

Latent Tuberculosis Infection Evaluation and Treatment Completion for Refugees in Philadelphia, PA-2010-2012

Background:

Seven hundred refugees arrive in Philadelphia annually. Before departure they are screened for tuberculosis and any active or suspected TB cases are treated overseas. Individuals with Class B TB (non-communicable) are allowed to enter the US without treatment, but an evaluation is required upon arrival. The Philadelphia Refugee Health Collaborative (PRHC) is a coalition consisting of Philadelphia's three resettlement agencies and eight ambulatory refugee health clinics dedicated to providing refugees with a high standard of care. The purpose of this study is to compare LTBI evaluation and treatment of refugees visiting PRHC and non-PRHC clinics to assess the effectiveness of the collaborative.

Methods:

A retrospective cohort study of Class B TB refugees referred to the Philadelphia Health Department for LTBI evaluation and treatment from 2010-2012 was performed. Patient demographic information, test results, and treatment start and completion dates were retrieved from the Pennsylvania National Electronic Disease Surveillance System (PA-NEDSS) and the CDC's Electronic Disease Notification (EDN) system. Refugees being treated at PRHC clinics were compared to those treated at non-PRHC clinics using χ^2 test. Odds ratios for time to first screening, diagnosis and treatment were calculated.

Results:

Of the 2,094 refugees that arrived in Philadelphia from 2010-2012, PDPH was notified of 149 through EDN. Among them 57 (38.3%) were diagnosed with LTBI and 75.4% of these patients completed treatment. Refugees seen at PRHC clinics were more likely to be screened within 30 days of arrival (OR: 4.70, 95% CI: 2.12-10.44), receive a diagnosis (OR: 7.54, 95% CI: 3.03-18.7), and complete treatment (OR: 9.44, 95% CI: 2.39-37.3) compared to those seen at non-PRHC clinics.

Conclusions:

Refugees that attended PRHC clinics were 4.7 times more likely to be screened within 30 days, 7.5 times more likely to be diagnosed, and 9.4 times more likely to complete treatment. The collaborative model provides patients access to a quick cross-clinic referral system, logistical support from resettlement agencies, and easy access to appointments. Bilingual staff provides language support, while specific screening days for refugees enable shorter wait times. Therefore PRHC clinics could serve as a model to non-PRHC clinics and other communities seeking to improve refugee TB care.

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