

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.

Objectives: This study aims to characterize the diagnostic test utilization, treatment, and final ED diagnosis for patients presenting to the Muhimbili ED with non-traumatic hypotension.

Methodology: A prospective descriptive cohort study was carried out from April to November 2012 at Muhimbili ED. Adult 65 patients with non-traumatic hypotension were enrolled. Data collected included history, physical examination findings, diagnostic testing, and final ED diagnosis. Follow-up data included hospital length of stay, discharge diagnosis, and 24-h and in-hospital mortality.

Results: 53 of 65 patients (88%) were referred from other hospitals, and 12 (18%) were self-referred. Mean SBP at arrival was 84 mmHg. 54 (83%) patients had ECGs done, of which 32 (59%) were abnormal. Bedside Ultrasound done in all 65, with 45 (69%) abnormal. 15(23%) received X-rays, abnormal in 11(73%). All patients underwent laboratory work up. Only 20 (38%) of the 53 referred patients received fluids prior to arrival. In the ED 63 patients (97%) received fluids. Mean SBP after intervention was 91 mmHg (median 90 mmHg). The mean hospital stay was 2 days in those who died and 4 days for those who survived to discharge. In 78%, the ED diagnosis matched hospital discharge diagnosis. Overall mortality in this study was 26% (17) patients, with 7 (48%) of these deaths occurring in the first 24 h .

Conclusion: The most common diagnostic tests performed in the ED were Ultrasound, ECG, plain X-Rays and bedside bloods. There was a high overall mortality in these patients with almost half within the first 24 h.

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Evaluation of emergency medicine training programs in Egypt: Trainees' perspective

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Background and Objectives: Emergency medicine (EM) is in the early development phase in Egypt. There is an Egyptian Board of Emergency Medicine that has been in existence for approximately 10 years, along with academic master degree in EM from three medical schools (Alexandria, Tanta and Suez Canal). Until now, there is not a specialty society in emergency medicine or national annual meetings to evaluate the training progress and give the trainees the chance to see and be seen. It is known that each program has two-folded objectives; the organization's objectives and the objectives of the individual. It is the goal of the study to emphasis on the trainees view toward the Emergency medicine training.

Methods: A questionnaire based survey of the satisfaction with EM training in Egypt among trainees who are doing residency or fellowship.

Results: 88 physicians filled the questionnaire; 18 trainees at the three medical schools for master degree and 70 at Egyptian board program. 100 % of the participants were unhappy with their training. 57 (65%) agreed that they are working without any or under unprofessional supervision, while 82 (93%) reported unclear job description and lack of practical and applicable training policy. 36 (41%) were thinking to change the career, while 17 (19.3%) already enrolled in another post-graduate specialty certificates e.g. MRCS (UK), MRCP (UK) and academic masters.

Conclusions: Egyptian Emergency medicine trainees are not satisfied with their training and owing that to the unclear vision toward Emergency medicine as specialty from the policy makers and lack of profes-

sional staff responsible for education and evaluation. It is highly recommended that the training and mentoring go hand in hand and trainees should take part in the continuous evaluation process.

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Nurse-led educational campaign on blood borne pathogens and proper sharps disposal at an urban tertiary hospital in Dar Es Salaam, Tanzania

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Introduction: In Africa, where the regional prevalence of HIV is the highest in the world, the rate of needlestick injuries in healthcare workers is also the highest, despite the fact that such injuries are vastly underreported. Needlestick injuries pose a significant risk to healthcare workers and are the most common source of occupational exposure to blood. Due to recurrent needlestick injuries in healthcare workers at the site, nurses from the Muhimbili National Hospital Emergency Medicine Department (MNH EMD) in Dar Es Salaam, Tanzania initiated a campaign to teach health assistants, nurses, and medical doctors the hazards of needlestick injuries, and to enforce proper sharps disposal for prevention.

Methods: We conducted a 2-week educational campaign on hazards and prevention of needlestick injury. To evaluate the acquisition and retention of lessons from this campaign, 61 participants underwent an immediate and delayed (at 2 months distance) post-training exam. To evaluate the impact of the campaign, we collected data on the rate of overfilled sharps boxes, before, during and after the campaign.

Results: Scores on both immediate and delayed testing on bloodborne pathogen transmission and proper sharps disposal were very high. The number of overfilled safety boxes dramatically decreased during and immediately following the training phase of this campaign, but exceeded pre-intervention levels only 2 weeks after the completion of the campaign.

Conclusion: The results of this study suggest that even with very high levels of immediate and delayed retention of educational content as measured by exam, the impact of an educational intervention on behavioural change may be much more short-lived. This has implications regarding the need for continuous education to support for workplace safety campaigns.

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The validity of the South African Triage Scale at a tertiary care centre, Kumasi, Ghana

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Introduction: Triage is the process of sorting patients based on level of acuity to ensure the most severely injured and ill patients receive timely care before their condition worsens. The South African Triage Scale (SATS) was developed out of a need for an accurate and objective measure of urgency based on physiological parameters and clinical discriminators that is easily implemented in low resource settings. SATS was