

Clinical Oncology 2018: Study on environmental factors causing head and neck cancer in Karachi, Pakistan - Arifa Aziz - Aga Khan University Hospital, Pakistan

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Introduction: Head and neck cancers are the most common cancers in developing countries, especially in Southeast Asia. Cigarette smoking and alcohol consumption are the main reasons for squamous cell carcinoma of head and neck in the Western population, whereas the use of smokeless tobacco and areca nut is the most common cause of head and neck squamous cell carcinoma in Southeast Asia. Oral cancers are predominant forms of head and neck squamous cell cancer in India, Pakistan and other Southeast Asian countries and oropharyngeal and tongue cancers are also common in the Western world. These differences in site of disease may be related to the prevalent habits in the respective regions.

Objective: Head and neck cancer is one of the most prevalent cancers in South East Asia and its incidence is increasing with time. The objective of this study is to identify the environmental factors and their role in causing head and neck cancers for better future strategy in controlling and prevention.

Materials & Methods: Questionnaire form was developed, which includes questions about environmental factors causing head and neck cancer. Forms were filled by patients after taking their written consent. This study was conducted at day care oncology and in Radiation Department of Aga Khan University Hospital after taking approval from

institutional ethical review committee (# 4392-Onc-ERC-16). It is a prospective study conducted from December 2016 to June 2017. Patients with head and neck cancer aged 18 years and above, of both genders were included. Statistical package for the social sciences SPSS version 19 was used to perform statistical analysis.

Results: A total of 132 patients were included. Head and neck cancers were observed to be more common in males 101 (76.5%) as compared to females 29 (22%) and average age was found to be 50.4 ± 12.9 years in both genders. The commonest environmental factors causing head and neck cancer included various forms of smokeless tobacco including pan, mainpuri, supari and gutka. Out of 132 patients 77 (58.3%) were using smokeless tobacco, 41 (31.1%) were cigarette smokers and 6 (4.5%) were using alcohol. Among all the head and neck cancers, the most common was squamous cell cancer of buccal mucosa, 63 patients (47.72%) and less common is the cancer of orbit, 4 patients (3%).

Conclusion: Incidence of head and neck cancer, specifically squamous cell carcinoma of buccal mucosa is increasing with time. The commonest cause was found to be different forms of smokeless tobacco easily accessible to the public. Increasing public awareness through various means is the way forward in controlling this menace.