# **PEDIATRIC ACUTE CARE TRAINING CURRICULUM FOR RESOURCE-**LIMITED SETTINGS: RESULTS OF AN ONLINE SURVEY

Shelina M Jamal, MD<sup>1</sup>, Amelie von Saint Andre, MD<sup>1</sup>, and Ndidi Musa, MD<sup>1</sup> <sup>1</sup>Division of Critical Care, Seattle Children's Hospital, Seattle, Washington, United States.

## Objective

- Determine the need for pediatric acute care training in resource-limited settings
- Design a relevant curriculum placing emphasis on highly valued course topics
- Identify and engage worldwide healthcare professionals with an interest in teaching Pediatric Emergency and Critical Care medicine in Kenya

## Background

- Pediatric acute care training (emergency and critical care) medicine) in Sub-Saharan Africa is limited, though the burden of critical illness is significant
- Pediatric Emergency and Critical Care (PECC)-Kenya is a collaboration between University of Washington and University of Nairobi developed to improve management and outcomes of critically ill children in Kenya and the East African region through clinical training in pediatric emergency and critical care medicine

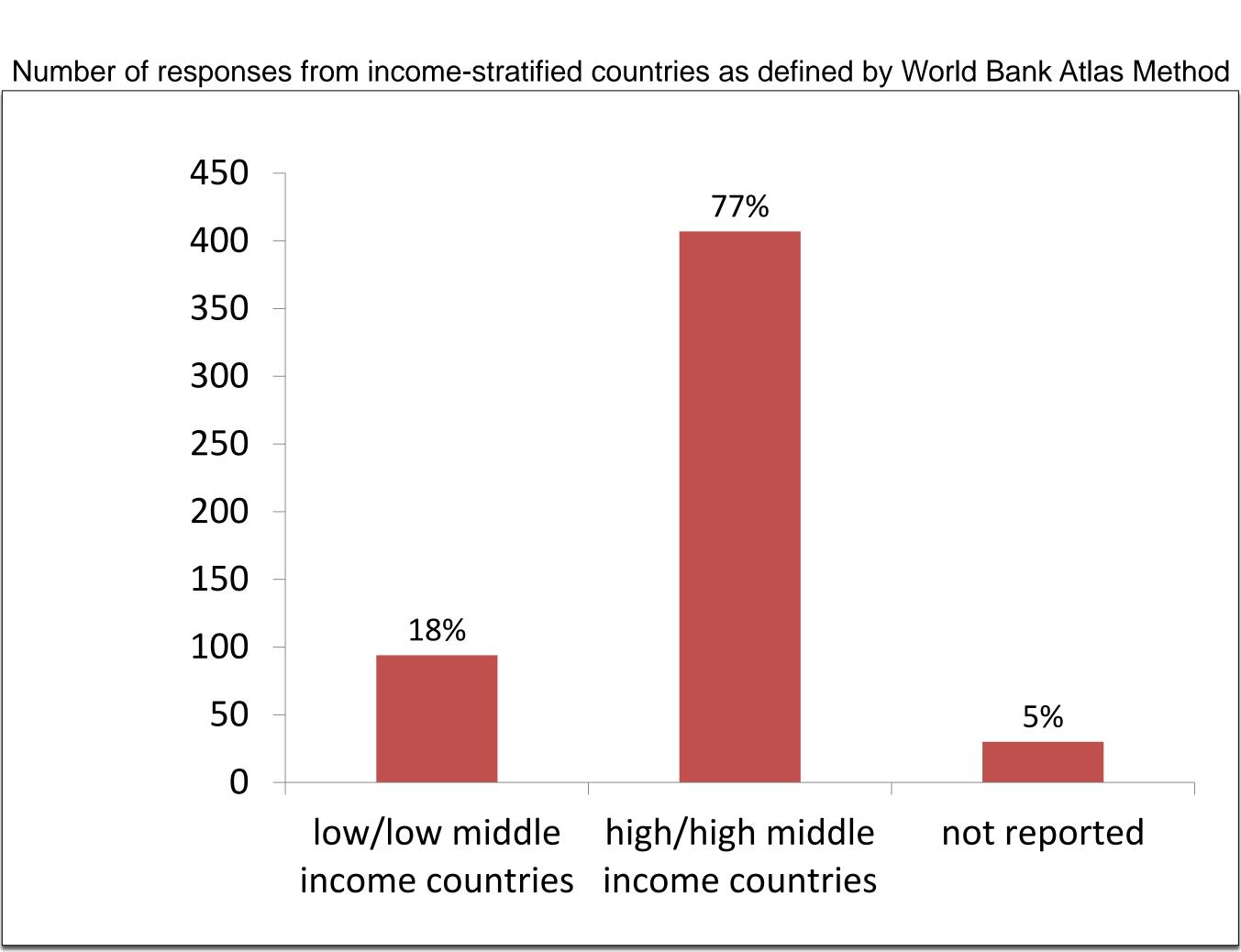
## Methods

- A voluntary, anonymous online survey containing 15 questions was emailed to members of the World Federation of Pediatric Intensive & Critical Care Society (WFPICCS)
- The survey was also accessible on the WFPICCS website and the Pediatric Critical Care Medicine (PCCM) website
- Exempt IRB approval was obtained
- Results were evaluated with descriptive statistics



