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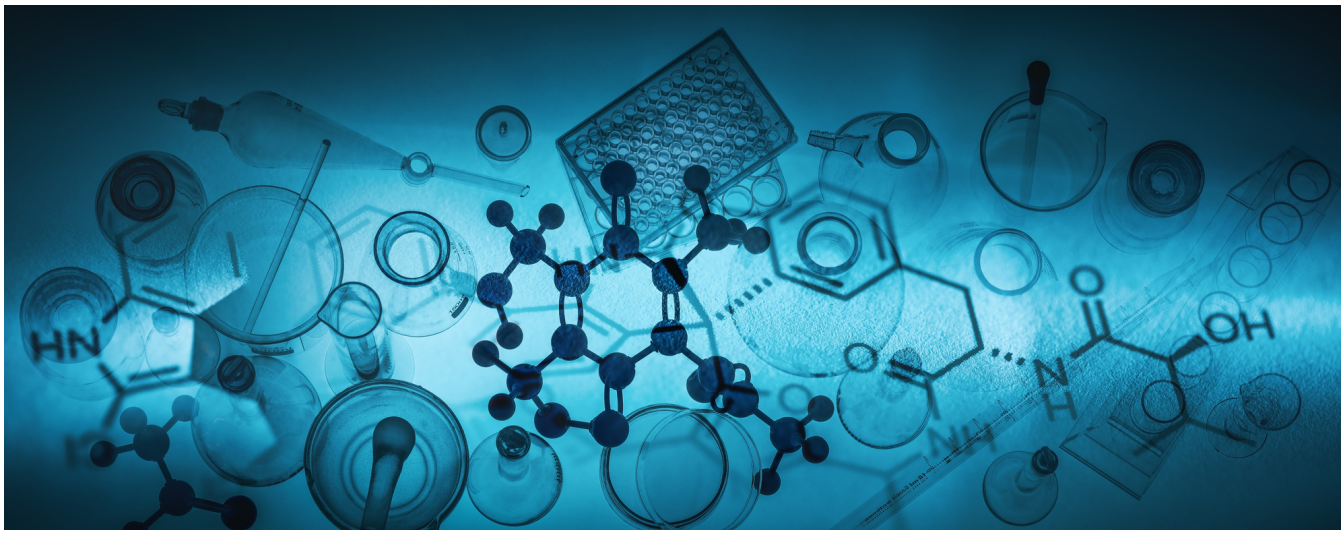
THE MONTHLY DOSE

Official Newsletter of The Mueller Health Foundation



WHAT'S NEW AT THE MUELLER HEALTH FOUNDATION:

The Mueller Health Foundation, together with our grantee REACH in India is proud to premiere a second short film titled "A New Dawn", which shows the journey of two drug-resistant tuberculosis (DR-TB) survivors from Chennai, Tamilnadu.

We are grateful to these brave TB survivors for sharing their stories with us and we would like to thank the team at REACH for putting together this great movie.

You can watch the second short film here: https://www.youtube.com/watch?v=1DKDlWjQtCk

Stay tuned for more updates!

LATEST NEWS: SHOWCASING STORIES OF TB SURVIVORS

We at The Mueller Health Foundation continue to be deeply committed to sharing personal stories and giving a voice to TB patients, TB survivors, TB practitioners, and all the friends and family members of the people who have been affected by the disease. The Center for Disease Control and Prevention (CDC) has put together a wonderful collection of stories and this month we would like to highlight Liliana's story. Here is an excerpt from her journey after being diagnosed with multi-drug resistant (MDR) TB:

Due to a lingering cough that did not get better, Liliana went to seek medical support from a pulmonologist and upon further testing, it was revealed that she had active TB disease. Liliana began treatment for TB disease, which typically takes 6 to 9 months to complete. After 3 weeks of staying home and taking her medication, she was relieved to be allowed to go back to work. It was a shock to hear 2 weeks later that her TB disease was resistant to most of the medications she was taking. Liliana was diagnosed with MDR TB, which is caused by TB bacteria that are resistant to at least isoniazid and rifampin. This was not the first time Liliana had been on treatment for TB. When in high school, she underwent tuberculin skin testing and the result was positive. Further testing had shown that she had latent TB infection. At that time, Liliana was put on isoniazid preventive treatment for 6 months to keep the infection from becoming TB disease. She thought nothing further about TB for years, until her new diagnosis with MDR TB. Because MDR TB is much more difficult to treat than regular TB, Liliana was in the hospital for 2 months. Her treatment required taking many pills and getting two painful shots every day. After being released from the hospital, Liliana was able to return to work since she was no longer infectious. However, she still had to receive treatment at home for the next 16 months. It took 1.5 years for Liliana to complete her treatment. Liliana wants to share the following advice: "My advice to someone who is recently diagnosed with TB is to have patience. There is hope and there is a cure, but you must be patient during your treatment." To read her full story please follow the link to the Center for Disease Control and Prevention's website here: https://www.cdc.gov/tb/topic/basics/lilianastory.htm

For more news, please also take a look at our top 3 picks for June in this newsletter, where we highlight novel research findings and news around the prevention and treatment of tuberculosis around the world.

