

Significant difference in vulnerability for injuries between boys and girls in Cape Town, South Africa

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Abstract

Background Pediatric injuries are associated with significant morbidity and mortality, especially in low- and middle-income countries. Data to characterize the cause and risk factors associated with childhood injuries in these countries are, however, very scarce. The aim of this study is to describe the injuries sustained among children, and possible sex disparities, between 1991 and 2017 (27 years) using hospital-based data in Cape Town, South Africa.

Methods Data from injured children <13 years of age who presented to a Children's Hospital's emergency unit between 1991 and 2017 were captured in a trauma surveillance system. Poisson regression was used to assess changes in rates of injury in terms of demographics, place of injury, type of injury mechanism, injury severity, and anatomic region of the sustained injury.

Results In total, over 200 000 children with injuries presented to the Children's Hospital from 1991 to 2017. Preliminary analysis shows that the mean age was 6 years and over 60% were male. Common mechanisms of injury included falls (40%), road traffic injuries (13%), burns (12%), and assault (4%). Comparing years from 1991 to 2017 the preponderance of boys to girls was a consistent finding for almost all types of injuries. Further analysis on type of injuries and severity, as well as injury incidence related to the implementation of certain policies, e.g. child restraint law, is still being undertaken.

Conclusion Although these epidemiologic findings suggest there is a stronger need for data that are population-based and not hospital-based, a more accurate description of childhood injuries will strengthen the need for targeted interventions to address the specific risk factors for pediatric injuries in both boys and girls. In the light of the paucity of population-based data, hospital-based data currently remain the most powerful tool to study sex differences in injuries in South Africa.