

TITLE: DESCRIPTION OF HEALTHCARE-ASSOCIATED INFECTIONS IDENTIFIED IN AN ICU OF A UNIVERSITY HOSPITAL AT NATAL, BRAZIL

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ABSTRACT

The use of invasive devices in medical procedures is one of the most important causes of infections acquired in the hospital environment. This study evaluated the occurrence of infections transmitted by these instruments in patients treated at the Hospital Universitário Onofre Lopes. This study analyzed all cases of healthcare-associated infections resulting from the use of invasive devices (central-line catheter, urinary catheters, mechanical ventilator) identified in an adult ICU between January 2016 and December 2017. This is a descriptive, retrospective and epidemiological study. The variables gender, age, time of hospitalization stay, invasive procedures, main site of infection, isolated microorganisms, clinical outcome, profile of antimicrobials used and resistance were collected and analyzed by statistical tests. It was identified 130 cases of infections. Male and female patients were also affected. There was an increasing density in the occurrence of infections in older age groups. The devices most used were urinary catheter, central-line catheter and mechanical ventilator, in order and the most observed type of infection were pneumonias associated with mechanical ventilation. The most common isolated bacteria species were *Pseudomonas aeruginosa*, *Klebsiella pneumoniae* e *Acinetobacter baumannii*. No statistically significant associations were found between the utilization rate of dispositive and the incidence density of infection or between the variables "age, length of hospital stay, number of devices" versus death. An expressive prevalence of infections transmitted by invasive devices, mainly caused by gram-negative bacteria, was observed, mainly reaching older patients, and pneumonia associated with mechanical ventilation was the most frequent clinical manifestation.

Keywords: Hospital infection; CCIH; HAIs; Prevention; ICU.

Development Agency: Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (Capes) and Universidade Federal do Rio Grande do Norte (UFRN).