ABSTRACT

TITLE OF THE ABSTRACT: SURVEILLANCE OF DEVICE ASSOCIATED HOSPITAL ACQUIRED INFECTIONS IN PATIENTS ADMITTED IN MEDICAL INTENSIVE CARE UNIT AND MEDICAL HIGH DEPENDENCY UNIT IN A TERTIARY CARE HOSPITAL IN SOUTH INDIA.

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OBJECTIVES: To study the incidence of device associated hospital acquired infections and also to study the profile of causative organisms and the mortality associated with each of the device associated infection between 1st January 2015 and 30th April 2015 among medical patients admitted in Medical Intensive Care Unit and Medical High Dependency Unit.

METHODS: The study was an observational study of a prospective cohort of patients admitted into Medical Intensive care unit and Medical High dependency unit. The patients were monitored using the Centre for Disease Control National Health Survey Network guidelines (CDC NHSN) for reporting Device associated hospital acquired infections during their stay in Intensive care unit. The patients were monitored for Ventilator associated event, Central line associated blood stream infection and Catheter associated urinary tract infection. The organisms causing the device associated infection and also the outcome as a measure of mortality was measured. The results were analyzed using Stata software. The mortality data was analyzed using Pearson's Chi square test.

RESULTS:

A total of 283 patients were recruited in the study. The surveillance study was carried over a period of 4 months from 1st January 2015 to 30th April 2015. The total number of patient days studied was 1444 days. The incidence of Ventilator associated event was 41 per 1000 ventilator days, the incidence of Catheter associated blood stream infection was 6.6 per 1000 central line days and the incidence of Catheter associated urinary tract infection was 2.87 per 1000 urinary catheter days. The most common organism causing Ventilator associated event was Acinetobacter (47%), central line associated blood stream infection was Non fermenting gram negative bacilli (44%) and Catheter associated urinary tract infection was Enterococcus (75%). The mortality associated with Ventilator associated event was significant when compared to group without infection (64% vs. 19.3% Pearson chi^2 P= 0.000).

Keywords: CDC NHSN , Ventilator associated event, Central line asociated blood stream infection, catheter associated urinary tract infection, Device associated infection