

**Characteristics and Risk Factors for Non-Fatal Injuries among Road Traffic
Accident Casualties at the Accident and Emergency Department, Kenyatta
National Hospital**

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**A thesis submitted in partial fulfilment for the Degree of Master of Science in
Public Health in the Jomo Kenyatta University of Agriculture and Technology**

2010

ABSTRACT

Road traffic accidents (RTA) and injuries have been a major public health problem worldwide, with about 1.2 million people dying each year in road crashes and up to 50 million being injured. This was a cross-sectional study carried out to determine the characteristics and injury risk factors of non-fatal injuries among RTA casualties at the Kenyatta National Hospital (KNH) accident and emergency department. The study involved 354 casualties between November to December 2008. Structured questionnaires and clinical assessment sheets were used to collect data, which was analysed using SPSS version 11.5 and the R-console epidemiological programme. The results showed that majority of the casualties [234 (66.1%)] were aged between 18 and 37 years and only 27 (7.6%) of them were aged below 18 years. Over 70% of them were males. In terms of injury severity, most of the casualties had moderate injuries. Among the injuries, wounds/cuts were the majority. Other injuries included fractures, internal organ injuries and dislocations. The injury risk factors identified included age, sex, education, occupation, time and day of accident occurrence, administration of First Aid at the scene of accident, casualty transportation and rescue time, and type of the casualty involved in the RTA. Other injury risk factors included type of vehicle, use of safety belt, casualty condition at time of accident, type and cause of the accident. The study results showed that most of the RTAs occurred on Saturdays and Sundays. It is recommended that, out of all the surgical materials ordered for the accident and emergency department, about 7.9% of them should be small size, with the rest being large sizes. These items should include splints for fractures, dressing materials, sutures, plaster of Paris, branulae and needles among others. Supplies for resuscitation should

also be availed to include drugs needed for maintenance of normal haemodynamics. There is also need to have enough stocks of intravenous fluids. Measurements for alcohol levels should be undertaken for all the RTA casualties who are suspected to be alcoholic. Surgeons of various specialties should be on stand by when need arises. It also calls for the department to have an exclusively dedicated trauma theatre, which should always be ready to deal with RTA casualties when need arises.

