

Hospital-Acquired Infection in Patients

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Abstract

Hospital-acquired infection is a common problem during hospitalization of patients. The aim of this study was to assess the rate of nosocomial infections in patients with their risk factors, causative pathogens and influence on patient's life style. We analyzed patients from different wards like Emergency ward, neurology ward, clinic ward and diagnose the problem of hospital acquired infections in 150 patients. Different types of infections were diagnosed in patients like hospital-acquired infection (51.5 % patients), urinary tract infections (22.5 % patients), pneumonia (16 % patients), and primary blood stream infection (11.7 %). Pneumonia was the cause of secondary blood stream infection in six patients while urinary tract was the origin of sepsis in two patients. The most common isolated pathogens were *pseudomonas Sp.* In 22 (22.9%), *Klebsiella Sp.* in 20 (20.9%) and *Acineto bacter* in 15 (15.8%) Cases. The rate of Cefepim and Ciprofloxacin Resistance of *Pseudomonas* was 70.5% ,85% and 100%, *Acinetobacter* 60.5%, 80.5% and 90.2%, and *Klebsiella* 1%, 90% and 95%. The presence of infection in patients was associated with longer hospital stay and was found to be an independent predictor out come. The one- day prevalence survey methodology was selected as the most effective way to generate necessary data in short time and with the potential to provide valuable information to guide future infection control interventions using limited resources. Participation was high and the global estimated coverage was approximately 87 % of all hospital, type of wards, hospital size, and teaching status. The total number of patients surveyed was 200. Hospital acquired infections in Patients. They are caused by resistant microorganisms and are associated with poor functional out come. Prevention and adequate initial therapy of these infections based

on the Prevalent Pathogens are important for final outcome of Patients. Plant wear collected by farmers and traditional healers. The ethanol, hexane and water extracts were obtained by standard methods. The antimicrobial activity was found by using a modified agar well diffusion method. MIC(minimal inhibitory concentration) was determined in the plant extracts some efficacy against the tested microorganisms. Gentamycin sulfare(1.0 microg/mi.) clindamycin(0.3microg/mi) were used as positive controls. The ethanol extracts of all species were active against *staphylococcus aureus*, *Escherichia coli* and gentamycin sulphate. All these plants were effective against three or more of pathogenic microorganism, they effective against *steptococcus* beta hemolytic and *pseudomonas aureus*.

Keywords: Nosocomial Infection, Infection Control, Antibiotic Use, Urinary tract infection, Control strategies, healthcare, Cross infection, Catheter-related infection.

1. Introduction:

Hospital-acquired infections represent a significant problem during hospitalization of patients. The aim of this study was to assess the rate of nosocomial infections in patients with their risk factors, most common pathogens and influence on patients out come.

2. Methodology:

We analyzed patients with the diagnosis who were treated in the Department for emergency neurology in the clinic for neurology. Patients who had fever or other signs of infection on admission and those transferred from another hospital were excluded from the study.

3. Results:

We analyzed 150 Patients. Hospital-acquired infection occurred in 75 (51.6%) Patients. The most frequent were urinary tract infections in 30 (22.5%) and pneumonia which was present in 21 (16.5%) Patients. Nine patients had primary blood stream infection. Pneumonia was the cause of secondary blood stream infection in 6 Patients while urinary tract was the origin of sepsis in two patients. The most common isolated pathogens were pseudomonas Sp. In 22 (22.9%), *Klebsiella Sp.* in 20 (20.9%) and *Acinetobacter* in 15 (15.8%) Cases. The rate of Cefepim and Ciprofloxacin Resistance of *Pseudomonas* was 70.5% ,85% and 100%, *Acinetobacter* 60.5%, 80.5% and 90.2%, and *klebsiella* 1%, 90% and 95%. The presence of infection in Patients was associated with longer hospital stay and was found to be an independent Predictor out come.

4. Discussion:

The one- day prevalence survey Methodology was selected as the most effective way to generate necessary data in short time and with the potential to provide valuable information to guide future infection control interventions using limited resources. Participation was high and the global estimated coverage was approximately 87% of all hospital, type of wards, hospital size, and teaching status. The total number of patients surveyed was 200.

Table1: Major resistance patterns identified among bacterial isolates.

Microorganism no. of Isolates	Antimicrobial	Percentage (%)
<i>Enterococcus</i>	Ampicillin	65.7 %
<i>Esherichiacoil</i>	Cefotaxime	63.6 %
<i>Pseudomonas Aeruginosa</i>	Ceftazidime	70.7 %

6.Conclusion:

Hospital acquired infections in Patients. They are caused by resistant microorganisms and are associated with poor functional out come. Prevention and adequate initial therapy of these infections based on the Prevalent Pathogens are important for final outcome of Patients.

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