

limited resources at our disposal, and in an attempt to minimize dependence in the relationships between the therapeutic agents and the victims. An attempt is made to enhance efficacy for effective coping with changing needs that emerge in the wake of the disaster. An attempt is made to prevent CPTSD, which can inhibit the functioning of the community residents. We will present these principles and describe how they were implemented in community intervention at two refugee camps in Haiti following the earthquake there, and at a refugee camp in Georgia.

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(A68) 7 Options for Evolving the Concept of Disaster Health

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Introduction: The World Association for Disaster and Emergency Medicine (WADEM) has been the primary innovator and incubator for the concept of disaster health. This presentation puts forth 7 options for consideration for evolving the concept of disaster health.

Discussion: (1) Promote disaster health from an adjective to a noun phrase. Disaster health has been a modifier for too long, tacked into expressions such as disaster health management or disaster health education. It is time for disaster health to emerge in its own right. (2) Elevate disaster health from a discipline to an endpoint, a defined and desired outcome. (3) Liberate disaster health from the confines of medicine and health care. Disaster health originated there, but is much more expansive. One of the distinctions of disaster health is its multidisciplinary nature. (4) Fully integrate the mental health and psychological dimension of disaster health. WADEM has been at the forefront, championing psychosocial issues in disasters, yet to date, this dimension of disaster health has been underdeveloped and underappreciated. (5) Consider the parallels inherent in optimizing disaster health for both disaster responders and disaster survivors. Also consider using plain language to create a common set of strategies for achieving disaster health that is equally applicable for responders and survivors. (6) Consider disaster health applied at the community level in a manner that subsumes community health, resilience, and disaster resistance. (7) Give disaster health its own framework. Clear and comprehensive WADEM-driven frameworks now exist for disaster health education, for example. Disaster health needs a framework that is simple, supple, and explanatory.

Conclusion: WADEM has promulgated disaster health as a vital, pivotal concept. The 7 options presented here have come from our own engagement with this concept. They are, in fact, defining features of our SAFETY FUNCTION ACTION framework for disaster health.

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(A69) Epidemiological Study of Trauma in Pregnancy: An Emergency Department-Based Study of a Level-1 Trauma Center

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Background: Trauma during pregnancy poses a challenge in assessment and management due to its unique anatomical and physiological changes. Trauma is the leading non-obstetrical cause of death. There is paucity of epidemiological data in this subgroup in India. An emergency department (ED)-based epidemiological study was conducted.

Methods: Female trauma victims of reproductive age with both positive and negative urinary pregnancy tests (UPTs) were selected retrospectively. Documentation was done by the nursing staff from the ED case records. Mode, mechanism, severity, site of injury, and ED disposal time were noted, compiled, and analyzed.

Results: Of 64 patients, 32 patients were UPT-positive and 32 were UPT-negative. The mean age was 26 (range 18–36) years. A total of 75% of UPT-positive and 59.3% of UPT-negative cases had assault due to domestic violence. As per START triage protocol, 84.3% of UPT-positive and 59.3% patients in UPT negative were triaged as yellow. Blunt trauma to the abdomen was the most common mechanism and site of injury in all patients. FAST and ultrasonic evaluation of the fetus was performed for all UPT-positive patients. The average ED disposal time was 2 hours 62 minutes in UPT-positive and 1.9 hours in UPT-negative.

Conclusions: Limited data suggest domestic violence as leading cause of trauma in pregnancy. A large, epidemiological study is required to validate this.

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(A70) Traumatic Brain Injuries at a Rural Teaching Hospital: Pattern of Presentation and Documentation

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Background and Objectives: Analyses of causes and trends of traumatic brain injuries help to define public health policy priorities. There are not much TBI registries, thus making documentation of injuries inadequate and accessing these data problematic. This study is aimed at identifying the characteristics of TBI and determining the efficiency of documentation of patients' records in a tertiary hospital.

Patients and Methods: Based on WHO guidelines "Standards for Surveillance of Neurotrauma" we designed a proforma to collect data on traumatic brain injuries. A prospective data collection was done from January to June 2010. Data was collected on a paper form and then entered into the self-developed TBI registry database. Descriptive analysis was performed.

Results: Data for a total 414 patients were collected. Mean age was 33.00 years (SD ± 16.725, range 1–85 years), and 81% male.

Most of the accidents took place on highways (57.2%), commonest being the road traffic accidents (55.1%), brought by relatives (74%). The mean duration for hospital stay was 5.42 days (SD \pm 8.312 days, range 1–79 days). 10% patients required resuscitation at the time of admission. Details of Glasgow coma scale were available; details regarding CT scan findings were available for 300 patients. Good recovery was seen in 68.4% and the mortality was in 7.2%. Further details on vital parameters and investigations included in the study were also collected.

