

ANALYSING THE EFFECT OF TUBERCULOSIS ON PATIENTS

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Abstract: Tuberculosis, also known as TB, is an infectious disease that primarily affects the lungs. Caused by the bacterium *Mycobacterium tuberculosis*, it is spread through the air when people who are sick with TB expel bacteria by coughing, sneezing or spitting. While tuberculosis has afflicted humanity for millennia, it remains a serious public health issue today with 10 million new cases and 1.5 million deaths globally each year. This article aims to analyze the profound physical, psychological and socioeconomic impacts that tuberculosis has on those diagnosed with the disease.

Keywords: Infectious diseases, socioeconomic sides, profound effect, analyzes, moder medicine, treatments.

Introduction: 33% of the total populace is tainted with *Mycobacterium tuberculosis*, which causes the irresistible respiratory infection tuberculosis (TB). In 2010, the World Wellbeing Association (WHO) assessed 8.8 million new instances of TB, and 1.1 million passings from TB among HIV-pessimistic people.

Dynamic TB infection applies a significant cost for personal satisfaction — going from physical side effects connected with illness and treatment to mental pain from social seclusion and demonization. The conclusion of dormant TB contamination (LTBI) might be misinterpreted as dynamic TB illness or even HIV disease, the two of which may likewise prompt further trashing; in certain networks, the finding of TB is unequivocally connected with HIV infection]. Wellbeing related personal satisfaction (HRQOL), as revealed by patients, is hence exceptionally applicable to understanding and evaluating the genuine effect of TB.

In spite of the way that tuberculosis (TB) is a preventable sickness, it actually positions among the best ten reasons for death around the world. As per a new report by the World Wellbeing Association (WHO) in 2016, around 10. million individuals were tainted with *Mycobacterium tuberculosis* and 1.7 million individuals kicked the bucket (counting .4 million passings among human immunodeficiency infection (HIV)- positive individuals) because of TB. As per 2016 appraisals, 56% of individuals experiencing TB were living in five nations (in sliding request); India, Indonesia, China, the Philippines and Pakistan.

Pakistan shares 61% of the TB trouble in the WHO Eastern Mediterranean Area. In 2016, 356,390 new and backslid instances of TB were advised in Pakistan, showing an expansion in the quantity of told cases contrasted and 2015 (323,856 cases). Among all advised cases in 2016, 80% were aspiratory tuberculosis (PTB) cases, and 4% cases had known HIV contamination. Despite the fact that patterns in TB death rates in Pakistan from 2012 to 2016 show a significant decrease in related passings going from 34 to 23 cases for each 100,000 populace, TB stays a critical executioner in this country.

To control the worldwide weight of TB, in 2006 the WHO fostered the Stop TB Technique (2006-2015) that was based on the Stop TB Association's most memorable worldwide arrangement (2001-2005). The fundamental targets framed in the methodology connected to the Thousand years Improvement Objectives (MDGs) were decrease in TB predominance and death

rate because of TB by half by 2015 when contrasted with 1990. Pakistan has met this Stop TB focus of half decrease in TB death rates throughout the predefined time and has gained tremendous headway with respect to effective treatment of medication vulnerable TB.

Notwithstanding, the nation actually faces an oppressive predominance pace of 341 cases for each 100,000 populace and an occurrence pace of 270 cases for every 100,000. In addition, lately, Pakistan is assessed to stand fourth among nations of the world with the most noteworthy extent of multidrug-safe TB (MDR-TB).

The WHO suggests that treatment result examination among PTB patients be completed consistently at public and locale levels. TB normally includes the lungs (aspiratory TB) and is gained by means of inward breath of drop cores in the air following openness as a rule more than a few hours. Close contact and the irresistibility of the source patient are key gamble factors for the disease of tuberculin-pessimistic people. Current therapy of medication defenseless TB requires mix treatment comprising of an escalated period of 2 months of isoniazid, rifampin, pyrazinamide, and ethambutol, trailed by a continuation period of 4 months of isoniazid and rifampin. Straightforwardly noticed treatment (Dab) is prescribed to guarantee adherence to the complicated routine and to dissuade the development and spread of MDR-TB.

