

Developing Infrastructure for Tobacco Cessation in India through Dental Task Force

Kunal Oswal and Ashok Dhoble

Indian Dental Association, Mumbai, India

Abstract

Background: Tobacco use remains the world's leading preventable cause of premature morbidity and mortality. In every nook and corner of a street of India today you have many tobacco selling vendors both smoke and smokeless forms which makes it easily accessible to tobacco consumers to have it. Tobacco industries have been marketing their product strategically targeting specifically to women's, youth, adults and special vulnerable groups. In comparison to the tobacco selling outlets there was lack of tobacco cessation centers in India.

Methodology: The tobacco intervention initiative was launched in 2009 by Indian dental association (IDA). Post its launch those dentists interested in cessation from all over the country were trained. A special two day programme was planned. A website was also developed serving as a resource for the patients, dentist and dental students. Brief interventions, self-help materials, and nicotine replacement therapy for established nicotine dependence form the mainstay of therapy which is made available through a specially designed tool-kit. A web based resource is also provided to the dentist. Dentists are trained to document all the information obtained during one on one counselling and subsequent follow-up.

Results: Till date about 1036 dentists across the country has already being trained and they are actively practicing tobacco cessation in their clinics. Also these dentists are master's trainers, as they provide further training to newer graduates and dentists.

Conclusions: In the last 5 years the number of dentists enrolling for such programs was on the rise. Such initiative by IDA has definitely assisted a lot of patients to relinquish this routine. The task ahead is to maximize this potential of dentist and make such centre more easily available to the patients.

Keywords: Tobacco cessation; Dental professional; Training and capacity building

Background

There are an estimated 1.1 billion smokers worldwide with India accounting for 182 million (16.6%) [1-4] and, as per the latest Global Adult Tobacco survey, the number of tobacco users are 275 million (15 years and above) [5]. Further if the focus is only on prevention of initiation of tobacco use and not cessation, by 2050 the result will be an additional 160 million deaths among smokers. Hence it is to ensure that tobacco cessation forms an essential component to reduce the mortality and morbidity related to tobacco use [6].

Tobacco cessation will provide the most immediate benefits of tobacco control and maximize the advantage for a habitué motivated to quit the habit. It has been established that a majority of smokers (70%) desire to quit, 30% actually attempt each year, and only 3%-5% actually succeed in quitting [7].

Cost-effectiveness analyses have demonstrated that smoking cessation treatment compares favourably with routine medical interventions such as the treatment of hypertension or hypercholesterolemia or preventive interventions [8].

Despite increasing awareness of the harmful effects of tobacco, smoking continues to be a significant health risk factor [9]. Studies have demonstrated that a brief physician-delivered intervention (as brief as three minutes) for smoking cessation in primary care setting, significantly increases the patients' smoking cessation rates [10]. Smoking cessation benefits men and women at any age with the health benefits immediate and substantial. Immediate benefits include a decline in carbon monoxide levels in the blood, returning of pulse rate and blood pressure to normal levels and improvements in the sense of taste and smell [11]. In addition, personal benefits of smoking cessation

include improved health, better self-esteem, lower level of perceived stress, good examples for the children, healthier babies, money savings and freedom from addiction.

The first treatment approaches to smoking cessation that emerged in the 1950s and 1960s were based principally on behaviour modification. 1970s saw a greater emphasis on cognitive treatments, which achieved greater momentum in the 1980s. The 1990s witnessed the introduction of several pharmacological strategies for nicotine cessation and the emergence of guidelines for tobacco cessation from various organizations. There is a general consensus that behavioural methods and pharmacotherapy can contribute substantially to improved health by enabling cessation of tobacco use [6].

