

## **INTISARI**

Infeksi Saluran Pernapasan Akut (ISPA) adalah infeksi akut yang mengenai hidung, sinus paranasal, faring, trachea, bronchus, paru dan epiglottis. ISPA kebanyakan disebabkan oleh virus dan bakteri dan mikroorganisme. Uji sensitivitas antibiotik akan berperan penting dalam pemberian obat antibiotik yang berpengaruh besar dalam keberhasilan pengobatan ISPA. Tujuan penelitian ini adalah untuk mengetahui gambaran resistensi bakteri *Klebsiella pneumoniae* terhadap antibiotik amikacin dan meropenem dalam rentang waktu Januari 2020 sampai dengan Februari 2022 di Rumah sakit Umum Islam Klaten. Metode penelitian ini adalah deskriptif retrospektif teknik sampling dalam penelitian ini adalah purpose sampling. rentang waktu 2020-2022. Subjek penelitian ini pada infeksi saluran pernapasan akut dengan objek sputum diperiksa kultur sensitivitas. Penelitian dilakukan di Laboratorium Patologi Klinik Rumah sakit Islam Klaten Januari 2020 sampai dengan Februari 2022. Analisis hasil dilakukan secara kualitatif dengan cara membandingkan diameter zona hambatan antibiotik uji terhadap tabel standart interpretasi uji kepekaan dilusi dan difusi disk. Hasilnya dilaporkan sebagai sensitif, intermediat, atau resisten. Interpretasi hasil dengan membandingkan nilai range sensitivitas disk antibiotik dengan standart CLSI (Clinical and Laboratory Standard Institute). Hasil penelitian salah satu bakteri penyebab Infeksi Saluran Pernapasan Akut .kultur sensitivitas didapatkan gambaran hasil presentase bakteri *Klebsiella pneumoniae* terhadap antibiotik amikacin dan meropenem. Uji sensitivitas bakteri

*Klebsiella pneumoniae* terhadap antibiotik meropenem dan amikacin pada sampel sputum penderita ISPA di Rumah Sakit Umum Islam Klaten periode 2020 – Februari 2022 yang menyebabkan Infeksi Saluran Pernapasan Akut (ISPA) dengan hasil uji kultur sensitifitas didapatkan gambaran angka sensitivitas dan resistensi dengan hasil data 76.8% jumlah sampel yang sensitif terhadap antibiotik amikacin dan 77.2% sensitif terhadap antibiotik merepenem pada rentang waktu januari 2020 sampai dengan februari 2022.

Kata kunci : Bakteri, Infeksi Saluran Pernapasan Akut, Uji Sensitifitas.

## **ABSTRACT**

Acute Respiratory Tract Infection (ARI) is an acute infection affecting the nose, paranasal sinuses, pharynx, trachea, bronchi, lungs and epiglottis. ARI is mostly caused by viruses and bacteria and microorganisms. Antibiotic sensitivity test will play an important role in the administration of antibiotic drugs which have a major impact on the success of ARI treatment. The purpose of this study was to describe the resistance of *Klebsiella pneumoniae* bacteria to amikacin and meropenenem antibiotics in the period January 2020 to February 2022 at the Klaten Islamic General Hospital. This research method is descriptive retrospective sampling technique in this study is purpose sampling. 2020-2022 timeframe. The subjects of this study were acute respiratory infections with sputum objects examined for sensitivity culture. The study was conducted at the Clinical Pathology Laboratory of the Klaten Islamic Hospital from January 2020 to February 2022. The results were analyzed qualitatively by comparing the diameter of the test antibiotic inhibition zone against the standard table of interpretation of the dilution and diffusion sensitivity test. The results are reported as sensitive, intermediate, or resistant. Interpretation of the results by comparing the sensitivity range of antibiotic disks with the CLSI (Clinical and Laboratory Standard Institute) standard. The results of the study on one of the bacteria that cause Acute Respiratory Tract Infection. Sensitivity culture showed a picture of the percentage of *Klebsiella pneumoniae* bacteria to amikacin and meropenem antibiotics. Sensitivity test of *Klebsiella pneumoniae* bacteria to

meropenem and amikacin antibiotics in sputum samples of ARI patients at the Klaten Islamic General Hospital for the period 2020 – February 2022 which causes Acute Respiratory Tract Infection (ARI) with sensitivity culture test results obtained an overview of sensitivity and resistance rates with data results of 76.8 % of the number of samples that were sensitive to amikacin antibiotics and 77.2% were sensitive to the antibiotic mepenem in the period from January 2020 to February 2022.

Keywords: Bacteria, Acute Respiratory Infection, Sensitivity Test.