

## ABSTRACT

### **Background:**

Contaminated environmental surfaces play an important role in transmission of nosocomial pathogens (Catano et al., 2012). These infections lead to increased rates of morbidity and mortality, staying longer in the hospital, indiscriminate and increased Use Of Antibiotics, And Increases On Hospital Expenses. The Study Was Therefore Carried Out To determine bacterial contamination of ward items predisposing individuals to nasocomial infection at Kiwoko Hospital, Nakaseke District.

### **Methodology:**

Swabs were collected from 309 ward items (Stethoscopes, Blood pressure machines, Bed pans, Examination beds, Nurse stations, Intravenous poles, Curtains and sinks) distributed over 7 wards (male medical, male surgical, female medical, female surgical, paediatric, opd and maternity). A total of 309 swabs collected were cultured on blood agar, Mackonkey agar, and identified using standard microbiological procedures. Antibiotic susceptibility testing was performed for all positive cultures.

### **Results:**

The results showed that out of 309 items swabbed and cultured, 72(23.3%) were contaminated with bacteria. *Staphylococcus aureus* was the highest contaminant 46(63.89%), followed by *Pseudomonas* species 12(16.67%), *Proteus mirabilis* 6(8.33%), *Staphylococcus epidemidis* 4(5.56%), *Esherichia coli* 2(2.78%) and *Salmonella typhi* species 2(2.78%).

Male surgical ward presented with the highest contamination at 15/72(20.83%), then followed by Paediatric 11/72(15.28%), Maternity ward 10/72(13.89%), Female surgical ward 10/72(13.89%), Male medical ward 9/72(12.50%), OPD 9/72(12.50%) and the least being Female medical ward with 8/72(11.11%). Highly contaminated items were BP machines 26.39% and stethoscopes 25%, while Examination beds, Bedpans and intravenous poles were not contaminated.

**Conclusion:** Ward items are frequently contaminated with bacteria and may be possible sources or reservoirs of pathogens causing nosocomial infection. Items routinely used and often carried by Health workers are frequently contaminated by bacteria for example BP machines and stethoscopes while those assumed to be often soiled like bedpans are always bacteria free. Therefore preventive measures should be followed.