

ABSTRACT

THE EFFECT OF ALCOHOL-BASED AND ALCOHOL-FREE HAND SANITIZER ON SUBSEQUENT BACTERIAL GROWTH

Although handwashing has proven to be the most effective means against transmission of bacteria, noncompliance in the hospital setting continues to increase. Many hospitals have adopted the use of alcohol-based hand sanitizers as an alternative to handwashing when hands are not visibly soiled. However, the alcohol-based hand sanitizers have proven to cause skin irritation which can lead to harboring of bacteria on the hands, potentially decreasing its effectiveness over time. This study compared the effects of an alcohol-based hand sanitizer and a newer, alcohol-free sanitizer on bacterial growth when used in a series of washes utilizing the FDA-approved glove juice protocol. A bacterial reduction factor was calculated for each subject, following the 1st and 10th wash in the series. The results from this study indicated that the alcohol-free hand sanitizer was as effective as the alcohol-based hand sanitizer when used repeatedly.

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