



Strategies for Tobacco Cessation

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ABSTRACT

Tobacco is the major cause of oral and other type of carcinoma. Tobacco also causes a wide range of conditions affecting all the body organs. It is also identified as major risk factors for many oral disorders comprising from simple staining of teeth to deadly oral cancer. Dental personnel has a unique opportunity in providing tobacco control activities by recognizing the early abnormal change in routine clinical examination via repeated oral check-up as part of their provision of ongoing oral healthcare.

Keywords: Counseling, Dental personnel, Smoking, Strategies, Tobacco

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INTRODUCTION

Tobacco is the major cause of oral and other type of carcinoma; such carcinoma may lead to death in productive age of individual.¹ Tobacco use is a disease of addiction and a behavior choice, its control is both a public health concern and individual health maintenance.²

India's tobacco issue is difficult with significant affliction of tobacco-associated disease and death. Problem of tobacco-related disease and death is extensive in India. India is second largest producer and consumer of tobacco. These make a greater necessity to study the tobacco control program.¹

The World Oral Health Report 2003 points out that "All health providers must be involved (in treatment of tobacco dependence), including oral health professionals who, in many countries, reach a large proportion of the healthy population."³

This literature review focuses on various strategies which can be used by the dental surgeon in tobacco habit cessation.

COUNSELING

The approach in helping patients to quit tobacco and guiding them toward habit cessation by any health professional is termed as counseling. The tobacco user's self-image and socialization behavior should be assessed based on the stages of behavioral changes theory to accommodate the new self-awareness of a smoke-free person rather than expecting an immediate, radical change in that individual. The clinician must also address the patient's fear about the withdrawal symptoms.⁴

The three components of effective counseling and behavioral therapies are:⁵

- i. Practical counseling includes identification of events, internal states, or activities that increase the risk of smoking or relapse, and practice coping of problem solving skills, providing basic information about smoking and successful quitting.
- ii. Intra-treatment social support by encouraging the patient in the quit attempt, communicating the patient with care and concern, and encourage the patient to talk about quitting process.
- iii. Extra-treatment social support by training patient in support solicitation from family, friends, and coworkers; prompting support seeking and clinician arranging outside support.

RATIONALE FOR TOBACCO CESSATION COUNSELING (TCC) BY DENTAL PERSONNEL

The commitment of the dental team plays a major role in the primary or the secondary prevention of

tobacco addiction, and is important to achieve success in helping patient quit tobacco.⁶

Dental treatment often necessitates multiple visits, providing a mechanism for initiation, reinforcement, and support of tobacco cessation activities by the same individual.^{7,8} The very early effects of tobacco use manifested in the mouth can be used as a tool to educate the patient without any other aid.⁹ Dental patients are particularly receptive, teachable moment, to health messages at periodic check-ups, and oral effects of tobacco use provide visible evidence and a strong motivation for tobacco users to quit.¹⁰

Involving dental personnel takes holistic approach in number of ways: As role models by not smoking; in primary care prevention and cancer detection in their practices;¹¹ in counseling patients not to smoke; in referring patients to smoking cessation services;¹² in speaking out publicly; and lobbying for comprehensive public policies to control tobacco use. Thus, the involvements of oral health professionals in tobacco use cessation help contribute to wider tobacco control strategies.¹³

Strategies for tobacco cessation counseling at individual level in dental office

It starts with routine screening for tobacco use. Identification of tobacco use by the dental surgeon itself increases the rates of dental personnel intervention.¹⁴ Dentist who recognizes a patient as a tobacco user has a duty to inform the patient of the options available to them.¹²

Effective identification of tobacco use status opened the door for successful interventions. Tobacco use status and willingness to quit can also be explored at this stage. Patients, who have not used tobacco in any form, should be complimented and encouraged never to begin. As for tobacco users, a quick assessment should be made of each patients current habit and aspire them to quit tobacco use. Patients who use tobacco should be advised of the effects of tobacco on general health and on oral health and educate them regarding the oral health that has improved following tobacco cessation with the help of pre and post cessation photograph.¹⁵

Simple, tailored questioning, advice, and follow-up support are all required to help patients successfully stop tobacco.¹⁶ Treatments involving person-to-person contact are consistently effective, and also the effectiveness increases with treatment intensity.¹⁴ Strong dose-response relationship is also seen between the intensity of tobacco dependence counseling and its effectiveness.¹⁷ Different levels of addiction are treated differently. Clinical and epidemiological studies have indicated

high success rate in more intense therapies and that mild smokers may not need such intensive therapies.

