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# Pediatric Emergency Medicine – A New Discipline

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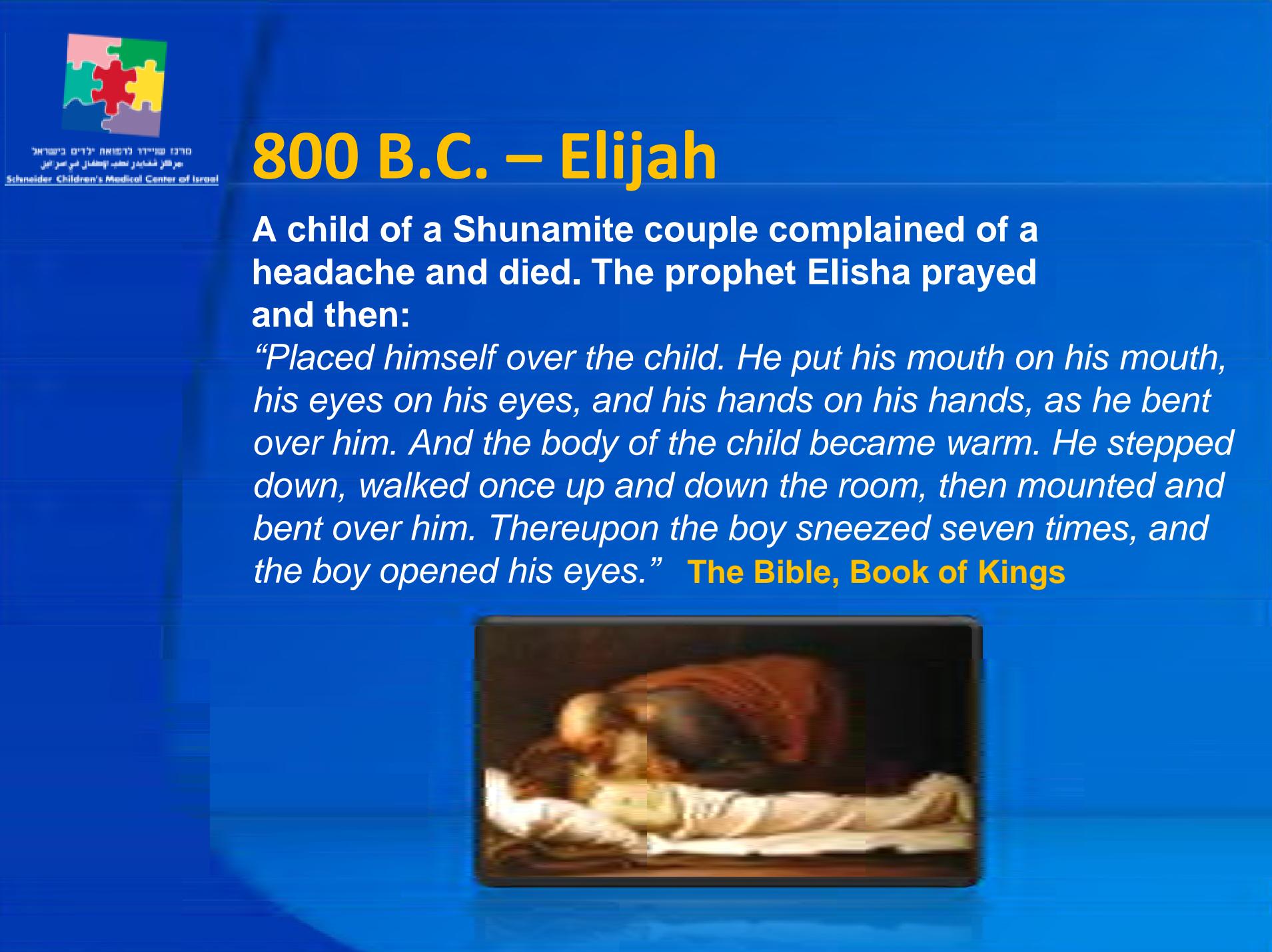




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How does the discipline of Pediatric Emergency Medicine offers a remedy to the situation described?





