Summary:

Total of 505 patients were enrolled in the study. The mean age of study population was 55.1±16.2 years. The majority of patients were males (66.9%) and 230 (45.5%) patients were on ventilation. Mortality among HAP patients was 23.6%. Mechanical ventilation (MV), Immunosuppression (IS), Liver insufficiency (LI), APACHE II score >20, Male sex, Age >60 years, Pulmonary disease (PD) were independently associated with mortality in HAP patients and based on that mortality prediction model was developed. 10 different pathogens were isolated from study population and majority of the patients were infected with gram-negative bacteria. *Klebsiella pneumoniae* was the most common microorganism isolated followed by *Acinetobacter species* and *Pseudomonas aeruginosa*. Highest mortality was observed in Methicillin-resistant *Staphylococcus aureus* (MRSA) infected patients, followed by *Acinetobacter species* and *Pseudomonas aeruginosa*. Analysis of sensitivity pattern of isolated microorganisms showed that majority of the microorganism were sensitive to Colistin and Tigecycline. MRSA was 100% sensitive to Linezolid, Doxycycline and Cotrimoxazole. *Streptococcus pneumoniae* showed 100% sensitivity to Chloramphenicol, Penicillin G, Piperacillin, Cefoperazone/sulbactam and Colistin. Based on the sensitivity pattern of the various microorganisms isolated from the HAP patients, cumulative susceptibility data (antibiogram) was prepared. Analysis of antibiotic consumption pattern showed Piperacillin/tazobactam was the highly prescribed drug with 12 DDD/100 bed days, followed by Azithromycin, Ceftriaxone and Cotrimoxazole. Among the different combination of antibiotics used Piperacillin/tazobactam and Azithromycin combination was found to be prescribed for the majority of HAP patients. The combination of triple regimen Piperacillin/tazobactam, Ceftriaxone and Azithromycin was associated with high cost among the other combinations.