



Research Article

TOBACCO USE AMONG ELDERLY IN RURAL POPULATION OF WESTERN MAHARASHTRA

Dr Himanshu Sharma^{1*}, Dr Shweta Joshi² and Dr Himani Sharma³

¹Officer Commanding, Station Health Organization, Allahabad, Uttar Pradesh, India

²Department of Anesthesiology, BJGMC, Pune, Maharashtra, India

³Department of Paediatrics, GMC Haldwani, Uttarakhand, India

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ABSTRACT

Introduction: WHO predicts that tobacco deaths in India may exceed 1.5 million annually by 2020. Tobacco is almost a risk factor for six of the eight leading causes of death. Smoking and smokeless form of tobacco use is common in India. Community based rural studies have shown the prevalence of tobacco use as 31% - 42% in elderly rural population. According to WHO Global Report on Trends in Tobacco Smoking 2015 in India, 19.9% men and 1.7% women are smokers among adult population. According to Global Adult Tobacco survey 32.9% men and 18.4% women are using smokeless tobacco.

Aim: The aim of the study is to estimate the prevalence of tobacco use among elderly in rural population of Western Maharashtra.

Methodology: Community based cross sectional study from Jan to June 2017. Elderly population with age of 60 years and above residing in rural area of Western Maharashtra during study period. Patients were interviewed through a pretested structured questionnaire in relation to their tobacco habits.

Results: Prevalence of tobacco use was 42.6%. Smoking was more common in males (33.6%) as compared to females (2.04%). Smokeless form of tobacco consumption was similar in both males (31.7%) and females (32.6%). Among females who consumed tobacco - 98% used a smokeless form. Mishri – roasted fine tobacco powder was the most common form of smokeless tobacco consumed by females (32.65%) as compared to males (1.92%).

Conclusions: High prevalence of tobacco in this rural area which is significantly associated with gender and alcohol consumption. This needs to be addressed immediately to prolong health. Myth of Mishri consumption that it cleans teeth should be dealt with appropriate IEC activity.

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INTRODUCTION

Chronic non communicable diseases are increasing in geriatric group. Tobacco continues to be the leading cause of preventable deaths worldwide. Cardiovascular diseases and cancer are at present the leading causes of death in developed countries. [1]

World Health Organization reports that the consumption of tobacco has been growing at the rate of 2% to 5% per annum and six million people are currently estimated to die annually from tobacco use. Tobacco use accounts for 7% of all female and 12% of all male deaths globally and it is projected to increase to 8 million deaths per year by 2030, or 10% of all deaths projected to occur that year. [2]

WHO predicts that tobacco deaths in India may exceed 1.5 million annually by 2020.

*Corresponding author: Dr Himanshu Sharma

Officer Commanding, Station Health Organization, Allahabad, Uttar Pradesh, India

[3] Tobacco is almost a risk factor for six of the eight leading causes of death. IHD, CVA, LRTI, COPD, TB, Lung Cancer (barring HIV and Diarrhea). [4] Smoking and smokeless form of tobacco use is common in India. Community based rural studies have shown the prevalence of tobacco use as 31% - 42% in elderly rural population. [5]

According to WHO Global Report on Trends in Tobacco Smoking 2015 in India, 19.9% men and 1.7% women are smokers among adult population. According to Global Adult Tobacco survey 32.9% men and 18.4% women are using smokeless tobacco.[6]

India is witnessing a demographic transition .Hence there is need for immediate action to bring down the risk factors in elderly population. Prevalence of tobacco is needed for planning and implementation of health intervention activities to target this cohort. Therefore this study was conducted to know the extent and pattern of tobacco use and to find out their association between various socio-demographic factors among

rural Indian elderly population. This data will be helpful in development and implementation of intervention techniques.

MATERIALS AND METHODS

Study design: Community based cross sectional study

Study population: Elderly population with age of 60 years and above residing in rural area of Western Maharashtra during study period.