Treatment is effective in around 85% of patients following a half year's treatment. Likewise, people can become non-irresistible in somewhere around fourteen days of treatment commencement, controlling sickness transmission. In this manner, brief commencement of treatment is significant for both the patient and their nearby contacts. Notwithstanding, the administration of TB is muddled by the rising predominance of MDR-TB, which requires delayed and complex treatment, and is bound to be related with unfortunate results. Indeed, even after effective treatment, patients might have continuous lung illness and a diminished future.

The medications used to treat tuberculosis are surely known clinically, and helplessness testing will demonstrate which treatment routine is fitting. Notwithstanding, treatment viability relies upon patient adherence to a requesting and extended treatment routine with related incidental effects. In this unique situation, a patient-centered approach which considers the singular's particular conditions is expected to guarantee adequate adherence and great results from treatment. Premium in this field has been constructing consistently and is generally fit to a subjective investigational approach which permits profound investigation of inspirations, responses, objectives, goals, and conditions. Be that as it may, concentrates on more frequently consider the difficulties looked by medical services laborers really focusing on TB patients, or the execution of new administration instruments.

On a physical level, tuberculosis can cause severe damage to the lungs if left untreated. When a person is first infected, the bacteria usually settle in the lungs where they remain inactive, in a dormant state called latent tuberculosis. However, in around 10% of cases, the bacteria become active which can lead to serious illness. The active form of the disease causes symptoms like coughing (which may produce sputum or blood), chest pains, weakness, fatigue, weight loss, fever and night sweats. If the infection spreads from the lungs to other parts of the body, it can affect organs like the brain, spine and kidneys. This systemic form of tuberculosis is more difficult to treat and carries a higher risk of death. The physical toll of advanced tuberculosis is immense, with patients often bedridden and suffering from respiratory failure, multi-organ dysfunction and wasting of the body. Even after successful treatment, lung damage may be permanent.

Beyond physical health impacts, tuberculosis takes a psychological toll on patients and their loved ones. Receiving a diagnosis of TB is understandably distressing due to the social stigma associated with the disease and concerns over treatment outcomes. Patients frequently experience feelings of anxiety, depression, guilt, isolation and loss of self-esteem. They may worry about infecting others or that the disease signals they have a weakened immune system. The drawn-out treatment period adds to mental strain, as patients must strictly adhere to medication schedules and face potential side effects for 6-9 months. They are often unable to work during this time which impacts livelihoods. For family members, caring for a tuberculosis patient is also psychologically taxing due to health risks, responsibility of treatment support and changes to family dynamics.

On a socioeconomic level, tuberculosis disproportionately affects vulnerable populations and perpetuates the cycle of poverty. It is more common in low and middle-income countries due to factors like overcrowded living conditions, malnutrition and limited access to healthcare. Within these settings, tuberculosis predominantly strikes the poorest communities who cannot afford preventative measures, diagnosis or treatment. Contracting the disease often means job or income loss due to illness. The high cost of long-term medication also deters some from seeking care. Even after recovery, tuberculosis survivors may struggle with consequences such as lost work and education opportunities plus social stigma. This perpetuates the poverty that initially increased susceptibility. On a national scale, tuberculosis epidemics sap productivity and strain public health systems. They hinder economic and social development especially in resource-poor regions.

Conclusion

In conclusion, tuberculosis has far-reaching impacts beyond the physical symptoms of infection. It profoundly affects the psychological well-being of patients and their families due to stigma, treatment burden and life changes. Additionally, tuberculosis exacerbates socioeconomic inequalities by preying on vulnerable populations and perpetuating the poverty-disease cycle. To make progress against this treatable yet devastating disease, multi-pronged interventions are needed to address biomedical, psychosocial and structural drivers of the tuberculosis epidemic. Only through understanding the full spectrum of tuberculosis' effects can we develop compassionate and effective strategies to combat its personal and public health consequences.

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INTERNATIONAL MULTIDISCIPLINARY JOURNAL FOR RESEARCH & DEVELOPMENT

SJIF 2019: 5.222 2020: 5.552 2021: 5.637 2022:5.479 2023:6.563 2024: 7,805
eISSN :2394-6334 <https://www.ijmrd.in/index.php/imjrd> Volume 11, issue 03 (2024)

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