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# Pediatric Emergency Medicine

- What is Emergency Medicine?
  - Deals with providing emergency care for adults and children
- The goal: To provide children with the best possible emergency care
- Annual patients volume
  - Israel: 3 mil. Total/ 0.6 mil. children
  - USA: 136 mil. total/40 mil. children
  - Spain: 20 mil. total/6 mil. children, million



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# Pediatric Emergency Medicine

## Why?

- Trauma: main cause of death in children
- Resuscitation: poor outcome; improved by early recognition of respiratory failure & shock
- Philosophy of ‘timely’ treatment, triage
- Comprehensive approach
- Prehospital component
- “Continuum-of-care” principle/philosophy



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# Waismann Y. Establishing Pediatric Emergency Medicine in Israel: Reflections and Lessons. Clinical Pediatr Emerg Med. March 2012

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## Abstract:

This work describes the challenges encountered by the author in establishing and developing emergency medicine and, especially, pediatric emergency medicine as medical specialties in Israel. Many of the measures were largely based on his training in the United States, including a clinical fellowship in pediatric emergency medicine at the Children's National Medical Center in Washington, DC, and a research fellowship at the National Institutes of Health in Bethesda, MD. The article covers the clinical precepts on which emergency care is based, their practical applications, administrative obstacles, and new protocols and guidelines. A major milestone was the introduction of guidelines from the Pediatric Advanced Life Support course and other educational activities, followed by the establishment of an infrastructure to encourage local, national, and international educational and collaborative research projects and quality control.

## Keywords:

pediatric emergency medicine;  
trauma; children; disaster medicine;  
triage; emergency department;  
continuing medical education;  
research network; emergency  
medical services

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# Establishing Pediatric Emergency Medicine in Israel: Reflections and Lessons

Yehzekel Waismann, MD\*

**I**srael is a small country ( $21\,946\text{ km}^2$ ) located along the eastern shore of the Mediterranean Sea, with a population of about 7.6 million. More than 90% of the inhabitants live in urban settlements.<sup>1</sup> The country's 26 hospitals report a total of approximately 2.6 million emergency department (ED) visits annually; about 600 000 (2%) are made by children aged 0 to 14 years.<sup>2,3</sup> In most Israeli hospitals, the pediatric ED (PED) functions separately and independently from the adult ED. Until the early 1990s, PEDs treated most medical and some surgical emergencies (such as acute abdomen or intussusception), but children with major trauma were referred to the adult EDs.<sup>2</sup> Furthermore, PEDs were staffed by residents from the pediatric wards, but there was no supervision by pediatricians trained in emergency medicine (EM).<sup>2,4</sup>

In 1991, the author returned to Israel from the United States after completion of a fellowship in pediatric EM (PEM) at the Children's National Medical Center, Washington, DC, and a research fellowship at the National Institutes of Health, Bethesda, MD. Construction of the Schneider Children's Medical Center of Israel (SCMCI), the first urban tertiary-care stand-alone pediatric hospital in Israel, had just finished, and as the first Israeli doctor of



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# Our vision ...



“Provision of professional and efficient medical care, at the highest level, with an emphasis on the quality of service and sensitivity to the needs of the child and his companions”

Slogan: “Small Patients - Great Responsibility”



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# The Scope of Pediatric Emergency Medicine

- Clinical Aspects
- Academic
- Research
- Administrative
- Appropriate infrastructure
- Mass Casualty Incidents



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# Clinical Aspects

**Psychiatric  
Emergencies**

***Major trauma***

***Major Medical  
Emergencies***

***Minor trauma***

***Minor Medical  
Emergencies***

***Child at  
risk***

***Differential  
Diagnosis***

***Surgical  
Emergencies***

***sedation &  
Analgesia***

***Procedures***

***Toxicological  
Emergencies***





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## PEM Concepts and Principles (PEM vs. Pediatrics )

