ABSTRAK

HUBUNGAN *MULTIDRUG RESISTANCE* (MDR) TERHADAP LUARAN KLINIS PASIEN SEPSIS DI RSUD DR. H. ABDUL MOELOEK TAHUN 2021–2024

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Latar belakang: Sepsis merupakan kondisi disfungsi organ yang mengancam jiwa dengan mortalitas tinggi akibat respons tubuh yang tidak terkontrol terhadap infeksi. Pemberian antibiotik empiris dini merupakan kunci tatalaksana sepsis, tetapi meningkatnya kejadian *multidrug resistance* menjadi tantangan karena berhubungan dengan keterbatasan terapi dan kondisi luaran klinis pasien. Penelitian ini bertujuan mengetahui hubungan *multidrug resistance* (MDR) dengan luaran klinis pasien sepsis di RSUD Dr. H. Abdul Moeloek tahun 2021–2024.

Metode penelitian: Penelitian analitik observasional dengan desain *cross-sectional* menggunakan data rekam medis. Sebanyak 77 sampel memenuhi kriteria inklusi dan eksklusi. Penelitian dilakukan di RSUD Dr. H. Abdul Moeloek

Hasil penelitian: Karakteristik pasien berusia 18–59 tahun (57,1%), perempuan (54,5%), dirawat 7–12 hari (48,1%), di ruang perawatan intensif (39%), dan memiliki luaran klinis klinis meninggal (67,5%). Bakteri gram positif (58,4%) dengan *Staphylococcus hominis* (16,9%) sebagai jenis bakteri terbanyak, sedangkan bakteri gram negatif (41,6%) tersering adalah *Escherichia coli* (10,4%). Resistensi antibiotik tinggi ditemukan pada amoxicillin (96,2%), piperacillin/tazobactam (62,3%), ceftazidime (65,6%), ciprofloxacin (56,6%), dan trimethoprim/sulfamethooxazole (52,5%). Sementara, sensitivitas tinggi pada meropenem (54,1%), gentamicin (66,2%), dan tigecycline (87%). Sebanyak 68 kasus tergolong MDR, dengan 16,9% resisten terhadap 8 kelas antibiotik. Analisis bivariat dengan uji *Fisher's Exact* menunjukkan tidak terdapat hubungan signifikan antara MDR dengan luaran klinis pasien sepsis (p=0,141).

Simpulan: Tidak terdapat hubungan antara *multidrug resistance* (MDR) terhadap luaran pasien sepsis di RSUD Dr. H. Abdul Moeloek tahun 2021–2024.

Kata kunci: Luaran klinis, *Multidrug Resistance*, Sepsis

ABSTRACT

THE RELATIONSHIP BETWEEN MULTIDRUG RESISTANCE (MDR) AND CLINICAL OUTCOMES IN SEPSIS PATIENTS AT RSUD DR. H. ABDUL MOELOEK, 2021–2024

By

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Background: Sepsis is a life-threatening organ dysfunction with high mortality due to a dysregulated host response to infection. Early empirical antibiotic administration is essential in sepsis management; however, increasing multidrug resistance (MDR) poses a challenge due to limited therapeutic options and its potential impact on clinical outcomes. This study aimed to assess the association between MDR and clinical outcomes in sepsis patients at RSUD Dr. H. Abdul Moeloek during 2021–2024.

Methods: This observational analytic cross-sectional study used medical record data. A total of 77 samples met the inclusion and exclusion criteria. The research was conducted at RSUD Dr. H. Abdul Moeloek

Result: Characteristics of patients aged 18–59 years (57.1%), female (54.5%), had length of stay of 7–12 days (48.1%), and with a clinical outcome of death (67.5%). Gram-positive bacteria (58.4%) with *Staphylococcus hominis* (16.9%) as the most common type, while gram-negative bacteria (41.6%) were most commonly *Escherichia coli* (10.4%). High antibiotic resistance was found in amoxicillin (96.2%), piperacillin/tazobactam (62.3%), ceftazidime (65.6%), ciprofloxacin (56.6%), and trimethoprim/sulfamethoxazole (52.5%). Meanwhile, high sensitivity was found in meropenem (54.1%), gentamicin (66.2%), and tigecycline (87%). A total of 68 cases were classified as MDR, with 16.9% resistant to 8 classes of antibiotics. Bivariate analysis using *Fisher's Exact* test showed no significant association between MDR and clinical outcomes in sepsis patients (p=0.141).

Conclusion: There was no relationship between MDR and clinical outcomes in sepsis patients at RSUD Dr. H. Abdul Moeloek during 2021–2024.

Keywords: Clinical outcomes, Multidrug Resistance, Sepsis