Comparison of the Two Scoring Indeces (CURB65 and PSI) and Determination of their Utility in Predicting the Severity of Community Acquired Pneumonia Among Patients Seen at Philippine Heart Center

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Background --- Pneumonia poses a great threat in the society. In the Philippines, community acquired pneumonia rank as the 3rd and 4th leading cause of mortality and morbidity among admitted patients. Several investigators made a landmark tool in assessing the severity of pneumonia and prognosticating the possible outcome. Two identified internationally standard tool are now being used to evaluate community acquired pneumonia (CAP); the Pneumonia Severity Index (PSI) and CURB65 [confusion, urea >7mmol/L, respiratory rate ≥30/min, low blood pressure (<90/60mmHg) and age ≥65yrs]. The objective of this study is to determine the utility of CURB65 and PSI scoring in predicting the severity of community acquired pneumonia.

Methods --- This is a prospective cohort study involving a total of 97 adult patients (male-41 and female-56) with a diagnosis of community acquired pneumonia seen in the emergency department in a 302-bed teaching hospital. These patients were evaluated basing on the CURB65 and PSI score. Of the ninety seven patients that were admitted, 31 of whom (31.9%) required ICU admission. The mean age is 73 ± 16.42 9 (SD).

Results --- Both CURB65 and PSI showed significant results in predicting the outcome of CAP with a p value of 0.000. However, CURB65 found to have a better discriminatory result compared to PSI. A score of ≥3 for CURB65 and 5 for PSI are the most sensitive cut off value with a kappa coefficient of 0.56 ± 0.09 (p value-0.000) and 0.50 ± 0.09 (p value-0.00), respectively. In this study, we found that CURB65 showed the slightly better sensitivity and specificity (91.7% and 85.9%) in predicting the severity CAP as compared to PSI (100% and 47.1%).

Conclusion --- CURB65 has slightly better discriminating power in predicting 30-day mortality as compared to PSI. ***Phil Heart Center J 2012;16:83-4.***