# FAMILY-ASSISTED SEVERE FEBRILE ILLNESS THERAPY (FASTER) FOR CRITICALLY-ILL KENYAN CHILDREN: A PILOT STUDY

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Background:

In sub-Saharan Africa, pediatric mortality remains high, with many hospital deaths occurring within 24 hours of admission. Low healthcare provider-to-patient ratios may limit patient monitoring. Parent identification of clinical deterioration may facilitate faster intervention. We developed a simple parental tool to quantify clinical deterioration, and implemented it in pediatric wards at Kenyatta National Hospital.

Methods:

The FASTER tool documents chest retractions, capillary refill time and mental status, producing color-coded severity flags. Half of caregivers were taught the tool by research nurses. Frequency of nurse/physician patient assessments within the 24 hour monitoring period was compared with caregivers not using the tool. Pediatric Early Warning Scores (PEWS) quantified illness severity.

Results:

146 subjects, 73 per group, were enrolled. Intervention:control group comparisons: ages 1.0 (0.2-10.8):1.2 (0.2-12.2) years; admission PEWS 4 (0-18):5 (0-16). Most common diagnoses were pneumonia and meningitis with 62% and 38% and 53% and 40% of subjects in the intervention and control groups respectively. Each 1 point increase in PEW score related with 0.54 more visits/24 hours ($p=0.005$). Difference in assessment rate of control versus intervention groups was 1.91 ($p=0.297$).

Conclusions:

Caregiver assessment of illness severity may be a novel, practical tool to improve timely recognition of clinical deterioration among hospitalized children in low-resource settings. Although numbers of group reassessments did not differ, further exploration of specific patient subsets is warranted. Study limitations included changing doctors and nurses during healthcare strikes unfamiliar with the study, incomplete reassessment rate reporting by caregivers.