

Original Research Article

Tobacco smoking perception and practice among pre-university students in a government boy's college: a cross sectional study

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ABSTRACT

Background: Tobacco is the single most preventable cause of death in the world hence this study was aimed at detecting the prevalence of tobacco smoking among students of a government pre-university college for boys, to find out the perception of students about tobacco smoking and factors related to the tobacco smoking among students.

Methods: A cross sectional study conducted among purposively selected students of Government Pre-university College for boys. Data was collected through pre-structured questionnaire. Tobacco smoking was assessed by self reporting by filling the questionnaire.

Results: The prevalence of ever use of tobacco smoking was 13.7% and current smokers were 5.6%. Mean age of starting smoking was 14.16 yrs. 66% of students were aware that tobacco smoking can lead to cancer. In majority (81.1%) of ever smoked students, their friends have motivated them to smoke for the first time. 93% of students knew that passive smoking is injurious to health. 83% of students felt that tobacco should be banned. Having a smoker in the family ($p=0.035$) and a student residing away from parents ($p=0.007$) are positively associated with ever smoking tobacco.

Conclusions: Tobacco smoking is prevalent among the boys of government pre-university college students. Majority of students have better perception about tobacco smoking. Familial support and peer involvement are crucial in controlling the tobacco smoking.

Keywords: Pre-university, Students, Smoking, Tobacco

INTRODUCTION

Tobacco is the single greatest preventable cause of death in the world today. It contains the highly addictive psychoactive ingredient, nicotine.¹ 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 6,00,000 are the result of non-smokers being exposed to second-hand smoke. Tobacco users who die prematurely deprive their families of income, raise the cost of health care and hinder economic development.² Tobacco use is one of the main risk factors for a number of chronic diseases it impacts

every organ of the body. Health consequences linked to tobacco usage are stroke, blindness, cataract, periodontitis, atherosclerosis, COPD, Tuberculosis, Diabetes mellitus, erectile dysfunction and cancer of lung, oropharynx, larynx, oesophagus, bladder, liver, colorectal etc.³

World health organization states that good monitoring tracks the extent and character of the tobacco epidemic and indicates how best to tailor policies. Only 1 in 3 countries, representing one third of the world's population, monitors tobacco use by repeating nationally representative youth and adult surveys at least once every 5 years.¹ Youth or adolescent is the formative period of

life where there is more risk of acquiring the habit of tobacco and alcohol usage and such acquired behaviour remains as a lifelong addiction.⁴ Hence this study is one such initiative to know the tobacco smoking among the pre-university students who are considered as vulnerable because of lack of awareness of the hazards and having an intentions to explore. The objectives of this study were 1) To find out the prevalence of tobacco smoking among the students of a government boy's college, 2) To find out the perception of students towards tobacco smoking and 3) To find out the various factors related to the tobacco smoking among students.

METHODS

A community based cross sectional study was conducted in one selected government boy's Pre-university (PU) college of Raichur city. The college was selected through purposive sampling as it is the only government PU College for boys in the city. Ethical clearance for the study obtained from the institution ethical committee of Raichur Institute of Medical Sciences, Raichur. Permission to conduct the study was obtained from the principal of the government boy's PU College. All the students studying in the college available during the study period and willing to participate were included in the study. Data was collected during December 2015.

A pre-structured questionnaire was used for data collection. Data was collected by assembling around 40 students each time in a selected classroom and questionnaire was distributed to each student and each question was read and explained to the students, adequate spacing between students was ensured while filling of the questionnaire to avoid copying from or discussing with other students, students were motivated to give the prompt answer and assured of confidentiality of the information obtained. Questionnaire consisted of data regarding general information like age, gender, year of study, religion etc., knowledge regarding harmful effects of tobacco, laws related to tobacco, passive smoking, attitude towards creation of smoke free environment, desire to start or quit tobacco, consumption of tobacco, its frequency of usage, reason for start, etc.

Any student who has smoked any tobacco product at least once in his life time is considered as ever smoker and anybody who has smoked tobacco at least once in the last one month is considered as current smoker. Data was analyzed using SPSS version 16 software and presented as proportions in tabular form and chi-square test was used to test the association between the variables.

RESULTS

A total of 270 students were studied. All of them were in the age group of 15-19 years, 122 (45.2%) were aged 17 years, 73 (27%) were aged 16 years, 61 (22.6%) were aged 18 years, 10 (3.7%) were aged 19 years and 4 (1.5%) were aged 15 years. Majority of the students i.e.

231(85.6%) were Hindus, 24 (8.9%) were Muslims and 15 (5.6%) were Christians. 186 (68.9%) students were studying in PUC first year and 84 (31.1%) in PUC second year. 106 (39.3%) students were studying arts, 113 (41.9%) were studying commerce and 51(18.9%) were studying science. Majority of the students i.e. 223 (82.6%) were living with their parents at present, 37 (13.7%) were living with friends and 10 (3.7%) were living with their relatives. 139 (51.5%) students were living with a family member who smokes (Table 1).

