

Methods: Pilot project involving fifteen doctors and 10 nurses in an Irish Emergency Department. SMS picture messages, with predetermined learning points, were sent to all participants on Mondays, Wednesdays and Fridays over an eight week period. All participants were asked to submit an answer to each question. Reminders were sent after 24 h to all non-responders.

Discussion: Overall satisfaction among participants was very high. The response rate among doctors (70%) exceeded that for nurses (40%).

Conclusion: This pilot project proved very popular with participants and trainers. Technical issues proved frustrating at times and together with cost are likely to pose difficulties for its widespread use in EM training in Africa. It is worthwhile exploring this further.

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Spinal clearance guideline for out-of hospital providers

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Introduction: Unnecessary spinal cord immobilisation is a common problem in South Africa, even though out-of hospital spinal clearance is becoming standard of care in international emergency medical care (EMC) communities. Large numbers of unnecessary spinal immobilisations, in low risk trauma patients, result in an increased health and economic burden in both the in-hospital and out-of hospital settings. Currently, informal spinal clearance is being practiced in South Africa creating large practice variation, potential patient safety compromise and probable economic burden. An evidence-based out-of hospital spinal clearance algorithm would minimise the unnecessary hospitalisation of low risk spinal patients. Our objectives included: (i) To provide an accurate and reproducible algorithm to identify and correctly refer clinically relevant spinal injury in the out-of hospital setting and (ii) To inform policy makers of best practice for spinal cord clearance through evidence informed decision making and provide implementation and evaluation recommendations. This document provides recommendations for a spinal clearance guideline for South Africa and includes implementation strategies and evaluation criteria.

Methods: A Population, Intervention, Professionals, Outcomes and Health Context (PIPOH) research question was designed to answer the guideline topic. The literature was systematically searched for spinal clearance guidelines or recommendations. These were screened, appraised and adapted by a specialist emergency care review group using the Appraisal of Guidelines Research and Evaluation (AGREE II) and ADAPTE tools recommended for guideline adaptation and development. The results were filtered by the primary author using pre-defined selection criteria.

Results: A total of 8 guidelines met the inclusion criteria. Each guideline was independently assessed by two emergency care specialists using the AGREE II tool. A forum discussion was held to adapt the included guidelines to the local out-of hospital needs. Emergency care policy stakeholders and operational and student paramedics were asked to review and comment on the adapted algorithm.

Conclusion: An out-of hospital spinal clearance guideline was developed with evaluation and implementation strategies for the out-of hospital context. The author would like to acknowledge the

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Paediatric trauma causes, patterns and early intervention at the Muhimbili national hospital emergency department in Dar es Salaam, Tanzania

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Introduction: Trauma remains the leading cause of death and disability in paediatric and adolescent population worldwide, though most of the childhood injury burden rests in low-income and middle-income countries. Many paediatric deaths attributable to trauma are preventable, and morbidity may be greatly reduced by early intervention, but efforts in sub-Saharan Africa are hampered by a lack of regional data to guide interventions.

Methods: This was a prospective descriptive cohort study of children under 18 years of age based in the Emergency Department (ED) at Muhimbili National Hospital (MNH) in Dar es Salaam. We used standardized trauma data collection embedded within the clinical chart to assess the mechanism and pattern of injury, and collected follow-up data on interventions performed in the first 24 h after presentation.

Results: We enrolled 509 children from August to December 2012, 65.6% male and 34.4% were female. The majority (98.6%) sustained unintentional injuries. 31% of injured children were under the age of 5 years, 28.5% were between 5 and 9 years, and 21.0% were 10–14 years. Motor traffic accident (MTA) was the most common mechanism (40.9%) followed by falls (38.3%) and burns (14.5%). The majority of MTAs (54.3%) were a result of pedestrians struck by vehicles. Fractures and dislocations of upper and lower limbs were the most common injuries (45%) followed by traumatic brain injuries (19%) and burns (14.5%). Only 10% of patients were discharged home from the EMD. Top mechanisms and patterns varied when sub stratified by age quartiles.

Conclusion: Childhood injury accounts for a substantial burden of disease at the MNH ED, with MTA being the most common mechanism overall, and with mechanisms and patterns varying by age.

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Management of patients with non-traumatic hypotension presenting at emergency department Muhimbili national hospital

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Introduction: Hypotension is associated with high morbidity and mortality among emergency department (ED) patients. The diagnostic workup and management may vary greatly based on suspected aetiology and regional burden of disease. Little is known about ED diagnostic evaluation, treatment, and discharge diagnoses of patients with non-traumatic hypotension in sub-Saharan Africa.