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Reorientation of Primary Health Care: An investment for the future

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OP 55

Causative organisms and antibiotic sensitivity of hospital acquired infections in intensive care unit patients at a teaching hospital in Sri Lanka

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Background : Hospital acquired infection (HAI) is an infection acquired in a hospital by a patient who was admitted for a reason other than that particular infection (WHO, 2002). The epidemiology and microbiological characteristics of these infections are very important for appropriate management.

Objectives : To describe hospital acquired infections, causative organisms, their antibiotic sensitivity patterns and related selected risk factors among ICU patients at a Teaching Hospital in Sri Lanka

Methods : A descriptive cross sectional study was carried out for 12 weeks in the medical ICU and surgical ICU of a Teaching Hospital which consisted of 5 and 8 beds respectively. Study population included all the patients who were admitted and stayed in the ICUs for more than 48 hours. A Hospital Acquired Infections was defined as "Infections that will first appear 48 hours or more after the hospital admission or within 30 days after the discharge from the hospital". Discharged patients from ICUs were excluded from the study since they were not followed up by the research team due to time and resource limitations. A data extraction sheet was used as the study instrument. The causative organisms were identified and the antibiotic sensitivity was studied for the disease.

Results: Among the 93 patients who stayed in the ICU for more than 48 hours, 17 patients (18.2%) acquired one or more infections. Total number of infections among them (17) was 39, which consisted of 28(71.8%) lower respiratory tract infections (LRTI), 6(15.4%) bloodstream infections, 3(7.7%) urinary tract infections (UTI) and 2(5.1%) skin and soft tissue infections. Commonest organism causing LRTIs was coliforms (50.0%), followed by Acinetobacter spp (28.6%). Highest percentage of resistance of Acinetobacter spp was found to be for ceftazidime and gentamycin (88.9%). Highest percentage of resistance (87.6%) of coliforms was for coamoxiclav, cefotaxime and ceftazidime. Usage of steroids/immunosuppressant was a statistically significant association for all the ICU acquired infections (P=.012). A patient on a ventilator also showed a statistically significant association for developing ICU acquired LRTIs (P=0.032).

Conclusions: Emphasis to be made to all health care workers in the ICU in preventing HAI and on rational use of antibiotics.

Key words: *Causative organism, risk factors, antibiotic*

OP 56

Are the future nurses and midwives geared to prevent themselves from blood borne viruses?

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Background: Health care workers have a high risk of being exposed to blood borne viruses (BBV) during their day to day practices. Yet, this can be prevented by having a good knowledge and thereby practicing safety precautions.