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Tobacco use and nicotine dependence among the adult males of different socioeconomic groups within a medical college campus in Ammapettai, Kancheepuram district of South India

Glad M. I. Mohesh, Abinaya Vijayakumar

BACKGROUND: India is becoming one of the most tobacco consuming countries with the expected number of tobacco-related deaths equaling to more than 1.5 million annually by 2020. As strong socioeconomic differences exist in the pattern and type of tobacco consumption across large number of communities and through varied cultures across the country, the objective of this study is to understand if there is any difference by socioeconomic status (SES) in nicotine dependence level and other characteristics related to tobacco quitting in tobacco users employed in a medical college campus. METHODS: Cross-sectional survey was conducted with a pretested questionnaire among 150 current tobacco users from different departments within the campus. The level of nicotine dependence was diagnosed using the Fagerstrom's nicotine dependence test. Kuppuswamys socioeconomic classification (2012) was used to group them by socioeconomic strata. Data was also collected on pattern and type of tobacco use, nicotine addiction, and attitude towards quitting tobacco use and tobacco control policies. Data collected was analysed using SPSS 21 and Epi-info 7 with the use of statistical tests of independence as well as binary logistic regression analysis. RESULTS: Nicotine dependence was higher in the lower SES groups than higher SES groups. Cigarette smoking prevailed among higher SES groups whereas bidi smoking was higher in lower SES groups. Smokeless tobacco was predominantly used in the lower SES groups. Awareness about the harmful effects of tobacco use was poorer in the low SES groups while the willingness to quit and the number of quit attempts did not differ by SES. More affluent tobacco users reported earlier initiation of tobacco use than those from lower SES groups. CONCLUSION: SES groups of tobacco users differ in type and pattern of tobacco use, dependence, age of initiation and awareness but not in intention and efforts to quit tobacco.

KEYWORDS: smoking tobacco; smokeless tobacco; nicotine dependence; socioeconomic groups.

Потребление табака и никотиновая зависимость среди взрослых мужчин из различных социально-экономических групп в кампусе медицинского колледжа в Ammapettai, район Kancheepuram Южной Индии

Glad M. I. Mohesh, Abinaya Vijayakumar

АКТУАЛЬНОСТЬ: Индия становится одной из стран с наибольшим потреблением табака, и ожидается, что к 2020 году количество вызванных табаком смертей будет составлять полтора миллиона ежегодно. Поскольку стереотипы потребления табака в общинах, принадлежащих к различным культурам Индии, характеризуются значительными социально-экономическими различиями, задача данного исследования состояла в том, чтобы понять, существуют ли различия по социально-экономическому статусу (СЭС) в уровне никотиновой зависимости и других характеристиках, имеющих отношение к отказу от табака среди его потребителей, работающих на территории кампуса медицинского колледжа. МЕТОДЫ: С применением предварительно про-

тестированной анкеты был проведен одномоментный опрос 150 потребителей табака, работающих в разных подразделениях кампуса. Уровень никотиновой зависимости диагностировали с помощью теста Фагерстрома. Группировку по социально-экономическим стратам проводили в соответствии с классификацией СЭС Kuppuswamys 2012 года. Также собирали данные о стереотипах и формах потребления табака, зависимости от никотина, отношении к прекращению потребления табака и политике контроля над табаком. Данные анализировали с использованием SPSS 21 и Epi-info 7, применяли тест независимости и бинарный логистический регрессионный анализ. РЕЗУЛЬТАТЫ: Никотиновая зависимость была выше в группах с низким СЭС, чем в группах с высоким СЭС. Курение сигарет преобладало в группах с высоким СЭС, а курение биди - с низким. Бездымный табак потребляли преимущественно в группах с низким СЭС. Информированность о вредных последствиях потребления табака в группах с низким СЭС была хуже, хотя желание отказаться от табака и количество попыток отказа не различались по СЭС. Более обеспеченные потребители табака сообщали о более раннем начале его потребления, чем представители групп с низким СЭС. ЗАКЛЮЧЕНИЕ: Социально-экономические группы потребителей табака отличаются по типам табачных изделий, стереотипам потребления, никотиновой зависимости, возрасту начала потребления и информированности, но не по намерениям отказаться от потребления табака и попыткам сделать это.

