

Oral Cancer in Developing Countries: The Time to Act Is Upon Us

To The Editor:

Globally, oral cancer has emerged as a significant cause of global public health concern. World Health Organization (WHO) has estimated that the incidence of oral cancer varies from one to ten cases per 100,000 people in most of the countries [1]. Further, it has been realized that more than fifty percent of oral cancer patients access services in the advanced stages of disease [2]. However, an inequitable distribution of the oral cancer has been observed due to the prevalence of disease-specific risk factors, socioeconomic factors, regional differences in demographic parameters of the population, and accessibility & availability of cost-effective screening and diagnostic measures [3].

Multiple socio-demographic and habit-related risk factors have been attributed to causing oral cancer. Recent publications from the World Health Organization and the findings of different studies have identified that male gender, older people, poor education status and socioeconomic class, consumption of smoked or non-smoked forms of tobacco, alcohol intake, human papilloma virus infection, oral sex and genetic susceptibility as the potential etiological factors in the causation of the oral cancer [1, 4-6]. A diverse array of challenges exists in the global campaign to address the burden of oral cancer. In a study done among patients in a Dental School of Iran, poor awareness about the risk factors was cited as the most common reason by 83.8% of the study participants [7]. Another study done in United Arab Emirates highlighted the apparent lack of knowledge of oral cancer risk factors among dental students [8].

Findings of a review article revealed that diagnosis in advanced stages, unaffordable treatment modalities, and inaccessibility to health centers or trained health professionals were the most common factors contributing towards the high burden of the disease [3]. Research findings of studies conducted in Malaysia and Saudi Arabia have reflected poor utilization of mass-media and dilemma associated with screening methods which are crucial bottlenecks in augmenting the magnitude of the oral cancer [9, 10]. All these identified barriers have limited the utility of existing public health measures and thus the chances of survival have also significantly reduced [10].

In order to counter the consequences of oral cancer and its impact on the quality of life measures such as ensuring early detection of oral cancer through mass screening or screening of high-risk group population [10]; reducing patient-related delays by creating awareness about signs or symptoms of oral cancer, encouragement of community participation [2, 9]; and reducing the provider-related delays by training health professionals on identifying high-risk groups, and providing routine oral screenings during health checkups [1, 4]; should be designed based on the prevalence of risk factors and then strategically implemented.

Simultaneously, multi-centric studies should be conducted for obtaining the epidemiological data about potential risk-factors and associated barriers to the utilization of oral cancer screening/treatment services. Oral health screening services should be merged into National Public Health Programs and the development of an evidence-base on strategies which focus on primary prevention and community health education will assist in efforts to detect and treat oral cancer at earlier stages in the epidemiology of the disease [1, 4, 7]. Furthermore, other strategies such as formulation of effective oral health policies by the dedicated policy makers; developing strong linkage with the technical agencies -national/international and non-governmental organizations; implementing measures for warranting mandatory display of pictorial warning / messages on tobacco products; and implementation of community-based screening projects for facilitating early detection of oral cancer, can be implemented in a customized way [1, 3, 4]. In addition, refinement in the field of diagnostic tools and adoption of newer modes of treatment can also be looked upon as potential solutions to combat the menace of oral cancer [1, 2, 4].

Evidence-based strategies must focus on primary prevention and community health education strategies in order to educate the public to access services for early detection, screening and timely initiation of treatment for oral cancer.

Conflict of Interest

None to be declared.

Authors' Contribution

Dr Saurabh Shrivastava: Conception and design, Drafting of the article, Review of literature, Guarantor.

Dr Prateek Shrivastava: Drafting the article, Review of literature, revising it critically for important intellectual content.

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References

1. World Health Organization. Oral health:- Fact sheet N°318. 2012. Available at: [<http://www.who.int/mediacentre/factsheets/fs318/en/>]

2. Warnakulasuriya S. Global epidemiology of oral and oropharyngeal cancer. *Oral Oncol* 2009; 45(4-5):309-16.

3. Coelho KR. Challenges of the oral cancer burden in India. *J Cancer Epidemiol*. 2012; 2012.

4. Zohoori FV, Shah K, Mason J, Shucksmith J. Identifying factors to improve oral cancer screening uptake: a qualitative study. *PLoS One*. 2012; 7(10): e47410.

5. Lin WJ, Jiang RS, Wu SH, Chen FJ, Liu SA. Smoking, alcohol, and betel quid and oral cancer: a prospective cohort study. *J Oncol*. 2011; 2011.

6. Stanko P, Kruzliak P, Labas P. Role of human papilloma virus infection and oral-genital contact in oral cancer etiopathogenesis. *Bratisl Lek Listy*. 2013; 114(6):345-8.

7. Pakfetrat A, Falaki F, Esmaily HO, Shabestari S. Oral cancer knowledge among patients referred to Mashhad dental school, Iran. *Arch Iran Med*. 2010; 13(6):543-8.

8. Rahman B, Hawas N, Rahman MM, Rabah AF, Al Kawas S. Assessing dental students' knowledge of oral cancer in the United Arab Emirates. *Int Dent J*. 2013; 63(2):80-4.

9. Saleh A, Yang YH, Wan Abd Ghani WM, Abdullah N, Doss JG, Navonil R, et al. Promoting oral cancer awareness and early detection using a mass media approach. *Asian Pac J Cancer Prev*. 2012; 13(4):1217-24.

10. Kujan O, Sloan P. Dilemmas of oral cancer screening: an update. *Asian Pac J Cancer Prev* 2013; 14(5):3369-73.