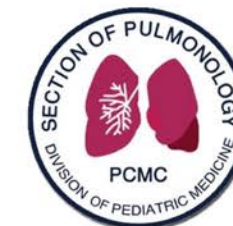


# RISK FACTORS IN PREDICTING MORTALITY AMONG CHILDREN ADMITTED FOR PCAP C AND D AT PHILIPPINE CHILDREN'S MEDICAL CENTER

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## BACKGROUND

Community-acquired pneumonia is a prevalent cause of respiratory morbidity and mortality in a significant part of the global population and is the leading cause of death in children under five years of age.

## OBJECTIVE

The study aimed to identify risk factors associated with mortality among patients admitted for pCAP C and D.

## METHODS

The study was a cross-sectional study involving children admitted for pCAP C and D at PCMC from January 2017 to December 2019. Their clinical profiles were extracted, then univariate and multivariate analyses through binomial logistic regression were used to determine significant predictors of mortality.

## RESULTS

A total of 472 patients were included in the study, of whom 363 (77%) had PCAP C and 109 (23%) had PCAP D. More than half in each patient group were infants (67% and 72%); male (58% and 58%); and of normal nutritional status (60% and 56%). The most common comorbidities in both groups were neurologic (11% and 18%) and cardiovascular in nature (12% and 8%). Leukocytosis (39% and 42%), thrombocytosis (27% and 36%), and anemia (23% and 23%) were the most common hematologic findings. More than half in both groups (60% and 72%) had radiographic readings of infiltrates in both inner and mid lung zones, while more than a third had interstitial infiltrates (36% and 34%). Single lobar consolidation (24% vs 9%) and atelectasis (15% vs 3%) were more common among children with very severe disease. Mortality was observed only among PCAP-D patients with a mortality incidence of 22%. Overall mortality rate among patients was 5.08%.

On univariate analysis, being severely underweight (cOR 8.28 [95% CI 2.52–27.23]), with history of antibiotic use (cOR 3.01 [95% CI 1.18–7.62]), neurologic comorbidities (cOR 4.04 [95% CI 1.42–11.43]), cardiac comorbidities (cOR 5.33 [95% CI 1.31–21.75]), Down syndrome (cOR 22.11 [95% CI 2.44–200.30]), and thrombocytopenia (cOR 22.11 [95% CI 2.44–200.30]) were associated with greater odds of mortality among PCAP-D patients. On multivariate analysis, the odds of mortality was 5.02 (95% CI 1.05–23.96) as much in severely underweight patients, 4.51 (95% CI 1.13–17.95) in patients with neurologic disease, and 73.62 (95% CI 3.63–1491.10) in patients with Down syndrome.

## CONCLUSION & RECOMMENDATION

Patients with PCAP D who have severe malnutrition, Down syndrome, cardiac and neurologic abnormalities, and thrombocytopenia should be managed more aggressively to decrease mortality in these groups of patients.