

It is well understood that either treatment interruptions or lost of follow-up is one of the major risk factors for the development of additional drug resistance and is also associated with poor treatment outcome which may be due to drug resistance [26]. Lost to follow-up was high (25%) in our study, which might be explained by the fact that this study was conducted in a cosmopolitan city where migration is common.

Head-on comparison of various high-risk factors with treatment outcome in conventional *versus* shorter regimens for RR/MDR-TB patients may help further to clarify the strengths and limitations of shorter MDR-TB regimen. By knowing the factors associated with treatment outcome on shorter regimen, it is possible to triage the patients early to higher centres for further evaluation and early initiation of appropriate treatment. Additionally, necessary measures need to be taken to address such adverse factors. This may help in improving the outcome and prognosis of MDR-TB patients on shorter regimen, and also help to reduce the catastrophic costs associated with TB by improving the outcome in DR-TB cases.

Our study has some limitations: Sample size was small in our study. So, large-scale studies are needed to understand how various factors affect the treatment outcomes among RR/MDR-TB patients on shorter MDR regimen. Time constraints prevented us from following up with the patients after 12 months of completion of treatment, so we did not assess long-term follow-up. Since this was a single-centre, observational study conducted at only one institution, it cannot be applied to the entire country.

In the current study, univariate analysis showed that RR/MDR-TB patients with far advanced disease, bilateral chest X-ray involvement, low BMI, previous history of multiple courses of ATT and anaemia were associated with poor outcome and low BMI (<18.5 kg/m²), anaemia, and far advanced disease on chest X-ray were associated with higher mortality. Anaemia was the only independent risk factor associated with poor outcome and mortality. Early screening for malnutrition, anaemia and chest X-ray severity, appropriate nutritional intervention and regular monitoring may improve outcome in DR-TB cases.

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