Strategies for Cessation: Evidence-Based

Tobacco cessation guidance/service as a primary health care service

Integrating tobacco cessation into primary healthcare and routine

***Corresponding authors:** DDr. Kunal C Oswal, G-14, Raval Chambers, Aai Mai Merwanji Lane, Parel, Mumbai- 400012, India, Tel: +91 9930011149; E-mail: oswal.kunal@gmail.com

Dr. Ashok Dhoble, Hon Secretary (HO) Indian Dental Association, Mumbai, India, Tel: 9820094499, E-mail: ashokdhoble@ida.org.in

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medical visits provides an opportunity to remind users of the hazards of tobacco use. It helps to mobilize health professionals and workers on the issue of tobacco control. Doctors, nurses, midwives, dentists, pharmacists, psychologists and counsellors can be mobilized to help people change their behaviour. Repeated visits help to reinforce the message and advice from health practitioners increases abstinence rates. It is also an extremely low cost method as it makes use of existing service primarily involving basic training on cessation counselling and information materials [12].

Easily accessible help lines: Toll-free phone numbers manned by informed staff can increase the outreach programme for tobacco cessation. These are easy to operate, low-cost, maintain confidentiality and provide round the clock services. Helplines linked with counselling services are most effective as callers can be followed up for progress. Helplines can also be tailored for target audiences. For example, UK's Asian Quit line gets 20,000 calls every year and reaches 10% of all South Asian tobacco users in the country. Countries like the USA and Australia have successfully implemented quit line programme across the country. Similar use of information technology is likely to help some sections of tobacco users in India. The major problem may be the multi-cultural communities and people with different languages in the same region.

Access to low-cost pharmacological therapy: Nicotine replacement therapy (NRT) in the form of patches, gums, lozenges, inhalers, and sprays are effective in tobacco cessation programme. Nicotine replacement therapy is said to double quitting rates [13]. Some countries like Australia have NRT at subsidized rates. Although nicotine patches were introduced in different parts of India, the costs have limited the acceptance of this form of treatment. Alternatives like nicotine gum, lozenges have recently been launched in the market. It can prove to be a cost effective medium as the price for the gum use per day equates to the cost of the daily habit.

Community based interventions: In developing countries like India, government and NGO personnel like Anganwadi workers, association of social and health advancement (ASHA), self-help group members, social workers and peer educators can be trained in cessation and sensitize individuals and prepare tobacco users for quitting the tobacco habit.

Worksite interventions: Cessation counselling by human resource and healthcare professionals can be effective in the corporate sector. There are less chances of dropouts as the clients are regular employees.

Clinic/Hospital based interventions: Cessation guidance at these centres is effective for people who have been unable to quit at community or workplace settings. Clinicians enjoy an advantage as their advice is generally taken seriously. In addition, easy accessibility to medications is available. However, clinical therapy has a major disadvantage of people not wanting to visit the clinic due to fear of stigma and discrimination.

Indian Scenario for Tobacco Cessation

Cessation in Indian settings needs a multi-sectoral approach. It must include preventive, curative and rehabilitative care. In India, clinical settings are few in number with a smaller number of trained professionals. Availability and affordability of medication required for cessation is also a severe constraint. It is important to therefore mainstream tobacco control into existing government programmes for greater outreach. Cessation services should also involve NGOs and local community-based organizations who can bring in non-clinical, behavioural methods of counselling to Indian grassroots level settings.

Quit Attempt and Health Professional Advice	Overall (%)	Male (%)	Female (%)	Urban (%)	Rural (%)
Smokers who made quit attempts in last 12 months	38.4	38.3	38.9	38.7	38.2
Smokers who were advised by health professional	46.3	47.3	38.9	50.6	44.9
Smokeless users who made quit attempts in last 12 months	35.4	38.8	29	37	35
Smokeless users who were advised by health professional	26.7	28.1	24.5	31.9	25.3

Table 1: Reported quitting by smokers and smokeless tobacco users and Health Professional Advice for Cessation as per the GATS Report 2010 [5].