Table 1: Distribution of study participants based on socio-demographic variables.

Socio-demographic variables		Frequency	Percentage
Age in years	15	4	1.5
	16	73	27.0
	17	122	45.2
	18	61	22.6
	19	10	3.7
Religion	Hindu	231	85.6
	Muslim	24	8.9
	Christian	15	5.6
Year of study	PUC 1	186	68.9
	PUC 2	84	31.1
Section of study	Arts	106	39.3
	Commerce	113	41.9
	Science	51	18.9
Present place of stay	Parents	223	82.6
	Friends	37	13.7
	Relative	10	3.7
Presence of a tobacco smoker in the family	Yes	139	51.5
	No	131	48.5

In the present study majority i.e. 247 (91.5%) students said that smoking in public place is wrong, 7 (2.6%) said it's not wrong and 16 (5.9%) not answered or said don't know. Majority i.e. 253 (93.7%) said smoking in public transport is wrong, 6 (2.2%) said it is not wrong and 11 (4.1%) said don't know or not answered the question. Majority i.e. 251 (93%) students said that passive smoking is injurious to health, only 5 (1.9%) said not injurious and 14(5.2%) said don't know. Only 84 (31.1%) students were aware that tobacco products should not be sold to persons aged less than 18 years. Majority i.e. 212 (78.5%) students were knowing that smoking during pregnancy is injurious to unborn baby. Majority of the students i.e. 224 (83%) felt that tobacco should be totally banned. 154 (57%) students said that there is a fine for smoking in public places (Table 2).

In the study 167 (61.9%) students said that tobacco smoking leads to cancer, 71 (26.3%) said it leads to respiratory problems, 54 (20%) said it leads to heart problem, 8 (3%) said it leads to some health problem, 3

(1.1%) said it leads to ulcer. When asked about why do people smoke tobacco, 59 (21.9%) said pleasure, 60 (22.2%) said for fashion, 73 (27%) said to reduce boredom, 59 (21.9%) said to reduce stress or tension and 19 (7%) said don't know. Majority of the students i.e.

181 (67%) felt that smoking tobacco is high risk health hazard, 35 (13%) felt it carries moderate risk, 13 (4.8%) felt little risk, 5 (1.9%) felt no risk and 36 (13.3%) said don't know or not responded (Table 3).

Table 2: Distribution of participants based on perception towards tobacco smoking.

Perception towards tobacco smoking		Frequency	Percentage
Smoking in public place is wrong.	Yes	247	91.5
	No	7	2.6
	Don't know	16	5.9
Smoking in public transport is wrong	Yes	253	93.7
	No	6	2.2
	Don't know	11	4.1
Passive smoking is injurious to health	Yes	251	93.0
	No	5	1.9
	Don't know	14	5.2
Legal age below which tobacco product should not be sold	Correct response (18 yrs)	84	31.1
	Wrong response	120	44.4
	Don't know	66	24.4
Smoking during pregnancy is injurious to unborn baby	Yes	212	78.5
	No	3	1.1
	Don't know	55	20.4
Tobacco should be banned	Yes	224	83.0
	No	41	15.2
	Don't know	5	1.9
Is there a fine for smoking in public places	Yes	154	57.0
	No	63	23.3
	Don't know	53	19.6

Table 3: Distribution based on Health hazards of tobacco smoking as perceived by students.

Health hazard of tobacco smoking		Frequency	Percentage
Health hazard of tobacco smoking as listed by the students*	Cancer	167	61.9
	Respiratory problem	71	26.3
	Heart problem	54	20.0
	Some health problem	8	3.0
	Ulcer	3	1.1
Severity of health hazard of tobacco smoking as per the students	Can't say	36	13.3
	No risk	5	1.9
	Little risk	13	4.8
	Moderate risk	35	13.0
	High risk	181	67.0

*includes multiple response.

Total of 37 (13.7%) students said that they have ever smoked tobacco and 15 (5.6%) are current smokers. Minimum age of starting smoking was 10, maximum was 18, mean age of starting smoking was 14.16yrs (SD=2.45). Among the 37 students who have ever smoked tobacco 22 (59.5%) have smoked cigarette, 14 (37.8%) have smoked beedi and 1 (2.7%) had smoked both. 30 (81.1%) students said that friends have encouraged them to smoke for first time, 7 (18.9%)

students have smoked for themselves without encouragement by anybody (Table 4).

Among the 15 students who are current smokers 3 (20%) smokes daily, 2 (13.3%) smokes once a week, 4 (26.7%) smokes more than once a week but not daily, 6 (40%) smokes occasionally. 10 (66.7%) said that they never thought of quitting tobacco smoking and 5 (33.3%) said that they have thought of quitting smoking tobacco at

least once. 5 (33.3%) students said they smoke tobacco for pleasure, 4 (26.7%) for style or fashion, 3 (20%) to reduce tension, 3 (20%) to reduce boredom/time pass. (Table 5).

