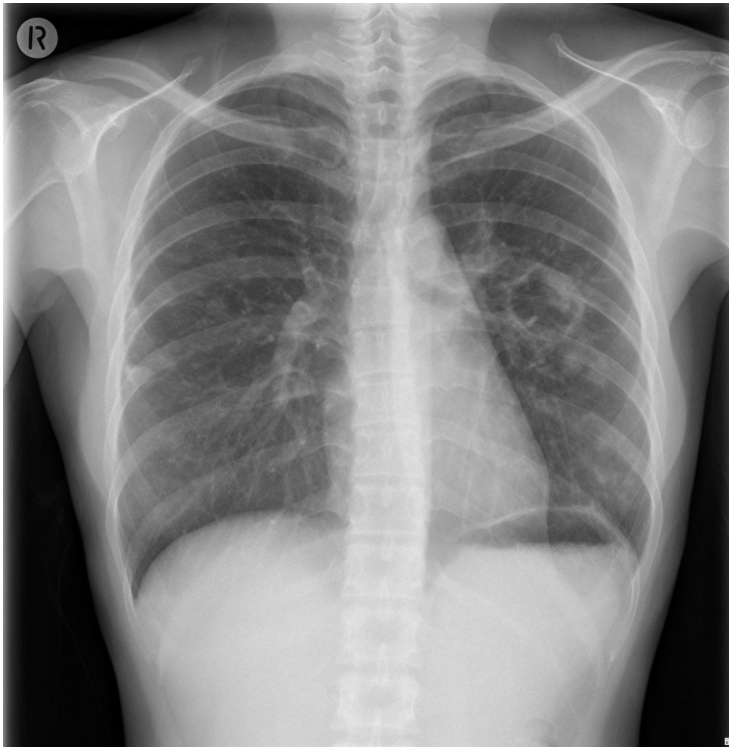


### TB & MDR-TB in a PHC Setting: A Case Study

Ms ZA is a 26 year old female with no comorbidities in a long term relationship, who now walks into your clinic with a 1 month history of a non-productive cough, loss of weight and night sweats. She has a BMI of >18, and her vitals are stable.

She is sent for an x ray, and below is the result:



#### **QUESTIONS:**

1. What does the CXR show and what test would you want to do next?
2. Her GeneXpert result comes back as positive, but with Rifampacin resistance. How would you approach the situation?
3. She has one of the mutation to INH. In the absence of any other risk factors, how would this alter your management?
4. Ms. ZA informs you that her and her partner have been talking about having a child. What advice would you give her regarding this?
5. Ms Za is lost to follow up during month 3. She is called back and she admits that she has not taken medication for more than 2 months. She was visiting family in KZN for a few months. What are your next steps?

**Answers:**

1. a) Apical segment of the left lower lobe has a cavity. Bilateral patchy opacification and nodules also noted. b) sputum GeneXpert and tell the patient to come back within 2 days for the result
2.
  - a. Send for DR-TB Reflex testing for smear, culture, INH mutations, first and 2nd line LPA as well as phenotypic drug resistance testing
  - b. Assess risk factors, and start short or longer course DR-TB treatment whilst waiting for results of DR-TB Reflex testing
3. Continue with short regimen, with high dose Isoniazid
4. Inform her of the risks to the baby of DR-TB medication. Counsel about family planning and offer it if needed. Tell her that should she get pregnant, she would need expert, regular follow up of her pregnancy.
5. a) Stop treatment b) Collect sputum do X-pert and evaluate results c) (i) If Xpert positive and Rif sensitive, restart on regimen 1a and register as "Treatment after loss to follow up" c) (ii) If Xpert sensitive and Rif resistance , register patient as "R-R TB", refer to MDR unit, do follow up to ensure that patient has been successfully referred .