The Ministry of Health and Family Welfare, Government of India, under the proposed National Tobacco Control Programme currently has 19 tobacco cessation centers (TCCs) in diverse settings across India. These centers function under the District Tobacco Control Cell and comprise cancer treatment centers, psychiatric centers, medical colleges and NGOs. Table 1 describes the overall quit attempt made by smokers and smokeless tobacco users across gender and locations.

The Indian Dental Association (IDA) as India's leading advocate of oral health aims for a "tobacco free India". This made the Association embark upon the tobacco intervention initiative (TII)-which takes dentistry as a profession and community service to a new level. TII strives for a "Tobacco Free India" by Counselling public to quit smoking and consumption of smokeless or chewing tobacco, through certified clinics engaged in tobacco intervention.

TII is a professionally-led "call to action" programme to eradicate tobacco addiction while striving for a 'Tobacco Free India' and thus improving the oral health of Indians. Tobacco smoking and consumption of smokeless or chewing tobacco affects the lives of billions of persons, posing an enormous public health challenge in its complexity, scale and impact, both at an individual and nation-wide level.

TII aims to establish a broad alliance of key influencers and policy makers from research, education, clinical practice, public health, government and industry, partnering in a common goal to effect fundamental changes in health systems and individual behaviour to achieve the goal of optimal oral health. Therefore, TII strives for a "Tobacco Free India" by helping patients quit smoking and consumption of smokeless or chewing tobacco, through certified dental clinics engaged in tobacco intervention. These clinics form the supportive infrastructure of the initiative for tobacco cessation (Figure 1).

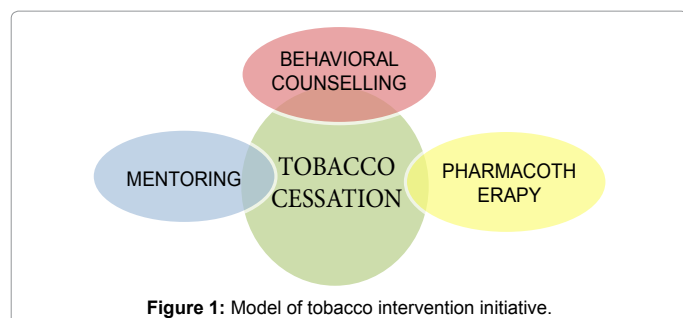
Infrastructure and planning of TII

Staff required

- TII trained professional dentists
- Administrative staff
- Computer opera
- Assistant helpers

TII tool kit

- Technique manual kit
- Patient Education CD and brochure
- A poster on patient education



State	Dentists Trained (n)	Patients Counseled (n)	Quit tobacco habit (n)
Andhra Pradesh	11	1292	130
Assam	31	529	46
Bihar	40	1994	119
Chhattisgarh	1	0	0
Delhi	60	1263	140
Goa	2	100	5
Gujarat	101	1967	174
Haryana	22	252	15
Jammu & Kashmir	1	60	11
Jharkhand	21	1315	57
Karnataka	124	4280	212
Kerala	32	872	173
Madhya Pradesh	150	8862	1358
Maharashtra	174	2825	220
Orissa	3	10	4
Punjab	24	100	8
Rajasthan	35	983	79
Tamil Nadu	15	689	74
Uttar Pradesh	170	3421	577
Uttarakhand	3	15	4
West Bengal	8	570	86
Chandigarh	8	0	0
Daman & Diu	2	0	0
TOTAL	1036	31399	3492 (11%)

Table 2: State wise distribution of TII clinics and patients quitting.

-Certificate and plaque

Budget allocation

-Estimated budget

-Time frame for completion period

-Phase wise Budget utilization, monitoring and evaluation

Counselling

It provides expertise in quit tobacco counselling for ensuring the patients with the necessary psychological support required before quitting and during the process. The counsellor will also speak with the family members of the patient to help them understand the withdrawal symptoms and positively support him/her for that. A fixed time slot will be allotted for the counsellor to speak with the patients to make it organized. The time slot will be at the convenience of the patients and the Counsellor. Counselling session will be provided once every month for 6 months. Different tobacco products used in India, prevalence of tobacco use, the ill-effects of tobacco, the harmful effects of second hand smoke, education on relapse prevention and different strategies to cope with triggers are used.

