J Infect Dis Ther 2018, Volume 6
DOI: 10.4172/2332-0877-C2-042

Effect of using collaborative quality improvement of infection prevention in tertiary Care Hospital, Bangkok Thailand

Kampong Kamnon
Rajavithi Hospital, Thailand

Hospital-associated infections (HAIs) has an impact on patients, personnel and the hospital. This an interrupted time series design study aimed to assess the effect of using collaborative quality improvement (CQI) of infection prevention in tertiary care hospital. The samples were selected by purposive sampling from the patients, who were HAIs and admitted into 6 intensive care units (ICUs) and 36 general wards. Data were collected from May, 2017 to January, 2018. The study instruments were a surveillance form of HAI and impacts of HAI form developed by research. Data were analyzed using descriptive and multiple linear regression statistics. The results revealed that reduction in HAIs, from 35.7 % (1,219/3,417 patients) before implementing CQI to 27.6 % (994/3,608 patients) after implementing CQI at a 0.05 statistically significant levels. Indicated the highest infection rate was from ventilator-associated pneumonia (VAP) 5.6 per 1,000 ventilator-days, followed by catheter-associated urinary tract infection (CAUTI) 3.1 per 1,000 catheter-days and central line-associated bloodstream infection (CLABSI) 1.9 per 1,000 catheter-days. Case fatality rate from VAP, CLABSI and CAUTI were 38.4%, 31.7% and 17.3%. Cost of antibiotic treatment for VAP, CAUTI and CLABSI were 91,153.45 USD, 74,342.72 USD and 20,114.27 USD, respectively. These finding imply that the concept of CQI could be applied to reduce incidence and preventive of HAIs. However, it is interesting to see if the results are sustainable and hospital still proceed with their work.