КЛЮЧЕВЫЕ СЛОВА: курительный табак; бездымный табак; никотиновая зависимость; социально-экономические группы.

Споживання тютюну та нікотинова залежність серед дорослих чоловіків різних соціально-економічних груп у кампусі медичного коледжу в Ammapettai, район Kancheepuram Південної Індії

Glad M. I. Mohesh, Abinaya Vijayakumar

АКТУАЛЬНІСТЬ: Індія стає однією з країн з найбільшим споживанням тютюну, і очікується, що до 2020 року кількість викликаних тютюном смертей становитиме півтора мільйона щорічно. Оскільки стереотипи споживання тютюну в громадах, що належать до різних культур Індії , характеризуються значними соціально-економічними відмінностями, мета даного дослідження полягала в тому, щоб зрозуміти, чи існують відмінності за соціально-економічним статусом (СЕС) у рівнях нікотинової залежності та інших характеристиках, що стосуються припинення споживання тютюну серед його споживачів, що працюють на території кампуса медичного коледжу. МЕТОДИ: Із застосуванням попередньо протестованої анкети було проведено крос-секційне опитування 150 споживачів тютюну, що працюють у різних підрозділах кампусу. Рівень нікотинової залежності діагностували за допомогою тесту Фагерстрома. Групування за соціально-економічними стратами проводили відповідно до класифікації СЕС Kuppuswamys 2012 року. Також збирали дані про стереотипи і форми споживання тютюну, залежність від нікотину, ставлення до припинення споживання тютюну і політики контролю над тютюном. Дані аналізували з використанням SPSS 21 і Epi-info 7 , застосовували тест незалежності і бінарний логістичний регресійний аналіз. РЕЗУЛЬТАТИ: Нікотинова залежність була вищою в групах з низьким СЕС, ніж у групах з високим СЕС. Куріння сигарет переважало в групах з високим СЕС, а куріння біді - з низьким. Бездимний тютюн споживали переважно в групах з низьким СЕС. Інформованість про шкідливі наслідки споживання тютюну в групах з низьким СЕС була гіршою, хоча бажання відмовитися від тютюну і кількість спроб відмови не розрізнялися за СЕС. Більш забезпечені споживачі тютюну повідомляли про більш ранній початок його споживання, ніж представники груп з низьким СЕС. ВИСНОВОК: Соціально-економічні групи споживачів тютюну відрізняються за типами тютюнових виробів, стереотипами споживання, рівнями нікотинової залежності, віком початку споживання та інформованістю, але не за намірами відмовитися від споживання тютюну і спробам зробити це.

КЛЮЧОВІ СЛОВА: курильний тютюн; бездимний тютюн; нікотинова залежність; соціально-економічні групи.

INTRODUCTION

Menace of tobacco use is now found to be one of the world's most concerning issues in the non-communicable disease sector. Tobacco use continues to be the leading global cause of preventable death. If current trends continue, by 2030 tobacco will kill more than 8 million people worldwide each year, with 80% of these premature deaths among people living in low- and middle-income countries (World Health Organization, 2011) Tobacco use is becoming increasingly concentrated among individuals with the lowest levels of education, income and occupational status (Irvin Vidrine, Reitzel, & Wetter, 2009) which has resulted in increasing coexistence between smoking and low SES (Hiscock, Bauld, Amos, & Platt, 2012). Regions with the highest proportion of tobacco-related deaths are the Americas and European nations, but this scenario is expected to shift from the West to the East with China and India (Murray & Lopez, 1997) consuming greater quantities of tobacco in the recent years. Social, economical, and political factors should be taken into account in forecasting tobacco use (Ramakrishna, Sankara Sarma, & Thankappan, 2005).

