

## ABSTRACT

**Background:** *The National Tuberculosis Control Program (NTP) of the Philippine Department of Health (DOH) released the NTP Adaptive Plan (NAP) in 2020. This plan outlines adaptive measures to ensure continuity of TB services during the COVID-19 Pandemic including shifting treatment protocols to community and home-based modalities and using digital adherence technologies such as SMS to support treatment adherence. This study aimed to: (1) describe the process of implementing SMS-based treatment adherence modality for TB-DOTS among drug-sensitive TB (DSTB) patients in Quezon City; (2) assess the extent of implementation of SMS-based modality for TB treatment adherence; (3) identify contextual factors affecting the implementation of SMS-based modalities for ensuring TB treatment adherence; and (4) examine organizational and individual perceptions on the acceptability and use of SMS as an implementation strategy to improve TB treatment adherence*

**Method:** *This implementation research employed a sequential explanatory mixed methods study design to assess and examine the use and acceptability of SMS-based treatment modality for TB-DOTS implementation in Quezon City, Philippines, using the Practical, Robust Implementation and Sustainability Model (PRISM) as a guiding framework.*

**Results:** *The study revealed agreement of patients on contextual factors affecting treatment adherence in an SMS-based treatment modality through mean scores (mean  $\pm$  SD) of Likert scale responses: knowledge of TB ( $4.64 \pm 0.64$ ), presence of treatment partners such as family members ( $4.71 \pm 0.46$ ) and community health workers ( $4.54 \pm 0.88$ ). The use of SMS for treatment adherence was acceptable for both providers and patients owing to its relative advantage against facility-based DOTS including reduced economic costs, privacy, ease and affordability of using SMS, and improved communication between providers and patients.*

**Conclusion:** *The use of SMS for treatment adherence has already been adopted in Quezon City as standard practice owing to its perceived benefit and overall acceptability. Further studies on sustainability and scalability might add value to replicating current practice in other settings and inform local policy reforms to address equity issues in TB treatment.*

**Keywords:** *short messaging service, tuberculosis, TB-DOTS, Philippines, acceptability*