

ABSTRACT

**THE ASSOCIATION BETWEEN AGE, GENDER, AND OCCUPATION
WITH ANEMIA IN PULMONARY TUBERCULOSIS PATIENTS
AT RSUD DR. H. ABDUL MOELOEK LAMPUNG PERIOD OF
JANUARI-DECEMBER 2022**

By

RIDHA RIANO FATHUNNISA

Background: Tuberculosis (TB) is an infectious disease caused by Mycobacterium tuberculosis. Tuberculosis itself is a multisystemic infection that can manifest in various organs, so various clinical pictures of TB disease are obtained. In TB disease, hematological findings are also common and are usually related to non-immunological mechanisms. Anemia can be caused by any chronic infection, including TB. Several pathogenesis can explain the occurrence of TB associated with anemia, but most studies show that inflammatory mediators suppress erythropoiesis, which is the cause of anemia.

Method: This research uses an observational analytic method with a cross-sectional research design. The purpose of this study is to see if there is a link between gender, age, and occupation and the incidence of anemia in pulmonary tuberculosis patients. Data was extracted from the medical records of pulmonary tuberculosis patients with anemia at the RSUDAM Bandar Lampung Medical Records Installation between January and August 2022. A total of 85 patients' data that met the inclusion criteria were subjected to univariate and bivariate analysis using the Chi-Square test.

Results: The univariate results showed that the majority of anemia in TB patients was normochromic normocytic anemia, namely 66 patients (77.6%), and 19 (22.4%) had hypochromic microcytic anemia. The highest prevalence of pulmonary TB patients with anemia based on gender was male (74.1%). In the results of the bivariate test, a relationship was found between age and the incidence of anemia ($p = 0.024$) in pulmonary TB patients at RSUDAM. While the bivariate test results between occupation and anemia status were obtained ($p = 0.886$) and between gender and anemia status were obtained ($p = 0.08$), it was concluded that there was no relationship between gender and occupation with the incidence of anemia.

Conclusion: The incidence of anemia in pulmonary tuberculosis patients at RSUDAM is related to age.

Keywords: Anemia, Gender, Pulmonary Tuberculosis, Age.

ABSTRAK

**HUBUNGAN USIA, JENIS KELAMIN, DAN PEKERJAAN DENGAN
KEJADIAN ANEMIA PADA PASIEN TUBERKULOSIS PARU
DI RUMAH SAKIT UMUM DAERAH DR. H. ABDUL MOELOEK
PROVINSI LAMPUNG PADA BULAN JANUARI-DESEMBER 2022**

Oleh

RIDHA RIANO FATHUNNISA

Latar belakang: Tuberkulosis (TB) merupakan penyakit yang menular dan disebabkan oleh *Mycobacterium tuberculosis*. Penyakit TB merupakan infeksi multisistemik yang dapat bermanifestasi di berbagai organ, sehingga didapatkan gambaran klinis pada penyakit TB yang beragam. Pada penyakit TB juga tidak jarang ditemukan temuan hematologi dan berkaitan dengan mekanisme non-imunologi. Semua infeksi kronik dapat menyebabkan anemia, termasuk infeksi TB. Beberapa patogenesis dapat menggambarkan terjadinya TB yang berhubungan dengan anemia, namun sebagian besar penelitian menunjukkan bahwa penekanan eritropoiesis oleh mediator inflamasi merupakan penyebab anemia.

Metode: Penelitian ini menggunakan metode analitik observasional dengan rancangan penelitian *cross sectional*. Pengumpulan data diambil dari rekam medis pasien TB paru yang mengalami anemia di Instalasi Rekam Medik RSUDAM Bandar Lampung selama periode Januari-Desember 2022. Sebanyak 85 data pasien yang memenuhi kriteria inklusi dilakukan analisis univariat dan bivariat menggunakan uji *Chi-Square*.

Hasil: Hasil univariat menunjukkan bahwa sebagian besar kejadian anemia pada pasien TB adalah anemia normositik normokrom yaitu sebanyak 66 pasien (77,6%) dan 19 (22,4%) lainnya mengalami anemia mikrositik hipokrom. Prevalensi pasien TB paru terbanyak yang mengalami anemia berdasarkan jenis kelamin adalah laki-laki (74,1%). Pada hasil uji bivariat, didapatkan hubungan antara usia dengan kejadian anemia ($p=0,024$) pada pasien TB paru di RSUDAM. Sedangkan hasil uji bivariat antara pekerjaan dan status anemia didapatkan ($p=0,886$) dan antara jenis kelamin dengan status anemia didapatkan ($p=0,08$) sehingga disimpulkan tidak terdapat hubungan antara jenis kelamin dan pekerjaan dengan kejadian anemia.

Simpulan: Terdapat hubungan antara usia dengan kejadian anemia pada pasien TB paru di RSUDAM.

Kata kunci: Anemia, Jenis Kelamin, Tuberkulosis Paru, Usia.