




Video-observed therapy and medication adherence for tuberculosis patients: randomised controlled trial in Moldova

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In this RCT, patients were assigned to either in-person observed treatment (as normal) or asynchronous video-observation. Observed medication adherence and satisfaction were improved and loss in patient time and costs during treatment were reduced. <https://bit.ly/2Klmf18>

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ABSTRACT

Introduction: The effectiveness of video-observed therapy (VOT) for treating tuberculosis (TB) has not been measured in low- and middle-income countries (LMICs), where >95% of TB cases and deaths occur. In this study, we analyse the effectiveness and patient cost-difference of VOT compared to clinic-based directly observed therapy (DOT) in improving medication adherence in Moldova, a LMIC in Eastern Europe.

Methods: The study was a two-arm individually randomised trial with 197 TB patients (n=99 DOT control group; n=98 VOT treatment group; multidrug-resistant TB cases were excluded). The primary outcome was observed medication adherence, measured by the number of days that a patient failed to be observed adhering to medication for every 2-week period during the course of their treatment.

Results: VOT significantly decreased nonadherence by 4 days (95% CI 3.35–4.67 days, p<0.01) per 2-week period: 5.24 days missed per 2-week period for DOT and 1.29 days for VOT. VOT patients spent MDL 504 (~EUR 25) (95% CI MDL 277–730, p<0.01) and 58 h (95% CI 48–68 h, p<0.01) less on their treatment. In addition, VOT increased self-reported satisfaction with treatment. We found no significant results pertaining to treatment success, patient wellbeing or patient employment status and some evidence of an increase in side-effects.

Discussion: In this trial, VOT increased observed medication adherence for TB patients in Moldova, a LMIC, when compared to clinic-based DOT. Additionally, VOT significantly reduced the time and money patients spent on their treatment.