

Background

Infant mortality accounts for 41% of all childhood deaths and is a common marker used to compare healthcare systems across the world. Infant mortality measures the number of deaths in infants less than 1 year old per 1,000 live births. While the infant mortality rate can be as low as 2 or less in resource-rich nations, it can be higher in war-torn or low resource regions. Haiti, one of the poorest countries in the world has a neonatal mortality rate of 27 per 1,000 births. There are multiple reasons for their high infant mortality rate. There are not enough hospitals or hospital staff and because of the landscape many small rural communities do not have access to healthcare. According to the global distribution of neonatal death 24% of deaths at birth are related to birth asphyxia, Helping Babies Breathe (HBB) training tackles this issue (figure 1). HBB, a training curriculum from the American Academy of Pediatrics (AAP), is a basic resuscitation that has been shown to improve infant mortality. This curriculum was designed to specifically meet the needs of resource limited environments. HBB focuses on the golden minute including immediate application drying, stimulation (and suction) if needed, and positive pressure ventilation (PPV) within the first minute of life (figure 2). In Tanzania, a national-focused HBB training reduced early infant mortality by 47% and fresh stillbirths by 24%.*

Goals

1. Become a trainer for Helping Babies Breathe
2. Teach effective neonatal resuscitation to future trainers
3. Learn to effectively maintain relationships with international partners
4. Learn to effectively work with health care workers from other healthcare systems

Objectives

- Record the number of providers who complete training.
- Document potential partners' names, contact information and any formal or informal agreements made in preparation for going on future trips.

Materials and Strategies

- Prior to traveling to Haiti, I completed a training course in Helping Babies Breathe to become a master facilitator and trainer.
- For the trip, I plan on traveling to Borgne, Haiti in the Spring/ Summer of 2019, a city in northern Haiti with several small surrounding rural communities. I am partnering with a Rochester-based organization mainly centered in Borgne called H.O.P.E. (Haiti Outreach Pwoje Espwa) which focuses on improving four major disciplines - health, clean water, economy and education, all key to improved living conditions. H.O.P.E. puts a strong emphasis on local involvement in these areas and strongly encourages community ownership and accountability. H.O.P.E. has been taking great strides in improving women's health by recently hiring a new OB/GYN for their hospital, building new operating rooms for obstetrical and gynecological emergencies, opening mobile clinics for pre and post-natal care and providing counseling for family planning.
- There are three major audiences that I plan on targeting in Borgne including the delivery room staff at the H.O.P.E.- run hospital at Borgne, the delivery room staff at a remote clinic in Tibouk, and the traditional birth attendants in the community. Overall, there are about 70 traditional birth attendants in these areas combined.

Evaluation

This project will be evaluated based on

- The number of providers we are able to successfully train in the HBB curriculum.
- The number of locations where we successfully implement the HBB curriculum.
- The number of new medical contacts we are able to maintain communication with after this trip for purposes of future trips.

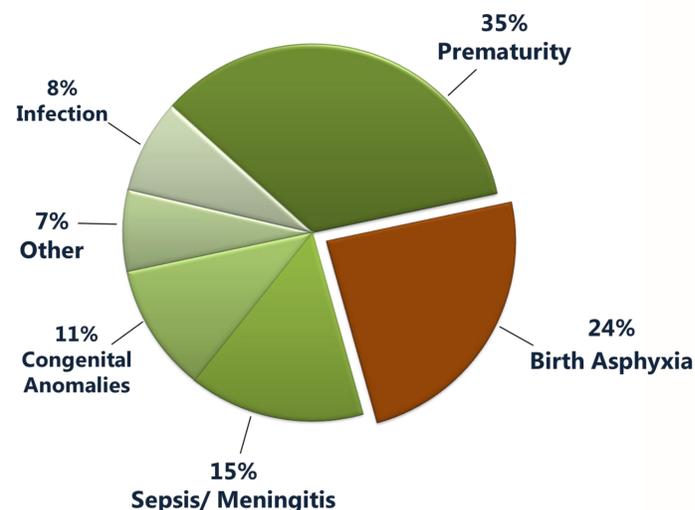
Future Direction & Sustainability

I will be working with Borgne-native Dr. Thony Voltaire, the medical director of H.O.P.E. who is currently working with the traditional birth attendants in the city and surrounding rural area on hand hygiene, sanitary practices during delivery and ability to recognize signs of danger during pregnancy. All of the mannequins purchased for teaching purposes will be left in Haiti for continuing education so the birth attendants who have passed the class can teach other birth attendants in the village and surrounding rural areas. Mannequins that are left in the hospital will be used to maintain skills and learners will be expected to practice on a regular basis.

References

* Newborn Mortality and Fresh Stillbirth Rates in Tanzania After Helping Babies Breathe Training. (2013). Pediatrics, 131(2). doi:10.1542/peds.2012-1795d

Figures



Data from WHO, Global distribution of deaths among newborns, by cause, 2016

Figure 1 (above). According to the global distribution of neonatal death 24% of deaths at birth are related to birth asphyxia, Helping Babies Breathe (HBB) training tackles this issue

Figure 2 (right). HBB focuses on the golden minute including immediate application drying, stimulation (and suction) if needed, and PPV within the first minute of life

