

Medicine and Society

Using non-communicable disease clinics for tobacco cessation: A promising perspective

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ABSTRACT

Globally, non-communicable diseases (NCDs) are responsible for 38 million (68%) of the world's 56 million deaths, of which 28 million occur in low- and middle-income countries. Tobacco use is a major preventable and modifiable behavioural risk factor for NCDs. It takes annually a toll of over 7 million people and by 2030, it is anticipated to kill over 8 million people every year. Internationally, WHO has advocated the Framework Convention on Tobacco Control and MPOWER policy to combat the tobacco epidemic. As part of its global commitment towards tobacco control, the Government of India has enacted a comprehensive law, namely Cigarette and Other Tobacco Products Act, in 2003, for governing tobacco control in the country followed by launching of the National Tobacco Control Programme for its effective implementation along with strengthening of tobacco cessation facilities at national and sub-national levels. As per the National Programme for Prevention and Control of Cancers, Diabetes, Cardiovascular Diseases and Stroke, there is a provision of screening of risk factors for NCDs (including tobacco) besides providing treatment and behavioural advice for NCDs. However, presently, tobacco cessation services for NCD patients are under-utilized, probably due to lack of a skilled and dedicated workforce. Delivery of effective patient-centric, disease-specific, culturally sensitive tobacco cessation services at an NCD clinic might efficiently reduce complications of NCDs among patients using tobacco and might further reduce morbidity and mortality attributable to NCDs in India.

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BURDEN OF TOBACCO USE AND NON-COMMUNICABLE DISEASES

Globally, more than 7 million people die due to tobacco use every year.¹ It is anticipated that this number will rise to over 8 million by 2030.² From 1990 to 2013, the disability-adjusted life years (DALYs) increased from 115.9 to 134.2 million, which could be attributed to tobacco smoking.³ Further, every year, 6 million DALYs are lost and over a quarter of million deaths occur due to consumption of smokeless tobacco (SLT).⁴ The Global Adult Tobacco Survey, India (2016–17), reports that 28.6% (268 million) of adults aged 15 years and above (42.4% of men and 14.2% of women) use tobacco in any form.⁵ The National Family Health

Survey-4 (2015–16) also reports that 6.8% of women and 44.5% of men use some kind of tobacco.⁶ Globally, non-communicable diseases (NCDs) were responsible for 39.5 million (70%) of 56.4 million deaths, of which 30.7 million occurred in low- and middle-income countries (LMICs).⁷ In India, the total DALYs from NCDs rose from 30.5% (in 1990) to 55.4% (in 2016) and the contribution from NCDs to total deaths has increased from 37.9% (in 1990) to 61.8% (in 2016).⁸

TOBACCO USE AS A RISK FACTOR FOR NCDs

WHO identifies tobacco as an important modifiable behavioural⁹ risk factor for NCDs and a leading cause of premature death.¹⁰ Globally, tobacco use is attributed to 14% of all deaths due to NCDs among adults aged 30 years and above.¹¹ Smoking tobacco increases the approximate risk for the following: coronary heart disease (by 2–3-fold), stroke (1.5-fold), chronic obstructive pulmonary disease (1.4-fold) and lung cancer (12-fold).¹² In diabetes, smoked tobacco use increases the chance of death and other complications, with tobacco smoking as an independent risk factor for diabetes.^{12,13} Among SLT users, the relative risk of fatal myocardial infarction and fatal stroke is 1.13 and 1.4, respectively.¹⁴ Further, significant odds ratio for oral, pharyngeal, laryngeal, oesophageal and stomach cancers have been reported to be 5.55, 2.69, 2.84, 3.17 and 1.26, respectively, among SLT users.¹⁵ Within the NCDs, tobacco use is responsible for 10% of all-mortality from cardiovascular diseases (CVDs), 22% of all cancer deaths, 36% of all-mortality from disorders of the respiratory system and 71% of all cancer deaths.¹⁰ The risks of developing these NCDs are 5–6 times higher in the younger age groups and are similar for men and women.¹²

