



# Awareness Regarding Tobacco Consumption in Any Form and Its Ill Effects on Health in a Rural Community in Mandya District, Karnataka

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## ABSTRACT

**Introduction:** Tobacco consumption rate is still high in spite of much being done to discourage many people from taking up that habit. The number of tobacco related deaths is expected to rise to over eight million deaths yearly by 2030. In India 42.4% of men, 14.2% of women and 28.6% of all adults currently use tobacco (smoked and/or smokeless tobacco).

**Objective:** To determine the prevalence of tobacco consumption and awareness about its ill effects in a community.

**Materials and methods:** It was a community based cross sectional study including 200 subjects. The information regarding the tobacco use in any form among the respondents aged 15 and above was collected. Suitable percentage and proportion expression of the result was given.

**Results:** The overall prevalence of tobacco consumption was found to be 40%. Eighty percent of them were tobacco smokers. Nearly 90 percent of the respondents had some idea about tobacco and its ill effects. Seventy percent of the total respondents felt the need to attend such de-addiction programmes.

**Conclusion:** Awareness regarding ill effects of tobacco consumption still needs improvement among the members of the community studied, as there is ignorance towards ill health of tobacco use.

**Keywords:** Tobacco, Cessation, Health warning, De-addiction programme

## INTRODUCTION

Tobacco consumption rate is still high in spite of much being done to discourage many people from taking up that habit. Tobacco related deaths worldwide are well over five million each year and its consumption is one of the major preventable cause of premature death and disease. The number of deaths is expected to rise to over eight million deaths yearly by 2030.<sup>1,2</sup> The developing countries contribute to much of these deaths. More than 8 lakh people in India die due to tobacco related diseases every year. Majority of the cardiovascular diseases, cancers and chronic lung diseases are directly attributable to tobacco consumption.<sup>1,3,4</sup>

According to Global Adult Tobacco Survey, the majority of tobacco users (60%) consume only smokeless tobacco and even among smokers, bidis (which are made by rolling tobacco in a tendu leaf) are much more commonly smoked than cigarettes. Cigarette smoking is only a minor part of tobacco use in India.<sup>3</sup> Other smoking implements include pipes, cigars and hookahs. All tobacco products contain various amounts of carcinogenic substances, such as polycyclic hydrocarbons (PAH) and tobacco-specific N-nitrosamines (TSNA, which undoubtedly play an important role in development of cancer.<sup>5</sup>

Tobacco consumption rates are much higher in

lower socioeconomic classes and in less educated groups. In these settings, second hand smoking is also a major problem.<sup>6,7,8,9</sup>

In India 42.4% of men, 14.2% of women and 28.6% of all adults currently use tobacco (smoked and/or smokeless tobacco).<sup>10</sup>The major challenge for effective tobacco control in India is lack of education and awareness among the population. Knowledge of the ill health effects of smoking is an important factor in predicting smoking-related behaviour, including lower likelihood of initiation and greater likelihood of quitting. Much less is known regarding harmful effects of tobacco use among users of tobacco in developing countries such as India.

Prior to effective implementation of strategies for cessation of tobacco use, the awareness about smoking and its ill effects among the community is a must. Thus, this study was undertaken in a rural community for betterment of our aim towards cessation of tobacco consumption.

## MATERIALS AND METHODS

The study was conducted in a rural field practice area of a Medical college for a period of two months. From a list of villages served from our rural field practice area, a village with population of 3034 was selected by simple random sampling. The sample size required for the study was calculated using the standard formula  $4pq/L^2$  where p is the prevalence of tobacco consumption among adults. The sample size obtained taking 34.7% as prevalence of tobacco use in any form among adults aged 15 and above is 186.<sup>11</sup> In order to attribute for the no response rate, we included a total of 200 households in the study area. After listing the households in the study area, simple random sampling method was used to meet the sample size derived. Individuals aged 15 years and above were included in the study. Those who did not give consent were excluded from the study.

Institutional Ethics Committee clearance was obtained before the start of the study. Data was collected by house to house visit in the selected village using a pretested structured questionnaire. The information regarding the tobacco use in any form among the respondents was collected with regard to their knowledge, attitude and practice regarding tobacco use in any form and also their attitude towards its cessation. Any person aged more than 15 years and who has consumed tobacco in the past 1 year before the study date and is currently using tobacco was considered in tobacco consumption prevalence. The response from one individual in a household was recorded with prior consent. A single visit was planned to get the information from the participants. Three consecutive

visits were made on alternate days to cover the missed study participants.

