

Short Communication

Quit status and challenges of tobacco users from a tobacco cessation clinic in South India

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ABSTRACT

In a given time, 55% of smokers and 50% of smokeless tobacco users think of quitting tobacco. However, only 3-5% successfully quit without professional support. This study aims to assess the quit status and challenges of tobacco users enrolled in tobacco cessation clinic at a regional cancer center. Totally, 171 tobacco users above 18 years were enrolled in the TCC between January 2015 and December 2015. All the users were contacted by a psychologist via telephone after 6 months from their first visit for gauging the status of tobacco use, associated challenges for quitting and reasons for not quitting. Nicotine dependence was assessed using the Fagerstrom scale for nicotine dependence for smokers and smokeless tobacco users, separately. Readiness to quit tobacco scale was used to assess the motivational stages of readiness to change. Based on level of nicotine dependence and motivational stage, cessation interventions were provided. On follow-up, 91 (53.2%) were successfully contacted, 72 (42.1%) could not be contacted and 8 (4.6%) had expired. Twenty-six (28.5%) tobacco users had quit and 15 (16.4%) were able to remain abstinent for less than 6 months. Only 5 (12.1%) reported physical challenges and 13 (31.7%) reported psychological challenges while reducing tobacco or quitting. Tobacco cessation provided by trained professionals in a cancer setting has been found to be highly effective in quitting. Close follow-up at regular intervals is mandated to help tobacco users manage cravings and withdrawal symptoms, to assist in achieving quit status.

Keywords: Tobacco cessation, Cessation intervention, Tobacco use, Quit status

INTRODUCTION

India has witnessed a reduction in the prevalence of tobacco use, according to the Global Adult Tobacco Survey GATS 2 report in comparison to GATS 1.^{1,2} While, a 3.3% decline and 4.5% reduction was observed in the prevalence of smoking and smokeless form of tobacco.¹ The Tamil Nadu Tobacco Survey (TNTS) reported that 2.86 million adults (5.2%) in Tamil Nadu use tobacco.³ In a given time, 55% and 50% of smokers and chewers plan or think of quitting tobacco use.¹

Despite this, only 3-5% achieves successful quit status without professional support.⁴ This low achievement rates are attributed to the dependency on tobacco products, perceived health effects, cravings and withdrawal symptoms, availability of tobacco products and social/peer influence.⁵ However, professional support with proven cessation medications, family and social support have improved rates of successful quitting.⁵ Further, studies suggests brief advice from health professionals increases quit rates by up to 30%, while intensive advice increases the chance of quitting by 84%.⁴

By identifying the need for professional support, the Ministry of health and family welfare, Government of India established 19 tobacco cessation clinics across the country, with the help of WHO in year 2002.^{6,7} The Tobacco Cessation Clinic (TCC) in Cancer Institute (WIA), Chennai was one among those centres, established in Tamil Nadu. This study aims to evaluate the tobacco cessation intervention outcomes of a TCC placed in comprehensive cancer centre.

METHODS

The TCC in Chennai offers stage-based intervention as per the WHO guidelines, to aid quitting tobacco. The cessation services are provided at free of cost by psychologists trained in tobacco cessation. The tobacco users who seek support come either voluntarily, through advertisements/information education communication (IEC) material distributed in the community or on referral by health care professionals/clients already visiting the TCC. Totally, 171 tobacco users above the age of 18 years attended the TCC between January and December 2015. All the users were contacted by a psychologist via telephone after 6 months from their first visit for gauging the status of tobacco use (quit or not quit) and the associated challenges for quitting and reasons for not quitting. During their first visit, a structured and validated interview schedule was used for collecting details regarding socio-demographic factors, tobacco and other substance use, exposure to passive smoking, history of medical and psychiatric issues. Nicotine dependence was assessed using the Fagerstrom Test for Nicotine Dependence scale (FTND) separately for smokers with six items and smokeless tobacco users with nine items.^{8,9} Readiness to quit tobacco scale (RQTS) with 25 items was used to assess the motivational stages of readiness to change. The clients were assessed and categorized into one of the five stages as delineated by transtheoretical model namely pre-contemplation, contemplation, preparation, action and maintenance.¹⁰ Based on the level of nicotine dependence, motivational stage, and history of comorbidity, tobacco cessation interventions comprising behavioral counseling, self-help tips and nicotine replacement therapy (NRT) were provided. The tobacco cessation intervention also included a group therapy in the form of support groups (tobacco free association) conducted once a month involving current users, tobacco quitters, family members and cancer survivors.

