



Original Research Article

Tobacco Consumption in a Rural Community - Pattern and Predictors

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ABSTRACT

Introduction: Tobacco consumption has a major detrimental effect on both the health and the socio-economic conditions. This study intends to find out the pattern of tobacco consumption in the rural population of Hadinaaru village, and thus come to know the current status, patterns and associated co-morbidities of tobacco consumption in the rural population.

Objectives: To find out the pattern of tobacco consumption among a rural population of Mysore. To correlate the factors influencing the tobacco addiction and factors contributing to quit.

Methodology: This Cross-Sectional study was conducted in Hadinaaru village of Mysore district for a period of three months. A total of 606 adults residing in the study area were included in the study.

Results: Tobacco was consumed by 22.1% of the study population and majority of them consumed beedis (64.9%). Tobacco consumption was more among illiterates (64.1%) and those belonging to class V socio economic status (70.1%).

Conclusion: Prevention and control of tobacco consumption requires proper health education to both adolescents as well as adults.

Key words: Tobacco consumption pattern; Rural; Smoking; Beedi; Cigarette; Pattern.

INTRODUCTION

Diseases are either naturally occurring or man-made, and of all the man-made diseases, substance abuse is the most deadly. It is estimated that about 190 million people all over the world consume one or the other form of substance of abuse. The most widely and commonly used substance of abuse is tobacco. Almost 30 percent of the Indian population above 15 years of age consumes one or the other form of tobacco. [1]

In India, tobacco consumption is mostly in the form of beedis, cigarettes,

gutkha and khaini. Several other forms of tobacco are also available. [2]

Tobacco consumption has very serious health implications. It is already established that smoking is a major risk factor for an array of diseases such as coronary heart disease, atherosclerosis, lung and oesophageal carcinomas, COPD and so many more. Chewing tobacco is now known to be a strong predecessor of carcinomas of the oral cavity and oropharynx. [3]

Tobacco consumption also has a major detrimental effect on the socio-economic conditions. Tobacco dependence by even one member of a family puts a huge

financial burden on the entire family, especially in low socio-economic classes. Poor socio-economic status leads to poor health and the vicious cycle goes on. [4]

This study intends to find out the pattern of tobacco consumption in the rural population of Hadinaaru village, and thus come to know the current status, patterns and associated co-morbidities of tobacco consumption in the rural population. This information is required so as to enable development and implementation of effective intervention strategies.

MATERIALS AND METHODS

This cross sectional community bases study was conducted for a period of three months. Out of two Primary Health Centres adopted by JSS Medical college one i.e. Hadinaru PHC was selected randomly. All the villages under this PHC were line listed and one village was selected by lottery method. The Hadinaru village was the village that came out of random selection by this method. House to house survey was

conducted in this village and all the individuals above the age of 10 years were included in the study. Revisits were made for locked houses at a different time of the day than the previous visit. A total of 606 individuals were interviewed during the study period. A pretested semi-structured questionnaire was designed to collect various demographic data and data regarding the tobacco consumption, knowledge, attitude and practice among study subjects.

Statistical Analysis: Data collected was entered in MS Excel-2010 and analysed using SPSS version 22. Descriptive statistical measures like percentages were applied. Inferential statistical test like chi square test was applied to test the association between tobacco consumption pattern and various independent variables. The associations were found statistically significant at $P < 0.05$.

RESULTS

Table 1: Demographic characters and their relation to Tobacco consumption among the study population