De-addiction sessions

These sessions will comprise:

- Educating about the health effects of tobacco use
- Motivation and training on how to quit
- Coping strategies of triggers

This will help the individuals understand the severity of addiction and will inculcate in them skills to quite tobacco. Individuals are often unaware and not well equipped with the process of quitting; their determination may not help them to quit the addiction successfully. Hence awareness regarding the marketing strategies of the tobacco industry will be an eye-opener and indicate the victimization through these strategies, at the cost of their health and quality of life.

Pharmacotherapy

Given the difficulties faced by people attempting to stop tobacco use, medical treatments have been developed to help them by lessening the intensity of withdrawal symptoms. Necessary medications required during the process of quitting will be made available at registered TII clinics. Patients who would benefit most from pharmacotherapy are those who have attempted to quit several times without success or those who suffer from chronic depression. These include: Nicotine Replacement Therapy (NRT) which include Nicotine gum (available in India in 4 mg nicotine pieces: *Gutkha* or mint flavor), Nicotine patch, Nicotine inhaler, Nicotine nasal spray, Nicotine lozenges. A fixed time slot for the distribution of medication will be implemented and patients will be asked to pay for the pharmacotherapy. Patients will also be educated about the use of medication, dosage, duration and any side effects.

Mentoring

Each patient will be followed up with a weekly motivational message. Messages will be addressed to both the groups.

The tobacco intervention initiative was launched in 2009 by the IDA. Post its launch, those dentists interested in cessation were trained from all over the country. A special two day programme was planned. A website was also developed serving as a resource for the patients, dentists and dental students. A step by step guide is in place to assist the dentists with tobacco cessation.

Brief interventions, self-help materials, and nicotine replacement therapy for established nicotine dependence form the mainstay of therapy which is made available through a specially designed tool-kit. A web based resource is also provided to the dentists. Dentists are trained to document all the information obtained during one on one counselling and subsequent follow-up.

Results/Outcomes

Till date, about 1036 dentists across the country have already been trained and they are actively practicing tobacco cessation in their clinics. Also these dentists are master trainers, as they provide further training to newer graduates and dentists. The dental professionals who have successfully completed the training are competent to certify their clinics as Tobacco Cessation Clinics approved by IDA. The quit ratio for smoking is 13 percent, i.e. about one in every eight ever daily smokers have completely stopped smoking as per the Global Adult Tobacco Survey 20105. The result from the Table 2 shows that the TII initiative is closely linked with the national quit rate. Geographically

there is widespread variation in number of dentist undertaking tobacco cessation training and implementing in the dental practice (Table 2).

Ongoing follow up

Most of the users or health professionals do not place emphasis on the follow up. Abstinence from tobacco use during the first two weeks with adequate follow up is essential to achieve long term abstinence. A telephonic follow up or visit should be encouraged for the tobacco users who have quit recently (less than 1 week).

Resource center

The centre will act as the information source focusing on tobacco and its effects on health and quality of life. The centre will have posters, pamphlets, fact sheets, self-help materials, especially individually tailored materials, one page notes, booklets and additional sources of information to be circulated within the community.

This information will be upgraded every six months and new materials and latest information will be provided. Display board with testimonials of success stories of quitters which, in turn, will motivate other users to quit will be installed. Also an e learning newsletter is send to all the registered TII members to disseminate information on latest development on tobacco cessation and policy initiative by the government.

Conclusions

In the past 5 years the number of dentists enrolling for TII has increased. Such an initiative by IDA has definitely assisted a lot of patients to relinquish this regular habit. The task ahead is to maximize this potential of dentists and make such centres more easily available to the patients across urban and rural location in India.

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