

**Testimony of Henry B. Perry, MD, PhD, MPH
Senior Associate, Department of International Health,
Johns Hopkins Bloomberg School of Public Health**

**Congressional Hearing: The First One Thousand Days of Life – Development Aid
Programs to Bolster Health and Nutrition**

**House Committee on Foreign Affairs
Subcommittee on Africa, Global Health, Global Human Rights, and International
Organizations
Rayburn House Office Building**

25 March 2014

Mr. Chairman, distinguished Committee members, staff, and others gathered here today, I am honored to be asked to speak today regarding what our government can do to support the first 1,000 days of life in places around the world where the risk of death is high and where healthcare services are scarce. I speak as an American citizen who has been working for 35 years with child survival programs and, at this latter point in my career, as someone who is now engaged in research, writing and teaching about child survival programs.

One of the greatest and unheralded advances in global health over the past 50 years has been the marked reduction in the number of mothers and children dying around the world even though the number of pregnant women and births has greatly increased. Yet, in spite of this progress, we must recognize that we have a long ways to go, since we have the scientific know-how and the proven low-cost program strategies to further accelerate reductions in the number of readily preventable deaths. The United States Government has been a leader in this process over the past 50 years – by funding research and programs that have contributed to this progress. I am here to urge the Congress to continue and in fact expand its support for research and programs that are geared to reducing readily preventable deaths among women and children, particularly during the first 1,000 days of life.

At present, there are estimated 3 million stillbirths around the world each year, and 99% of these occur in low-income countries.¹ In addition, there are approximately 3.8 million live-born children who die each year before the age of two years, and three-fourths of these deaths among occur during the first month of life.² More than 300,000 mothers die each year from maternal causes.³ Thus, altogether, more than 7 million deaths are occurring each year among viable fetuses that have reached at least 6 months of life, among live-born children before reaching their 2nd birthday, or among mothers in the pre-partum, intra-partum, or post-partum periods. The period of greatly heightened risk of death for both the mother and the infant is the time during labor and delivery and the first 48 hours following birth. At least one-third of stillbirths are among children who suffer and die from intra-partum asphyxia, from a complication of prolonged labor, eclampsia, or some other complication of the delivery process.

The tragedy is that the great majority of these deaths can be readily prevented at low cost. This is a tragedy not only a public health terms but also in moral terms as well. Governments all over the world – including the United States – along with foundations, international donors, and citizens of the world with even a few dollars to spare – all of us should be contributing to the effort to eliminate the disparities in mortality that now exist among mother and among their children during the first 1,000 days of life. In fact, the United States government and many other governments around the world have joined with UNICEF and the World Health Organization to eliminate preventable maternal and child deaths by the year 2035. This campaign, referred to as A Promise Renewed,⁴ was initiated here in Washington at Georgetown

University by our own government in collaboration with UNICEF, the World Health Organization, and the governments of India, Ethiopia, Democratic Republic of Congo, and Nigeria. Today, 176 countries have signed on to achieve the goal of eliminating preventable maternal and child deaths by 2035, as have hundreds of NGOs and faith-based organizations. The campaign for A Promise Renewed will need strong support over the next two decades from not only governments but also from individuals throughout the world, civil society, businesses, foundations and others in our global community.

How can this be achieved? The basic and simple answer is to ensure that every pregnant woman and every newborn has access to a set of evidence-based interventions from a trained and supported health worker. Most of these interventions can be provided by community-level workers with minimal training, working outside of health facilities and in the home using simple, low-cost medicines and commodities.