An interview schedule was followed in gathering the information regarding tobacco consumption from the respondents. Due consideration was given in maintaining the confidentiality of the information provided. The information obtained was entered in Microsoft excel, analysed and expressed in percentage and proportions with suitable statistical tests if needed.

## RESULTS

A total of 200 subjects were included in the study. The mean age of the participants was  $45.15 \pm 15.06$  years. Majority of the respondents were male (73.5%) and the rest (26.5%) being females. Nearly 40% (79) of the respondents were farmers and the rest included business - 30 (15%), Private employee- 29 (14.5%), Government employee - 20 (10%) and others. Forty one percent of them had studied up to SSLC, followed by primary school (28%) and Pre University and above (30.5%). More than two third (84.5%) of them were married. More than half of them belonged to nuclear family. Only 10.5% of the households had children less than 5 years of age.

The overall prevalence of tobacco consumption among the respondents was found to be 40% (80). Eighty percent (68) of them were tobacco smokers. The prevalence of tobacco use among the females was only 4 percent whereas it was 44% among males.

**Table 1: Responses from the subjects**

Responses	Subjects (N=68) (%)
<b>Type of smoking</b>	
Beedi	27 (39.7)
Beedi and cigarette	25 (36.8)
Beedi and hookah	2 (2.9)
Cigarette or cigar	14 (20.6)
<b>Frequency of smoking</b>	
Everyday	52 (76.5)
Once a week	6 (7.9)
Once a month	2 (3)
Occasionally	8 (12.6)
<b>Tobacco consumption causes</b>	
Respiratory problems	61 (30.5)
Respiratory problems & cancer	88 (44)
Cancer	27 (13.5)
Any other	24 (12)

Table 1 shows nearly 40 percent of the respondents who were smokers used Beedi as the most common form of tobacco smoke. More than two third (76.5%) smokers did so every day. Nearly 90 percent of the respondents had some idea about tobacco

**Table 2: Responses from the subjects**

Responses	Yes (%)	No (%)
Tried quitting tobacco consumption(N=80)	33 (41.2)	47 (58.8)
Need to Attend de-addiction programme (Overall) (N=200)	140 (70)	60 (30)
Health warning observed(N=200)	197 (98.5)	3 (1.5)

co and its ill effects. Two third of the total respondents mentioned respiratory problem and cancer as the most common harmful effects of tobacco consumption.

Out of the total 80 respondents who were using tobacco, 40 of them were influenced to do so from their friends and family members. Fifty percent of them had started consuming tobacco in any form before the age of 20 years.

Many (69%) of the respondent smokers preferred a common place in the village to smoke along with their friends. Among those using smokeless tobacco paan with tobacco was the most common form. More than 80 percent of the total respondents opined that tobacco consumption in any form is harmful to their health. Sixty three percent of the smokers had some respiratory problem.

Only 41 percent of the tobacco consumers had tried quitting within the past 3 months. (Table 2) Only 20 percent of those using smokeless tobacco had tried quitting. The main reason to try quitting was the health problem they faced and also as suggested by their family members

More than one third (35.5%) of the respondents had heard about the de-addiction programmes to quit smoking. Seventy percent of the total respondents felt the need to attend such de-addiction programmes if it helps the users to quit. Ninety five percent of the respondents mentioned they would encourage others to quit smoking. Seventy percent of them opined that passive smoking is also injurious to health.

Most (94.5%) of the respondents had seen the tobacco ill effects warning in TV or any other media. Ninety percent of the respondents had observed the same on the cigarette pack. None of them had witnessed cigarette promoting acts. Only 26 percent of the respondents knew that smoking was banned in public places. Sixty percent of the respondents mentioned one or more members in their family were also using tobacco. Only 26 percent of the respondents had got their oral cavity screened for any lesions. Forty two percent of the respondents opined that ill effects of tobacco could be reversed if they quit smoking.

## DISCUSSION

In our study, the overall prevalence of tobacco use among the respondents was found to be 40%.

Nearly 40 percent of the respondents who were smokers used Beedi as the most common form of tobacco smoke. More than two third smokers did so every day. Nearly 90 percent of the respondents had some idea about tobacco and its ill effects. Nearly half of the total respondents mentioned respiratory problems and cancer as the most common harmful effects of tobacco consumption.

