Helping Babies Breathe: Lessons learned guiding the way forward: Executive Summary

A 5-year report from the HBB Global Development Alliance
Helping Babies Breathe:
Lessons learned guiding the way forward:
Executive Summery

June 7, 2015

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The concept behind Helping Babies Breathe had been taking shape in the minds of AAP volunteers and staff for many years. Beginning in the 1980s, the AAP advocated strongly for at least one person skilled in neonatal resuscitation to be present at every birth in the United States. A daunting task at the time, it was embraced by leadership and eventually accomplished, largely through a dedicated volunteer network and like-minded nursing colleagues. Many of the same individuals responded to international requests for training and came to realize that a program focused on hospital births was simply not enough to address the global burden of deaths. No matter where in the world or what the economic circumstances, all mothers and babies deserve to have an attended birth.

Born of the shared conviction that every human life has value, what is now known as Helping Babies Breathe took shape. The determination to develop the best educational materials and most effective learning methodology was strong. Quality, evidence base, credibility, and reaching out to a diverse set of partners throughout the development and evaluation process built a foundation for the program that allowed it to reach communities in resource-limited areas of the world and make a difference. We continue to be motivated by our commitment that all mothers and babies deserve the best possible chance at life.

Global Development Alliances (GDAs) are USAID’s premiere model for public-private partnerships, helping to improve the social and economic conditions in developing countries and deepen USAID’s development impact. The Helping Babies Breathe partnership has implemented USAID’s GDA model and has clearly demonstrated that this is an effective model for rapid global rollout of a health intervention.

I congratulate the partnership for its achievements. This GDA exemplifies the power of partnership; it has leveraged and relied on each partner’s assets, shared knowledge, influence, networks, and program platforms and significantly increased facility-readiness and access to newborn resuscitation. Among the 1,500 public-private partnerships that USAID has established since 2001, this GDA received USAID’s 2011 Excellence Award. Building on its strength, Secretary Clinton announced the establishment of the Survive and Thrive GDA in 2012, broadening the scope of the partnership to include maternal, newborn, and child health interventions with even greater potential for contributing to the US Government’s goal of ending preventable child and maternal deaths.

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Foreword

The concept behind Helping Babies Breathe took shape in the minds of AAP volunteers and staff for many years. Beginning in the 1980s, the AAP advocated strongly for at least one person skilled in neonatal resuscitation to be present at every birth in the United States. A daunting task at the time, it was embraced by leadership and eventually accomplished, largely through a dedicated volunteer network and like-minded nursing colleagues. Many of the same individuals responded to international requests for training and came to realize that a program focused on hospital births was simply not enough to address the global burden of deaths. No matter where in the world or what the economic circumstances, all mothers and babies deserve to have an attended birth.

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Susan Niermeyer, MD, MPH, FAAP
On behalf of the Helping Babies Breathe Planning Group and The American Academy of Pediatrics

Story contributed by Sherri Bucher, Indiana University
Executive Summary

The Helping Babies Breathe (HBB) Global Development Alliance (GDA) was established with the goal of achieving a significant reduction in neonatal morbidity and mortality through strengthening the performance of providers who prevent and manage newborn asphyxia in low-resource settings. GDAs are public-private partnerships that seek to identify and capitalize on common or complementary interests among partners who work together to improve social and economic conditions in less-developed countries. The HBB GDA was founded in 2010 by its five core member organizations: the American Academy of Pediatrics (AAP), the United States Agency for International Development (USAID), Laerdal Global Health, Save the Children, and the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD).

The formal establishment of the HBB GDA provided partners with a platform for working together and allowed them to define relationships and construct a common agenda. The HBB GDA developed a Memorandum of Understanding (MoU) that outlined key policies and procedures, objectives, and principles to guide its actions. The partners agreed on five objectives: (1) encourage attention to increased international, regional, and national commitment and resources for newborn resuscitation as a part of Essential Newborn Care (ENC); (2) improve the availability of high-quality, appropriate and affordable resuscitation devices and training materials; (3) improve the resuscitation capabilities of birth attendants with emphasis on skilled birth attendants; (4) strengthen the supply chain logistics system for resuscitation devices; and (5) evaluate the impact of resuscitation programs at scale. The partners agreed to abide by five principles that were at the core of the GDA: (1) inclusiveness and collaboration; (2) country-owned and country-led; (3) integration within a broader package of ENC; (4) shared goal, results, and recognition; and (5) brand non-exclusivity.

