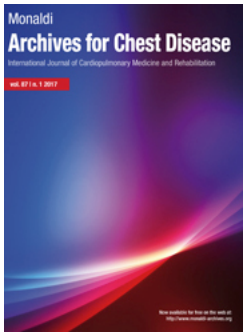

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Quitting tobacco through quitline services: impact in India

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Abstract

Tobacco quitline services offer telephone-based counseling to assist tobacco users in quitting through behavioral modification. It is a sponsored scheme by the Ministry of Health and Family Welfare, Government of India. The present study has two objectives: primarily, to study the correlation between socio-demographic variables and tobacco abuse, and secondly, to study the impact of National Tobacco Quit-Line Services (NTQLS) in India. The data for the study was collected from the registered callers who have completed at least one year of follow-ups at NTQLS, Vallabhbhai Patel Chest Institute, University of Delhi, between May 2016 and May 2021. The questionnaire was directly administered to the people who had called NTQLS for the first time to quit tobacco use. Callers were provided one year of continuous follow-up to ensure they remain long-term abstinent from tobacco and permanently quit. All the data were managed through an electronic database. A total of 85,807 individuals' data was taken for the study. The maximum number of callers were from Uttar Pradesh (28.03%), followed by Rajasthan (24.67%) and Madhya Pradesh (7.59%). The female population represented only 1.43%; the male population was significantly higher (98.57%). Youth (44.83%) and adults (53.78%) were more than seniors (0.9%) and adolescents (0.4%). Smokeless tobacco users (67.32%) were more common than smoking tobacco users (20.11%). Duration of tobacco use among the 71.74% of callers was found to be between 1 and 10 years; the remaining 24.03% had been using tobacco for over 10 years, while 4.23% were novice users. The abstinence rate achieved by NTQLS was 33.42% after one month of quitting and 21.91% after one year of quitting. We found a significant association between tobacco users' socioeconomic and demographic status. The number of male tobacco users was significantly higher than the number of female tobacco users. Among all the tobacco users, youth was persistently using tobacco the most. Individuals from low socio-economic status were more likely to use tobacco as compared to those from high socio-economic status. These associations indicate the need for strengthening the enforcement of tobacco control policies and developing and monitoring comprehensive smoke-free legislation.

Key words: tobacco quit line, smoking tobacco, smokeless tobacco, comparative analysis tobacco.

Introduction

World Health Organization's (WHO) Framework Convention on Tobacco Control (FCTC) mandates countries to setup national programs to help people live tobacco free life, by monitoring and controlling tobacco use and integrating brief tobacco cessation interventions into the primary care systems of the nation [1]. The brief and specialized tobacco cessation intervention can be provided by tobacco cessation centers/clinics, national toll-free tobacco quit lines, web-based application and through mobile based text messaging (m-Cessation) projects [1,2]. Offering help to quit is one of the six key interventions outlined in the MPOWER (**M**onitor tobacco use and prevention policies, **P**rotect people from tobacco smoke, **O**ffer help to quit tobacco use, **W**arn people about the dangers of tobacco, **E**nforce bans on tobacco advertising, promotion and sponsorship, **R**aise taxes on tobacco) package of technical measures and resources which WHO introduced in 2007 [3]. Vallabhbhai Patel Chest has been instrumental in providing help to quit tobacco use since 2001 [4]. In 2016 on the eve of "World No Tobacco Day", Government of India established the nation's first National Tobacco Quit-Line Services (NTQLS) at Vallabhbhai Patel Chest Institute (VPCI), New Delhi, with the sole objective to reach a large number of tobacco users to provide free- of-cost telephone-based, information, advice, support, and referrals for tobacco cessation which is accessible with a toll-free number (1800-112-356). Since 2018, the services have been successfully expanded to three more regional satellite centers (Guwahati, Bangalore and Mumbai). In order to reach a wider population, counseling services is now being offered in 15 regional languages to the tobacco users including Hindi, English, Marathi, Bengali, Tamil, Telugu, Kannada, Malayalam, Assamese, Punjabi, Gujrati and Maithili. The VPCI's National Tobacco Quitline Services is effective in terms of accessibility, over a two-year period, 63,350 callers, including the elderly, rural residents, minorities, and the poor, used the toll-free number to get at least a quick brief advice or information on quitting smoking [5].

The use of tobacco compromises health and economic destruction of peoples in the country. Tobacco consumptions in any form either smokeless or smoke causes numerous dangerous consequences to everyone. Tobacco is a leading preventable cause of death, kills up to half of its users. Tobacco kills more than 8 million people each year whereas more than 7 million of those deaths are the result of direct tobacco use while around 1.2 million are the result of non-smokers being exposed to second-hand smoke [3,6,7]. India is the second largest tobacco

consumer almost 267 million people in India consume tobacco [7]. The high tobacco use causes many forms of cancers, leading to early, painful deaths of users in their productive years. It is therefore critical to raise awareness to help reduce use and protect the health of the people [8]. India is a country with largest population in the world. The people of India with different regions poses distinct social, cultural and economic characteristics. The distribution of tobacco use is not uniform across the country. There are wide variations in tobacco consumption across various socio-economic and demographic classes like age, gender, education, occupation and income. This study was conducted to understand the association of tobacco users with different socioeconomic and demographic characteristic.