POLICY AND LEGISLATION ON TOBACCO CONTROL

The Framework Convention on Tobacco Control (FCTC) is the first evidence-based treaty by WHO to combat tobacco epidemic, which has elaborate efficient supply and demand reduction measures to address tobacco menace.¹⁶ Article 14 of the FCTC states the importance of counselling and psychological support for reducing tobacco dependence and increasing cessation of use, including advocacy to develop national guidelines on tobacco-cessation and establishment of sustainable infrastructure for such services.¹⁶ In 2008, WHO formulated the MPOWER policy, which is a six-component strategy to achieve and monitor the commitments of FCTC. Under the policy, 'O' measure—'Offering help to quit tobacco use' is a useful component which provides a cost-effective approach for increasing the likelihood of quitting among smokers, thereby reducing their risk of early death.¹⁷

As part of its global commitment towards tobacco control, the Government of India (GoI) framed the 'Cigarettes and Other Tobacco Products (Prohibition of Advertisement and Regulation

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of Trade and Commerce, Production, Supply and Distribution) Act, 2003 (COTPA) and Smoke Act Rules (2008), which prohibit the advertisement of tobacco products and provide for regulation of trade and commerce in production, supply and distribution of tobacco products in India.¹⁸ In 2007–08, the GoI launched the National Tobacco Control Programme for the effective implementation of COTPA.¹⁹ Among the thrust areas were establishment and strengthening of tobacco-cessation facilities with provision of behavioural and pharmacological interventional facilities at the district level for effective tobacco control.¹⁹

SUGGESTED TARGETS TO BE ACHIEVED FOR NCDs

The Global Action Plan for the Prevention and Control of NCDs (2013–20) targets to achieve 30% relative decrease in the prevalence of current tobacco use in persons >15 years of age.²⁰ The third objective of the Sustainable Development Goals, i.e. 'ensuring healthy lives and promote well-being for all at all ages' also includes a target of reducing premature mortality from NCDs by 33% by 2030 and implementation of the FCTC in all nations.²¹ The National Health Policy of India, 2017, lays emphasis on the need to reverse the growing incidence of NCDs along with 15% relative reduction in the prevalence of current tobacco use by 2020 and 30% by 2025, thereby making a significant impact on reduction of morbidity and preventable mortality.²²

COMBATING NCDs THROUGH TOBACCO CESSATION

The determinants of NCDs are multifactorial. The four main groups of NCDs (diabetes, cancer, CVD and chronic obstructive pulmonary disease [COPD]) share the main four risk factors, i.e. tobacco use, lack of sufficient physical activity, unhealthy diet and harmful use of alcohol. It is necessary to change lifestyle and behaviour of individuals to reduce these risk factors. Tobacco control could be an effective strategy to decrease the trend of the NCD epidemic. Hence, addressing and prioritizing tobacco control through evidence-based interventions such as provision of cessation services and legislative measures could be a cost-effective strategy.

Treatment for tobacco dependence involves behavioural interventions, which may range from brief to intensive advice and counselling, nicotine replacement therapy (patches, nasal sprays, lozenges and nicotine gums) and pharmacotherapy (bupropion, varenicline, etc.).²³ Over 85% of the world's population does not have access to comprehensive treatment for tobacco dependence.²⁴ Hence, there is an opportunity and need to provide cessation services to tobacco users to quit and help reverse the course of the tobacco epidemic.

Tobacco-cessation services in India

In 2002, the GoI established 13 pilot tobacco-cessation clinics (TCCs) across 12 states of India for developing exemplary interventions for tobacco cessation. In 2009, two new TCCs were established in Rajasthan and Delhi and their role was broadened as a 'Resource Centre for Tobacco Control (RCTC)'. Apart from providing tobacco-cessation services, these RCTCs aided in capacity building of other institutes to set up and promote tobacco-cessation facilities.²⁵ However, they were criticized for not providing tailored population-based cessation services,²⁶ limited accessibility to tobacco users, poor resource allocation and their concentration in urban areas.²⁷ Apart from TCCs, another novel initiative by the GoI was the establishment of National Health Portal, which uses mobile technology (mCessation Programme-Quit tobacco for life) to offer cessation services to tobacco users.

