



KEY POINT SUMMARY

OBJECTIVES

This study aimed to compare the efficacy of alcohol-based hand rubs versus traditional hand washing with soap and water in reducing hand contamination during routine patient care, and to evaluate the effectiveness of the locally prepared hand rubs.

DESIGN IMPLICATIONS

Alcohol-based hand rub is far more efficient than traditional hand washing, as well as more convenient and time saving. It is recommended as a hand-hygiene practice in critical settings such as dialysis units and ICUs, particularly when sink and running water are inaccessible. Alcohol-based hand gels should not replace liquid hand disinfectants, as they have lower efficacy in reducing bacterial contamination.

Comparative Study on Efficacy of Different Alcohol Hand Rubs and Routine Hand Wash in a Health-Care Setting, Alexandria, Egypt

Abaza, A. F., Amine, A. E., Hazzah, W. A.
2010 | Journal of the Egypt Public Health Association
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Key Concepts/Context

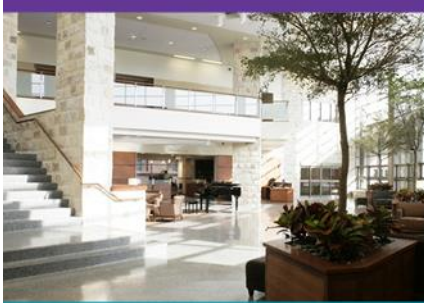
Hand hygiene, which refers to routine hand wash, antiseptic hand wash, antiseptic hand rub, or surgical hand antisepsis, is universally acknowledged as a cornerstone of the prevention of healthcare-associated infections (HAIs). The impact of hand hygiene depends not only on the regularity and thoroughness of the procedures used but also on the type of hand-washing agent selected.

Methods

The study included 20 volunteer nurses in three intensive care units and the renal dialysis unit in the Alexandria University Students' Hospital. A total of 200 samples were collected by direct finger print of the dominant hand taken from all nurses before and after applying hand hygiene procedures. Three hand rubs available in the Egyptian market (Brands A; B, alcohol-based liquid; and C, alcohol-based gel) were used and compared to a locally prepared hand-rubbing solution (D), and to hand washing with non-antiseptic soap and water (SW).

Findings

Hand washing with non-antiseptic soap and water and all of the four used alcohol-based hand rubs showed significant reduction of bacterial counts on the examined hands. However, this study illustrated that the antimicrobial effect of alcohol rubs far exceeds that of hand washing with un-medicated soap.



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Limitations

Generalizability is limited by the small sample size. Hand-disinfecting procedures were controlled rather than incorporating environmental design variables related to location of disinfecting features.