

Assessment on the Approach of Physicians on Management of Hospital Acquired Pneumonia at Philippine Heart Center

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Background --- Hospital-acquired pneumonia (HAP) accounts for 15% of all nosocomial infections and affects 0.5 to 2.0% of hospitalized patients. It accounts for up to 25% of all ICU infections and for more than 50% of all antibiotics prescribed. Mortality rate may be as high as 30-70%. It is estimated to increase hospital stay by 7–9 days. The study aims to assess the practices on the diagnosis and management of Hospital Acquired Pneumonia among physicians at Philippine Heart Center.

Methods --- This is a prospective cohort study involving patients diagnosed with Hospital Acquired Pneumonia. Adherence to the 2004 American Thoracic Society guidelines on the management of Hospital Acquired Pneumonia were assessed. Only those level I and level II recommendations were used in the adherence measures. Adherence to diagnostics and therapeutic management were computed per patient. Management of patients were classified as adherent if it meets more than 70% of the guidelines that should be enforced. Patients were followed up during their entire hospitalization for the occurrence of the following outcomes: endotracheal intubation, mortality, hospital length of stay and ICU length of stay.

Results --- Forty patients who were admitted at the Philippine Heart Center for Hospital Acquired Pneumonia were included in this study. The mean age was 70.6 years, with half of them are males. Majority of the patients had hypertension and Diabetes Mellitus. Chest X-ray was taken on all the patients as well as respiratory culture. Arterial Blood Gas was taken in 98% of the subject. Majority of the subjects were initially admitted at the Intensive Care Unit with 22% were mechanically ventilated at the time of admission. Majority (55%) of the attending physicians adhered to the currently recommended ATS Consensus Guidelines on HAP. Among the 40 subjects studied, 13(30%) of the patients were eventually mechanically ventilated, however this was not statistically significant ($p=0.525$) in comparison with those who did not adhere (20%). 2 (5%) of patients who adhered to the ATS Consensus recommendations consequently died during hospitalization ($p=0.073$). The length of ICU stay and hospital stay is not significantly associated with adherence to the recommended guidelines. Of the level I and II current recommendations, most of the attending physicians requested for blood culture which was significantly associated with adherence ($p = 0.045$). However, logistic regression analysis showed that there is no association of adherence in doing blood culture to mortality. Univariate Analysis of Variance as well revealed that there is no significant association of adherence with length of ICU stay and hospital stay ($p = 0.807, 0.802$) respectively.

Conclusion --- This analysis showed that compliance with the currently recommended ATS guidelines at Philippine Heart Center is 55%. Blood culture is the most significantly associated recommendation being followed by the attending physicians. Rate of endotracheal intubation, length of ICU and hospital stay and mortality however was not significantly associated with adherence. *Phil Heart Center J 2012;16:84-5.*