Abstracts of Oral Presentations-WADEM Congress on Disaster and Emergency Medicine 2019

PEDIATRICS

Are There Adequate Policies and Programmes in Place to Protect Infants and Young Children During Emergencies?

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Introduction: In emergencies, infants and young children are disproportionately affected due to specific food and fluid requirements, immature immune system, susceptibility to dehydration, and dependence on others. Provision of safe food and water to infants and young children is critical. However, it is challenging in the emergency context. Specific planning is vital to support infant and young child feeding in emergencies (IYCF-E).
Aim: To identify the extent to which Australian emergency management plans and guidance account for the needs of infants and young children.
Methods: An audit of Australian emergency management plans and guidance was conducted as a part of the 2018 World Breastfeeding Trends Initiative assessment of Australian infant feeding policies. All national and state/territory emergency preparedness plans, and a sample of local government area preparedness plans, response plans, and other guidance were identified and searched for content related to the needs of infants and young children. Plans and guidance were searched for content related to the needs of animals as a comparison.
Results: Vulnerability of infants and young children was commonly noted. However, content related to supporting the specific needs of infants and young children through appropriate IYCF-E was almost totally absent. In some cases, the guidance that did exist was misleading or dangerous. No agency at the federal, state/territory, or local government level was identified as having met the responsibility for ensuring the needs of infants and young children. The absence of any coordinated response for the needs of infants and young children is in stark contrast to consideration of animal needs, which have a delegated authority, plans, and guidance at all levels of government.
Discussion: Planning for the needs of infants and young children in emergencies in Australia is dangerously inadequate. Action should be taken to ensure that appropriate plans exist at all levels of government.

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A Comprehensive Coalition Based Regional Approach to Pediatric Disaster Planning

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Introduction: Children, who comprise 25% of the US population, are frequently victims of disasters and have special needs during these events.
Aim: To prepare NYC for a large-scale pediatric disaster, NYCPDC has worked with an increasing number of providers that initially included a small number of hospitals and agencies. Through a cooperative team approach, stakeholders now include public health, emergency management, and emergency medical services, 28 hospitals, community-based providers, and the Medical Reserve Corps.
Methods: The NYCPDC utilized an inclusive iterative process model whereby a desired plan was achieved by stakeholders reviewing the literature and current practice through discussion and consensus building. NYCPDC used this model in developing a comprehensive regional pediatric disaster plan.
Results: The Plan included disaster scene triage (adapted for pediatric use) to transport (with prioritization) to surge and evacuation. Additionally, site-specific plans utilizing Guidelines and Templates now include Pediatric Long-Term Care Facilities, Hospital Pediatric Departments, Pediatric and Ob/Newborn/Neonatal Intensive Care Services and Outpatient/Urgent Care Centers. A force multiplier course in critical care for non-intensivists is provided. An extensive Pediatric Exercise program has been used to develop, operationalize and revise plans based on lessons learned. This includes pediatric tabletop, functional and full-scale exercises at individual hospitals leading to citywide exercises at 13 and subsequently all 28 hospitals caring for children.
Discussion: The NYCPDC has comprehensively planned for the special needs of children during disasters utilizing a pediatric coalition based regional approach that matches pediatric resources to needs to provide best outcomes.

The NYCPDC has responded to real-time events (H1N1, Haiti Earthquake, Superstorm Sandy, Ebola), and participated in local (NYC boroughs and executive leadership) and nationwide coalitions (National Pediatric Disaster Coalition). The NYCPDC has had the opportunity to present their Pediatric Disaster Planning and Response efforts at local, national and International conferences.

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Development of a Model for Admitting Pediatric Trauma Casualties in the Emergency Department

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Introduction: Pediatric trauma is one of the leading causes of child mortality and morbidity and is a major challenge for healthcare systems worldwide. Treatment of pediatric trauma requires special attention according to the unique needs of children, especially in children affected by severe trauma who require life-saving treatments. It is essential to examine the preparedness of Emergency Departments (EDs) for admitting and treating pediatric casualties.
Aim: To develop a model for admitting and treating pediatric trauma casualties in EDs.
Methods: Seventeen health professionals were interviewed using a semi-structured qualitative tool. A quantitative questionnaire was distributed among general and pediatric EDs' medical and nursing staff. Following the qualitative and quantitative findings, another round of interviews was performed to identify constraints, to construct a "Current Reality Tree," and develop a model for admission and management of pediatric casualties in EDs. The model was validated by the National Council for Trauma and Emergency Medicine.
Results: Lack of uniformity was found regarding age limit and levels of injury of pediatric patients. Most study participants believe that severe pediatric casualties should be concentrated in designated medical centers and that minor and major pediatric casualties should be treated in pediatric rather that general EDs. Pediatric emergency medicine specialists are preferred as case managers for pediatric casualties. Significant diversity in pediatric-care training was found. Based on qualitative and quantitative findings, a model for the optimal admitting and managing of pediatric casualties was designed.
Discussion: To provide the best care for pediatric casualties and regulate its key aspects, clear statutory guidelines should be formulated at national and local levels. The model developed in this study considers EDs' medical teams and policy leaders' perceptions, and hence its significant contribution. Implementation of the findings and their integration in pediatric trauma care in EDs can significantly improve pediatric emergency medical services.

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The Illinois EMSC Pediatric Preparedness Checklist - An Innovative Approach to Improving Pediatric Disaster Planning and Preparedness in Chicago

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Introduction: The Illinois EMSC Pediatric Facility Recognition Program was implemented in 1998. The objective was to identify the capability of a hospital to provide optimal pediatric emergency and critical care. Beginning in 2004, steps were taken to integrate pediatric disaster preparedness into the facility recognition process.
Aim: The goal of this study was to identify strengths and areas for improvement in pediatric disaster preparedness in participating Chicago hospitals.
Methods: The impact of the EMSC Pediatric Preparedness Checklist was assessed during the 2016 Pediatric Facility Recognition hospital site surveys. The following components were surveyed as they relate to pediatrics: Overall Emergency Operations Plan (EOP), Surge Capacity, Decontamination, Reunification/Patient Tracking, Security, Evacuation, Mass Casualty Triage/JumpSTART, Children with Special Health Care Needs/Children with Functional Access Needs, Pharmaceutical Preparedness, Recovery, Exercise/Drills/Trainings. All survey items were extracted, collated, and reviewed.
Results: Fourteen Chicago hospitals participated in the survey. Almost all hospitals (93%) surveyed indicated that they consult staff with pediatric expertise when updating their EOP, incorporate pediatric trained mental health professionals into their disaster call lists (93%), and integrate staff with pediatric focus into their incident command system/emergency operation center during a disaster (79%). Almost all of the hospitals (93%) had an infant/child abduction plan and all hospitals (100%) were testing the process at least once per year. Finally, almost all of the hospitals (93%) had incorporated a patient connection program into their tracking and reunification plan. However, not all hospitals included drills for pediatric surge, decontamination, and evacuation. Less than one-third of the hospitals had pediatric components in their alternate treatment site plans. Half of the hospitals did not have pediatric components incorporated into their decontamination plans.
Discussion: Integrating the EMSC Pediatric Preparedness Checklist surveys into the recognition process is an innovative approach to improve pediatric disaster planning and preparedness in hospitals.

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The Illinois EMSC Pediatric Preparedness Checklist Does Impact Pediatric Disaster Planning and Preparedness in Chicago: A Comparison of 2012 and 2016 EMSC Facility Recognition Surveys

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