

Original Research Article

Prevalence of smokeless tobacco consumption among women of rural Telangana

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ABSTRACT

Background: Tobacco kills approximately 1 million people annually in India and is responsible for almost half of all cancers in men and quarter of all cancers in women. Smokeless tobacco (SLT) is one such form that is culturally and socially acceptable by women especially in rural India. The study was aimed to estimate the prevalence of smokeless tobacco consumption among women, prevalence of exposure to second hand smoke and to determine the factors associated with it.

Methods: A community based cross sectional study was done among 190 women in the rural field practice area of department of community medicine of Kakatiya Medical College, Warangal during the period of October 2019 to December 2019. Data was collected using simple random sampling. A semi structured questionnaire was prepared with the help of global adult tobacco survey proforma. The data was analyzed using statistical package for the social sciences (SPSS) 20.00.

Results: Prevalence of smokeless tobacco consumption was 57% and the most common form of tobacco being consumed was tobacco with pan (40.3%). The prevalence of exposure to second hand smoke at home was 61%. The most common reason for initiation was peer pressure. High prevalence of consumption of smokeless tobacco was seen in unemployed and illiterate women.

Conclusions: The prevalence of smokeless tobacco consumption is higher among women in this study and this indicates the lack of awareness and the need for better strategies to reduce the burden.

Keywords: Prevalence, Smokeless tobacco, Women, Consumption

INTRODUCTION

Globally tobacco usage being one of the major public health threats is a risk factor for many chronic illness such as lung diseases, cancers and cardiovascular diseases. Tobacco kills nearly 6 million people each year globally, of which around 5.4 million are due to direct use of tobacco while remaining 0.6 million are a result of exposure to second-hand smoke.¹⁻³

India is the second largest consumer and third largest producer of tobacco in the world.⁴ As per the global adult tobacco survey (2016-2017), 42.4% of men, 14.2% of women and 28.6% (266.8 million) of all adults currently use tobacco (smoked and/or smokeless tobacco), 29.6% of men, 12.8% of women and 21.4% (199.4 million) of all adults currently use smokeless tobacco. Globally the most common form of tobacco used is cigarette smoking while in India the most common form is smokeless tobacco and the most commonly used products are khaini, gutkha and betel quid with tobacco.

Smokeless tobacco is culturally and socially acceptable by women especially in rural India. All wide varieties of tobacco are sold at low cost in the country. These reasons contribute to major prevalence of tobacco consumption in the country.

Tobacco kills approximately one million people annually in India and is responsible for almost half of all cancers in men and quarter of all cancers in women. In addition to cancers of oral cavity, esophagus, cardiovascular diseases, tobacco consumption causes premature mortality in women. The relative risk of mortality due to smokeless tobacco consumption is higher among women than men.^{5,6}

It will also lead to stillbirth, preterm birth and low birth weight in their offspring. Hence this present study was conducted to assess the prevalence of smokeless tobacco consumption in women of rural Telangana, India and to determine the factors associated with it. The prevalence of second hand smoke exposure was also assessed.

METHODS

A community based cross-sectional study was done among 190 women (18 years and above) residing in the rural field practice area of department of community medicine of Kakatiya Medical College, Warangal, India. Prior permission from institutional ethical committee (IEC) was obtained before the commencement of the study. The study was done for a period of three months from October 2019 to December 2019. Women more than or equal to 18 years were included in the study. Informed consent were obtained from the participants before interviewing them. Women with dementia and who were bed ridden were excluded from the study. Sample size was calculated using Epi Info with a prevalence of 17.85% from previous study.⁷ Absolute precision of 5% and 10% nonresponsive rate. Simple random sampling technique was used. So total sample size was 190 women. A semi structured questionnaire was developed with the help of global tobacco adult survey questionnaire for data collection.⁸

The dependent variable was tobacco consumption. The independent variables were socio-demographic profile such as age, literacy, occupation, marital status and type of family.

Statistical analysis

Data was entered in to Microsoft excel and analyzed by using statistical package for the social sciences (SPSS) version 20.0. Descriptive and inferential statistics were also used. Chi-square test was used to test the association between the dependent and independent variables. P value <0.05 was considered as statistically significant.

RESULTS

It was seen from Table 1 that out of total 190 subjects, 28 (14.7%) were between 18-27 years, 39 (20.5%) were between 28-37 years, 50 (26.3%) were between 38-44 years and 73 (38.4%) were above 45 years. 102 (53.6%) were illiterate and 88 (46.3%) were literate. 102 (53.6%) were employed, 81 (42.6%) were housewives and 7 (3.6%) were students. 140 (73.6%) were married, 43 (22.6%) were widow and 7 (3.6%) were never married.

The overall prevalence of smokeless tobacco consumption in our study was 108 (57%). The most common form of tobacco used was tobacco with pan 77 (40.37%) followed by tobacco with betel quid 57 (30%) and plain tobacco 56 (29%). 129 (68%) of tobacco users consumed it daily, while 40 (21%) consumed it 3-5 days per week and 21 (11%) consumed it less than 3 days a week. The most common reason for tobacco initiation was peer pressure 76 (40%) followed by parental use 42 (22%), body pains 38 (20%) and other reasons 34 (18%).

