

P2643 Rubbing of the fingertips is the missing link

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Background. Hand Hygiene (HH) is of major importance to prevent nosocomial infections. Promotion of HH and monitoring of compliance with HH are priorities for infection control teams. HH requires the use of adequate product and the 6-step WHO HH technique. Non-compliance with HH by the healthcare workers (HCWs) is generally linked with inadequate technique likely because of complexity. A 3-step technique has been proposed to improve compliance with HH (Tschudin-Sutter, CMI 2017).

We aimed (1) to investigate among the different steps of the WHO HH technique, those which are the less respected, and (2) to study the bacterial load on the hands after the 6-step and the 3-step techniques.

Materials/methods. The infection control teams of 87 hospitals and nursing homes participated in the study. The infection control nurses (1) observed step-by-step HCWs performing HH after providing a care, and (2) sampled the hands immediately after observed 6-step or 3-step HH. The swabs were sent and analyzed in a unique lab. Bacterial colonies obtained on horse blood agar (48h, 37°C) were identified and counted.

Results. 2862 observations of HH were performed at 889 nurses and 1973 nursing assistants. Strict compliance with HH prerequisite and full hand drying was generally observed (74 and 77%, respectively). Duration of hand rubbing was adequate with most 6-step HH (73%), and less frequently with the simpler technique (68%). Conformity of the gesture was low whatever the technique (24 and 37%, for the 6-step and the simpler technique respectively) because of poor observance of the steps involving fingertips. 202 sampling of the hands were performed after HH. Significant bacterial cultures were observed in 18 and 37% of the cases with 6-step and 3-step techniques, respectively, with predominant coagulase negative staphylococci and scarce pathogens (2%).

Conclusions. Frequent fingertips omission results in inaccurate HH gesture, even when HCWs use the simpler technique. The simpler technique is associated with a shorter duration of rubbing and unsatisfactory antimicrobial results. Our data do not argue for this simpler technique. Efforts should be made to improve the WHO HH technique by focusing over fingertips.

