

Abstract

Background: Elderly patients have worse outcomes for similar severity when compared to younger trauma patients. Elderly patients form smaller proportions of the trauma population in the developing world in comparison to high in-come countries. Due to limited data capabilities, elderly trauma has been infrequently studied. **Objective:** To describe the common injuries that afflict elderly trauma patients associated resource utilization and the determinants of outcome in Kenyan urban hospital. **Methods:** Seventy two patients aged 60 years and older admitted for trauma from diverse mechanisms, were recruited over a period of one year (November 2009-December 2010). Data on the specific mechanism and type of injury, age, sex, intensive care unit (ICU) use, hospital length of stay, and cost were recorded. Survivors and those who died during admission were compared to determine associated factors. Elderly patients were also compared to younger trauma patients to determine significant group peculiarities using X2 analysis or Fisher's exact test as appropriate. **Results:** Elderly trauma cases (mean age 70.5 + 9.1 years) formed 4.5% of all trauma admissions during the study period. The intent was accidental in 84.7% of cases. The predominant mechanisms of injury were traffic (44.4%) and falls (41.7%). Females comprised 41.7% of all patients and lower limb fractures predominated (54.9%). The average injury severity score was 7.82 + 4.4. (median 9.0). The proportion admitted to the ICU was 6%. The median length of hospital stay was 24 days, cost of treatment Kshs. 27,153 Kenya shillings and overall hospital mortality rate was 13.9% (25% for ISS > 15). Only gender and head injury were predictors of mortality. **Conclusions:** Traffic and falls are the predominant mechanisms in geriatric trauma in Kenya. Unique features of geriatric trauma are higher female involvement, prolonged length of hospital stay and fewer predictors of mortality compared to younger patients.