

## Clinical profile of head and neck cancer patients

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### Abstract

**Background:** The spectrum of Head and Neck Cancer (HNC) varies from place to place within the country. **Aim:** The present study evaluated clinical profile of HNC at a tertiary care centre. **Methods:** This study was conducted over a period of 6 months between Jan 2019 to Jun 2010 at Karnataka Institute of Medical Sciences, Hubli, Karnataka. Data were gathered with context to age, sex, site involved and risk factors. **Results:** Fifty patients were included during the study period. Fifty-two percent patients aged above 40 years. Male predominated females with a ratio of 4:1. Fifty percent of the patients had education of up to 12<sup>th</sup> standard. Forty percent of the patients were laborers and twenty percent were farmers. Remaining patients were working in Govt. job. Seventy percent of the patients had history of tobacco chewing, 50% had past history of smoking, and 30% had alcohol abuse. Seventy percent of the patients had history of tobacco chewing, 50% had past history of smoking, and 30% had alcohol abuse. Eight-two percent of the patients had malignant tumors while remaining 18% had benign tumors. Forty-two percent were diagnosed with oral cavity cancer followed by laryngeal carcinoma (26%), pharyngeal carcinoma (20%), and thyroid cancer (12%). **Conclusion:** Smoking highlights the need for prevention through common risk factor approach.

**Key words:** Head and Neck Cancer, Smoking, Tobacco

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### I. Introduction

Head and neck cancers account for 30% of all cancers in males and 13% of cancers in females in developing countries like India as opposed to the West where it accounts for only 5% of all cancers.[1]

The most common risk factors associated with HNC are tobacco and alcohol use with significant interaction observed between the two. [2] Other reported risk factors in the existing literature are poor oral hygiene [3] and the human papillomavirus (HPV) 16 for tongue, tonsil, and oropharyngeal HNC and in non-smoking cases of HNC. [4] In South Asian countries, the risk of HNC is further aggravated by smoking of bidis, [5] reverse smoking, and chewing tobacco, betel quid, and areca nut. [6]

The spectrum of HNC varies from place to place within the country. Site-specific data from different parts of the country provide the various trends and give clues to the etiological factors responsible for this significant variation.

The present study evaluated clinical profile of HNC at a tertiary care centre.

### II. Methodology

This study was conducted over a period of 6 months between Jan 2019 to Jun 2010 at Karnataka Institute of Medical Sciences, Hubli, Karnataka. Data were gathered with context to age, sex, site involved and risk factors. Records were maintained in a proforma. Various malignancies of the head-neck region were classified according to the International Classification of disease coding system devised by WHO (9th revision) using ICD codes.

Data were presented as frequency and percentages.

### III. Results

Fifty patients were included during the study period. Fifty-two percent patients aged above 40 years (Figure 1). Male predominated females with a ratio of 4:1 (Figure 2). Fifty percent of the patients had education of up to 12<sup>th</sup> standard. Forty percent of the patients were laborers and twenty percent were farmers. Remaining patients were working in Govt. job.

Seventy percent of the patients had history of tobacco chewing, 50% had past history of smoking, and 30% had alcohol abuse (Figure 3).

Eight-two percent of the patients had malignant tumors while remaining 18% had benign tumors (Figure 4).

Forty-two percent were diagnosed with oral cavity cancer followed by laryngeal carcinoma (26%), pharyngeal carcinoma (20%), and thyroid cancer (12%) (Figure 5).

