PREVENTION OF TUBERCULOSIS: BEHAVIOURAL AND SOCIAL FACTORS

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I. INTRODUCTION

This issue of the journal has presented a comprehensive picture of the Tuberculosis situation analysis, programmes, priorities, strategies, successes and failures in diagnosis and treatment and critical issues.

It is said that there are more than 14 million cases of TB of which 3.5 million are infectious. TB is responsible for the greatest mortality of any diseases in India. Inadequate adherance to effective treatment regimens remains a problem, and only 60 percent of the diagnosed cases are cured.

What can we do to prevent tuberculosis? Is it the germ or the social-behavioural factors attributing to tuberculosis?

II. BACKGROUND - CAUSES

Germ or the host? In 1882, Robert Koch, the German Bacteriologist, discovered the tubercle bacillus. The medical world immediately embraced the bacteria as the cause of the great white plague. Medical world felt that they could find specific agent for every other disease. Robert Koch subsequently proved that healthy humans can carry even cholera bacteria without suffering from disease.

Louis Pasteur, the French chemist and bacteriologist who developed the germ theory, believed that external agents were the causes of all diseases. On his death bed, however, he wrote: The microbe is nothing, the soil is everything.

Before Koch, the causes of the TB were regarded as combination of heredity, climate, and depressing emotions.

III. BEHAVIOURAL AND SOCIAL FACTORS

Some of the scientific studies regarding behavioural factors leading to tuberculosis are presented as under:

a) Drolet, G J (1946) observed that when the Irish were transplanted by the thousands to the eastern seaboard of America in the last century, death from TB rate was 100% higher than it was at the same time in Dublin, where living conditions were much worse. Many did not want to migrate and were not prepared for the discrimination they faced. No matter what starvation they might have escaped, a number of immigrants viewed their new home with distress.

b) Moorman, LJ (1950) observed that after the Native Americans were forced off the plains, they had better sanitation and a higher standard of living on reservations not many miles away. Yet deaths from TB shot up. The meaning of the move to them was that they were being uprooted from the land of their forebears.

The same disease killed hundreds of Bantu natives who were moved from the countryside into Johannesburg. Many of the dying were allowed to go back to their kraals. Although the TB Bacillus was then spread to the villages, the natives there suffered no significance increase in the disease.

c) Selye H (1956), found that reactions to psychological as well as physical threats and challenges could trigger a person's latent bacilli. He demonstrated the importance of rest in TB.

d) Cohen, S. Doyle, W.J. and Skoner, DP (1999), observed that the highest rates of TB have been found among isolated and marginal people who have little social support, although they may live in affluent neighborhoods.

People who lack a sense of control or support have also been found to have higher rates of accidents and mental illness.

The above studies show that improved sanitation, nutrition, economic prosperity do not result in reduction of tuberculosis. On the other hand, love, healthy relationships, supportive relationships, fellowship and close community feeling give a sense of existence and help build up immunities against the pathogenic mechanisms of tubercle bacillus.

We may infer that with increasing unemployment, disasters - natural and man-made, cyclones, floods, earthquakes, wars, fires displacing large population, and attendant HIV existence tuberculosis will increase all over the world. Is this the Nature's way of controlling the population?

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REFERENCES


