

## ABSTRACT

**Background:** In line with WHO recommendation, Nepal has started implementing Tuberculosis preventing therapy (TBPT). However, enrolment of children in preventive therapy is sub optimal. So this study measured implementation fidelity of programs in terms adherence and moderating factors influencing the implementation of TBPT program from parents/caretakers and providers perspective in Kaski district, Nepal, using implementation fidelity framework by carroll et. al.

**Methods:** We used a mixed-method explanatory sequential design study. Quantitative data was collected by retrospective review of secondary from April 2018 to May 2019 and established the level of adherence. Qualitative study was conducted to explore the moderators from both providers and parents/caretakers side. We undertook sixteen in-depth interviews with care givers and a focus group discussion which were analyzed thematically.

**Results:** The majority of the components of the TBPT program were found to be implemented with moderate level of fidelity. The proportion of under five years children initiate and complete full course of TBPT was 72.5% and 75.86% respectively. The proportion of index cases traced for household contact, timely contact tracing and timely initiation of therapy were 54.19%, 82.73% and 86.20% . The major moderating factors identified in implementation of TBPT from providers side were unregulated contact tracing, sub optimal service delivery, partnership and ownership, poor recording /reporting, knowledge and training, unstable financing and resource available. Likewise, poor dissemination of information, awareness, access, supports and drug characteristics were potential moderators identified from parents/ caretakers side.

**Conclusion:** TBPT program is being moderately implemented in Kaski districts. Addressing the key challenges identified; inconsistent contact tracing, sub optimal service delivery, partnership/ownership, unstable financing and knowledge of health worker results in more identification of children eligible for TBPT.

*Keywords: Adherence, Implementation fidelity, Preventive Therapy, Nepal, Tuberculosis*