



Original Research Article

EFFECTIVENESS OF BEHAVIOR CHANGE COMMUNICATION ON TOBACCO CONSUMERS AT TOBACCO CESSATION CENTRE IN KURUKSHETRA

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ABSTRACT

Background: Tobacco use is the leading single preventable cause of deaths worldwide. Present study was focused on the cessation of tobacco consumption through a range of behavioural and pharmacological therapies.

Material and Methods: Prospective self-control quasi experimental study utilizing WHO 5A's and 5R's method of behavioural intervention for tobacco cessation.

Results: 150 patients were enrolled for the study. 95 participants successfully quit tobacco, 16 and 9 patients restarted before and after one month and 23 patients did not quit. 8 patients were lost to follow-up. Presence of withdrawal symptoms was significantly associated with reuse of tobacco (p-value 0.0018*).

Conclusion: WHO 5A's and 5R's method of tobacco cessation counselling was found to be effective in quitting tobacco.

Keywords: Behavioural interventions, 5A's and 5R's, STAR approach.

INTRODUCTION

Tobacco use is the leading single preventable cause of deaths worldwide with an estimated seven million deaths attributed to it.^[1] Most of these deaths were in middle and low-income nations, accounting for almost 80 percent of all tobacco related deaths.^[2] The economic costs are enormous with estimated losses of more than US\$ 1.4 trillion for health care and productivity loss of about 1.8 percent of the world's GDP.^[3] Yet tobacco remains the single most widely legally available and purchasable addictive substance. In the decade since the WHO introduced MPOWER and the monitoring of its progress began, there have been substantial advances in the adoption of strong tobacco control policies in all regions of the world and among countries of all income levels. However, 2.7 billion people still have no protection from the illness, disability and death caused by tobacco use and second-hand smoke exposure, or

from associated economic, environmental and social harms.^[4]

India is the third-largest tobacco-producing nation and second-largest consumer of tobacco worldwide. Mortality due to tobacco in India is estimated at upwards of 1.3 million.^[5] Out of these, one million are attributed to tobacco smoking, and the rest to smokeless tobacco use. One feature of tobacco related mortality in India is the high incidence of oral cancer, exceedingly even that of lung cancer and accounting for almost half of all oral cancers in the world.^[6] Smoking increases the risk of TB by more than two-and-a-half times.^[7] Smoking is also contributing in a major way to India's increasing burden of non-communicable diseases and it accounted for 13 percent of all deaths in India in 2020.^[8] According to GATS-2 (2016-17), 55% of smokers and 50% of smokeless tobacco users are planning or thinking of quitting tobacco use. However, quitting is challenging and most smokers make multiple attempts before successfully quitting.

There is significant evidence that has highlighted that both behavioral therapies and pharmacotherapy can help quit, either on their own or in combination with one another.^[9]

Behavioral interventions (BI) in tobacco cessation vary widely in their content, delivery, and availability. Typically, they focus on, informing the user, giving advice to quit, or a combination of both, using different theoretical models to achieve these aims. BIs can also range from brief advice to providing Information Education and Communication (IEC) material, to more intensive programs involving multiple counsel programs. However, most attempts are made without the aid of appropriate behavioral support. Studies focusing on tobacco cessation through behavioral therapy in the Haryana state are not available as previous studies focused largely on the prevalence and socio-demographic determinants of tobacco consumption prevalence. Only knowing the prevalence and determinants cannot lead to anywhere. So, the prime focus of the present study was on the cessation of tobacco consumption through a range of behavioral and pharmacological therapies.

MATERIAL AND METHODS

The self-control quasi experimental study among Tobacco consumers was conducted for a period of 12 months at Shahabad (M), District Kurukshetra, Haryana in an Urban Health Training Centre attached to Adesh Medical College and Hospital, Shahabad with a follow up period of 6 months post intervention. All the tobacco consumers irrespective of gender and age (smoked/smokeless) visiting TCC were included in the study after informed consent. Person having psychological instability and those on pharmacotherapy replacement therapy were excluded from the study. The approval for the study was taken from Institutional Ethics Committee. Our TCC working on Tuesday and Thursday, and approximately eight participants attend TCC in a week, thirty in one month and more than 190 participants in six months.

