# MAPPING OF HAND HYGIENE HABITS OF NURSES

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### **OBJECTIVES**

Healthcare associated infections are a major problem worldwide and a challenge for the healthcare system. Intensive care units may be at increased risk of nosocomial infections, therefore the aim of our study was to assess hand hygiene practices of nurses in intensive care units during a primary study and to assess the extent of change in a post-training follow-up study in order to improve the hand hygiene techniques.

### **METHODS**

A cross-sectional qualitative study was conducted between July and September 2019 among nurses working in the Central Intensive Care Unit (CICU), the Pediatric Intensive Therapy Unit (PITU) of the Department of Infancy and Pediatrics (NICU) and the Perinatal Intensive Care Center (PIC) of a county hospital, selected on the basis of nonrandom convenience sampling. We excluded those who had not attended hand hygiene education and those with other health care qualifications (N=36). Structured observation was used to record areas of hands that were not properly disinfected. Descriptive and mathematical statistics ( $\chi$ 2 test, t-test) were used using MS Excel (p<0.05).

#### RESULTS

Significantly fewer failures were documented in the PIC group after education (PIC: 17 vs. CICU: 53; p=0.003). There was no difference when analyzing the control test scores of the PIC and PITU groups (PIC: 17 vs. PITU: 26; p=0.11). For all three groups, fewer error scores were recorded when comparing primary and control test scores (PIC: 42 vs. 17; PITU: 61 vs. 26; CICU: 78 vs. 53), so the compliance rate was significantly higher after training (PIC: p=0.03; PITU: p=0.008; CICU: p=0.004).

### CONCLUSIONS

Hand hygiene education was effective in the intensive care units, with the PIC group having a higher hand hygiene compliance rate compared to the CICU group.

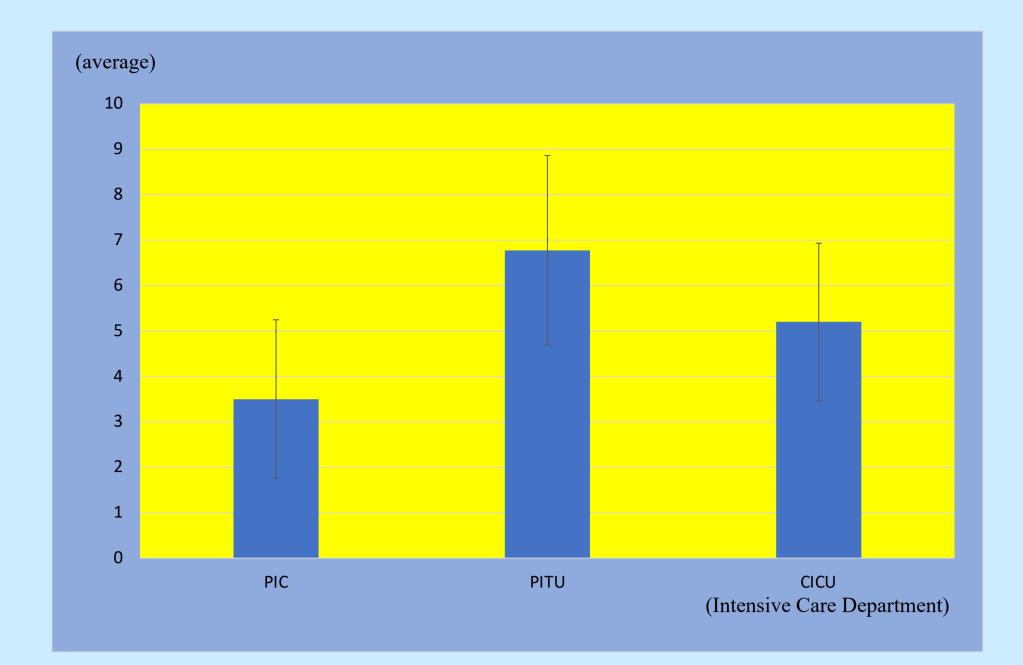


Figure 1.

Average of the error rates measured in the primary survey by groups (N=36).

