

Profile of Pediatric Trauma Patients Presenting to the Emergency Department of the All India Institute of Medical Science Trauma Centre

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Background: There is a lack of published literature on the epidemiology of pediatric trauma in India. The profile of pediatric trauma in the emergency department of the Trauma Centre at the All India Institute of Medical Science in New Delhi was studied.

Methods: Prospective and retrospective data were collected from the case records of the emergency department from 01 December 2007 to 30 November 2008.

Results: A total of 550 pediatric patients were recruited for the study. The age range was 3 months–15 years. A total of 8% of the patients were 0–1 years of age, 30.9% were 1–5 years of age, 33.6% were 6–10 years of age, and 27.5% were 11–15 years of age. Eighty percent of the victims sustained injuries at home and the rest occurred outdoors. A total of 63.3% were falls, 10.7% were sports-related injuries, 16.7% were crash injuries, 2.7% were assault cases, 0.7% were firearm injuries, and 5.8% were caused by other forms of injuries such as glassware and the fall of heavy objects. A total of 83.6% of victims were brought in by parents, 2.2% by schoolteachers, 9.8% by police, and 4.4% by bystanders. Only 7.8% of the patients received prehospital care. Based on the START triage protocol, 81.8% were triaged as “yellow”, 6.4% as “green”, and 11.8% as “red”. A total of 21.6% needed surgical attention, 54.2% required neurosurgery, 24.7% presented for orthopedics consultation, and 10% were for polytrauma. The average emergency department stay for surgical and orthopedic injuries was 1.5 hours, and six hours for neurosurgery patients. A total of 40.54% were discharged, 5.4% were admitted, and 54.1% were transferred out from the ED.

Conclusions: Most of the victims sustained injuries at home. The predominant mode of injury was fall from height and crash injuries. Victims mainly were brought in by parents and police as there is no organized prehospital care. Head injury was the predominant mode of presentation. Due to overcrowding, only few patients were admitted.

Keywords: emergency department; India; injury; pediatrics; trauma
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Australasian Emergency Department Preparedness for Disasters and Mass-Casualty Incidents Involving Children

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Introduction: Pediatric disaster medicine is not just pediatric emergency medicine on a larger scale. The aim of this study was to quantify the level of preparedness of the major

pediatric emergency departments in Australasia for pediatric mass-casualty incidents.

Methods: Questionnaires were mailed to the 13 emergency departments in the Pediatric Research in Emergency Departments International Collaborative, which includes all of the major pediatric hospitals in Australasia. Four additional emergency departments in the states without pediatric hospitals were included. Questions covered planning, training, triage, resources, and decontamination.

Results: Responses were received from 16/17 (94%) emergency departments. Fifteen (93.8%) emergency departments had a disaster plan, 10 (62%) had pediatric-specific plans. Six (37%) had risk assessments. Of those, two (12%) were pediatric-specific. Nine departments (56%) had a plan to locate family members. A plan to identify unaccompanied children was present in nine (56%) departments, however six (37.5%) did not have a plan to ensure discharge to a legitimate guardian. While 12 (75%) departments had a psychological support plan, three (18%) had mental health triage. The disaster plan was tested annually by seven (44%) departments. Pediatric disaster exercises were completed by <5% of medical or nursing staff in nine (56%) departments. Eight emergency departments had completed a pediatric disaster exercise with live victims, but only five (31%) drilled for a chemical, biological, or radiological incident. Fourteen (87%) had equipment to manage <20 critical pediatric patients over a four-hour period. Four different mass-casualty triage methods were used.

Conclusions: This survey raises significant questions about the preparedness of Australasian emergency departments for mass-casualty incidents involving children. Health services must ensure that disaster planning is directed specifically at children and their vulnerabilities.

Keywords: children; disaster preparedness; emergency department; mass-casualty incident; pediatrics
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Psychological Impact of Disasters on Children—A Case Study from Sri Lanka

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Introduction: The combination of the 25-year civil war between the Liberation Tigers of Tamil Eelam (LTTE) and the Government of Sri Lanka, and the 26 December 2004 tsunami resulted in the deaths of >100,000 people. Approximately 900,000 people, one-third of whom are children, have been displaced. Of the 2.5 million people living in the areas directly affected by conflict, approximately one million are children <18 years of age.

