EVERY CHILD’S ADVOCATE

Women rarely hold office in Kenya. Florence Weke-sa is an exception. As the only female member of the Kimilili Municipal Council, she has become a voice for the mothers of her ward and their children. Wrapped in her customary bright colors, Florence stands out in a crowd — and so does her message: “We need to care for our children.”

As a councilor, it is Florence’s duty to be present at every funeral in her district. Too often, the funerals are direct evidence of how quickly and how often diarrhea kills. The funerals affect Florence as both a leader and a mother. She vividly remembers a long week almost 20 years ago that she spent nursing her son through a nearly fatal outbreak.

Last year, Florence took part in a pilot project run by PATH, joining a workshop that taught practical methods to reduce diarrheal disease with a comprehensive approach: breastfeeding, use of oral rehydration solution, zinc treatment, and proper hygiene. The workshop was part of a new, community-based approach to diarrheal disease control in the region and a proving ground for techniques that will be integrated into Kenya’s National Diarrheal Disease Control policy. The model will soon be transitioned to Vietnam as well.

Learning how to respond when diarrhea breaks out in a village — including slowing its spread from household to household, keeping children hydrated, and ensuring the availability of clean water — gave her a fresh set of tools. Florence, who believes a councilor’s job is to lead by example said, “The seminar opened up so much.”

Armed with information, Florence can provide immediate aid to families who come to her when a child is violently ill. She travels every week to churches, schools, and health clinics, spreading awareness among parents and community leaders and creating a safety net for her community’s children. According to Florence, “Diarrhea is still here — but it is no longer killing.”
We Have an Opportunity to Defeat Diarrhea Now

Millions of children’s lives have been saved by diarrheal disease interventions and millions more can be saved moving forward.

Proven, lifesaving interventions already exist. Unlike many other global health crises, cost-effective, lifesaving prevention and treatment methods already exist for diarrheal disease. These interventions include ORS, ORT, optimal infant and young child feeding practices, such as exclusive breastfeeding, improved sanitation, and good hygiene, as well as new tools like zinc treatment and rotavirus vaccines. Because diarrheal disease has many different causes and infections respond differently to each intervention technique, a coordinated approach is needed to address the multiple sources of infection.

History has demonstrated that diarrheal disease interventions work. Deaths of children under the age of five have declined by nearly half since the 1980s. But progress has stalled, and today 1.6 million children still die from diarrhea each year. That’s too many.

We know what works. What we need now is the political will and resources to make it happen.

World leaders are committed to child survival. For a child in a poor country, simply surviving early childhood can be at tremendous feat. For example, one in six children in sub-Saharan Africa die before their fifth birthday. A child in Sierra Leone, which has the world’s highest child mortality rate (262 out of 1,000 in 2007) is almost 100 times more likely to die than one born in Sweden (with a rate of 3).
Every year, 9.2 million children under the age of five die, and 90 percent of those deaths are from preventable conditions like diarrheal disease.23

To address the inequities between low-income and wealthier countries, as well as the needs of future generations everywhere, world leaders came together in 2000 at the UN Millennium Summit and drafted the MDGs — a “blue print for a better future.”58 The goals establish a set of priorities to be reached by 2015.

Aggressively combating diarrheal disease is crucial to the success of two of the goals that came out of the UN meeting. MDG 4 calls on the global community to reduce the mortality rate of children under the age of five by two-thirds or fewer than five million deaths per year. MDG 7 calls for reducing the number of people without access to safe drinking water and sanitation by half.59

