

term “developing country”, 438 articles were retained. Less than 1% (0.69%) citations in PubMed dealt with developing country disasters. Half of the manuscripts (46.5%) were found to be original research articles (36.1%) or reviews (10.4%), while more than a quarter (29.5%) were commentaries. 97.4% (149/153) of all ‘original research articles’ were Level IV or V evidence. A fifth (20.3%) of the authors of all manuscripts on developing world disasters were from the developing world (82/404); Predominant themes (29.1%) were missions, healthcare provision and humanitarian aid during the acute phase of developing world disasters.

Conclusion: Less than 1% of all disaster-related publications are about developing world disasters. Also, the developed world, authors four-fifths of the articles about developing world disasters, and contributes the predominant perspective. Aid for sustaining long-term disaster research may be a more useful investment in mitigating future disasters, than short-term humanitarian aid missions to the developing world.

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(A108) Pediatric Disasters: Key Elements for Improving Care

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80% of children are seen in non-Pediatric Emergency Departments (EDs). In a disaster, most children and their caregivers will go to the closest or their regularly identified ED for treatment. In disasters, the preservation of the Pediatric Tertiary Infrastructure for the sickest and most injured children is critical. Surge capacity for pediatrics may involve both ante-grade and retrograde distribution of pediatric patients and health care staff to preserve Tertiary capacity. Reverse Triage of stable pediatric patients to other hospitals with adapted units and staff can decompress tertiary facilities. General hospitals can allow an expanded care for pediatric patients. Surge capacity needs to be addressed to allow non-pediatric facilities to surge for pediatric patients. Disaster Credentialing by immediate cross-credentialing of appropriate health care staff needs to be reciprocal and internet based to allow appropriate staff to attend pediatric patients. Pediatric consultants can augment healthcare staff to allow input into expanded care roles. Pre-hospital providers should have more pediatric training. Rotated regional caches of pediatric equipment would expedite safe pediatric disaster site care and pre-hospital transportation to definitive care. Pediatric patients should routinely be included in disaster drills and in all-inclusive disaster plans, rather than in separate drills and plans. Pediatric patients are usually accompanied by caregivers who may need care as well. Secure tracking and reunification of unaccompanied minors needs to be addressed to allow tracking across jurisdictional boundaries. Limited access to data on children, and credentialing of shelter staff would preclude access by anyone without a specific need to know. There are no clear uniform liability statutes for care in declared disasters as well as no uniform agreements for reimbursement for medical care. These issues are an important facet of disaster care that still needs to be addressed.

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(A109) Systematic Literature Review on Pediatric Sleep Disturbance Management Post-Disaster: Implications of Post-Disaster Pediatric Clinical Management in Developing Countries

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Introduction: Sleep disturbances are common symptoms during the immediate and long-term aftermath of exposure of traumatic events. While stress affects sleep in all age groups, due to differences in physiological, psychological, and socio-behavioral risk factors, the clinical management of pediatric patients with sleep disturbances post-disaster might be different. This study aims to systematically review scientific literature on the clinical management of pediatric sleep disturbances post-disaster and its clinical implication in developing countries. **Methods:** A keyword-based, systematic review was conducted for scientific publication in academic and disaster literature databases (Medline, PUBMED, Academic Search Premier, Google Scholar, ELDIS, PsycINFO, PILOTS and RELIEFWEB) until October 2010. Abstracts of all the hits were inspected to remove non-relevant articles, and all relevant articles were reviewed and scored by two reviewers to determine relevancy before being included in the final study database. Quality, relevance, and applicability of the reported literature were examined critically with the EBM level of evidence and EPPHPPQ (2003) assessment tool.

Results and Discussion: The literature disproportionately emphasized the clinical effects and psychological impacts of traumatic events on pediatric patients, and most reported studies were reported as a subset within PTSD study literature. Management of younger children, gender differences, clinical effectiveness of cross-disciplinary management modalities, and experiences in middle- and low-income countries were extremely limited. While principles of sleep hygiene and clinical guidelines for management of adult sleep disturbance are available, the application of clinical effectiveness and appropriateness of these guidelines in pediatric population must be examined further.

Conclusion and Implications: Currently, there is limited literature on the acute management of pediatric sleep disturbances post-disaster in developing countries. Evidence-based studies are needed to identify the appropriate clinical approaches to support the pediatric population with sleep disturbances post-disaster.

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(A110) Cardiac Trauma in Children

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Heart trauma is a severe form of thoracic trauma with an incidence of 7–14%. Heart trauma can be either open or blunt, with the latter more prevalent during a disaster. Possible open heart injuries include: (1) pericardial injuries; (2) superficial myocardial and coronary vessels injuries; and (3) penetrating cardiac wounds. The variants of blunt heart trauma include: (1) heart concussion and contusion; (2) rupture of the heart wall and