What are these interventions? Among the most important of these are the following:

- Provision of antenatal care (including provision of balanced energy supplements and multiple micronutrients as well as detection and treatment of syphilis, HIV, or who live in malaria-endemic areas) to pregnant women;
- Delivery in a clean environment by a skilled birth attendant who has access to referral care if needed and the capacity to manage birth asphyxia;
- Postnatal care for the mother and baby
- Exclusive breastfeeding during the first 6 months of life and appropriate complementary feeding beginning at 6 months of age;
- Provision of multiple micronutrients (vitamin A, zinc and iron) and immunizations;
- Detection and treatment of neonates with infection;
- Detection and treatment of children with pneumonia and malaria;
- Provision of oral rehydration fluids and zinc for children with diarrhea;
- Detection and management of children with severe malnutrition;
- Promotion of appropriate hand-washing practices;
- Provision of access to safe water and sanitation.

Unfortunately, in most high-mortality settings, the percentage of mothers and children who have access to these interventions still remains surprisingly low. In the 75 countries with more than 98% of all maternal deaths and deaths of children younger than 5 years of age occur, the coverage of all of these interventions is 60% or less with the exception of immunizations and vitamin A supplementation.⁵ For a number of these very important interventions, coverage levels are 30% or less.

In 2011, there were an estimated half a million deaths of children younger than 2 years of age from diarrhea and 1 million deaths from pneumonia in this age group.⁶ By increasing the coverage of interventions for the prevention and treatment of diarrhea and pneumonia to attainable levels (80% for all interventions except for immunizations, and 90% for immunizations), 95% of diarrhea deaths and 67% of pneumonia deaths in children younger than 5 years could be eliminated by 2025 at a cost of only \$6.2 billion.⁷

For the foreseeable future – over the next two decades during which the world is committing itself to ending preventable maternal and child deaths – there will not be adequate numbers of formally trained professional health workers and nor will there be enough health facilities that will be readily available to those who need services. The World Health Organization has estimated that by the year 2035 there will be a global deficit of about 12.9 million skilled health professionals (midwives, nurses, and physicians).⁴

The scientific evidence is abundantly clear that community health workers, with only a few months of training or less and who reside in the communities they serve, can deliver 90% of the interventions required to end preventable maternal and child deaths.^{8,9} In fact, an analysis that I led found that if community health workers were fully deployed and utilized we could save 3.6 million more children's lives every year.⁶ Africa as a whole has been languishing in its progress in reducing under-5 mortality, but Malawi and Ethiopia have been able to meet their Millennium Development Goal targets for reducing under-5 mortality because of the expansion of coverage of key child survival health interventions through community health workers.

What is lacking now is the commitment to build the community-based delivery system for these interventions. An essential component of these interventions is now community empowerment and empowerment of women's groups. These approaches are needed for women to adopt healthy behaviors, recognize warning signs for which treatment is needed, and support each other in the process of doing all they can to ensure a healthy outcome for themselves and their babies.¹⁰

To cite but one of many possible examples, I had the privilege of evaluating a USAID-funded child survival program implemented in rural Mozambique by my colleague here today, Carolyn Wetzel, and others at Food for the Hungry. Through a program of educating women volunteers who were each responsible for 10-12 households, it was possible to accelerate by four times the average annual rate of decline in the percentage of undernourished children in a population of 1.1 million people over a 5-year period at cost only \$0.55 per capita of the total population.¹¹ No food was distributed, and no medical care was provided. To our knowledge, this is the largest successful program of improvement in childhood nutrition that has not used food supplementation as an intervention.

These findings are important because the best current evidence indicates that undernutrition of mothers and children is a cause of 45% of all death among children younger than 5 years of age.¹² Therefore, we urgently need to expand outreach programs to all mothers, neonates and children to ensure that their nutritional status is optimized. This requires community-based approaches that do not require health facilities or higher-level trained personnel. Approaches like the one implemented by Food for the Hungry will be essential for ending preventable maternal and child deaths over the next two decades.

What should the United States Congress do to end preventable deaths during the first 1,000 days of life? The answer is straightforward.

