

# ASSOCIATIONS OF CONTACT HISTORY, SMOKING STATUS, NUTRITION STATUS, AND ARV TREATMENT, WITH TB-HIV CO-INFECTION AMONG PEOPLE WITH HIV/AIDS

Adymulianto Manurung, Rahayu Lubis, Kintoko Rochadi

Masters Program in Public Health, Universitas Sumatera Utara

## ABSTRACT

**Background:** Tuberculosis (TB) and HIV co-infection causes a heavy burden on health care systems and poses particular diagnostic and therapeutic challenges. Studies into predictors of TB-HIV co-infection is lacking in Indonesia. This study aimed to examine the associations of contact history, smoking status, nutrition status, and ARV treatment, with TB-HIV co-infection among people with HIV/AIDS.

**Subjects and Method:** This was a cross sectional study conducted in Balige, North Sumatera. A sample of 82 people living with HIV/AIDS were selected for this study, comprising 41 cases with and 41 controls without TB-HIV co-infection. The dependent variable was TB-HIV co-infection. The independent variables were contact history, smoking status, nutrition status, and ARV treatment. The data on HIV/AIDS co-infection were taken from the medical record at HKBP Committee HIV/AIDS service in Balige. Other variables were measured by questionnaire. Data were analyzed by multiple logistic regression.

**Results:** 82.9% of sample had no contact history, 56.1% had poor nutrition status, 78% were smokers, and 58.5% had irregular ARV treatment. TB-HIV co-infection increased with poor nutrition status (OR= 3.48;  $p= 0.014$ ), smoking status (OR= 3.39;  $p= 0.021$ ), and irregular ARV treatment (OR= 10.16;  $p<0.001$ ).

**Conclusion:** TB-HIV co-infection increases with poor nutrition status, smoking status, and irregular ARV treatment.

**Keywords:** TB-HIV co-infection, nutrition status, smoking status, ARV treatment.

## Correspondence:

Adymulianto Manurung. Masters Program in Public Health, Universitas Sumatera Utara. Email: adymulianto\_manurung@yahoo.com. Mobile: 085296652111.