As Table 2 shows the significance of association between dependent and independent variables. Prevalence of smokeless tobacco consumption was significantly higher among illiterates ($p \leq 0.05$), housewives ($p \leq 0.05$) and women living in joint family ($p = 0.001$). Age ($p = 0.633$) and marital status ($p = 0.143$) were not significantly associated with smokeless tobacco consumption.

Table 1: Socio-demographic characteristics of participants according to the smokeless tobacco consumption pattern.

Socio-demographic characteristics	No. of women (%)	Smokeless tobacco consumption	
		Present	Absent
Age (in years)			
18-27	28 (14.7)	07 (25.0)	21 (75.0)
28-37	39 (20.5)	18 (46.1)	18 (53.9)
38-44	50 (26.3)	28 (56.0)	22 (44.0)
>45	73 (38.4)	55 (75.3)	18 (24.7)
Literacy			
Illiterate	102 (53.6)	77 (75.4)	25 (24.6)
Literate	88 (46.3)	31 (35.2)	57 (64.8)
Occupation			
Housewife	81 (42.6)	65 (80.2)	16 (19.8)
Employed	102 (53.6)	43 (42.1)	59 (57.9)
Students	07 (3.6)	00	07 (100)
Marital status			
Married	140 (73.6)	78 (55.7)	62 (44.3)
Divorced/widow	43 (22.6)	30 (69.7)	13 (30.3)
Never married	07 (3.6)	00	07 (100)
Type of family			
Nuclear family	135 (71.0)	67 (49.6)	68 (50.4)
Joint family	55 (28.9)	41 (74.5)	14 (25.5)

Table 2: Association of socio-demographic characteristics to the prevalence of smokeless tobacco consumption.

Socio-demographic characteristics	No. of women (%)	Smokeless tobacco consumption		P value
		Present	Absent	
Age (in years)				
18-27	28	07 (25.0)	21 (75.0)	0.633
28-37	39	18 (46.1)	18 (53.9)	
38-44	50	28 (56.0)	22 (44.0)	
>45	73	55 (75.3)	18 (24.7)	
Literacy				
Illiterate	102	77 (75.4)	25 (24.6)	<0.005*
Literate	88	31 (35.2)	57 (64.8)	
Occupation				
Housewife	81	65 (80.2)	16 (19.8)	<0.005*
Employed	102	43 (42.1)	59 (57.9)	
Students	07	00	07 (100)	
Marital status				
Married	140	78 (55.7)	62 (44.3)	0.143
Divorced/widow	43	30 (69.7)	13 (30.3)	
Never married	07	00	07 (100)	
Type of family				
Nuclear family	135	67 (49.6)	68 (50.4)	0.001*
Joint family	55	41 (74.5)	14 (25.5)	

*Statistically significant.

DISCUSSION

Tobacco consumption is an emerging epidemic especially in low and middle income countries like India. Tobacco is a major risk factor for lung cancer, emphysema, oral and throat cancers, pancreatic cancer, premature mortality in women, stillbirth and low birth weight in their offspring. The prevalence of smokeless tobacco consumption in our study was 108 (57%) which was higher than other studies.⁹⁻¹¹

The prevalence in our study was much higher than the figures in global adult tobacco survey 2016-2017.¹² These variations might be due to differences in study settings, profile of participants and also cultural practices.

In our study, the most common form of tobacco consumption was tobacco with pan 77 (40.3%) followed by tobacco with betel quid 57 (30%). Only 22 (11.5%) of the subjects had received advice regarding tobacco consumption and its side effects from health care workers at least once in the past 6 months. Out of the subjects who had received, 17 (77%) of them received advice from a doctor and remaining 5 (23%) had received from ANMs/ASHA. The prevalence of second hand smoke exposure among the study participants was 115 (61%). The most common place of second hand smoke exposure was at home 76 (66%). Remaining 39 (34%) of subjects got exposed to second hand smoke at their workplace.

In the study done by Yuvraj et al, the most common form of tobacco consumption was tobacco with betel quid. The most common influencing factors for tobacco consumption

was peer and parental usage which was similar to other studies.¹³

Only 22 (11.5%) of the participants had received advice or awareness regarding tobacco usage. Majority 115 (61%) of the participants were exposed to second hand smoke, majority of them at home 76 (66%). These findings were higher than the previous study. These factors play a significant role in initiation and continuation of the habit. In the present study, the prevalence of smokeless tobacco consumption was significantly higher among illiterates, housewives and women living in joint family. These findings were consistent with other studies.¹⁴

Limitations

One of the limitations of our study was the factors such as presence of co-morbidities and reproductive issues were not included in the present study.

CONCLUSION

Almost half of the women are consuming some form of smokeless tobacco in this study. Peer and parental usage are found to be the common influencing factors for tobacco consumption initiation. The study has found that illiteracy and unemployment are significantly associated with higher prevalence of tobacco consumption. The study also found out that very less proportion of women have received advice regarding tobacco and its side effects and relatively higher proportion of women are exposed to second hand smoke.

Recommendations

The findings from our study reflects the need for awareness on the harmful effects of tobacco consumption and also second hand smoke exposure. The legislations related to tobacco needs to be enforced in much stringent way to reduce the easy availability of tobacco products.

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