

## ORIGINAL ARTICLE

# A Descriptive Study on the Prevalence of Squamous Cell Carcinoma of Head and Neck

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## ABSTRACT

**Objective:** To determine the risk factors and the sites involved so as to promote the education in the community and improve the Treatment besides prevention of the disease. The mean age of patients enrolled in the study is 52±8.31 years and the percentage of the males is higher as compared the females i.e 57% of patients were males while 43% females. And among the patients 69% belonged to city areas and 31% were from rural community.

**Material and Methods:** The design of this study was Descriptive study. This study was conducted at Mardan medical complex, Mardan and the duration of this study was from July 2020 to May 2021. 100 patients were enrolled in the study and Biopsies were taken and then sent to the laboratory for histopathology. Disease primarily of the region, mucosal disease. Children with congenital tumors, mentally retarded cases.

**Conclusion:** The squamous cell carcinoma is a major problem due to its high morbidity and mortality. And it is the most common malignancy of head and neck region. The most common area involved is hypo-pharyngeal area

**Keywords:** Mucosal Disease, Epidemiology, Malignancy, Hypo-Pharyngeal, Congenital Tumors

## INTRODUCTION

The Head and neck cancers are categorized together with the justification of their epidemiology, similar

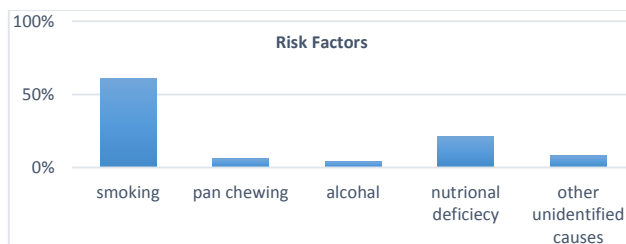
natural history, Risk factors, control measures and their gross and microscopic morphology. Squamous cell carcinoma of head and neck is the most common of All head and neck malignant tumors accounting for almost 23% of Asian burden of all the cancers. The incident of the disease is 6% of total cancers of the world. According to an estimation, 112000 patients are diagnosed as a case of head and neck malignancy in Europe per year. The 5-survival rate of the patient presenting with the disease is associated with the stage and grade of the malignancy. A number of the studies have been done on the subject. A study done locally on the trends of the patients suffering from the disease shows that the 2-year survival rate is 73%. And it is higher if the stage is lower. The other thing that is associated with the disease prognosis is grading as the use of treatment options are directly dependent on the staging and grading of the cancer.

## METHODOLOGY

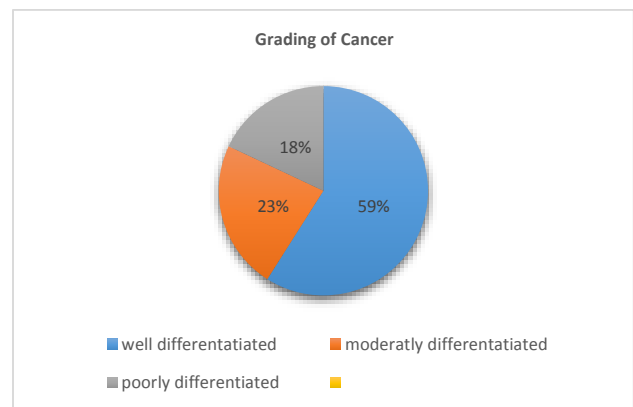
The design of this study was Descriptive study. This study was conducted at Mardan medical complex, Mardan and the duration of this study was from July 2020 to May 2021. 100 patients were enrolled in this study. Biopsies of the patients were taken and sent to laboratory and patients who were diagnosed squamous cell carcinoma were included in the study. Data was collected and analyzed about the age, gender, radiation exposure, beetle nut and pan chewing and smoking history. Histological diagnoses were taken from the histopathology lab. The Data was compiled and analyzed by SPSS 21. The quantitative variables were represented as mean and qualitative variables as percentages. Stratification of effect modifiers was done and chi square was applied.

## RESULTS

Mean age of patients is 52±8.31. Median Age of patients is 54 years. And the Mean age of female's patients was 46.83±3.15.



It was revealed on histopathology that 59% of patients had well differentiated carcinoma, 23% had moderately differentiated and 18% of patients showed poor differentiation.



## DISCUSSION

The prevalence of Head and Neck malignancies is different in different parts of the world. Pakistan is amongst the countries having high prevalence of this disease due to increased Pan and betel nut chewing and smoking. Our study shows that the males suffering from the disease are slightly more as compared the females. The most common site involved in the malignancy of this region is hypopharynx. The results of our study are in line with a study done by Smith et al. in 2004 that showed that the tobacco and alcohol have joint effect in development of head and neck cancer along with the evidence of HPV infection in exfoliated oral cells as compared to control group. The independent role of tobacco smoking was first identified as a cause for head and neck cancer by Wynder and Bross in 1957. Later, chewing tobacco and tobacco products were confirmed as causes of cancer in head and neck region in 1991 by kahyo and franceschi in 1999. In Pakistan there is unchecked usage of tobacco and tobacco products in the form of cigarettes, pan chewing, eating niswar etc. All of these recreational activities put the life of person in danger of developing cancer. Another study done by Luo et al. shows the evidence of DNA breaks due to smoking in oral cancer patients in 2004. A study similar to ours is done in Karachi shows the same ratio of males to females but in our study the male proportion of patients is slightly higher as compared to females. A study in Bihar, India, showed that the Hypo pharyngeal carcinoma is the third most common carcinoma, In contrast to our study, and shows larynx to

be the Most Common site for head and neck malignancies. The results can be different in different geological areas depending upon the epidemiology and change of risk factors causing the disease. In our study it is assessed that the females usually present earlier in contrast to their male counterparts. This may be due to poor nutritional statuses and nutritional deficiencies in the female population of our country. And those areas where the betel nut, pan chewing and smoking is high, have higher risk of head and neck cancers. Proper awareness campaigns should be launched in order to put a control on this deadly disease on local, institutional and government level.

## CONCLUSION

The population of the under developed and developing countries like Pakistan are at high risk of developing head and neck cancers probably due to poor education of people regarding health, risk factors like pan chewing, betel nut chewing, malnutrition and smoking. Furthermore, late presentation and lack of facilities for treatment worsens the prognosis. It is highly important to take steps to increase the awareness regarding the risk factors and proper health education must be ensured to put a control on the rising number of this disease.

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