

## Knowledge, Attitude And Practices Of Tobacco Use Among Arts And Science Students In Chennai District - An Online Survey

Research Article

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### Abstract

**Background:** A disproportionately higher number of individuals who succumb to the adverse effects of tobacco use reside in low and middle-income countries and this disparity is expected to widen further over the next several decades.

**Materials And Methods:** A cross-sectional study was conducted in arts & science colleges in Chennai District. The study was conducted among 492 arts and students in Chennai district. Convenient sampling methodology was followed and the google form link was shared among the students in arts and science colleges. Responses were collected and the results were tabulated. Descriptive statistics was used to describe the frequency distribution of the responses.

**Results:** Among 492 students, 86 (17.5%) reported to use tobacco. Majority of them that is 60 (70%) used cigarettes. Among the tobacco users, 53 (61.6%) tried to quit tobacco. Nearly half of the study participants, 288 (58.5%) reported that smoking should not be allowed in university campus. Among 492 study participants, only 208 (42.2%) were aware that tobacco use leads to cancer.

**Conclusion:** Prevalence of tobacco use among the study participants was low. The knowledge related to ill effects of tobacco has to be improved.

**Keywords:** Tobacco; Oral Cancer; Cigarettes; Tobacco Ban.

### Introduction

Tobacco is the second major cause of death in the world[1]. The death toll from tobacco consumption is now 4.9 million people a year. If the present consumption pattern continues, the number of deaths will increase to 10 million by the year 2020, 70% of which will occur in the developing countries[2].

Tobacco has long been related with various health problems and is considered a major preventable risk factor for six of the eight leading causes of morbidity and mortality globally. The World Health Organization attributes approximately four million deaths annually to tobacco consumption, and this estimate is expected to raise to eight million by the year 2030. Smoking cessation lowers the risk of smoking related diseases and hence the life expectancy of the person can be increased [3,4].

Oral health is strongly related to tobacco smoking and chewing practices. South and Southeast Asia have some of the highest age-adjusted incidence rates of oral cancers and cancers of upper aero digestive sites in the world and the highest numbers of persons affected[5].

Tobacco use is among the most preventable causes of disease and premature death worldwide[6]. The detrimental effects of tobacco use on oral health have been well documented in studies focusing on changes in the oral mucosa[7,8] and periodontal tissues[9]. Substantial evidence indicates that tobacco cessation not only reduces the prevalence of a range of diseases, but also limits their progression and improves treatment outcomes[10].

Moreover, the health impact of smoking will be more in the younger generation related to the early smoking initiation; infact,

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in the long term, young people who become habitual smokers and continue smoking in adulthood, are more prone to develop cancer and cardiovascular diseases[11].

Youth in general and adolescents in particular fall prey to this deadly habit with severe physical, psychological, and economic implications. Encouragement from peer group, the lure of popularity, and easy availability of tobacco in different forms makes teenagers easy prey. In India, approximately 5,500 children and adolescents start using tobacco products daily, some as young as 10 years. The majority of users have first used tobacco prior to the age of 18 years[12,13,14].

The purpose of this study was therefore to investigate cross-sectionally to assess the knowledge related to tobacco use, to assess the attitude related to tobacco use and to know their practice related to tobacco use among arts and science students in Chennai District. Hence a study was done with an aim to assess the knowledge, attitude and practices about tobacco products among arts and science students in Chennai District.

## Materials And Methods

A cross-sectional study was done among arts and students in private colleges in Chennai District. The study was conducted among 492 arts and science students in private colleges in Chennai District. Convenient sampling methodology was followed and those students who were willing to participate completed the survey. Questionnaire was prepared consisting of questions related to the demographic details of the participants, knowledge about the ill effects of tobacco use, attitude towards tobacco use and also about the practice of the tobacco use among the study participants. Questions were framed from the existing literature. Google form survey link was distributed among the students and the incomplete forms were not included in the analysis. Descriptive statistics and Chi square test were used to analyse the responses given by the study participants.

## Results

An online cross-sectional study was conducted among 492 arts and science students in Chennai district to assess the knowledge about tobacco products among arts and science students in Chennai District.

### Distribution Of Study Population Based On Gender

Out of 492 study participants, 325 (66%) were male and 167 (34%) were females.

### Distribution Of Study Population Based On Tobacco Consumption

Out of 492 study participants, 86 (17.5%) have consumed tobacco and among them 75(23%) were males and 11(6.6%) were females. Majority of the tobacco consumers consumed cigarettes.