In this document, we chronicle the implementation of HBB from its inception as a concept to subsequent global rollout. The objectives of the document are to describe how a public-private partnership sought to address the problem of high newborn mortality due to birth asphyxia and to detail the strengths and challenges that were encountered during implementation as countries introduced HBB across the globe.

Achievements

The HBB GDA has demonstrated that the GDA model can be a highly effective strategy for health development at global and country levels.

Global: Between June 2010 and December 2014, the HBB GDA mobilized multiple organizations to contribute monetary and non-monetary resources valued at about $58 million (USAID $21 million; Partners $37 million). Through their global and national program platforms, networks, and partnerships, the GDA raised global awareness about asphyxia-related newborn mortality and the feasibility of tackling this major cause of newborn death and disability with a simple and demystified educational program. This work sparked the development of simpler, more user-friendly and effective innovative technologies that were integrated in education programs across the world. It influenced the update of evidence-based global policy recommendations, created awareness about the lack of appropriate indicators for tracking progress and outcomes of resuscitation interventions both at global and country level, and increased the global supply of resuscitation equipment.

Country: The global partnership was mirrored at the country level where multiple partners came together to introduce and roll out HBB. Between June 2010 and December 2014, the GDA introduced HBB in 77 countries; at least 52 of these introductions were led and coordinated by national governments. Many of these countries were galvanized to change national plans, policies, and guidelines; incorporate resuscitation data into existing or newly created registers; support programs to increase the number of trained providers; and equip health facilities with resuscitation devices. Program reports from several countries indicate a high rate of successful resuscitation, ranging from 79 percent to 89 percent, among babies who do not breathe at birth. Seven countries (Bangladesh, Cambodia, Colombia, Ethiopia, Malawi, Tanzania, and Uganda) have now begun to implement HBB in over 40 percent of health facilities where births take place. Facility readiness was relatively high in Bangladesh, Cambodia, Ethiopia, Malawi, Tanzania, and Uganda where survey and program data were available; across these countries, 53 percent to 88 percent of facilities were equipped with resuscitation devices, and 44 percent to 75 percent of health providers were trained in neonatal resuscitation. However, access to resuscitation continued to be hampered by low coverage of facility births.

The impact study of HBB conducted among 80,000 births over two years in Tanzania reported a significant reduction of early newborn mortality (within the first day of life) by 47 percent and fresh stillbirth by 24 percent.1
Lessons learned

The HBB GDA demonstrated that global public-private partnership was an effective strategy for rapid rollout of a health intervention. The partnership leveraged and relied on each partner’s assets, cash and in-kind contributions, shared knowledge, influence, networks, and program platforms. The partnership also facilitated coordination and harmonization of training methods and program approaches; and it lowered the cost of products such as medical devices and training materials. The GDA influenced global policy on interventions, shaped the global market for products, stimulated the development of innovations and educational materials, and was a powerful force for advocacy through the widespread reach of its partners’ influence and networks.

In the absence of a blueprint for scaling up resuscitation, one of the most important lessons learned by the GDA partners is that achieving impact requires more than training providers and distributing equipment. The evidence at hand suggests that, for HBB, the answer lies in an approach to implementation that is tailor to the local context, looks beyond training and provision of equipment to other system components, and is carefully implemented, monitored and evaluated. The simplified HBB training methodology leads to significant improvements in knowledge and skills of birth attendants in simulation exercises but this does not necessarily translate into improvements in clinical performance. Promising approaches to address this problem that are being introduced by many countries include low-dose, high frequency practice drills, mentoring, and quality improvement processes integrated with monitoring and supervision systems.

HBB is recommended as an approach to address birth asphyxia for babies born in health facilities but has limited reach in countries where a significant proportion of babies are born at home. Referral to a higher level facility is often not a viable option for birth asphyxia; the resuscitation action must be immediate or within a few minutes of birth if the baby is to survive without life-long complications. Thus, coverage of newborn resuscitation continues to be very low in settings where it is hampered by low coverage of facility births. Given this, a clearer articulation of implementing the initial action steps (drying, additional stimulation, and airway clearing) as an effective resuscitation intervention that can be accomplished by community health workers and family members in home births might be a possible interim strategy in settings where the coverage of facility births is very low even as countries are building and expanding the capacity of facility delivery.

