

Bacterial colonization after the application of an educational program: a quasi-experimental study.

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Abstract

Intervention in populations by means of educational programs increases knowledge in a given group and, in some cases, achieves a change in behavior. A quasi-experimental non-randomized study was carried out by consecutive sampling of students in the last year of high school, who were divided into two groups of intervention and control, analyzed in two stages before and after the application of the educational program. Samples were taken from the dominant hand for bacterial culture. In addition, a questionnaire was applied to assess the knowledge of hand hygiene before and after the application of the program, which was aimed at improving the level of knowledge and attitudes of the students regarding hand hygiene. The results indicate that of the 208 samples obtained, the most frequent agents before and after the application of the educational program were *Staphylococcus epidermidis* (39% versus 23%) and *Staphylococcus aureus* (21% versus 15%); the average number of colonies was 236 and 183 respectively ($p=0.35$). It is concluded that the application of the educational program succeeded in improving the level of hand hygiene knowledge. However, it was not enough to reduce bacterial colonization, so other behaviors such as direct supervision should be added.

Key words: hygiene, program, infection, hands.