

ABSTRACT

Background: Pediatric injuries are among the leading causes of morbidity and mortality globally, especially in the low- and middle-income countries. Paucity of data regarding pediatric injuries and newly instituted triage and initial management protocols are among the factors limiting the timely interventions to prevent mortality and enhance early disposition in the ED. We aimed to characterize pediatric injuries as predictors of disposition from MRRH ED southwestern Uganda.

Methods: This was a prospective cohort study of 160 pediatric patients aged 0 to 17 years presenting to the MRRH ED from 12th December 2022 to 31st March 2023. We described the characteristics of pediatric injuries and evaluated the predictors of 24-hour disposition from the ED using Bivariate analysis and multivariate analysis.

Results: Pediatric injuries contributed almost 25% of the trauma burden during the study period. Of the 160 children followed up, 64.4% were male with a median age of 7 years, brought in with RTAs (40.6%) and falls (35.6%) as the commonest Mechanism of injury. Over half of the patients were triaged as yellow (urgent), and polytrauma and head injuries were the top injury patterns. In terms of disposition, the majority (45.6%) of the children were admitted to the inpatient ward, 30% discharged, and 17.5% were taken to theater. Only 3 (1.9%) and 8 (5.0%) ended up in ICU and died, respectively. The median time to disposition was 8 hours and 14% stayed in the ED beyond 24-hours. The significant predictors of 24-hour disposition were "being managed by two regimens (to ward, (AOR= 5.3, 95%CI: 2.0-13.0, $p < 0.001$) and mild KTS (discharged home).

Conclusion: Like other LMICs, pediatric injuries MRRH ED contributed to just under quarter of all injuries, majority caused by RTAs and presenting with head injuries. Most patients were disposed of to the ward within 24 hours. Severe KTS and initial management were significantly associated with 24-hour disposition. These findings can be used to tailor quick risk stratification and decision-making tools and improve ED disposition of pediatric injuries in LMICs.