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Antiseptics and disinfectants are extensively used in hospitals and other health settings for a variety of topical and hard surface application *(McDonell and Russell, 1999).* They are an essential part for infection control practices and aid in the prevention of nosocomial infections *(Rutala, 1995).*

Because it is unnecessary to sterilize all patient care items, hospital policies must identify whether cleaning, disinfection or sterilization is indicated, based primarily on the item's intended use *(Rutala, 1998).*

Instruments and items for patient care were divided into three categories; critical, semi-critical, and non critical; the disinfection is the selective elimination of certain undersirable microorganisms *(Reber et al., 1972).*

The advantages and limitations of various disinfectants must be well known and appreciated. The disinfectant chosen must be not expensive, not toxic, not affected by environmental factor, surface compatibility, residual effect on treated surface, easy to use, odorless, solube in water, stable, and should have good cleaning properties *(Russell et al., 1983).*

Nosocomial infection may be either endogenous or exogenous; endogenous infection caused by organisms that are present as part of normal flora of the patient, while exogenous infections are those caused by organisms acquired by exposure to hospital personnel, medical devices or hospital environment *(Stamm, 1978).*

The most common pathogen in hospital acquired infection are E. Coli, S. aureus, Enterococci and Pseudomonas aeruginosa *(Horan et al., 1986)*.

Nosocomial infection in intensive care unit (ICU) is a frequent event with potentially lethal consequences. Because patients in intensive care are severely ill and undergo invasive procedures, they develop nosocomial infection more frequently than other hospitalized patients *(Craven et al., 1988)*.

Common sites of nosocomial infection in an ICU differ from those sites in the ward, the three most common sites are the respiratory tract, the urinary tract, and the blood stream *(Nystrom et al., 1988)*.

Studies have shown that during the first few hours to days of hospitalization, the patient's flora begins to change and becomes colonized with organisms that are present in the hospital environment *(Holey, 1986)*.

Escherichia coli is the most common hospital acquired organisms and S. aureus is the second most common serious isolate from blood cultures *(Anonymous, 1997)*.

It is now recognized that many Gram negative nosocomial pathogens have developed broad spectrum resistant to a newer beta lactam antibiotics through small modification in the structure of the - enzymes that they are already posses. The extended spectrum beta-lactamases (ESBL) are particularly common in isolates of Escherichia

coli, Klebsiella. and Citrobacter they located on transmissible plasmids ***(Speller and Humphreys, 1998).***

An important role of the microbiology laboratories is accurate and timely detection of multi-resistant strains which are the first line of defense ***(Willey et al., 1992).***