Conference Abstracts

Impact of Structured Oral Health Education on Tobacco Cessation and Oral Potentially Malignant Disorders: A Quasi-Experimental Community Based Study in Nepal

Pratibha Poudel, Master of Dental Surgery, Master of medical research[1a], Dilip Prajapati, MDS[1], Sagar Adhikari, MDS[1], Manoj Humagain, MDS[1], Chandan Upadhyaya, MDS[1]

[1] Dhulikhel Hospital-Kathmandu University Hospital/Kathmandu University School of Medical Sciences, Dhulikhel, Kavre, Nepal, Dhulikhel, Bagmati

Corresponding author

[a] Pratibha Poudel, Master of Dental Surgery, Master of medical research, Dhulikhel Hospital-Kathmandu University Hospital/Kathmandu University School of Medical Sciences, Dhulikhel, Kavre, Nepal, Dhulikhel, Bagmati, Email: poudelpratibha@kusms.edu.np

Keywords: oral cancer, rural setting, OPMD

https://doi.org/10.53876/001aa.129656

International Journal of Cancer Care and Delivery

Vol. 6, Issue Supplement 1, 2026

Background

Oral cancer is largely preventable cause of cancer related morbidity and mortality in South Asia, with tobacco use being the primary modifiable risk factor. Nepal bears high burden of tobacco related oral diseases, yet community based cancer prevention initiatives that integrate tobacco cessation with early detection of oral potentially malignant disorders (OPMDs) remain limited. OPMDs represent reversible stage offering a unique opportunity for early intervention to interrupt cancer progression. However, there is paucity of longitudinal evidence from low resource settings evaluating structured oral health education as a cancer prevention strategy.

Aim

To evaluate effectiveness of structured, oral health education intervention in improving tobacco cessation rates and reducing incidence and persistence of OPMDs among adult tobacco users in rural Nepal.

Methods

A quasi-experimental study will be conducted in two rural villages in Nepal. Adult tobacco users will be enrolled and followed for 24 months. Intervention village will receive structured oral health education package delivered by trained oral health professionals, comprising repeated behavioral counselling, visual demonstration of oral lesions, motivational interviewing, relapse-prevention support, and regular oral screening. Control village will receive brief advice at baseline. Tobacco cessation outcomes will be assessed at 3, 6, 12, and 24 months using self-report validated by biochemical testing. Incidence and regression of OPMDs will be documented through standardized clinical oral examinations.

Outcomes

Primary outcomes include sustained tobacco cessation. Secondary outcomes include reduced new OPMD incidence, regression of existing lesions, improved tobacco-related knowledge and behaviors, and lower relapse rates. The study will generate evidence to inform low-cost, scalable oral cancer prevention policies in Nepal and similar low and middle-income settings.