

NOSOCOMIAL INFECTIONS AT THE UNIVERSITY HOSPITAL IN WARSAW IN 2005-2012

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Introduction: Nosocomial infections are a major health problem. Especially dangerous is the spread of hospital infections caused by bacteria which are resistant to drugs, known as alert pathogens. There is an alarming growth in the number of deaths caused by these infections.

Aim: The objective of this study was regarding nosocomial infections at the Czerniakowski University Hospital in Warsaw during the years 2005-2012.

Materials and Methods: This study was a retrospective analysis and was based on the annual reports of the Hospital Committee of Infection Control monitoring nosocomial infection. At the Czerniakowski Hospital in 2005 there were 322 beds and by 2012, there were only 283 beds. In 2005, there were 13,306 hospitalized patients and in 2012, 14,930 were admitted. The number of bacteriological examinations performed in 2005 were 1622, and in 2012, 6915 bacteriological examinations were performed.

Results: In 2005, nosocomial infections numbered 56 and in 2012 there were 232. The incidence of infections per 100 patients admitted in 2005 was 4.2% and 12.3% in 2012. The number of cultured pathogens has increased from 560 in 2005 to 1,839 in 2012. Among them were 112 alarm strains emergencies in 2005 and in 2012 there were 487. The most common alert pathogens in 2005 were: *Enterobacter cloacae* (26), *Klebsiella pneumoniae ESBL⁺* (12) and *Pseudomonas aeruginosa* (10). In 2012, the most common were *Klebsiella pneumoniae ESBL⁺* (108), *Clostridium difficile* (100), *Escherichia coli ESBL⁺* (78) and *Staphylococcus aureus* MRSA (57). Far the most common strains were found in the emergency department of internal diseases (311) and in the intensive care unit (78)

Conclusions: From 2005 to 2012 registrations of nosocomial infections caused by alert strains significantly increased. Observed during this time was the marked change of pathogens causing infections. The most important pathogens have become *Klebsiella pneumoniae ESBL⁺*, *Clostridium difficile* and *E. coli ESBL⁺*.