Materials and Methods

National Tobacco Quitline Services (NTQLS) has been designed to help tobacco users who are willing to quit their tobacco use habit. NTQLS provides telephone-based counselling to the registered callers who call first time (reactive call) at toll-free number 1800-11-2356 by answering their queries, setting a quit date, formulating a personalised quit plan and follow-up calls. The 5As (Ask, Advise, Assess, Assist and Arrange), the 5Rs (Relevance, Risks, Rewards, Roadblocks, Repetition), identifying dangerous situations, imparting fundamental knowledge, cultivating coping skills, were the core intervention strategies applied through behavioural counselling among the callers (tobacco users). A total of 8 proactive follow-up calls are made throughout the year in order to maintain a longer abstinence rate. To understand the impact of National Tobacco Quitline Services in India the present study was conducted at NTQLS, VPCI University of Delhi. The data for the study was taken from the registered callers who have completed at least 1 year of follow-ups between May 2016 to May 2021. The questionnaire was directly administered to the persons who had called for first time at NTQLS to quit tobacco addiction. The questionnaire contained information on standardize characteristics like socio demographic and economic status, type of tobacco use (smoking and smokeless), quantity of tobacco use, disease if any and other related aspect. Among the detailed information, the study was conducted across the variables. A total of 85807 registered callers were taken during the study period. The responses of these individuals were used to analyse the data. The individuals in the study were generally belonged to north, central and western regions of India. The statistical methodology used in the analysis of data includes frequency tables, bar chart and

one sample Chi-Square test. All the analysis was performed using SPSS version 25.0 and Excel 2013. A standard p-value of 0.05 is used to test the significance of result.

Results

There were 85807 registered individuals completed their one year follow-ups during the study period and they were included in the present study. Each individual was using tobacco in some form (smoking and smokeless). The maximum number of callers were from Uttar Pradesh (28.03%) followed by Rajasthan (24.67%) and Madhya Pradesh (7.59%), state-wise calls received at NTQLS (Figure 1).

Socio-demographic and economic characteristics of study population

Among the study population a large number of tobacco users were male (n = 84582, 98.57%). The p-value of one sample chi square test is <0.01, this indicate that male tobacco users in India is much larger than female tobacco users (Table 1).

In the study of Age group, it was found that of all tobacco users, adult (25-64) tobacco users were most 53.78% followed by youth (15-24) 44.83% while only 1.4% of seniors and adolscent consume tobacco. The p-value of one sample chi square test is <0.01, this indicate that there is significant association between tobacco users and age group in India.

on study of marital status, it was found that married (50%) and unmarried (49.85%) tobacco users were almost equal whereas 0.15% of tobacco users were either widowed or divorced. The number of cases of tobacco users by Married and unmarried people are approximately equal and extensively larger than the cases of widowed and divorced. This may be happening due to the reason that the cases of widowed and divorced in the country is very low. the p-value of one sample chi square test is <0.01, this indicate that there is significant association between tobacco users and marital status.

Since the cases of widowed and divorced are very small so we are removed these cases. After removing the cases of widowed and divorced and taking only married and unmarried populations in the study, the one sample chi-square test shows a p-value = 0.662 > 0.05, this indicate that there is no significant association between tobacco users and marital status.

On study of education level, it was found that maximum number of tobacco users were studied up to 10th class (40.43%) whereas 25.42% tobacco users were either graduate or diploma holder and 25.30% tobacco users were studied up to 12th class. The result also showed that

4.34 % tobacco users were post graduate, 3.38% tobacco users are illiterate and 1.12% tobacco users were professionals. This suggest that less educated people are uses tobacco more and it will gradually decrease as the education level increases. The p-value of one sample chi square test is <0.01, this indicate that there is significant association between tobacco users and education level.

On study of occupation, it was found that maximum tobacco users 46% are self-employed followed by 24% tobacco users employed at private sector and 20.1% tobacco users were students, it was also found that 5.2% tobacco users were unemployed, 3.1% tobacco users were employed at government sector and 0.7% tobacco users were retired. The result is found to be significant, the p-value of one sample chi square test is <0.01, this indicate that there is significant association between tobacco users and occupation.

On study of income level. It was found that most tobacco users 46.6% have no income or less than 10000 incomes per month followed by 46.3% tobacco users have income between 11000 and 30000 per month whereas 7% tobacco users have income more than 30000 per month. The significance value of chi square test is < 0.01, this indicate that poor people or people with low socioeconomic status have more tobacco users than high socioeconomic status (Table 1).

Prevalence of tobacco users and quitting percentage

On study of different type of tobacco users in India it was found that the smokeless tobacco users in India was found to be maximum 67.32% whereas the smoking tobacco users and both smoking and smokeless tobacco users was found to be 20.11% and 12.57% respectively. The significance value of chi square test is <0.01, this indicate smokeless tobacco users were more common as compared to other type of tobacco users in India (Table 2).

