

TITLE: HIGH PREVALENCE OF MULTIDRUG-RESISTANCE IN HOSPITAL-ACQUIRED PNEUMONIA IN SÃO LUÍS, MA.

AUTHORS: ASSUNÇÃO, R.G.; SOUSA, M.C.; GONÇALVES, M.B.; LIMA-NETO, L.G.; ABREU, A.G.

INSTITUTION: Universidade CEUMA, São Luís, MA (Rua Josué Montello 01, CEP: 65075-120).

ABSTRACT:

Nosocomial infections have been common in health services in Brazil. Among them, pneumonia is very relevant as a disease in itself and its comorbidity. Pneumonia is a serious infection that usually affects intensive treatment unit (ITU) patients due to the need for endotracheal intubation. It is recurrent in Brazil due to hospital conditions, ITU and the lack of care in patient admission. Several risk factors are: age, tracheostomy, lung and heart disease. The aim of this study was to determine the resistance profile of bacteria isolated from ITU patients with pneumonia in a public hospital in São Luis-MA. Bacteria strains were obtained from tracheal aspiration and collected for diagnosis as well as phenotypic characterization. Standards culture media, such as blood and MacConkey agar, were used to isolate clinical strains. Automatized Vitek 2 method was used to identification of strains and disc diffusion method (Kirby-Bauer) was performed to determine the antimicrobial susceptibility profile. In addition, sociodemographic and clinical data were obtained from medical records. In this study, ninety patients were diagnosed with pneumonia, detecting more than 20 different bacteria. Among them, *P. aeruginosa* (26%), *Acinetobacter baumannii* (19%), Coagulase-negative Staphylococci (15%), *Staphylococcus aureus* (7%) and *Klebsiella pneumoniae* (6%) were the most prevalent microorganisms. Regarding to the resistance, antimicrobial susceptibility test showed that majority of Gram-negative bacteria presented resistance to ampicillin. In Gram-positive bacteria there was a high resistance to ampicillin, penicillin, ciprofloxacin, clindamycin and erythromycin. This study showed a high prevalence of bacteria resistance in ITU patients in a public hospital. Moreover, it's a great support to promote control measures to prevent the spread of these pathogens.

Keywords: Bacteria Resistance; Infection; Pneumonia.

Development Agency: Fundação de Amparo à Pesquisa e ao Desenvolvimento Científico do Maranhão (FAPEMA).