

Hand hygiene in infection control

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Hand Hygiene in Infection Control Hand Hygiene in Infection Control The term hand hygiene describes the process of decontaminating hands through hand washing using either water with plain soap, antibacterial soap or by using alcohol based products that contain emollient (PAC and the HICPAC/SHEA/APIC/IDSA, 2002). These alcohol based products do not require water for decontaminating hands. Plain soap and antibacterial soap are more effective in cases where hands are contaminated with soil or visible dirt while alcohol based products are preferred in all other cases. This helps to kill germs that inhabit ones skin and can be spread through contact. These germs are mainly bacteria which can cause serious infections. Some bacteria, known as flora or commensals inhabit the skin and multiply very fast to increase in number. Those bacteria that are easily spread through contact are referred to as transient microorganisms. Hand washing is recognized as the most important procedure for preventing cross infection and has been promoted in the healthcare field for generations. Hand washing is a concept that emerged in the 19th century and gained popularity in the 1970s with development of specific hand hygiene guidelines to assist in prevention of infections in hospitals, other healthcare facilities as well as in people's homes (PAC and the HICPAC/SHEA/APIC/IDSA, 2002). Today, hand washing is recognized as an integral part of quality healthcare to patients and is included among the required standards for hospital accreditation. Hand washing helps to reduce the risk of infections among the general public, staff of healthcare staff and among patients in healthcare facilities. Infections acquired in healthcare facilities such as hospitals as a result of poor hand hygiene only leads to prolonged stays in the hospital for patients,

consumes a lot of resources which are scarce and poses challenges for clinical governance (PAC and the HICPAC/SHEA/APIC/IDSA, 2002). Hospital acquired infections can be reduced if both patients and medical staff decontaminated their hands very often following stipulated guidelines and procedures for hand hygiene. The main purpose of disinfecting hands is to reduce the spread of pathogens on hands from one person to the next. The type of hand infection by pathogens will often determine the extent of disinfection required to kill the pathogens and prevent cross infection. There are various types of disinfectants that can be used to decontaminate hands, and the choice of one depends on the task that the healthcare worker intends to perform. The disinfectants are classified in to three categories namely, soap and water, alcohol based products and aqueous antiseptic solutions (PAC and the HICPAC/SHEA/APIC/IDSA, 2002). Liquid soap is mainly used to remove visible transient microorganisms. Alcohol based products are preferred as an alternative to hand washing when the pathogens on hands are not visible. They help to prevent the skin from drying. Aqueous antiseptic solutions are used to kill skin flora through both mechanical and chemical action. A good hand washing practice involves taking care of finger nails, nail brushes (if used), gloves, jewellery, and proper skin care. Finger nails must always be kept short and clean. Medical staff should not wear artificial finger nails when attending to patients. If nail brushes are used to clean finger nails, they should strictly be used for the nails and should not come in contact with the skin. The nail brushes ought to be soft bristle. The skin should also be taken good care of. Emollient creams should be used to prevent the skin from drying, and occlusive dressing used to cover any

breakages on the skin. While attending to patients, gloves should be used only when there is potential contact with the patient's blood, body fluids, or any other hazardous materials and removed immediately thereafter. The same pair of gloves should not be used to more than one patient. Hands should also be washed after using the gloves. Recommended hand washing techniques involves washing of hands under running water before applying plain soap, antibacterial soap or antiseptic detergent. Hands should then be thoroughly rinsed to remove residual soap and dried carefully with particular attention to the areas between forearms and fingers (PAC and the HICPAC/SHEA/APIC/IDSA, 2002). Health care facilities ought to perform risk assessments in their departments so as to determine which methods of washing hands work well for them and their patients (PAC and the HICPAC/SHEA/APIC/IDSA, 2002). The method used, be it soap, alcohol based products or aqueous antiseptic solutions, should be user friendly and should be effective in preventing cross infection within the environment of the healthcare facility. In most hospitals, user friendly alcohol based products are widely used to rub hands and kill germs effectively. The decontaminating agent used should be acceptable to both the hospital authorities and the public as the best way to prevent the spread of germs and infections through contact. Hand cleaning among medical staff such as nurses bears a lot of ethical considerations. The American Nurses Association recognizes the significance of hand washing and has included it in its code of ethics for nurses by stressing that it is the nurse's duty to the patient to protect his health. Nurses should therefore work within an ethical framework and put the health of the patients above anything else. Reference Practices Advisory

Committee and the HICPAC/SHEA/APIC/IDSA. (2002). Hand Hygiene Task Force Centers for Disease Control and Prevention (CDC). Guideline for Hand Hygiene in Health-Care Settings: Recommendations of the Healthcare Infection Control. MMWR 51: (No. RR-16).