ABSTRACT

**Background:** Rifampicin-resistance Tuberculosis (TB) case rate is increasing every year, particularly in Indonesia. It is probably caused by the infection of Human Immunodeficiency Virus (HIV) on Tuberculosis patient, called TB-HIV co-infection. However, the association between HIV infection, which can cause decreasing of CD4, and Rifampicin-resistance Mycobacterium tuberculosis in TB-HIV co-infection patients is still not clearly yet.

**Objective:** This study was undertaken to describe the demographics profile of TB-HIV co-infection patients and analyze the association between CD4 decreasing and Rifampicin resistance in TB-HIV co-infection patients of Dr. Soetomo General Hospital Surabaya.

**Methods:** A retrospective research with cross-sectional method of TB-HIV co-infection patients’ medical record at Medical Record Center of Dr. Soetomo General Hospital Surabaya from 1 January to 31 December 2016 with 40 samples.

**Result:** TB-HIV co-infection was common in male (70%). It was dominated by the productive age between 25-44 years old (55%). Most of them were high school graduated (80%) and 52.5% of them had been married. Rifampicin-sensitive Mycobacterium tuberculosis was still the most found (86%). Chi Square test shows that there is no association (p=0.545) between CD4 decreasing and Rifampicin-resistance Mycobacterium tuberculosis in TB-HIV co-infection patients of Dr. Soetomo General Hospital Surabaya.

**Conclusion:** TB-HIV co-infection was common in male, productive age, high school graduated, and married patients. Rifampicin-sensitive Mycobacterium tuberculosis was still the most found and there is no association between CD4 decreasing and Rifampicin-resistance Mycobacterium tuberculosis in TB-HIV co-infection patients.

**Keywords:** Clinical profile, TB-HIV co-infection, Mycobacterium tuberculosis, Rifampicin resistance, CD4.