Among smokeless tobacco users, it was found that maximum number of tobacco users consumed Khaini (42.11%) followed by Guthka (39.8%) and Zarda (10.58%) whereas other smokeless product such as Pan Masala, Tobacco Paste etc. were consumed very less (7.50%). The above difference in the usage of different tobacco product was statistically significant, the p-value of chi square test is < 0.01, this indicate that in India Khaini and Guthka are consumed significantly higher than any other smokeless tobacco product. Among smokeless tobacco users (20.29%) had consumed alcohol as well.

Among smoking tobacco users, it was found that maximum number of tobacco users consumed cigarette (59.1%) followed by Bidi (39.99%) where as other smoking Product like Huka and Cigar are smoked very less (0.82%). The significance value of chi square test is <0.01, this indicate that in India cigarette is smoked significantly higher than bidi and any other smoking product.

Among the smokeless tobacco users, the one-month abstinence rate was found to be maximum 34.58% whereas one-month abstinence rate of smoking tobacco users was found to be 29.75% and for both smoking and smokeless tobacco users it was found to be 33.11%. The overall one-month abstinence rate was 33.42%. From the proportion test the significance value of chi square test is < 0.01, this indicate that there is significant difference between the quitting rates of different type of tobacco users with maximum quitters are from smokeless tobacco. Among the smokeless tobacco users, the one-year abstinence rate was found to be maximum 23.20% whereas one-year abstinence rate of smoking tobacco users was found to be 17.76% and for both smoking and smokeless tobacco users it was found to be 21.62%. The overall one-year abstinence rate of tobacco users was 21.91%. From the proportion test the significance value of chi square test is <0.01, this indicate that there is significant difference between the one-year quitting rates of different type of tobacco users with maximum quitters were from smokeless tobacco users. The one-month abstinence rate of smokeless tobacco users taking alcohol as well was found to be 33.38%, for smoking tobacco users taking alcohol as well it was found to be 28.53% and for both smoking and smokeless tobacco users taking alcohol as well it was found to be 32.53%. The overall one-month abstinence rate of tobacco users taking alcohol as well was 32.05%. The one-year abstinence rate of smokeless tobacco users taking alcohol as well was found to be 22.67%, for smoking tobacco users taking alcohol as well it was found to be 16.51% and for both smoking and smokeless tobacco users taking alcohol as well it was found to be 22.14%. (Table 2)

Abstinence rate of tobacco users at different proactive calls (follow-ups)

The abstinence rate of study population was measured by two methods. The primary measure was Prolonged abstinence or overall quit rate whereas the secondary measures was Periodic abstinence or periodic quit rate.

The prolonged abstinence is obtained as, the number of registered individuals who quit tobacco after receiving the quit line services (proactive call) to the total number of registered

population under study. Here, the denominator is fixed at each proactive call which is total number of registered callers whereas in numerator the number of quitters in each follow-ups are taken.

The Periodic abstinence is obtained as, the number of registered individuals who quit tobacco after receiving the quit line services (proactive call) to the number of individuals who were quitted from tobacco during the previous proactive call.

In prolonged abstinence rate, we have observed that the percentage of quitters are decline with respect to time or different follow-up calls. At the first call "Pre Quit Date Call" the abstinence rate was maximum 67.65% and then it will start decline in the further follow-up calls, the reason is that in prolonged abstinence rate the sample size (n) is fixed whereas in periodic abstinence rate the sample size is changes for each follow-up. (Table 3 and Figure 2)

In periodic abstinence rate of callers, we have observed that most of the quitters were still quitted at 6 Months (P6), 9 Months (P7) and 1 Year (P8) of follow-up calls with percentage more than 90%. In P5 (3 Months After Quit date Call) a decline in the periodic abstinence rate was observed from 94.61% to 78.26%. The Periodic abstinence rate at Pre Quit Date Call (P1), Quit date Call (P2), 7-10 Days After Quit date Call (P3) and 1 Month After Quit date Call (P4) were observe as 67.65%, 64.33% 81.18% and 94.61% respectively. (Table 3 and Figure 3) represents the Periodic abstinence rate of registered callers at different follow-up calls.

Discussion

The behaviour of tobacco consumption has been prevalent in our society since long time. Irrespective of gender, age and region the tobacco is consumed widely. To understand the tobacco usage patterns and its correlated factors, this research study was conducted. This study provides the prevalence estimates of tobacco users by different socioeconomic and demographic characteristic who wants to quit. It also highlighted the impact of NTQLS on the abstinence rate of tobacco.