Out of the total 68 respondents who were smokers, 44 % of them were influenced to do so from their friends and family members. Only 41 percent of the smokers had tried quitting within 3 months. The main reason to try quitting was the health problem they faced and also as suggested by their family members.

In a study, done in Rajasthan by Dixit AM et al, showed an overall prevalence of tobacco consumers in rural area as 37.8%. It was quite higher among males (48.8%) in comparison to females (14.6%). Among males smoking of tobacco (31.13%) was more prevalent in comparison to tobacco chewing (17.71%). In females prevalence of tobacco chewers (9.21%) was more in comparison to smokers (5.48%).<sup>12</sup>Our study found a prevalence of Tobacco consumption as 34%. Only 4 % of the female respondents were using tobacco. This finding is in contrast to the findings from our study, might be due to the fact that less number of female participants (26.5%) in our study.

In a study done in Karnataka by Vinayak et al, showed 39.2% elderly patient consumed tobacco in any form. Among this group (40%) patients gave history of tobacco smoking since 15 to 20 years. Thirty five percent of patients exposed to passive smoking at work place. Only 34.6% patients knew about smoking being banned in public places. In 30.8% patient's homes smoking is allowed, and 48.5% patients responded passive smoking causes health Hazard.<sup>13</sup> Seventy percent of the subjects in our study opined that passive smoking is also injurious to health. The reason might be due to the fact that there might be difference in their educational level and also the benefit of being in proximity to a medical college from where regular community awareness activity is being done. Our study also had included participants from all the age group above 15 years of age.

A study by Jose R et al also showed relation with cancer and tobacco consumption.<sup>14</sup>Prevalence of smoking in our study matched with the finding in

the study mentioned above except the awareness of passive smoking which is better in our study. This might be because of the better access to media advertising harmful tobacco effects.

In a study done in Uttarakhand, the overall prevalence of tobacco consumption was 38.9%.<sup>15</sup> In a study done by Nagpal R et al in North India, Smoking tobacco was the most common type of addiction in males (53.1%) followed by chewing tobacco which was found in 36.4% of male population. Chewing tobacco was found to be the most common addiction in females (24.5%).<sup>16</sup> These findings are very much similar to the findings of our study.

In a study by Mehta V et al, 85.29% students were aware of ill effects of taking Tobacco and only 4.90% individuals disclosed the behaviour of consuming tobacco.<sup>17</sup> Similar results regarding awareness of ill effects of tobacco were shown by Imtiaz D et al in Dehradun.<sup>18</sup> Even in our study, the awareness regarding the ill effects of tobacco was good. Tobacco consumption prevalence is in contrast to the finding in our study as their study included only the adolescent children in a rural school.

A study done among rural Nepalese women by Khatri RB et al, showed a high prevalence of tobacco use (46.9%) among women of 20-35 years of age. It also showed early initiation of tobacco using habit (mean: 14.96 year) where 92% of participants initiated <19 years. Influencing factors for initiation of tobacco use was peer's pressure (95.8%).<sup>19</sup> Our study showed nearly 50 percent of them having started using tobacco before the age of 20 years and also started to do so from peer pressure. The high prevalence in the study by Khatri et al might be because of the cold climate that prevails in most part of Nepal which may push many people irrespective of their gender to start using tobacco at an early age.

In a study done in rural Karnataka by Bhavya B et al, the prevalence of tobacco use was found to be 39.3% of which 17.3% were current tobacco smokers and 22% used smokeless form of tobacco. They had found that 59% of smokers had attempted to quit in the past 12 months as compared to 44% in smokeless tobacco users.<sup>20</sup> These findings are similar to the findings from our study. In a study by Kahar P et al, 18% of respondents used tobacco in various forms. Tobacco consumption was significantly higher among males. The prevalence was 11 times higher among males than females. The low prevalence might be due to the fact that the study finding was an average from 26 districts of Gujarat and a better awareness regarding ill effects of Tobacco.<sup>21</sup>

## CONCLUSION

Awareness regarding ill effects of tobacco consumption still needs improvement among the members of the community studied. There is ignorance regarding the ill effects and it is treated as something it would not affect them. Efforts to try quitting and completely quitting can be done only if there is proper information and access to the de-addiction methods and programme. Hence, there is a need to improve the awareness regarding de-addiction methods and programmes. This can be done only with the full cooperation of the person affected, his family and also the community as a whole with some expert assistance.

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