The oral samples were tested for high-risk HPV. Oral cells swabbing, brushing, and oral rinse

**MATERIALS & METHODS**

Cancer prevention strategies such as tobacco users, and determine factors associated with HPV communities.

**OBJECTIVE**

The goal of this project is to examine the prevalence of oral HPV among women who are chronic tobacco users, and determine factors associated with HPV infection. The long-term objective is to inform oral cancer prevention strategies such as tobacco cessation and HPV vaccination within these communities.

**INTRODUCTION**

Human papillomavirus (HPV) is the most common sexually transmitted disease. Low-risk HPV can cause warts, and the virus often clears on its own. High-risk HPV can persist and can cause cervical, anogenital, and head and neck cancer, primarily of the oropharynx. Not all oral cancers are caused by HPV alone. Additional independent risk factors include alcohol, smoking, and smokeless tobacco consumption. Tobacco use, including cigarette smoking and tobacco chewing, is the primary cause of oral cancer worldwide. India has high prevalence of tobacco consumption and 60% of smokeless tobacco users are women. Tobacco users have a fifteen-fold increased risk of oral cancer compared to non-tobacco users. There may be interactions between smokeless tobacco use, oral HPV infection and oral cancer.

**RESULTS**

The prevalence of high-risk oral- HPV is low (2%) among rural/tribal women in Mysore who are chronic chewing tobacco users.

**CONCLUSIONS**

- There is a low prevalence of high-risk oral HPV (N=1),
- The low prevalence of oral-HPV might be due to low number of women who engage in oral sex hence decreasing the transmission rate.
- There is also a low percentage (18%) of women who had tried alcohol before.
- Cultural values and practices might play a role in the prevalence of oral HPV within these communities

**MATERIALS & METHODS**

**Laboratory analysis:**

- Oral rinse was combined with the collection tube samples which contained the swab and the brush. The tube was centrifuged for 10 minutes at 2,300 rpm to obtain cell pellet. The supernatant layer was discarded, and the pelleted cells transferred to the Qiagen collection tube with the other oral cell samples.
- The oral samples were tested for high-risk HPV using in vitro nucleic acid hybridization assay with signal amplification using microplate chemiluminescence for the qualitative detection of 13 high-risk types of HPV DNA.

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