

ABSTRACT

ANALYSIS OF RATIONALITY OF EMPIRICAL ANTIBIOTIC USE AND CLINICAL OUTCOMES OF TYPHOID FEVER PATIENTS IN THE INPATIENTS OF DR. H. ABDUL MOELOEK REGIONAL GENERAL HOSPITAL IN 2023

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Background: Typhoid fever is an infectious disease that still frequently occurs in Indonesia. Empirical antibiotic therapy needs to be administered rationally to prevent resistance and improve clinical outcomes. The aim of this study was to determine the relationship between the rational use of antibiotics and the clinical outcomes of patients with typhoid fever.

Methods: This was an observational analytic study with a retrospective cross-sectional design. The inclusion criteria were hospitalized patients with typhoid fever aged 26–65 years who received antibiotic therapy, while the exclusion criteria were patients who continued treatment elsewhere, died, or developed other disease complications. Data were collected using purposive sampling. Antibiotic evaluation was conducted using the “5 rights” method: right indication, right drug, right dose, right timing, and right duration. Data were analyzed using the Mann-Whitney test with a significance level of $\alpha = 0.05$.

Results: A total of 86 patients met the inclusion criteria. Of the antibiotics evaluated, 80 (93%) were classified as rational, while 6 (7%) were deemed irrational. The most common irrationality was in the category of inappropriate duration of administration (6 prescriptions, 7%), while the categories of right indication, right drug, right dose, and right timing were all deemed appropriate (100%). Bivariate analysis showed a significant relationship between the rationality of antibiotic use and the length of hospital stay (p -value = 0.001), as well as the duration of fever reduction (p -value = 0.008).

Conclusion: There is a relationship between the rationality of empirical antibiotic therapy and the clinical outcomes of patients with typhoid fever.

Keywords: Clinical outcomes, Empirical antibiotics, Typhoid fever

ABSTRAK

ANALISIS RASIONALITAS PENGGUNAAN ANTIBIOTIK EMPIRIS TERHADAP LUARAN KLINIS PASIEN DEMAM TIFOID DI INSTALASI RAWAT INAP RUMAH SAKIT UMUM DAERAH DR. H. ABDUL MOELOEK PERIODE 2023

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Latar Belakang: Demam tifoid merupakan penyakit infeksi yang masih sering terjadi di Indonesia. Terapi antibiotik empiris perlu diberikan secara rasional untuk mencegah resistensi dan meningkatkan luaran klinis. Tujuan penelitian ini adalah untuk mengetahui hubungan antara rasionalitas penggunaan antibiotik terhadap luaran klinis pasien demam tifoid

Metode: Penelitian ini bersifat observasional analitik dengan desain *cross sectional* secara retrospektif. Kriteria inklusi dalam penelitian ini yaitu pasien demam tifoid rawat inap dengan rentang usia 26–65 tahun yang menerima terapi antibiotik serta kriteria eksklusi yaitu pasien yang melanjutkan pengobatan di tempat lain, meninggal, atau mengalami komplikasi penyakit lain. Data dikumpulkan dengan metode *purposive sampling*. Evaluasi antibiotik menggunakan metode 5 tepat yaitu tepat indikasi, tepat obat, tepat dosis, tepat waktu pemberian dan tepat durasi pemberian serta dianalisis dengan uji *Mann-Whitney* dengan nilai signifikansi $\alpha = 0,05$

Hasil: Sebanyak 86 pasien memenuhi kriteria inklusi. Sebanyak 80 antibiotik (93%) tergolong rasional, sedangkan 6 antibiotik (7%) dinilai tidak rasional dengan jumlah ketidaktepatan paling banyak yaitu pada kategori tidak tepat durasi pemberian yaitu 6 peresepan (7%), sedangkan kategori tepat indikasi, tepat dosis, tepat obat dan tepat waktu pemberian seluruhnya dikatakan tepat (100%). Analisis bivariat menunjukkan hubungan yang signifikan antara rasionalitas penggunaan antibiotik dengan lama hari rawat inap ($p\text{-value} = 0,001$), serta dengan lama hari penurunan demam ($p\text{-value} = 0,008$).

Kesimpulan: Terdapat hubungan antara rasionalitas terapi antibiotik empiris dengan luaran klinis pasien demam tifoid.

Kata Kunci: Antibiotik empiris, Demam tifoid, Luaran klinis