

Assessment Of Tobacco Habits Among Godihal Tribal Population In Belagavi District- A Cross Sectional Study

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Abstract-

Background: One of the major global public health problems is the tobacco epidemic. Hence this study aims to assess the oral health of tobacco use in the Godihal tribal community in the Belagavi District of Karnataka.

Objective: To estimate the tobacco use (smokeless/smoking tobacco) among tribal populations.

Materials and Methods: The present cross-sectional study was carried out at the Godihal tribal community from October 2022 to January 2023. Through a self-designed questionnaire, the frequency of tobacco consumption was evaluated. Each and every Godihal tribal participants of all ages were included in the study. Data was imported into Microsoft Excel and analyzed using SPSS (Version 26; Raleigh, North Carolina, USA).

Results: There were 252 study participants in total for this cross-sectional study, 133 of whom were men and 119 of whom were women. Smoking and smokeless tobacco prevalence were —3.20% and 46.40%, respectively.

Conclusions: In indigenous people, a high rate of addiction and poor health effects are caused by the extensive availability of commercial tobacco products. Among tribal participants, about 50% used tobacco in some form of pattern. There were 252 participants, and 181 (56.3%) of them were tribe participants who chewed tobacco. Chewing (smokeless) tobacco consumption is therefore more prevalent than smoking tobacco in the Godihal tribal people.

Keywords: Smoking/Smokeless tobacco, Tobacco usage, Oral mucosal lesions, Oral Leukoplakia, Oral Submucous Fibrosis

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I. INTRODUCTION

Tobacco use is a leading cause of preventable deaths globally, with over 8 million deaths annually. The World Health Organization (WHO) estimates that there are 1.3 billion tobacco users worldwide, with the majority in low- and middle-income countries. Smoking rates vary widely by country and region, with China having the most daily smokers. India has the second-highest tobacco consumption and a high consumption of smokeless tobacco. Smoking rates are higher among men and in nations with low and medium incomes. Tobacco use is prevalent among tribal populations in India and the United States. Factors contributing to higher rates of tobacco use among tribes can include cultural, historical, socio-economic, and educational disparities. A study is conducted to evaluate the oral health of smokers in the Belagavi District, Karnataka-based Godihal tribal group.

II. NEED FOR THE STUDY

There is a need for more studies on tobacco use among tribal groups in the Belagavi district, especially given the prevalence of tobacco cultivation and trade in the region. Such studies can inform policies and guidelines aimed at reducing tobacco use and its associated health consequences among these vulnerable populations. Further research can help policymakers and public health experts better understand the unique challenges and risk factors of tobacco use among tribal groups, leading to more culturally sensitive and effective solutions.

III. MATERIALS AND METHODOLOGY

A cross-sectional study was conducted in Godihal, Belagavi District, to evaluate tobacco use (smoking and not smoking).

Method of sample size calculation used was Complete enumeration (296) and Universal sampling technique used. Both male and female residents of Godihal tribal community were included in the study. The ethical committee provided its ethical clearance, KLE University, Belagavi. Permission was obtained from higher authorities. A standardized pre-designed structured questionnaire was administered in their local language. The socio-demographic characteristics like occupation, types of family, monthly income, education, and tobacco

habits (smokeless/smoking tobacco) were recorded. The examination was carried out by the investigator throughout the survey. Participants in the study gave their freely informed consent.

The study used statistical analysis techniques, such as importing data into Microsoft Excel and using SPSS software to analyze it, presenting results as percentages, numbers, mean values, standard deviations, and mean values for quantitative data. The Fisher's Exact test was used to assess differences between the groups.

IV. RESULTS

In this research, we examine the oral health of tobacco users among the Godihal tribal residents in the Belagavi District of Karnataka. The study consisted total 252 participants. Out of which 133 were males and 119 were females. The majority of the participants in this study have occupations falling under the "Other" category. All individuals in the sample population belong to the Hindu religion and also belong to the BPL card. Out of the 252 participants, only 2 (0.8%) had OL, 4 (1.6%) had OL and OSMF, 17 (6.7%) had OSMF, and 229 (90.9%) were healthy. The prevalence of smoking and smokeless tobacco is 3.20 percent and 46.40 percent, respectively.

