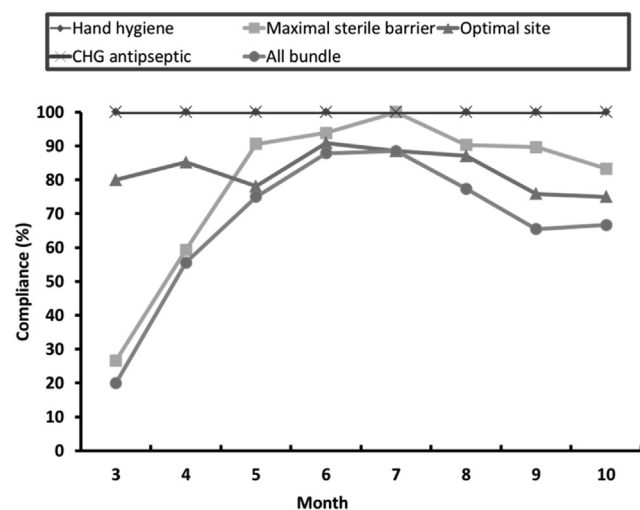


compliance of each component was as the following: 100% for hand hygiene, 82.9% for maximal sterile barrier precaution, 100.0% for the use of CHG, 83.4% for optimal site selection.



**Conclusions:** The surveillance study to find out the specific bundles with low compliance should be warranted.

#### PS 1-052

##### EFFECTIVENESS OF ELECTRONIC LEARNING ON URINARY CATHETER CARE IN AN ACUTE TERTIARY HOSPITAL

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**Purpose:** Catheter-associated urinary tract infection (CAUTI) accounts for 30% to 40% of healthcare associated infection (HAI). Indwelling urinary catheter causes pain and discomfort, which might lead to prolonged hospitalisation stay. The ongoing care of an indwelling urinary catheter lies with the nurses. In order to improve the quality of care in urinary catheter, the intervention measures in infection control plays an important role. The Infection Control Department implemented CAUTI electronic learning module to educate nurses with the objective to increase their awareness and knowledge in the care of urinary catheter.

**Methods:** The cohort study was conducted over a period of 3 months in two wards- medical and surgical wards. The content of the module comprise CAUTI insertion and maintenance bundles adopted from CDC guidelines. A pre and post survey as well as a weekly audit on the care on urinary catheter were used to evaluate the effectiveness of the electronic learning among the nurses.

**Results:** A total of 87.7% nurses responded. The findings showed improvement in knowledge from a mean score of 17.2 to 18.3 among the surgical discipline ( $p = 0.008$ ) and an improved mean score of 14.8 to 15.7 among the medical discipline ( $p = 0.008$ ). Using Fishers' exact test the results shown an improvement in the audit compliance rate from 83% to 90% ( $p = 1.000$ ) in surgical discipline and 60% to 79.7% in medical discipline ( $p = 0.176$ ).

**Conclusion:** From the results, the nurses have shown improvement in their knowledge on the care of urinary catheter. With the success of this cohort study, we intend to launch the CAUTI electronic learning module throughout the hospital.

#### PS 1-053

##### CONTROL CATHETER-ASSOCIATED URINARY TRACT INFECTIONS IN A NEUROSURGERY INTENSIVE CARE UNIT

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**Purpose:** This study was conducted to evaluate the effect of the implementation of one catheter-associated urinary tract infection (CAUTI) care bundle in the neurosurgery intensive care unit (NSI-ICU).

**Methods:** This study was carried in a NS-ICU at regional teaching hospital that has 10 adult ICU beds. Since July, 2013, the CAUTI care bundle was implemented in the entire ICU. The bundle includes several components including hand hygiene, ensuring that there are the indications for urinary catheter insertion, use of aseptic technique by trained healthcare providers, maintenance of a sterile closed drainage system, keeping the drainage bag below the level of bladder, daily review the indications for the urinary catheter, early removal of unnecessary catheters, and avoiding routine changing of catheters or drainage bags. Outcomes including CAUTI per 1,000 catheter-days, CAUTI per 1,000 inpatient-days, and catheter utilization rates (days of catheter use divided by total inpatient-days) were measured.

