**ABSTRACT**

**Background:** Post-surgery wound infections are associated with long hospital stays, higher treatment expenditure, morbidity and mortality. The emergence of antimicrobial resistance has further made the management of wound infections in some of these patients difficult. There is also limited information on the bacterial pathogens and their antimicrobial susceptibility patterns in post-surgery wound infections in the West Nile region of Uganda. The general objective of this study was to identify the bacterial isolates from post-surgery wound infections and their antimicrobial susceptibility patterns among patients attending ARRH.

**Methods:** This was a descriptive cross-sectional study. Inpatients presenting with clinical signs of infected post-surgery wounds constituted the study population. A consecutive sampling technique was used to select 183 participants. Pretested and semi-structured questionnaires were used to interview and collect information on study participants and wound fluid and swab sampling techniques used to collect samples for gram staining, culture and antimicrobial susceptibility testing.

**Results:** Prevalence of post-surgery bacterial wound infection in this study was 87.98% with a predominance of gram-negative isolates 54.5% than gram positives 45.5%. All 183 (100%) of the study participants received antibiotic prophylaxis before surgery. *S aureus* was the most prevalent isolate at 31.74% (53/167) followed by *klebsiella species* 25.15%, *E. coli* 12.57%, Coagulase negative *Staphylococcus* 10.78%, *Acinobacter baumannii* 8.98%, *Proteus sp.,* 4.19%, *Citrobacter sp.,* 3.59% and *E. faecalis* 2.99%. High resistance levels of ampicillin to gram-positive and gram-negative bacteria were seen in this study. The gram negatives showed moderate sensitivity to ciprofloxacin and cotrimoxazole. The highest antibiotic sensitivity to gram-positives was shown with vancomycin, amikacin, ceftriaxone (80.3%), amoxclav and, ciprofloxacin.

**Conclusion:** There is need to change choice of drugs for prophylaxis and improve infection control measures given the high prevalence levels. Based on this study, ciprofloxacin and amikacin are the recommended drugs for management of post-surgery wound infections.

Key words; Bacteria isolates, Antimicrobial susceptibility, Wound infections.