

THE RELATIONSHIP BETWEEN HOST AND ENVIRONMENTAL FACTORS AND PULMONARY TUBERCULOSIS IN THE WORKING AREA OF PAMULANG HEALTH CENTER IN 2026

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Abstrak

Tuberkulosis (TB) Paru menjadi tantangan besar dalam bidang kesehatan di Indonesia, khususnya di Kota Tangerang Selatan yang menempati peringkat kedua dengan kasus TB Paru tertinggi di Provinsi Banten. Selain itu, di Kecamatan Pamulang, terjadi lonjakan kasus dari 139 pada tahun 2022 menjadi 869 pada tahun 2024. Tujuan studi ini adalah menganalisis hubungan antara faktor pejamu dan lingkungan serta kejadian Tuberkulosis Paru di wilayah kerja Puskesmas Pamulang Tahun 2026. Penelitian ini menggunakan desain studi *case-control*. Sampel penelitian dipilih dengan teknik *simple random sampling* sehingga didapatkan 34 responden kasus dan 34 responden kontrol. Data primer diperoleh melalui wawancara menggunakan kuesioner dan observasi lingkungan dengan *Lux Meter* dan pita ukur. Untuk mengetahui status tuberkulosis paru, data sekunder diperoleh melalui data rekam medik Puskesmas Pamulang. Data dianalisis menggunakan uji *Chi-Square*. Temuan penelitian menunjukkan adanya hubungan signifikan antara tingkat pendidikan ($p=0,001$; OR=20,429; 95%CI: 2,486-167,869), pendapatan ($p=0,022$; OR=3,857; 95%CI: 1,324-11,235), riwayat kontak serumah ($p=0,005$; OR=7,233; 95%CI: 1,842-28,403), ventilasi ($p=0,002$; OR=5,808; 95%CI: 2,038-16,552), pencahayaan ($p=0,028$; OR=3,429; 95%CI: 1,255-9,370), kepadatan hunian ($p=0,026$; OR=6,667; 95%CI: 1,336-33,278), jenis lantai ($p=0,008$; OR=13,750; 95%CI: 1,647-114,761), dan jenis dinding ($p<0,001$; OR=23,100; 95%CI: 2,819-189,283) dengan kejadian TB Paru. Status merokok ($p=0,608$ untuk "berat"; $p=0,944$ untuk "sedang"; $p=1,000$ untuk "ringan"), kebiasaan membuka jendela ($p=0,709$), dan kebiasaan menjemur kasur ($p=0,764$) tidak berhubungan dengan kejadian TB Paru. Disimpulkan bahwa terdapat hubungan antara faktor pejamu dan lingkungan dengan terjadinya TB Paru. Disarankan masyarakat untuk menerapkan gaya hidup sehat, dan Puskesmas Pamulang aktif melakukan pemantauan dan edukasi rumah sehat.

Kata Kunci: Kejadian TB Paru, Faktor Pejamu, Faktor Lingkungan

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Abstract

Pulmonary tuberculosis (TB) is a major public health challenge in Indonesia, particularly in South Tangerang City, which ranks second in Banten Province for the highest number of pulmonary TB cases. Additionally, in Pamulang Subdistrict, there was a surge in cases from 139 in 2022 to 869 in 2024. The objective of this study is to analyze the relationship between host and environmental factors of pulmonary tuberculosis in the working area of the Pamulang Health Center in 2026. This study employed a case-control design. The sample was selected using simple random sampling, resulting in 34 case and 34 control respondents. Primary data were collected through interviews using a questionnaire and environmental observations with a lux meter and measuring tape. To determine pulmonary tuberculosis status, secondary data were obtained from the medical records of the Pamulang Health Center. Data were analyzed using the chi-square test. The study findings indicate a significant association between educational level ($p=0.001$; OR=20.429; 95% CI: 2.486–167.869), income ($p=0.022$; OR=3.857; 95% CI: 1.324–11.235), household contact ($p=0.005$; OR=7.233; 95% CI: 1.842–28.403), ventilation ($p=0.002$; OR=5.808; 95% CI: 2.038–16.552), lighting ($p=0.028$; OR = 3.429; 95% CI: 1.255–9.370), housing density ($p = 0.026$; OR = 6.667; 95% CI: 1.336–33.278), floor type ($p = 0.008$; OR = 13.750; 95% CI: 1.647–114.761), and wall type ($p < 0.001$; OR = 23.100; 95% CI: 2.819–189.283) with the incidence of pulmonary TB. Smoking status ($p=0.608$ “heavy”; $p=0.944$ “moderate”; $p=1.000$ “light”), habit of opening windows ($p=0.709$), and habit of sun-drying mattresses ($p=0.764$) were not associated with the incidence of pulmonary TB. It is recommended that the community adopt a healthy lifestyle, and that the Pamulang Community Health Center actively conduct monitoring and education on healthy homes.

Keywords: TB Incidence, Host Factors, Environmental Factors