancer. Finally, 40.6% students considered Human Papilloma Virus as a risk factor for oral cancer.

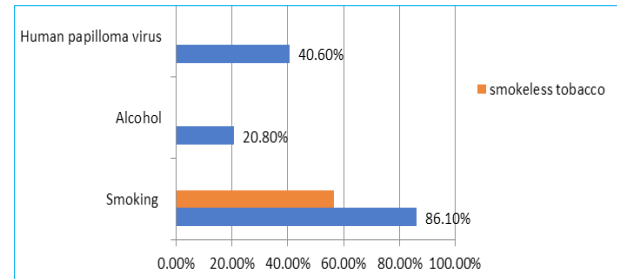


Figure 4. Knowledge regarding etiology among students.

After graduating, 94.1% students specified that they will always advise their patients about risk factors of oral cancer. After graduating, 1% students acknowledged they will refer oral cancer patients to plastic surgeon whereas 11.9% students believed they will refer them to general medical practitioner. However, 93.1% students documented that they will refer oral cancer patients to an oral and maxillofacial surgeon.

Only 3.0% students felt very well-informed about clinical appearance of oral cancer whereas 23.8% felt poorly informed. Of total participants, only 22.8% students had examined oral cancer lesion before the study.

In our study, 63.8% students felt that red and white lesions were associated with oral cancer but only 23.8% considered indurated ulcer were associated with oral cancer. Similarly, 47.5% students selected that non-healing chronic ulcers were associated with oral cancer and 28.7% students felt fixation of tissue were associated with oral cancer.

For the most common site of oral cancer, 54.5% students selected floor of mouth but 60.4% selected border of tongue as most common site of oral cancer. Additionally, 10.9% students selected gingiva as most common site of oral cancer whereas 11.9% selected palate as most common site of oral cancer.

However, in our study, only 30.7% students felt they had sufficient knowledge for prevention of oral cancer whereas 16.8% students felt they had sufficient knowledge for detection of oral cancer. Among all, 99% students said they wanted more information on oral cancer. Case presentation was most preferred method (75.2%) followed by seminars (32.7%), lectures (22.8%)

and Information packet (18.8%).

DISCUSSION

Our study demonstrates that the students do not have sufficient information on oral cancer. They had minimal knowledge about the risk factors and oral cancer associated lesions. They were also not well-informed about the detection and prevention of oral cancer. Even though oral cancer and precancerous lesions are common, it was stimulating to find that majority of students had not examined oral cancer lesions.

Various studies have also reported lack of awareness about oral cancer among doctors and dentists and particularly among medical and dental students. The study by Warnakulasuriya et al investigating the opinions, attitudes and practices towards oral cancer prevention among UK dentists indicated a considerable need for improvement in the manner and extent of provision of health advice in respect of the major risk factors for oral cancer.⁷ In 2007, Carter et al conducted a cross-sectional questionnaire-based study to assess general medical practitioners' (GMPs') and general dental practitioners' (GDPs') awareness of prevention and early detection of oral cancer.⁶ They concluded the need for improved education of general medical practitioners on oral cancer. The study by Kumar et al among dental practitioners concluded that educational interventions for practitioners and dental students are necessary.⁸ Soares et al, conducted study on undergraduate dental students and concluded the need to implement the clinical suspicion of oral cancer throughout the undergraduate course to enable awareness and early diagnosis.⁵ In our study, we found that many students lacked the basic knowledge of oral cancer. The study by Santosh et al also concluded that even though undergraduate dental students have basic knowledge, it is not enough to practice and help in prevention of oral cancer.⁹ In Nepal, Shrestha et al conducted a similar study to evaluate the awareness of undergraduate dental and medical students towards oral cancer in B. P. Koirala Institute of Health Sciences.¹⁰ They also demonstrated a lack of awareness in many aspects of oral cancer among medical and dental students. We conducted the study in a single centre and could not include more colleges. Students studying in Dental Colleges where the oral cancer patients come in good number on regular OPD may have higher exposure and better understanding about the oral cancer than the students of our college where number of Oral cancer patients visiting daily OPD is minimum.

Our study was also limited to the Dental students and we were not able to find the level of understanding Dental Interns and Dental Surgeons working in our Hospital have regarding the Oral cancer.

CONCLUSIONS

The undergraduate students lacked knowledge on the identification and detection of oral cancer. They were also not examining patient's oral mucosa routinely. Many students did not have sufficient information on risk factors and associated oral cancer lesions. The faculties from Dental Schools, curriculum developers from University and the concerned stakeholders should consider the results and review it to implement which may help improving the understanding of oral cancer among the Dental students.

CONFLICT OF INTEREST: NIL

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