

Conclusions: The improved outcome for children treated at PTC suggests that the most seriously injured pediatric trauma patients should be rapidly transferred to PTC.

Keywords: hospital; mortality; pediatric; trauma

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Transportation of Critically Ill Neonates: Experience, Training, and Participation

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Objective: The objective of this study was to survey the experience, training, and confidence in the transportation of critically ill neonates among nurses, interns, residents, and fellows in three main pediatric training centers in Tehran, Iran.

Methods: Questionnaires consisting of eight questions regarding the transportation and resuscitation of critically ill neonates were completed by nurses from the emergency ward, pediatric ward, neonatal intensive care unit, and pediatric intensive care unit. Surveys also were completed by pediatric ward interns, residents, and fellows of the three main pediatric training centers of Tehran between 2005 and 2006. Additional questions obtained participant demographics.

Results: Between 63% and 69% of the survey participants were involved in the transport of neonates. Approximately half of the survey participants reported passing the resuscitation functional training course. Only 50% of participants received training in neonatal and pediatric emergencies. The majority of the study participants assessed their ability to transport ill neonates and children and resuscitate children in cardiopulmonary arrest and pediatric emergencies as good or very good. Pediatric ward interns had the least self-confidence in their abilities. Of the interns surveyed, 53.3% evaluated their skills in transporting and handling critically ill neonates and children as unsuitable or very unsuitable.

Conclusions: Training in emergency transport and management of critically ill neonates and children with emergency issues is necessary for all medical personnel involved in their care.

Keywords: children; education; neonates; training; transportation

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Pediatrics and Persons with Disabilities Emergency Preparedness Guidelines and Recommendations:

Findings from an Evidenced-Based Consensus

Process

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A cadre of experts and stakeholders from government agencies, professional organizations, emergency medicine and response, pediatrics, mental health, and disaster preparedness were gathered to review and summarize the existing data on emergency preparedness. Specifically, they looked into the needs of two vulnerable populations, children and persons with disabilities, in the planning, prepara-

tion, and response to disasters, public health emergencies, and terrorism. This review was followed by the development of evidence-based consensus guidelines and recommendations.

An evidence-based consensus process was used in conjunction with a modified Delphi approach for selection of topic areas and discussion points. These recommendations and guidelines represent the first national, evidence-based standards for emergency preparedness for these two vulnerable populations. There were four goals of this process: (1) To build a collaboration among individuals with expertise in pediatrics, pediatric emergency medicine, pediatric critical care, pediatric surgery, and emergency management (including disaster planning, management, and response) and collaboration among individuals with expertise in person with disabilities and emergency management; (2) To review and summarize the existing data on the needs of these two populations in emergency planning, preparation, and response; (3) To develop evidence-based guidelines and recommendations, as well as an evidenced-based consensus guidelines for dealing with gaps in the evidence on the needs of these two populations; and (4) To create a research agenda to address knowledge gaps based on the limited data that exist on the needs of these two populations.

The final recommendations developed focused on eight major areas.

Keywords: collaboration; evidence-based guidelines; pediatrics; persons with disabilities; planning

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Poster Presentations—Theme 11: Pediatrics

(165) Iraqi Children and Trauma

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In recent decades, Iraqi children have experienced multiple traumatic events. These traumatic experiences can have terrifying effects on mental health. Children have experienced emotional, physical, and sexual abuse, neglect, separation and loss, and serious illnesses. They have witnessed extreme violence, and the illnesses and deaths of their loved ones. In spite of the difficult situation, a non-governmental organization called the Iraqi Association for Child and Adolescent Mental Health was established.

Keywords: children; Iraq; mental health; psychosocial; trauma

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(166) Deciding Factors for Mortality in Children with Gastroschisis and Omphalocele, Underlying Transportation

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Children with gastroschisis and omphalocele are delivered to the Regional Children's Hospital by first-aid aircraft from very remote villages, and by ambulance from the city

of Arkhangelsk. The mortality rate for this group of patients is very high.

