

Hospital outcomes for paediatric pneumonia and diarrhoea patients admitted in a tertiary hospital on weekdays versus weekends: a retrospective study.

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Abstract

BACKGROUND:

Quality of patient care in hospitals has been shown to be inconsistent during weekends and night-time hours, and is often associated with reduced patient monitoring, poor antibiotic prescription practices and poor patient outcomes. Poorer care and outcomes are commonly attributed to decreased levels of staffing, supervision and expertise and poorer access to diagnostics. However, there are few studies examining this issue in low resource settings where mortality from common childhood illnesses is high and health care systems are weak.

METHODS:

This study uses data from a retrospective cross-sectional study aimed at "evaluating the uptake of best practice clinical guidelines in a tertiary hospital" with a pre and post intervention approach that spanned the period 2005 to 2009. We evaluated a primary hypothesis that mortality for children with pneumonia and/or dehydration aged 2--59 months admitted on weekends differed from those admitted on weekdays. A secondary hypothesis that poor quality of care could be a mechanism for higher mortality was also explored. Logistic regression was used to examine the association between mortality and the independent predictors of mortality.

RESULTS:

Our analysis indicates that there is no difference in mortality on weekends compared to weekdays even after adjusting for the significant predictors of mortality (OR = 1.15; 95% CI 0.90-1.45; $p = 0.27$). There were similarly no significant differences between weekends and weekdays for the quality of care indicators, however, there was an overall improvement in mortality and quality of care through the period of study.

CONCLUSION:

Mortality and the quality of care does not differ by the day of admission in a Kenyan tertiary hospital, however mortality remains high suggesting that continued efforts to improve care are warranted.

