Analysis of Risk Factors for Tuberculosis (A15-A16) Based on Medical Records at RSUD dr. H. Koesnadi Bondowoso

dr. Novita Nuraini, M.A.R.S., (*as chief counselor*)

Khurin In An' Amta Soraya
Program Study of Health Information Management
Departement of Health

ABSTRACT

Pulmonary tuberculosis is one of the communicable diseases that remains a public health problem in Indonesia and is caused by the bacterium Mycobacterium tuberculosis. The number of tuberculosis cases at RSUD dr. H. Koesnadi Bondowoso was 334 cases in 2023, decreased to 221 cases in 2024, and increased to 256 cases in 2025. This study employed an analytical observational design with a case-control approach. The study sample consisted of 128 cases and 128 controls selected using simple random sampling. Data were collected through medical record observations using a checklist and were analyzed using univariate and bivariate analyses with the Chi-Square test. The results showed that tuberculosis was more frequently found among <15 old and >49 old (75%), males (52%), individuals with abnormal nutritional status (53.1%), individuals with no history of smoking (88.3%), unemployed individuals (56.9%), and individuals with no history of diabetes mellitus (89.5%). Bivariate analysis showed significant associations between sex (p-value = 0.024; OR = 1.821), nutritional status (p-value = 0.000; OR = 7.737), and occupation (p-value = 0.000; OR = 3.760) and the incidence of tuberculosis. In contrast, age (p-value = 0.470), smoking history (p-value = 0.080), and history of diabetes mellitus (p-value = 0.416) were not significantly associated with tuberculosis incidence. In conclusion age, sex, nutritional status, and occupation are risk factors associated with the incidence of tuberculosis, with males, individuals with abnormal nutritional status, and employed individuals having a higher risk. Therefore, preventive measures such as social distancing, handwashing, mask use, and control efforts through improved health education and interventions targeting high-risk groups are needed.

Keywords : *Case Control, Medical Records. Risk Factors, Tuberculosis,*