Place of study: A village located in rural field practice area of a medical college in Western Maharashtra.

Study duration: 01 Jan 2017 - 30 June 2017

Sample size : Sample size was calculated to estimate 95% confidence interval for assuming prevalence of tobacco use to be 31% in elderly with α error of 0.05

Based on the above prevalence, a minimum of 125 was required. However all the elderly i.e. 202 were included.

$$N = \frac{z^2 \times p(1-p)}{d^2}$$

N= sample size; p= prevalence; d= 5% error

Sampling Method: All elderly of the village included

Study Tool: Pre-tested questionnaire in marathi was administered

Analysis: SPSS 20 software used

The data collected was tabulated and analyzed using Microsoft Excel. Chi-square test was used to evaluate the presence of a statistically significant difference between the gender and the variable characteristics (age, educational status, occupational status etc) under the study.

RESULTS

Socio demographic profile: A total of 202 elderly persons were included in the study. 51.48% males and 48.51% females. 85.14 % were elderly, 13.86 % old and 0.99% very old. (Table 1) 72.27 % were married and 27.72 % were unmarried, widow or divorced. 64.85% were literates and 35.14% illiterates.

Table 1 Distribution of study subjects according to socio-demographic characteristics.

Characteristics	N(%)
Gender	
Male	104(51.48%)
Female	98(48.51%)
Age group	
60-75	172(85.14%)
76-90	28(13.86%)
>or= 91	02(0.99%)
Marital status	
Married	146(72.27%)
Others (Unmarried /Widow/ Separate/ divorced)	56(27.72%)
Education	
Illiterate	71(35.14%)
Literate	131(64.85%)
Socioeconomic status	
Lower	120(59.40%)
Middle and above	82(40.59%)

Tobacco consumption

33.6 % of males and 2.04 % females smoked tobacco. 31.73 % males and 32.65% females chewed tobacco. (Table 2)

Table 2 Sex wise prevalence of tobacco consumption among study subjects

Pattern of/ Use	Male (%)	Female (%)	Total N=202	OR	p value
Tobacco smoking				24.34	0.00
Yes	35 (33.6%)	2 (2.04%)	37		
No	69(66.34%)	96(97.95%)	165		
Tobacco chewing				3.06	0.44
Yes	33 (31.73%)	32 (32.65%)	65		
No	71(68.26%)	66(67.34%)	137		

Tobacco use and sociodemographic factors

46.51% of elderly from the age group between 60 -75 years consumed tobacco as compared to 20% in the age group of 76 years and above. The prevalence of tobacco was more in the elderly i.e, 60-75 years groups this can be attributed to the survival rates in the older ages after 80 years. Strong association (p value=0.003) was found between tobacco consumption and age. (Table 3)

No significant association with low education, low economic status, those who were either unmarried or widowed or separated was found.

Table 3 Association between tobacco use and various sociodemographic factors

	Tobacco use Present (%)	Tobacco use Absent (%)	Chi square	p value
Age			7.344	0.003
60-75	80(46.51)	92(53.48)		
>or= 76	6(20%)	24(80%)		
Education			0.44	0.506
Illiterate	28(39.43%)	43(60.56%)		
Literate	58(44.27%)	73(55.73%)		
Socioeconomic status				0.07
Lower	46(38.37%)	74(61.66%)		
Middle and above	40(48.78%)	42(51.21%)		
Marital status			0.343	0.28
Married	64(43.83%)	82(56.16%)		
Others (Unmarried /Widow/ Separate/ divorced)	22(39.28%)	34(60.71%)		

Alcohol and tobacco consumption

Statistically strong association (p value=0.0001) was found between tobacco and alcohol consumption. (Table 4)

Table 4 Alcohol and tobacco consumption

Pattern of/ Use	Tobacco Consumption Yes	Tobacco Consumption No	Total N=202	OR	p value
Alcohol				3.05	0.0001
Yes	37	23	60		
No	49	93	142		

DISCUSSION

Our study found out that there was a high prevalence of tobacco consumption (42.6%). Consumption of tobacco in the form of smoking is a widely spread phenomenon among males in rural areas of our country. [7-10] Studies [9, 10] done in rural India revealed that the prevalence of tobacco smoking

was high among males when compared to females. Similar findings (33.26% vs 2.04%) were noted in our study also. But the prevalence of tobacco chewing was similar in both males (31.7%) and females (32.6%).

