

Helping Babies Survive: Lessons Learned from Global Facilitators – The First Decade Michael K. Visick, MD, Hasan S. Merali, MD, MPH, Erick Amick, MPH, MA, and Renate D. Savich, MD Latter-day Saint Charities, McMaster Childrens Hospital, American Academy of Pediatrics, University of Mississippi Medical Center

Background

Helping Babies Breathe (HBB) was first launched in 2010 as an evidence-based educational package to train healthcare workers in neonatal resuscitation in low- and middle- income countries (LMIC). Manikins and basic newborn resuscitation equipment were developed by Laerdal to be used in conjunction with the educational materials for training. Two subsequent courses, Essential Care fore Every Baby (ECEB) and Essential Care for Small Babies (ECSB), were later added to teach immediate newborn care and management of complications of prematurity. Together, these courses create the Helping Babies Survive (HBS) curriculum. In the decade since, although much has been learned regarding best practices for effective trainings, overcoming challenges to implementation, and sustaining impactful HBS interventions around the world, there has been no purposeful examination of lessons learned from HBS Master Trainers. This represents a critical gap in knowledge of "what works" in HBS implementation. The intent of this study is to gather data on lessons learned from the field, to identify the essential elements of successful HBS interventions around the world.

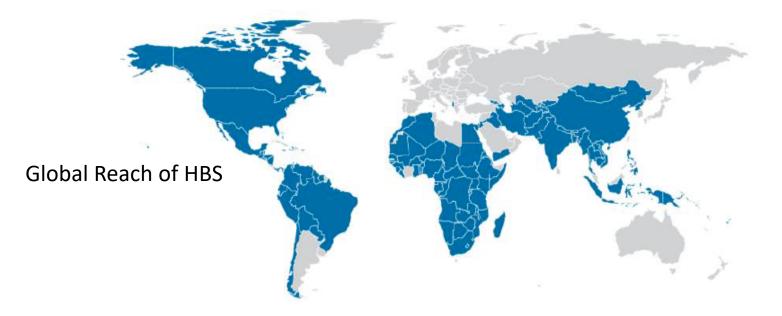
Methodology

To estimate the total global reach of the HBS program, we obtained equipment distribution data from Laerdal and HBS material download data from the HBS website as of March 2020. To understand the lessons learned from Master Trainers who have experience conducting courses, we used three sources of data for the qualitative analysis. First, we examined the records and comments from the HBS website of courses that were recorded by trainiers. Next, we examined HBS Stories from the Field, first-hand accounts of training published on the HBS website. Finally, we sent a survey to all HBS Master Trainers, which asked where they have taught HBS and included six questions related to their experience:

- What worked best for your course?
- What did not work well for your course?
- Can you name one completely unanticipated challenge you faced and how you were able to overcome it?
- What advice would you offer others implementing HBS programs in the field?
- What is one thing you would have done differently?

Results

Since its inception, over one million pieces of equipment (simulators, Flipcharts, Provider Guides and Action Plans) have been distributed worldwide. HBS materials have been downloaded from the website more than 130,000 times and have now been translated into 28 languages . Combining data from distribution, downloads, and courses taught, we estimate the total reach of HBS to be approximately 850,000 providers across 158 countries.



In the qualitative analysis, three major themes emerged that were critical for building a sustainable program: Support, Local Context, and Planning. Ten subthemes were also identified as critical for success of the training program and sustained implementation.



Comments from international HBS trainers about **Support**:

Local Contacts

"Do an assessment before you go to teach. Work on developing a strong in country partnership in order to create a sustainable program.'

"Must identify a local champion prior to the training...after (the training) must continue to communicate with the local champion...local champions can gather data—share with trainers."

Mentor new Trainers in putting on a course or training others prior to your team leaving the area/country.

It's vital to have the in-country Hospital administration, Ministry of Health and key players buy off on the training. We have been going for five years and are well known and have MOU with the hospital at the training clinic we built – but it took a long time.

Communication

"After the training there needs to be a plan in place as to how the participants will practice skills. This can be through the use of a skills corner that is equipped, where healthcare workers practice at the beginning of each shift."

"It is difficult to sustain HBB skills over time, and continued refresher trainings are needed."

"Return again and again to continue to mentor. Let them contact you with questions and stories of successes. Help them set up QI systems and check to be sure they are continuing to use the systems. Check in with those in charge of QI and hold them accountable."

"Provide training materials way in advance." Give participants the Provider Guide at least 2-3days in advance to study.

Hands-on Practice

"Train and re-train and leave a baby (Neonatalie) where healthcare providers can practice between deliveries etc."

"Then we have 5 active resuscitations with the staff in the labor ward, real live, before they are deemed competent." Teaching at the bedside and in labor ward.

Comments from international HBS trainers about Local Context:

Demonstrate Success

Go for it! Engage your students by telling stories of your experiences and encouraging them to tell stories of theirs.

"Create benchmarks for institutions to determine when they've integrated the skills into their protocols effectively. We saw a dramatic reduction in newborn death, but it took about two years.

Language

"Allow yourself enough time to go through the material slowly. Some participants may not have any experience, English is their second language and need you to speak slowly to understand, or you may need to use an interpreter."

"We didn't know most of our audience was illiterate and spoke a native language (not Spanish)...We didn't know our students wouldn't be able to read/write."

Gaps in Care or Practice

"Know your audience. I always want to know what they don't have so I can work with what they do have. Understand they will not be able to perform as if they work in a US hospital. It will be different, but they have the talent and desire to do a good job for their patients. Help them figure out the work-arounds. Give them the gift of confidence that comes with knowledge. Love them. "

Training midwives, nurses, and physicians helps to break down barriers, create bridges between

Don't assume what you teach in a classroom will, translate into active ward care.

Time

HBS has had incredible reach worldwide since its inception ten years ago. Findings from this study offer further guidance on best practices for implementing and sustaining HBS programs and provide insight into challenges and successes experienced by HBS Trainers working in LMIC settings.



Comments from international HBS trainers about **Planning**:

"More time. There is never quite enough time. Making them come back a separate day is almost impossible in most venues."

Consider a stipend for participants, esp. those travelling from a great distance, to offset that cost.

Determine beforehand what time the course must end for participants to be safe travelling home.

Unexpected

"We had miscommunication regarding it being a 2-day program and we had to cram in one day. We concentrated on the keeping the baby warm and delayed cord cutting and how that applied directly to their practice."

"Difficulty downloading the HBB resuscitation video that is so impactful. I was not prepared how weak the internet access was in a city of 70,000 ppl. This would have been completely avoided if we would have downloaded it in the states prior to take-

The doctors had to go and cover the wards during breaks and lunch, so "we allocated one Trainer to catch them up if they missed any of the training."

Adapting

"Plan, plan, plan, and then plan some more. Anticipating every possible struggle or complication is what helped my team survive. Having team members with critical thinking skills is a MUST."

"I was still surprised by HOW resource poor some places were--no running water, no electricity, no cord clamps or ties, etc. Talking with people about what they do and what they do have available was critical, and then catering training to use what they can access."

Being "willing to change table (assignments) if it became apparent that a participant was struggling once the course had started."

Equipment

"Continual hospital renovations that interrupted training and ability to localize /maintain training and clinical supplies."

"Host country did not have enough equipment for program to be sustainable in rural outlying healthcare centers."

"Provide posters, workbooks NeoNatalies to leave in country"

There is a tendency to try and teach 10 or even 20 learners with just one NeoNatalie because the skills are so sought after. One Trainer eliminated this barrier by scheduling different times for each pair to practice with the mannequin.

Conclusions

For more information, please visit: hbs.aap.org