

IMPROVING TREATMENT ADHERENCE AMONG TUBERCULOSIS PATIENTS THROUGH EVENING DOTS IN CHENNAI, INDIA

EXECUTIVE SUMMARY

In addition to socio cultural, economic and health system barriers in accessing care in RNTCP, there are additional difficulties such as fixed days of service, inconvenient fixed timings and waiting time etc. Studies show that loss of wages and work timings as some of the reasons for non-compliance to TB treatment. Most of the urban population work in organized and unorganized sector with fixed work timing and Chennai being a metro city where almost one-fifth of the Tamil Nadu organized sector working population lives has smear positive TB prevalence of 228/100000 population. Considering this, the present study was conducted to determine the factors leading to treatment interruptions and default to DOTS and assess whether provision of DOTS in the evening improves the treatment adherence in Chennai district. Study result showed favourable treatment outcomes among all TB patients who took evening DOTS. This study findings point to the need for provision of RNTCP services at a time convenient to the patient especially in the evening in urban settings that would improve access to TB services.

BACKGROUND

The key focus of RNTCP is to prevent drug resistant TB by providing access to quality diagnostic services and Directly Observed Treatment, Short Course (DOTS) services in a decentralized manner. The treatment is provided closer to the patient's residence by DOTS providers to minimise the patient's expenditure for travel and loss of wages but still many of them face barriers for accessing care. At least one-third of the patients initiated on Anti TB Treatment (ATT) are irregular for treatment due to socio-economic or health related barriers. Besides this, other common barrier to treatment adherence is work related and the work timings. treatment completion can be improved by efforts to minimize treatment interruptions and improving adherence to treatment. Interventions such as reinforced counselling by health personnel, decentralization of treatment, DOTS supporter chosen by the patient reduces the proportion of default rates. One of the intervention strategies that could combat higher default



TB patient receiving directly observed treatment in India; Source: IPTC photo Metadata

rates especially for the day-time workers who are unable to attend DOTS clinic during day time may be evening DOTS. The present study was conducted in Chennai among TB patients diagnosed and initiated on CAT I treatment between 2016 to 2017. The study was done with the aim to assess whether provision of DOTS at a time convenient for the patient in the evening will improve treatment adherence especially in TB Units (TU) with higher default rate.

AIM OF THE PRESENT POLICY BRIEF

This policy brief help us to understand the barriers leading to treatment interruptions and default to DOTS. It also inform the effectiveness of providing evening DOTS in the improvement of treatment adherence among TB patients.

STUDY OBJECTIVES

- To compare the treatment outcomes among TB patients started on Category I treatment by evening DOTS and routine DOTS between 2016 and 2017 in Chennai district.
- To determine the factors for treatment compliance among TB patients started on Category I treatment by routine DOTS and Evening DOTS in Chennai district between 2016 and 2017.

GAP ANALYSIS

TB patients non-compliance to anti-TB treatment deals blow to the national program fights against this disease. At least one third of the patients initiated on ATT are irregular for treatment and it is neither easy to predict the patient characteristics for non-compliance nor prevent non-compliance by improving patient education. There are various patient-related and health-system related barriers in regularity to TB treatment. Fixed days for TB service, inconvenient and fixed timings, and waiting time is a concern particularly for working TB patients as they either have to take leave from work during the treatment days or vice versa.

Study among new pulmonary TB patients in Mumbai, largest city in India with a population >18 million, almost one fifth of the patients who were non adherent to therapy mentioned their duty schedule as the reason for missing treatment. Similarly, studies conducted in different countries reported interruptions in TB treatment due to work related reasons

such as work load and lack of money or financial crisis in the household. In a study done in Thiruvallur district in Tamilnadu, almost, 12% of the patients lost greater than 60 days of work during treatment, however returned early to work establishing the economic benefit to the patient and their family.

Interventions such as reinforced counselling by health personnel, decentralization of treatment, DOT supporter chosen by the patient reduces the proportion of patients who defaulted. Chennai being one of the largest and most populous city in the country, with increase effect of urban living of TB infection and 20% of the population working in organized sectors, call for an intervention strategy that is highly convenient and feasible for TB patients in treatment compliance. One of the interventions that could be studied to combat higher default rates especially for the day-time workers who are unable to attend the DOTS clinic during day time may be evening DOTS.

KEY FINDINGS

- Almost one out of seven patients had opted for taking DOTS in the evening.
- More than 90% of the patients had conveyed that the Centre being closer to their residence was the reason for taking DOTS in the routine time .
- Convenient timings was another reason for opting for evening DOTS and the reason they said was what helped them completing treatment .
- All patients from the evening DOTS group had favorable outcomes (cured/treatment completed).
- Almost 40% had conveyed the need for improvement in the TB services in the evening DOTS clinics and need for frequency of drug supply
- With program moving from DOTS to daily treatment, the convenience of the patients to avail the TB services need to be studied.

POLICY IMPLICATIONS

- Evening DOTS is an adjunct strategy if it is implemented using the available program resources.
- There is a need to assess the choice of patient with regard to preferences for morning or evening DOTS.
- Adherence of DOTS needs to be ensured according to patient willingness and availability.

KEY REFERENCES

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ACKNOWLEDGEMENT

We acknowledge The Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM), Central Tuberculosis Division (CTD) and Indian Council of Medical Research (ICMR) for funding and supporting this project.

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