Global Adult Tobacco Survey conducted in India documented (Bhawna, 2013) that the prevalence of tobacco use among its residents in 2009–2010 was 34.6%, varying for males (47.9%) and females (20.7%). The tobacco use in India is additionally complicated by the diversity of forms in which tobacco is presented and used and its deep rootedness in traditions. Chewing pan and tobacco is an age-old custom in Indian family gatherings; this itself is an example illustrating the social acceptability of tobacco use in India, which was considered a tool to achieve a status in peer groups of men. Tobacco in India is consumed in various forms like cigarettes, bidis, hookah, cigars, cheroot, chewing tobacco, oral snuff, nasal snuff etc. A variety of smokeless products like pan masala, Khaini, Hans, etc. are increasingly used and the consumption in rural areas is greater than in urban ones (Bhawna, 2013; Gupta, Yadav, & Anand, 2010). Prevalence studies conducted in India have shown the existence of socioeconomic differences in tobacco consumption including variations between urban/rural areas, regions, age, gender, and education (Preeti & Raut, 2012).

Socioeconomic differences both in patterns of tobacco consumption and in health consequences (Clayton, Flaherty, & Alexander, 2007) of these behaviors including differences in mortality (Denney, Rogers, Hummer, & Pampel, 2010) have been widely studied (Fagan, Moolchan, Lawrence, Fernander, & Ponder, 2007; Moolchan et al., 2007) in different countries. The fact that smoking prevalence is usually higher among disadvantaged groups is explained as a result of higher uptake and/or less likely quit attempts or less successful quitting (Hiscock, Bauld, Amos, Fidler, & Munafo, 2012; Reid et al., 2010) due to lower self-efficacy and poorer access to cessation services and medication, which can also be mediated by multiple factors (Businelle et al., 2010; Wetter et al., 2005) including cumulative advantages of better socioeconomic position (Pampel & Rogers, 2004). On the other hand, it is less understood whether tobacco users belonging to different socioeconomic strata develop different levels of nicotine dependence. The existing evidence is not completely consistent across the countries (Siahpush, McNeill, Borland, & Fong, 2006). Moreover, the disparity patterns to be found in India might differ from those in other countries due to the differences in social structure or the larger number of communities existing in India (International Institute for Population Sciences, 2007). Thus, we undertook a study in order to understand the pattern and type of tobacco use and levels of nicotine dependence among subjects who belong to groups of different socioeconomic status (SES). Nicotine dependence assessment using the Fagerstrom's questionnaire (Fagerstrom, 1978; Fagerstrom & Schneider, 1989) allows categorizing tobacco users into groups of mild, moderate, and severe dependence. We aimed to understand the disparities among the five socioeconomic classes of people working within the campus of Shri Sathya Sai Medical College & Research Institute, Ammapettai, Kancheepuram District of Tamilnadu, India. The main objective of this paper is to understand the possible differences in nicotine dependence as well as various aspects of tobacco use, awareness about its ill-effects and attitude towards tobacco control among tobacco users who belong to different socioeconomic groups.

MATERIALS AND METHODS

Between July and August, 2012, a cross-sectional survey was carried out among male tobacco users working in the campus of Shri Sathya Sai Medical College and Research Institute. Convenience sampling method was used to se-

lect the study subjects. Written informed consent was obtained from all participants.

The goal was to cover tobacco users from all levels of employment. An equal representation of different socioeconomic strata was aimed. The survey was stopped in each category when 30 subjects in each group were recruited. Subjects were grouped into five socioeconomic (SE) groups based on Kuppuswamy's socioeconomic classification (Patro, Jeyashree, & Gupta, 2012). Group I – Upper class (GI), Group II – Upper Middle (GII), Group III – Lower middle (GIII), Group IV – Upper lower (GIV), Group V – Low (GV).

Participants were asked to fill out a semi-structured questionnaire with the principal investigator available in case clarifications were needed. Only current users of tobacco of any kind during at least three past months were included.

