

Directly Observed Therapy: Current Challenges

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Directly Observed Therapy (DOT) is a specific strategy, endorsed by the World Health Organization, to improve adherence by requiring health workers, community volunteers or family members to observe and record patients taking each dose.

In a Cochrane review Eleven trials including 5662 participants comparing DOT versus self-administered treatment, TB cure was low with self-administration across all studies (range 41% to 67%), and direct observation did not substantially improve this (RR 1.08, 95% CI 0.91 to 1.27) thereby, indicating that DOT did not provide a solution to poor adherence in TB treatment (1).

In another study participants reported that making a daily visit to health facilities for DOT is difficult due to the distance of the facilities from their residences, lack of or high transportation cost and had undesired implications on their work and social lives were the main challenges with the daily DOTS therapy (2).

Similarly, in another study the low level of education & counselling, age, past treatment, drug abuse, and housing in poor neighbourhoods were negatively correlated to DOT adherence (3).

On the contrary to this Providing DOT for a full course of treatment has been reported to be associated with a higher treatment success rate in MDR-TB patients (4).

A study comparing treatment success using community-based home DOT vs. conventional clinic DOT reported that Community DOT improved treatment success more in comparison to conventional clinic DOTS(5). Further two met analysis established similar results that community based-DOT improves TB treatment outcomes in comparisons to hospital based DOTs and self administered therapy (6, 7).

To best of our knowledge we failed to cite any Indian Study in this direction. Where as Geographical, socioeconomic, educational status of the Indian population, distance of travel from the nearest health care centres, larger rural working pollution, large population residing in difficult hilly and mountain trains and indirect cost implications of DOTS are some of the important reasons to reconsider the strategies to make DOTS more productive in Indian scenario by the health care providers. Further, the need of hour is to conduct research in this field on Indian population shall go long way in improving the treatment out come of DOTS. Further, the literature strongly recommends presently for Community based DOTS.

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