



Five Moments on Hand Hygiene: Whether It Needs to be Adapted for ICU?

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Hand hygiene; Cross transmission; Healthcare-associate infections.

Opinion

The association between hand hygiene and infection prevention has long been known. According to the World Health Organization (WHO), the 5 moments for Hand Hygiene were designed to minimize the risk of transmission of microorganisms between a healthcare worker, the patient, and the environment. It was introduced by WHO in 2009 to reduce the burden of Healthcare-Associated Infections (HCAIs). HCAIs are the most common adverse events affecting patients' outcome and the pathogens responsible are often transmitted through healthcare workers' hands [1]. WHO promotes 'My Five Moments for Hand Hygiene' as a 'time-space' framework to identify moments in the sequence of care when hand hygiene should be performed to prevent transmission and cross-contamination. These five moments of hand hygiene include before touching a patient, after touching a patient, before a procedure, after a procedure or body fluid exposure risk, and after touching a patient's surroundings.

These five moments are appropriate because they cover the key situations in which hand hygiene is essential to prevent the transmission of harmful microorganisms. As a general framework, they provide a clear and effective approach to hand hygiene in healthcare, but they are not exhaustive and should be adapted to the specific needs of each healthcare setting.

WHO guideline does not mention the need for hand hygiene before touching patients' surroundings. Patient surroundings include bed, bedrails, linen, table, bedside chart, bedside locker, call bell/TV remote control, light switches, personal belongings (including books, mobility aids), chair, foot stool, monkey bar etc. Many things in critical care units in patients' surroundings are touched multiple times by different healthcare staff and many of these are often skipped during cleaning patients' surroundings. Surfaces surrounding patients are often heavily contaminated with pathogens able to cause HCAI. These pathogens can withstand desiccation, survive for long periods in an inanimate environment, and frequently contaminate health workers' hands [2].

In a study from Italy by Musu et al. [3], they concluded that overall, the ICUs showed low levels of adherence to best hand hygiene practices and suggested the need to implement immediate strategies for infection control in the ICUs. The similar findings of low adherence to hand hygiene by healthcare workers are noted throughout the world.

In addition to patient care activities, healthcare workers in ICUs are busy with completing medical records on the computer and attending phone calls. They attend to the patients surrounding (e.g., addressing alarming monitor or ventilator, changing settings on the monitor or ventilator, addressing infusion pumps) while working on a computer or responding to a phone call. In view of complexities and multitasking of ICU, it is very much possible that during these processes, bacterial transmissions may occur if healthcare workers enter patients' surroundings without hand hygiene specifically when compliance to hand hygiene practices are already poor particularly before touching patients.

Hand hygiene has the objective of reducing the incidence of Healthcare-Associated Infections (HCAI) not only by preventing direct microbial transfer to patients but also by decreasing microbial transmission and burden in the patient's surroundings and, patients' surroundings are considered part of their environment.

Considering complexities of ICU environment, incorporating the moment of hand hygiene before touching patients' surroundings in the existing guidelines for critical care units can further

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strengthen the current practices and reduce the risk of HCAs. Therefore, further studies are needed to evaluate this gap in the existing recommendations. Overall, it is crucial to adapt the Five Moments of Hand Hygiene to the specific needs of each healthcare setting and emphasize the importance of ongoing monitoring and reinforcement to maintain high levels of hand hygiene compliance.

References

1. Gould D, Purssell E, Jeanes A, Drey N, Chudleigh J, McKnight J. The problem with 'My Five Moments for Hand Hygiene'. *BMJ Qual Saf.* 2022;31(4):322-6.
2. Weber DJ, Anderson D, Rutala WA. The role of the surface environment in healthcare-associated infections. *Curr Opin Infect Dis.* 2013;26(4):338-44.
3. Musu M, Lai A, Mereu NM, Galletta M, Campagna M, Tidore M, et al. Assessing hand hygiene compliance among healthcare workers in six Intensive Care Units. *J Prev Med Hyg.* 2017;58(3):E231-7.