

Introduction: Multidrug-resistance is a global concern. This is a major problem within intensive care units (ICU), where usually doctors have few options to treat healthcare-associated infections (HAI).

Results: In a six-years of follow-up (from January 2009 to December 2015), we reported 224 HAI. Sixty-five cases were due to Gram-negative and global rates of resistance reported were 47.7 %. Rates of HAI during the years (in density of incidence) are showed in table 1. Number of infections by Gram-negative and resistance by year, are showed in table 2. During this period only two HAI due to Enterobacteriaceae resistant to carbapenem were reported (0.9 % of all HAI). In table 3 we present rates of Gram-negative bacteria resistance according to the year of occurrence.

Table 2- Total number of Gram negative bacteria and multiresistant isolates causing HAI-PICU Prontobaby- 2009-2014

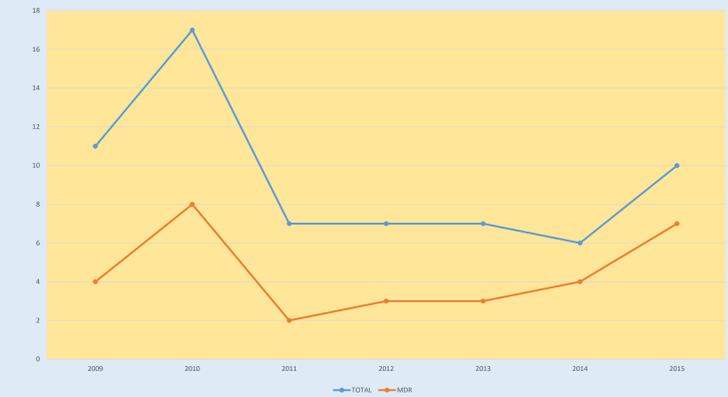
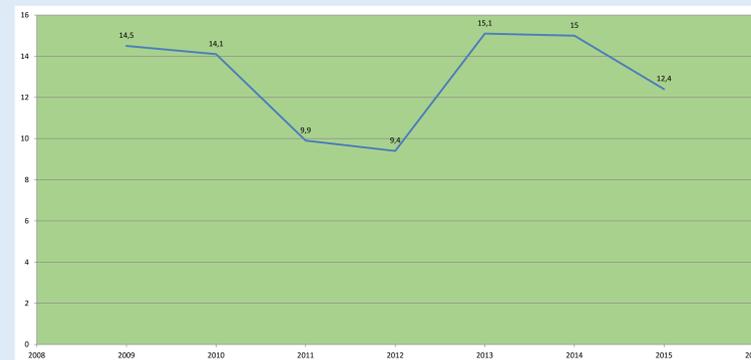


Table 1- Density of incidence of HAI in PICU of Prontobaby-Hospital da Criança- 2009-2015

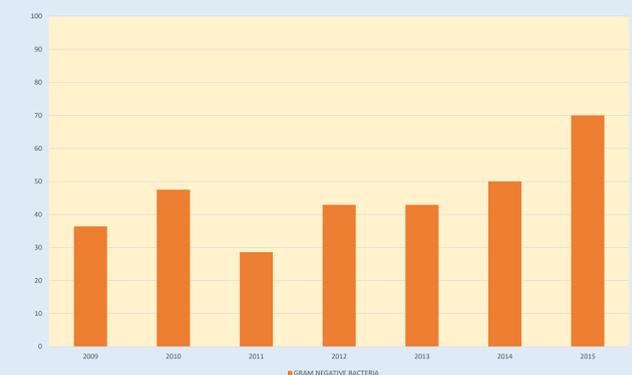


Aim: To describe profile of Gram-negative resistance in cases of HAI occurred in a Pediatric Intensive Care Unit (PICU) of reference.

Conclusion: In our casuistic we found a higher rates of Gram-negative bacterial resistance in cases of HAI . To avoid this problem, it's necessary to develop strategies to reduce incidence of HAI, even in critical ill children. Also, new treatment options are urgently needed.

Methods: Prospective study of all HAI reported in PICU of Prontobaby-Children's Hospital, with focus in infections due to Gram-negative bacteria. We used National Healthcare Safety Network (NHSN) criteria to define HAI. Gram-negative resistance was defined according Magiorakis criteria.

Table 3- Rates (%) of Gram-negative resistance in HAI-PICU Prontobaby-2009-2015



References: 1- Araujo da Silva AR, Henriques CT, Werneck LS. Healthcare associated infections by multidrug resistant organisms in paediatric intensive care: Analysis of four years. *Int J Infect Control* 2014, v10:i3 d 2- Magiorakos AP, Srinivasan A, Carey RB. Multidrug-resistant, extensively drug-resistant and pandrug-resistant bacteria: an international expert proposal for interim standard definitions for acquired resistance. *Clin Microbiol Infect* 2012; 18: 268–281
 3- CDC/NHSN Surveillance Definitions for Specific Types of Infections. CDC/USA. Available at: http://www.cdc.gov/nhsn/PDFs/pscManual/17pscNosInfDef_current.pdf Access in 2/6/16.