

Abstract

BACKGROUND:

Immediate trauma fatality is not amenable to trauma care and primary prevention is the key. The published profiles of deaths due to trauma differ in different regions. Injury mortality rates are higher in developing countries where injury data capture systems are unreliable for prevention purposes.

OBJECTIVE:

To describe the pattern of pre-hospital injury (immediate) deaths at the Nairobi city mortuary and compare these with hospital (late) trauma deaths.

METHODS:

Consecutive trauma autopsies performed over one year (November 2009 to December 2010) at the main mortuary of the Nairobi city council were analyzed for demographic (age, sex, occupation) characteristics, circumstances of the trauma and injury patterns. The patterns of injuries were compared to those of victims who survived and later died at the Kenyatta National Hospital over the same period.

RESULTS:

Two hundred and thirty seven trauma autopsies were analyzed. The average age of the victims was 29.8 years (range 1-67 years). Christians (93.7%) and males (89.5%) predominated. The place of injury was the road in 32.9% and home/neighborhood in 57.5% of cases. The main mechanisms of fatal injury were traffic (35.4%), gunshot wounds (25.7%) and assault (19.8%). Burns and suicides accounted for 5.9% and 6.3% of fatalities. Most fatalities were intentional (59.4%) Of vehicular injuries, pedestrians predominated (65.5%). For assault, blunt and penetrating injuries accounted for 68.7% and 31.11% of fatalities. Law enforcement officers were responsible for majority of gunshot deaths. Fatal injuries were sustained in single, two and multiple regions in 56.2%, 25.7% and 14.2% of cases. The body region most involved was the head/neck (40.5%). Twelve children under 15 years died. Compared to in-hospital deaths, pre-hospital deaths were associated with intentional injuries, night-time occurrence and preponderance of gun involvement.

CONCLUSION:

Injury was a significant cause of mortality among adults of working age in this urban African setting. Intentional injuries predominate in causation of immediate but not late deaths. Local prevention programs should incorporate mortuary data to unravel further aspects of trauma and address violence as a key determinant of prehospital mortality.