The questionnaire was designed to collect data on the demographic details, socioeconomic status, type and pattern of tobacco use, symptoms experienced, nicotine addiction, attitude towards quitting tobacco, and suggestions towards the governmental plan of tobacco control. Pilot testing of the questionnaire was done before using it as a survey tool.

Intensity of cigarette smoking in this study was based on the number of cigarettes the participants smoked per day i.e. <5 – mild, 6–10 – moderate and >10 – severe. Intensity of bidi smoking was assessed based on the number of bidis they smoked per day: <5 – mild, 6–10 – moderate and >10 – severe. Intensity of smokeless tobacco products use was determined based on the number of packets they consumed: <2 – mild, 3–5 – moderate and >5 – severe.

Data Analysis

All the study group characteristics were considered by socioeconomic group with chi-square test of independence used for categorical variables and ANOVA for continuous ones. Five socioeconomic groups were then collapsed into two as a clear cut-off point was seen in bivariate analysis between groups 1–3, on the one hand, and groups 4–5, on the other.

Scores of nicotine dependence with regard to both smoked and smokeless tobacco were dichotomized with the aim to create approximately equal groups with lower and higher scores of dependence. A combined measure of tobacco dependence was then constructed, which equaled 'low' if either or both initial measures were recorded as 'low' and 'high' if any of smoked or smokeless measure of nicotine dependence was recorded 'high'.

Further on, characteristics related to quitting tobacco including measures of dependence, willingness to quit, awareness of hazardous health impact of tobacco, prior quit attempts, and experience of successful quit attempts were regressed on socioeconomic status in both bivariate and multivariate logistic regression models adjusted for age, age of tobacco initiation, type of tobacco used, and residence.

Microsoft Excel, Epi Info 7 and SPSS 21.0 were used for data preparation and analysis.

RESULTS

All 150 subjects recruited were males, aged from 20 to 45; 72 subjects lived in urban and 78 in rural areas. They belonged to one of five socioeconomic groups of the Kuppuswamy (Patro et al., 2012) socioeconomic classification and included physicians, teaching faculty, lab technicians, tutors as well as housekeeping attendants. Based on the recruiting procedure, we had 30 subjects in each of the five socioeconomic groups.

Characteristics of the study subjects by socioeconomic group are shown in Table 1. Representatives of higher socioeconomic group (group 1) more likely originated from urban areas, had better educated and employed head of the family and reported higher family income. Study participants in groups IV and V were older than those in groups I–III.

Characteristics of tobacco use show that use of smoked tobacco prevailed in the first three socioeconomic groups with cigarette use being more pertinent to same three higher socioeconomic groups and bidis outnumbering them in two lower groups. Smokeless tobacco use prevailed in two lower (IV and V) SES groups; however, the distribution of gutkha and other forms used across SES groups was not consistent. Use of several forms of tobacco was mostly found in the second and third SES groups, which combined the features of higher and lower statuses.

While most (62.3%) of the participants had their initiation of smoking at the age of 10–20 years, about half of participants in lower SES groups reported initiating tobacco use after the age of 20, and more affluent and younger tobacco users of groups I–III have reported their younger age of tobacco use initiation.

Table 1. Characteristics of the study participants by socioeconomic groups, N=150