The NTQLS have the ability to lower relapse rates while having a major effect on the overall cessation rate. Most significantly, tobacco users can use NTQLS services at no cost to them, from any location at any time. It provides private, individualized, and customized help to encourage an individual who is addicted to tobacco to try quitting. According to estimates,

NTQLS has the ability to lower India's economic burden of tobacco use-related illnesses overall [5]. Currently, only Hindi and English are offered during counseling sessions at NTQLS Delhi. The counselors fill out an English-language questionnaire with the caller's demographic information (name, age, gender, occupation, education, address, etc.), as well as information about the caller's level of tobacco use, expenses, and income. The information is stored on the server and is kept confidential [9]. Tobacco is very approachable, marked by persistent chemical and molecular alterations in the brain, compulsive drug seeking and abuse, and both. When the user tries to stop using it, they experience withdrawal symptoms like anxiety and irritability. In its worldwide report on the prevalence of tobacco use from 2000 to 2025, the World Health Organization projected that there were 1.337 billion tobacco users worldwide in 2018 [7]. There is a widespread belief that if current tobacco use patterns continue, about half of the world's population will eventually perish from tobacco use. According to the current trend in morbidity and mortality, smoking-related deaths are expected to reach 10 million annually by 2030, or one death every three seconds [3]. Tobacco is used both smokeless and smoked in India. Of the population, 10.7% (99.5 million) smoke, 21.4% (199.4 million) use smokeless tobacco (SLT), and 28.6% (266.8 million) consume tobacco in any form. In India, bidis make up the majority of smoked tobacco use, in the lower socioeconomic strata, bidis consumption exceeds cigarette smoking by a factor of 8 to 10. The two most popular chewable smokeless tobacco products in India are gutka and khaini. In the previous 12 months, 33.2% of users of smokeless tobacco and 38.5% of current smokers attempted to stop. Of current tobacco users, 49.6% were smokeless tobacco users and 55.4% of smokers said they planned to stop using tobacco products [10].

As nicotine replacement therapy (NRT) has been shown to be effective in helping smokers quit, and since Quitline at VPCI (NTQLS) does not provide medication, quitting was accomplished without the need for pharmacological intervention. Studies suggest that non-pharmacological intervention is also effective in tobacco cessation [2]. Regular reactive calls suggest that the individuals were inspired to give up smoking. Numerous studies indicate that social influence factors play a role in helping people give up tobacco use [11]. The prevalence estimate of registered callers from different socioeconomic and demographic characteristic who wants to quit their tobacco use habit (Table 1). As per the data obtained from this study, it is seen that males are comparatively higher in numbers when it comes to consuming tobacco than females. There is a vast difference between the two genders. Of all registered callers 98.57% of males

are consuming tobacco whereas only 1.43% of females consuming tobacco. In a study by Mamta Agrawal et al; a significant gender difference was seen for tobacco use with fewer females being habitués of tobacco as compared to males [12]. In a similar study the same results were found [13]. As per that research study, the lower consumption of tobacco among females is due to the prevalence of diseases. Smoking during pregnancy reduces birth weight substantially, which is associated with infant mortality and illness. It also increases the risk of miscarriage, still birth and premature birth. Women are at risk from the same tobacco-related diseases as men, and are also affected by other particular conditions, such as the increased hazards of infertility and menstrual disorders [13]. In the Indian context, societal taboo deeply exists and consequently women are highly dependent to their families [14]. It could be a probable reason that they are hesitant to approach the cessation process as it risks confidentiality [15]. Another probable reason for low prevalence rate of tobacco consumption among women is that they are mostly housewives [16]. Prevalence of smokeless tobacco use was comparatively lower among women with family income above Rs. 5000 per month [17]. According to this study, Betel-tobacco quit was found to be fairly popular in Karnataka with prevalence being 14.2% (26.9% among males and 0.6% among females) in Karnataka [13].

For the dimension of marital status, nearly equal percentages reported in terms of tobacco usage among those who are married as compared to those who are unmarried. Since the research focuses on the aspect of quitting; i.e. the willingness to approach the tobacco Quitline and quit apparently, there is more or less similarity in the percentage of the two sub-dimensions. Studies have shown results of prevalence of tobacco use among these sub-categories, however no such strong evidences have been found regarding quitting. Different sub-dimensions for the variable of 'education and tobacco use' are also a focus area of this research. Tobacco is significantly associated with education (Table 1). The major tobacco users who approach the Quitline to quit tobacco have the educational level up to class 12. About 65% of the tobacco users belong to this educational range. In addition to this, the research study found that only 3.4% of the tobacco users are illiterate. Whereas many studies show that tobacco use both smokeless and smoking are inversely related to education, Tobacco users are more likely to be illiterate [14]. It is probable that the illiterate does not have enough information or awareness to access the toll- free number and approach the Quitline to initiate the process of tobacco cessation. Secondly, it is also possible that the illiterate people are unaware of the harmful consequences that tobacco has on mental and

