First Steps for NU Medical Education Partnership Initiative (NU-MEPI): Pediatric Emergencies Simulation-Based Education at Maseno University in Kisumu, Kenya

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Background

Pediatric Emergency Medicine

Pediatric Emergency Medicine (PEM) as a medical specialty does not exist in many parts of the world. In low- and middle-income countries (LMICs), the majority of care for acutely ill children is done by providers with limited emergency medicine or dedicated pediatric training.

Simulation-based Education

Simulation-based education is a widely recognized tool to teach medically challenging and emergent scenarios allowing participants to gain experience and preparation in a supervised environment without compromising patient safety.

Maseno University in Kisumu, Kenya

Maseno University has recently launched medical education programs and are looking for collaborators to support innovative locally driven medical education programs and are affiliated with the Jaramogi Oginga Odinga Teaching and Referral Hospital (JOORTH) that has a state-of-the-art simulation lab.

Implementation and Results

The NU-MEPI program completed the first two steps of the Kern model for curriculum development.
- Stakeholder meetings occurred with key informants at multiple institutional levels across both Maseno and JOORTH.
- Key activities identified were: Maseno/JOORTH faculty and trainee clinical, research, and education development.
- Key assets and opportunities identified were: leveraging the Center for Experiential Learning Simulation at JOORTH; focusing on education that drives improved clinical outcomes, and engaging with interprofessional and team collaboration around communication.

Our targeted assessment identified the need for further pediatric specialty training, and the opportunity for simulation and case-based learning. Simulation case content was determined and 6th year medical students were identified as target learners. Future directions for research and education activities that our partners aim to pursue was outlined.

Objective

The Northwestern University Medical Education Partnership Initiative (NU-MEPI) project aims to implement a partnership in medical education with the goal of strengthening educational systems.

The inaugural project is with Maseno University in collaboration with Jaramogi Oginga Odinga Teaching and Referral Hospital (JOORTH) to build an emergency medicine pediatric simulation training program.

Methods

Step 1 and 2 of the Kern Model:
(1) problem identification and general needs assessment
(2) targeted needs assessment

Both were completed with local and key stakeholders at Maseno University and JOORTH. Topics, contents, and curriculum were developed, and we conducted several asset-based needs assessments with key stakeholders to agree upon step 3 of the model; the development of goals and objectives of the curriculum as well as the overall partnership.

Next Steps

Next steps are to translate these assessments to learning goals and objectives, agree upon educational strategies and finally implement the simulation.

Acknowledgements

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Background

Pediatric Emergency Medicine
• Medical specialty that does not exist in many parts of the world
• In low- and middle-income countries (LMICs), care for acutely ill children is done by providers with limited emergency medicine or dedicated pediatric training

Simulation-based Education
• Widely recognized tool to teach medically challenging and emergent scenarios
• Allows participants to gain experience and preparation in a supervised environment without compromising patient safety
The inaugural NU-MEPI project is with Maseno University in collaboration with Jaramogi Oginga Odinga Teaching and Referral Hospital (JOOTRH) to **build an emergency medicine pediatric simulation training program**.
Method: Kern Approach

Implementation and Results

Step 1: Problem Identification and General Needs Assessment

• Need for further pediatric specialty training
  – Faculty and trainee- clinical, research, and education development
• Stakeholder meetings occurred with key informants at multiple institutional levels across both Maseno and JOOTRH

Step 2: Targeted Needs Assessment

• Specific simulation case content topics
• 6th year medical students as target learners
• Future directions for research and education activities
• Utilization of simulation lab and evaluation implanted through covert clinical observations
Next Steps

• Translate assessments into specific learning goals and objectives
• Determine educational strategies
• Implement the simulation program (virtual)
Thank You

Special thanks to the Strohm Family, Maseno University and JOORTH