Detection of Bacterial Contaminants in Pediatric Wards in the City of Manaus by Molecular Biology

Diniz, C.X.¹; Santos, F.S.¹; Belém, S.P.¹; Trentin, C.C.G.¹; Pereira, J.O.²; Souza, A.D.L.³ e Souza, A.Q.L. de^{1,2}.

¹Escola Superior de Ciências da Saúde - UEA, ²Faculdade de Ciências Agrárias e ³Departamento de Química - UFAM. <u>cxdiniz@uea.edu.br</u>

Key words: bacterial contamination, aseptic hospital, pediatric ward.

The city of Manaus has approximately 1,800,000 inhabitants, of which 60% are aged less than or equal to 14 years. The hot humid climate of the Amazon region is conducive to microbial life in the winter and ready to be filled with child care. The objective was to direct the isolation of bacterial contaminants in the air input and air circulating the pediatric wards of 08 SPAs in Manaus. Identifying them by biochemical tests and the region of 16S rDNA. We isolated 105 strains of bacteria from the first three SPAs. Since 08 strains of São Raimundo grouped in Salmonella typhi and Pseudomonas aeruginosa, 69 of Galileia grouped in 18 genera between the two already described it, more Staphylococcus aureus, Bacillus, Streptococcus and others, and 28 of the South Zone, where the two were also observed first most Bacillus and Staphylococcus aureus. The high prevalence of contaminants in the SPA of Galileia seems related to high flow of patients associated with poor area of town. The other two SPAs are areas of lower flow. The low level of contaminants in the São Raimundo seems SPA is associated with high hygiene of the place. We initially sequenced 10 samples which confirmed the biochemical identification. It is expected to contribute to this research guidelines for the hygiene of SPAs in the city of Manaus and decreased risk of contagion.

Support: FAPEAM and CNPq.