

# **Risk Factors of Surgical Site Infection at Muhimbili National Hospital, Dar es Salaam, Tanzania.**

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## **ABSTRACT**

**Background:** Surgical site infection (SSI) is a common source of morbidity among operated patients. At Muhimbili National Hospital (MNH), studies indicate that the rate of SSI has been increasing over the past thirty years. The aim of this study was to determine the prevalence and factors associated with SSI among patients undergoing surgery at MNH.

**Methods:** This was a hospital-based cross-sectional study. One hundred and eighteen patients who underwent surgical procedures in the surgical wards were recruited. Demographic information was obtained using standardised questionnaire, surgical sites were examined to determine infections, and case notes were reviewed for clinical information including surgical notes. Blood sample was collected for HIV serology.

**Results:** SSI occurred in 42 patients (35.6%). Wound class, abdominal surgeries, emergency procedures and HIV infection increased the risk of SSI. Superficial SSI was the most commonly observed type, 54.8%. Overall HIV prevalence in this study was 16.9% with a 5 times risk of developing SSI.

**Conclusions:** Surgical site infection has remained a major Nosocomial infection in developing countries. Factors shown to be associated with increased risk are wound class, site and nature of surgery, and HIV infection. This study found higher prevalence of HIV infection among surgical patients.