The study subjects enrolled were interviewed and behavioral communication therapy was done by the investigators themselves, after induction training in tobacco cessation by experts. Subjects were fully informed about the purpose of the study, written informed consent was obtained before initiating the interview and confidentiality of information was assured to the study participants. The study proforma included information on socio demographic profile including age, sex, education, occupation and marital status using a pre tested, semi-structured schedule. Socio-economic status was calculated using Modified BG Prasad scale.^[10] Questionnaire was used to assess the general Physical examination, History of tobacco use, cessation, perception, follow up.

Managing Tobacco Cessation by WHO 5 A Model and 5R Model.^[11]

Ask: Screening Question is asked to Identify and document tobacco use status

- a. Do you smoke cigarettes/use any Tobacco products?
 - b. Have you stopped tobacco in the past? Since how long?
 - If answer to any of the above was YES, then proceed for the next step
 - Participants was screened at the following Point of contact
 - OPD and referred from any other place.
 - Community based screening through awareness camps in clusters like schools, colleges.
 - Contact screening- Home visits to screen family.
 - Passive screening.
1. Advise: Health risk was discussed and tobacco user was encouraged and advised to quit in a simple, clear positive, strong and personalized manner
 2. Assess: Readiness to Quit by asking the following questions:
 3. Would you like to be a non-tobacco user?
 4. Do you think you have a chance of quitting successfully?
 - If YES, means Participants is willing to quit, cessation support to be provided.
 - If answer is NO, means Participants is not willing to quit.

1. Assist: by behavioral Change Communication

Step 1: Rapport building

Step 2: Detailed interview using TCC study proforma to document the complete profile

Step 3: Individual session by Face-to-face counseling for 15-30 minutes: Participants were facilitated to develop a QUIT PLAN-STAR APPROACH

“QUIT PLAN” using STAR APPROACH [12]

A. Set quit date within 7 days and strategy was formulated with inputs from family members.

Strategy a) Tapering off slowly: • Every day cut down on one or more cigarettes/bidis/packet. • Not extend beyond 5-7 days • Change routine. don't smoke/chew at regular tobacco using times or at regular places.

Strategy b) Abrupt and complete cessation of tobacco use • Participants advised that best evidence available is in favor of stopping altogether rather than gradually. • Advised to stay positive in attitude and approach.

B. Tell: Investigator was asked to inform family, friends and coworkers about quitting and educate about second hand smoke so as to encourage in the quit attempt as a team work.

C. Anticipate Challenges to Quit:

Participants was asked to

- Talk about the quitting process
- Draw a matrix of benefits vs harmful effects.
- Maintain tobacco use diary and record his usage.

- Identify triggers and manage by coping skills like substituting activities.
 - Identify withdrawal symptoms and follow 7D approach to prevent relapse and stay quit.
1. Drink water-8-10 glasses of water.
 2. Deep breathing exercise (10 cycle) 3times a day.
 3. Delay-increase time between each tobacco by at least 1hour.
 4. Distract-engage in favorites hobby
 5. Diet-eat health food, antioxidants, immunity booster,
 6. Discuss-share problem with spouse, friends-social support
 7. Drugs-certified tobacco cessation specialist

D) **Remove:** Tobacco products and reminders. • Session assisted by health education leaflets and audio-visual aids. • Participants were referred to psychiatry department, for pharmacotherapy if needed.

Participants Who is not willing to quit: 5R. approach^[11] to be followed.

1. Relevance- Encouraged to indicate how quitting is personally relevant.
2. Risks- Identify potential negative consequences of tobacco use that are relevant to him.
3. Rewards- Identify potentially relevant benefits of stopping tobacco use.
4. Roadblocks- Identify barriers to quitting and problem-solving counseling provided.
5. Repetition- Reassess readiness to quit; If still not ready, end positively with an invitation to return if they change their minds at a later date.

5)Arrange for Follow Up

Follow-up schedule with team approach: investigators with family and friends-

- F-1 (3rd day) • F-2(7th day) • F-3(1 month) • F-4(3 months) • F-5(6 months)

Participants were greeted and asked for their well-being and the following questions.

