

ZERO CATASTROPHIC COSTS GOAL FOR TUBERCULOSIS PATIENTS IN INDIA: ARE WE THERE YET?

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Abstract:

This article gives insight into the financial burden of tuberculosis (TB) in India, with a specific emphasis on low-income households and tribal people who endure significant out-of-pocket spending, catastrophic costs, and impoverishment. The article emphasizes the challenges encountered by low-income households and tribal populations, the frequent use of private health facilities for tuberculosis care, and the impact of poverty on the results of tuberculosis treatment. It also explores the impact of AB-PMJAY scheme towards reducing financial obstacles in tackling tuberculosis.

Introduction:

Tuberculosis (TB) is a contagious disease that requires long treatment and care and strongly associated with social stigma, poverty, illiteracy, unemployment, and catastrophic cost. The government of India provides free diagnosis and treatment to all registered TB patients; however various studies have reported high out-of-pocket expenses and catastrophic costs related to TB [1].

Financial Strain and Tuberculosis:

A financial strain on low-income households is one of the main effects of poverty, which is both a risk factor and a result of tuberculosis. Poverty and tuberculosis may be linked negatively, with consequences including delayed care seeking, increased default rates, and poor treatment outcomes. The costs associated with the condition for affected persons and their families are one of the factors contributing to low treatment compliance and a low treatment success rate. Financial ruin could result from these expenses, which affect about 18% of the Indian population overall in terms of catastrophic medical costs [2].

Financial troubles experienced by a patient or family are indicated by a catastrophic cost, which is defined as the total cost of tuberculosis care surpassing 20% of the household's yearly income. The elimination of catastrophic costs by linking eligible TB patients with social welfare schemes including providing nutritional support is a stated objective of the National Strategic Plan (NSP) 2017-2025, the Centre's plan to eliminate TB in India by 2025.

Analysis using various National Sample Survey Office (NSSO) rounds (2004-2018) show the out-of-pocket expenditure (OOPE) has doubled for outpatient care and hospitalisation in the country [3]. During this period nearly 50% of households were exposed to catastrophic health expenditure.

TB Economic Burden and Hardship Financing:

One additional aspect to consider towards economic burden of TB in the country is the aspect of hardship financing. Hardship financing occurs in a household when expenditures towards health are met through borrowings (mainly with repayment and interest) or sale of assets. In 2018, 26.7% of inpatient and 3.5% of outpatient cases experienced hardship financing [4]. This translates to an average of 25.9% or one in 4 patients had to sell assets or use borrowings for financing TB expenses.

It is well-known that there is a symbiotic relationship between TB and poverty. New TB infections are not just a product of poverty, but also creates poverty. The economic impact of TB is seen to be many times greater on poor households. However, the effects of TB expenditure are now to be seen among middle-class households as well. In 2018 almost 50% of the patients belonging to the middle-income category fell below the poverty line due to hospitalisation related OOPE [4].

Another matter of concern is the high use of private health facilities for TB treatment with almost half of all TB patients seeking private health facilities. Median treatment costs towards diagnosis and treatment of TB in private sector is almost double when compared to the public sector [5]. Patients seeking private health facilities for TB treatment have shown higher exposure to hardship financing and catastrophic health expenditure, and impoverishment [4].

Catastrophic health expenditure among tribal populations:

Tribals comprise of 8.6% (translating to 110.4 million people) of our total population. Tribal populations have shown higher prevalence of TB compared to national average. 10.4% of all TB notified patients in the country belong to tribal communities [6]. Since 2005 the National TB program have prioritized tribal subgroup population through various Tribal Action Plans. Despite these efforts various studies have highlighted TB to be a major cause of catastrophic health expenditure among tribal populations in the country [6]. These expenses can be as high as 10% in relation to annual family income. Impoverishment among tribal populations due to OOPe for TB hospitalisation has shown substantial increase from 2004 to 2018 [6].

Impact of AB-PMJAY on TB care in India

The National Health Assurance Scheme 'Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana' (AB-PMJAY) has been launched by the Government of India in 2018 to address the financial and economic barriers, including TB. This scheme provides health cover of Rs 5 lakhs per family per year for secondary and tertiary care hospitalisation. While TB has the lowest rate of hospitalisation (50 per 100,000 people) in the country, only 1% of the mean expenditure on TB hospitalisation has been reimbursed in 2018 [7].

Very few studies exist of the impact of AB-PMJAY towards reducing OOPe and catastrophic health expenditure for TB [8]. Recent study published with The Lancet Regional Health-Southeast Asia focused on impact of integrating AB-PMJAY (scheme is called Arogya Karnataka scheme or ArK) with National Tuberculosis Elimination Program [9]. This study reported an average cost per TB patient at US\$124.5 per patient compared to US\$159 per patient in 2018 [8,9]. The study also claims reduction in catastrophic costs incurring due to TB due to its gatekeeping mechanism.

This study, however, has major flaws. For example, in Table 3 the authors present analysis of average cost per TB patient using amount spent and number of patients [10]. This methodology is flawed as it does not convey whether these costs are direct costs or indirect costs. Indirect costs account for about 55.5% of total costs among TB patients [11]. The authors also claim reducing the catastrophic cost of TB treatment without explaining the methodology used for its measurement.

Modeling studies have shown that improvements in treatment packages have potential to reduce patient-incurred costs in the future [12,13]. These studies clearly point out that the 2025 targets of the End TB strategy for reducing catastrophic health expenditures would not be achieved by implementing any one intervention. Expanding access to care for tuberculosis services in the country has the potential to substantially reduce patient-incurred costs in the country.

Conclusion:

Overall, the economic burden of tuberculosis in India is significant, especially for low-income households and tribal populations. The need for comprehensive strategies to address the financial barriers to treatment is crucial. While initiatives like the National Health Assurance Scheme aim to provide financial protection, more can be done to reduce out-of-pocket expenses and catastrophic costs for TB patients. Integrating programs like AB-PMJAY with the National Tuberculosis Elimination Program shows promise, but further research is needed to assess their impact on reducing economic burden. Overall, a multi-faceted approach is necessary to address the economic challenges of TB in India.

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