- We received 531 surveys from 75 different countries from March 2014–March 2015
- Responders:
  - worked in university/academic settings (68%), public (28%) and private (17%) hospitals
  - were critical care physicians (57%), pediatricians (17%), nurses (13%), other (7%), emergency physicians (3%), and trainees (2%).
  - 489/531 (92%) indicated that development of a Pediatric Emergency and Critical Care curriculum would impact patient care in a positive way
  - 425/531 (80%) indicated willingness to teach a 1month course in pediatric emergency and critical care at a resource-limited training site

### 59% (55/94) of responders from low/low middle income countries reported NO pediatric acute care (ED/ICU) training program



Immunologic/rheumatologic disorders Psychiatric emergencies Genitourinary emergencies Oncologic emergencies Congenital heart disease Outcomes research skills Disaster planning and management Hematologic disorders Cardiac anatomy, physiology Ethics

- Anesthesia, procedural sedation Metabolic and endocrine emergencies Renal system and electrolytes Leadership, management, QI Respiratory anatomy & physiology
- Toxicology/environmental disasters Gastrointestinal emergencies Severe malnutrition/refeeding
- Hemodynamic/respiratory monitoring Severe burns and inhalational injury

  - Non-invasive positive pressure
- Shock, recognition, and management

## Conclusion

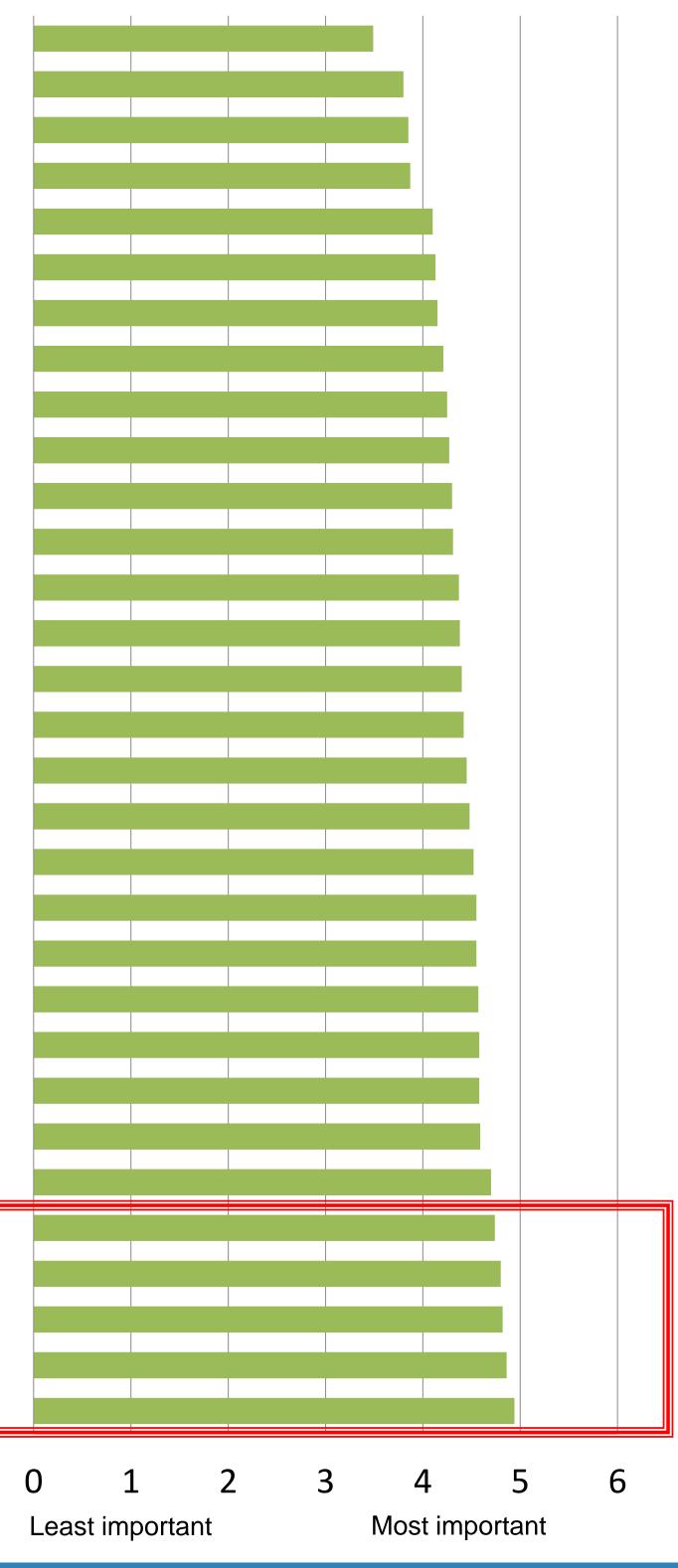
- A relevant curriculum should focus on: shock recognition/management, respiratory disorders/management, infectious diseases, trauma, and neurologic emergencies
- Over 400 healthcare professionals have expressed interest in curriculum implementation

## **Future Directions**





Mechanical ventilation Patient triage skills Team work training Pharmacology Technical procedures Neurologic emergencies Pediatric trauma care Infectious diseases Respiratory disorders



This survey demonstrates a need for the development of pediatric acute care training in resource-limited settings

Interested? Please visit our website for more information: www.deptsofwashington.edu/pecc Questions? Comments? Please feel free to contact us at: shelina.jamal@seattlechildrens.org