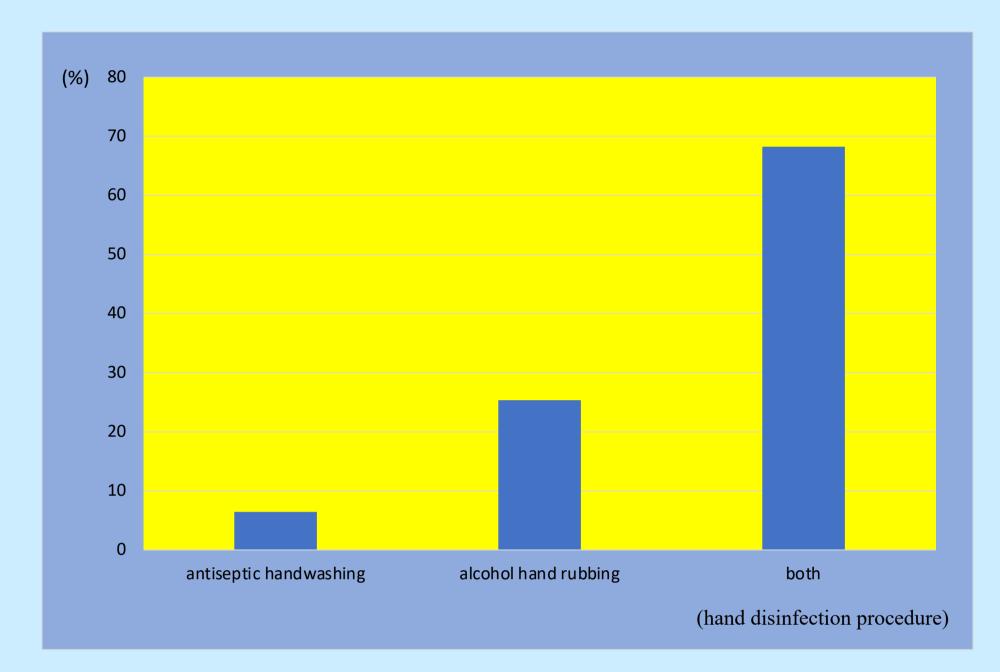


Figure 3.

Distribution of sample members by most frequently used hand disinfection method (N=233).

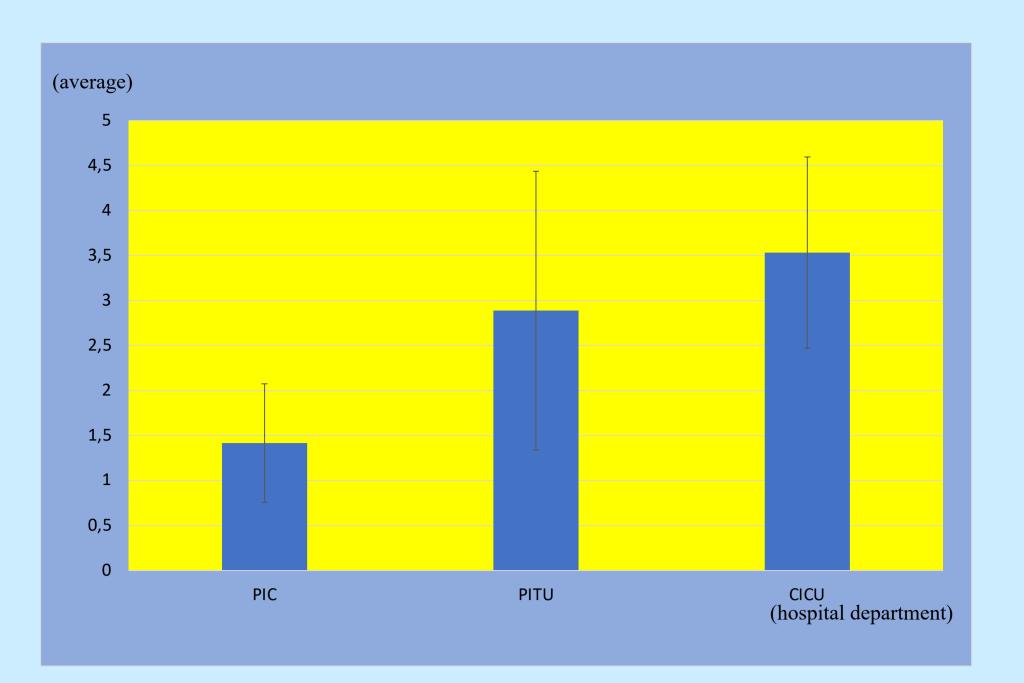


Figure 2. Average of the control test error rates by group (N=36).