Study findings showed that there was statistically significant association between ever tobacco smoking and place of residence. Tobacco smoking was higher among those residing with friends (29.7%) compared those residing with relatives (20%) and residing with parents (10.8%). There was statistically significant higher occurrence of tobacco smoking among those with smoker in the family compared to those without a smoker in the family. There was no statistical association between religion and course of study with ever smoking tobacco. (Table 6).

Table 4: Tobacco smoking practice among students.

Tobacco smoking habit		Frequency	Percentage
Ever smoked tobacco	Yes	37	13.7
	No	233	86.3
	Total	270	100.0
Type of tobacco smoked	Cigarette	22	59.5
	Beedi	14	37.8
	Beedi & cigarette both	01	02.7
	Total	37	100.0
Who encouraged to smoke for first time	Friends	30	81.1
	None /self	07	18.9
	Total	37	100.0

Table 5: Tobacco related behaviour among current smokers.

Practice among current smokers		Frequency	Percentage
Current smoker	Yes	15	5.6
	No	255	94.4
	Total	270	100.0
Frequency of smoking	Daily	3	20.0
	Once a week	2	13.3
	More than once a week but not daily	4	26.7
	Occasionally	6	40.0
	Total	15	100.0
Ever thought of quitting smoking tobacco	Yes	10	66.7
	No	05	33.3
	Total	15	100.0
Reason for smoking	Pleasure	5	33.3
	Style or fashion	4	26.7
	To reduce pressure/tension	3	20.0
	To reduce boredom /time pass	3	20.0
	Total	15	100.0

Table 6: Relation between demographic variables and smoking behaviour.

Variables		Never smoked tobacco	Ever smoked tobacco	p value
Religion	Christian	12 (80%)	03 (20%)	0.299
	Hindu	198 (85.7%)	33 (14.3%)	
	Muslim	23 (95.8%)	01 (4.2%)	
Residence	With friends	26 (70.3%)	11 (29.7%)	0.007*
	With parents	199 (89.2%)	24 (10.8%)	
	With relatives	08 (80%)	02 (20%)	
Course	Arts	91 (85.8%)	15 (14.2%)	0.059
	Commerce	93 (82.3%)	20 (17.7%)	
	Science	49 (96.1%)	02 (3.9%)	
Smoker in the family	Yes	114 (82%)	25 (18%)	0.035*
	No	119 (90.8%)	12 (9.2%)	

*Significant

DISCUSSION

In the present study 13.7% students have ever smoked tobacco and the current smokers were 5.6%. This Finding was similar to a study conducted by Bhojani UM et al among pre university students in Bangalore which showed prevalence of ever use of tobacco smoking (among boys) to be 15% and current smokers were 5.0%, whereas in a study conducted in Nepal by Sreeramreddy CT et al prevalence of current smokers (among boys) was found to be 14%.^{5,6}

In our study 80% of students felt that tobacco smoking carries moderate to high risk to health and 66% students were aware that tobacco smoking can lead to cancer and 93% students were aware that passive smoking carries health hazard. In a study conducted by Tiwari et al among 12-15 year school children in Chattisgarh showed that 92% of the students said that smoking is harmful to health, only 44% were aware about passive smoking can be injurious to health.⁷ Our study was conducted among higher age group than Tiwari et al study it may be the reason for higher knowledge regarding passive smoking in our study.⁷

Mean age of starting smoking was 14.16 years in our study, early initiation of smoking has got more health relevance apart from legal prohibition as those initiated early have got more chances of becoming heavy smokers and cessation is also less likely.⁸ Our study here highlights the fact that in spite of legal restriction of not selling the tobacco products to less than 18 years, tobacco smoking is prevalent among less than 18 years.

Having a knowledge regarding the law is essential to follow the same. In our study 57% students were aware that there is a fine for smoking in public places and 31.1% students know the legal age below which tobacco products can't be sold. Findings were similar to a study conducted by Ruchal R et al at in Belgaum among pre-university students showed in pre-test 59.2% were aware about the laws regarding tobacco.⁹

In the present study religion and course of study was not associated with ever smoking tobacco, but having a family member with smoking and students not residing with parents are positively associated with ever tobacco smoking. This finding confirms the fact that children tends to imitate and learns from their elders and also those children are out of control from their parents by staying with relatives or friends are more likely to try the tobacco smoking.

Limitations: As the study was conducted among the government college students only. Hence the findings can't be generalised to all the Pre-university students as the pattern may vary among the private colleges.

CONCLUSION

Tobacco smoking is prevalent among the boys of government pre-university college students. Having a smoker in the family and residing away from parents increases the chances ever smoking tobacco. Hence parental involvement is important in curbing the tobacco smoking outbreak. Majority of Pre-university boys knows and perceives that tobacco smoking is injurious to health. In majority of those who have ever smoked tobacco friends have encouraged to do so for first time. Creating peer help group can be tried as a method to curb the tobacco smoking prevalence. Among the current smokers 66.7% have ever thought of quitting, this information can be further utilized to conduct tobacco cessation activities.

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