

Knowledge, Attitude, and Practice Related to Tobacco Use among IT Professionals in Chennai – A Cross-sectional Study

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Abstract

Aim: The aim of this study was to assess the knowledge, attitude, and practice related to tobacco usage among IT professionals in Chennai. **Subjects and Methods:** A cross-sectional descriptive study was conducted among 615 IT professionals in Chennai. A preformed questionnaire was used to assess the knowledge, attitude, and practice related to tobacco use. Statistical tests used were frequency distribution and Chi-square test. **Results:** Out of 615 study participants, 495 (486 males and 9 females) have consumed tobacco. Among 486 males who consumed tobacco, 481 consumed cigarettes and 5 consumed pan zarda. Among the 9 females who consumed tobacco, all of them consumed cigarettes. Majority of the tobacco consumers (244) reported that they consume tobacco to relieve from tension. Out of 495 tobacco users, only 214 tobacco users attempted to quit the habit. Out of 214 tobacco users who attempted to quit, only 97 tobacco users quit the habit. Among the 97 tobacco users who quit the habit, 56 stated that they encountered health hazards and 41 reported that they quit the tobacco habit for the sake of family members. Among the tobacco users who have not attempted to quit the habit, 155 tobacco users stated that they did not felt it was necessary to quit the habit. Out of 615 study participants, only 255 study participants support strict legislation on tobacco use. Out of 486 males, 354 study participants stated that smoking near them was not harmful, while out of 129 females, majority of them, i.e., 122 study participants, stated that smoking near them was harmful ($P < 0.001$). **Conclusion:** It was found from the study that majority of the study participants were tobacco users and cigarette was the most commonly used form of tobacco. Although majority of the study participants reported that they were aware of the ill effects of tobacco, they were not reported to support strict legislation related to tobacco use.

Keywords: Cigarette, health professionals, smoking, tobacco

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 developing countries.^[2]

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 aerodigestive sites in the world and the highest number of persons affected.^[3]

Tobacco use is among the most preventable causes of disease and premature death worldwide.^[4] The detrimental effects of tobacco use on oral health have been well documented in studies focusing on changes in the oral mucosa^[5,6] and periodontal tissues.^[7] 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.^[8]

Moreover, the health impact of smoking will be greater in the young people of today related to the early smoking initiation; indeed, in the long term, young people who become habitual smokers and continue smoking in adulthood are more likely to develop cancer and cardiovascular diseases.^[9]

Youth in general and adolescents in particular fall prey to this deadly habit with severe physical, psychological, and

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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 5500 children and adolescents start using tobacco products daily, some as young as 10 years. The majority of the users have first used tobacco prior to the age of 18 years.^[10]

Software industry is one sector, which is affected profoundly by this (stress) challenge, and professionals serving these organizations are often observed under huge stress.^[11]

Stress was rated as the most important factor contributing to smoking. A substantial amount of research has documented that psychosocial stress is a significant risk factor for smoking and predicts difficulty with smoking cessation. Smoking is more common among individuals who report higher levels of work strain.^[12,13]

It is known that workers in the information technology and information technology-enabled services sectors are predisposed to stress. Although the idea that smoking alleviates anxiety is almost certainly wrong, there are campaigns that associate smoking with stress relief. Thus, we selected IT professionals as our study population.

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 IT professionals in Chennai.

SUBJECTS AND METHODS

A cross-sectional descriptive study was conducted in Chennai. The study was conducted among 615 IT professionals in Chennai. IT professionals present on the day when the investigator visited special economic zone, Chennai, were included in the survey, and IT professionals who were not willing to participate in the study were excluded from the survey. A preformed questionnaire was used to assess the knowledge about tobacco products among IT professionals in special economic zone, Chennai. The questions focused on knowledge, attitude, and practice related to tobacco use.

The study instrument had been prepared after a detailed literature search and perusal of questionnaires used in prior studies. The questionnaire was pretested to ensure that all questions were clear and understandable to participants.

Questionnaire items solicited data on participants' sociodemographic characteristics (age and gender) and knowledge and attitudes regarding smoking and its cessation. The variables included pertained to: knowledge about tobacco (harmful effects, link with diseases, forms of tobacco available, and second-hand smoking); role of peers (social network and acceptance among friends); their own practices (smoking and smokeless tobacco); reasons

and influencers for their habit (role of general stress, societal pressure, peer pressure, friends, parents, and relatives, and advertisements on TV and print media); and attempts and methods adopted for quitting.

