Optimizing TB Services for Pregnant People: Best Clinical Practices

Jennifer Furin, MD., PhD.
Harvard Medical School, Department of Global Health and Social Medicine
The Sentinel Project on Pediatric Drug-Resistant T
Learning Objectives

• 1. Participants will be able to identify the main challenges facing pregnant and peripartum people living with drug-resistant TB;
• 2. Participants will be able to recognize and apply best clinical practices for the diagnosis, prevention and treatment of drug-resistant TB in pregnant, peripartum people, and their infants.
Pregnant People with TB: A Complex and Under-Served Population

• Increased physical vulnerability to all forms of TB;
• Exclusion from studies and, as a result, access to innovation;
• Fear-based infection control practices lead to discriminatory and harmful practices;
• “Limited information” means counseling often creates additional anxiety;
• Result is that pregnant people with TB feels confused, scared, isolated and alone.
Building Expert Consensus for Pregnant People with drug-resistant TB

- 17 representatives with collective experience caring for hundreds of pregnant people with DR-TB in all WHO regions of the world;
- Literature review for data to support “best practices”;
- Where data were lacking, consensus reached through processes of discussion, revisions, consultation;
- Hosted by the Sentinel Project on Pediatric Drug-Resistant TB, an international group with successful track record of undertaking similar work for children with DR-TB;
- Focus was on drug-resistant TB, but most practices could also apply to pregnant people with TB as well.
Topic Areas Covered

- Diagnosis and pathways to care;
- Treatment regimen design and initiation;
- Monitoring
- Management during labor and delivery;
- Postpartum management of person who has given birth;
- Postpartum management of neonate

- Infant feeding considerations;
- Family planning;
- Counseling and support;
- Annexes with referral letters, PV forms;
- Selected references
Format

- Review of evidence;
- Recommended best practices;
- Tables with practical information;
- Summary points;
- Patient review scenarios with management improvement strategies;
- Attempted to use inclusive language throughout.

Patient Scenario

FG is a 32-year-old person who is pregnant and in the first trimester when they find out they are living with DR-TB. They have a rapid molecular test that is positive for Mycobacterium tuberculosis as well as rifampicin-resistance and fluoroquinolone resistance. They have bilateral cavitary disease on chest radiograph and are started on a regimen of bedaquiline, clofazimine, cycloserine and ethionamide. Linezolid is omitted after a baseline hemoglobin is 77 g/dL, and delamanid is not given because the providers are worried about safety owing to “limited information” on its use in pregnancy. They continue to cough, fail to put on weight and in their second month of treatment, they still have a positive smear and culture. They also report daily vomiting after taking DR-TB treatment.

Recommendations to improve practices in this scenario would include the use of linezolid since its use is associated with improved outcomes and decreased mortality, especially in the setting of fluoroquinolone resistance. Delamanid should also be given since it is likely safe and the benefits outweigh the risks in people who are pregnant and where strains are resistant to the group A drugs. It is preferable to ethionamide, a drug associated with poor treatment outcomes and associated with vomiting, and with neural tube defects in a developing fetus. Pregnant people living with DR-TB should be given the most effective treatment regimens possible, since these regimens are the best chances for keeping the pregnant parent healthy and delivering a healthy infant.
Key “Top-Line” Recommendations

- Free family planning services at all stages of DR-TB diagnosis and treatment so that people can be in control of their reproductive lives while working to regain their health from their DR-TB;

- WHO recommended diagnostic tests, including rapid molecular tests and chest radiography as well as to routine screening for DR-TB given the heightened risk of developing TB during pregnancy;

- Compassionate counseling and support for either continuing or terminating a pregnancy when the person is also living with DR-TB, depending on the preferences and needs of the pregnant person;

- Effective treatment (including with newer drugs such as bedaquiline, delamanid, linezolid and the third-generation fluoroquinolines), even if specific data on pregnant people are lacking due to their limited inclusion in studies (although drugs that are known to cause reproductive toxicity such as pretomanid or clear damage to the developing fetus such as the injectables should be avoided if possible);
Key “Top-Line” Recommendations

- Routine monitoring to ensure treatment is progressing well and that side effects are being assessed, managed, and minimized;

- Skilled medical care and support during all phases of pregnancy—including delivery—without unnecessary and discriminatory infection control practices being enforced beyond what is provided to other pregnant people (with some rare exceptions for people who are only recently started on DR-TB treatment);

- Their newborn child and the right to feed that child in a way that promotes the health of the newborn and the postpartum parent and aligns with the parent’s values, preferences and needs around feeding;

- Support to remain on therapy for DR-TB with practical information about the risks and benefits of all aspects of treatment provided by informed and compassionate staff.
Next Steps


• Completion of short “policy briefs” that can be used at national and international levels;

• Incorporation of best practices into existing training modules:

• Publication of best practices in IJTLD (likely out in April 2023);

• Developing counseling tools and materials for pregnant people impacted by TB;

• Advocacy!
Thank you!