# CLINICAL PROFILE AND OUTCOME OF PATIENTS WITH HEALTH CARE-ASSOCIATED INFECTION IN PHILIPPINE CHILDREN'S MEDICAL CENTER FROM 2009 TO 2019

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#### **INTRODUCTION:**

Health care-associated infections (HAI) previously referred to as nosocomial infections or hospital-acquired infections are the most frequent adverse event in health care delivery worldwide. However, there are limited data on HAI in pediatric population and on the national level to assess its impact in low and middle- income countries.

## **OBJECTIVE:**

To describe the clinical profile and outcome of patients who developed health care-associated infections in Philippine Children's Medical Center

### **METHODS:**

This is a retrospective cross-sectional study. Included are patients aged 0 to 18 years old admitted in PCMC with HAI from 2009 to 2019. Review of PCMC-ICC HAI Surveillance Standardized Case Report Forms was done. Descriptive statistics was used to summarize the general and clinical characteristics. STATA 15.0 was used for data analysis.

### **RESULTS:**

There were 2,685 HAIs included in the study. The average annual incidence rate of HAI was 2.29%. The most common HAI types identified were bloodstream infections (45.25%), health care-associated pneumonia (33.18%) and ventilator-associated pneumonia (13.07%). More than half of patients with HAI were males (56.13%), infants less than one year-old (54.67%), and with two or more antibiotics used prior to identification of HAI (51.73%). The most common isolates in all types of HAIs were Gram-negative organisms (29.68%) and *Klebsiella sp.* was the predominant pathogen causing HAI (10.88%). The wards with frequently reported HAIs were NICU (15.68%), Hematology-Oncology ward (14.97%), PICU (13%) and General Services ward (12.85%). The all-cause mortality rate of patients with HAI was 11.99%.

## **CONCLUSION AND RECOMMENDATIONS:**

HAIs in PCMC had low incidence in the past eleven years. Active surveillance and monitoring of HAIs must be continued and intensified. Likewise, infection prevention and control measures must be strictly enforced to reduce the burden of HAIs.

KEY WORDS: health care-associated infections, HAI, hospital-acquired infections, nosocomial infections, children