Characteristic of the respondent	Value	Socioeconomic status GI	GII	GIII	GIV	GV	p- value
		n=30	n=30	n=30	n=30	n=30	
Settlement							p<0.001
	Rural	10(33.3%)	11(36.7%)	11(36.7%)	26(86.7%)	20(66.7%)	
	Urban	20(66.7%)	19(63.3%)	19(63.3%)	4(13.3%)	10(33.3%)	
Education level of the five groups							p<0.001
	Graduate	29 (96.7%)	13 (43.3%)	5 (16.7%)	0 (0%)	0 (0%)	
	Primary-intermediate	1 (3.3%)	15 (50%)	25 (83.3%)	14 (46.7%)	3 (10%)	
	Illiterate	0 (0%)	2 (6.7%)	0(0%)	16(53.3%)	27(90%)	
Occupation of the head of the family							p<0.001
	Professional	28 (93.3%)	1 (3.3%)	0 (0%)	0 (0%)	0 (0%)	
	semi-Professional	1 (3.3%)	12 (40%)	0 (0%)	0 (0%)	0 (0%)	
	Clerical-shop owner	1 (3.3%)	14 (46.7%)	11 (36.7%)	0 (0%)	0 (0%)	
	Skilled worker	0 (0%)	2 (6.7%)	19 (63.3%)	5 (16.7%)	0 (0%)	
	Semi skilled worker	0 (0%)	1 (3.3%)	0 (0%)	5 (16.7%)	0 (0%)	
	Unskilled worker	0 (0%)	0 (0%)	0 (0%)	19 (63.3%)	27(90%	
	Unemployed	0 (0%)	0 (0%)	0 (0%)	1 (3.3%)	3(10%)	
Family income per month							p<0.001
	>28114	15 (50%)	10 (33.3%)	0 (0%)	0 (0%)	0 (0%)	
	14050-28113	15 (50%)	13 (43.3%)	0 (0%)	0 (0%)	0 (0%)	
	10533-14049	0 (0%)	6 (20%)	7 (23.3%)	0 (0%)	0 (0%)	
	7016-10532	0 (0%)	1 (3.3%)	17 (56.7%)	3 (10%)	0 (0%)	
	4204-7015	0 (0%)	0 (0%)	6(20%)	9(30%)	0 (0%)	
	1407-4203	0 (0%)	0 (0%)	0 (0%)	12 (40%)	0 (0%)	
	<1406	0 (0%)	0 (0%)	0 (0%)	6 (20%)	30 (100%)	
Age of participants							p<0.001
	mean	31.03	29.9	33.3	39.7	39.3	
	SD	7.3	6.7	6.2	5.7	5.6	
Form of tobacco used							p<0.001
	smoked	29 (96.7%)	18 (60%)	20 (66.7%)	9 (30%)	6 (20%)	
	smokeless	0 (0%)	3(10%)	8(26.7%)	19(63.3%)	21(70%)	
	both	1(3.3%)	9(30%)	2(6.7%)	2(6.7%)	3(10%)	
Type of tobacco product used							p<0.001
	bidi	2(6.7%)	0 (0%)	4 (13.3%)	6 (20%)	4 (13.3%)	
	cigarettes	26 (86.7%)	19(63.3%)	12(40%)	1(3.3%)	2(6.7%)	
	gutkha	0 (0%)	2(6.7%)	7(23.3%)	4(13.3%)	14(46.7%)	
	other forms	0 (0%)	0 (0%)	1(3.3%)	16(53.3%)	7(23.3%)	
	>1 form	2(6.7%)	9 (30%)	6 (20%)	3 (10%)	3 (10%)	
Age of tobacco use initiation							p=0.039
	10-20	24(80%)	20(66.7%)	20(66.7%)	13(43.3%)	16(53.3%)	
	>21	6(20%)	10(33.3%)	10(33.3%)	17(56.7%)	14(46.7%)	
Fagerstrom's nicotine dependence score Smoked tobacco							p<0.001
	N	30	28	22	10	9	
	Score (Mean±SD)	9.02±1.2	9.50±1.3	9.68±1.9	11.7±1.5	10.6±1.8	
Sum of smokeless tobacco dependence (inverse)							p=0.296
	N	1	10	10	21	24	
	Score (Mean±SD)	11	12.1±1.7	11.7±1.7	10.9±2.9	10.4±1.8	

Intensity of tobacco use differed by type of the tobacco products, i.e. 56% of smokers were mild smokers whereas 55% of smokeless tobacco products users were moderate users.

There was a clear socio-economic gradient of tobacco-related health knowledge: percentage of participants who were aware of hazardous consequences of tobacco use on human health was lower among the participants from the lower SES group. Tobacco users from first three SES groups more likely recalled the health warnings on tobacco packs, while warnings are printed only on cigarette packs. Higher SES tobacco users believed that the reason for the habit of smoking is peer pressure, whereas participants from lower SES groups reported that they used tobacco to improve physical state and work productivity. Opposite to the above, there was no socioeconomic gradient in the attitude and experience of quitting tobacco use: three in four tobacco users were willing to quit, half of study participants had ever attempted to quit but only one in six was successful in that, though relapsed later.

