Tobacco Use, Its Correlates and Knowledge about Its Hazards in Belgaum Urban, Karnataka

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ABSTRACT

Background: Owing to the presence of impressionable, curious minds, adolescents are highly prone to experiment with tobacco which increases the risk of addicting to tobacco and thus of disease and death. This study was conducted to know the factors associated with tobacco consumption and knowledge related to health hazards in an urban area.

Methodology: This descriptive cross-sectional study was done in urban area of Belgaum during July to December 2011. Sample size was calculated to be 238 and subjects were interviewed from randomly chosen anganwadis of all the wards of UHTC.

Results: Among the tobacco users, 10.29 % had initiated the habit before the age of 18 years. All the 28 consumers above the age group of 50 were consuming tobacco from more than 10 years while 24 of those between 30-49 years were consuming from more than 10 years. Among 68 current users, 8 had attempted to quit tobacco. Almost 90 % of the tobacco users knew that tobacco causes cancers.

Conclusions: Association between increase in age and duration of use was highly significant. Curiosity or fun and peer pressure were the most common reasons for tobacco initiation.

Keywords: Onset of tobacco, tobacco use, tobacco quit attempts, knowledge of health hazards.

INTRODUCTION

The tobacco epidemic is one of the biggest public health threats the world has ever faced, killing around 6 million people a year. More than 5 million of those deaths are the result of direct tobacco use while more than 600 000 are the result of non-smokers being exposed to second-hand smoke.[1]According to World Health Organization, no single factor could have as much impact on the rising toll of cardiovascular deaths around the world as tobacco cessation does.[2]

More than 80 percent of all Non communicable diseases (NCD) in India are attributed to four diseases, namely cardiovascular diseases, cancers, chronic respiratory diseases and diabetes. It is well known that tobacco consumption is a major risk factor for these NCD's.[3]

There are over many diseases that are caused, increased or exacerbated by tobacco in the form of acute gastritis, predisposition to hypertension, diabetes mellitus, coronary artery disease, bronchial asthma. Tobacco is also associated with cancer of respiratory tract, lungs, upper gastrointestinal tract, liver, pancreas, kidney, urinary bladder, oral cavity, nasal cavity, cervix etc. Smokeless tobacco is a major cause of cancer of oral cavity.[4] Nearly 45% of all cancers among males and 17% among females in India and more than 80% of oral cancers are directly attributable to tobacco use.[5]

Quitting smoking cuts cardiovascular risks and within 2 to 5 years after quitting, risk for stroke could fall to about the same as a nonsmoker's. Quitting smoking also reduces risks for cancers of the mouth, throat, esophagus, and bladder by half

within 5 years and ten years later the risk for lung cancer drops by half.[6]

Changing life styles, increasing money availability, decreasing parental control, growing influence of television, films, ignorance towards health hazards and such other factors have contributed to the increasing trend. Even experimental use of tobacco in adolescence significantly increases the risk of adult addicting to tobacco as well as the risk of disease and death.[7]

This study has been designed to identify the age and reasons for initiation of tobacco use, knowledge related to tobacco and quit attempts among residents of an urban area of Belgaum.

MATERIALS AND METHODS

This was a cross sectional study conducted in urban health training centre of department of Community Medicine, Belgaum Institute of Medical Sciences, Belgaum over a period of 6 months, between July to December 2011. Study population included household members aged 15 years and above from urban area, Khasbag of Belgaum.

The study sample size was calculated using the following formula $4pq/d^2$ (P is 29.6%[8], relative error d was taken as 20% of P).The study sample size was calculated to be 238. The sample of 238 people was selected from different Anganwadis of all the wards of the UHTC. In Urban area of Khasbag there are 3 Anganwadis and altogether 762 households under these 3 aganwadis. The households were selected by doing systematic sampling and every 3rd household was selected for the study. In case the household was locked, multiple visits were made and even after the 3rd visit if the household was found to be locked, the next house was taken for the study. The head of the family or the eldest member of the family (in case the head of the family was not available) was selected as participant for the study. Only one participant was included from one household. The data was collected by conducting household surveys and sociodemographic profile was obtained by personal interview of all the participants. Informed consent was obtained from the participants and accent was obtained wherever necessary. Ethical clearance was obtained from the Institutional Ethics Committee.

Individuals above 15 years of age staying in the study area were included in the study. Individuals suffering from major mental disorder/mental retardation and those who stayed in Belgaum for less than 6 months were excluded from the study.

Data was entered in Microsoft Excel and analysis was done using SPSS version 18.

Descriptive data for prevalence estimates are presented as percentages, proportions. Chi square test was applied to see the significant differences and associations of various parameters with current tobacco use. Variables included prevalence of tobacco consumers, age at initiation of tobacco use, reasons for initiation, knowledge and quit attempts related to tobacco use and health hazards due to tobacco use.

Definitions used in the study (Defined by WHO):

Non Smokers – Adults who currently do not smoke cigarettes, including both former smokers and never smokers.

