

## ORAL CANCER AND SUPPORTIVE CARE KNOWLEDGE AMONGST UNDERGRADUATE DENTAL STUDENTS OF NEPAL MEDICAL COLLEGE, KATHMANDU

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### ABSTRACT:

Oral cancer is one of the most debilitating of all malignancies and is a major health problem of developing world including Nepal. Deficiencies in training hinder the recognition and may also contribute to the delayed diagnosis and discomfort of patients. The objective of this study was to assess the knowledge and awareness about oral cancer and supportive care among undergraduate dental students. A questionnaire-based study comprising 12 questions was carried out in clinically posted dental students of third year and final year students of college of dental sciences and hospital, Nepal Medical College. The total number of participants were 100. The majority of students were aware of oral cancer (94.0%) and recognized signs and symptoms of oral cancer. A satisfactory knowledge was observed on risk factors whereas unsatisfactory knowledge was observed about treatment cost. This study highlights the need of continuing dental education with greater emphasis on the early signs and risk factors of oral cancer, performing routine oral examination, appropriate supportive management of suspicious oral lesions and referral to cancer hospital for definite management.

**Keywords:** Oral cancer, Undergraduate students, awareness, supportive care, knowledge



### INTRODUCTION:

Oral cancer is the sixth most common cause of cancer related deaths and is a worldwide problem.<sup>[1]</sup> Though oral cavity is amenable to routine screening and clinical examination for malignant changes, oral cancer remains a highly lethal disease. It has been reported that lack of awareness among the general public about oral cancer its associated risk factors is the primary reason for delayed presentation.<sup>[2]</sup> Lack of knowledge among the medical and dental practitioners has also been shown to contribute to delays in referral and

treatment.<sup>[3,4]</sup> Nepal being a developing country has still a long way to go before we see state of the art facilities in any aspect. Majority of Nepalese people have a habit of chewing tobacco and smoking which leads to high incidence of oral cancer. Cancer is identified as one of the major non-communicable disease and is responsible for 42% of total deaths, cerebrovascular accidents being the lead cause responsible for 21% of such deaths, followed by cancer in 7% contributing to a major public health burden. According to National Cancer

Registry of Nepal, which pooled data from 7 major hospitals where cancer is diagnosed and treated, the most common cancer in males is lung cancer, followed by oral cavity and stomach while the most common cancer in females are cancer of the cervix uteri, breasts, and lungs. Considering treatment of cancer in Nepal, at present, there are only 4 centers in the country treating cancer patients with the radiation therapy facilities.<sup>[4]</sup> With minimal number of cancer centers and maximum number of patients, it is difficult to provide quality service to the patients. It is believed that the etiology of oral cancer is multifactorial and that the process is a multiple, stepwise one. Tobacco, alcohol consumption are the major risk factors. Other risk factors include betel nut, human papilloma virus, herpes simplex type I and Epstein Barr virus, dietary deficiency, previous history of oral cancer, , marijuana, UV light, irradiation, mouth rinses containing alcohol, candidiasis, diabetes, free radicals, HIV infection, positive family history, poor oral hygiene and age over 40 years.<sup>[3]</sup> Among the various risk factors for cancers, the most common identified in Nepal are smoking followed by illiteracy, lack of awareness, poor hygiene, and low economic status.<sup>[4]</sup> Attempts to raise oral cancer awareness of both public and health professionals have been made in many countries to counteract the problem of oral cancer mortality. Deficiencies in training, which hinder the recognition and supportive care of lesions may also

contribute to the delayed diagnosis and discomfort of patients along with other factors.<sup>[3]</sup>

The objective of this study was to assess the knowledge and awareness about oral cancer and supportive care among undergraduate dental students.

## **MATERIALS AND METHODS:**

A questionnaire-based study comprising of 12 questions was carried out in clinically posted dental students of third year and final year students of college of dental sciences and hospital, Nepal Medical College between Jan 2016 – Jan 2017. The total number of participants were 100. Informed consent was sought from the respondents before administration of the questionnaire. We designed the questionnaires to assess the knowledge, practices, and opinions regarding oral cancer prevention early detection and supportive care. The items included in the questionnaires assessed the knowledge of signs, symptoms, and risk factors for oral cancer and clinical practice technique of oral cancer examination. Questions regarding importance of family history, personal history, awareness towards risk factors of oral cancer, whether patients were informed about risk factors of oral cancer or not were asked. Furthermore, to assess the knowledge amongst students, questions related to awareness of clinical signs, treatment modalities and treatment cost of oral cancer were asked. Also students were asked whether they would like more training

on diagnosis and supportive management of oral cancer, if they were aware as where to refer the patients with oral cancer. Opinion was taken on whether they thought dentists were the first personal to identify oral cancer at its

early stage. The questionnaire was subjected to statistical analysis. Data were fed to SPSS software version 17 and were analyzed statistically using descriptive analysis .