As our world’s climate and demographics change and natural resources are depleted, diarrheal disease will become an even more significant global health threat. The threat of diarrheal disease outbreaks related to natural disasters such as the cyclone in Myanmar portend major diarrheal disease-related health crises in the future. The International Federation of Red Cross and Red Crescent Societies (IFRC) recently reported that diarrheal disease such as cholera is increasingly becoming the major cause of recurring disease and death throughout the world, particularly in sub-Saharan Africa. According to 2007 and 2008 IFRC data, approximately 60 percent of all requests submitted for IFRC Disaster Response Emergency funding were related to outbreaks of acute diarrheal disease.60
We have noticed a significant increase in the number of operations undertaken to respond to acute situations...This trend is the combined result of poor hygiene practices, lack of awareness of disease transmission, and a shortage of safe water. Poor sanitation linked to unplanned urbanization is also a major factor. This is further complicated by the effects of climate change, which have led to an increase in the frequency and intensity of floods and related epidemics...Humanitarian efforts have had some impact, but data suggests we may be losing the battle. This is especially true in countries affected by extreme poverty and conflict, where diarrheal diseases have become endemic. Such countries now require long-term commitment if this worrying scenario is to be pushed back.”

— Uli Jaspers, head of the IFRC water and sanitation team.

**Challenges Remain**

We have more proven intervention methods to combat diarrheal disease than ever before, but the momentum to control it has slowed, and children in the poorest countries are dying because they are not getting the simple lifesaving treatments they need to survive.
Today, although diarrhea is the second leading killer of children under the age of five worldwide, it is not treated as a global health priority. In fact, a 2008 research study conducted by PATH to evaluate the global health funding and policy landscape found that diarrheal disease ranked last among a list of other global health issues. Public awareness of this issue is also low, making it difficult to mobilize commitments and resources. In donor countries such as the United States, many are unaware of the burden of diarrheal disease and the existing prevention and treatment options.\textsuperscript{15}

\begin{itemize}
  \item 93 percent of Americans think child survival should be a global health priority.
  \item 73 percent say knowing how to prevent the major causes of child death is a major reason
\end{itemize}

Only 38 percent of children under five with diarrhea receive oral rehydration and continued feeding.

62 percent of infants under six months of age are not exclusively breastfed.\textsuperscript{61}

the US should be doing more to save lives around the world.

\begin{itemize}
  \item However, most do not realize preventable and treatable diarrheal disease is a leading killer.\textsuperscript{62}
\end{itemize}

Despite the persistently high burden of the disease, research into childhood diarrhea has been steadily decreasing since the 1980s, according
**Proven Interventions for the Leading Killers of Children**

More proven interventions are available to prevent and treat diarrhea than any other major child killer.

<table>
<thead>
<tr>
<th>Preventive Interventions</th>
<th>Diarrhea</th>
<th>Pneumonia</th>
<th>Measles</th>
<th>Malaria</th>
<th>HIV/AIDS</th>
<th>Birth asphyxia</th>
<th>Preterm delivery</th>
<th>Neonatal tetanus</th>
<th>Neonatal sepsis</th>
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**Treatment Interventions**

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<th>Malaria</th>
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</table>

1 Level 1 (sufficient) evidence

2 Level 2 (limited) evidence

Hib=Haemophilus influenza type b

*Exclusive breastfeeding in the first 6 months of life and continued breastfeeding from 6 to 11 months.*

**Source:** Jones G Bryce J et al., Lancet CS series 2003.
to the WHO. Funds available for research into diarrhea are less than those available for research into other diseases that cause fewer deaths. For example, diarrheal disease receives less than one-tenth the funding that Type 2 diabetes receives.$^{63, 64}$

Barriers exist at both the country level, with lack of awareness of and access to life-saving interventions, and at the global level, with advocacy challenges that have prevented the global health community from mobilizing around the issue and committing to stop it. Additionally, research also indicates that while a great deal is known about effective treatments for diarrhea, there is a critical lack of knowledge on how to make sure the children who need diarrheal disease treatment can get access to it.$^{63}$

Widespread adoption of proven, existing water, sanitation, hygiene, and health interventions has
**INCREASING ACCESS TO INTERVENTIONS**

*Interventions seen as an integral part of a coordinated approach to fighting diarrheal disease:*

