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**HUBUNGAN RASIONALITAS DAN LUARAN KLINIS PENGGUNAAN ANTIBIOTIK EMPIRIK PADA PASIEN COMMUNITY ACQUIRED
PNEUMONIA USIA LANJUT DI RUMAH SAKIT RSUP DR. SARDJITO YOGYAKARTA**
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INTISARI

Latar Belakang: Penggunaan antibiotik yang rasional berhubungan dengan luaran klinis yang lebih baik pada pasien usia lanjut.

Tujuan: Penelitian ini bertujuan untuk melihat pola kerasionalan penggunaan antibiotik *Community Acquired Pneumonia* (CAP) usia lanjut, serta mengetahui hubungan rasionalitas dan luaran klinis serta mengetahui pola peresepan antibiotik pada RSUP Dr. Sardjito Yogyakarta.

Metode Penelitian: Penelitian rancangan kohort retrospektif menggunakan data rekam medis pasien periode Januari-Desember 2024. Sampel penelitian adalah pasien usia lanjut dengan *Community-Acquired Pneumonia* (CAP) di RSUP Dr. Sardjito Yogyakarta yang memenuhi kriteria inklusi. Rasionalitas penggunaan antibiotik dinilai menggunakan metode Gyssens. Luaran klinis dikategorikan menjadi membaik dan belum membaik berdasarkan parameter frekuensi napas, suhu tubuh, jumlah leukosit, dan persentase neutrofil pada hari ke 3-7 hari setelah pemberian antibiotik empirik. Analisis data menggunakan uji Chi-square dilanjutkan dengan regresi logistik berganda (CI 95%).

Hasil: Sebanyak 122 pasien usia lanjut dengan *community-acquired pneumonia* (CAP) memenuhi kriteria inklusi. Evaluasi rasionalitas penggunaan antibiotik empirik berdasarkan metode Gyssens dengan menggunakan pedoman praktek klinik pneumonia 2024 menunjukan 65 pasien (53,27%) menerima terapi antibiotik rasional dan 57 pasien (46,72%) tidak rasional. Ketidaktepatan penggunaan antibiotik paling banyak ditemukan pada kategori IIA (ketidaksesuaian dosis), kategori IIIA (durasi terapi terlalu lama), dan kategori IV (pemilihan antibiotik belum optimal). Antibiotik yang paling banyak digunakan adalah seftazidim IV (25,30%), levofloksasin IV (9,80%), sefoperazon IV (8,00%), serta kombinasi seftazidim IV dan levofloksasin IV (8,00%). Tidak terdapat hubungan yang signifikan antara rasionalitas penggunaan antibiotik empirik dan luaran klinis dengan nilai p= 0,136, dengan presentase membaik pada kelompok rasional 53,85% dan kelompok tidak rasional presentase membaik 40,35% (p = 0,136).

Kesimpulan: Sebagian besar pasien usia lanjut dengan Community-Acquired Pneumonia (CAP) menerima antibiotik empiris yang rasional. Namun, tidak terdapat hubungan yang signifikan antara rasionalitas penggunaan antibiotik empiris dan luaran klinis pasien.

Kata kunci: pneumonia, community-acquired pneumonia, usia lanjut, metode Gyssens

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ABSTRACT

Background: Rational antibiotic use is associated with better clinical outcomes in older adults. However, data on the appropriateness of antibiotic use in older adults with community-acquired pneumonia (CAP) remain limited.
Objective: To evaluate the appropriateness of empirical antibiotic use, its association with clinical outcomes, and antibiotic prescribing patterns among older adults with CAP at Dr. Sardjito General Hospital, Yogyakarta.
Methods: A retrospective cohort study was conducted using medical records of older adults with CAP hospitalized at Dr. Sardjito General Hospital, Yogyakarta, from January to December 2024. The appropriateness of empirical antibiotic use was assessed using the Gyssens method based on the 2024 Clinical Practice Guideline for Pneumonia. Clinical outcomes were classified as improved or not improved according to respiratory rate, body temperature, leukocyte count, and neutrophil percentage on days 3–7 after empirical antibiotic initiation. Data were analyzed using Chi-square and multiple logistic regression tests with a 95% confidence interval.
Results: A total of 122 patients met the inclusion criteria. Based on the Gyssens evaluation, 65 patients (53.27%) received rational empirical antibiotic therapy and 57 (46.72%) received irrational therapy. The most common causes of inappropriate antibiotic use were category IIA (inappropriate dosage), category IIIA (prolonged treatment duration), and category IV (suboptimal antibiotic selection). The most frequently prescribed antibiotics were intravenous ceftazidime (25.3%), intravenous levofloxacin (9.8%), intravenous cefoperazone (8.0%), and a combination of intravenous ceftazidime and intravenous levofloxacin (8.0%). No significant association was found between the appropriateness of empirical antibiotic use and clinical outcomes ($p = 0.136$). Clinical improvement was observed in 53.85% of patients receiving rational therapy and 40.35% receiving irrational therapy.
Conclusion: More than half of older adults with CAP received rational empirical antibiotic therapy. However, no significant association was found between the appropriateness of empirical antibiotic use and clinical outcomes.

Keywords: pneumonia, community-acquired pneumonia, older adults, Gyssens method.