- Prioritizing patient care by severity/urgency
- Initiating therapy on the basis of the physiological/anatomical status
- Decision-making process under uncertainty
- Distinction between stable & unstable patients
- Ensuring efficient patient flow and minimal length of stay in the ED
- Approaching all patients and their families with respect and dignity considering the different cultural and beliefs

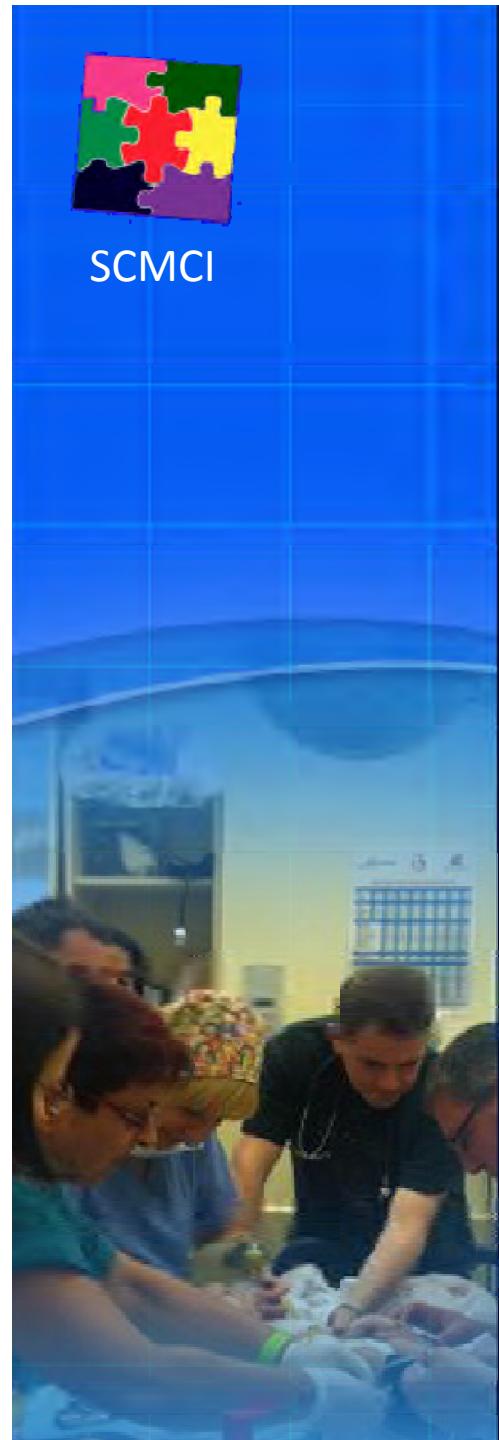


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# PEM Concepts and Principles

- A different differential diagnosis
  - We rule out severe conditions first
- Adhering to the continuum-of-care philosophy
- Hospitalization vs Discharge home
  - Experienced EP admit a smaller percentage
- Attention to continuous quality improvement
- 24h/day, 7 days/week, 365 days/year coverage of Eds by emergency physicians





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## Benefits of Establishing PEM

- Optimal patient care in a timely fashion
- Appropriate environment
  - Organized, provides support to the physical and emotional needs of our patients
- Patient satisfaction
- More cost-effective care



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# How does the development and recognition of PEM help improving patient care?

- Acquiring the necessary body of knowledge & skills (PEM curriculum, boards exams)
- Establishing standards of care
- Helps equality of emergency care
- Ensures appropriate infrastructure
  - Space/manpower/equipment/technologies
- Helps implementation of national regulations



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# What does it take to get PEM established?

- Clinical body of knowledge and skills
- Academic programs/medical education
- Research
- Lobbying - policy makers
- Public opinion leaders
- Public /press/media awareness of the need
- Official recognition by medical, academic and governmental authorities



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# Positive changes in Europe

- Pediatric Section at **EuSEM (2006)**
- **APEC** courses (2009)
- **REPEM** (research in European Pediatric Emergency Medicine, 2006)
- Recognition by UEMS of the **Curriculum for Pediatric Emergency Medicine**
- **PERN (2009)**
- **IFEM** guidelines for Pediatric Emergency Departments (2014)



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# Thank You

