

**Título: TEMPORAL ANALYSIS ON INCIDENCE OF TB/AIDS COINFECTION IN THE RIO GRANDE DO NORTE, BRAZIL.**

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**Abstract:**

Tuberculosis and HIV are diseases of such magnitude that cross biological barriers, constituting a serious social problem. The vulnerability of individuals occurs in not realize themselves in risk, reducing the practice of self-care and also having greater difficulty to access health services. The arising and dissemination of HIV from 1981 changed the epidemiology of tuberculosis worldwide. There is a synergic interaction between tuberculosis and HIV, in which, one increase the other's progression. Individuals infected with HIV are at high risk of progressing to active tuberculosis from a focus of primary infection, as well as from the reactivation of latent tuberculosis. HIV infection also increases the risk for subsequent episodes of tuberculosis by exogenous reinfection. Considering that Tuberculosis/HIV co-infection is an important pathology due to its magnitude, dissemination and vulnerability and that knowledge of its epidemiology is essential for the planning of prevention actions, the purpose of this study was to analyze temporally the overall incidence of tuberculosis/HIV co-infection between January 2001 to December 2011 in the state of Rio Grande do Norte, Brazil. This is a descriptive study of confirmed cases of tuberculosis in co-infected patients, using the regression model with standard error Newey-West, applying the non-parametric filter Tukey (3RSSH). During the study period all diagnosed patients were included. The data were obtained from the database Diseases Information System of the Ministry of Health Notification - (SINAN/MS). It was found a temporal variation upward trend of TB/HIV co-infection; with a higher incidence in the age group 20-49 years; followed by age group  $\geq 50$  years; the pulmonary form was the most frequent; males predominated. The current reality of these two pathologies reinforces the need for monitoring of the reported cases, allows one to estimate the TB/HIV comorbidity, with direction of control actions, optimizing available resources. Furthermore, is need commitment and political involvement of managers and professionals in planning and health services.

**Keywords:** Tuberculosis; coinfection; epidemiology; incidence; temporal analysis.