Mishri – roasted fine tobacco powder was the most common form of smokeless tobacco consumed by females (32.65%) as compared to males (1.92%). Mishri chewing which is very much prevalent cultural practice in this part of the rural India would have resulted in a habit which might be an important contributing factor for the huge difference in tobacco chewing. The present data shows that, 29.7% of elderly people were currently consuming the alcohol which was high as compared to the findings (17.1%) in other studies. [8, 9] Prevalence of drinking was high in elderly males than in females. This could be because of various social factors like peer influence, perception about alcohol drinking as a means of recreation after hard labour day in the fields.

The prevalence of tobacco and alcohol consumption declined with the increased age (maximum in 61-75 years age group and minimum in more than 75 years group) which was similar to findings of Goswami A *et al.* [8]

CONCLUSION

Prevalence of tobacco use was 42.6%. Smoking was more common in males (33.6%) as compared to females (2.04%) (p value 0.00). Smokeless form of tobacco consumption was similar in both males (31.7%) and females (32.6%). Among females who consumed tobacco - 98% used a smokeless form. Mishri – roasted fine tobacco powder was the most common form of smokeless tobacco consumed by females (32.65%) as compared to males (1.92%).

This study shows high prevalence of tobacco use among elderly people in this rural area and its use was significantly associated with male gender. Not significantly associated with low educational, low economic status, those who were either unmarried or widowed or separated. The prevalence of tobacco was more in the elderly i.e, 60-75 years groups this can be attributed to the survival rates in the older ages after 80 years. Strong association between tobacco and alcohol consumption was present. Since tobacco consumption serious health concern various measures like tobacco cessation campaign should be implemented. Myth of Mishri consumption that it cleans teeth should be dealt with appropriate IEC activity. Spreading awareness by means of outreach activities regarding the harmful effects of tobacco and alcohol consumption should be conducted.

References

1. Park K. Park's Textbook of Preventive and Social medicine. 22nd edition. Jabalpur: M/s Banarsidas Bhanot Publisher; 2009. p.434 -36.
2. World Health Organization. Global Status Report On Non-communicable Diseases 2014. Geneva: WHO, 2014. Available from http://www.who.int/nmh/publications/ncd_report_full_en.pdf (Accessed on 2014-05-29)
3. http://www.who.int/tobacco/surveillance/en_tfi_india_gats_fact_sheet.pdf
4. http://www.who.int/nmh/publications/fact_sheet_tobacco_en.pdf
5. Swathi HN, Franco A, Issac D. Prevalence of alcohol and tobacco abuse among the elderly in a rural area of Bangalore: A cross sectional study. *J. Evid. Based Med. Healthc.* 2016; 3(8), 228-230. DOI: 10.18410/jebmh/2016/54
6. <http://www.who.int/tobacco/surveillance/survey/gats/en/>
7. Purohit CK, Sharma R. A study of general health status of persons aged 60 years & above in the rural health training centre area, Naila. *Indian J Med Res* 1976;64:202-10.
8. Goswami A, Reddaiah VP, Kapoor SK, Singh B, Dwivedi SN, Kumar G. Tobacco and alcohol use in rural elderly Indian population. *Indian Journal of Psychiatry.* 2005;47(4):192-197.
9. International Institute of Population Sciences (IIPS) and ORC Macro. National Family Health Survey, 1998-99. Mumbai: IIPS; 2001.
10. Lal S, Mohan B, Punia MS. Health and social status of senior citizens in rural areas. *Indian J Community Med* 1997;9:10-17.

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