Ever users – Ever users include current and former users.

Current Smokers – Adults who have smoked 100 cigarettes in their lifetime and currently smoke cigarettes every day (daily) or some days (nondaily).[9]

RESULTS

The study involved direct interview of 238 participants. Distribution of study participants based on sociodemographic profile has been depicted in table 1.

Table 1: Distribution of study participants based on sociodemographic details

Variable	Frequency (%)
Age	
15-19 years	5 (2.1)
20-29 years	21 (8.83)
30-39 years	57 (23.95)
40-49 years	60 (25.21)
50-59 years	46 (19.33)
>60 years	49 (20.58)
Gender	
Males	158 (66.38)
Females	80 (33.62)
Religion	
Hindu	227 (95.37)
Muslim	11 (4.63)
Type of family	
Joint	67 (28.16)
Nuclear	171 (71.84)
Literacy	
Illiterate	12 (5.04)
Primary school	85 (35.72)
Secondary School	49 (20.58)
SSLC	42 (17.64)
Pre university	26 (10.92)
Graduation	21 (8.82)
Post graduation	3 (1.26)
Socio economic status	
Class I	1 (0.42)
Class II	28 (11.76)
Class III	103 (43.28)
Class IV	92 (38.66)
Class V	14 (5.88)

More than two thirds of the study participants were males. Most of the participants were in the age group of 40-49 years (25.21%) followed by 30-39 years (23.95%). Majority of the subjects only had primary school education (35.72%). More than 80% of the participants were either in Class III or Class IV as per Modified B G Prasad classification.[10]

Prevalence of ever users of tobacco was calculated by dividing ever users of tobacco (participants who had ever used any form of tobacco) with the number of participants (70 ever users among 238 participants) and it was found to be 29.41%.

Table 2 shows distribution of current users of tobacco according to gender. More than 4/5th of the tobacco users were male and association of tobacco use with male gender was found to be highly significant. Similarly Table 3 shows distribution of current tobacco users according to religion and none of the religions had any statistically significant association with tobacco use.

Table 2: Distribution of current tobacco users according to gender

Gender	Tobacco user (n=68)(%)	Non user (n=170)(%)
Male	58 (85.29)	100 (58.82)
Female	10 (14.71)	70 (41.18)

χ^2= 15.25; P<0.001, highly significant

Table 3: Distribution of current tobacco users according to religion

Gender	Tobacco user (n=68)(%)	Non user (n=170)(%)
Hindu	65 (95.58)	162 (95.29)
Muslim	03 (4.41)	08 (4.70)

χ^2= 0.0095; P = 0.922, not significant

Table 4: Distribution of current tobacco users according to duration of use and previous quit attempts

Age group (Current age)	Total (n=68)	Duration of Tobacco Use*			Previous quit attempts**	
		1-5 yr (n=08)	5-10 yr (n=08)	>10 yr (n=52)	Yes (n=08)	No (n=60)
15-29	03 (4.41)	01 (12.5)	02 (25)	-	00 (0)	03 (5)
30-49	37 (54.41)	07 (87.5)	06 (75)	24 (46.15)	01 (12.5)	36 (60)
50+	28 (41.18)	-	-	28 (53.85)	07 (87.5)	21 (35.0)

Figure in the bracket indicate percentage; * χ^2= 22.66, P<0.001 highly significant; **χ^2= 8.05; P<0.017, significant

Table 5: Distribution of current tobacco users according to age of onset

Age group (Current age)	Age of onset		Total (n=68)
	<18yr (n=07)	>18yr (n=61)	
15-29	01 (14.29)	02 (3.28)	03 (4.41)
30-49	04 (57.14)	33 (54.10)	37 (54.41)
50+	02 (28.57)	26 (42.62)	28 (41.18)

Figure in the bracket indicate percentage; P= 0.361, not significant

Table 6: Reason for initiation of tobacco among users (Multiple answers)

Reason for initiation	Number (%) (n = 68)
Along with friends	22 (32.35)
As a sign of prestige	04 (5.88)
Others	08 (11.76)
Unknown/Curiosity/Fun	36 (52.94)

Table 7: Knowledge of health hazards of tobacco use among study participants (Multiple answers)

Knowledge of health hazards*	Tobacco users (n= 68) (%)	Non users (n=170)(%)
Cancers	61 (89.70)	145 (85.29)
Respiratory Problems other than cancer	01 (1.47)	98 (57.65)
Oral problems other than cancer	03 (4.41)	76 (44.70)
Others	03 (4.41)	09 (5.29)
No knowledge	07 (10.29)	18 (10.59)

Table 4 shows association of age group of tobacco users with variables like duration of regular use and previous quit attempts. With respect to duration of tobacco use, it was observed that more than three fourth of the tobacco users were using it for more than 10 years. All the 28 consumers above the age group of 50 were consuming tobacco from more than 10 years while 24 of those between 30-49 years were consuming from more than 10 years. This association between increase in age and duration of use was found to be highly significant. Maximum numbers of previous quit attempts were seen in 7 of 28 consumers above the age of 50 years. Table 5 shows distribution of current users of tobacco according to their age of onset. Among 37 consumers in the age group of 30-49 years, 4 had started the habit before 18 years.

