

**SURVIVAL OF CHILDREN AGED LESS THAN TWO YEARS
WITH PNEUMONIA IN MULAGO HOSPITAL
KAMPALA, UGANDA**

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ABSTRACT

The objective of this study was to investigate factors associated with survival time of children aged less than two years suffering from pneumonia. It utilized administrative records of patients admitted to Mulago Hospital between 2010 and 2015 selecting only data for patients under 24 months old. A total of 656 records of patients were sourced and the investigation was made using background and clinical characteristics of the patient. The analysis was carried out using a time-to-event analysis, employing Kaplan-Meier product estimate, Log-rank Chi-square test and Accelerated Failure Time model.

In the results, the median survival time among patients who died (n=215) was 1 day, range 1-16 days and the median length of hospital stay was 3 days (range, 1-25 days). From the multivariate analysis, survival varied by patients' age, respiratory rate, axillary temperature, comorbidity, exclusive breastfeeding and antibiotics therapy in a substantial manner ($p < 0.05$). Specifically, there were reduced risk of death among patients that have been exclusively breastfed for at least six months, and patients that were treated on cefuroxime antibiotics therapy. On the other hand, reduced survival time was observed among patients 0-2 months old, those who had high fever (febrile) at time of admission, those who had very fast breathing (tachypnea) at time of admission and those with additional sickness or illnesses (comorbidity).

With regard to these findings, two measures to increase the survival of pneumonia patients are recommended: Reinforcing advocacy for exclusive breastfeeding especially through extending paid-leave to at least 6 months for working mothers, providing stipend-transfers for non-working breastfeeding mothers and establishing training programs for adolescent girls, potential mothers on safe motherhood and child-care.