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Editorial

Hand hygiene: An essential element of infection control practices

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Infection prevention and control (IPC) is an integral aspect of healthcare delivery that ensures patient safety, reduces the spread of infections, and enhances clinical outcomes. Among the various components of IPC practices, hand hygiene stands as the cornerstone of effective infection control. With its simplicity and profound impact, hand hygiene is a primary defense against healthcare-associated infections (HAIs). This editorial aims to emphasize the importance of hand hygiene as a key element in infection control practices, drawing attention to its role in reducing the burden of infectious diseases in healthcare settings.¹

1. The Critical Role of Hand Hygiene in Preventing Infections

Infection transmission occurs through multiple pathways, but the hands are recognized as one of the most common vectors. Healthcare workers (HCWs), including doctors, nurses, technicians, and support staff, come into frequent contact with patients, their surroundings, and various medical equipment. These interactions create an environment where pathogens can easily spread. According to the Centers for Disease Control and Prevention (CDC), hand hygiene, when performed correctly, can reduce the transmission of healthcare-associated pathogens by up to 50%. This simple yet effective practice is crucial in preventing the spread of infections, especially in an era

where antimicrobial resistance (AMR) is rapidly rising, and the global health landscape is continuously challenged by new pathogens.

2. Evidence Supporting Hand Hygiene

Extensive research and numerous studies have consistently shown the effectiveness of hand hygiene in controlling the spread of infections in healthcare settings. The WHO's "5 Moments for Hand Hygiene" framework highlights the critical points at which hand hygiene must be performed: before patient contact, before aseptic procedures, after exposure to bodily fluids, after patient contact, and after contact with patient surroundings. Adhering to these moments has proven to be effective in preventing cross-contamination between patients, healthcare providers, and hospital environments.²

Furthermore, the widespread implementation of hand hygiene protocols has demonstrated tangible benefits. Findings from the different studies across the globe underscore the undeniable impact of hand hygiene on reducing infection rates and improving patient outcomes.

3. Challenges in Hand Hygiene Compliance

Despite the established evidence of its effectiveness, hand hygiene compliance remains a challenge in many healthcare settings. A combination of factors contributes to this issue, including busy work environments, lack of time, insufficient access to hand hygiene products, and even complacency

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among healthcare workers. Some healthcare workers may neglect hand hygiene due to the assumption that they have not been in contact with infectious materials, leading to a false sense of security.

Moreover, certain structural and organizational barriers, such as inadequate hand washing facilities, the unavailability of alcohol-based hand rubs in strategic locations, and poor healthcare worker education, further hinder compliance.

4. Strategies to Improve Hand Hygiene Compliance

Improving hand hygiene compliance requires a multifaceted approach that includes education, policy enforcement, and continuous monitoring. Training should be ongoing, as new evidence on infection control continues to emerge. Additionally, healthcare institutions must invest in making hand hygiene supplies accessible and easy to use, placing alcohol-based hand rubs at the point of care and ensuring sufficient hand-washing facilities. Positive reinforcement through recognition programs and feedback mechanisms can motivate healthcare workers to maintain high standards of infection control.

5. Conclusion

Hand hygiene is one of the most cost-effective and simple interventions in infection control. While challenges

in compliance persist, continuous education, institutional support, and leadership commitment can foster a culture of hand hygiene that will safeguard both patients and healthcare workers alike.

6. Conflict of Interest

None.

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