- Withdrawal symptoms: accordingly advised to avoid relapse by following 7D Approach.
- Current tobacco use status.
- Praised and reinforced positively for a successful attempt
- Categorize Outcome Categories (self-reporting):
- STQ- Staying quit but less than a month
- SQ- Successful quitting (Staying quit for over a month)
- Relapse- After a SQ (1 month)
- FTQ- Failed to quit (After first 2 follow-ups- 3rd & 7th Day)
- NR/loss to follow up-No response not attending 2 telephonic calls on subsequent follow-up (if participants return on any follow up then categorized as per current status)
- No of Quit attempts (at least 24 hrs.)
- Percentage reduction of consumption in a day.
- Reduction of expenditure on tobacco per month
- Switching to any other tobacco products
- Time since last cigarette.
- 7-day abstinence

*Educational messages (every week) and reminders for follow up sessions (3 days prior to the scheduled follow up session) given by SMS. In-between F3-F4 -F5 sessions, monthly calls made to document tobacco status and motivate the participants accordingly.

RESULTS

The total number of patients enrolled in the study were 150 in number. Eight patients with exclusion criteria. The major components of patients were from Majri, Siklyghar, Deha Basti, Zimer Basti and Indra Colony

Table 1: Demographic variables of Study Participants

Variables		Female(n=11); n (%)	Male(n=139); n (%)	Total (n=150); n(%)
1. Marital Status	Married	11(100)	131(94.2)	142(94.7)
	Unmarried	0(0)	8(5.8)	8(5.3)
2. Age	<21	0(0)	8(5.8)	8(5.3)
	21-30	2(18.2)	32(23)	34(22.7)
	31-40	2(18.2)	38(27.3)	40(26.7)
	41-50	1(9.1)	36(25.9)	37(24.7)
	51-60	0(0)	12(8.6)	12(8)
	61-70	5(45.5)	9(6.5)	14(9.3)
	71-80	0(0)	4(2.9)	4(2.7)
	81-90	1(9.1)	0(0)	1(0.7)
3. Social class	General	0(0)	17(12.2)	17(11.3)
	BC	1(18.2)	54(38.8)	56(37.3)
	SC	4(45.2)	53(38.1)	58(38.7)
	ST	4(36.4)	15(10.8)	19(12.7)
4. Occupation	Labourer	2(36.4)	80(57.6)	84(56.0)
	Pvt Job	0(0)	24(17.3)	24(16.0)
	Shopkeeper	0(0)	21(15.1)	21(14.0)
	Homemaker	7(63.6)	0(0)	7(4.7)
	Farmer	0(0)	6(4.3)	6(4.0)
	Govt Job	0(0)	1(0.7)	1(0.7)
	Security Guard	0(0)	1(0.7)	1(0.7)
	Student	0(0)	1(0.7)	1(0.7)

	Unemployed	0(0)	5(3.6)	5(3.3)
5. Education	Illiterate	7((63.6)	27(19.4)	34(22.7)
	Primary	4(36.4)	23(16.5)	27(18.0)
	Middle	0(0)	65(46.8)	65(43.3)
	Secondary	0(0)	21(15.1)	21(14.0)
	Graduate	0(0)	3(2.2)	3(2.0)
6. Socio-economic class	II	0(0)	5(3.6)	5(3.3)
	III	0(0)	40(28.8)	40(26.7)
	IV	6(54.5)	94(67.6)	100(66.7)
	V	5(45.5)	0(0)	5(3.3)

Table 2: Tobacco Abuse in Participants

Tobacco Abuse			Light use; n=96; n (%)	Heavy use; n=79; n (%)	Total; n=175; n (%)	
1. Smoked Tobacco	Biddi		57(59.4)	66(83.5)	123(70.3)	
	Biddi + Cigarette		0(0)	3(3.8)	3(1.7)	
	Cigarette		6(6.3)	0(0)	6(3.4)	
	Hukka (7-8 times/day)		0(0)	5(6.3)	5(2.9)	
2. Smokeless Tobacco	Anshul (Smokeless)		23(24.0)	5(6.3)	28(16.0)	
	Shikhar		5(5.2)	0(0)	5(2.9)	
	Kulip		3(3.1)	0(0)	3(1.7)	
	Udta Panshi		2(2.1)	0(0)	2(1.1)	
Duration of use (Years)		1-5; n=21; n (%)	6-10; n=111; n (%)	11-15; n=14; n (%)	>15; n=29; n (%)	Total; n=175; n (%)
4. Smoked Tobacco	Biddi – Unbranded	16(76.2)	78(70.3)	9(64.3)	20(69.0)	123(70.3)
	Biddi + Cigarette	0(0)	3(2.7)	0(0)	0(0)	3(1.7)
	Cigarette	3(14.3)	3(2.7)	0(0)	0(0)	6(3.4)
	Hukka (7-8 times/day)	0(0)	5(4.5)	0(0)	0(0)	5(2.9)
	Anshul					
	Kulip	0(0)	19(17.1)	0(0)	9(31.0)	28(16.0)
	Shikhar	2(9.5)	1(0.9)	0(0)	0(0)	3(1.7)
	Udta Panshi	0(0)	0(0)	5(35.7)	0(0)	5(2.9)
		0(0)	2(1.8)	0(0)	0(0)	2(1.1)

