

Effective interventions for Smoking Cessation services for patients with Tuberculosis under National Tuberculosis Elimination Programme, India

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Policy Brief

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Problem Statement

India is the highest TB burden country in the world, though TB notifications in India decreased in early months due to CoVID pandemic, a total of 18,05,670, cases were notified in 2020[1]. WHO reports that many new cases of TB are attributable to five risk factors: Undernutrition, HIV infection, alcohol use disorders, smoking (especially among men) and diabetes and is important to address this factor. India is the third largest producer and second largest consumer of tobacco in the world. Nearly one million Indians die due to tobacco use every year, which is much more than the combined mortality resulting from HIV/AIDS, TB and Malaria. About 30% of adults in India(28.6%), aged 15 and above currently use tobacco in some form means that 266.8 million are currently using tobacco in India. Problems associated with smoking among TB patients is high, with more sickness requiring hospitalization, more relapse, and more deaths compared to non-smokers[2,3]. It has also been observed that even non-tobacco smoke (smoky kitchen, non-chimney closed kitchen smoke) influences the prevalence of pulmonary TB. Similarly, the use of tobacco in TB induces the liver enzymes and decreases the bioavailability of several other drugs used in treatment of tuberculosis. Also those who quit smoking, may benefit from avoiding the complications of non-communicable diseases like cancer and other respiratory diseases.

Current Interventions available at program level in India

National Framework for Joint TB-Tobacco Collaborative Activities' provides guidelines to programme managers of National Tuberculosis Elimination Programme (NTEP) and National Tobacco Control Programme (NTCP) on the implementation of tobacco cessation services as an integral part of TB case management[4]. The framework describes recommendations to be followed at National, State and District level.

Recommendations are the following at the primary health care level:

1. Implement "Brief Advice", on tobacco cessation in NTEP
2. Screen for active 'TB Symptoms Complex' among registered tobacco users in NTCP
3. Train programme/field staff in TB/tobacco control activities

Hence, a "Brief advice" is recommended at the primary health care level and if smoking is not quit the health care worker refers TB patient to Tobacco Cessation Clinic at district level.

Summary of Evidence

National Institute for Research Tuberculosis(NIRT) [5] conducted a study on Strategies for Smoking Cessation among TB patients treated at NTEP centers in Villupuram and Kancheepuram districts of Tamilnadu. The study compared the effectiveness of three interventions for smoking cessation among Tb patients, namely:

- ❖ Bupropion Sustained Release 150 mg for 7 weeks daily with standard counselling
- ❖ Enhanced Counselling
- ❖ Standard counselling

By training and engaging the NTEP health care workers to deliver the various cessation strategies, smoking status was assessed after 2 months and at the end of TB treatment. Operational definition for current smoking was defined as smoking atleast 1 or more cigarettes/bidis per day in the past 7 days.

- ❖ The study was conducted at field level at the primary health care setting and the smoking cessation interventions were delivered by the health worker. Hence at primary health care level itself we may implement the strategies.

- ❖ The proportion of patients who quit smoking at the end of TB treatment in three arms of drug+standard counseling, enhanced counselling and standard counselling were 67%, 83% and 52% respectively ($P < 0.001$)
- ❖ There was no statistical significance in response to TB treatment between those who quit smoking and those who did not, though favourable TB outcome was higher among those who quit smoking.

The enhanced counselling included use of

- ❖ Brochures/Educative materials with information on harms of smoking, and 'how to quit smoking'
- ❖ Educating the patient in person using a flip chart with relevant information on problems due to smoking and various cessation methods available.
- ❖ Posters at the centres depicting harms of smoking and with TB
- ❖ Family counselling
- ❖ Movie/video presentations on smoking hazards wherever feasible.

The policy brief is based upon the study on "Strategies for smoking cessation (pharmacologic intervention versus enhanced motivation vs. standard motivation) in TB patients under treatment in the RNTCP, India - A cluster - Randomized trial" published in Indian J Tuberculosis 2020; 67(1): 8-14.

Recommendations

- ❖ Mandatory enhanced counselling of every smoking TB patients by trained Health care workers, using Brochures/Educative materials, Movie/video presentations on smoking hazards, in person individually and also provide family counselling
- ❖ Educate and Encourage Medical Officers at health facilities- public and private to prescribe Tab. Bupropion Sustained Release along with advise for smoking cessation to the smokers with and without TB
- ❖ **Caution required for possible adverse effect and drug interactions with the above management**
- ❖ Include Enhanced counselling for Tobacco cessation in 'Standard of care' for management of all TB patients
- ❖ Include Enhanced counselling for Tobacco cessation under NTEP as preventive intervention under health centres for implementation under general health system.

Key Message

- ✓ Burden of Tuberculosis and tobacco usage is high in India.
- ✓ The problems associated with tobacco smoking among TB patients is more than non-smokers.
- ✓ Implementation of tobacco cessation services in TB case management is important.
- ✓ Enhanced counselling strategies delivered for smoking cessation by trained health care workers has been found effective.

Reference

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