



## ABSTRACT

Bacterial infections which are common in burn patients, remain a serious concern that varies with time and location. The challenge of rapidly growing nosocomial infections and multi-drug resistance needs an analysis of bacterial isolation patterns and antibiogram on a regular basis in the burn units of tertiary care hospitals in Lahore. The study aim is to evaluate post-burn wounds infection bacteriological profile and to assess the AST of the bacteria isolated. A total of 685 samples were collected on random basis from burn patients of Jinnah Hospital Lahore and 101 from Mayo Hospital Lahore. Bacteriological profile was determined by culture on Blood and MacConkey agar and through biochemical testing. The method disc diffusion by Kirby-Bauer was used to assess AST through Mueller-Hinton agar. The frequency of isolates from Jinnah Hospital was 64.31% *Pseudomonas*, 28.77% *Klebsiella* sp, 1.87% *E.coli*, 1.72% *Proteus*, and 1.87% *S.aureus* and from Mayo Hospital was 44.66% *Pseudomonas*, 6.79% *Klebsiella* sp, 31.06% *E.coli*, 6.79% *Proteus*, and 8.73% *S.aureus*. MDR *Klebsiella* from Mayo Hospital was completely resistant to Augmentin, Cefotaxime and Ceftazidime. High sensitivity toward Colisten antibiotic and high resistivity to Augmentin was shown by isolates. *Pseudomonas* was major contributor of infection in burn patients with highest frequency. *Klebsiella* was the second commonest in JHL and *E.coli* in Mayo Hospital. Almost all isolates were resistant to Augmentin. In Mayo Hospital, third generation Cephalosporin's have high Resistivity against Lactose Fermenter. Methicillin Resistant *S.aureus* has high frequency in Mayo hospital with 77% resistivity to Cefoxitin than in JHL with 28% resistivity.