## RESULTS:

The total sample size was 100, out of which 20 were males and the majority were females (80). The mean age of participants was 21.5 ( $\pm$  2.5). Majority of students were aware of oral cancer (94.0%) and recognized signs and symptoms of oral cancer (Figure 1). A satisfactory knowledge was observed on risk factors (98%) and on supportive care (92%); unsatisfactory knowledge was observed regarding treatment cost (89%), (68%) were unsure about where to refer the patients with oral cancer (figure 2, 3). 96% of students preferred to have continuing dental education in oral cancer diagnosis and supportive care available. (Table 1, 2)

## DISCUSSION:

Oral cancer is one of the most fatal health problems faced by mankind and is the sixth most common cause of cancer related deaths.<sup>[5,6,7]</sup> Oral potentially malignant disorders (OPMDs) describe oral lesions and conditions associated with a risk of malignant transformation. Early detection, treatment and identification of patients at risk remains the most important approach for reducing the risk of malignant transformation associated with OPMDs.

Majority of undergraduate students were aware of the main risk factors. Rate of awareness for risk factors in oral cancer was similar to study done by Awan et al (2014)<sup>[8]</sup> which reported that 93.9% of undergraduate students were aware regarding risk factors. In our study 96% of students preferred to have more training regarding diagnosis of oral cancer, which is more than the study conducted by Hamdy B et al (2016)<sup>[9]</sup> which shows 77.7% students wanted training for oral cancer diagnosis. On the other hand, several aspects like clinical signs of oral cancer, treatment protocol and referrals need to be improved. Continuing dental education programs and workshops on oral cancer should be carried out to enhance the knowledge and awareness of the undergraduate students.<sup>[10]</sup> Although the basic knowledge of the students was good, it was not adequate enough and practices about risk factors need 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. Also though the level of knowledge amongst students increased with academic year, educators and policy-makers need to place greater emphasis on oral cancer education and training in dental schools.<sup>[10,11]</sup> The dental curriculum for students should lay

more emphasis on diagnostic, prognostic factors of oral cancer as well as supportive care. Morbidity and mortality are likely to be reduced if future dentists know how to prevent and detect oral cancer.<sup>[12,13]</sup> A comprehensive oral cancer examination and risk assessment are measures that may lead to early detection and prevention of oral cancer as many experts agree that the key is not necessarily identifying oral cancer but identifying tissue that is not normal and taking appropriate action.<sup>[7,13,14]</sup>

### CONCLUSION:

Early identification of oral cancerous lesions reduces rates of morbidity and mortality, increases the quality of life

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**TABLES:**

Table 1: Whether students have knowledge regarding the place for referring the patients with oral cancer

Yes	32%
No	68%

Table 2: Whether students prefer to have continuing dental education in oral cancer diagnosis and supportive care

Yes	96%
No	4%

**FIGURES:**

Figure 1. Awareness Regarding Oral Cancer

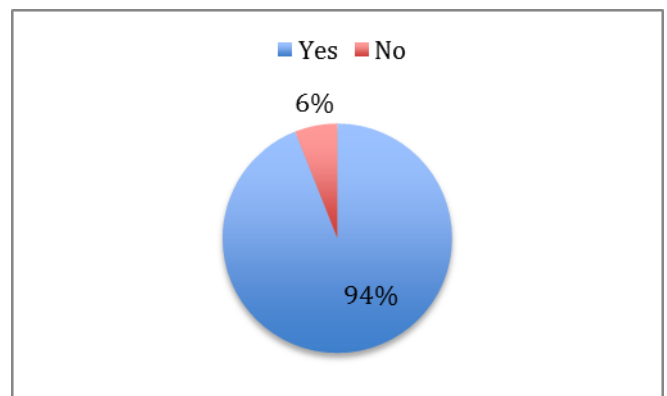


Figure 2: Knowledge on Risk factors

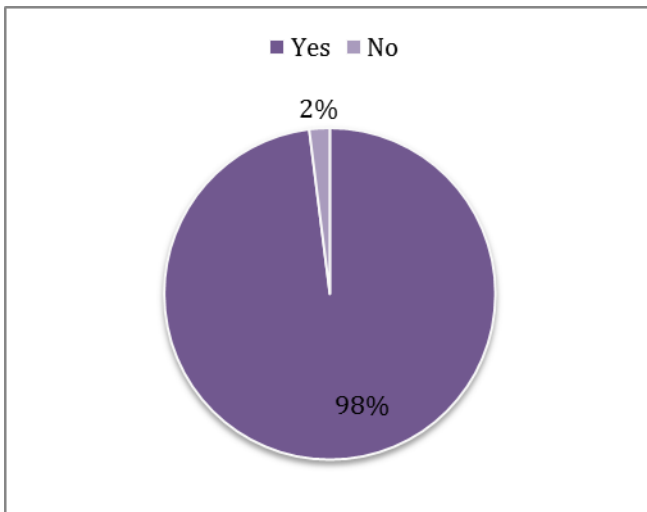


Figure 3: Knowledge Regarding Treatment cost