Note: - Percentage does not match due to multiple option.

Table 3: Behavior Intervention Effects on Tobacco use

OUTCOME	Day 7	1 month	3 months	6 months	Final Outcome
Lost to follow up	7	8	8	8	NR - 08
No Change	19	25	28	25	FTQ - 23
Quit	111	106	103	95	SQ - 95
Reduced	13	11	11	14	STQ - 16
Relapse	-	-	-	8	Relapse -08

Table 4: Patient Variable vs Behavior Outcomes

Variables		FTQ; n=23; n (%)	STQ; n=16; n (%)	Relapse; n=8; n (%)	SQ; n=95; n (%)	Total; n=142; n (%)	p-value
1. Age	<21	2(8.7)	0(0)	0(0)	6(6.3)	8(5.6)	0.53
	21-30	6(26.1)	3(18.8)	1(12.5)	23(24.2)	33(23.2)	
	31-40	7(30.4)	8(50.0)	3(37.5)	20(21.0)	38(27.8)	
	41-50	2(8.7)	5(31.3)	2(25)	24(25.3)	33(23.2)	
	51-60	1(4.3)	0(0)	1(12.5)	9(9.5)	11(7.8)	
	61-70	5(21.7)	0(0)	1(12.5)	8(8.4)	14(9.9)	
	71-80	0(0)	0(0.9)	0(0)	4(4.2)	4(2.8)	
	81-90	0(0)	0(0.9)	0(0)	1(1.1)	1(0.7)	
2. Gender	F	2(8.7)	0(0)	0(0.9)	6(6.3)	8(5.6)	0.59
	M	21(91.3)	16(100)	8(100)	89(93.7)	134(94.4)	
Variables		FTQ; n=18; n (%)	STQ; n=15; n (%)	Relapse; n=8; n (%)	SQ; n=83; n (%)	Total; n=137; n (%)	p-value
3. Smoked Tobacco	Biddi	17(94.4)	13(86.7)	7(87.5)	73(88.0)	123(89.8)	0.17
	Biddi + Cigarette	0(0)	2(13.3)	0(0)	1(1.2)	3(2.2)	
	Cigarette	1(5.6)	0(0)	1(12.5)	4(4.8)	6(4.4)	
	Hukka	0(0)	0(0)	0(0)	5(6.0)	5(3.7)	
Variables		FTQ; n=7; n (%)	STQ; n=3; n (%)	Relapse; n=2; n (%)	SQ; n=26; n (%)	Total; n=38; n (%)	p-value
4. Smoke-less	Anshul	6(85.7)	3(100)	0(0)	19(73.1)	28(73.7)	0.08

Tobacco	Kulip	0(0.9)	0(0)	1(50)	2(7.7)	3(7.9)	
	Shikhar	0(0.9)	0(0)	0(0)	5(19.2)	5(13.2)	
	Udta Panshi	1(14.3)	0(0)	1(50.0)	0(0.9)	2(5.3)	
Variables		FTQ; n=23; n (%)	STQ; n=8; n (%)	Relapse; n=3; n (%)	SQ	Total; n=34; n (%)	p-value
5. Relapse Reason	Craving	9(39.1)	2(25.0)	2(66.7)	-	13(38.2)	0.78
	Insomnia	4(17.4)	2(25.0)	0(0)	-	6(17.7)	
	Irritability	3(13.0)	3(37.5)	1(33.3)	-	7(20.6)	
	Stress	3(13.0)	0(0.9)	0(0)	-	3(8.8)	
	Unable to concentrate	4(17.4)	1(12.5)	0(0)	-	5(14.7)	
Variables		FTQ; n=23; n (%)	STQ; n=16; n (%)	Relapse; n=8; n (%)	SQ; n=95; n (%)	Total; n=142; n (%)	p-value
6. Withdrawal Symptoms	Yes	20(87.0)	9(56.3)	3(37.5)	41(43.2)	73(51.4)	0.0018*
	No	3(13.0)	7(43.7)	5(62.5)	54(56.8)	69(48.6)	

Table (1) reveals that most participants with various educational statuses had family incomes below 10000 rupees, some exceeding 20000 rupees. With a total of 142 participants fell into socio-economic classes 3 and 4.

