INTISARI

Sepsis merupakan penyebab kematian terbanyak di ICU (*Intensive Care Unit*) dengan sumber infeksi tertinggi diakibatkan oleh pneumonia. Keberhasilan pengobatan dan penurunan angka kematian akibat sepsis pneumonia bergantung pada terapi yang diberikan. Pemberian terapi antibiotik empirik yang sesuai merupakan salah satu faktor penunjang keberhasilan pengobatan sepsis pneumonia. Penelitian ini bertujuan untuk mengetahui hubungan kesesuaian antibiotik empirik berdasarkan ATS/IDSA (*American Thoracic Society/ The Infectious Disease Society of America*) terhadap *outcome* klinik dan perbedaan rata-rata lama waktu rawat antara pemberian antibiotik empirik sesuai dan tidak sesuai ATS/IDSA.

Penelitian ini menggunakan rancangan penelitian observasional analitik dengan desain kohort retrospektif. Pengambilan data dilakukan dari catatan medik pasien dengan diagnosis sepsis pneumonia di ICU di RS X Jakarta periode 1 Januari 2019 - 31 Desember 2020. Penelitian melibatkan 99 pasien yang terbagi dalam kelompok sesuai dan tidak sesuai ATS/IDSA. Data kedua kelompok dianalisis dengan uji *Chi square* untuk mengetahui hubungan kesesuaian antibiotik empirik berdasarkan ATS/IDSA terhadap *outcome* klinik. Perbedaan rata-rata lama waktu rawat dianalisis dengan uji *Mann whitney*. Masing-masing uji menggunakan tingkat kepercayaan 95%.

Kesesuaian antibiotik empirik berdasarkan ATS/IDSA diperoleh 48,48% (48 pasien) telah sesuai. Sebesar 48,48% penggunaan antibiotik empirik yang sesuai ATS/IDSA terdapat 72,9% (35 pasien) memiliki *outcome* klinik membaik, sedangkan 27,1% (13 pasien) belum membaik. Berdasarkan analisis statistik terdapat hubungan yang signifikan antara kesesuaian antibiotik empirik dengan *outcome* klinik (p<0,05). Analisis statistik lama waktu rawat didapatkan bahwa tidak terdapat perbedaan rata-rata lama waktu rawat antara pemberian antibiotik empirik sesuai dan tidak sesuai ATS/IDSA (p>0,05) dengan perbedaan rata-rata 7,13 hari pada kelompok sesuai dan 6,59 hari pada kelompok tidak sesuai ATS/IDSA.

Kata kunci: sepsis pneumonia, antibiotik empirik, *outcome* **klinik, lama waktu rawat**

ABSTRACT

Sepsis is the leading cause of death in the ICU (Intensive Care Unit) with the highest source of infection caused by pneumonia. The success of treatment and the decrease in mortality due to sepsis pneumonia depends on the therapy provided. The provision of appropriate empirical antibiotic therapy is one of the contributing factors to the successful treatment of sepsis pneumonia. This study aims to determine the relationship of the suitability of empirical antibiotics based on ATS / IDSA (American Thoracic Society / The Infectious Disease Society of America) to clinical outcomes and the difference in the average length of stay between the administration of empirical antibiotics appropriate and inappropriate to ATS / IDSA.

The study used an analytical observational research design with retrospective cohort design. Data collection was taken from the medical records of patients with a diagnosis of sepsis pneumonia in the ICU at RS X Jakarta for the period January 1, 2019 - December 31, 2020. The study involved 99 patients who were divided into appropriate groups and inappropriate groups with ATS/IDSA. The data of both groups were analyzed with the Chi square test to determine the relationship of empirical antibiotic conformity based on ATS / IDSA to clinical outcomes. The difference in the average length of stay was analyzed with Mann whitney test. Each test uses a 95% confidence level.

Appropriateness of Empirical antibiotic based on ATS/IDSA obtained 48,48% (48 patients) was appropriate. As of 48,48% of the use of empirical antibiotics according to ATS / IDSA there is 72,9% (35 patients) have improved clinical outcomes, while 27,1% (13 patients) have not improved. Based on statistical analysis, there is a significant relationship between the suitability of empirical antibiotics and clinical outcomes (p<0,05).
Statistical analysis of the length of stay found that there was no difference in the average length of stay between the appropriate and inappropriate empirical antibiotic based on ATS/IDSA (p>0,05) with an average difference of 7,13 days in the appropriate group and 6,59 days in the ATS/IDSA inappropriate group.

Keywords: sepsis pneumonia, empirical antibiotics, clinical outcome, length of stay