

Oral anti-tuberculosis (Anti-TB) drugs in the hospitals: a medication reconciliation needed

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Abstract

Background: Available data from South Asia show one-third of TB deaths of the global burden. One-fifth among the treated cases had rifampicin-resistant TB. Four oral anti-tuberculosis drugs have been conceived to be the most effective ones to eradicate this bacterium *Mycobacterium tuberculosis* and to obviate the resistance organism. Nonetheless, the patients' adherence and medication discrepancies are obstacles to achieving the goal. This study aims to define the anti-tuberculosis drug in the hospitals to detect the discrepancies and the continuity of the tuberculosis treatment. **Methods:** This retrospective cross-sectional study is based on the medical records of adult patients (17-65 years old) with a diagnosis of pulmonary tuberculosis and hospitalized with the ICD-X code A15.0 (verified using sputum microscopy with or without culture) between January and December 2018. From 136 and 85 patients' medical records that observed, only thirty-five records from Hospital A and thirty-three records from Hospital B met the inclusion criteria. These two hospitals were a secondary care hospital with a total of 223 and 323 inpatient beds, respectively. **Results:** The most systemic anti-infective drugs were ceftriaxone (51.80 DDD/100 bed days) in Hospital A and isoniazid (50.08 DDD/100 bed days) in Hospital B. The number of rifampicin was less than isoniazid. The number of anti-tuberculosis drugs was 108.8 DDD/100 bed days (52.6%) in Hospital A and 194.50 DDD/100 bed days (100%) in Hospital B. Each patient received an average of 2 DDD/100 bed days. **Conclusion:** In the two-month intensive phase, each patient received four-drug fixed-dose combination therapy and two-drug fixed-dose combination therapy in the four-month continuation phase. The medication discrepancies will threaten the anti-tuberculosis drug effectiveness. Thus, medication reconciliation is needed to accomplish the TB-free world in 2035.

Keywords: Defined daily dose (DDD), tuberculosis drug, medication reconciliation