BRIEF BEHAVIORAL INTERVENTIONS

Brief intervention for few min can move patients through various stages of change.¹⁵ Interventions as brief as 3 min can increase cessation rates significantly.¹⁷ A brief intervention using available resources on the various effects of tobacco use (e.g., tooth discoloration), was effective in educating tobacco users who were not prepared to quit. Method of utilizing visually seen effects for education is distinctive to the dental setting that can function independently of medical facilities as a health resource in providing intervention for tobacco users.¹⁸

Brief advice against smoking as defined by the Cochrane Tobacco Addiction Group as “verbal instructions to stop smoking with or without the added information about the harmful effects of smoking” has been shown to increase the rates of smoking cessation in a general population.¹⁹

Brief interventions can be used with 3 types of patients:¹⁷

1. Current tobacco users now willing to make a quit attempt;
2. Current tobacco users unwilling to make a quit attempt at this time; and
3. Former tobacco users who have recently quit.

CURRENT TOBACCO USERS NOW WILLING TO MAKE A QUIT ATTEMPT

The strategies are designed to be brief, requiring 3 min or less of direct clinician time. The 5 major steps (the “5 As”) to intervention in the primary care setting are: Ask, advise, assess, assist, and arrange.¹⁰

1. Ask - Ask all patients about tobacco use at every visit and record their status
2. Advise- Advise in a clear, strong and personalized manner every tobacco users to stop using tobacco and non-tobacco users to remain tobacco-free
3. Assess- Ask if tobacco user is willing to quit within the next 30 days
4. Assist- Help all tobacco users to stop based on their willingness to quit with a quit plan
5. Arrange Schedule follow-up contact, either in person or by telephone.

It is important for the dental care provider to practice the 5A.^{10,17} In recent years, this has been condensed to Assist, or an **ABC Model: Ask provide Brief advice Cessation support.**¹⁴

PHARMACOTHERAPY

Pharmacotherapy can increase success rate up to 30%.¹⁵ It mainly include nicotine replacement

therapies increase the rate of long term quitting by 50-70%.¹⁴ The nicotine replacement therapy (NRT) used in smoking cessation are nicotine patch, nicotine gum and nasal spray inhaler and nicotine inhaler. Various medications can be given along with NRT as per specific requirement.

INTENSIVE BEHAVIOURAL CHANGE

The dental personnel should limit themselves to brief interventions or counseling sessions. Intensive behavioral interventions are required for heavy tobacco users, who have co-morbidities like clinical depression and advanced social and emotional conflicts. Heavy tobacco users need referral to family practice clinic dealing with addiction issues or are treated as well by clinical psychologists or psychiatrists.¹⁵

INTENSIVE CLINICAL INTERVENTIONS¹⁷

Intensive tobacco-dependence treatment is more potent than brief treatment. Any trained clinician who has the resources to provide intensive interventions can provide intensive tobacco dependence treatment. Intensive interventions (requiring multiple visits for longer periods of time and provided by more than one clinician) are appropriate for any tobacco user willing to participate but their effectiveness and cost effectiveness is not limited to a subpopulation of tobacco users (e.g., heavily dependent smokers). In addition, patients, even those who are not ready to quit, have reported increased satisfaction with their overall health care as tobacco counseling intensity increases. The patient’s self-efficacy (e.g., by recognizing previous successes in efforts to change behavior) of quitting, and assisting the patient make motivational intervention more successful.

FORMER TOBACCO USERS WHO HAVE RECENTLY QUIT

Dental personnel should provide brief relapse prevention treatment for recent quitters because of the chronic relapsing nature of tobacco dependence. Relapse prevention interventions are especially essential soon after quitting and can be provided through scheduled clinic visits, telephone calls, or any time the dental personnel come across an ex-tobacco user. A systematic, institutionalized mechanism to recognize recent quitters and communicate them is needed to deliver relapse prevention messages effectively. They should reinforce recent quitters, reexamine the benefits of quitting, and help the patients in understanding any persisting problems arising from quitting.¹⁷

Relapse prevention interventions can be divided into 2 categories:²⁰

1. Minimal practice for all quitters: These interventions should be part of every encounter with a patient who has recently quit.

2. Prescriptive interventions for patients with problems continuing abstinence: Prescriptive interventions, these are tailored based on information obtained about problems the patient has faced in maintaining abstinence.

RELAPSE COUNSELLING^{21, 22, 23}

Very few tobacco users accomplish permanent abstinence in an initial quit attempt; most of them continue in tobacco use for many years and classically cycle through several periods of relapse and remission. It is important that dental personnel be aware that relapse is common and that it reveals the chronic nature of dependence, not their own or their patients failure.

