

Title : Epidemiology of Oral cancer-A Hospital based case control study in Bengaluru

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Publication : Research Paper

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Asbstract :

Back Ground of the Study: Oral cancer is estimated to be the fifteenth most common cancer and it accounts an age adjusted rate (AAR) of 4.0 persons for every 100,000 population after combining both sexes in global level. In Asia, Oral and lip cancer is ranked ninth most common cancer with AAR 3.8 in both sex. In India oral cancer is found to be third leading site after combining both sex (AAR 7.2), in males it occupies 1st position with AAR 10.1 in females 5th leading position with AAR 4.3 per 100,000 persons. In Hospital based cancer registry (HBCR) oral cancer showed increasing proportion among tobacco related cancer in both sex. Oral cancer is twice as common in men as in women. This difference may be related to the use of alcohol and tobacco in Kidwai hospital based cancer registry and the proportion of male and female oral cancer is same. This study was conducted to know the risk factors associated for oral cancer pattern. Material and Methodology: The study was conducted in Kidwai cancer Institute located in Bengaluru, which is the capital of the state of Karnataka. It is comprehensive center for cancer research and treatment in the state and is one of the Regional cancer center in India. To study risk factors, prospective case control study was plan Ned. The information on exposure factor was collected through direct personal interview method using structure questionnaire prepared based on old review and experts opinion. Only microscopically confirmed cases were including in the study, one case per control was matched for sex and age group was selected. 300 cases and equal number of control selected

for the study. A descriptive statistics along with odds ratio estimate the effects of different variables on oral cancer. Results: There were more proportion of women (55%) than men (44%). The mean age group of respondents is 54years. About 67% of cases and 44% of controls are illiterates and 4% in study group and 14% in control groups have completed their college level education. The average income level of cases and controls is 1700 Rs/month and 3600Rs/month respectively. Among 600 respondents, 74% and 26% are tobacco users either in the form of chewing or smoking tobacco. Out of 288 respondents, majority of the cases have tobacco chewing habit (78%) compared to control group which was 22%. 66% of the cases and 33% of controls have smoking habits out of 125 respondents.

Odds ratio was found to be significant 2.3 and 10.8 between cases and controls with respect to chewing and smoking habits. The odds ratio between cases and control with respect to only smoking, alcohol and Smoking+Alcohol consumption was not found significant. Only chewing, smoking+chewing and smoking+chewing+alcohol was found significant (P-values 0.001, 0.033, 0.001). Majority of them had the habit of chewing tobacco stem (Kaddipudi) with lime and betel leaf. Among 64 respondents, tobacco chewing in the form of leaf (Khaini) 43(67.2%) and 21 (32.8%) with respect to case and control, the odds ratio is statistically significant.

Conclusion: In this study, a higher chance of oral cancer was found in those who were chewing and smoking tobacco in any form and a strong risk for oral cancer is proved from chewing with different combination. Alcohol and smoking alone has not proved the association with oral cancer, it may be due to high proportion of women respondents or combined males and female respondents for analysis.