

Oral Cancer Screening and Awareness through Dental Camps

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ABSTRACT

Introduction: Oral cancer is one of the most common and preventable forms of cancer. Screening can be an effective tool for the early detection of oral cancer. Similarly, screening provides an opportunity to raise public awareness of oral cancer and the services available for it. Hence, this study was designed to determine the awareness of oral cancer and services provided by oral health professionals among diagnostic camp participants.

Methods: A cross-sectional study was carried out in 4 wards of Kathmandu metropolitan city among 167 subjects to explore the awareness of oral cancer adopting a convenience sampling technique. Ethical approval for the study was taken from the Institutional Review Board of People's Dental College and Hospital. Data were collected using a semi-structured questionnaire delivered by a trained dental surgeon through face-to-face interviews. The raw data were entered and analyzed using SPSS version 16.

Results: We found out that about 69.5% of the participants had heard about oral cancer with nearly 18.6% being aware of symptoms and very few ever had oral cancer screening on their own. Nearly 48% of participants choose to visit a general hospital rather than dental hospitals for any suspicious oral lesions. Similarly, few cases of oral lesions were seen.

Conclusions: The study reported more than two-thirds of the participants had heard about oral cancer. Similarly, a majority had general practitioners as their first option for treating oral lesions.

Keywords: Awareness; Dental camps; Oral cancer; Screening.

INTRODUCTION

Oral cancer, considered one of the major health problems globally, is easily preventable and treatable if diagnosed early.¹ Incidence of oral cavity cancer in the world was 354,864 in 2018 which is equivalent to an estimated risk of 2.0 per 100,000, with 177,384 deaths.² It is the sixth most common cancer in Nepal. The number of deaths and the estimated risk was found to be 446 and 3.3 per 100,000 respectively.³

The majority of people are unaware of the signs and symptoms of potentially malignant oral lesions (PMOL) and seek treatment only when severe symptoms develop, delaying diagnosis and treatment.⁴ Sufficient knowledge

of oral cancer at the community level can help prevent or treat oral cancer with fewer invasive procedures and better outcomes.⁵ This study was designed to determine the awareness of oral cancer and services provided by oral health professionals among diagnostic camp participants and further assess the oral lesions among the participants.

METHODS

A descriptive cross-sectional study was conducted among 167 participants who participated in the screening camps conducted in 4 wards of Kathmandu metropolitan city (ward no.13, 17, 12, and 21) from

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March 2021 to September 2021 after ethical approval from IRB of People’s Dental College and Hospital (Ref. no 077/078/79).

Participants above 18 years and who were willing to participate were included in the study.

Sample size

As per the record from the hospital, we found out about 40-45 cases participated in each screening program conducted by the Department of Community Dentistry of Peoples Dental College and Hospital. Therefore, out of all the participants, 190 respondents who provided consent for participation were conveniently selected in this study. However, out of 190 respondents, only 167 participants had complete responses in the provided questionnaire, making the response rate of (88%).

The data were collected by interview method using a semi-structured questionnaire which was delivered by a trained dental surgeon. The questionnaire consisted of variables like demographic details, awareness of oral cancer, and the oral cancer screening services provided by the oral health professionals

The collected data was entered and analyzed using SPSS version 16.

RESULTS

The age range of the participants was 18 to 79 years with a mean age of 44 years. Similarly, female respondents (60.5%) covered a major proportion of this study.

As shown by table 1 majority of participants (69.5%) had heard about oral cancer. Nearly half of the participants (46.1%) knew the reasons for oral cancer. About 18.6% of participants were aware of the symptoms of oral cancer while few respondents (4.8%) had undergone screening of oral cancer. About one-third of participants (33.5%) knew that dentists can diagnose the symptoms of oral cancer and 35.9% knew that cancer is preventable. Similarly, a significant number of participants (88%) wanted government support for the risk reduction of oral cancer.

Furthermore, palpable and tender lymph nodes were observed in 3(1.8%) participants. Red and white lesions on lips were observed in 1(0.6%) of cases. Ulcers on lips were observed in 2(1.2%), on gingiva in 1(0.6%), and on anterior two-thirds of the tongue in 1 (0.6%) case.

Table 1. Patients response on oral cancer awareness (n=167)

Patients response on oral cancer awareness	n (%)
Heard about oral cancer*	116(69.5)
Aware about reasons of oral cancer*	77(46.1)
Aware about symptoms of oral cancer*	31(18.6)

Patients response on oral cancer awareness	n (%)
Ever had an oral screening for cancer*	8(4.8)
Aware that oral cancer is preventable*	60(35.9)
Aware that dentists can diagnose the symptoms of oral cancer*	56(33.5)
Want government support for risk reduction of oral cancer*	147(88.0)

*multiple responses

Nearly half of the participants (47.3%) reported visiting a general hospital seeking advice for any suspicious lesions in the oral cavity followed by a dentist/dental hospital (26.9%).

Table 2. Participant’s choice of treatment and advice for any suspicious lesion in oral cavity (n=167)

Patients choice of treatment and advice	n (%)
Cancer hospital	8(4.8)
Dentist/dental hospital	45(26.9)
General hospital	79(47.3)
Pharmacy	4(2.4)
No idea	31(18.6)

DISCUSSION

Oral cancer is largely considered a preventable disease, and significant public awareness and information may reduce the incidence of oral cancer in the population.⁶ Thus, we aimed to determine the awareness of oral cancer and services provided by oral health professionals among diagnostic camp participants. This study also assessed the oral lesions among the participants.

We found more than two-thirds of participants (69.5%) had heard about oral cancer. Similar to our findings, a study conducted in Kathmandu reported a similar but slightly less proportion of participants who heard about oral cancer (59.2%).⁷ Our study reported only 4.8% of respondents who had ever been screened for oral cancer which is comparatively less than the result present by the study conducted in Sudan.⁸ This might be due to the disparities of health facilities available in both of these countries. Furthermore, a study conducted in Brazil reported the awareness of signs and symptoms of oral cancer among nearly one-third proportion of the respondents which is contradicting the result of our findings.⁹

In context to seeking assistance in the choice of treatment and advice for any suspicious lesion in the oral cavity, more than half of the respondents (52.5%) reported visiting the dentist which is contrasting to the findings of our study.¹⁰

We also conducted screening to assess the oral lesion among the patients where we observed palpable and tender lymph nodes, red and white lesions on lips, ulcer in lips, gingiva, and anterior two-thirds of tongue among 1.8%, 0.6%, 1.2%, 0.6% and 0.6% of participants respectively. This result is slightly different than the result interpreted by the study conducted at a Lebanese university.¹¹

CONCLUSIONS

We found out more than two-thirds of the participants had heard about oral cancer however less than half were aware of oral cancer. Similarly, a major proportion of the participants were unaware that dentists could diagnose oral cancer and general practitioners were their first option for treating oral lesions. Many people were still unaware of where to go if they got oral lesions. Furthermore, on screening, very few respondents were found to have oral lesions.

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Not Applicable

CONFLICT OF INTEREST

None

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