### Knowledge Related To Tobacco Usage

More than half of the study participants said that tobacco use was highly addictive. About 220 (44.7%) study participants responded that second-hand smoke can adversely affect the health of non-smokers, 163 (33.1%) study participants responded that second-hand smoke have no effect on the health of non-smokers and about 109 (22.2%) were unaware about second hand smoke.

For the question related to tobacco use and oral cancer, about 230 (46.7%) study participants responded as tobacco use could not lead to oral cancer and 208 (42.3%) responded as tobacco use cause oral cancer.(Figure 1)

For the question, 'Are you aware of COTPA act (Prohibition of supply and distribution of tobacco products within 100 yards of educational institution)', about 181 study participants responded as they were aware about the COTPA act and about 311 study participants responded as they were unaware about the COTPA act. Majority of the female study participants were not aware about the act while nearly half of the male study participants were unaware and this difference was found to be statistically significant. ( $p$  value  $< 0.001$ ) (Table 1) Female study participants were more aware about the addictive nature of the tobacco products when compared with the male study participants and this was found to be statistically significant suggesting females have comparatively better knowledge about the tobacco addiction. (Table 2)

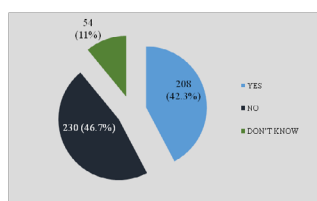
### Attitude Towards Tobacco Use

About 109 (22.5%) responded that smoking to be allowed in university campus and about 95 (19.3%) responded only in designated area and more than half of the study participants that is 288 (58.5%) said that smoking should not to be allowed in university campus. Female study participants were more toward the tobacco ban compared to male participants and this difference was found to be statistically significant. ( $p$  value  $< 0.001$ ) (Figure 2)

## Discussion

Tobacco use and related health impacts pose a significant problem globally, and tobacco use is among the leading causes of morbidity and mortality[15]. Studies have highlighted the need for in-

**Figure 1: Responses of the study participants related to the question "Tobacco use could lead to oral cancer"**



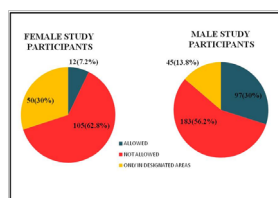
**Table 1: Distribution of the study participants based on their awareness about COTPA act**

Gender of the participants	Are you aware of COTPA act?			P value
	YES	NO	TOTAL	
MALE	156 (48%)	169 (52%)	325	0.03
FEMALE	25(15%)	142(85%)	167	
TOTAL	181	311	492	

**Table 2: Responses of the study participants related to the question on addictive nature of tobacco**

Gender of the participants	How addictive are the tobacco products?			P value
	High	Moderate	Low	
Male study participants	152 (46.8%)	115 (35.4%)	58 (17.8%)	0.02
Female study participants	127 (76%)	25 (15%)	15 (9%)	
Total	279 (56.7%)	140 (28.5%)	73 (14.8%)	

**Figure 2: Distribution of study participants based on the responses related to the question whether smoking to be allowed in university campus**



involvement of various healthcare professionals in the fight against tobacco use [14].

To the best of our knowledge, there are very few or no studies regarding tobacco use among arts and science students in Tamilnadu or other parts of India. Hence comparison was done with studies related to tobacco use among other population.

In the present study, cigarette was most extensively consumed among tobacco consumers compared to other tobacco products. The smoking rates among female students were lower in the current study, similar to the results reported from other studies [4,16]. The smoking rates are lower in females as smoking is considered as especially unacceptable for females and is thought to offend social customs. Gender gap between in tobacco use is narrowing globally. This may be attributed to factors such as the changing position of women in society, women’s increasing social and economic independence, a lack of health education specifically targeted at women, and the tobacco industry’s deliberate attempts to target their products at women.

In the present study, only half of the study participants were aware about the ill effects of tobacco. Whereas in another study more than ninety percent of the participants were about the harmful effects of tobacco [16] suggesting that awareness about the harm of tobacco products is not evenly distributed around the world and hence awareness programs should be carried out in such a way to improve the person’s knowledge about tobacco products and the harmful effects.

It is possible that these students underestimate the hazards of tobacco use and the challenges to quitting. Continued smoking may increase their risk for nicotine addiction, adverse health effects, and unsuccessful cessation attempts.

Some limitations of the current study are that the questionnaire study design, online data collection, with self-reported data, which could increase the possibility of underreporting by tobacco users.

