

**Title: EPIDEMIOLOGICAL PROFILE OF BACTERIA AND YEAST ISOLATED IN HAIs AT A PRIVATE INSTITUTION IN GOVERNADOR VALADARES, IN THE 2013-2014 PERIOD.**

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**Abstract**

Healthcare-Associated Infections (HAIs) originate in health care settings and manifest during hospitalizations or at least 48 hours after discharge and are related to procedures during therapy. The fungi are responsible for 8% of these diseases, *Candida albicans* and *Aspergillus* being the most common agents. About 90 % of HAIs are caused by bacteria, especially *Enterobacteriaceae*. This descriptive study aimed to understand the epidemiological profile of isolated bacteria and yeast in HAIs at a private institution in Governador Valadares, in the 2013-2014 period. The data were drawn from microbiological tests provided by a third-party laboratory and then grouped into three categories of microorganisms, Gram-positive bacteria, Gram-negative bacteria and yeasts. The results showed that in 2013, out of the 186 identified microorganisms, 62.37 % (n = 116) were Gram-negative bacteria, 29.57 % (n = 55) Gram-positive and 8.06% (n = 15) belonging to the yeast genus *Candida*. Among the Gram-negative bacteria, the most common was *Pseudomonas aeruginosa* (36.22%), followed by *Escherichia coli* (15.52%) and *Acinetobacter baumannii* (11.21%). Regarding the Gram-positive bacteria, *Coagulase-Negative Staphylococcus* was the most prevalent (47.26%) followed by *S. aureus* (34.55%) and *Enterococcus sp* (14.55%). *Candida albicans* represented 60% of the isolates, followed by *Candida tropicalis* (26.67%) and *Candida krusei* (13.33%). In 2014, out of the 131 isolated microorganisms, 67.18% (n = 88) were Gram-negative, 29.0% (n = 38) Gram-positive and 3.82% (n = 5) yeast. *E. coli* was more frequent (32,95%), followed by *A. baumannii* (18.18%), *Klebsiella pneumoniae* (15.91%) and *P. aeruginosa* (13.64%). Among the Gram-positive *Coagulase-Negative Staphylococcus* remained with a higher prevalence (47.37%) followed by *S. aureus* (18.43%) and *Enterococcus sp* (15.79%). *C. albicans* represented 60% of the fungal isolates in 2014, followed by *C. parapsilosis* and *C. krusei* with a frequency of 20.0% each. Knowing the epidemiological profile of the bacteria and yeast that cause HAIs represents an essential tool for preventing their recurrence and maximizing effectiveness for their treatment.

**Keywords:** Healthcare-Associated Infections (HAIs), Gram-positive bacteria, Gram-negative, Yeast.

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