

Abstract

Treatment non-adherence results in treatment failure, prolonged transmission of disease and emergence of drug resistance. Although the problem is widely investigated, there remains an information gap on the effectiveness of different methods to improve adherence, and to determine predictors of non-adherence in resource limited countries based on theoretical models. Health behavior theory is important to plan effective interventions to achieve changes in risky health behaviors including treatment non-adherence. This study aimed to determine psychosocial and behavioral predictors of TB treatment non-adherence, and to evaluate the impact of psychological counseling and educational intervention on treatment adherence based on Health Belief Model (HBM). A cluster randomized control trial study preceded by cross sectional study was conducted in Addis Ababa at randomly selected 30 Health Centers (15 HCs Intervention and 15 HCs control groups) and one purposely selected TB Specialized Hospital. A total of 698 TB patients, who were on treatment at least for one to two month were enrolled. A structured questionnaire was administered to both groups of patients at baseline and endpoint after intervention. Psychological counseling and adherence education intervention were provided for seven sessions for intervention group. In control group, the normal directly observed therapy remained unchanged. Antiretroviral therapy status, alcohol misuse, economic status, perceived low severity, perceived high barriers and cue to action were separately able to predict treatment non-adherence. At enrollment non-adherence levels was equal among intervention (19.4%) and control (19.6%) groups. After intervention, non-adherence level decreased among intervention group from 19.4% (at baseline) to 8.7% (at endpoint), while it increased among control group from 19.4% (baseline) to 22.6% (endpoint). Psychological counseling and educational intervention was resulted in borderline statistically significant difference among intervention and control groups (AOR = 0.61, 95% CI (0.34-1.07)). Strengthening of adherence education and incorporation of psychological counseling in regular TB treatment strategy, and using of HBM to promote adherence are required.

Key Words: Psychological counseling, Educational intervention, Treatment non-adherence, Health Belief Model