

“Intention to quit tobacco” among male youth in a peri-urban area of Villupuram town, India: a mixed-method study

V Karthikeyan, Amol R Dongre

Department of Community Medicine, Sri ManakulaVinayagar Medical College and Hospital, Puducherry, India.
Correspondence to: V Karthikeyan, E-mail: karthikeyanveerabadran@gmail.com

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Abstract

Background: Tobacco usage initiated in adolescence and early adulthood continues throughout adulthood.

Objective: (1) To study the social determinants of “intention to quit” and “quit attempts” among male youth in our field practice area. (2) To explore the reasons for intention to quit.

Materials and Methods: It was an explanatory mixed-method design, where quantitative (Survey - Phase I) method was followed by qualitative (Focus Group Discussion-Phase II) method. Trained interviewer did house-to-house visits and collected data among current tobacco-using male youth in the field practice area of Urban Health Training Centre, Villupuram, Tamil Nadu, India. On the basis of the survey results, two focus group discussions were conducted among slum dwelling youth.

Result: In logistic regression analysis, the odds of intention to quit significantly rose by 1.26 times with a unit rise in age, and the intention to quit was high among youth belonging to below poverty line status and those having illiterate mothers. The only determinant for “action taken” was the age of the respondent. Focus group discussion (FGD) participants felt that the poor and relatively older youth have more intention to quit due to fear of side effects and their poor financial conditions.

Conclusion: The intention to quit increases with the rising age and it was found to be high among youth who were below the poverty line. The action to quit increased with the age. These determinants could be considered for equitable distribution of tobacco control activities in the study area.

KEY WORDS: Intention to quit, tobacco, social determinants, mixed-method, India

Introduction

The Global Adult Tobacco Survey (GATS) — 2010 shows that more than one-third (34.6%) of adults (aged 15 years and above) in India use tobacco in some form (smoking, chewing,

application to the teeth and gums, or sniffing), whereas in Tamilnadu, about 16.2% of adults use some form of tobacco.^[1] The most vulnerable time for initiating tobacco use is during adolescence and early adulthood (15-24 years).^[2] Tobacco usage initiated during this period continues throughout the adulthood. Quitting tobacco at the earliest would protect them from developing non-communicable diseases in the later part of life.^[3]

The Framework Convention on Tobacco Control (FCTC) by the World Health Organization recommends promoting tobacco cessation and treatment of tobacco dependence as one of the key strategies for tobacco demand reduction.^[4] One of the objectives of the National Tobacco Control Program (NTCP) of India is “helping people quit tobacco use through tobacco cessation clinics.”^[5]

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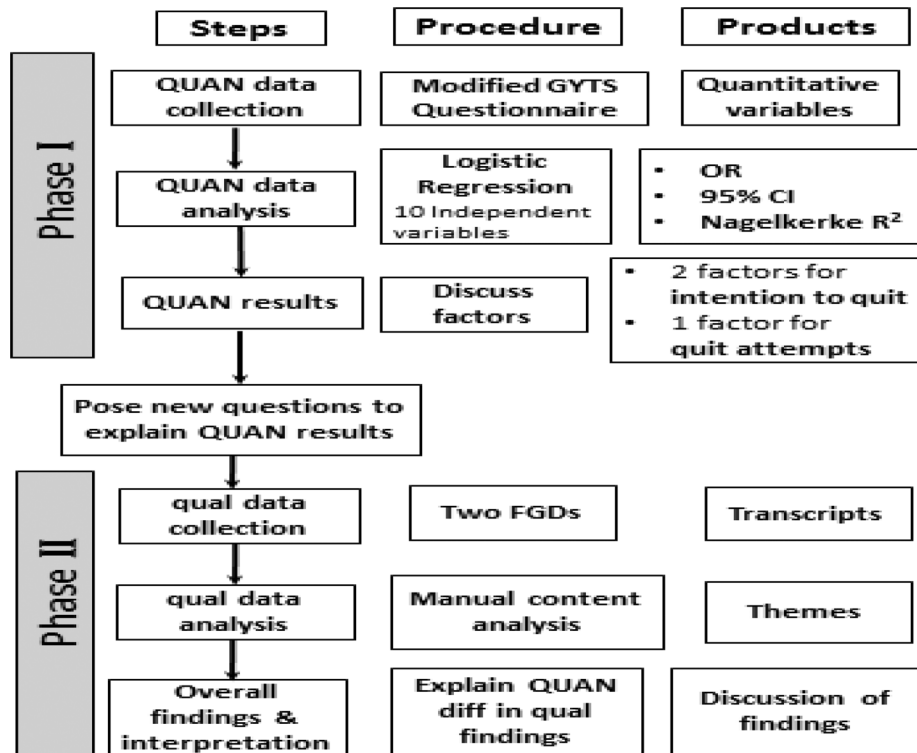


Figure 1: Visual diagram of the study design.

Knowledge of social determinants of intention to quit and quit attempts would help in planning awareness programs in the community and facilitate equitable distribution of tobacco control services.^[6] Very few studies in India explore the social determinants of youth's intention to quit tobacco. Hence, the objectives of this study were to study the social determinants of "intention to quit" and "quit attempts" among male youth in our field practice area and to explore the reasons for their intention to quit.

