

## The Besrouer Centre for Global Family Medicine

Dr. Patrick Chege Memorial Research Award Poster Presentation

### **Is it Effective? Latent Tuberculosis Treatment in Memorial University's Refugee Health Clinic**

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**Context:** Effective treatment of latent tuberculosis infection (LTBI) is important in preventing reactivation to active tuberculosis in the newcomer population. In 2018-2021, the Refugee Health Collaborative Latent TB Clinic, formerly Memorial University of Newfoundland (MUN) Refugee Health Clinic (RHC) oversaw a LTBI treatment clinic for newcomers. Before 2019, first-line treatment was Isoniazid monotherapy for nine months (9INH). In 2019, Rifampin monotherapy for four months (4RMP) was introduced as first-line treatment with local public health approval reflecting WHO and CDC guidelines although it was not yet standard practice per provincial guidelines for LTBI management.

**Objectives:** To evaluate the effectiveness of RHC's current approach to LTBI management and make recommendations for improvement.

**Setting:** Refugee Health Collaborative LTBI Clinic (former MUN RHC).

**Participants:** Refugee patients of all ages with either a positive TST or a positive IGRA between (January 1<sup>st</sup> 2018 - July 2021).

**Method:** A patient chart audit was conducted searching for "TST, IGRA, latent and active Tuberculosis". LTBI treatment log sheets were also reviewed for treatment initiated, start/finish dates and side effects experienced. A literature review of LTBI treatment completion rates was also completed to contextualize results.

**Outcome/Measures:** LTBI treatment course completion rates (with 4RMP or 9INH), side effects experienced, patients who were never initiated on treatment.

**Results:** Overall completion rates were 89% for 4RMP (47/53) and 90% for 9INH (26/29) for the period of time studied. 14 people were identified as never having started treatment. Hematological and gastrointestinal were the most common 4RMP side effects observed whereas gastrointestinal and paresthesia were observed with INH. Literature review revealed completion rates of 52.63% – 78.8% elsewhere in Canada and outside the country.

**Conclusion:** The RHC's higher completion rate for patients taking 4RMP and similar clinical effect compared to INH in our clinic suggests that the RHC should continue to offer 4RMP as a first line treatment for LTBI. Additional recommendations for improvement of the RHC include: (1) patients identified as never starting treatment should be contacted for follow-up counselling on their treatment options; and (2) an annual audit of latent TB treatment initiation and completion should be conducted to help prevent future loss to follow up.