physical health of the person. Further, this study shows that illiterate people were less likely to try quitting tobacco and think of quitting tobacco as compared to counterparts. Similar to this finding, Garg et al. reported that low educational status was associated with poor quitting behavior [17]. Islam et al. inferred that intention to quit was more among more educated person [18]. Rosenthal et al. reported that lower education level was associated with difficulty in quitting tobacco [16]. In other studies, the same is pointed out, "The illiterate cannot read statutory health warnings. Among the more educated and urban population, tobacco use seems to be more in response to peer pressures and advertising, while some knowledge of possible health consequences is laid aside as irrelevant for the present. Thus, this research highlights the importance of community out-reach programmes, wherein the people are made aware of the harmful consequences of tobacco use and the possible methods to quit its use." The statistical analysis shows that tobacco use is more prevalent among those who are illiterate and it gradually decreases as the level of education increases. According to the Indian Smoke-free law, Cigarettes and Other Tobacco Products Act there is a mandatory provision of health warning on tobacco products [19,20]. The present study found that illiterates were less likely to notice health warnings on cigarette packets and smokeless tobacco pouches. This finding is supported by a study conducted by Hammond et al. wherein it was reported that lesser educated respondents were less likely to be exposed to health warnings [21]. The other reasons that lead to the engagement of the poor in using tobacco include low cost sources of pleasure, using tobacco as a relief for a number of problems like sleep problems, toothache, constipation, gastric complaints, etc. Hence, it is not just lack of education or insufficient guidance but also lack of awareness that one develops from education. The NTQLS has witnessed a number of calls wherein the caller is completely unaware of why is the toll free number given on the packet and the importance of printed warnings.

Lower income is significantly associated with a higher number of tobacco users, in this study it was found that of all the tobacco users 46.9 % tobacco users have no income or less than 10000 incomes per month. In many studies, it was found that the tobacco consumption for poor and underprivileged people is significantly larger [22]. In a review by Hiscock, it was reported that population with low socioeconomic status are more likely to be exposed toward tobacco consumption and quit attempts are less likely to be successful in these individuals mainly due to reduced community support for quitting, less motivation to quit, very strong addiction, greater likelihood of not completing pharmaceutical and behavioral intervention

for tobacco quitting, psychological problems such as lack of self-efficacy, and tobacco industry marketing [23]. Recently, Kumar et al. observed the deeper understanding of health behaviors in communities, guiding the development of targeted interventions for better respiratory health outcomes [24].

In this study, we have found a variation in the tobacco use by age category, the most tobacco users registered were in the age group of 15-24 years (youth) and 25-64 years (Adults) with 44.83% and 53.78% respectively. Whereas Children (14 years or less) and seniors (65 years & above) are very less with 0.45% and 0.95%. This suggest that youth and Adults are more prone to tobacco use and seek help to quit the tobacco use habit. Studies shows similar results where an increase in tobacco use was seen with age for male up to the age of 59 and then a significant decline is observed. It was observed that most of registered callers are least educated and have very low income levels. The estimates of registered tobacco users of age group (15-25) among all tobacco users in this study was 45.5%, Global Adult Tobacco Survey (2016–2017) found among 266.8 million tobacco users 28.6% tobacco users are adults above the age group of 15 [6,25]. Tobacco use among uneducated people or very less educated people (up to class 10) was found very common in this study 43.81%. Uneducated males and females are more likely to expose to the risk of tobacco use. This can often be attributed to less knowledge and awareness among the uneducated people. Lower income is significantly associated with a higher number of tobacco users; in this study it was found that of all the tobacco users 46.9 % tobacco users have no income or less than 10000 incomes per month. In many study it was found that the tobacco consumption for poor and underprivileged people is significantly larger [22].

Quit rates in different countries

The prolonged abstinence rate of registered callers after one month and one year in National Tobacco Quitline services was found to be 33.42% and 21.91% respectively. The Vietnam national telephonic counselling for smoking cessation has reported a 31.6% abstinence rate for 7 days (5). The three-month abstinence rate for clients in China is about 20% (5). In Korea the 1-year abstinence rate of clients is 26% (5). The New-Zealand Quitline achieved a 24.2 percent self-reported quit rate at 3 months and 20.9 percent at 12 months (5). In California the rates of abstinence for 1, 3, 6, and 12 months, according to an intention-to-treat analysis,

were 23.7%, 17.9 %, 12.8%, and 9.1% respectively (5). Taiwan has reported six-month point prevalence abstinence rate in 2005 and in 2014 were 41.7% and 38.7% (5).

Conclusions

The National Tobacco Quit Line Services provide standardized and professional telephonic counselling to tobacco users across the country and thereby acquainting them with the knowledge, need, and ways to reduce tobacco usage. This paper highlights the prevalence of tobacco consumption and the importance of quit line in tobacco cessation. Therefore, effective advocating campaigns should be implemented to publicize the quit line for a greater reach. Several protocols need to be developed to cover different sub-populations so that a better service is provided to the larger public.