Tobacco users can also avail services offered by the National Tobacco Quitline, which gives counselling through a toll free number (1800-11-2356) or by giving a missed call (011-22901701) or at www.nhp.gov.in/quit-tobacco and get themselves registered for the mCessation programme. The tobacco user will receive text messages based on tips for quitting, craving, management, etc. on his/her registered mobile number.²⁸ However, the efficacy of this service has not been evaluated so far.

Various modules on tobacco cessation were developed including a manual for tobacco cessation under the National Cancer Control Programme by the GoI (2005),²⁹ tobacco dependence guidelines (2011),²³ a training manual on tobacco cessation for nurses, health workers and doctors by WHO (2010)³⁰ and a toolkit for delivering five A's (ask, advice, assess, assist and arrange) and five R's (relevance, risk, rewards, roadblocks and repetition) by WHO (2014).³¹ However, despite availability of all these resources for healthcare providers, their preparedness for delivery of tobacco-cessation services remains low in India.³²

Scope of integration of tobacco-cessation services in the National Programme for Prevention and Control of Cancers, Diabetes, Cardiovascular Diseases and Stroke

During 2010–11, the National Programme for Prevention and Control of Cancers, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS) was launched with an objective to prevent and control NCDs through early detection and management of NCDs, awareness generation on lifestyle changes, opportunistic screening through outreach camps and capacity building of health systems to tackle NCDs. Under the programme, there is provision of establishment of NCD clinics at the Community Health Centre (CHC) level and district level for screening of risk factors for NCDs (including tobacco use) besides providing them behavioural advice and treatment for NCDs. Across all states in India, 388 district NCD clinics and 2115 CHC-NCD clinics had been established till March 2017. Various pilot interventions have been initiated, wherein the NPCDCS has been integrated with Ayurveda, Yoga, Unani, Siddha, and Homeopathy (in six districts), Rashtriya Bal Swasthya Karyakram (in three districts) and Revised National Tuberculosis Control Programme. As per reports, around 2.24 crore (22.4 million) persons attended NCD clinics and were screened for common NCDs. Besides, 1.67 crore (16.7 million) persons were screened during outreach activities.³³

Similarly, a doctor or counsellor at the NCD clinic can effectively provide tobacco-cessation services as the patients visiting the NCD clinic due to other major ailments may be more receptive to the advice given by them. A Cochrane review on physician advice for smoking cessation also reports that brief advice from a healthcare professional increases the quit-rates by 1% to 3%, in comparison to unassisted quitting.³⁴ Since tobacco use is a routine element of history taking at the NCD clinic, every healthcare provider can make use of this contact to gauge tobacco-use behaviour and promote a change in behaviour. Individual and family counselling should be provided to patients regarding risk factors for NCDs in addition to provision of Information, Education and Communication and Behaviour Change Communication material that promotes healthy behaviour.³⁵ The NCD clinics also provide an opportunity to reinforce to users of tobacco its harmful effects on their health and of those around them. These clinics can also serve as a vehicle to train the available human resources in cessation services in resource-poor settings. This could be relatively inexpensive as it will be part of an existing service under the national programme that most people use at least occasionally. It

is also envisaged in NPCDCS that linkages would be made with the existing tobacco control programme.³⁵

The knowledge and skills of healthcare providers at NCD clinics, with respect to tobacco cessation, can be enhanced through training via tailor-made customized module. The message should follow the five A's (Ask about tobacco use, Advice on quitting, Assess readiness to quit, Assist in making quit attempt, Arrange follow-up for tobacco user) and five R's (Relevance indicating why quitting is important, Risk identifying potential harms of tobacco use, Rewards as benefits of quitting, Roadblock as barriers to quitting and Repetition of motivational intervention each time) approach.³⁰ This approach can be customized to different NCDs (hypertension, diabetes, cancer, stroke, CVD and COPD).

