REVIEW

Tuberculosis and Diabetes Mellitus Co-Morbidity: Lessons to Learn From HIV/AIDS

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ABSTRACT

Tuberculosis (TB) and Diabetes mellitus (DM) are among the top ten causes of morbidity and mortality globally, with the Human Immunodeficiency Virus (HIV)/Acquired Immunodeficiency Syndrome (AIDS) also causing significant mortality as well. The HIV-TB link has been well recognized since the beginning of the HIV epidemic, but link between TB and DM has only returned to the fore-front recently after effective treatments for each condition reduced the association that was reported earlier in the twentieth century. Recently also, urbanization, increasing age and sedentary lifestyle has led to an increase in diabetes prevalence. Diabetes mellitus is associated with a 3-fold incident risk of tuberculosis and, to a lesser extent, tuberculosis may also increase the risk of developing diabetes. Both diseases interact negatively at multiple levels, exacerbating and worsening the outcomes of the other.

The impact of these co-morbidities particularly in developing countries of Sub Saharan Africa, of which Nigeria is one, is likely to be large. An increasing prevalence of diabetes mellitus may hinder efforts aimed at tuberculosis control, making successful TB treatment and control more difficult. Improved management of tuberculosis and diabetes could build on the successes of the TB-HIV/AIDS collaborative activities, and DOTS strategy, which emphasizes support to patients, as well as a reliable supply of quality-assured medicines. This review aims to examine the association between these two important diseases, and explore ways to manage and reduce mortality caused by the duo.

Keywords: Tuberculosis, Diabetes, HIV, Co-morbidities