This cross-sectional study was conducted over a 3-month period from November 2017 to January 2018 in Chennai using a self-administered, two-page structured questionnaire. Questionnaires were distributed to IT professionals during their break time at their workplaces. Each questionnaire was accompanied by a cover letter explaining the purpose of the study and providing specific instructions for questionnaire completion. Standard procedures of informed consent were used, including the protection of participants' anonymity and confidentiality.

Data were analyzed using SPSS (IBM, Chicago, IL, USA version 20). Responses were coded numerically to facilitate data entry. Comparison of smoking characteristics among the male and female study participants was performed, and the data were analyzed using the Chi-square test, with the level of significance set to $P < 0.001$.

RESULTS

A cross-sectional study was conducted among 615 IT professionals, Chennai, 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 615 study participants, 486 were males and 129 were females.

Out of 615 study participants, 495 (80.5%) have consumed tobacco, and among them, 486 were males and 9 were females [Table 1]. Among 486 males who consumed tobacco, 481 consumed cigarettes and 5 consumed pan zarda. Among the 9 females who consumed tobacco, all of them consumed cigarettes. Among those who consumed tobacco, 435 (87.87%) consumed tobacco every day. Majority of the tobacco consumers that is 244 (49%) reported that they consume tobacco to relieve from tension [Graph 1].

Out of 615 study participants, 520 (84.5%) study participants answered that smoking is harmful to one's health, while 95 (15.5%) study participants answered that smoking has no effect on one's health.

Out of 486 males, 354 (72.8%) study participants stated that smoking near them was not harmful, while out of 129 females, majority of them that is 122 (94.6%) study participants stated that smoking near them was harmful ($P < 0.001$).

Table 1: Distribution of study population based on tobacco usage

	Males (%)	Females (%)	Total (%)
Tobacco users	486 (100)	9 (6.9)	495 (80.5)
Tobacco nonusers	0	120 (93.1)	120 (19.5)
Total	486	129	615

Majority of the study participants that is 522 (84.9%) reported that there was no difference between chewing tobacco and smoking cigarettes and both were equally bad.

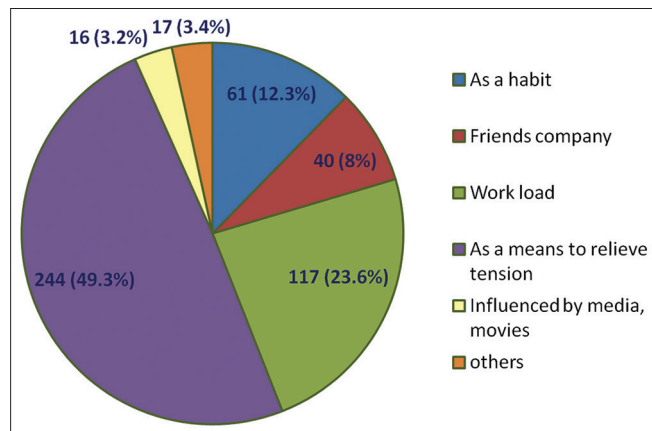
Out of 495 tobacco users, only 214 (43.2%) tobacco users attempted to quit the habit. Out of 214 tobacco users who attempted to quit, only 97 tobacco users quit the habit. Among the 97 tobacco users who quit the habit, 56 stated that they encountered health hazards and 41 reported that they quit the tobacco habit for the sake of family members.

Among the 281 tobacco users who have not attempted to quit the habit, 155 tobacco users stated that they did not felt it was necessary to quit the habit. Out of 615 study participants, only 255 (41.5%) study participants support strict legislation on tobacco use.

Majority of the study participants that is 519 (84.9%) were aware of the effects of tobacco on your oral and general health and 92 (15.1%) were unaware of the effects of tobacco on your oral and general health.

In the present study, more than half of the study participants were supporting ban against tobacco use. Female study participants were more likely to oppose tobacco ban compared to their male counterparts [Graph 2 and Table 2].

Regarding treatment modalities available for quitting tobacco, majority of the study participants 391(63.9%) were aware of all the modalities which includes nicotine patches, nicotine gums, behavioral methods, pharmacotherapy.



