

IDENTIFYING THE COSTS CONTRIBUTING TO CATASTROPHIC EXPENDITURE AMONGST TB PATIENTS REGISTERED UNDER RNTCP IN TWO METRO CITIES IN INDIA

EXECUTIVE SUMMARY

Despite free care, Tuberculosis (TB) takes a toll of patients' finances. TB often causes catastrophic economic effects among TB patients and their households. Such costs can create access and adherence barriers which can affect treatment outcomes and increase risk of transmission of disease. To overcome access and adherence barriers, as well as to minimize the economic burden for TB patients (and their households) it is therefore essential to address both direct and indirect costs.

The present study was done in two metro Indian cities among TB patients to identify the factors contributing to catastrophic costs during TB therapy. Findings report that indirect costs due to absence from work and TB patients' households with lower annual income were the major contributing factor for high catastrophic expenditure.



High out of pocket medical expenditure leads to increased incidence of poverty. Source: Microgiving/ Ivan Sanford

BACKGROUND

The TB-specific indicator of “catastrophic total costs” direct medical payments for treatment, direct non-medical payments (transportation, lodging charges, nutritional food) and indirect costs (loss of income). Given the often long health seeking period and the six months to two years period of treatment, this catastrophic expenditure may in turn impact adherence leading to poor treatment outcomes and increase incidence of poverty. It is important to understand the direct and indirect costs involved in TB care and how its effecting the patient and their families and also the key factors contributing to these expenditures should be addressed.

Interventions are needed to address high medical costs, as well as costs of food and transport and lost earnings. Health financing and delivery models, as well as social protection mechanisms (such as job protection, paid sick leave, social welfare payments) need to be considered.

This study was conducted with the aim to find out the households of TB patients experiencing out of pocket expenditures and to identify the costs contributing to the catastrophic expenditure. It was done in two metropolitan cities in India (Chennai and New Delhi) amongst TB patients, including children registered under RNTCP in both sites.

AIM OF THE PRESENT POLICY BRIEF

This policy brief provide an insight about the direct and indirect costs experienced by TB patients and their families and the costs or factors leading to catastrophic expenditure.

OBJECTIVES OF THE STUDY

- To estimate the proportion of households that experience catastrophic expenditure due to TB.
- To find out the various costs contributing to catastrophic expenditure due to TB.

GAP ANALYSIS

The overall costs borne by patients during diagnosis and treatment of TB have been largely ignored, even though such costs are often larger than the direct costs to the government. Ignoring these costs leads to an underestimation of the total costs of TB and this can lead decision makers to make poor choices in health care. Besides this, households attempt to cope with these costs by diverting resources from reducing other forms of consumption such as withdrawing children from school or borrowing or selling assets.

A study from Uganda reported that absence from work or quitting job or loss of wages due to the disease—visits to be made for TB treatment, side effects of anti TB drugs and inability to work (Saunderson 1995).

Lost earnings due to TB were also reported by patients. Studies have shown that the average time lost from normal activities was 9.5 months (range week to three years); the average income lost from inability to work was 89% of GDP per capita. In South Africa, lost earnings were even higher i.e., 16% of GDP per capita (Floyd et al. 1997; Wilkinson, 1997). Income reductions were much smaller: average income fell by 5% for poor households, 2.3% for households with

income between poverty and the national average, and 3.3% for households with income above average in a study conducted in Thailand (Karnolratanakul et al. 1999).

A survey of patients in Bombay showed that nearly 10% of income was spent on travelling to the clinic twice a month to collect drugs (Chakraborty et.al. 1995). In another study in rural Ghana found transport costs to be larger than direct costs (Van der Werf et al. 1993). Clearly, such expenditures could lead to defaulting from treatment, particularly among the poor. Studies on the economic impact of TB was conducted earlier by ICMR-NIRT, Chennai in 1997, which found substantial lost earnings about 15% of annual household income (Ramachandran et al. 1997). Lost earnings exceeded direct medical costs by two times in Tamil Nadu and almost three times in Uganda and South Africa.

Around 24% of all people hospitalized in India in a single year fall below the poverty line due to hospitalization. An analysis of financing of hospitalization shows that large proportion of people, especially those in the bottom four income quintiles borrow money or sell assets to pay for hospitalization (World Bank 2002).

KEY FINDINGS

- ➔ 44% of adult TB patients in Chennai and 8% in Delhi experienced catastrophic expenditure (i.e., more than 20% of the family annual income was spent for TB treatment).
- ➔ Among children, 24% in Chennai and 7% in Delhi experienced catastrophic expenditure .
- ➔ In both cities, indirect costs due to work absenteeism was a major contributing factor for high catastrophic expenditure.
- ➔ It was also observed that higher proportion of lower annual income (less than Rs. 100 000(\$1410) people experienced catastrophic expenditure due to TB.

POLICY IMPLICATIONS AND RECOMMENDATIONS

- There is a need to monitor health and social protection coverage in the context of TB care and prevention.
- Early detection and treatment important in reducing the indirect costs and extra costs incurred during the pre-diagnosis period
- Further medical assistance schemes could be introduced to make TB treatment more pro-poor, and financial incentives and nutrition support to TB patients could also be another way to ensure financial protection
- Introducing new digital technological interventions such as 99DOTS and video supported home based TB care, video observed therapy (VOT), eHealth portal could also reduce catastrophic costs to TB patients.
- There is an urgent need to promote sensitization among school children on TB and availability of free treatment at government health facility. This will help in preventing ‘Catastrophic School Absenteeism’, poor school performance and school impairment of these children due to TB.

KEY REFERENCES

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