Neonatal Resuscitation in Disaster Settings: Updating Curriculum for Non-Medical Global Workers

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Abstract:

Despite declining mortality rates of children worldwide, there continues to be a disproportionately large number of neonates (defined as infants within their first 28 days of life) who die every year compared to older children. Many public health interventions have been undertaken to save pediatric lives, but this incongruity suggests that the neonatal age group has not received the same amount of attention as their older peers. Moreover, although most of these deaths occur in low resource settings abroad, there is evidence to suggest that relatively simple and affordable measures can be put in place to lower neonatal mortality that would be feasible to bring to such environments. Our project sought to improve the availability and quality of one of those measures: education and skills training for birth attendants. The "Global Health and Disasters" course is offered on the Anschutz Medical Campus every fall and is also taught internationally, with up to 13 low resource countries participating prior to the COVID-19 pandemic. It focuses on training non-medical professionals to have a basic understanding of how to respond in a low resource setting during a natural or man-made disaster through a series of modules. One such module on neonatal resuscitation was outdated and difficult to follow in the course manual. We undertook a complete re-writing of this chapter starting with background data collection and literature review. We heavily utilized the World Health Organization's Essential Newborn Care and Helping Babies Breathe to re-structure the content and make it more user

friendly, as well as to expand the topics covered to include a brief introduction to breastfeeding. The entirely new course manual now awaits publication and will be implemented in class in the fall of 2025, both at the Anschutz Medical Campus and at trainings for healthcare workers and untrained birth attendants abroad. By updating the course manual for "Global Health and Disasters" into compliance with the newest evidence-based practices and increasing its approachability to new learners, this project will increase the number of neonates who are safe during the intrapartum period and in their first hours of life, thereby decreasing the gap in falling mortality between older children and this particularly vulnerable population.