Conclusions: TBI related research in many developing countries is in the developmental stages with relatively few published data. Although early analysis of a TBI data can lead to useful information, there is further need for the development of a user-friendly secure web-based database system to continuously maintain and analyze the registry.

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(A71) Prospective Evaluation of “Focused Assessment with Sonography for Trauma” Done by Emergency Physicians, and its Comparative Analysis with Radiologist’s Performance

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Objective: The objective of this study was to determine the accuracy of emergency physicians in detecting free fluid in the abdomen when compared to radiologists during w primary survey of trauma victims by focused assessment with sonography for trauma (FAST) scan in the emergency department.

Methods: This prospective study was performed during a primary survey of the resuscitation of non-consecutive patients in the resuscitation bay. The study subjects included emergency physicians (EP) [one emergency medicine (EM) consultant, two EM residents, one orthopedic resident, and one surgical resident] who underwent training at a three-day workshop on emergency sonography and performed 10 supervised positive and negative scans for free fluid. The FAST scans were performed by the EPs and then by the radiology resident (RR). Both were blinded to each other’s sonography findings. Computed tomography (CT) scan and laparotomy findings were used as gold standard. Results were compared between both groups. Intra-observer variability among EPs and level of agreement between EPs and RRs were assessed.

Results: One hundred fifty scans performed by EPs and RRs were analyzed. The mean age of the patients was 28 [1–70] years. Out of 24 true positive patients, 18 underwent CT scan, and exploratory laparotomy was done in six patients. Intra-observer performance variation ranged from 87–97%. The sensitivity of FAST performed by EP and RR was 100%. The specificity of FAST by EPs was 95.4% vs. 98.4% by RRs. The level of agreement was 100%.

Conclusions: This study proves that FAST scan performed by EPs who are trained in short course of ultrasonography can be reliable and accurate when compared to a qualified radiologist.

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(A72) Efficacy of Parental Opioid Analgesics versus Non-Opioid Analgesic in Acute Pain Management of Trauma Victims in the Emergency Department

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Background: The pyramid of pain management involves sequential drug escalation but its role is limited in an emergency department (ED). The efficacy of parental opioid analgesics versus non-opioid analgesic in acute pain management of trauma victims in the ED was evaluated to formulate protocol.

Methods: All alert patients with a baseline visual analogue scale score (\geq 7) was randomly assigned either parental non-opioid (Group A) or opioid analgesics (Group B). The emergency care providers noted the VAS in either group at 15 minutes, 30 minutes, and 60 minutes, and at the time of discharge from the ED. If the patient’s VAS score did not reduce by 50% at 30 minutes, repeat parental analgesics was given. The oral analgesics prescribed at the time of discharge were documented. Ethical clearance was taken. Data was compiled and analyzed.

Results: Of 106 patients, 99 were analyzed. The mean age in Group A was 33.2 \pm 13.2 years and 32.5 \pm 18 years in Group B. The male:female ratio in Group A was 1.5:1 and 7:1 in Group B. The average baseline VAS score in Group A was 7.5, and that of Group B was 8.96. The average VAS at 15, 30, and 60 minutes and at discharge in Group A was 5.4, 5.34, 4.3, and 3.5 and it was 6.1, 6, 5.1, and 4.4. Repeat parental dose of analgesics were required in 95/99 (95%) patients in Group A and 5% that of Group B. The most common prescription at discharge from ED was non-opioid analgesics.

Conclusions: Acute pain relief was comparable in both groups. Non-opioid analgesics may be preferred over opioid in VAS score \pm 7 in a busy emergency department for early disposition.

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(A73) Burden of Maxillofacial Trauma at Level Trauma 1 Centre

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Background: There is an upward trend in facial injuries following changes in population pattern, increasing industrialization and urbanization, hence maxillofacial trauma is becoming a burden and a leading medical problem in emergency rooms worldwide.

Method: A retrospective study of patients with maxillofacial fractures seen and treated at the Jai Parkash Narayan Apex Trauma Center, AIIMS, New Delhi, India between January 2007 to June 2010. Data extracted from the patients’ records include aetiology, age, sex, types and sites of fractures, treatment modality and concomitant injuries.

Results: There were 795 fractures of the maxillofacial skeleton and 86 concomitant injuries from 542 patients. Road traffic accident (56.8%) was the most common aetiological factor, followed by falls (22.3%) and fights (18.5%). The age range was from 3 years to 75 years (mean = 34.7) with a peak incidence in the 3rd decade