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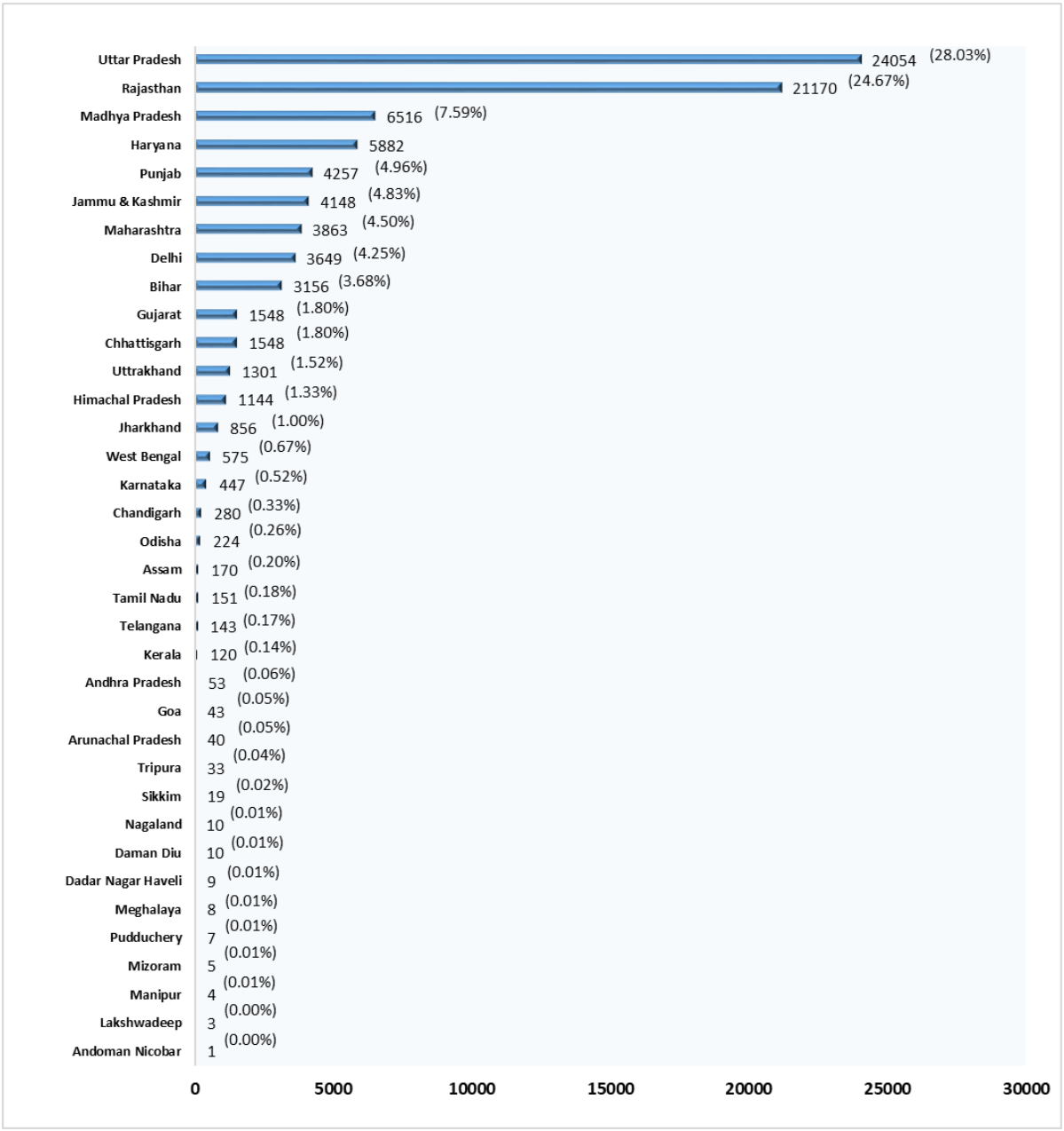

Figure 1. Represents State-wise calls received at NTQLS.