The study subjects who intended not to quit tobacco use in future should be the target of our counselling and motivation for tobacco cessation activities as these are the individuals who in future are liable to increase their group and bring more non-smokers into the tobacco users’ group. At the same time, counselling and motivation should also be focused on the respondents who had never taken up tobacco use in their lifetime as they may fall prey to the temptations and peer pressure to use tobacco products in their life time during circumstances of failure/success.

**Conclusion**

Prevalence of tobacco use among the study participants was low. The knowledge related to ill effects of tobacco has to be improved. More than half of the study participants recommended ban against tobacco in public places. Continuous education is essential in order to hope that cessation rates will increase and more lives will be saved. It would be important to introduce specific information and education programs in a formal way during regular courses.

## References

- [1]. World Health Organization. The world health report 2003: shaping the future. World Health Organization; 2003
- [2]. World Health Organization. The world health report 2002: reducing risks, promoting healthy life. World Health Organization; 2002.
- [3]. World Health Organization. WHO Report on the Global Tobacco Epidemic, 2019. Geneva: World Health Organization; 2019. Licence: CC BY-NC-SA. 2019;3:209.
- [4]. Grover S, Anand T, Kishore J, Tripathy JP, Sinha DN. Tobacco Use Among the Youth in India: Evidence From Global Adult Tobacco Survey-2 (2016-2017). *Tob Use Insights*. 2020 Sep 22;13:1179173X20927397. PubmedPMID: 33013161.
- [5]. Priya MH, Bhat SS, Hegde KS. Prevalence, knowledge and attitude of tobacco use among health professionals in Mangalore City, Karnataka. *J Oral Health Community Dent*. 2008;2:19-24.
- [6]. US Department of Health and Human Services. The health consequences of smoking: a report of the Surgeon General.
- [7]. Warnakulasuriya S. Bidi smokers at increased risk of oral cancer. *Evid Based Dent*. 2005;6(1):19. PubmedPMID: 15789047.
- [8]. Warnakulasuriya S, Sutherland G, Scully C. Tobacco, oral cancer, and treatment of dependence. *Oral Oncol*. 2005 Mar;41(3):244-60. PubmedPMID: 15743687.
- [9]. Palmer RM, Wilson RE, Hasan AS, Scott DA. Mechanisms of action of environmental factors--tobacco smoking. *J ClinPeriodontol*. 2005;32Suppl 6:180-95. PubmedPMID: 16128837.
- [10]. Preshaw PM, Heasman L, Stacey F, Steen N, McCracken GI, Heasman PA. The effect of quitting smoking on chronic periodontitis. *J ClinPeriodontol*. 2005 Aug;32(8):869-79. PubmedPMID: 15998271.
- [11]. Ferrante M, Saule R, Ledda C, Pappalardo R, Fallico R, La Torre G, et al. Prevalence of smoking habits, attitudes, knowledge and beliefs among Health Professional School students: a cross-sectional study. *Ann Ist Super Sanita*. 2013;49(2):143-9. PubmedPMID: 23771259.
- [12]. Aggarwal P, Varshney S, Kandpal SD, Gupta P. Habits and beliefs pertaining to tobacco among undergraduates of a medical college in the state of Uttarakhand. *Journal Indian Academy of Clinical Medicine*. 2012 Jul;13(3):189-94.
- [13]. Thakur SS, Sachdeva S, Singh H, Barwal V. Prevalence and determinants of tobacco use among school going adolescents in a hilly district of Himalayan region in India. *Sch J App Med Sci*. 2017;5:4074-9.
- [14]. Jaisoorya TS, Beena KV, Beena M, Jose DC, Ellangovan K, Thennarasu K, et al. Prevalence & correlates of tobacco use among adolescents in Kerala, India. *Indian J Med Res*. 2016 Nov;144(5):704-711. PubmedPMID: 28361823.
- [15]. Grover S, Anand T, Kishore J, Tripathy JP, Sinha DN. Tobacco Use Among the Youth in India: Evidence From Global Adult Tobacco Survey-2 (2016-2017). *Tob Use Insights*. 2020 Sep 22;13:1179173X20927397. Pubmed PMID: 33013161.
- [16]. Hossain S, Hossain S, Ahmed F, Islam R, Sikder T, Rahman A. Prevalence of Tobacco Smoking and Factors Associated with the Initiation of Smoking among University Students in Dhaka, Bangladesh. *Cent Asian J Glob Health*. 2017 Jan 6;6(1):244. Pubmed PMID: 29138736.