Following are the several steps include in relapse counseling:

- Understanding that relapses are possible and do not imply a personal failure¹⁴
- Knowing about the situations that can lead to using tobacco again and handling them differently recent quitters, reexamine the benefits of quitting, and help the patients in understanding any persisting problems arising from quitting.¹⁷

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METHODS OF QUITTING

Different methods suit different people in quitting tobacco habit. The options are:

Tapering off S-L-O-W-L-Y²⁴

Dental personnel can assist the patient willing to quit by setting a quit date 1-2 weeks, from the date the patient begin to taper off. This is followed by progressive reduction that is by cutting down one or more cigarettes/beedis/packet.

Cold Turkey (Stopping all at once)

Smokers who smoke <10 cigarettes per day, have a relatively low level of nicotine dependence as per the FTND (score lower than 6 out of the possible 10 points), and individuals who don't require the "extra help" are the best candidates for this method for whom an NRT or Bupropion could be provided. Individual who are determined to quit even if they smoke more than 10 cigarettes per day, having a high score on the FTND, can also attempt the cold turkey method. Pharmacologic therapy can be initiated in failure of long-term tobacco abstinence.²⁵

WITHDRAWAL SYMPTOMS¹⁴

The unpleasant symptoms that occur when a person suddenly stops use of any psychoactive drug are known as withdrawal symptoms. The common symptoms of withdrawal are: Depressed mood, craving, insomnia, irritation, poor concentration, restlessness, and increased appetite. Withdrawal symptoms are most severe during the 1st week and last 2-4 weeks after stopping tobacco. However, the urge to use or "craving," an important symptom of withdrawal, may last a few months and is an important cause for restarting tobacco use.

STRATEGIES FOR TCC AT COMMUNITY LEVEL

The local dental associations can be involved in tobacco control coalition, which performs to organize and enable the community in supporting the nonuse of tobacco. Some of the activities that could be included are community-based programs comprising educating the health risks of environmental tobacco smoke, developing smoke-free public places, and encouraging policies and programs that help tobacco control interventions.¹⁰

The dentist's contribution in tobacco use cessation at a community level are as follows:¹⁶

- As a role model by abstaining from tobacco or by quitting successfully
- Conducting periodic individual or group meetings about the significance of tobacco use cessation
- Developing and executing tobacco cessation intervention models in schools
- Exhibiting educational material during the outreach programs or at the urban and rural health centers
- Writing a column in newspaper or magazines about the benefits of various tobacco control policies or other aspects of addiction
- Spreading health awareness linking with NGOs, involving in talk shows, bringing into publicity about the tobacco use cessation success stories thereby helping to understand the community about tobacco use,
- Encouraging the farmers to produce an alternative cash crop and in co-ordination with horticulture department.

Besides giving health education to the public on the detrimental effects of tobacco using pamphlets, role play, mass media, etc. dental personnel can also help in the following:¹⁶

- Referring the tobacco users to counseling centers and arrange for follow-up
- Recognizing and extending support to quit tobacco among the high-risk groups such as young adults and pregnant women
- Assisting in monitoring the action against all forms of tobacco use at a local level and also endorsing an implementation of these policies through community participation

- Periodic surveillance and carrying out research for initiating newer methods for tobacco control.

BARRIERS FOR THE TOBACCO CESSATION COUNSELING AND CURRENT SCENARIO IN INDIA

Despite the ever increasing burdens of tobacco, there are several factors which impede dental personnel from participating in counseling their patients here in India. The tobacco use among dental personnel and also the lack of awareness of the need to counsel their patients are one of the major reasons for not performing tobacco cessation activities. Doubting their own efforts/skills of counseling may be due to lack of formal training in providing TCC limit their capabilities. Lack of confidence and concern, prioritizing other dental treatments over counseling considering TCC as time-consuming, fear of losing the patient, uneasy

talking to their patients, and no remunerations for such kinds of acts are some of the other factors.^{22, 23}

Lately, there have been many tobacco cessation clinics set up in dental institutions in various departments across the country, but they are not recognized and accredited.

CONCLUSION

Tobacco is a major and foremost cause of preventable death in the world. It is important that all health providers including dental personnel must involve in combating today's tobacco war as no single health care professional can access all tobacco users. Dental team can play a vital role in various forms, at the dental office and at the community level, in decreasing the burdens inflicted by tobacco consumption.

