Abstract

Background: Road traffic injuries continue to exert a huge burden on the health care system in Kenya. Few studies on the severity of road traffic injuries have been conducted in Kenya. We carried out a cross-sectional study to determine factors associated with severity of road traffic injuries in a public hospital in Thika district, Kenya. Methods: Road crash victims attending the Thika district hospital, a 265-bed public hospital, emergency room were recruited consecutively between 10th August 2009 and 15th November 2009. Epidemiologic and clinical information was collected from medical charts and through interview with the victims or surrogates using a semi-structured questionnaire. Injuries were graded as severe or non-severe based on the Injury Severity Score (ISS). Independent factors associated with injury severity were assessed using multivariate logistic regression. Results: The mean age of participants was 32.4 years, three quarters were between 20-49 years-old and 73% (219) were male. Nineteen percent (56/300) of the victims had severe injury. Five percent (15) had head injury while 38% (115) had fractures. Vulnerable road users (pedestrians and two-wheel users) comprised 33% (99/300) of the victims. Vulnerable road users (OR=2.0, 95%CI=1.0-3.9), road crashes in rainy weather (OR=2.9, 95%CI=1.3-6.5) and night time crashes (OR=2.0, 95%CI=1.1-3.9) were independent risk factors for sustaining severe injury. Conclusion: Severe injury was associated with vulnerable road users, rainy weather and night time crashes. Interventions and measures such as use of reflective jackets and helmets by two wheel users and enhanced road visibility could help reduce the severity of road traffic injuries.