When study participants were asked to report the listed ill-health symptoms, they selected sleeplessness, general fatigue and heart burn as some of the serious problems they were suffering from. Most of them had tobacco stains (82%) and some showed signs of oral ulcers and reddish white patches.

Fagerstrom's score for cigarette smokers varied from 6 to 14 and for smokeless tobacco from 7 to 16. Clear socioeconomic gradient was found with lower SES smokers revealing greater nicotine dependence. However, as SES groups of study participants were found to differ not only by socioeconomic characteristics but also by age and patterns of tobacco use, analysis of association between dependence or quitting and SES was further adjusted for potential impact of these variables.

Table 1. Characteristics of the study participants by socioeconomic groups, continued

Characteristic of the respondent	Value	Socioeconomic status GI	GII	GIII	GIV	GV	p-value
		n=30	n=30	n=30	n=30	n=30	
Knowledge of the subjects about the ill-effects of tobacco							
Are you aware of the ill effects of tobacco							p<0.001
	Yes	29 (96.7%)	24 (80%)	22 (73.3%)	12 (40%)	7 (23.3%)	
	No	1 (3.3%)	6 (20.0%)	8 (26.7%)	18 (60.0%)	23 (76.7%)	
Have you ever noticed the pictorial warning on tobacco products							p<0.001
	Yes	30 (100.0%)	28 (93.3%)	29 (96.7%)	16 (53.3%)	10 (33.3%)	
	No	0 (0%)	2 (6.7%)	1 (3.3%)	14 (46.7%)	20 (66.7%)	
What do you think is the reason for your tobacco use							p<0.01
	Peer- pressure	26 (86.7%)	26 (86.7%)	19 (63.3%)	15 (50%)	14 (46.7%)	
	Addiction	2 (6.7%)	0 (0%)	4 (13.3%)	5 (16.7%)	1 (3.3%)	
	A status of well being	1 (3.3%)	3 (10%)	3 (10%)	8 (26.7%)	10 (33.3%)	
	To increase the work efficiency	1 (3.3%)	1 (3.3%)	3 (10%)	2 (6.7%)	4 (13.3%)	
Attitude towards quitting tobacco							
Do you wish to quit tobacco							p=0.82
	Yes	22 (73.3%)	23 (76.7%)	22 (73.3%)	24 (80%)	20 (66.7%)	
Have you ever tried to quit tobacco							p=0.17
	Yes	19 (63.3%)	16 (53.3%)	13 (43.3%)	22 (73.3%)	16 (53.3%)	
Have you ever successfully quit tobacco							p=0.07
	Yes	7 (23.3%)	5 (16.7%)	1 (3.3%)	9 (30%)	4 (13.3%)	

In the logistic regression analysis (Table 2), all measures of nicotine dependence (for smoked and smokeless tobacco and combined) were higher among the representatives of lower SES groups than among those of higher SES groups. Tobacco awareness was expectably higher among the representatives of higher SES groups while the measured willingness to quit did not differ, and the experience of quit attempts and successful quit attempts was even higher among those in lower SES groups.

DISCUSSION

In this study, the association between socioeconomic status of tobacco users and their patterns of tobacco use and quitting-related characteristics including Fagerstrom's nicotine dependence score was considered. Though some of our findings coincide with conclusions of other authors, other results somewhat differ from what is found in literature.

Our findings are in line with other studies showing that lower SES households in India are more likely to use bidis and smokeless tobacco, and cigarettes are used predominantly within higher SES settings (Agrawal et al., 2013). Findings that awareness of hazardous effects of tobacco use is better in higher SES groups coincide with conclusions of other authors (Lund & Lund, 2005; Viswanath et al., 2006) as well.

