

Drug Resistant Tuberculosis: Treatment Options and Challenges in Underdeveloped Countries

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Abstract

Tuberculosis (TB) is an infectious disease that mainly targets the lungs and continues to be a worldwide concern. There are two stages of TB: Latent Tuberculosis Infection (LTBI) and active TB disease. Although there are potent drugs for treating TB, treatment regimens can vary depending on the severity of this disease, and improper treatment can cause LTBI to become active TB. The rise of drug resistant TB presents challenges because it can become extremely difficult to treat the disease, requiring a longer and more complex treatment regimen. TB is more common in underdeveloped countries with higher rates of poverty and limited access to healthcare. Additionally, socioeconomic status significantly influences the outcome of TB. To decrease the rate of TB and drug resistant TB in underdeveloped countries, we must first understand the underlying cause of patients experiencing drug resistant TB. This review analyzes TB treatment regimens and drug resistant TB patients in low-income countries. We find that low-income families face several challenges in managing TB as it becomes more difficult and costly to treat drug resistant TB. With adequate treatment and proper care, it is possible to reduce and prevent further complications of this disease. Therefore, prioritizing access to health care, improving early diagnosis and treatment, and raising awareness of TB symptoms and transmission can make significant progress in overcoming the challenges posed by TB and improving the well-being of affected populations.