# **World Tuberculosis Day 2020**

“It's time”

* TB, although curable and preventable, is one of the top 10 causes of death and the leading cause from a single infectious agent (besides HIV/AIDS)

**GLOBAL TB STATISTICS IN 2018**:

* an estimated 10 million people fell ill with tuberculosis(TB) worldwide, (5.7 million men, 3.2 million women and 1.1 million children). A total of 1.5 million people died from TB (including 251 000 people with HIV)
* Eight countries account for two thirds of the total disease burden :India, China, Indonesia, the Philippines, Pakistan, Nigeria, Bangladesh and South Africa.
* Multidrug-resistant TB (MDR-TB) remains a public health crisis and a health security threat. WHO estimates that there were 484 000 new cases with resistance to rifampicin – the most effective first-line drug, of which 78% had MDR-TB.
* **Pakistan**, with an estimated 510 000 new TB cases emerging each year and approximately 15 000 developing drug resistant TB cases every year, is ranked fifth among high-burden countries worldwide and it accounts for 61% of the TB burden in the WHO Eastern Mediterranean Region.
* The country is also estimated to have the fourth highest prevalence of MDR-TB globally.

**KEY REASONS FOR EMERGENCE OF DRUG RESISTANCE FORM OF TB**: delays in diagnosis, unsupervised, inappropriate and inadequate drug regimens, poor follow-up and lack of a social support programme for high-risk populations.

**NATURAL HISTORY OF TB**

* **TRANSMISSION:** TB is spread from person to person through the air. When people with lung TB cough, sneeze or spit, they propel the TB germs into the air. It has high transmissibility and a very small bacterial load is enough for infection.
* **THE COMMONEST SYMPTOMS:** cough, fever, night sweats, and weight loss
* **LATENT TB**: About one-quarter of the world's population has latent TB, which means people have been infected by TB bacteria but are not (yet) ill with the disease and cannot transmit the disease.These have a 5–15% lifetime risk of falling ill with TB**.**
* **ACTIVE TB**: People with active TB can infect 5–15 other people through close contact over the course of a year.When a person develops active TB disease, the symptoms may be mild for many months. This can lead to delays in seeking care, and results in transmission of the bacteria to others
* **MULTIDRUG-RESISTANT TUBERCULOSIS (MDR-TB)** :It is a form of TB caused by bacteria that do not respond to isoniazid and rifampicin, the 2 most powerful first-line anti-TB drugs. MDR-TB is treatable and curable by using second-line drugs. However, second-line treatment options are limited and require extensive chemotherapy (up to 2 years of treatment) with medicines that are expensive and toxic.
* **EXTENSIVELY DRUG-RESISTANT TB (XDR-TB):** It is a more serious form of MDR-TB caused by bacteria that do not respond to the most effective second-line anti-TB drugs, often leaving patients without any further treatment options.
* **PERSONS WITH COMPROMISED IMMUNE SYSTEMS**: People living with HIV, malnutrition or diabetes, or people who use tobacco, have a higher risk of falling ill. Without proper treatment, 45% of HIV-negative people with TB on average and nearly all HIV-positive people with TB will die.
* People living with HIV are 19 (15-22) times more likely to develop active TB disease than people without HIV.
* **MORTALITY IN HIV ASSOCIATED TB**: In 2018 about 251 000 people died of HIV-associated TB. In 2018, there were an estimated 862 000 new cases of TB amongst people who were HIV-positive, 72% of whom were living in Africa.

**DIAGNOSIS:**

The **rapid test Gene Xpert** simultaneously detects TB and resistance to rifampicin, the most important TB medicine. Diagnosis can be made within 2 hours and the test is now recommended by WHO as the initial diagnostic test in all persons with signs and symptoms of TB.

The Mantoux tuberculin skin test (TST) or the TB blood test, Chest X-Ray, presence of acid-fast-bacilli (AFB) on a **sputum smear** and sputum **culture** are other tests.

**BCG VACCINE**:BCG vaccine is a part of EPI schedule. One dose is recommended in babies at birth for prevention against TB and leprosy.

**WHO RESPONSE TO END TB (FOR THE 5-YEAR PERIOD 2018–2022)**

The global targets are:

* treat 40 million people for TB disease;
* reach at least 30 million people with TB preventive treatment for a latent TB infection;
* mobilize at least US$ 13 billion annually for universal access to TB diagnosis, treatment and care by 2022;
* mobilize at least US$ 2 billion annually for TB research.

**PREVIOUS WHO THEMES FOR WORLD TB DAY**

* 2015: Gear up to end TB
* 2016: Unite to End TB
* 2017: Unite to End TB : leave no one behind
* 2018: Wanted: Leaders for a TB-free world
* 2019: It's time

**Ending the TB epidemic by 2030 is among the health targets of the Sustainable Development Goals** (SDG Target 3.3 ).Under the theme ‘**It’s Time**’, the spotlight this year is on urgently accelerating the TB response to save lives and end suffering, building on high level commitments by Heads of State at the 2018 UN High-Level Meeting on TB.Its time to keep promises,time to turn commitments into action and time for accountability

**PAKISTAN- TB CONTROL PROGRAMME STRATEGY**

WHO recommended End TB Strategy has been adapted to be translated into National End TB Strategic Plan (2017-2020) for Pakistan, led by the National, Provincial and Regional TB Control Programs, through a consultative process amongst all stakeholders with complete ownership on respective TB Control Programs.

**GOAL:**To end the TB epidemic in Pakistan by 2035

The major 3 pillars are:

**PILLAR 1**: INNOVATIVE CARE INTEGRATED PATIENT CENTERED TB CARE AND PREVENTION- SEARCH, TREAT AND CURE

**PILLAR 2**: BOLD POLICIES AND SUPPORTIVE SYSTEMS -SUPPORT, CARE AND ENGAGE

**PILLAR 3**: INTENSIFIED RESEARCH AND INNOVATION- SEEK, KNOW AND APPLY