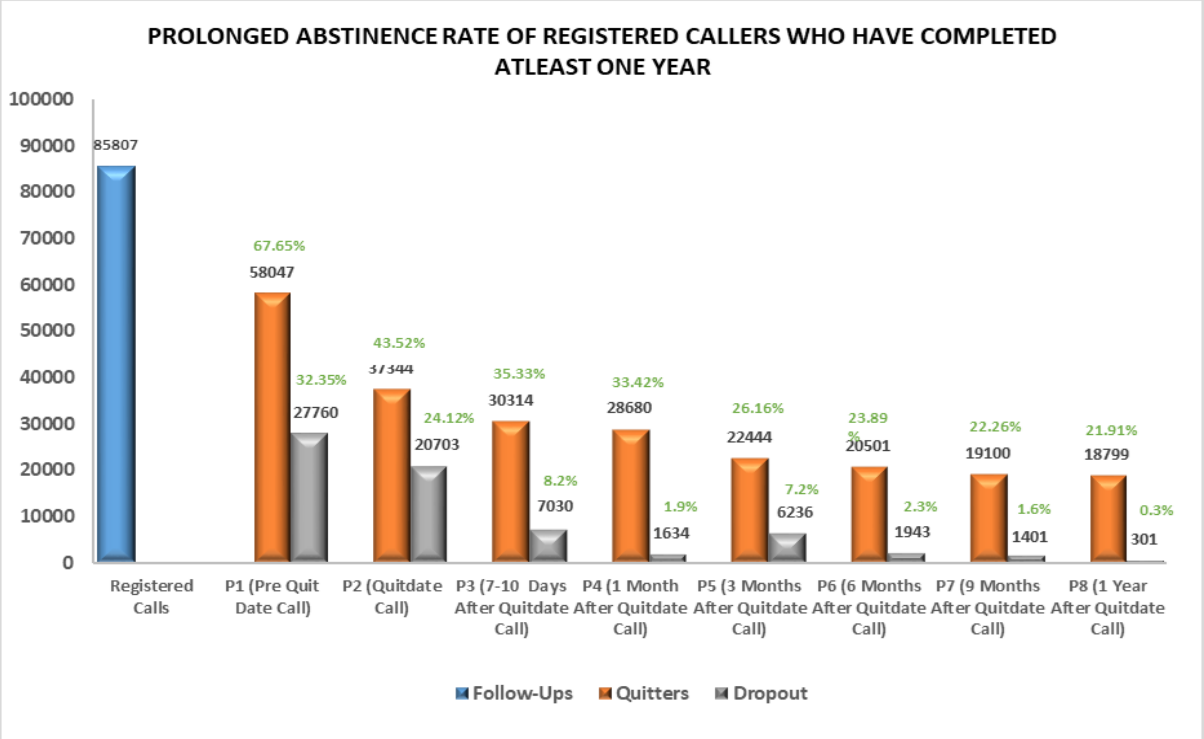

Figure 2. Represents prolonged abstinence rate of registered callers who have completed at least one year of follow-ups.

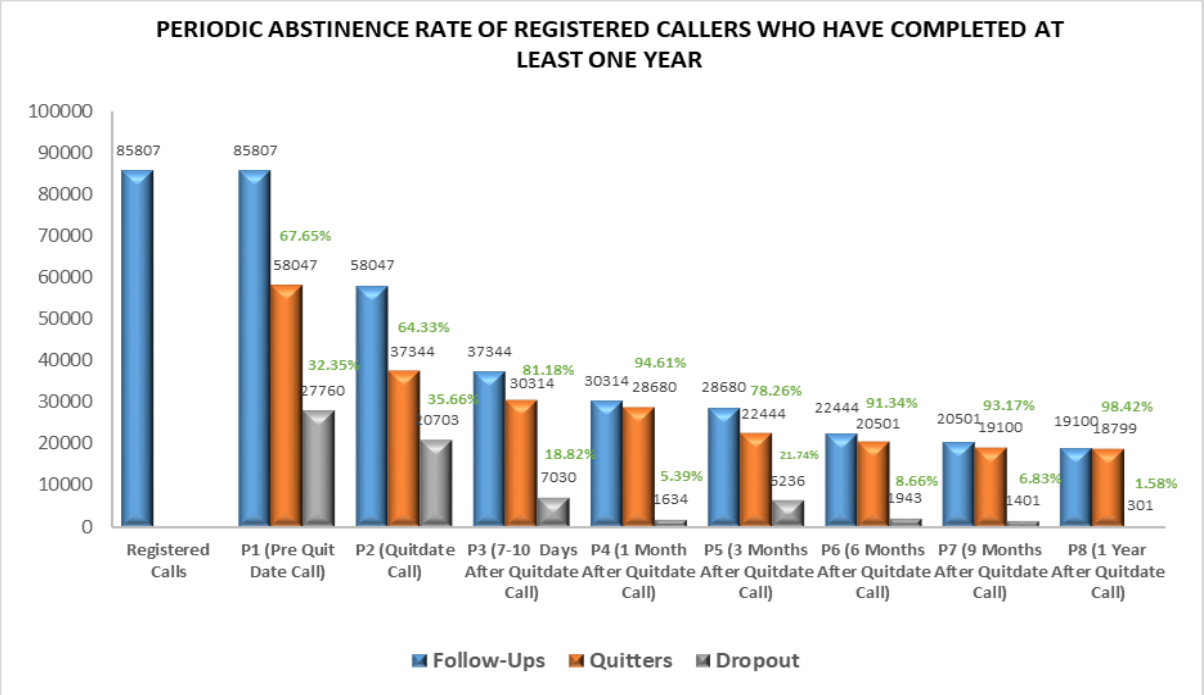

Figure 3. Represents periodic abstinence rate of registered callers who have completed at least one year of follow-ups.

Table 1. Demographic and economic details of the study population.