Table 6 shows reasons for initiation among the tobacco users. Knowledge of health hazards due to tobacco use has been depicted in table 7.

DISCUSSION

Through this study, an attempt has been made to look at some important factors associated with tobacco use in the community. Tobacco use varies considerably from region to region within the country and there was lack of studies done exclu-

sively to provide the factors associated with tobacco use in this region.

The prevalence of ever use of tobacco was found to be 29.4% and current use of tobacco was found to be 28.5% in the present study. Similar finding was seen in Global Adult Tobacco Survey (GATS) 2009-10 survey report according to which current use of tobacco in Karnataka was 28.2%[8].

Present study showed that only 10.29 % of tobacco users had initiated the habit before the age of 18 years. Although there can be some recall bias in assessing the age of initiation of tobacco. However, according to a study done by Kapoor and others, 44% of the ever smokers had initiated this habit when they were in the age group of 10 – 15 years.[11]This early age of tobacco initiation is most commonly due to adolescent nature, were they are impulsive to do new things.

It was observed that males (36.70%) had higher prevalence of tobacco compared to females (12.50%) in the present study and this difference was found to be highly significant. Findings from the Global Tobacco Survey conducted in India in the year 2009 also had similar findings with current use of tobacco being 47.9% in males and 20.3% in females.[12]

With respect to duration of tobacco use, it was observed that association between increase in age and duration of use was highly significant. On overall, more than 3/4th of the current users were using tobacco from more than 10 years. According to another study done by Rani M et al, tobacco usage increased with increasing age.[13] Similar findings were seen in a study done by Garg K N[14], where two thirds had a history of tobacco use for more than 5 years. In these patients almost two thirds of the lesions seen in longer duration group were high risk lesion as compared with only one third lesions in the short duration group. This suggests that the duration of tobacco consumption increases the risk of developing oral cancer.[14]

Among 68 current users, 8 had attempted to quit tobacco but failed which accounted for 11.76%. Quit attempts increased with age and most of these were in the users above the age group of more than 50 years and this was found to be statistically significant. According to study done by Gauri G D et al, 25% of the users had tried to quit but failed.[15] A very high quit rate was seen according to Srivastava et al where among the ever tobacco users, 41.7% made an attempt to quit tobacco, and of these 41.8% were successful. [16] Quitting tobacco for a person addicted to it requires a lot of will power. Tobacco cessation centers have to be made available, or if available people should be made aware of that. This may increase the quitting rate.

Half of the users who had attempted to quit had done it because of one or the other health problems associated with tobacco use in themselves. According to Gauri G D et al the most common reason was concern for personal health (92.5% overall). [15]

Most of the users (51.42%) had started the habit as a curiosity or fun or could not ascertain a particular reason for initiation. Initiation along with friends was the second most important reason (32.35%). A study done by Chezhian showed that the study participants had initiated smoking due to surrounding influence (44%), during stress (42%) and for fun (40%).[17]

Among 68 tobacco users, majority of the people knew that tobacco consumption leads to cancer (89.70%) of one or the other organs while few people (10.29%) had no knowledge about the hazards of tobacco consumption. According to Global Tobacco Survey, 90.2% of adults believed smoking causes serious illness and 88.8% of adults believed smokeless tobacco use causes serious illness.[12] Even though people have knowledge regarding the hazards still many opt to start or continue. This could be controlled by repeated counselling and advertisements regarding it. It should be started from school level for a change to be found in future.

In the present study, knowledge of the non users regarding other health hazards apart from cancers was better than the tobacco users. Similarly, in a study done by Reem T. Abu Shomar and others smokers had less knowledge of smoking associated health risks than non-smokers.[18]

Among 17 ever smoker's, 10 (58.82%) knew that their smoking habit can have ill effects on their family members while 5 (29.41%) did not knew anything about this. Whereas according to An Dao Thi Minh, 77.3% of the current smokers knew that breathing other people's smoke causes serious illness in non-smokers, and among non smokers a better percentage of 86% knew the ill effects of second hand smoke. [19]

CONCLUSIONS

Initiation of tobacco usage begins from an early age mostly during adolescence. Number of previous quit attempts increased with age and this may be because of increasing hazards of tobacco or other chronic diseases in the elderly. People willing to quit tobacco are not able to sustain the will power to quit. Curiosity or fun and peer pressure were the most common reasons for tobacco initiation. Knowledge regarding health hazards due to tobacco was better among non users. Tobacco use may not be disclosed in the house where the data was collected. The present study did not analyze the

association between tobacco cessation and various demographic factors like education status, socioeconomic status and occupation which may play an important role in successful quit attempts.

SOURCE OF SUPPORT

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