

# Assessment of adverse drug reactions in shorter and longer treatment regimens for drug-resistant tuberculosis in a tertiary care respiratory centre

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## ABSTRACT

**Introduction:** Drug-resistant tuberculosis (DR-TB) managed with shorter (STR) or longer (LTR) treatment regimens reported a high occurrence of adverse drug reactions (ADR), with a scarcity of local data. This study characterised the ADR in the STR and LTR DR-TB patients at a tertiary care respiratory centre. **Methods:** A cross-sectional study was conducted among adult DR-TB patients at the National Respiratory Centre from January 2017 to January 2021. A validated and piloted data collection form was used to extract ADR data from medical records and ADR report forms of STR and LTR patients. Data was analysed descriptively using SPSS version 24. **Results:** Eighty-one patients (mean age 41.1±14.1) were included, with 55.6% (n=45) on LTR. Sixty-four (79%) patients experienced at least one ADR resulting in 77 ADR cases. Most ADRs (61.4%, n=43) were reported among LTR patients. The suspected drugs mostly were Kanamycin (29.9%, n=23), Cycloserine (18.2%, n=14) and Ethionamide (14.3%, n=11). Causality was certain in 18.1% and 32.5% of STR and LTR, respectively. Majority of serious ADR (n=5, 14.7%) were observed in STR. The ADR caused or prolonged hospitalisation in 15.1% and 23.3% of STR and LTR patients, respectively. Most reported ADR in STR and LTR were gastrointestinal disorders, each with 14.3% (n=11) cases. About 20.8% (n=16) STR and 28.6% (n=22) LTR patients fully recovered from the ADR. **Conclusion:** Occurrences of ADR were comparable among STR and LTR DR-TB patients with a preponderance of serious ADR in STR. Future efforts could focus on the identification of ADR risk factors in order to optimise DR-TB treatment.