For example, any patient suffering from an NCD (e.g. diabetes mellitus) should be asked about tobacco use and this should be documented in the records. If a patient is a tobacco user, then the patient should be counselled to quit using tobacco in a strong, clear and personalized manner. The counselling session can incorporate the technique of motivational interviewing, which is a client-centred, non-judgemental, non-confrontational approach for eliciting behavioural change by helping the tobacco user to explore and resolve mixed feelings.³⁶ The patient should be provided with disease-specific educational material linking diabetes with tobacco use. It can be further reinforced with visual images of common complications associated with diabetes and how they are exacerbated by tobacco use. Thereafter, the patient's readiness to quit should be assessed using various behavioural change models (when patient does not have any interest in quitting is pre-contemplation stage, when he/she begins to think about quitting is contemplation, when patient is about to quit is preparation stage, when patient has quit tobacco use is action stage and, lastly, maintenance stage when the patient is working to keep up the status of being a quitter and prevent relapse).³⁷

If the patient is ready to quit, then he/she should be assisted in making the decision and informed about certain strategies to manage the triggers of tobacco use. It should be followed with the development of a quit-plan. Finally, follow-up should be arranged for every patient by setting up an appointment for the next visit. Mobile technology can be used for following up, where short messages can be sent and telephone calls made at frequent intervals to the patient (tobacco user) and family members, seeking their support for helping the tobacco user to quit. These text messages can be customized to the disease of the patient and the stage of behavioural change he/she is currently in. This will break the monotony of generic texts and the patient could relate better to the help offered. This disease-specific, patient-centric approach may bring a positive reinforcement in behavioural change towards tobacco use and in the long term will improve the quality of a patient's life.

Another important point to ponder over is the culture-specific nature of each aspect of the intervention. In India, which has a rich cultural diversity, there is an opportunity to developing interventions as per local cultural traditions. Thus, the role of healthcare providers in tobacco cessation are multifaceted. Their minimal intervention can bring visible change. The doctor at NCD clinic can ask a patient coming to the clinic about the current and past tobacco use, with its documentation, and provide brief advice on quitting tobacco in light of the NCD the patient is suffering from. The counsellor at NCD clinic shall determine the stage of behavioural change of patient and provide counselling sessions of 15–20 minutes, making use of motivational interviewing. The

counsellor may also give handouts to the patient and may show relevant video clips on tobacco cessation. Further, the counsellor may also assist in developing a quit-plan, certain lifestyle modifications which avoid triggers and offer certain tips to manage cravings for tobacco use. The role of a nurse at NCD clinic in tobacco cessation is also important. The nurse can motivate the patient to quit while guiding the patient about the prescribed medication for NCD he/she is suffering from. This shall reinforce the advice given by the doctor and counsellor. Further, the nurse and counsellor can schedule the follow-up sessions with the patient synchronized with the regular follow-up visits to the NCD clinic for the primary disease. They can manage the sending of quit text messages and calls to patients at regular intervals. Further, printed educational material can be displayed at the NCD clinic in the form of posters. These can also be run on visual screens or on television at the registration or waiting area for the benefit of patients as well their attendants. If financial outlay allows, then the quit status of the patients can also be assessed using carbon monoxide breath analyser, or saliva/serum/urine cotinine level estimation, which will biochemically verify the quit status of the patient.

THE WAY FORWARD

There is a need to develop a context-specific, tailored and comprehensive package for tobacco cessation, especially for high-risk patients suffering from NCDs. As tobacco use is a major risk factor for NCDs, it is important to provide comprehensive tobacco-cessation services at NCD clinics. Delivery of effective patient-centric, disease-specific, culturally sensitive tobacco-cessation services in the existing framework of NPCDCS might efficiently reduce complications of NCDs among patients. This model of integrating tobacco cessation into other healthcare programmes such as NCD control can be adopted by the GoI and could prove to be cost-effective in India.

Conflicts of interest. None declared

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