Materials and Methods

Setting

This study was done in the field practice area of Urban Health Training Centre, Villupuram town of the Tamil Nadu state in India. It consisted of 16 peri-urban wards, having a total population of 34,000.

Design

Explanatory mixed-method design, where quantitative (Survey - Phase 1) method followed by qualitative (Focus Group Discussion, FGD-Phase II) method was used [Figure 1].

Phase I

Considering $p = 34.6\%$ (GATS, 2008–2010), design effect = 1.5%, and the non-response rate 10%, a representative

sample of 610 youth (15–24 years of age) was selected by the cluster sampling technique (21 respondents in each of 30 clusters). The details of sampling, questionnaire, and interview technique have been reported elsewhere.^[7] We have used the data of 177 current tobacco using male youth's data in this study. Only two girls who were currently consuming tobacco were excluded from the analysis. Trained interviewer did a house-to-house visits and collected data on intention and attempts to quit by using Global Youth Tobacco Survey (GYTS) questionnaire.

Phase II

Based on survey findings, guidelines for two FGD sessions with youths were planned. Two FGDs were conducted among 8–12 purposively selected slum dwelling youth to explore the reasons for intention to quit, to explore why relatively older youth had more intention to quit, and why youth from higher socioeconomic status (APL) had less intention to quit than those with below poverty line (BPL) status.

Data Analysis

Survey data were entered and analyzed using the EpiInfo software, version 3.5.4. Descriptive statistics, which included frequency, means, and percentages, were used to describe the data. Logistic regression analysis was used to assess the influence of various independent factors on the intention to

Table 1: Determinants for intention to quit and actions to quit among tobacco users

| Variables | N = 177 | Determinants for "intention to quit" OR (95%CI) | Determinants for "actions to quit" OR (95%CI) |
|-------------------------------|------------|-------------------------------------------------|-----------------------------------------------|
| Age group | | | |
| 15–19 | 38 (21.5) | 1.26 (1.03–1.54) | 1.25 (1.04–1.51) |
| 20–24 | 139 (78.5) | | |
| Socioeconomic status | | | |
| Below poverty line | 93 (52.5) | 2.87 (1.18–6.96) | 0.82 (0.38–1.77) |
| Above poverty line and others | 86 (47.5) | 1 | 1 |
| Occupation of the respondent | | | |
| Student | 87 (49.2) | 2.56 (0.95–6.82) | 2.20 (0.97–4.97) |
| Working | 90 (50.8) | 1 | 1 |
| Religion | | | |
| Hindu | 150 (84.7) | 1.13 (0.40–3.21) | 0.71 (0.28–1.79) |
| Muslim\Christians and others | 27 (15.3) | 1 | 1 |
| Membership in youth groups | | | |
| Yes | 16 (9.0) | 1.47 (0.33–6.52) | 2.72 (0.84–8.84) |
| No | 161 (91) | 1 | 1 |
| Mother's education | | | |
| Illiterate | 49 (27.7) | 6.02 (1.22–23.04) | 1.61 (0.71–3.66) |
| Literate | 128 (72.3) | 1 | 1 |
| Father's education | | | |
| Illiterate | 18 (10.2) | 0.34 (0.06–1.93) | 2.65 (0.79–8.81) |
| Literate | 159 (89.8) | 1 | 1 |
| Use of tobacco by mother | | | |
| Yes | 14 (7.9) | 1.46 (0.24–8.58) | 1.54 (0.42–5.33) |
| No | 163 (92.1) | 1 | 1 |
| Use of tobacco by father | | | |
| Yes | 103 (58.2) | 0.50 (0.21–1.22) | 0.69 (0.31–1.52) |
| No | 74 (41.8) | 1 | 1 |
| Use of alcohol by father | | | |
| Yes | 84 (47.5) | 1.45 (0.63–3.34) | 1.92 (0.88–4.15) |
| No | 93 (52.5) | 1 | 1 |
| Nagelkerke R ² | | 22.6% | 13.7% |

Note: Figures in parenthesis are percentages

quit and actions taken to quit tobacco. The multiple coefficient of determination (R^2) was used as the goodness-of-fit statistic for the model. Statistical significance was set at 5% ($p < 0.05$) and manual content analysis of FGD data was done.

Ethical Considerations

Clearance from the Research Committee and Institutional Ethics Committee of SMVMCH, Puducherry was obtained.

Results

Out of the 177 current tobacco-using male youth, 38 (21.5%) were of age group 15–19 years, 139 (78.5%) were of age group 20–24 years, 93 (52.5%) youth were below the poverty line, and 86 (47.5%) were above the poverty line. About 87 (49.2%) youth were students and 90 (50.8%) were currently working. About 150 (84.7%) youth were Hindu by religion and 27 (15.3%) belonged to other religion. Only

16 (9%) youth were members in youth groups. About 49 (27.7%) youths' mothers and 18 (10.2%) youths' fathers were illiterate and 14 (7.9%) youths' mothers and 103 (58.2%) youths' fathers were reported to use tobacco products and 84 (47.5%) youths' fathers were reported to consume alcohol [Table 1].

