

ABSTRACT

RELATIONSHIP OF POTENTIAL DRUG INTERACTIONS WITH LENGTH OF HOSPITALIZATION IN PNEUMONIA PATIENTS IN RSD DR. A. DADI TJOKRODIPO BANDAR LAMPUNG

By

Annisa Salshabilla

Background: Pneumonia is a lower respiratory tract infection caused by bacteria. The incidence of pneumonia in Indonesia in 2018 was 1,017,290 cases. Most hospitalized pneumonia patients receive ≥ 5 types so they are at risk of drug interactions. The aim of this study was to identify drug interactions and analyze their relationship with length of stay.

Methods: The study used a cross-sectional method and collected data retrospectively. The subjects of this research were pneumonia patients at the RSD Dr. A. Dadi Tjokrodipo for the period 2023. Data analysis using the Drugs.com application and Stokley's Drug Interaction book and using chi-square analysis to determine the relationship between potential drug interactions and length of stay.

Results: Of the 92 patients, the patient characteristics were predominantly male (52.2%) and patients ≥ 60 years old (55.4%). Potential drug interactions were noted in 60 (64.5%) patients. Interactions based on minor, moderate, and major severity were 20.2%, 66.0%, and 13.8%, respectively. Interactions based on pharmacodynamic, pharmacokinetic and unknown mechanisms of drug interactions were 61.7%, 29.3% and 9.0% respectively. The bivariate results of the relationship between drug interactions and length of stay in hospital showed a p-value of 0.409.

Conclusion: There is no relationship between potential drug interactions and the length of stay in pneumonia patients.

Keywords: Drug Interactions, Length of Hospitalization, Pneumonia

ABSTRAK

HUBUNGAN POTENSI INTERAKSI OBAT DENGAN LAMA RAWAT INAP PADA PASIEN PNEUMONIA DI RSD DR. A. DADI TJOKRODIPO BANDAR LAMPUNG

Oleh

Annisa Salshabilla

Latar Belakang: Pneumonia adalah infeksi saluran pernapasan bawah yang disebabkan oleh bakteri. Kejadian pneumonia di Indonesia pada tahun 2018 sebanyak 1.017.290 kasus. Sebagian besar pasien pneumonia rawat inap menerima ≥ 5 jenis sehingga berisiko mengalami interaksi obat. Tujuan penelitian ini untuk mengidentifikasi interaksi obat dan menganalisis hubungannya dengan lama rawat inap.

Metode: Penelitian ini menggunakan metode *cross-sectional* dan pengambilan data dilakukan secara retrospektif. Subjek penelitian ini adalah pasien pneumonia di instalasi rawat inap RSD Dr. A. Dadi Tjokrodipo periode 2023. Analisis data menggunakan aplikasi *Drugs.com* dan buku *Stokley's Drug Interaction* serta menggunakan analisis *chi-square* untuk mengetahui hubungan antara potensi interaksi obat dengan lama rawat inap.

Hasil: Dari 92 pasien menunjukkan karakteristik pasien yang didominasi oleh laki-laki (52.2%) serta pasien ≥ 60 tahun (55,4%). Potensi interaksi obat didapatkan pada 60 (64.5%) pasien. Interaksi berdasarkan tingkat keparahan minor, moderat, dan mayor masing-masing sebesar 20.2%, 66.0%, dan 13.8%. Interaksi berdasarkan mekanisme interaksi obat farmakodinamik, farmakokinetik dan mekanisme tidak diketahui masing-masing sebesar 61.7%, 29.3%, dan 9.0%. Hasil bivariat hubungan interaksi obat dengan lama rawat inap didapatkan *p-value* sebesar 0,409.

Kesimpulan: Tidak terdapat hubungan antara potensi interaksi obat dengan lama rawat inap pasien pneumonia.

Kata kunci: Interaksi Obat, Lama Rawat Inap, Pneumonia