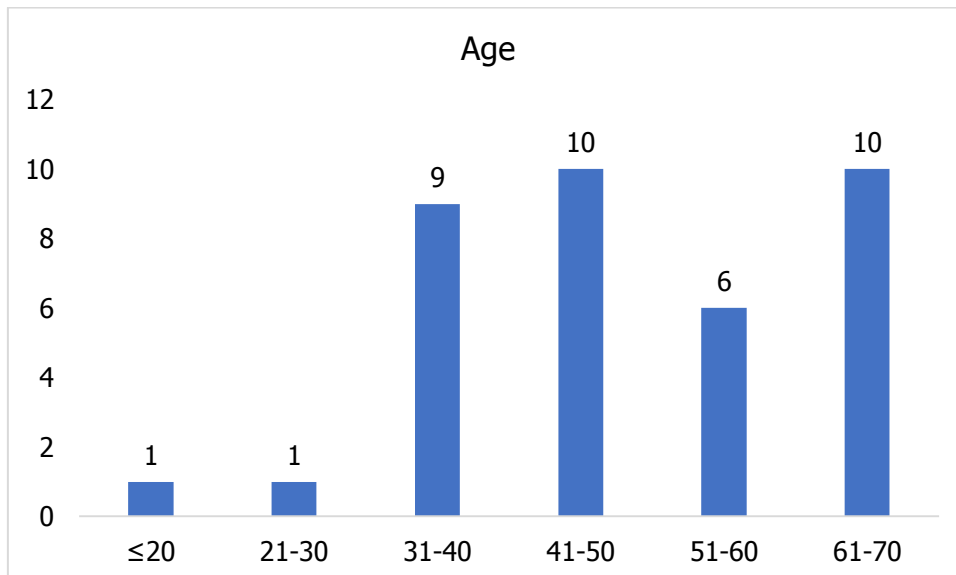


Figure 1: Age distribution of the study participants

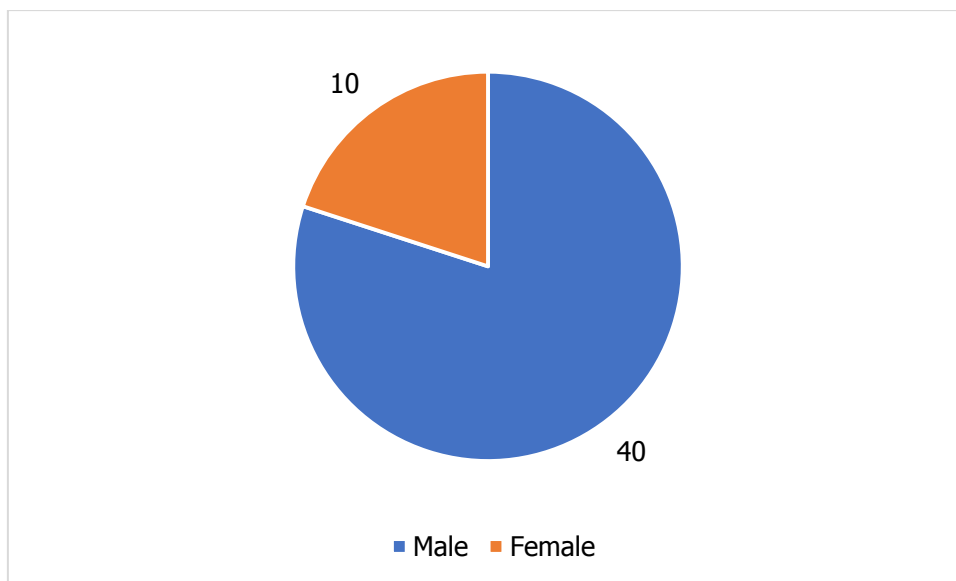


Figure 2: Sex distribution of the study participants

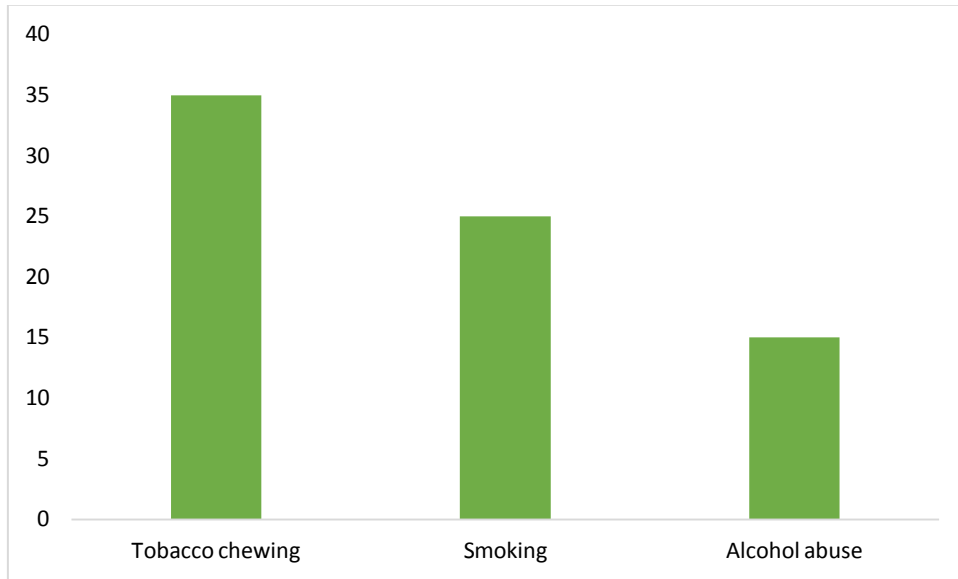


Figure 3: Past history

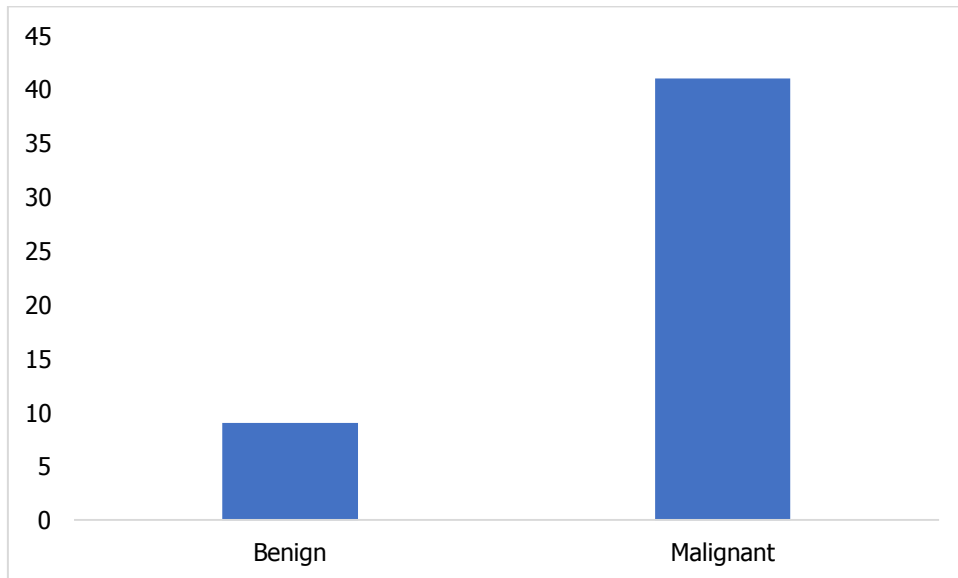
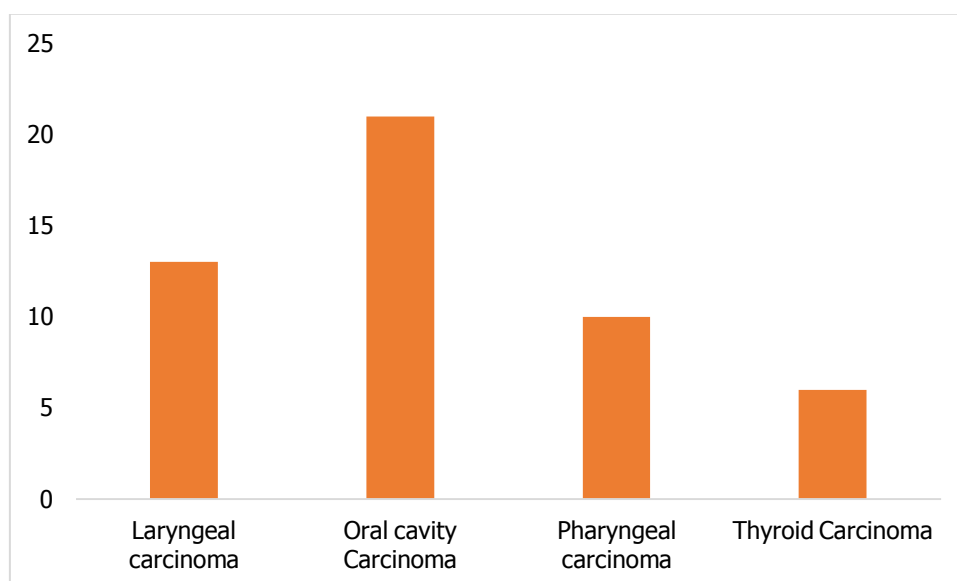


Figure 4: Type of tumors



**Figure 5:** Histopathology diagnosis

#### IV. Discussion

Head and neck malignancies are common in several regions of the world where tobacco use and alcohol consumption are high. The incidence rate of HNC in males exceeds 30 in one lakh in Indian subcontinent. High rates ( $> 10/100,000$ ) in females are found in the Indian subcontinent, Hong Kong and Philippines.

The variation in the incidence of cancers by sub-site of head and neck is mostly related to the relative distribution of major risk factors such as tobacco or betel quid chewing, cigarette or bidi smoking, and alcohol consumption. While mouth and tongue cancers are more common in the Indian sub-continent, nasopharyngeal cancer is more common in Hong Kong and pharyngeal and/or laryngeal cancers are more common in other populations. In our study, oral cavity cancers were the most common due to consumption of tobacco.

The most common habit in both males and females was the combination of all the three habits (smoking, alcohol, and chewing tobacco). Following the combined risk factors like smoking, chewing, and alcohol habits, chewing habit and smoking were the most common habits in females and males, respectively, because females in our society are not indulged in tobacco smoking but likely to inculcate chewing habits.

Although the current study was a hospital-based one, it highlights the risk factor profile of cancer patients from state of Karnataka. The data reflect a specific patient population but not the community as whole. Though the results from the study cannot be extrapolated directly to the general population, the data may help in understanding the possible risk factors and behavior patterns in HNC patients.

Cultural differences in the use of tobacco and alcohol drinking habits lead to a variation in the geographic and anatomic incidence of HNCs among these patients.

#### V. Conclusion

Half of the study population had indulged in smoking, highlighting the need for prevention through common risk factor approach. Tobacco with or without other risk factors has been shown to be related to many multi-system disorders. Hence, there is an urgent need for taking appropriate prevention strategies through common risk factor approach along with intense educational program to revert back the present scenario of such preventable diseases.

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