A standard operating procedure was used for follow-up assessments. Each tobacco user was contacted maximum of three times at an interval of 30 minutes in a day. After two calls, a standardized text message was sent stating the details of the caller (TCC) and the purpose of the call. Subsequently, the tobacco user was called 30 minutes after the text message. This process was repeated again after 7 days before labelling it as an unsuccessful contact. The responses to the call were recorded in a separate sheet as no response, disconnected the call, number not reachable, number invalid, refused to share information,

busy schedule and responded to the call. Respondents who were contacted and verbally consented were briefed about the purpose of the call. A structured interview schedule consisting of 8 items related to usage status, challenges while quitting and reasons for not quitting, developed by the author and face-validated with experts in the field, was used. The telephone calls were not recorded as it might affect the response of the clients. However, the call-logs were monitored by the division head for interviewer compliance with the protocol. The data was double entered and validated using EpiData (V.3.0) and analyzed using Stata V.13.0. The quit rate, physical and psychological challenges were calculated using descriptive statistics. Chi square test was used to identify the socio demographic and tobacco use factors associated with quit status.

RESULTS

Of the 171 users enrolled in the cessation clinic, 91 (53.2%) were successfully contacted, 72 (42.1%) could not be contacted and 8 (4.6%) had expired. The mean age of the tobacco users was 37.9 years (SD=11.69). While 28.6% were referred from the departments of medical, radiation and surgery oncology at institute, 48.4% walked-in as they were motivated either by IEC materials or clients of TCC and 13.2% were referred from other hospitals. Baseline data was collected (n=91) and on follow up revealed that 65.9%, 17.6% and 16.5% were smokers, chewers and dual users. The average age at initiation of tobacco was 19.6 years (Range=7-49, SD=7.22).

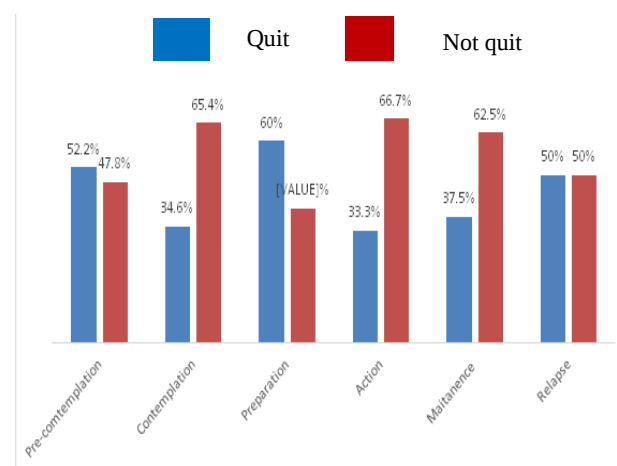


Figure 1: Quit status of tobacco users based on stages of motivational change.

The average number of cigarettes/beedi smoked and chewing tobacco dips per day was 11 and 6 respectively. Majority (91.5%) were exposed to passive smoking during or before initiating tobacco use. While 22.8% and 8.1% reported physical and psychological comorbidities at their first visit. Commonly reported reason for initiating tobacco consumption was peer pressure (66.1%), curiosity (22.2%), physical or psychological

reasons (11.7%). With regard to nicotine dependence, 34.1% had high and 26.4% had very low levels of dependence. With regard to motivational stages of change, nearly half of the clients (53.9%) were in the pre-contemplation and contemplation stages. Among the users, 26 (28.5%) had quit (abstinent for more than 6 months) and 15 (16.4%) were able to remain abstinent for less than 6 months. Of those who either quit or were abstinent, only 5 (12.1%) reported physical and 13 (31.7%) reported psychological challenges while quitting. Among those who did not quit (n=50), 86% reported psychological craving as reasons for continuing tobacco

use. The level of nicotine dependency was significantly associated with the quit rate ($p=0.014$). (Table 1)

There was a statistically significant difference in age ($\chi^2(2)=9.02$, $p<0.05$), residence ($\chi^2(1)=11.69$, $p<0.001$), income ($\chi^2(2)=6.42$, $p<0.05$) and tobacco usage ($\chi^2(2)=9.43$, $p<0.01$) between the tobacco users contacted and not contacted. However, there was no significant difference in other socio-demographic variables, reasons for consultation, referral, dependence level and motivational stage ($p>0.05$).

