Co-infection of TB and HIV: why is it important?

Tuberculosis and HIV/AIDS are among the leading public health problems globally - and they can interact in powerful ways. We can guard against both - and this newsletter special explains how. Here are some key facts:

- Tuberculosis (TB) is one of the most common illnesses and causes of death among people with HIV.
- If untreated, TB is fatal for people living with HIV -- responsible for more than 1 of 3 HIV-associated deaths.
- Globally in 2017, TB claimed 1.6 million lives and HIV 1 million. Among those, 300,000 people died as a result of both diseases.
- Due to decreased immunity, people living with HIV have 20-30 times higher risk to develop TB than those without HIV.
- In general, the outcome of TB treatment of people living with HIV is not as good as those without HIV.
- On the positive side, TB preventive treatment for people living with HIV reduces risk of getting TB significantly.
- Early detection of TB and HIV allows early treatment of both diseases - with a better chance of survival.

Linkage of TB and HIV

The Human Immunodeficiency Virus (HIV) attacks the immune system of an infected person. Due to decreased immunity, the body cannot fight well against infections by bacteria, fungi, and other viruses. The advanced stage of this condition is called Acquired Immunodeficiency Syndrome (AIDS).

TB is caused by bacteria called Mycobacterium tuberculosis that attacks lungs and other organs, such as brain, bones, intestines, and skin. People living with HIV are more prone to develop active TB due to impaired immunity.

Without treatment, both diseases progressively paralyze vital functions of the body, until the person dies.

How to detect TB in people living with HIV?

TB symptoms may not be easy to recognize in people living with HIV. Cough is not always present. Other TB symptoms are valuable to recognize. If these symptoms are present, a health professional should be consulted:

- long term or chronic fever
- weight loss
- night sweats
- malaise and lack of appetite

References:
2. National Tuberculosis Control Program, MoHS Myanmar, 2018
How can a person living with HIV prevent TB, or get TB treatment as early as possible?

1. **Enrolment to HIV care.** The only way to obtain comprehensive and appropriate care is to seek medical care immediately.

2. **Regular follow up visits** to your clinic as in accordance with treatment and care. This enables health workers monitor and support your health and well being.

3. Take **anti retroviral drugs** as prescribed, without fail. WHO recommends anti retroviral treatment for all people living with HIV -- and with good adherence to the medication.

4. During each follow up visit to your clinic, the health professional will **screen for TB** disease. They will check for any symptoms of TB - and may request chest x-ray and sputum sample for further examination if necessary.

5. Even if TB is not present, the health professional may prescribe **preventive treatment** to protect against TB.

6. **TB prevention includes simple actions all of us can take.** For example,
   - do not spend unnecessary time in under-ventilated spaces.
   - Observe cough etiquette rigorously. Cover your nose and mouth by coughing or sneezing into elbow and arm. If cough persists, wear a mask.

**TB preventive treatment...**

...is a medicine prescribed for a person living with HIV to prevent TB. Ministry of Health and Sports, Myanmar, recommends: one Isoniazid tablet daily for six months, viz 300mg for adult, and 10mg (per kg of body weight) for children. There may be side effects. These can be managed. Therefore, a patient is encouraged to regularly visit the health centre for follow up.

Further, for people living with HIV, taking antiretroviral drugs, as prescribed, **improves immunity and reduces the risk of TB.** In addition, taking TB preventive treatment reduces the risk further.