Methods: Participatory observation and focus group discussions with community-level workers and government and non-governmental officials were used to gather data. The effects of the civil war, man-made disaster, and tsunami on the community in Northern Sri Lanka were compared with the status before the war and after the tsunami. **Results:** When children were affected, there were significant changes in familial relationships. It was found that approximately 55% of children suffered from post-traumatic stress disorder (PTSD), while 25% displayed serious

complications. Symptoms of PTSD include fainting, loss of appetite, breathing difficulties, giddiness, and sleep disturbances. Most children in this region suffer from one or more symptoms. Child soldiers were the most severely affected.

Conclusions: Children were exposed to conflict, war, and disaster situations. The impact of these events on children and community structure must result in changes. There must be relief, rehabilitation, and reconstruction projects to address the problem of collective trauma, particularly using integrated multi-level approaches to save the children in northern and eastern Sri Lanka.

Keywords: children; disasters; psychological; Sri Lanka; tsunami; war

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Poster Presentations—Pediatrics

(G52) Family Presence during Pediatric Reanimation: An Additional Stress Factor?

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In a review of the international literature about family presence as stress factors on nurses and doctors, Nurses were more favorable of family presence than were doctors and an additional staff member is needed to support the family during reanimation. This staff member needs specific schooling to deal with family members. Advantages and disadvantages of family presence during pediatric cardiopulmonary resuscitation will be presented. In France, family presence protocol did not exist. The only French study was about family presence during adult CPR and the feelings of emergency medical service personnel in 2007.

Keywords: cardiopulmonary resuscitation; emergency medicine; emergency medical services; family presence; pediatrics; reanimation; stress

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(G53) Post-Traumatic Stress Symptomology in Pediatric Accidental Injuries—An Asian Perspective

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Studies in America and Europe have consistently found that a significant proportion (around 5–15%) of children and their families develop post-traumatic stress disorder following accidental injuries. Despite important socio-cultural differences, there are no published studies in Asian countries examining the prevalence of distressing emotional symptoms in children hospitalized for accidental trauma injuries or the emotional impact on their parents. We describe a case series of three Singaporean children who were hospitalized in a pediatric tertiary hospital for accidental trauma who developed post-traumatic stress symptomology on follow-up three months post-injury. This paper also describes a multi-disciplinary approach in the care and management of these children and their families. Prospective observational research on the prevalence of traumatic stress reaction fol-

lowing accidental trauma and local validation of the STEPP tool (modified) for risk assessment for the development of post-traumatic stress disorder are currently being performed.

Keywords: accident; Asia; pediatrics; post-traumatic stress disorder

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(G54) Urban Health Programs in Kathmandu: An Effective Child Labor-Related Interventions Program

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In Nepal, children are employed in the manufacturing of carpets, working in bakeries, brick kilns and stone quarries, and involved in the construction of roads. Although there are substantial challenges in preventing child labor, Kathmandu also had implemented successful local community child development programs that aim to address the growing child labor problems in various urban areas. Slum areas are the primary targets of these programs because of the higher rate of poor migrants that live in these areas. There are community child education and support centers established by Kathmandu Municipality to deliver essential, informal education, counseling against physical abuse and torture, recreational outlets, such as playgrounds, and formal schooling facilities. There are five centers in different wards of Kathmandu. These centers provide deprived children with equal access to education through an effective management system. There are total of 500 students who benefit from such facilities. The centers also educate the parents by organizing child labor related awareness programs. These programs are conducted twice a month, and approximately 100 community members participate. This poster is considered one of the most effective urban child labor programs. This paper will review large, innovative, and effective child labor related programs in Kathmandu. Where available, the poster also will describe the impact of these programs.

Keywords: child labor; education; intervention; Nepal; urban health programs

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(G55) Out-of-Hospital Pediatric Cardiopulmonary Arrest in a Rural Community

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Introduction: Cardiorespiratory arrest (CRA) is a rare event in childhood and its characteristics are not well-known internationally. Our objective was to determine the characteristics of pediatric CRA and the immediate results of CPR in Galicia.

Methods: Data were recorded prospectively following the Utstein's style guidelines. All children (0–16) who suffered