Table 1: Association between the socio-demographic details and quit status of tobacco users (n=91).

Parameters	Quit status of tobacco users				P value
Socio-demographic characteristics	Quit		Not quit		
	N	%	N	%	
Age in years					
15-25	5	50.0	5	50.0	0.642
26-35	25	48.1	27	51.9	
36-50	11	37.9	18	62.1	
Residence					
Urban	34	44.2	43	55.8	0.453
Rural	7	50.0	7	50.0	
Education					
No formal schooling	0	0	4	100.0	0.126
Primary	4	40.0	6	60.0	
Secondary	14	60.9	9	39.1	
Graduation and above	22	41.5	31	58.5	
Occupation					
Student	4	80.0	1	20.0	0.386
Self employed	11	47.8	12	52.2	
Retired and unemployed	2	50.0	2	50.0	
Government and private	24	40.7	35	59.3	
Marital status					
Unmarried	14	45.2	17	54.8	0.581
Married	27	45.0	33	55.0	
Type of family					
Nuclear	43	45.7	49	52.1	-
Joint family	1	1.0	1	1.0	
Religion					
Hindu	33	44.0	42	56.0	0.037
Christian	2	22.2	7	77.8	
Muslim	6	85.7	1	14.3	
Income					
1000-9000	19	45.2	23	54.8	0.409
10000-70000	17	51.5	16	48.5	
Type of tobacco used					
Smoking	26	43.4	34	56.7	0.409
Smokeless	6	37.5	10	62.5	
Both	9	60.0	6	40.0	

DISCUSSION

This study reports on short term follow-up outcomes of tobacco users enrolled for cessation in a tertiary cancer center in India. The study reported a quit rate of 28.5% at

six months, which is in line with the findings of a study among smokers in a tobacco dependence treatment clinic.¹² The later study had reported a quit rate of 33.6% at 6 months. The similar findings of these studies could be attributed to the nature of cessation clinic, wherein

both were hospital based cessation centers. However, few studies have reported higher quit rates like 51.8%.¹¹ These differences could be owed to the sample of this study, which included diabetics. Nearly half of the users walked in on their own to quit tobacco which is two times more than those who were referred by healthcare professionals in and outside the institute. This finding was in contradiction to a study by Moni et al who reported that majority were referred by physicians.¹⁴ This high rate of voluntary walk-ins in the present study could be attributed to repeated awareness programs being organized in the communities. It is widely noted that exposure to passive smoking is a major trigger for initiating tobacco. This study reports that majority of the users were exposed to passive smoking even before initiating tobacco. The GATS-India also has reported similar findings wherein nearly half of the adults in India were exposed to passive smoking at home.² Other commonly reported reasons for initiating tobacco were peer pressure/influence, curiosity, health reasons as in to manage any physical or psychological issues.

While this present study stated that majority of the users had low and medium nicotine dependence, a study in India also reported comparable finding.¹⁵ This similarity could be attributed to cultural context and usage pattern in-view of national level policies. In addition, present study has validated the association of nicotine dependence with quit rates. As literature suggested, lower nicotine dependence was consistently predictive of successful quitting in clinic and general population.¹⁴ Majority of the users in the study were in pre-contemplation and contemplation stages. This finding is in line with a study conducted among patients with oral malignant disorders wherein majority were in contemplation stage.¹⁶ These findings are suggestive that creating repeated awareness in the communities can motivate such tobacco users to seek professional help. The tobacco quitters in this study reported no major challenges after few months of quitting tobacco. Although Hughes JR has stated that quitters typically experience withdrawal symptoms for two to four weeks after quit day, it is reported that withdrawal symptoms subside with time.¹⁷ As the follow-up in this study was done at 6 months, the withdrawal symptoms might have been mitigated, eventually with time.

It should be borne in mind that though majority of subjects were contacted on follow up there was a variable distribution between of those contacted and not in terms of residential status, income levels and type of tobacco used. This study stresses the need to devise strategies to optimize follow up of study subjects.

CONCLUSION

The tobacco cessation intervention provided by trained professionals in a cancer setting is found to be highly effective as the quit and abstinent rates are higher. Follow-up at regular intervals is mandated to help

tobacco users manage cravings and withdrawal symptoms, further assist in achieving quit status. Establishing tobacco cessation services in comprehensive cancer centres will be beneficial and instrumental in reducing tobacco and related disease burden in India.

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Ethical approval: Not required

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