

MICROBIOLOGICAL EVALUATION OF THE HANDS OF CHILDREN AND ADOLESCENTS IN AN INTERNAL EDUCATIONAL INSTITUTION OF FORTALEZA-CE.

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1. Introduction

The hands are considered one of the most important route of disease transmission. There may be a transfer of microorganisms from the bowel, mouth, nose, skin, fur, hair and even secretion and injuries when sanitation is inadequate. Human hands are constantly in contact with huge environment in daily activities and can provide the transmission of microorganisms.

Young children have habits that facilitate the spread of diseases such as:

put their hands and objects in the mouth, close interpersonal contact, lack of hand washing and other hygienic habits.

According to ANVISA (2004), more than half of people forget to wash their hands when they leave the bathroom and it may make them a vehicle for potentially pathogenic microorganisms, enterobacter species.

2. Methods

The sampling was made weekly, not being informed in advance the date and time of the procedure.

The children were instructed to submerge their hands and rub - sanitized beforehand by themselves – inside a sterile plastic bag containing 250 ml of peptone water. This material was taken to the Research Laboratory of Applied Microbiology, Department of Clinical and Toxicological Analysis at Universidade Federal do Ceará. Where the determinancy of presence or absence of fecal coliforms, total coliforms and *Staphylococcus* positive coagulase were made.

3. Results

The results are related to the analysis of the 21 first samples that were collected from August 2010 to May 2011 (Table 1).

Table 1 – Presence of Total Coliforms, Fecal Coliforms and *Staphylococcus aureus* in the samples.

	Number of positive samples	Percentage of positive samples
Total Coliforms	21	95,24%
Fecal Coliforms	14	66,6%
<i>Staphylococcus</i> Positive Coagulase	1	4,76%

4. Conclusion

According to partial results obtained, it is estimated that the hygiene of the hands of inmates is not being effective, making it a potential vehicle for transmission of pathogens. This fact justifies the importance of conducting such a study and the need for continuing the education in health.

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