The objective of the study was to identify the reasons for the death of children with gastroschisis and omphalocele, and to find ways to decrease it. The charts of 33 patients with gastroschisis and omphalocele, who were delivered to the Arkhangelsk Regional Children's Hospital from 1994 to 2006, were analyzed retrospectively. The results of the treatment were evaluated according to risk factors of transportation, technique of abdominal closure, and anesthetic management.

The children were transported on average 28.8 hours (range: 1–168 hours) after their birth. Eighteen children (54.5%) were delivered by air transport, 15 children (45.5%) using ground transport. Seventeen (51.5%) of the newborns died. In 8 newborns the cause of death was too tight a closure of the abdominal wall; in 4, it was intestinal inflammation; in 3, it was related to anesthetic problems, and in 2, it was associated with other anomalies. Only 5 of the patients that died were exposed to long transportation times. Sixteen newborns (48.5%) survived, of which 14 also experienced difficult transport conditions.

The defining factor of the high death rate proved to be the applied operative technique. Connected associated anomalies and anesthetic defects also played fatal role. The difficulties of transportation did not contribute decisively to the death rate of this group of patients.

Keywords: children; gastroschisis; mortality; omphalocele; transport
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(167) Rendering Medical Care to Children in Emergencies Abroad

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Introduction: Since 1995, the airmobile hospital participated in seven operations in emergency response abroad.

Methods: The hospital consists of 20 pneumo-modules, equipped with technical supply systems. The personnel includes 38 medical specialists and 17 engineers. The airmobile hospital is equipped with modern medical equipment.

Results: Data from five countries since 2001 were analyzed. In Afghanistan, from December 2001 through January 2002, medical assistance was provided to 10,061 injured persons, among them, 1,046 (10%) children. In Iran in 2003, medical assistance was provided to 430 injured persons, among them, 146 (34%) children. After the 2005 Tsunami in Sri Lanka, medical care was provided to 3,500 injured victims, among them, 1,008 (29%) children. In the

hospital, 113 injured persons were treated, including 33 children (29%); in the resuscitation department, of the 76 injured, 25 were children (33%). In March 2005, the hospital was deployed to Nias, Indonesia. In total, 729 injured victims, including 333 children (46%) received medical care. After the 2005 earthquake in Muzaffarabad, Pakistan medical care was provided to 2,469 injured persons, among them 892 children (36%). Children requiring specialized treatment were evacuated.

Conclusions: Considering the large number of children (10.4–45.7%) injured in emergencies, the Russian EMERCOM airmobile hospital has adequate equipment, personnel, and experience to work in the field.

Keywords: children; field hospital; international; medical care; pediatrics
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(168) Experience of Treating Long-Bone Fractures in Mass-Admission of Children after Disasters

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Purpose: The purpose of this study was to optimize treatment techniques of long tubular bone fractures in children who were victims of earthquakes.

Methods: A specialized pediatric team that included pediatric traumatologists, worked at various disaster sites. The team usually started its activity 3–7 days after the onset of the disaster. More than 600 children were examined and consulted; 200 children (six months–16 years of age) were treated. Most skeletal system injuries were isolated or were combined fractures of the low extremities and pelvis. Upper extremity fractures were rare. The most common combined traumas were brain injuries of various severity, injuries of the thorax and the abdomen, and crush syndrome. Conservative methods (e.g., skeletal traction, reposition with the plaster immobilization) and other invasive techniques.

Results: In case of massive numbers of admission, of patients with acute traumatic injuries, the most optimal approaches are low-invasive osteosynthesis techniques, intrasosseous transcutaneous osteosynthesis with TENs, pins, and apparatus for outer fixation of various constructions. Supraosseous and intramedullary-blocked osteosyntheses also are possible, however, they take more time, and in the case of massive numbers of admission, one can have a deficit of fixators. Plaster immobilization is rather limited because of inadequate stability and is indicated only in simple cases. Skeletal traction is indicated only if a qualified team is absent.

Keywords: children; disasters; earthquake; long-bone fractures; mass-admission

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