EDITORIAL

Tuberculosis: A Red Flag for Pakistan's Health Care System

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Mycobacterium tuberculosis is the microbe that causes tuberculosis (TB). The lungs are the usual site of infection for tuberculosis bacteria, although they can also affect the brain, spine, gastrointestinal tract, kidneys, and other organs. If left untreated, TB can be lethal [1].

It is easy for tuberculosis to spread from person to person through the air. The most efficient way to produce infectious aerosols in pulmonary tuberculosis is through cough, but other powerful expiratory movements such as singing, sneezing, or yelling can also produce droplet nuclei containing M. tuberculosis [2].

Clinical manifestations of pulmonary tuberculosis typically include a persistent cough, production of sputum, an appetite loss, weight loss, low-grade fever with night sweats, and blood in the sputum [3].

1.6 million individuals died from tuberculosis globally in 2021, including 187,000 HIV-positive patients. After COVID-19 but before HIV and AIDS, tuberculosis (TB) is the second most deadly transmissible illness in the world and the 13th leading cause of death [4].

Pakistan's health system is extremely complicated because both the federal and provincial governments are involved. Health care receives a comparatively modest portion of Pakistan's GDP. Pakistan is ranked 154th out of 195 countries in terms of having access to high-quality medical care [5].

Unfortunately, Pakistan accounts for 61% of tuberculosis cases in the WHO Eastern Mediterranean Region and has the fifth-highest tuberculosis burden in the world. An estimated 510000 new cases of tuberculosis are diagnosed each year, and 15000 of those cases develop drug resistance. According to estimates, the country has the fourth-highest global prevalence of multidrug-resistant tuberculosis (MDR-TB) [6].

The statistics showed that Punjab had the highest percentage of MDR cases reported (51%), followed by Sindh (23%), KPK (15%), and Baluchistan (3.5%) [7]. It seems that tuberculosis (TB) is becoming a national epidemic in Pakistan. Pakistani citizens are primarily affected by the spread of tuberculosis (TB) due to inadequate nutritional and socioeconomic conditions, as well as a lack of awareness regarding vaccination, symptoms, transmission, and treatment options.

Pakistan faces several significant obstacles to the control of tuberculosis, such as a dearth of research, a lack of community and private sector involvement, a lack of knowledge among health professionals regarding the management of tuberculosis.

Since tuberculosis has a significant financial burden on households, it mostly affects the poorest of the poor and significantly adds to the disease-poverty trap [8]. As per the most recent survey conducted by the Planning Commission of Pakistan, around 55 million people, or 24.3% of the population, were living below the poverty level in the years 2015–2016 [9].

Pakistan's efforts to eradicate tuberculosis are confronted with a new challenge due to the increased susceptibility of HIV patients to tuberculosis, MDR infections, and a recent rise in HIV incidence among injectable drug users.

According to a qualitative study on the difficulties faced by general practitioners (GPs) in Pakistan, most GPs were ignorant of screening guidelines, did not fully understand the meaning of MDR-TB, and were unable to respond when asked how to treat TB in women who were pregnant or nursing [10].

Delayed diagnosis and treatment exacerbate the condition and clinical results, which increases the risk of tuberculosis (TB) spreading throughout the community. The primary causes of patient delays were poor income and poverty (42.0%), followed by treatment from local traditional healers (41.6%), stigma (feeling ashamed = 38.7%), and ignorance of the TB center (41.6%) [11].

Previous similar research have demonstrated that the primary factor impeding the control of tuberculosis (TB) is treatment delay. Ten to fifteen persons may acquire tuberculosis each year from a single untreated patient. Additionally, postponing TB treatment increases the chance of developing new problems and ill health, which raises the death risk.

The socioeconomic status of the patient is a major factor in treatment delays. For instance, important characteristics linked with treatment delay were age, sex, marital status, location, stigma, educational status, monthly earnings, profession, family size, drive to health institution, and awareness of TB [11].

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After tuberculosis (TB) became a national emergency in 2001, the National TB Control Programme (NTP) was reinstituted in Pakistan under the Ministry of Health, with the seemingly insurmountable objective of "getting back on track to end the TB epidemic by 2030."

To fulfill their mission, NTP and the Health Ministry should: use social media to inform the public about the disease; hold community-based research and TB screening events; adequately train medical professionals in TB treatment; and establish a public-private partnership to provide free care for patients.

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