Table (2) study reveals a prevalence of bidi smoking among the majority of participants 123 out of 142(86.6%), with a notable subset engaging in dual tobacco consumption. The bidi smokers showed a varied duration of use, with 6 to 10 years being predominant. Additionally, 38 out of 142 (26.8%) reported using chewed tobacco, with Anshul being the most common brand. The findings emphasize the diverse patterns and durations of tobacco use within the studied population.

Table (3) shows that in the follow-up period, after 7 days, 111 participants quit, 13 reduced tobacco use, 19 showed no change, and seven were lost to follow-up. At 1 month, quit participants decreased to 106, those reducing tobacco use were 11, and 25 showed either equivalent or increased usage. After 3 months, 103 quit, 28 showed no change, and there was no change in those reducing tobacco use. At the 6-month mark, 95 participants out of 142 (66.9%) successfully quit, 23 out of 142 (16.1%) couldn't quit, and 16 out of 142 (11.3%) stayed quit for less than a month. Despite relapse or short-term success, 14 participants reported decreased usage, showcasing counselling's positive impact.

In Table (4) population characteristics and variables were evaluated against the quit pattern of the persons and any significance with the outcomes were noted, six out of eight female participants successfully quit tobacco, showing gender had no significant influence on outcomes (p=0.59). Similarly, age groups displayed no significant differences (p=0.53). While bidi users exhibited a higher quit rate for smoked tobacco, it didn't reach significance (p=0.17), and smokeless tobacco type showed no impact (p=0.11). Reasons for relapse didn't affect outcomes (p=0.78), but withdrawal symptoms significantly differed between successful quitters and those who failed (p=0.0018).

DISCUSSION

The present study was done in the area of Shahabad in the Ambala district of Haryana state to evaluate for the pattern of tobacco use and the effectiveness of behavioral change communication utilizing the WHO's model of 5A's and 5R's model on tobacco secession. A total of 162 patients were evaluated. 12 patients excluded due to exclusion criteria, refusal of consent or incomplete evaluation process. Finally, a total of 150 participants were included out of which 11 were females and 139 were male participants. The study was comparable to the previous studies by **Kumbhalwar et al** [13] with two hundred participants, and **Basu et al** [14] with 159 participants. **Soulakova et al** [15] with 7195 smokers and **Alanazi et al** [16] with 511 participants had much higher sample size but were essentially surveys. **Kumbhalwar et al** [13] also had similar gender ratio compared to our study. Ten male participants were unmarried and the rest were all married. In contrast, **Alanazi et al** [16] had one third female gender in their study and had equal numbers of married and unmarried population. **Shoosmith et al** [17] had approximately equal participants from both genders.

In the population demographics, the majority of participants were noted in the age group of 21 to 50 years with a total of 101 participants (74.1%). Only eight participants (5.3%) were from the age group of less than 20 years and only five participants had age more than 80 years (3.4%). The mean age of the participants were 41.0 ± 14.7 years in our study, comparable to the 44.5 ± 14.3 years in the study by **Basu et al**. [14] In comparison, **Kumbhalwar et al** [13] reported much younger population with 36.6 ± 8.38 years and 27.25 ± 11.35 years in study and control groups in their RCT. Majority of participants belonged to schedule castes or backward castes with a total of 58 (38.7%) and 56 (37.3%) participants respectively. The schedule tribe and general category participants were only 19 and 17 participants respectively. An overwhelming majority

were from Hindu faith with 142 participants or 94.7%. The occupation of the tobacco users on evaluation revealed a majority of 54 (56%) participants being unskilled labourers. 46 tobacco users (30.7%) were in semi-skilled jobs, five participants (3.3%) were unemployed, six participants (4%) were farmers and seven (4.7%) female tobacco users were homemakers. 22.7% or 34 participants were illiterate. Similar ratios were noted in study by **Kumbhalwar et al** ^[13] and **Alanazi et al.** ^[16] A majority of 92 tobacco users (61.3%) had only graduated till primary or middle school. 21 participants (14%) had passed secondary school and only three participants (2%) were graduates. In contrast both **Kumbhalwar et al** ^[13] and **Alanazi et al** ^[16] had higher participants with secondary, graduates and post-graduates.

