



Title: *Study of the antibiotic resistance profile of Nosocomial Infection in patients infected with COVID- 19*

Koiava T ¹ , Tavadze V ² , Kalandadze S¹, M. Nagervadze ¹Akhvlediani L.¹

1. Batumi Shota Rustaveli State University, Faculty of Natural Sciences and Health Care-Department of Biology.

2. National Center for Disease Control and Public Health in Adjara.

3. Corresponding author: Qoiava.tea@bsu.edu.ge

Name: International Conference Medical Biology and Oncology (ICBAO-2024)

University/Organization: Batumi Shota Rustaveli State University

Abstract:

Nosocomial infections have been impacted by the COVID-19 pandemic in a complicated and diverse way. Although strict infection control protocols have led to the decline of certain HAIs, the overwhelming strain on healthcare systems and the growing use of invasive devices in COVID-19 therapy have made other forms of HAIs more prevalent. Furthermore, the pandemic has brought attention to how crucial it is to maintain strict infection control procedures and constant watchfulness in order to prevent HAIs.

Materials and Methods: Susceptibility profile and identification of the infection *Pseudomonas aeruginosa* and *Acinetobacter baumannii* isolates collected in different hospital services were performed by disc diffusion methods according to the CLSI/EUCAST guidelines, and API 20E, respectively.

The research materials were collected at the different hospital resuscitations from patients undergoing treatment for a long time who were resistant to antibiotics. As the results showed, *Pseudomonas aeruginosa* has the highest resistance to meropenem, ceftazidim, ciprofloxacin, levofloxacin, and imipenem (100%), as well as resistance to Aztreonam, cefepime, and tobramycin (80%), and relatively low resistance was detected to amikacin (20%). *Acinetobacter baumannii* showed the highest resistance to meropenem, trimethoprim/sulfamethoxazole, tobramycin, ciprofloxacin, levofloxacin, gentamycin, imipenem, and amikacin (100%). As research has shown, the number of effective antibiotics is gradually decreasing

Biography: Associate professor Tea Koiava completed her education at Batumi Shota Rustaveli State University, Faculty of Natural Sciences and Health Care, where she pursued her studies in clinical microbiology/immunology and related fields. As an associate professor, she has been involved in teaching various courses related to microbiology and immunology. She has been actively involved in research, focusing on clinical microbiology. Tea Koiava has published numerous research papers, sharing her findings with the broader scientific community. She has participated in various national and international conferences. Administrative position: Head of Quality Assurance Service, Faculty of Natural Sciences and Health Care. <https://bsu.edu.ge/sub-14/cv-new/60/koiava-tea/index.html?lang=en>