

communication technology in order to reach a larger public; to develop expertise and leadership in faculty development in GH; and to insure long term sustainability.

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Interactive Training in Emergency Preparedness and Response [EPR]: Innovative Class Simulation Module that Helped Save Lives in Recent India Floods

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Program/Project Purpose: Increasing numbers of environmental emergencies (disasters, pandemics) and manmade disasters around the world, require diverse training of healthcare professionals and students at all levels. Global Health (GH) teaching programs struggle with developing an optimal model which could move the needle from theoretical understanding of the issues to real-life implementation and capacity building.

An innovative module – “WoE”- developed under the Ben-Gurion University of the Negev Global Health Track was successfully implemented during multi-cultural GH training courses over the last 4 years. A course graduate reported her effective use of WoE during 2015 floods in Chennai, India which supported saving of lives there. Lessons-learned from WoE could inform other GH programs which are in need of effective EPR modules.

Structure/Method/Design: Imitating in the classroom a well-functioning World Health Organization’s SHOC Room (JW Lee Strategic Health Operations Centre) under an emergency situation is the fundamental concept of WoE. Students are pre-assigned to their roles (e.g. Technical Officer for Epidemics, Country Liaison Officer, UNICEF Adviser on Youth in Emergencies, Representative of the WHO Director General, Press Officer) with sufficient lead time to study it and be prepared for a simulation of an unfolding emergency.

Classroom is arranged with features corresponding to the SHOC Room in Geneva, Switzerland and an Event Manager is rolling out a written simulation plan. A Monitoring & Evaluation team (2-3) documents and records the exercise for an evaluation and reflections session. Written assignments, pre-reads and a preparation session are part of the WoE Module.

Outcome & Evaluation: During a declared emergency in Chennai, India due to floods, a graduate of the class (SJ) implemented the principles and essentials practiced during the WoE module taught in Israel to coordinate a local response translated into effectively saving lives during that emergency (Nov-Dec 2015,) 500 people have been killed, 1.8 Million were displaced, and a record of 1049mm of rain was registered.

The responses of over 50 participants, including written and video-recording feedback and evaluation data, had been used to qualitatively evaluate the module. Lessons learned for curricula developers, teachers and students will be discussed.

Going Forward: We intend to expand the implementation of the WoE exercise through collaboration with other institutions in GH.

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Improving Newborn Care in Resource Poor Settings: Evaluation of a Combined Training and Quality Improvement Approach

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Background: Every year 2.8 million newborns die worldwide due to complications in the newborn period. Newborns with low birth weight <2,500 g (LBW) are at greatest risk for death due to complications related to asphyxia, prematurity, and infections. Outcomes for newborns in resource poor countries have seen little improvement over the last decade. The objectives of this study are to measure changes in newborn care quality in a hospital setting in rural India following a combined training and quality improvement intervention.

Methods: This study took place at the Mota Fofalia Pediatric Center in Gujarat, India between February 2014 and July 2016. Assessments of 10 newborn care quality measures were completed at baseline and at 6 month intervals. We utilized previously validated quality measures for newborn care in resource poor settings and recorded compliance with quality measures through direct observation of care using a standardized data collection tool. At training intervention, hospital staff received structured training in intra-partum, post-partum and LBW newborn care according to best practice protocols and WHO guidelines. Training was based on the Helping Babies Breathe protocol for immediate newborn care and the Integrated Management of Maternal and Neonatal Care program. The QI intervention consisted of ongoing data review by local management and PDSA improvement cycles based on gap analyses on reported issues.

Findings: Since the implementation of staff training intervention, a total of 112 deliveries and 718 care encounters in 326 newborns were observed. The mean age was 2.75 days (range: 0 to 26 days) and mean birth weight was 2.549 + 0.49 kg (range: 1.00 to 3.68 kg). At baseline, provider performance for care quality in the immediate newborn period (delivery room resuscitation), postnatal care and care for LBW babies was low (0%). Following the interventions, care quality improved in the majority of quality measures. Ongoing challenges with bag and mask ventilation during resuscitation, equipment use, and discharge for LBW babies exist.

Interpretation: An approach utilizing a training and QI intervention improves care in most aspects for newborns in resource poor settings.

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