The Mueller Health Foundation

MHF TOP PICKS FOR JUNE

Every month, we at the Mueller Health Foundation like to showcase interesting news and updates in the field of tuberculosis (TB). Below are our top **3** picks for **June**:

1. Active Screening for Pulmonary Tuberculosis Among Jail Inmates: A Mixed Method Study From Puducherry, South India

Active case finding (ACF) is crucial in the effective management of TB disease. The researchers aimed to conduct a mixed methods study that has a quantitative component, i.e., to actively screen prison inmates for pulmonary TB (PTB), and a qualitative component, i.e., to know the perceptions of jail inmates towards PTB and the stigmas associated with it. Out of all the 187 inmates screened with cartridge-based nucleic acid amplification test (CB-NAAT) assay, 10.7% were symptomatic for PTB. During the focus group discussion, the researchers came across negative ideologies and stigmas associated with PTB among jail inmates. The researchers used the same platform to clear those ideologies and recommend frequent health education exercises even in socially ostracized communities like jail inmates. To learn more, you can access the full paper at: https://www.cureus.com/articles/154379-active-screening-for-pulmonary-tuberculosis-among-jail-inmates-a-mixed-method-study-from-puducherry-south-india#!/

2. Public Health Concerns about Tuberculosis Caused by Russia/Ukraine Conflict

According to WHO, Ukraine has the fourth-highest Tuberculosis (TB) incidence in the European region while globally it has the fifth-highest number of confirmed cases of extensively drug-resistant TB. Before the Russian invasion in Ukraine several interventions have been employed to mitigate the TB epidemic in the country. However, the ongoing war has demolished meticulous efforts and subsequently worsened the situation. The high prevalence of multidrug resistant (MDR) TB in Ukraine and the possibility of it being transmitted to other people in the Ukraine or neighboring countries seem to be the most feared consequence. The researchers urge the international community to aid in the creation of well-prepared camps where the war refugees can be diagnosed to identify whether they have TB or not; and if found positive, they must be immediately introduced to medications. TB patients who are still in Ukraine must be supported economically as war has left most people helpless and even those who are capable of buying drugs find no drugs available as main infrastructures for transportation of drugs and other medical equipment have been destroyed. To learn more, you can read the article here: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10108851/

3.Prevalence of Latent Tuberculosis Infection in Mexican Patients With Rheumatoid Arthritis

The objective of this study was to determine latent tuberculosis infection (LTBI) prevalence and the associated risk factors in rheumatoid arthritis (RA) patients in Mexico. A cross-sectional study was performed comprising 82 patients with RA who attended the rheumatology service at a second-level hospital in Mexico. Demographic characteristics, comorbidity, Bacillus Calmette-Guerin (BCG) vaccination and smoking history, type of treatment, disease activity and functional capacity were investigated. The prevalence of LTBI in Mexican patients with RA was 14%. Factors associated with LTBI were history of smoking (odds ratio (OR) = 6.63 95% CI 1.01 to 43.3) and disability score (OR = 7.19 95%CI 1.41 to 36.6). The researchers suggest that smoking prevention and managing functional incapacity could reduce the risk of LTBI. You can learn more and access the full paper here: https://www.cureus.com/articles/154275-prevalence-of-latent-tuberculosis-infection-ltbi-in-mexican-patients-with-rheumatoid-arthritis-ra?score_article=true#!/

DID YOU KNOW?

Given the on-going conflict between the Ukraine and Russia, we wanted to highlight some facts related to TB prevalence among refugees and displaced persons from the Ukraine with the latest available data from 2022:

- Before the occurrence of the conflict, cases of TB in the Ukraine spiked up to 30,000 annually while among those cases, 29% of all new diagnoses were MDR-TB cases. Only 81% of the total TB cases were diagnosed and treated.
- The extent of the TB burden in Ukraine emanates from the southern and eastern regions, skewed toward the male population aged 40 years and older.
- Of the estimated 6.12 (95% CrI: 5.84 to 6.36) million Ukrainians refugees fleeing the country between February 24 and May 13, 2022, it is estimated that 5,625 people have TB.
- For internally displaced people within the Ukraine is estimated that around 8,031 people have TB based on estimates made in May 2022.
- TB and HIV disproportionately impact adult men younger than 60 years old, who may be prohibited from leaving the country under martial law restrictions.
- Researchers have estimated the prevalence of TB to be 9.19 per 10,000 Ukrainian refugees in 2022.
- Given that the Ukraine has the highest number of cases of MDR-TB in the EU region, and given that more than 7 million people have left the country to date, managing and treating TB and MDR-TB refugees from the Ukraine should be a critical concern within the EU region and globally.

Information Source:
https://www.pnas.org/doi/10.1073/pnas.2215424120
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10108851/