With regard to nicotine dependence, higher levels of nicotine dependence in low SES groups were found in just a few recent studies (Hiscock, Bauld, Amos, Fidler, et al., 2012; Siahpush et al., 2006; Yong et al., 2013), including one from India (Jayakrishnan et al., 2012), and our results are in line with them. However, we cannot refute an alternative explanation that because low SES groups are more likely to use smokeless tobacco, greater nicotine dependence may be due to the type of tobacco used and not the SES.

Though lower SES is generally associated with higher risk of tobacco use initiation and progression towards nicotine dependence (Gilman, Abrams, & Buka, 2003), we have not identified studies that more precisely considered age of tobacco use initiation in relation to SES. Our results show that lower SES individuals reported overall later age of initiation. Whether younger age of initiation in higher SES groups was because these were cigarette smokers (due to more intensive promotion) or because their younger age in general, remains an open research question.

Several authors report that lower SES smokers are less interested in quitting (Reid et al., 2010; Yong et al., 2013), while our findings show that willingness to quit was equally high in all groups. Actual quitting behavior is reported to be less practiced by lower SES smokers as well (Hiscock, Bauld, Amos, Fidler, et al., 2012; Reid et al., 2010). Our study participants from lower SES groups demonstrated slightly more quit attempts and more successful ones. This might be due to their older age and longer smoker's career; however, the difference persisted even after controlling for age.

The differences in tobacco users' attitude towards quitting and practice of quitting might be a result of the sampling strategy: all the study

Table 2. Quitting-related characteristics and their associations with socioeconomic status: results of bivariate and multivariate logistic regression analysis

Dependent variables	% of outcome among		Raw OR estimate				Adjusted*			
	SES 1-3	SES 4-5	N	OR	95% CI		N	OR	95% CI	
Combined indicator of high tobacco dependence	46,7%	70,0%	150	2,7	1,3	5,3	149	6,5	1,8	23,7
Smoked tobacco dependence	48,8%	80,0%	100	4,2	1,3	13,7	100	4,1	0,8	20,2
Smokeless tobacco dependence	19,0%	57,8%	66	5,8	1,7	20,1	65	7,3	0,9	60,7
Low awareness of tobacco-related harm	16,7%	68,3%	150	10,8	5,0	23,5	149	3,4	1,1	11,0
Willingness to quit	74,4%	73,3%	150	1,1	0,5	2,2	149	1,1	0,3	3,3
Quit attempts	53,3%	63,3%	150	0,7	0,3	1,3	149	0,4	0,2	1,3
Experience of successful quit attempts	14,4%	21,7%	150	0,6	0,3	1,4	149	0,1	0,0	0,5

* Controlled for age, age of tobacco initiation, type of tobacco used, and residence

participants were employees of a medical center and thus could be more motivated towards quitting. On the other hand, differences in SES correlates of quitting-related variables were also shown between countries (Reid et al., 2010) with some low SES territories showing special increase in smoking cessation (Germain, Durkin, Scollo, & Wakefield, 2012).

CONCLUSION

Our study recorded the disparity in the pattern and type of tobacco use among the adult male tobacco users belonging to different socioeconomic strata. Lower SES tobacco users were found to more likely use smokeless tobacco and bidis and be more dependent on nicotine. Higher SES tobacco users were more likely cigarette smokers, earlier initiators of tobacco use, though better aware of smoking-related health hazards. Three fourths of tobacco users in all SES groups were willing to quit, only half of them ever attempted and only one in five had positive experience with quitting with slightly higher percentages among lower SES tobacco users.

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ABOUT THE AUTHORS

Glad M. I. Mohesh is an Assistant Professor, Department of Physiology at Shri Sathya Sai Medical College & Research Institute, Ammapettai, Sembakkam Post, Kancheepuram District, Tamilnadu, India, 603108.

ORCID 0000-0002-3182-8869

Email: gladmohesh@gmail.com

Abinaya Vijayakumar is III MBBS student at the same institution.

Email: vabinayambbs@gmail.com

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