Global Health Center: Treatment Adherence for Latent Tuberculosis Infection among the Kentucky Refugee Population at the University of Louisville Refugee Health Program
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INTRODUCTION

- Tuberculosis is a transmissible airborne disease with significant global burden.
- Approximately 1/3 of the world's population is infected with Mycobacterium tuberculosis (MTB). The World Health Organization reported 1.5 million deaths worldwide in 2013 due to MTB.
- Latent tuberculosis infection (LTBI) represents a state in which the causative organism is suppressed and, therefore, inactive. Affected individuals are asymptomatic and chest x-rays have no evidence of active pulmonary disease.
- The risk of progression to active disease has been reported to be between 5-10%.
- An estimated 11 million people in the U.S. are affected by LTBI.1
- Identification of high risk groups and treatment of LTBI is therefore essential for the elimination of active TB, as the untreated individuals pose the greatest risk of conversion to active disease.
- High risk population groups for LTBI include immigrants and refugees from countries where the prevalence of active TB is high.1
- New diagnostic modalities have been developed to identify adequately exposure to TB. Bridging the gap between disease identification and treatment completion remains a global challenge.

OBJECTIVE

This study aimed to identify the percentage of refugees with LTBI identified at the university of Louisville clinic and the percentage of refugees with LTBI who completed therapy.

RESULTS

- A total of 581 refugees were screened at the 550 clinic. Forty-five (8%) had LTBI.

- Figure 1 illustrates a flowchart with rates of treatment for LTBI.
- Figure 2 demonstrates adherence to treatment in refugees diagnosed with LTBI. 20/45 (44%) LTBI positive refugees started treatment and 25/45 (56%) did not initiate treatment. Twenty-seven percent of subjects who initiated treatment went on to complete it.
- Figure 3 shows the distribution of LTBI positive refugees by country of nationality.
- Figure 4 describes the age range for LTBI positive refugees.
- Figure 5 depicts gender distribution among LTBI positive refugees.

CONCLUSIONS

The lack of adherence to treatment for LTBI has been a long-standing problem. Our 27% rate of treatment completion is consistent with published literature on low adherence rates to treatment among high risk populations. Tuberculosis represents an important global health burden, with more than 9.2 million cases of reactivation of LTBI and 1.5 million deaths per year. Eighty percent of active TB cases in the U.S. are the result of reactivated LTBI, especially among individuals born in endemic areas. Therefore, it is crucial that refugees are screened for LTBI and that appropriate access to treatment and adherence to therapy are ensured. Coordination of care with a multidisciplinary team/medical staff, public health workers, case managers and the individual patient is fundamental. Further studies focused on understanding the unique barriers to treatment completion are needed in order to provide a tailored, cultural context of care that ensures successful treatment adherence and prevents the reactivation and transmission of TB.

REFERENCES