

Tuberculosis Preventive Treatment (TPT) in India: Current Landscape and Implementation Barriers: Reg No: 94

Roshan Kumar Sahu, Amit Kumar Mishra

All India Institute of Medical Sciences Raipur

CORRESPONDING AUTHOR

Dr Roshan Kumar Sahu, All India Institute of Medical Sciences Raipur

Email: drrsahu97@gmail.com

CITATION

Sahu Roshan Kumar, Mishra Amit Kumar, . Tuberculosis Preventive Treatment (TPT) in India: Current Landscape and Implementation Barriers: Reg No: 94. Journal of the Epidemiology Foundation of India. 2025;3(2Suppl):18.

DOI: <https://doi.org/10.56450/JEFI.2025.v3i2Suppl.018>

ARTICLE CYCLE

Received: 10/11/2025; Accepted: 20/12/2026; Published: 31/12/2025

This work is licensed under a Creative Commons Attribution 4.0 International License.

©The Author(s). 2026 Open Access

ABSTRACT

Introduction: Tuberculosis Preventive Treatment (TPT) is a key part of India's TB elimination strategy, targeting vulnerable household contacts (HHC). This review synthesizes national evidence to identify implementation barriers across the TPT care cascade by analyzing epidemiological patterns, determinants, and intervention effectiveness

Methods: A comprehensive search was conducted across PubMed, Google Scholar, Scopus, and Embase with application of specific filters. From this search, 13 relevant articles were identified and reviewed, of which 8 were selected for inclusion in the final review. Findings were compiled from 8 studies (cross-sectional, mixed-method, and cohort studies between 2022-2025) in India, focusing on HHCs of TB patients. Key variables analyzed included demographic characteristics, overcrowding, socioeconomic status, and preventive therapy uptake.

Results: The awareness of TPT among HHCs, as reported by a cross-sectional study in Delhi was low at 51.20%. Screening coverage varied widely (46.9%–91.3%), and TPT initiation rates ranged from (16.8% to 97.1%). Treatment completion rates showed substantial variation (60.6%–93.9%), with higher adherence to shorter regimens such as 3HP compared to the conventional 6H regimen. Major barriers for non-initiation included lack of perceived need, absence of symptoms, stigma, and drug stock-outs. Treatment was stopped due to side effects, drug unavailability, migration, and socioeconomic pressures.

Conclusion: To meet India's 2025 End TB goals, urgent interventions must fix the fragmented TPT care cascade by overcoming patient, provider, and systemic barriers through improved awareness, drug security, service delivery, and capacity building.

Keywords : TB, TPT, Barriers, Coverage, 6H, 3HP

KEYWORDS