Household contact non-attendance of clinical evaluation for tuberculosis: a pilot study in a high burden district in South Africa

CITATION


ABSTRACT

Background: In 2012, the World Health Organization launched guidelines for systematically investigating contacts of persons with infectious tuberculosis (TB) in low- and middle-income countries. As such, it is necessary to understand factors that would influence successful scale-up. This study targeted household contacts of newly diagnosed infectious TB patients in the Mangaung Metropolitan district to explore factors associated with nonattendance of clinical evaluation.

Methods: In September–October 2016, a pilot study of household contacts was conducted. At each of the 40 primary health care (PHC) facilities in the district, at least one out of four types of TB index cases were purposefully selected. These included children <5 years, smear-positive cases, HIV co-infected cases, and multidrug-resistant TB (MDR-TB) cases. Trained fieldworkers administered questionnaires and screened contacts for TB symptoms. Those with TB symptoms as well as children <5 years were referred for clinical evaluation at the nearest PHC facility. Contacts’ socio-demographic and clinical characteristics, TB knowledge and perception about TB-related discrimination are described. Logistic regression analysis was used to investigate factors associated with nonattendance of clinical evaluation.

Results: Out of the 259 participants, approximately three in every five (59.5%) were female. The median age was 20 (interquartile range: 8–41) years. While the large majority (87.3%) of adult contacts correctly described TB aetiology, almost three in every five (59.9%) thought that it was hereditary, and almost two-thirds (65.5%) believed that it could be cured by herbal medicine. About one-fifth (22.9%) of contacts believed that TB patients were subjected to discrimination. Two in every five (39.4%) contacts were referred for clinical evaluation of whom more than half (52.9%) did not attend the clinic. Non-attendance was significantly associated with inter alia male gender (AOR: 3.4; CI: 1.11–10.24), prior TB diagnosis (AOR: 5.6; CI: 1.13–27.90) and sharing of a bedroom with the index case (AOR: 3.4; CI: 1.07–10.59).

Conclusion: The pilot study identified gaps in household contacts’ knowledge of TB. Further research on important individual, clinical and structural factors that can influence and should be considered in the planning, implementation and scale-up of household contact TB investigation is warranted.