

Abstract

Background:

Healthcare-associated infections (HAIs) are an important cause of morbidity and mortality, prolongs hospital stay, increases antibiotic usage, add costs. Surgical Site Infections (SSIs) are a very important topic of concern in the ever changing times of health care. There are countries and hospitals that have just begun to realize the importance of preventing and surveillance of SSIs while there are others who have reached heights in the implementation of protocols of Infection controls for HAIs in general and SSIs in particular, depending on the types of services the hospital renders.

Of the many inseparable contributing factors in SSIs, the air contamination in the Operating Theatre (OT) is an important factor that has called for the requirements of different air supply systems, cleaning protocols, use of surgical protective suites and limiting of individuals in the OTs. The use of antibiotic prophylaxis has contributed tremendously to the prevention of SSIs especially in the major surgeries and surgeries conducted in ordinary air supplies.

It is an important task for the clinical microbiology laboratory to monitor the quality of air in the surgical theatre. But controversy exists over the extent and frequency of microbiological surveillance of operation theatres. Evaluation of the quality of the air in the theatres can be performed routinely by microbiological sampling and particle counting as part of regular infection control programs. These are especially required in the commissioning of the new operation theatres, investigation of clusters or outbreaks of infections or to validate a change in the ventilation system of the theatre.