In our study, corresponding to the educational status, a majority of 96 tobacco users or 64% participants had family income less than 10000 rupees. Only 22 participants or approximately 14.7% of the population had incomes beyond rupees 20000. Socio-economically majority of participants were in social economic class 3 and 4 with a total of 142 participants or 94.7% population.

An overwhelming majority of 123 participants out of 142 (86.6%) were predominantly smoked unbranded or branded bidis. Three participants (2.1%) admitted smoking both bidis and cigarettes, six participants (4.2%) smoked cigarettes exclusively and five participants (3.5%) were hookah smokers. The majority of smoked tobacco users in the bidi group did not specify any brand. The duration of smoked tobacco use was found to be 6 to 10 years in a maximum of 89 participants. 19 participants admitted smoking for less than 5 years followed by 20 participants smoking for 16 to 20 years. In the other type of tobacco usage, a total of 38 participants out of 142 or 26.8% participants admitted using chewed tobacco. The commonest brand used was Anshul tobacco in 28 participants of 19.7% of the cohort followed by five participants using Shikhar brand. The duration of tobacco usage was between one year to 20 years. The maximum smokeless tobacco users were chewing tobacco for last 6 to 10 years (22 users or 15.5%) followed by nine users (6.4%) with duration of 16 to 20 years. The biggest cohort of smokeless tobacco use was of 19 participants (13.4%) using Anshul tobacco for last 6 to 10 years.

When the participants were followed up at 7 days, 111 participants had quit and 13 participants had reduced tobacco use. 19 participants showed no change and seven participants were lost to follow up at this stage. After 1 month, the quit participants numbers reduced to 106 and participants who are reduced tobacco usage were at 11. The participants

who had quit tobacco but restarted within one month were categorized in STQ group. 25 participants showed tobacco usage either equivalent to or increased than the start of intervention. Eight participants were lost to follow up by 1 month. After 3 months, the quit participants numbers reduced to 103 and number of no change participants increased to 28. However, there was no change in number of participants who reduced tobacco usage. The participants who restarted tobacco use after one month were categorized in relapse group.

At the end of the study after 6 months, 95 participants out of 142 (66.9%) had successfully quit tobacco usage, 23 participants (16.2%) were found to be unable to quit tobacco, 16 participants (11.3%) staying quit for less than 1 month followed by eight participants either lost to follow up or relapsing after 1 month. However, it was noted that even in study population with relapse or staying quit for less than one month, 14 participants reported decreased usage out of a total of 24 participants representing a win for the counselling process. Our reported success rate was comparatively much higher than that reported by **Kumbhalwar et al** ^[13] who had only 26% abstinence at 6 months. **Boyle et al.** ^[18] (quit rate at 16.6% in manual only and 45.3% in telephone counselling groups) and **Masouredis et al.** ^[19] (24% quit rate) also reported much lower success at three months in comparison to our study.

The population characteristics and variables were evaluated against the quit pattern of the persons and any significance with the outcomes were noted. Out of total of eight female participants six had successfully quit tobacco use and two failed to do that. However, the comparison of gender with counselling outcomes revealed no significance with a p-value of 0.59. Similarly, comparison of outcomes for different age groups revealed no significant difference (p-value 0.53). The type of smoked tobacco usage when compared with outcomes revealed increased percentage of quitting among bidi users, however, the results did not reach significance with p value of 0.17. The type of smokeless tobacco usage also did not affect the outcomes with p-value of 0.11. The reasons given for relapse by the participants also did not affect the study outcomes (p-value 0.78). However, withdrawal symptoms reported by tobacco users were predominantly much higher in the failure to quit group as compared to successful quitters. Here the p-value was found to be highly significant at 0.0018.

CONCLUSION

The WHO 5A's and 5R's method of tobacco cessation counselling was found to be effective in

quitting tobacco in a significant proportion of smokers and smokeless tobacco use in tobacco abusing population in Shahabad, Haryana and hence is recommended for adoption for wider use.

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