TABLE NO. 1: PREVALENCE OF TOBACCO

Tobacco	Frequency	Percent
A. Smoking Tobacco		
YES	8	3.20%
NO	244	96.80%
B. Smokeless Tobacco		
YES	117	46.40%
NO	135	53.60%

TABLE 2: SOCIODEMOGRAPHIC

Age Group	Frequency	Percent
1-18	93	36.9%
19-35	59	23.4%
36-50	71	28.1%
51-80	23	9.1%
81-110	6	2.3%
Gender		
Male	133	52.8
Female	119	47.2
Occupation		
Farmer	57	22.6
Labourer	45	17.9
Driver	15	6.0
Other	135	53.6
Total	252	100.0
Religion		
Hindu	252	100.0
Family type		
Joint	142	56.3
Nuclear	110	43.7
Type of ration card		
BPL	252	100.0
Education		
Illiterate	57	22.6
Primary school	149	59.1
Secondary school	42	16.7
Pre-University	1	0.4

Anganwadi (Pre schooling)	2	0.8
High school	1	0.4

TABLE 3: HABITS OF SMOKING/SMOKELESS TOBACCO

Habits of smoking tobacco	Frequency	Percent
Yes*	8	3.2
No	244	96.8
Age at which an individual first started smoking		
Below 18 years of age	4	50.0
Above 18 years of age	4	50.0
Cigarettes/bidis smoke per day		
6 to 10 cigarettes/bidis per day	4	50.0
11 to 20 cigarettes/bidis per day	4	50.0
How many days did participants use cigarettes/bidis over the previous 30 days	8	100.0
How many cigarettes or bidis did participants smoke each day over the past 30 days		
6 to 10 cigarettes/bidis per day	4	50.0
11 to 20 cigarettes/bidis per day	4	50.0
Habits of chewing tobacco		
No	135	53.6
Yes	117	46.4
Tobacco Types		
Gutkha	54	17.1%
Betel quid with tobacco & zarda	55	17.4%
Betelnut	72	22.8%
NA (None of the Above)	135	42.7%

****Multiple Responses****

Age at which chewing tobacco use started		
Below 18 years of age	23	19.7
Above 18 years of age	94	80.3
Chewing tobacco per day		
1 time per day	10	8.5
2 to 5 times per day	24	20.5
6 to 10 times per day	35	29.9
11 to 20 times per day	48	41.0
Past 30 days, how many days chew tobacco		
1 or 2 days	8	6.8
3 to 5days	2	1.7
10 to 19 days	10	8.5
All 30 days	97	82.9

TABLE 4: ASSOCIATION OF CLINICALLY SUSPECTED ORAL LESION AND TOBACCO USE

Habits of smoking tobacco	Clinically suspected oral lesion				p value
	OL	OL, OSMF	OSMF	Healthy	
Yes	1 12.5%	4 50.0%	1 12.5%	2 25.0%	<0.001**
No	1 0.4%	0 0.0%	16 6.6%	227 93.0%	
	Clinically suspected oral lesion				p value
	OL	OL, OSMF	OSMF	Healthy	

Habits of chewing tobacco	No	0 (0.0%)	0 (0.0%)	0 (0.0%)	135 (100.0%)	<0.001**
	Yes	2 (1.7%)	4 (3.4%)	17 (14.5%)	94 (80.3%)	

** significant at 0.01 level

V. DISCUSSION

The article discusses tobacco use among tribal populations in India and the challenges of addressing the issue due to cultural and social norms. The prevalence of tobacco use among several tribes is highlighted, along with the health risks associated with tobacco use. The article presents several studies that reveal a serious issue with tobacco use among Indian tribal people, and that cultural norms, low levels of education, and poverty are contributing factors to the growing proportion of tobacco use in these populations. The current study shows a lower incidence of oral mucosal lesions and less frequent use of chewing and smoking tobacco among a particular tribal group, but they still practice the habit of chewing areca nut, betel nut, and ghutka, as well as smoking bidi occasionally during social gatherings. The article emphasizes the importance of considering cultural and traditional values in any interventions aimed at reducing tobacco use among tribal populations.

VI. FUTURE SCOPE

The article suggests that tobacco usage among Indian tribal people is a major global public health concern and proposes establishing tobacco cessation cells to educate, counsel and provide resources to those who want to quit tobacco. The implementation of NTCP programs and tobacco cessation cells can reduce the burden of diseases related to tobacco use in tribal populations. Additionally, the NTCP can collaborate with tribal communities and leaders to develop culturally appropriate tobacco control strategies and initiatives that can promote a healthier lifestyle and improve the health outcomes of indigenous people.

VII. CONCLUSION

Tobacco use has been prevalent among many tribal communities for centuries, often used for ceremonial, medicinal, or social purposes. However, the widespread availability of commercial tobacco products has contributed to high rates of addiction and ill health outcomes among tribal populations. In the current research investigation, 3.20 percent and 46.40 percent, respectively, of participants consume smoking and smokeless tobacco. In the present study, 14.3% of male and 3.4% of female were having suspected lesions. 50% of the suspected oral lesion were OL and OSMF and maximum number of suspected lesions were identified in the age group of below 18 in smoking form of tobacco group. Among people who were suspected with lesions, 17.6% were farmers, 22.2% were laborer's, 6.7% were drivers and 1.4% were from other professionals. Number of lesions among people who smoke 6-10 cigarettes per day and 11-20 cigarettes per day were equal. Among people who used smokeless form of tobacco, 1.7% were having OL, 3.4% were having OL and OSMF, 14.5% of people were suspected with OSMF. 29.8% of the study participants who had suspected lesions were illiterate.

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