

ABSTRAK

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Program Studi: Kedokteran Umum
Judul Skripsi : Perbedaan Status Gizi Anak Dengan Tuberkulosis Paru
Berdasarkan Status Vaksinasi BCG Di Puskesmas Cempaka Putih
Tahun 2020-2025 Dan Ditinjau Menurut Pandangan Islam

Latar Belakang: Tuberkulosis (TB) paru pada anak masih menjadi masalah kesehatan masyarakat yang signifikan, khususnya di negara berkembang, termasuk Indonesia. Penyakit ini tidak hanya berdampak pada sistem pernapasan, tetapi juga berpengaruh terhadap status gizi anak melalui mekanisme inflamasi kronis, peningkatan kebutuhan metabolik, penurunan nafsu makan, serta gangguan penyerapan nutrisi. Di sisi lain, vaksinasi *Bacillus Calmette-Guérin* (BCG) diketahui berperan dalam mencegah bentuk TB berat pada anak, meskipun efektivitasnya terhadap pencegahan TB paru bervariasi. Perbedaan status vaksinasi BCG diduga dapat berkaitan dengan variasi manifestasi klinis TB, yang secara tidak langsung dapat tercermin pada status gizi anak. Oleh karena itu, penelitian ini bertujuan untuk mengetahui perbedaan status gizi anak dengan TB paru berdasarkan status vaksinasi BCG.

Metode: Penelitian ini merupakan penelitian deskriptif observasional dengan pendekatan analitik komparatif. Subjek penelitian adalah anak dengan diagnosis TB paru yang tercatat di Puskesmas Cempaka Putih pada periode tahun 2020–2025. Data yang digunakan merupakan data sekunder dari rekam medis, meliputi status vaksinasi BCG dan status gizi anak yang dinilai menggunakan indikator antropometri berat badan menurut umur (BB/U), tinggi badan menurut umur (TB/U), berat badan menurut tinggi badan (BB/TB), dan indeks massa tubuh menurut umur (IMT/U) berdasarkan standar WHO. Analisis univariat dilakukan untuk menggambarkan karakteristik subjek penelitian, sedangkan analisis bivariat menggunakan uji Mann–Whitney untuk menilai perbedaan status gizi antara kelompok anak dengan dan tanpa riwayat vaksinasi BCG, dengan tingkat kemaknaan statistik $p < 0,05$.

Hasil: Hasil penelitian menunjukkan bahwa sebagian besar anak TB paru memiliki riwayat vaksinasi BCG. Distribusi status gizi pada seluruh indikator antropometri menunjukkan variasi kondisi gizi, mulai dari gizi baik hingga gizi kurang dan stunting. Berdasarkan hasil uji Mann–Whitney, tidak terdapat perbedaan yang bermakna secara statistik pada status gizi anak TB paru berdasarkan status vaksinasi BCG untuk seluruh indikator antropometri yang dinilai ($p > 0,05$). Hal ini menunjukkan bahwa status vaksinasi BCG tidak berhubungan secara signifikan dengan perbedaan status gizi pada anak yang telah menderita TB paru.

Simpulan: Penelitian ini menyimpulkan bahwa tidak terdapat perbedaan status gizi anak dengan TB paru berdasarkan status vaksinasi BCG di Puskesmas Cempaka Putih periode 2020–2025. Temuan ini mengindikasikan bahwa status gizi pada anak TB paru dipengaruhi oleh berbagai faktor lain di luar status vaksinasi BCG, seperti

kondisi penyakit, asupan nutrisi, status sosial ekonomi, serta faktor lingkungan. Meskipun demikian, vaksinasi BCG tetap memiliki peran penting dalam pencegahan TB berat pada anak, sehingga upaya peningkatan cakupan imunisasi serta intervensi gizi yang komprehensif tetap perlu menjadi bagian dari strategi pengendalian TB anak.

Kata kunci : tuberkulosis, BCG, vaksinasi, kesehatan gizi, anak.

ABSTRACT

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Title : Differences in the Nutritional Status of Children with Pulmonary Tuberculosis Based on BCG Vaccination Status at the Cempaka Putih Community Health Center from 2020 to 2025 and Its Review According to Islamic Perspectives

Background: Pulmonary tuberculosis (TB) in children remains a significant public health problem, particularly in developing countries, including Indonesia. This disease not only affects the respiratory system but also has an impact on children's nutritional status through mechanisms such as chronic inflammation, increased metabolic demands, decreased appetite, and impaired nutrient absorption. Meanwhile, Bacillus Calmette–Guérin (BCG) vaccination is known to play an important role in preventing severe forms of TB in children, although its effectiveness in preventing pulmonary TB varies. Differences in BCG vaccination status are presumed to be associated with variations in the clinical manifestations of TB, which may indirectly be reflected in the nutritional status of affected children. Therefore, this study aimed to determine differences in the nutritional status of children with pulmonary TB based on their BCG vaccination status.

Methods: This study employed a descriptive observational design with a comparative analytic approach. The study subjects were children diagnosed with pulmonary TB who were recorded at Cempaka Putih Primary Health Center during the period 2020–2025. Secondary data were obtained from medical records, including BCG vaccination status and nutritional status assessed using anthropometric indicators: weight-for-age (W/A), height-for-age (H/A), weight-for-height (W/H), and body mass index-for-age (BMI/A), based on World Health Organization (WHO) standards. Univariate analysis was conducted to describe the characteristics of the study subjects, while bivariate analysis using the Mann–Whitney test was performed to assess differences in nutritional status between children with and without a history of BCG vaccination, with a level of statistical significance set at $p < 0.05$.

Results: The results showed that the majority of children with pulmonary TB had a history of BCG vaccination. The distribution of nutritional status across all anthropometric indicators demonstrated variability, ranging from normal nutritional status to undernutrition and stunting. Based on the Mann–Whitney test, no statistically significant differences were found in the nutritional status of children with pulmonary TB according to BCG vaccination status across all assessed anthropometric indicators ($p > 0.05$). These findings indicate that BCG vaccination status is not significantly associated with differences in nutritional status among children who have developed pulmonary TB.

Conclusion: This study concludes that there are no differences in the nutritional status of children with pulmonary TB based on BCG vaccination status at Cempaka Putih Primary Health Center during the 2020–2025 period. These findings suggest

that the nutritional status of children with pulmonary TB is influenced by various factors beyond BCG vaccination status, including disease condition, nutritional intake, socioeconomic status, and environmental factors. Nevertheless, BCG vaccination remains important in preventing severe forms of TB in children; therefore, efforts to improve immunization coverage and implement comprehensive nutritional interventions should continue to be integral components of childhood TB control strategies.

Keywords: tuberculosis, BCG, vaccination, nutritional health, children.