Graph 1: Reasons for tobacco consumption

DISCUSSION

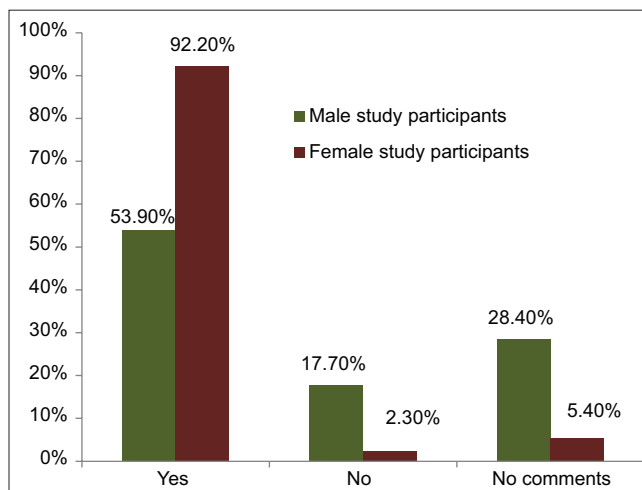
Tobacco use and related health impacts pose a significant problem globally, and tobacco use is among the leading causes of morbidity and mortality. Studies have highlighted the need for involvement of various health-care professionals in the fight against tobacco use.^[14]

To the best of our knowledge, there are very few or no studies regarding tobacco use among software professionals in Tamil Nadu or other parts of India.

Majority of the tobacco consumers (244) reported that they consume tobacco to relieve from tension which is in agreement with similar study where they consume tobacco because of the tension caused due to workload.^[3]

In the present study, cigarette was most extensively consumed among tobacco consumers compared to other tobacco products, which is similar to the studies conducted among medical and dental health professionals of Mangalore, Karnataka, and among Iranian Health Professions Students of Shiraz University.^[15]

The smoking rates among female students were lower in the current study, similar to the results reported from other studies among dental students in Himachal Pradesh state^[16] and among medical and dental health professionals of Mangalore, Karnataka.^[3] The smoking rates are lower in females as smoking is considered especially unacceptable for females and is thought



Graph 2: Responses related to banning of tobacco usage

Table 2: Attitude of study participants toward tobacco use

	Yes (%)		No (%)	
	Males	Females	Males	Females
Eliminating scenes from cinema where actor smokes or chews tobacco may reduce tobacco use	210 (43)	107 (82.9)	276 (57)	22 (17.05)
Increase price of tobacco products decreases the tobacco use	301 (61.9)	125 (96.9)	185 (38.06)	4 (3.1)
Support strict legislation on tobacco use	138 (28.39)	117 (90.7)	348 (71.6)	12 (9.3)
Size of warning labels to be increased	184 (37.9)	123 (95.3)	302 (62.1)	6 (4.7)

to offend social customs. Gender gap is narrowing pertaining to tobacco usage. 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, nearly half of the tobacco users attempted to quit the habit, which is similar to the study conducted among undergraduate medical students.^[10] The study results were in contrast to the study conducted among Italian hospital health-care professionals in that only 15% declared to quit the habit.^[17]

In the present study, more than half of the study participants were supporting ban against tobacco use. Female study participants were more likely to oppose tobacco ban compared to their male counterparts. This is similar to the study conducted at Shiraz University, in which females were more likely to oppose tobacco use.^[15] The study results are in contrast to the study conducted among Italian hospital health-care professionals, in which 92.3% supported ban against tobacco use and also to the study conducted among dental surgeons in the city of Bangalore, Karnataka, in that almost all favored banning smoking.^[17,18]

Majority of the male and female study participants reported that there was no difference between chewing tobacco and smoking cigarettes and both were equally bad, whereas in another study, males believed smokeless tobacco and hookah are less harmful and less addictive than cigarettes.^[15]

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, with self-reported data, could have led to under- or over-reporting and recall bias.

The study subjects who intended not to quit tobacco use in future should be the target of our counseling and motivation for tobacco cessation activities as these are the individuals who in future are liable to increase their group and bring more nonsmokers (already quit/non users/never users) into the tobacco users group. At the same time, counseling 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 lifetime during circumstances of failure/success.

CONCLUSION

About half of the software professionals in the present study had consumed some form of tobacco. Knowledge related to tobacco was inadequate among software professionals. Cigarette is a major tobacco product consumed by the study

participants. About half of the tobacco consumers in the present study had attempted to quit, and only half of the software professionals have expressed that tobacco use be banned.

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Conflicts of interest

There are no conflicts of interest.

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