Out of 177 current tobacco-using male youths, 8 (4.5%) consumed smokeless form of tobacco, 90 (50.8%) consumed smoke form of tobacco and 79 (44.6%) consumed it in both the forms. Out of 8 smokeless tobacco users, 5 (62.5%) had an intention to quit. Out of 90 smokers, 70 (77.8%) had an intention to quit. Out of 79 respondents who reported to consume both forms, 52 (65.8%) had an intention to quit.

In logistic regression analysis, the odds of intention to quit significantly rose by 1.26 times with a unit rise in age and the intention to quit was high among youth belonging to BPL status and those having illiterate mothers. The only determinant for "action taken" was the age of the respondent (adjusted OR; 1.25:95% CI-1.04–1.51). The Nagelkerke

Table 2: Voices of youth in two FGDs

| Why relatively older youth have more intention to quit? | Why youth having APL status have less intention to quit than those with BPL status? |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| At young age- Desire to explore new things, curiosity, pleasure Careless and less motivation at young age Growing fear of ill effects such as cancer. Some start experiencing its ill effects with time Realize the value of money Increased expenditure, family commitments as they grow old | Youth with APL status are rich and educated. Being rich, they can consume high-quality (safe) tobacco products. Being rich, they can afford medical care. Being rich, they have good self-control. — |

R^2 values for intention to quit and actions to quit were 22.6% and 13.7%, respectively [Table 1].

In FGD, we tried to explore the various reasons for relatively older youth to have more intention to quit. As reported by the respondents, factors such as curiosity among younger youth and desire to explore new things and seek pleasure motivate them to initiate tobacco consumption. As they grow older, some of them start experiencing the ill effects of tobacco consumption and tend to realize the value of money. There is also growing fear of ill effects of tobacco products among them [Table 2].

As mentioned by the FGD respondents, the youth of APL status have a better financial condition and educational status. Being rich, they can afford to consume safer tobacco products and access medical care if required. According to the respondents, rich and educated people have better self-control [Table 2].

Discussion

Out of the 177 current tobacco-using male youth, 4.5% were consuming smokeless tobacco, 50.8% were smokers, and 44.6% consumed it in both the forms. About 62.5% smokeless tobacco users, 77.8% smokers and 65.8% of those who consume both had an intention to quit tobacco. About 25% smokeless tobacco users, 45.6% smokers, and 35.4% users of both the forms had reported at least one quit attempt in the past. The odds of intention to quit significantly rose by 1.26 times with a unit rise in age in years, and the intention to quit was high among youth belonging to BPL status and those having illiterate mothers. The only determinant for "action taken" was the age of the respondent.

Our findings on attempts to quit were comparable to the findings of that observed in secondary data analysis of Global Adult Tobacco Survey-India^[8] conducted in 2009–10, which reported that about 42% youth had an attempt to quit tobacco. In this study, 40.1% of the current tobacco users reported at least one quit attempt in the past.

In a study conducted by Surani et al.^[9] in the rural and urban areas of Maharashtra and Bihar, the results showed that the tobacco users who were urban residents had greater intention to quit as compared to those who were resided in rural areas. Similarly, users who were literate had greater intention to quit as compared to illiterate users.

Age and gender did not have any significant impact on the intention to quit.

However, in this study the odds of intention to quit significantly rose by 1.26 times with a unit rise in age. Youth having BPL status had more intention to quit due to their financial problems and fear of health problems. Relatively younger youth and those who were having above poverty line (APL) status were found to have less intention to quit and thus fall under the pre-contemplation stage of behavior change. Hence, they require motivational strategies such as providing information about the effects and risks of substance use, using motivational language, creating doubt, and evoking a response.^[10] Relatively older youth and those who were having BPL status were in the contemplation stage. Hence, they require cessation facility and high-intensity treatment.

The limitation of this study should be kept in mind. The findings could be context-specific as it was done in a small geographical area. Even though all efforts were made to avoid the social desirability bias, there could be some reporting bias as the survey was done in the respondents' house. However, this study offered the explanations to determinants of youth's intention to quit and quit attempts. India is a very diverse country with different levels of social and economic developments in rural and urban settings; further research is required for the development of area-specific tobacco control strategy.

Beaglehole et al.^[11] envision the goal of a tobacco-free world by 2040, where less than 5% of the world's adult population use tobacco. Addressing the social determinants of intention to quit and quit attempts and acting accordingly would facilitate equitable distribution of tobacco control services and thereby would help in achieving the goal of tobacco-free world by 2040.

Conclusion

The intention to quit increases with the rising age and it was found to be high among youth who were below the poverty line. The action to quit increased with the age. Youth having BPL status had more intention to quit due to their financial problems and fear of health problems. Overall, approach to the exploration of the determinants of intention to quit and quit attempts and its explanation offers a platform for the need-based behavior change communication strategy.

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