- (1) The US Congress should at least maintain but much more preferably substantially expand its financial support for child survival programs in the 75 countries where 98% of maternal and child deaths occur.
- (2) The US Congress should elevate US Government support for community health workers by insisting on funding child survival and other global health programs that are carried out by community health workers in a way that builds long-term sustainability for CHW programs and that engages communities and civic society, not just government health programs.
- (3) The US Congress should call on the administration to draft a comprehensive health workforce strategy, with a focus on community and other frontline health workers, to maximize the impact of US Government investments in the global health workforce.
- (4) The US Congress should insist on strong funding for the USAID Child Survival and Health Grants Program, which has been supporting US-based NGOs (referred to as private voluntary organizations, also called PVOs) for three decades now and have been leaders in and champions of community-based programming for maternal and child health in low-income countries.

The United States has been a global leader in support for innovation and community-based child survival programming. It should continue in this role. The current levels of funding for maternal and child health programs both to USAID and to UNICEF need to be expanded, not cut. To not fully support these efforts and to cut funding for these programs would represent a moral failure on the part of our government, and it would not support the wishes of the great majority of American citizens who repeatedly have expressed their support for US Government funding for saving the lives of mothers and children.

Fully engaging the US PVO community by providing major financial support to it for this effort will increase the quality of child survival programming around the world, promote innovation,

expand community engagement and community-based services, and accelerate the reduction in readily preventable deaths during the first 1,000 days of life.

References

1. Lawn JE, Gravett MG, Nunes TM, Rubens CE, Stanton C. Global report on preterm birth and stillbirth (1 of 7): definitions, description of the burden and opportunities to improve data. *BMC Pregnancy Childbirth* 2010; **10 Suppl 1**: S1.
2. Government of India. Sample Registration System, Statistical Report 2010. New Delhi: Office of the Registrar General, Ministry of Home Affairs, 2012. http://www.censusindia.gov.in/vital_statistics/srs/Contents_2010.pdf
3. Hogan MC, Foreman KJ, Naghavi M, et al. Maternal mortality for 181 countries, 1980-2008: a systematic analysis of progress towards Millennium Development Goal 5. *Lancet* 2010; **375**(9726): 1609-23.
4. GHWFA and WHO. A Universal Truth: No Health Without a Workforce. 2014. http://www.who.int/workforcealliance/knowledge/resources/hrhreport_summary_En_web.pdf?ua=1 (accessed 24 March 2014).
5. Bhutta ZA, Black RE. Global maternal, newborn, and child health--so near and yet so far. *N Engl J Med* 2013; **369**(23): 2226-35.
6. Walker CL, Rudan I, Liu L, et al. Global burden of childhood pneumonia and diarrhoea. *Lancet* 2013; **381**(9875): 1405-16.
7. Bhutta ZA, Das JK, Walker N, et al. Interventions to address deaths from childhood pneumonia and diarrhoea equitably: what works and at what cost? *Lancet* 2013; **381**(9875): 1417-29.
8. Perry HB, Zulliger R. How Effective Are Community Health Workers? An Overview of Current Evidence with Recommendations for Strengthening Community Health Worker Programs to Accelerate Progress in Achieving the Health-Related Millennium Goals 2012. http://www.coregroup.org/storage/Program_Learning/Community_Health_Workers/review%20of%20chws%20effectiveness%20for%20mdgs-sept2012.pdf (accessed 9 January 2013).
9. Perry HB, Zulliger R, Rogers MM. Community Health Workers in Low-, Middle-, and High-Income Countries: An Overview of Their History, Recent Evolution, and Current Effectiveness. *Annual review of public health* 2014.
10. Rosato M, Laverack G, Grabman LH, et al. Community participation: lessons for maternal, newborn, and child health. *Lancet* 2008; **372**(9642): 962-71.
11. Davis T, Wetzel C, Hernandez Avilan E, et al. Reducing child global undernutrition at scale in Sofala Province, Mozambique, using Care Group Volunteers to communicate health messages to mothers. *Global Health: Science and Practice* 2013; **1**(1): 35-51.
12. Black RE, Victora CG, Walker SP, et al. Maternal and child undernutrition and overweight in low-income and middle-income countries. *Lancet* 2013; **382**(9890): 427-51.