

EPIDEMIOLOGICAL CHARACTERISTICS OF HOSPITAL INFECTIONS CAUSED BY *CLOSTRIDIUM DIFFICILE* AT THE UNIVERSITY CLINICAL CENTRE OF NIŠ

Bojan Stanojević¹, Nikola Milenković¹, Sonja Novak¹, Ivica Grozdanović², Goran Maksić³, Zvonko Zlatanović⁴

Hospital (nosocomial, hospital-acquired) infections represent the greatest health challenge in more developed countries worldwide. Infections caused by the bacterium *Clostridium difficile* have been a serious medical problem for years. Despite the constant progress and improvement of diagnostic and therapeutic procedures, they still represent one of the most frequent and most severe hospital-acquired infections, and their incidence rate, mortality rate, as well as severity of their clinical picture are all on the rise. This paper aimed to analyse the epidemiological situation surrounding hospital-acquired infections caused by the bacterium *Clostridium difficile* at the University Clinical Centre of Niš between 2015 and 2019. In this study, *Clostridium difficile* was the most frequent cause of hospital-acquired gastrointestinal infections and was identified in as many as 48% of the studied samples. Preventive measures to control the spread of *Clostridium difficile* in a hospital environment are based on identifying transmission routes. In 1995, the first prevention and control guidelines were issued, while the Center for Disease Control and Prevention in Atlanta (CDC) modified the guidelines to control the spread of *Clostridium difficile* in health facilities, which were re-evaluated in 2005, while hygiene guidelines following contact with a patient infected with *Clostridium difficile* were added. The European Centre for Disease Prevention and Control (ECDC) published a new set of guidelines in 2008, while the Society for Healthcare Epidemiology of America (SHEA) and the Infectious Diseases Society of America (IDSA) published the most recent set of guidelines in 2010. A comprehensive examination into the interplay of different aspects of important factors dealing with *C. difficile* would provide a more detailed understanding of the various factors that could inform academics and practitioners and improve theoretical knowledge and actual practices in this really important area of public health. In that sense, the study of potential and significant factors which could have a significant impact on the health of the population, especially illnesses caused by the bacterium *C. difficile* in a hospital environment, should be an imperative in the scientific and professional sphere.

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Key words: hospital-acquired infections, *Clostridium difficile*, disease prevention and control