Tuberculosis: Poor Awareness Leads to Poor Control

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Every year on 24 March, World Tuberculosis Day is commemorated annually, for raising public awareness regarding the devastating consequences of tuberculosis on health and economic aspects of life. This helps to launch efforts to end the global epidemic of tuberculosis. On the date of 24th March in 1882, Dr. Robert Koch announced about the discovery of a bacterium that causes tuberculosis.[1] It was held on 24th March 1982 first time by the World Health Organization at the 100th anniversary of Dr. Koch's discovery. Target 3.3 of SDG calls for, by 2030, ending the epidemics of tuberculosis, malaria, AIDS, combat other communicable and water-borne diseases. A large number of people 1.7 billion, roughly 23% of the world's population suffered from tuberculosis. In the world, each year 1.5 million people died due to TB, proving it a leading infectious killer disease. Thirty countries having a high burden of TB accounted for 87% of new TB cases during 2019.[2] Among these, two-thirds of the total cases were in India, Indonesia, China, Bangladesh, Philippines, Pakistan, Nigeria, and South Africa. An estimated 510,000 new TB cases are emerging each year in Pakistan. Among these about, 15000 are developing drug-resistant TB cases. Pakistan is bearing 61% of the TB burden in the EMRO.

Tuberculosis is a preventable and curable disease. The causative agent of tuberculosis, Mycobacterium tuberculosis, most often affects the lungs. The vaccine for tuberculosis (TB) disease is called BCG (Bacille Calmette-Guérin). In 1921, the first patient was vaccinated with the BCG vaccine, 13 years were spent in making the vaccine. In countries where TB is common, **the** BCG vaccine is given to infants and small children. It does not always protect people from getting TB. BCG vaccine is included in the national Expanded Program on Immunization (EPI) in Pakistan and given at birth. National TB Control Program in order to make TB-free Pakistan through universal access to quality TB care, is striving for achieving Zero TB death by reducing 50% prevalence of TB in the general population by 2025.

The mode of transmission of TB from person to person is through the air. The TB germs are propelled into the air, when people with lung TB cough, sneeze or spit carelessly due to a lack of awareness that they are participating in the spread of disease and weakening the efforts. These germs are when inhaled by other people, resulting in lung infection, which is called primary TB. From primary TB infection, the majority of people recover without any further evidence of the disease. For years the infection may stay inactive (latent). People with TB infection are not contagious, do not have any symptoms, and do not put their friends, co-workers, and family at risk. Many people who have latent TB infection never develop TB disease. In these people, the TB bacteria remain inactive for a lifetime without causing disease, but in other people, especially people who have weak immune systems, the bacteria become active, multiply, and cause TB disease. There is good news for people with TB disease! It can almost always be treated and cured with medicine, but the medicine must be taken as directed by the Physician.

The relapse rate differs by a country's incidence and control: 0–27% of TB relapses occur within 2 years after treatment completion and most relapses occur within 5 years; however, some relapses occur 15 years after treatment. A person who has genital tuberculosis can infect others through sexual contact. The most common means of spreading genital TB can be through blood or lymph. Hence, sexual contact can spread genital tuberculosis. Genital tuberculosis can spread to any other body organ, once it enters the body.

Consuming a diet high in nutritious foods and beverages is a smart way to support and protect lung health. Coffee, dark leafy greens, fatty fish, peppers, tomatoes, olive oil, oysters, blueberries, and pumpkin are just some examples of foods and drinks that have been shown to benefit lung function. Milk can be used by the TB patient. It is also a great source of protein, providing the strength necessary to perform day-to-day activities. Directly observed treatment, short-course (DOTS, also known as TB-DOTS) is the name given to tuberculosis (TB) control strategy recommended by the World Health Organization. According to WHO, "The most cost-effective way to stop the spread of TB in communities with a high incidence is by curing it."

The usual treatment is two antibiotics (isoniazid and rifampicin) for 6 months, two additional antibiotics (pyrazinamide and ethambutol) for the first 2 months of the 6-month treatment period. Groups with high rates of TB transmission are homeless persons, injection drug users, and persons with HIV infection are more susceptible to TB, and persons who have immigrated from areas of the world with high rates of TB. The disease is prevalent mainly in the underprivileged sections of society. The lack of knowledge in the masses and the communities is a factor that contributes largely to the spread of the disease. The theme of World TB Day 2020 was "It's TIME to end TB" and in 2021 it is," Am I stopping TB" highlighting the importance of awareness. It is the time to fuel the awareness program with full energy, resources, and ways. In such a scenario, there is always a need for new and innovative ideas to create mass awareness about tuberculosis. The more focus of this awareness campaign should be very much targeted towards people living in an area where there are a lot of people are with TB, or have been homeless or live in poorly ventilated or overcrowded housing and sufferers of a weakened immune system.

References:

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