

# FACTORS ASSOCIATED WITH TB-HIV/AIDS CO-INFECTION IN KEDU, CENTRAL JAVA

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## ABSTRACT

**Background:** TB-HIV co-infection is one of the current biggest public health challenges in the world. Although there is a breadth of information on TB-HIV co-infection among settled populations elsewhere, to our knowledge, there are no published reports on the determinants of TB-HIV co-infection from Central Java, Indonesia. This study aimed to determine the factors associated with TB-HIV/AIDS co-infection in Kedu, Central Java.

**Subjects and Method:** This study was a case control study conducted at general hospital in Kedu, Central Java. A sample of 152 patients with HIV was selected for this study consisting those with and without TB-HIV co-infection. The dependent variable was TB-HIV/AIDS co-infection. The independent variable were education level, history of TB contact, BCG immunization status, opportunistic infection, adherence to treatment, drug taking supervisor support, and community health worker support. The data were collected from medical record and questionnaire. The data were analyzed by a multiple logistic regression.

**Results:** TB-HIV/AIDS co-infection was associated with low education (OR= 4.70; CI= 95%; 2.11 to 10.47 p= 0,001), history of TB contact (OR= 3.75; CI= 95%; 1.26 to 5.72; p= 0.01), absence of BCG immunization (OR= 3.59; CI= 95%; 1.07 to 6.23; p= 0.033), opportunistic infection (OR= 3.42; CI= 95%; 1.23 to 5.89; p= 0.010), non-adherence to treatment (OR= 5.15; CI= 95%; 1.50 to 7.16; p= 0.001), lack of drug taking supervisor support (OR= 4.61; CI= 95%; 1.94 to 10.50; p= 0.001), and lack of community health worker support (OR= 4.51; CI= 95%; 1.94 to 10.50; p= 0.001).

**Conclusion** TB-HIV/AIDS co-infection is associated with low education, history of TB contact, absence of BCG immunization, opportunistic infection, non-adherence to treatment, lack of drug taking supervisor support, and lack of community health worker support.

**Keywords:** risk factors, Tuberculosis-HIV/AIDS co-infection

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