| Demographic characteristics | Tobacco non consumers (n=472) | Tobacco consumers (n=134) | Total (n=606) | Chi-square value | P-value | | |
|-----------------------------|-------------------------------|---------------------------|---------------|------------------|---------|--------|--------|
| 11 to 20 years | 115(24.36%) | 2(1.49%) | 117(19.31%) | 111.29 | <0.005 | | |
| 21 to 30 years | 97 (20.55%) | 7 (5.22%) | 104(17.16%) | | | | |
| 31 to 40 years | 100(21.19%) | 23(17.16%) | 123(20.30%) | | | | |
| 41 to 50 years | 73(15.47%) | 23(17.16%) | 96(15.84%) | | | | |
| 51 to 60 years | 47(9.96%) | 32(23.88%) | 79(13.04%) | | | | |
| 61 to 70 years | 27(5.72%) | 35(26.12%) | 62(10.23%) | | | | |
| 71 years and over | 13(2.75%) | 12(8.96%) | 25(4.13%) | | | | |
| Male | 223(63.5%) | 128(36.5%) | 351(57.92%) | 99.80 | <0.005 | | |
| Female | 249(97.64%) | 6(2.36%) | 255(42.08%) | 61.92 | <0.005 | | |
| Illiterate | 145(30.72%) | 86(64.18%) | 231(38.11%) | | | | |
| Primary school | 42(8.90%) | 13(9.70%) | 55(9.08%) | | | | |
| Middle school | 83(17.58%) | 19(14.18%) | 102(16.83%) | | | | |
| High School | 113(23.94%) | 12(8.96%) | 125(20.63%) | | | | |
| PUC (10+2) | 56(11.86%) | 2(1.49%) | 58(9.57%) | | | | |
| Graduate | 29(6.14%) | 1(0.75%) | 30(4.95%) | | | | |
| Post graduate | 4(0.85%) | 1(0.75%) | 5(0.83%) | | | | |
| Unemployed | 6(1.27%) | 8(5.97%) | 14(2.31%) | | | 210.14 | <0.005 |
| Agriculture | 17(3.60%) | 57(42.54%) | 74(12.21%) | | | | |
| Shopkeeper | 22(4.66%) | 4(2.99%) | 26(4.29%) | | | | |
| Labourer | 110(23.31%) | 39(29.10%) | 149(24.59%) | | | | |
| Driver | 28(5.93%) | 8(5.97%) | 36(5.94%) | | | | |
| Others | 289(61.22%) | 16(11.94%) | 305(50.33%) | | | | |
| Class I | 0 | 1(0.75%) | 1(0.17%) | 38.54 | <0.005 | | |
| Class II | 1(0.21%) | 1(0.75%) | 2(0.33%) | | | | |
| Class III | 9(1.91%) | 11(8.21%) | 20(3.30%) | | | | |
| Class IV | 35(7.42%) | 27(20.15%) | 62(10.23%) | | | | |
| Class V | 427(90.47%) | 94(70.15%) | 521(85.97%) | | | | |

Among 606 subjects included in the study, 134 (22.11%) had reported consumption of tobacco in any of its forms. Majorities were consuming smoked tobacco 92.5% and 7.5% were consuming smokeless tobacco. Majority [26.12%] of the tobacco consumers were in the age group of 60 years and above followed by those in the age group of 51-60 yrs [21.38%]. Tobacco consumption was substantially higher among males 36.4% compared to females (2.36%). Maximum tobacco consumers were illiterate 86(64.18%) and 94(70.15%) belonged to lower socioeconomic status (according to Modified B G Prasad classification). Subjects with educational status of above PUC were using less tobacco when compared to subjects with educational status of below PUC. Maximum use of tobacco was seen among farmers (42.5%).

Among different forms of tobacco available, majority were consuming beedis (64.93%) followed by cigarette (11.9%). Out of 134 tobacco consumers 38% were alcoholics. All the subjects with tobacco consumption were having diseases of teeth followed by diseases of respiratory tract. Majority of the subjects were suffering from illnesses of more than one system. Most people (21.7 %) were influenced by their friends for tobacco consumption. 27 people (25.2%) were prepared to quit tobacco consumption, and health concern was the most important motivating factor (12.26%) for them to quit.

Good knowledge about hazards of tobacco was seen among 61.9% of the tobacco consumers. The attitude was positive among 50% of tobacco consumers. More than half of the tobacco consumers (55.2%) felt that it is wrong to consume tobacco.

