



# P3.008 Eight-Year Community-Based Tobacco Reduction in an Indigenous Population: Implications for Tobacco Control and Cancer Prevention in Rural India



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## INTRODUCTION

Tobacco use is a leading preventable cause of cancer, disproportionately affecting indigenous and marginalized populations. Tribal communities in India face high tobacco exposure driven by cultural practices, low literacy, and limited access to preventive health services.

**Aim: to evaluate tobacco use patterns, cancer awareness, and the impact of 8 years of sustained brief cessation counselling with motivation and reinforcement among the Malayali tribal population of South India.**

## METHODS

### Design:

Longitudinal community-based study: 2010 pilot survey followed by 8 years of sustained brief cessation counselling, then a 2018 population-based follow-up survey.

### Setting & Sample

- Yelagiri Hills, Tamil Nadu, India; Malayali tribal population
- 2010 pilot: n=660. 2018 follow-up: n=2,185 (cross-sectional survey design).

### Intervention (2010–2018)

- Brief tobacco cessation counselling, health education and motivational reinforcement delivered every 3 months for 8 years.

### Data Collection

- Structured, pre-tested questionnaires; clinical oral examination; documentation of tobacco habits and cancer-risk awareness.

### Analysis

- Descriptive comparison of baseline (2010) vs follow-up (2018) tobacco use prevalence; absolute and relative change estimated.

## DISCUSSION AND CONCLUSION

### Actionable Takeaway Message

Repeated brief cessation counselling with motivation and reinforcement, sustained over 8 years, significantly reduced tobacco use in a high-risk tribal population a scalable, low-cost model for tribal primary care. Health is a neglected issue in the case of Malayali tribes. The findings, however limited, may also bring to the light the magnitude of the tobacco use and cancer prevalence among this group of tribal people.

### Future Directions

Integrate sustained counselling into routine tribal health services; evaluate impact on longer-term oral/other cancer incidence and explore digital reinforcement tools to extend reach.

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## RESULTS

Overall tobacco use prevalence fell from 45.4% (2010) to 32.8% (2018) an absolute decline of 12.6 percentage points (27.7% relative reduction) after 8 years of sustained counselling.

- Of 2,185 participants surveyed in 2018, 47% (n=1,027) had no formal education.
- Tobacco use at follow-up: raw tobacco chewing 39% (n=852), commercial smokeless 33% (n=721), cigarette smoking 31% (n=677), beedi smoking 29% (n=634), dual use 12% (n=262).
- Oral mucosal lesions were detected in 32% of tobacco users indicating substantial early tobacco-related pathology despite the decline in use.**