Variables	n=85807 (%)	p-value
Gender		
Male	84580 (98.57)	<0.01
Female	1225 (1.43)	
Transgender	2 (0)	
Age Criteria		
< 14 years (Childhood)	382 (0.45)	
15- 24 (Youth)	38465 (44.83)	<0.01
25-64 (Adults)	46145 (53.78)	
65 & above (Seniors)	815(0.95)	
Marital Status		
Married	42906 (50.00)	
Unmarried	42778 (49.85)	0.662
Widowed	56 (0.07)	
Divorced	67 (0.08)	
Education		
1^{st} - 10^{th}	34693 (40.43)	
11^{th} - 12^{th}	21706 (25.30)	
Diploma	1881 (2.19)	<0.01
Graduation	19934 (23.23)	
Post-Graduation	3728 (4.34)	
Professional	962 (1.12)	
Illiterate	2903 (3.38)	
Occupation		
Private Sector	21288 (24.81)	
Self Employed	39477 (46.01)	
Government Sector	2676 (3.12)	<0.01
Student	17256 (20.11)	
Unemployed	4497 (5.24)	
Retired	613 (0.71)	
Income per Month		
<10000	18376 (21.42)	
11000-30000	39770 46.35)	<0.01
31000-60000	4840 (5.64)	
61000+	1211 (1.41)	
NIL	21610 (25.18)	

Table 2. Prevalence of tobacco users and quitting percentage.

Tobacco Type	Frequency	Quitters (1 Month)	Quitters (1 Year)	Alcohol Use	Quitters (1 Month)	Quitters (1 Year)
Smoking	17258 (20.11)	5134 (29.75)	3065 (17.76)	4935 (28.60)	1408 (28.53)	815 (16.51)
Smokeless	57761 (67.32)	19974 (34.58)	13402 (23.20)	11718 (20.29	3912 (33.38)	2657 (22.67)
Smoking & Smokeless both	10788 (12.57)	3572 (33.11)	2332 (21.62)	3984 (36.93)	1296 (32.53)	882 (22.14)
Total	**85807 (100)**	**28680 (33.42)**	**18799 (21.91)**	**20637 (24.05)**	**6616 (32.05)**	**4354 (21.09)**
Smoking Product						
Cigarette	10215 (59.19)	2919 (28.58)	1665 (16.30)	3188 (31.21)	889 (27.89)	495 (15.53)
Bidi	6901 (39.99)	2163 (31.34)	1372 (19.88)	1712 (24.81)	507 (29.61)	313 (18.28)
Hukka	138 (0.80)	51 (36.96)	28 (20.29)	34 (24.64)	12 (35.29)	7 (20.59)
Cigar	4 (0.02)	1 (25)	0 (0.00)	1 (25.00)	0 (0.00)	0 (0.00)
Total	**17258 (100)**	**5134 (29.75)**	**3065 (17.76)**	**4935 (28.60)**	**1408 (28.53)**	**815 (16.51)**
Smokeless Product						
Guthka	22994 (39.81)	7795 (33.90)	5189 (22.57)	4483 (19.50)	1446 (32.26)	974 (21.73)
Khaini	24324 (42.11)	8574 (35.25)	5725 (23.54)	5254 (21.60)	1827 (34.77)	1259 (23.96)
Zarda	6113 (10.58)	2095 (34.27)	1552 (25.39)	1081 (17.68)	341 (31.54)	241 (22.29)
Pan Masala	2298 (3.98)	743 (32.33)	455 (19.80)	475 (20.67)	139 (29.26)	86 (18.11)
Tobacco Paste	1718 (2.97)	647 (37.66)	425 (24.74	364 (21.19)	137 (37.64)	89 (24.45)
Other	314 (0.54)	120 (38.22)	56 (17.83)	61 (19.43)	22 (36.07)	8 (13.11)
Total	**57761 (100)**	**19974 (34.58)**	**13402 (23.20)**	**11718 (20.29)**	**3912 (33.38)**	**2657 (22.67)**
Smoking & Smokeless Product						
Cigarette And any SLT	5912 (54.80)	1960 (33.15)	1272 (21.52)	2368 (40.05)	786 (33.19)	527 (22.26)
Bidi and any SLT	4778 (44.29)	1575 (32.96)	1039 (21.75)	1591 (33.30)	501 (31.49)	350 (22.00)
Cigar and any SLT	7 (0.06)	4 (57.14)	2 (28.57	0 (0.00)	0	0
Huka and any SLT	91 (0.84)	33 (36.26)	19 (20.88)	25 (27.47)	9 (36.00)	5 (20.00)
Total	**10788 (100)**	**3572 (33.11)**	**2332 (21.62)**	**3984 (36.93)**	**1296 (32.53)**	**882 (22.14)**

*Smokeless Tobacco (SLT)

Table 3. Prolonged and Periodic abstinence rate of callers at different follow-ups.

Variables	Proactive calls (Follow-Ups)	Quitters	Prolonged percentage of quitters	Periodic percentage of quitters
Registered Calls (n=85807)				
P1 *(Pre Quit Date Call)*	85807	58047	67.65	67.65
P2 *(Quit Date Call)*	58047	37344	43.52	64.33
P3 *(7-10 Days After Quit Date Call)*	37344	30314	35.33	81.18
P4 *(1 Month After Quit date Call)*	30314	28680	33.42	94.61
P5 *(3 Months After Quit Date Call)*	28680	22444	26.16	78.26
P6 *(6 Months After Quit Date Call)*	22444	20501	23.89	91.34
P7 *(9 Months After Quit Date Call)*	20501	19100	22.26	93.17
P8 *(1 Year After Quit Date Call)*	19100	18799	21.91	98.42