

# HAND HYGIENE IS AN IMPORTANT FACTOR IN THE PREVENTION OF NOSOCOMIAL INFECTIONS

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Hand hygiene is the basic and most effective way to prevent diseases because people are the carrier of germs. Many studies and researches were conducted on this topic but however hand hygiene compliance among health workers remains a major issue in most healthcare settings.

Studies were conducted to determine the practice of hand hygiene among healthcare workers in Neonatal Intensive Care Unit, NICU. Hand hygiene either by hand washing or hand disinfectant is the most effective method preventing the spread of health care associated infections but is poorly carried out among healthcare workers. "Infections acquired during the process of receiving health care that was not present during the time of admission is known as Nosocomial infections". In infants the infections occurred 48 hours after their birth and not related to the maternally derived pathogens are Nosocomial infections. The infections are 100 times more common than the early onset bacterial infections, which are mainly caused by the pathogens acquired in utero or perinatally. These infections increase incidence of mortality and morbidity among babies admitted in NICU. Not only nurses and doctors but every one related to neonatal care should practice good hand hygiene including radiographers, physiotherapists, cleaners etc.

In a study, observational hand hygiene data were collected from pediatric intensive care unit and neonatal intensive care unit. And they checked if health workers performed the key moments in "My Five Moments for Hand Hygiene" of the World Health Organisation, WHO. The five moments in this strategy includes, 1) prior to patient contact 2) prior to a clean or aseptic procedure 3) after contact with body fluid 4) after patient contact and 5) after contact with the patient environment.

Checked if there were hand washing sinks near the ward and if they have waterless, alcohol based hand disinfectants. In a different study they tried to observe the current hand hygiene practice in a hospital and tried altering soap based hand wash with alcohol based hand disinfectants to see if it makes any difference.

A program was done in a hospital consisted of problem-based and task orientated hand hygiene education, training sessions and distribution of posters of hand hygiene guidelines, regular hand hygiene audit and surveillance of health care associated infections. And to assess the evolution of hand hygiene, studies were repeated every 3 months.

In the data's collected from the hospital overall hand hygiene compliance was 37%; nurses 41.4% and doctors 31.9%. overall hand hygiene compliance with respect to the five MMH were; compliance prior to patient touching was 43.2%, prior to a clean or aseptic procedure was 8.5%, after body fluid exposure was 18.1%, after contact with patient was 43.2%.

Most of the hospitals used soap and water based cleaning than alcohol based disinfectant. When checked 62.5% of the staffs used soap and water, and 37.5% used alcohol based disinfectant to maintain good hand hygiene.

In a hospital programs were conducted to improve hand hygiene, there was improvement in hand washing or hand hygiene techniques after three months of program. We audited again in 6 months and the health care related infection rate decreased from 15.5% to 9.6% among infants and children in both neonatal intensive care ward and pediatric ward.

Health care workers should improve their hand hygiene practices because current system is not at its best. Alcohol based disinfectants should be used in every hospitals and every health workers should follow the five moments of MMH. They should be more careful when dealing with patients in pediatric and neonatal care units. Each and every health care workers needs to be properly educated on the importance of good hand hygiene and the infections occurred from poor hand hygiene practices. Further studies needs to be done to find the best possible method to achieve the ultimatum in practicing good hand hygiene.