REFERENCES

1. Reddy KS, Gupta PC, editors. Report on Tobacco Control in India. New Delhi: Ministry of Health and Family Welfare; 2004.
2. Tobacco Control and Mobile Health, a New Initiative. Available from: http://www.who.int/tobacco/mhealth/mhealth_new_initiative.pdf.
3. The World Oral Health Report 2003: Continuous improvement of oral health in the 21st century- the approach of the WHO Global Oral Health Programme. Available from: http://www.who.int/oral_health/media/en/orh_report03_en.pdf.
4. Sandhu HS. A practical guide to tobacco cessation in dental offices. J Can Dent Assoc 2001;67:153-7.
5. Clinical Practice Guideline Treating Tobacco Use and Dependence Update Panel, Liaisons, and Staff. A clinical practice guideline for treating tobacco use and dependence: 2008 update. A U.S. Public Health Service report. Am J Prev Med 2008;35:158-76.
6. Rosseel JP, Jacobs JE, Plasschaert AJ, Grol RP. A review of strategies to stimulate dental professionals to integrate smoking cessation interventions into primary care. Community Dent Health 2012;29:154-61
7. Amemori M, Michie S, Korhonen T, Murtomaa H, Kinnunen TH. Assessing implementation difficulties in tobacco use prevention and cessation counselling among dental providers. Implement Sci 2011;6:50.
8. Albert DA, Severson H, Gordon J, Ward A, Andrews J, Sadowsky D. Tobacco attitudes, practices, and behaviors: A survey of dentists participating in managed care. Nicotine Tob Res 2005;7:S9-18.
9. Watt RG, McGlone P, Dykes J, Smith M. Barriers limiting dentists' active involvement in smoking cessation. Oral Health Prev Dent 2004;2:95-102.
10. Tomar SL, Dentistry's role in tobacco control, J Am Dent Assoc 2001,132,30S-5.
11. Martin LM, Bouquot JE, Wingo PA, Heath CW Jr. Cancer prevention in the dental practice: Oral cancer screening and tobacco cessation advice. J Public Health Dent 1996;56:336-40.
12. Monaghan N. What is the role of dentists in smoking cessation?. Br Dent J 2002;193:611-2.
13. Beaglehole RH, Benzian HM. Tobacco or Oral Health. An Advocacy Guide for oral Health Professionals World Health Organization. Lowestoft: FDI World Dental Federation; 2005.
14. Helping People Quit Tobacco: A Manual for Doctors and Dentists. WHO Regional Office for South-East Asia; 2010. Available from: http://www.nimhans.kar.nic.in/Doctors_and_dentists_tobacco_cessation.pdf.
15. Sandhu HS. A practical guide to tobacco cessation in dental offices. J Can Dent Assoc 2001;67:153-7.
16. Kalyanpur R, Pushpanjali K, Prasad KV, Chhabra KG. Tobacco cessation in India: A contemporary issue in public health dentistry. Indian J Dent Res 2012;23:123.
17. Clinical Practice Guideline Treating Tobacco Use and Dependence Update Panel, Liaisons, and Staff. A clinical practice guideline for treating tobacco use and dependence: 2008 update. A U.S. Public Health Service report. Am J Prev Med 2008;35:158-76.
18. Ojima M, Hanioka T, Tanaka H. Necessity and readiness for smoking cessation intervention in dental clinics in Japan. J Epidemiol 2012;22:57-63.
19. Succar CT, Hardigan PC, Fleisher JM, Godel JH. Survey of tobacco control among Florida dentists. J Community Health 2011;36:211-8.

20. A clinical practice guideline for treating tobacco use and dependence: A US public health service report. The tobacco use and dependence clinical practice guideline panel, staff, and consortium representatives. *JAMA* 2000;283:3244-54.
21. Rosseel JP, Jacobs JE, Plasschaert AJ, Grol RP. A review of strategies to stimulate dental professionals to integrate smoking cessation interventions into primary care. *Community Dent Health* 2012;29:154-61.
22. Chandrashekar J, Manjunath BC, Unnikrishnan M. Addressing tobacco control in dental practice: A survey of dentists' knowledge, attitudes and behaviours in India. *Oral Health Prev Dent* 2011;9:243-9.
23. Bhat N, Jyothirmal-Reddy J, Gohil M, Khatri M, Ladha M, Sharma M. Attitudes, practices and perceived barriers in smoking cessation among dentists of Udaipur City, Rajasthan, India. *Addict Health* 2014;6:73-80.
24. Tobacco Use: A Smart Guide. Available from: http://www.nimhans.kar.nic.in/cam/CAM/TOBACCO_USE.pdf.
25. Methods to Facilitate Smoking Cessation: Guidelines and Treatment Modalities. Available from: <http://www.medscape.org/viewarticle/418531>.