Table 2: Various features in relation to tobacco consumption

| Characteristics | Number | Percent |
|--|--------|---------|
| <i>Forms of smoke tobacco:</i> | | |
| Beedi | 97 | 72.4 |
| Cigarette | 27 | 20.2 |
| <i>Forms of smokeless tobacco</i> | | |
| Khaini | 3 | 2.2 |
| Gutkha | 7 | 5.2 |
| <i>Alcohol consumption:</i> | | |
| Yes | 51 | 38.06 |
| No | 83 | 61.94 |
| <i>Diseases:</i> | | |
| Oral cavity | 9 | 6.72 |
| Teeth | 134 | 100 |
| Tongue | 4 | 2.99 |
| Stomach | 24 | 17.91 |
| Intestine | 8 | 5.97 |
| CVS | 13 | 9.70 |
| RS | 121 | 90.30 |
| CNS | 6 | 4.48 |
| Joints | 15 | 11.19 |
| <i>Knowledge:</i> | | |
| Good | 83 | 61.94 |
| Poor | 51 | 38.06 |
| <i>Attitude:</i> | | |
| Positive | 67 | 50 |
| Negative | 67 | 50 |
| <i>Practice:</i> | | |
| Right | 60 | 44.78 |
| Wrong | 74 | 55.22 |
| <i>Information about hazards of tobacco:</i> | | |
| Friend | 13 | 9.70 |
| Relative | 14 | 10.45 |
| Parents | 4 | 2.99 |
| Media | 57 | 42.54 |
| Doctor | 10 | 7.46 |
| Others | 72 | 53.73 |
| <i>Attempt to quit tobacco:</i> | | |
| Yes | 59 | 44.03 |
| No | 75 | 55.90 |
| <i>Reasons to quit tobacco:</i> | | |
| HAZARD to health | 14 | 10.45 |
| Costly | 5 | 3.73 |
| Social STIGMA | 0 | 0 |
| HEALTH condition | 27 | 20.15 |
| Others | 5 | 3.73 |

DISCUSSION

Abuse of drugs is one of the biggest curses that modern society has come across. It is not confined to any one country or region alone, but has widely afflicted the globe. Today, no part of the world is free from the curse of drug trafficking and drug addiction. With a turnover of around \$500 billion, it is the third largest business in the world next to petroleum and arms trade. About 190 million people all over the world consume one drug or the other, such as heroin, smack, ganja, affeem, bhang, tobacco, etc ^[1]

The present study was done in a village of *Mysuru* to assess the patterns and perceptions of tobacco consumption. The Global Adult Tobacco Survey India has shown that males consume more tobacco than females, and *Khaini* is the most common commonly consumed smokeless form of tobacco and *Beedi* is the most common smoked form. Our study too has given similar results, and thus it reinforces the GATS study. [5,6]

The percentage and extent of tobacco consumption is lesser than the Global and National estimates (22.11% in this study, 24.6% National level, 51% at the Global level). [7] This may be due to the fact that the Government has banned Gutkha and several forms of chewed (smokeless) tobacco. There is a male preponderance in tobacco consumption largely and most probably due to hesitation and restriction of females in the rural areas. This has been reported by most of the studies conducted across the country. In a study conducted by Gupta et al in rural Rajasthan 51% of men and 5% of women were found to be consumers of tobacco. Majority of female tobacco consumption was in chewing pattern such as Gutkha or with betel nuts and paan. These observations closely coincide with the results of the current study. [2] Most common morbidity among tobacco consumers was found to be related to teeth followed by the respiratory system. In a study conducted by Gupta PC similar observations were made. The tobacco always affects the portal of its entry i.e. oral cavity and its site of lodgement i.e. respiratory tract severely. [8] These effects start as staining of teeth and cough and finally end up with malignancies of oral cavity and that of lungs. Also, many of the study participants accepted and acknowledged that tobacco consumption is related to cancer and other fatal diseases. Also, many of the study participants have

quit tobacco, owing to development of diseases and on advice by doctors or by their kith and kin. Although this is a good sign, yet the current prevalence is still unacceptable and has to be brought down to zero. This needs sustained IEC and BCC activities throughout the year, and not just on 31st May (World No Tobacco Day).

CONCLUSION

Tobacco consumption is still persisting inspite of good knowledge and attitude among 50% of the tobacco consumers. Risk to health is the only major factor which can motivate them to quit the habit.

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