Birth asphyxia and other intrapartum complications are often the result of suboptimal management of labor and delivery. Neonatal resuscitative care must be integrated within stronger maternal and newborn health systems that provide effective obstetric care. Implementation and evaluation of HBB and essential newborn care provided evidence that up to a quarter of stillbirths can be averted by training providers how to correctly classify stillbirths and that many non-breathing babies who are misclassified as stillborn can be resuscitated successfully if action is taken immediately.

Nigerian midwives practicing simulation based HBB scenarios
Sustaining impact requires government leadership and ownership of the program; institutionalization within national plans, budgets, and health systems; and public awareness. Equally important is the establishment of partnerships in countries that build on national technical working groups or steering groups and nurture national champions to demonstrate their leadership in support of the national programs. Health professional associations play an important role in almost all countries as influential and respected champions, advocates, mentors, and trainers of the HBB program.

**NEWBORNS: OUR FUTURE**

**In 2013**
- 139 million babies were born
- 10 million babies needed help to breathe with simple drying and rubbing for stimulation
- 6 million babies needed help to breathe with a bag and mask for ventilation
- 1 million babies needed help to breathe with advanced resuscitation
- 2.8 million babies died within the first month of life
- 2.6 million babies were stillborn
- 560,000 newborns died from intrapartum-related complications including asphyxia

**By 2030**
- We will help to end preventable newborn deaths by achieving a target of 12 newborn deaths per 1,000 live births (Every Newborn Action Plan)
- We will prevent a third to one-half of intrapartum-related deaths with effective resuscitation
- We will prevent a quarter of stillbirths with effective resuscitation

**Action**
- We will prevent a third to one-half of intrapartum-related deaths with effective resuscitation
- We will prevent a quarter of stillbirths with effective resuscitation

The HBB GDA has advanced the cause of newborn health and laid the foundation for a significant reduction in asphyxia-related newborn morbidity and mortality in the future. The GDA has guided HBB through a successful initial period during which HBB has been widely adopted. Moving forward, the partners have already taken steps towards the second phase of partnership, drawing on important lessons learned, to work more strategically and deliberately towards improved quality of care, sustainability and national impact.

Broadening the scope: The HBB GDA has broadened the scope of its mandate beyond newborn resuscitation by merging with the broader and newly established Survive and Thrive GDA towards vigorous support on integrated newborn, child and maternal interventions in partnership with pediatricians, midwives, and obstetricians. To address additional causes of newborn death, the Survive and Thrive partners are developing a suite of educational modules in the same style as the proven HBB program, Helping Babies Survive, with the objective of tackling all major causes of newborn death - asphyxia, infections and preterm/low-birth weight complications. A separate suite of modules on Helping Mothers Survive is also under development.

Strengthening systems and quality improvement processes: Under the umbrella of the Survive and Thrive GDA, HBB efforts will shift from rapid rollout in new countries to a greater emphasis on deepening and expanding support in countries where HBB has already been introduced with the objective of achieving high quality care, sustainability, and impact. The GDA has begun to focus on strengthening health systems, including commodity-related issues, data recording and reporting, and quality improvement processes to improve and sustain provider skills which will be an integral component of the Helping Babies Survive program.

Reaching every newborn: Since the HBB strategy is focused on health facilities, the potential for HBB to achieve impact is limited in countries where rates of facility birth are low. Partners will need to increase public awareness and develop and test alternative strategies to efficiently reach newborns who suffer from birth asphyxia but are born at home and in community settings. These may include alternative formulations of HBB (e.g., immediate drying, additional stimulation, and airway clearing) for community-level providers in supervised home births.

The body of global experience suggests that the HBB initiative will require additional years of intensive support if it is to achieve the impact envisioned by the founders of the Alliance. Given the investments that members of the Alliance have made in HBB, the passion and dedication that they still have for their effort, and the plight of millions of newborns that struggle to breathe at birth, it would be a missed opportunity of the highest order to fail to further strengthen the global HBB effort.
Founding Partners, Helping Babies Breathe Global Development Alliance

American Academy of Pediatrics
Save the Children

USAID Implementing Project Partners

USAID ASSIST Project
PATH
MCHIP
Maternal and Child Survival Program
coregroup

Additional Partners in the Growing Survive and Thrive Global Development Alliance

The American College of Obstetricians and Gynecologists
IPA
AMERICAN COLLEGE OF NURSE-MIDWIVES
Jhpiego
Sigma Theta Tau International
Johnson & Johnson
March of Dimes

MILLENIUM VILLAGES
American Heart Association
American Stroke Association
GLOBAL HEALTH MEDIA
CMMB

USAID Implementing Project Partners

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