**Results:** During the 2-year period, there were a total of 16 episodes of CAUTI and the catheter utilization rate was 0.83. The rate of CAUTI was 2.13 per 1,000 inpatient-days and 2.55 per 1,000 catheter-days. The rate of CAUTI significantly declined from 3.86 per 1,000 catheter-days in Pre-P to 0 per 1,000 catheter-days in Post-P3 ( $p = 0.026$ ). In addition, the rate of CAUTI per 1,000 inpatient-days showed a similar trend that significantly decreased from 3.01 per 1,000 inpatient-days in Pre-P to 0 per 1,000 inpatient-days ( $p = 0.037$ ).

**Conclusion:** The rate of CAUTI in NS-ICU can be reduced to zero after implementation of a prevention care bundle.

#### PS 1-054

##### EFFICACY AND TOLERABILITY OF CEFTOBIPROLE MEDOCARIL IN CHINA, SOUTH KOREA, AND TAIWAN: POST-HOC ANALYSIS OF TWO RANDOMIZED TRIALS IN COMMUNITY-ACQUIRED AND HOSPITAL-ACQUIRED PNEUMONIA

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**Purpose:** A *post hoc* analysis was undertaken of 2 global randomized, double-blind Phase 3 studies in community-acquired pneumonia (CAP) or hospital-acquired pneumonia (HAP [including ventilator-associated pneumonia]) to determine the efficacy and tolerability of ceftobiprole medocaryl vs comparators in patients enrolled in China, South Korea, and Taiwan. Ceftobiprole medocaryl is the prodrug of ceftobiprole, a novel cephalosporin for intravenous use with activity against Gram-positive pathogens, including methicillin-resistant *S. aureus* (MRSA) and against Gram-negative pathogens, including *P. aeruginosa*.

**Methods:** In the CAP study, patients were randomized to 5–14 days ceftobiprole 500 mg q8h or ceftriaxone 2000 mg once daily ± linezolid 600 mg q12h. In the HAP study, patients were randomized to 7–14 days ceftobiprole 500 mg q8h or combined ceftazidime 2000 mg q8h + linezolid 600 mg q12h. In both studies, ceftobiprole and comparators were evaluated for clinical cure at the test-of-cure (TOC) visit, 30-day pneumonia specific mortality (PSM) and all-cause mortality (ACM) using the intent-to-treat population and microbiological eradication using the microbiologically evaluable population.

**Results:** 139/638 patients in CAP and 82/781 patients in HAP (16% of the study populations) were included in this analysis. In CAP, cure rates were 73.5% with ceftobiprole and 70.4% with ceftriaxone ± linezolid. Microbiological eradication was numerically higher with ceftobiprole (92.9% vs 80.0%), and 30-day mortality was numerically lower (ACM: 1.5% vs 2.8%; PSM: 0% vs 1.4%). In HAP, cure rates were 46.3% in the ceftobiprole and ceftazidime/linezolid groups. Microbiological eradication was numerically higher (38.9% vs 21.1%), and 30-day mortality was numerically lower (ACM 7.3% vs 14.6%; PSM 2.4% vs 7.3%) with ceftobiprole. Adverse events were comparable between treatments.

**Conclusion:** In this *post hoc* analysis of patients enrolled from 3 Asian countries, ceftobiprole medocaryl was effective and well tolerated vs treatment with ceftriaxone ± linezolid in CAP and vs ceftazidime plus linezolid in HAP.

#### PS 1-055

##### TO USE CVC BUNDLE CARE IMPROVEMENT CRBSI EXPERIENCE

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**Purpose:** As the care unit for the General Department of our hospital, the Intensive Care Unit got its rate of BSI go up to 9.4% in 2012 from the 10.3%