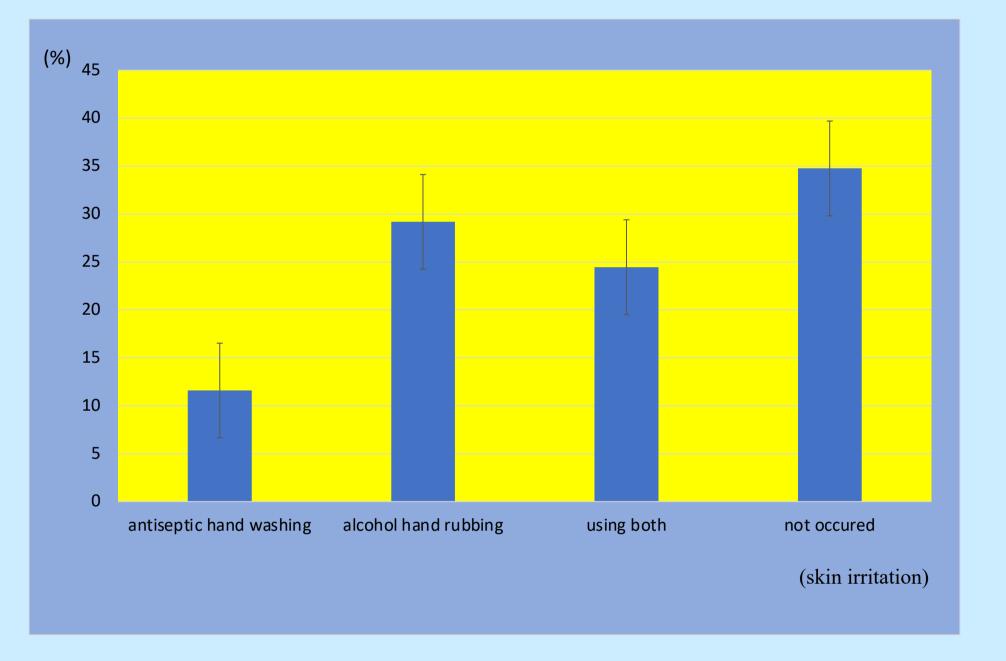


Figure 4.

Distribution of members of the study sample in terms of the prevalence of skin irritation with regard to hand disinfection activities (N=233).

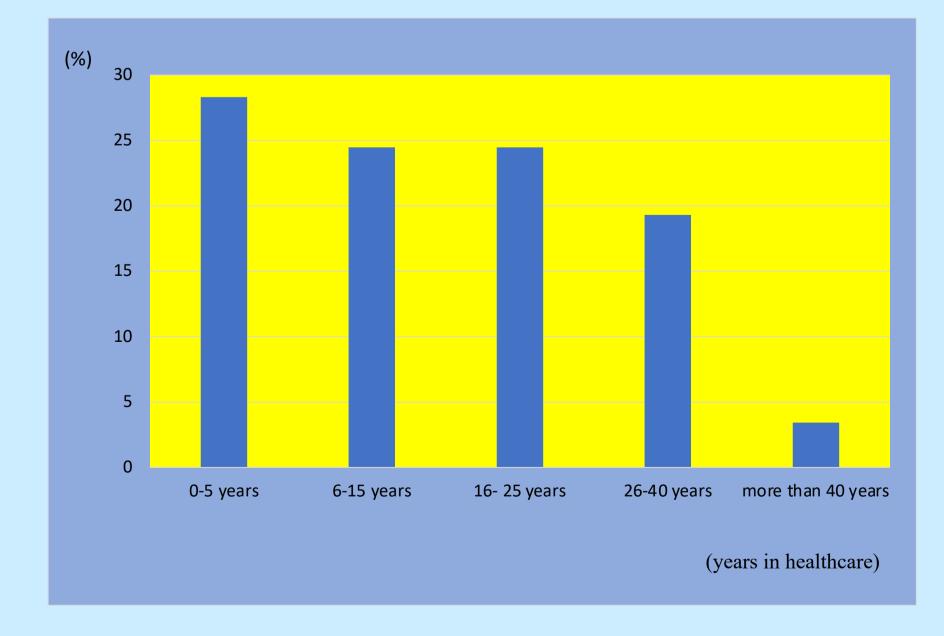


Figure 5.

Distribution of sample members by number of years in health care (N=233).



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