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Patient Hand Hygiene:

A Forgotten Part of Infection Prevention



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Patient Hand Hygiene: A Forgotten Part of Infection Prevention

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In 2002, the Centers for Disease Control and Prevention (CDC) published the Guideline for Hand Hygiene in Health-Care Settings. In this document hand hygiene is acknowledged as one of the most important measures for preventing transmission of pathogens in healthcare facilities.¹ However, eight years after the publication of the Hand Hygiene Guideline, healthcare facilities continue to struggle with the incidence of healthcare-associated infections (HAIs) and the challenges of healthcare worker hand hygiene compliance. Recent publications suggest that hand hygiene compliance remains low,² leaving infection control and C-suite personnel looking for additional interventions to prevent HAIs in their facilities. With today's healthcare emphasis on transparency, public reporting of patient safety measures, and non reimbursement for HAIs, a hospital cannot afford to ignore all aspects of hand hygiene and HAI prevention in their desire to do the right things to ensure patient safety. One intervention that has been scarcely studied but is becoming more of a focal point is the role patient hand hygiene has on infections and environment contamination. Patients should be considered a source of pathogen introduction into the healthcare setting and a means of transferring germs from one surface to another and even having the potential to infect themselves and others.

Think about the patient admitted to the hospital today. They come from home, their workplace, an accident scene, or another facility often emergently with little time or priority to stop for hygienic measures. The patient is bringing his pathogens with him on admission to the healthcare facility. In several studies of patients who are nasal carriers of methicillin-resistant *Staphylococcus aureus* (MRSA), 40 percent of those patients are also colonized with MRSA on their hands.³ Another study was conducted of the skin flora of the hospitalized patient's forearm and sternum. This study indicated an increasing prevalence of multiple antibiotic resistant pathogens, including MRSA.⁴ The patient is touching all the objects also touched by healthcare personnel and other patients such as hand rails, bed rails, and toilet fixtures. This potential transfer of germs from the patient to the healthcare worker, other patients and the environment can result in HAIs. Offering and encouraging patient hand hygiene should be a part of the infection prevention program.

A recent study was conducted to evaluate the association between hospital roommate exposure and the risk of acquiring an HAI. The study found a significant association between daily roommate exposures and the infection outcomes. Specifically, the number of roommate exposures per day was significantly associated with an increased risk of acquiring MRSA, vancomycin-resistant *Enterococcus* (VRE) and *Clostridium difficile*.⁵ Roommates, especially the total number of roommates exposed on a day-to-day basis contributes to this risk. Being in a private room was protective against infection/colonization in this study. Many hospitals are unable to offer private rooms, and therefore roommates and exposure to them increases risk of acquiring their infections. Patient hand hygiene is one simple measure to prevent the spread of pathogens in the multi-patient room environment.

Many times patients are unable to perform their own hand hygiene and must depend upon their caregiver to provide them with the products and assistance to do their hand hygiene. Burnett (2009) studied acute-care nurses' perceptions, attitudes and behavior toward patient hand hygiene, and found that the majority of nurses had a good sense of the importance of patient hand hygiene in preventing HAIs, and a positive attitude toward patient hand hygiene, but reported their behavior to be less than favorable when it came to actually performing patient hand hygiene. This study also found that nurses who received local education on patient hand hygiene in the clinical setting were more likely to demonstrate positive behavior toward patient hand hygiene.⁶

The study found that **100 percent of nurses** stated that they felt **patient hand hygiene was an important** part of controlling and preventing HAIs, but when they were observed, **1 percent** actually **offered their patients the materials** to perform hand hygiene when the patients were unable to undertake this task independently.⁷

Another study of nurses' and patients' perceptions toward hand hygiene was done to determine if patients who required assistance with their hand hygiene were encouraged to and offered appropriate facilities at appropriate times. The study found that 100 percent of nurses stated that they felt patient hand hygiene was an important part of controlling and preventing HAIs, but when they were observed, 1 percent actually offered their patients the materials to perform hand hygiene when the patients were unable to undertake this task independently.⁷ The opportunities identified in this study for patient hand hygiene included:

- Before meal time
- Following use of the commode at the bedside
- After using the urinal
- After using the toilet
- Following vomiting or expectoration

This study showed that nurses perceived patient hand hygiene to be an important part of preventing HAIs, and reported that they frequently encouraged patients to clean their hands, but both patient interview and direct observation showed that patients were rarely offered materials or encouraged to clean their hands.

Many infection control leaders advocate patient hand hygiene education and empowerment programs. The concept of empowerment by the World Health Organization (WHO) includes the concept that the patients be involved in their care and should expect their healthcare worker to perform hand hygiene at the 5 Moments as defined by the World Health Organization (WHO).⁸ They suggest ways to approach healthcare workers who do not comply

with hand hygiene and empower patients to suggest that they clean their hands. Educating patients about the importance of hand hygiene and its relationship to HAIs is essential.

The Joint Commission initiated the Speak Up program to help patients become more informed and involved in their healthcare. One component of the Speak Up program is a document for patients titled, "5 Things You Can Do To Prevent Infections." The first item is that the patient should clean their hands. The second item is to make sure that caregivers clean their hands.⁹ Consider taking the patient hand hygiene education and empowerment programs to another dimension, to one which educates patients and their families to understand their important role in infection prevention by performing their own hand hygiene. Patients have a basic right to healthcare, including hand hygiene and should be educated as to how to comfortably ask for assistance and the materials to perform hand hygiene.

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