ABSTRAK

Latar Belakang: Prevalensi koinfeksi bakterial pada pasien COVID-19 termasuk rendah, tetapi penggunaan antibiotik justru sangat tinggi. Sebanyak 71% pasien COVID-19 yang dirawat di rumah sakit menerima antibiotik dengan fokus antibiotik spektrum luas meskipun tingkat koinfeksi bakterial yang dikonfirmasi hanya 1%. Hal tersebut berisiko meningkatkan angka kejadian resistensi antibiotik. **Tujuan:** Mengetahui profil antibiogram, mikroorganisme, dan sensitivitas bakteri terhadap antibiotik penyebab koinfeksi bakterial pada pasien COVID-19 di ICU RSWN periode Januari 2020 – Juni 2022. **Metode:** Penelitian ini merupakan penelitian observasional deskriptif dengan pendekatan retrospektif menggunakan rancangan belah lintang dengan menggunakan data rekam medis pasien COVID-19 yang dirawat di ICU periode Januari 2020 – Juni 2022 selama 4 bulan di RSD KRMT Wongsonegoro. **Hasil:** Prevalensi pneumonia bakterialis pada pasien COVID-19 di ICU adalah 32,2%. Mikroorganisme penyebab yang diidentifikasi antara lain *Acinetobacter spp.* (32.6%), *K. pneumoniae* (13.8%), *K. oxytoca* (10.7%), *Enterobacteriaceae* lainnya (7.6%), *E. coli* (6.5%), *E. faecalis* (6.1%), *P. aeruginosa* (5.8%), CoNS (4.2%), *S. aureus* (3.8%), *S. agalactiae* (3.1%), *Stenotrophomonas maltophilia* (2.7%), *Non Enterobacteriaceae* lainnya (2.7%), dan *S. pneumoniae* (0.4%). Hasil uji sensitivitas antibiotik menunjukkan bahwa bakteri gram negatif hampir semua sensitif terhadap amikasin dan trimethoprim/sulfametoksazol serta resisten terhadap ampisilin, sedangkan bakteri gram positif hamper semua sensitif terhadap vankomisin, teikoplanin, linezolid, dan trimethoprim/sulfametoksazol, namun resisten terhadap amikasin, sefoksitin, dan penisilin G. **Kesimpulan:** Mikroorganisme yang paling banyak teridentifikasi adalah bakteri gram negatif. Secara umum bakteri gram negatif memiliki kepekaan yang baik terhadap amikasin dan trimethoprim/sulfametoksazol, sedangkan gram positif memiliki kepekaan yang baik terhadap vankomisin, teikoplanin, linezolid, dan trimethoprim/sulfametoksazol.

Kata kunci: Koinfeksi bakterial, Infeksi sekunder bakterial, COVID-19, ICU, Antibiogram.

ABSTRACT

Background: The prevalence of bacterial co-infection in COVID-19 patients is low, but the use of antibiotics is actually very high. As many as 71% of hospitalized COVID-19 patients received antibiotics focused on broad-spectrum antibiotics even though the actual bacterial coinfection rate was only 1%. This risks increase incidence of antibiotic resistance. **Objective:** To determine the profile of antibiograms, microorganisms, and sensitivity of bacteria to antibiotics that cause bacterial coinfection in COVID-19 patients in the ICU RSWN for January 2020 – June 2022. **Methods:** This study was a descriptive observational study with a retrospective approach using a cross-sectional design from the medical record data of COVID-19 patients treated in the ICU for the period January 2020 - June 2022 for four months at KRMT Wongsonegoro Hospital. **Results:** The prevalence of bacterial pneumonia in COVID-19 patients in the ICU is 32.2%. The causative microorganisms identified include Acinetobacter spp. (32.6%), K. pneumoniae (13.8%), K. oxytoca (10.7%), other Enterobacteriaceae (7.6%), E. coli (6.5%), E. faecalis (6.1%), P. aeruginosa (5.8%), CoNS (4.2%), S. aureus (3.8%), S. agalactiae (3.1%), Stenotrophomonas maltophilia (2.7%), other Non-Enterobacteriaceae (2.7%), and S. pneumoniae (0.4%). The antibiotic susceptibility test results showed that Gram-negative bacteria mostly sensitive to amikacin and trimethoprim/sulfamethoxazole and resistant to ampicillin. In contrast, Gram-positive bacteria mostly sensitive to vancomycin, teicoplanin, linezolid, and trimethoprim/sulfamethoxazole but resistant to amikacin, cefoxitin, and penicillin G. **Conclusion:** The most identified microorganisms were Gram-negative bacteria. In general, Gram-negative bacteria had good susceptibility to amikacin and trimethoprim/sulfamethoxazole, while gram-positive bacteria had good susceptibility to vancomycin, teicoplanin, linezolid, and trimethoprim/sulfamethoxazole.

Keywords: Bacterial coinfection, Secondary infection, COVID-19, ICU, Antibiogram.