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Percentage</th>
</tr>
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<tbody>
<tr>
<td>Clean water and sanitation</td>
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</tr>
<tr>
<td>ORS/ORT</td>
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<tr>
<td>Breastfeeding</td>
<td>83%</td>
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<tr>
<td>Vaccines</td>
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<tr>
<td>Zinc</td>
<td>63%</td>
</tr>
<tr>
<td>Nutrition</td>
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<tr>
<td>Restorative feeding</td>
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<tr>
<td>Diagnostics</td>
<td>23%</td>
</tr>
<tr>
<td>Anti-diarrheals</td>
<td>20%</td>
</tr>
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</table>

Increasing access to proven interventions is believed to be the most effective way to accelerate progress toward MDG 4

*Source: PATH.*

been hampered by the lack of political leadership and commitment to fight diarrheal disease. In turn, this has led to a decline in funding and research on the issue. Interventions that may be easily accessible in the developed world are not as accessible to the children who need them most in the developing world.

The challenges are great but so are the opportunities to save millions of children’s lives worldwide. Leaders from all sectors can take practical steps to begin to galvanize the funding and political will necessary to reduce the illness and deaths from diarrhea. These steps include:

- Investing the resources to ensure that funding for diarrheal disease, including both prevention and treatment interventions, is commensurate with the scope of the burden the illness places on families and communities around the world.
- Redoubling commitment to reducing the child mortality MDG by 2015 as stated in the WHO/
UNICEF joint statement on the MDGs, focusing on addressing diarrheal disease as a strategy for clear and rapid progress towards that goal.

- Investing in the research and development of new effective, appropriate, and affordable prevention and treatment options for diarrheal disease.

- Prioritizing the implementation of an appropriate combination of interventions against diarrhea, including improved water, hygiene, and sanitation; optimal infant and young child feeding; increased access to and uptake of vitamin A, ORS, and zinc; and rotavirus vaccination.

- Including diarrhea prevention and control in international, regional, and country plans on sanitation, water and hygiene; further including sanitation, water, and hygiene interventions in health efforts to prevent and control diarrheal disease.

By reprioritizing diarrheal disease as a global health priority and educating, increasing awareness among, and mobilizing the global community around the burden of diarrheal disease and the lifesaving health, hygiene, sanitation, and safe water interventions that exist today, we can save lives. A coordinated approach will be crucial to the effort to ensure that this preventable and treatable disease is no longer a leading killer of children. Because no child should die from diarrhea.

“The persisting high mortality rate from diarrhea in the presence of existing, cost-effective interventions and available resources to implement them represents a continuing scandal.” — Olivier Fontaine, Margaret Kosek, Shinjini Bhatnagar, Cynthia Boschi-Pinto et al. PLOS Medicine.
End Notes


12 PATH. The Promise of Vaccines and Other Interventions to Address Diarrheal Disease. Presented at: Rotavirus Symposium, June 2008; Istanbul, Turkey.


16 According to an email from Dr. Greg Allgood on April 7, 2009.


20 Clasen T, Roberts I, Rabie T, Schmidt W, Cairncross S. Interventions to improve water quality for preventing diarrhoea. *Cochrane Database of Systematic Reviews*. 2006;3.


WHO says diarrhea is a major killer. Agence France Presse. March 9, 2009.

WEBSITES


UN Millenium Project: www.unmillenniumproject.org/goals/index.


WaterAid: http://www.wateraid.org/uk.

World Health Organization: www.who.int/.

FACT SHEETS


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BACKGROUND Page 6. PATH/Janie Hayes, Page 7. PATH


TREATMENT Page 22. Amy Gottlieb (all), Page 23. PATH, Page 24. PATH/Satvir Malholtra


BACK COVER Amy Gottlieb (left), Amy Gottlieb (middle), David and Lucile Packard Foundation (right)
For more information on diarrheal disease please visit www.eddcontrol.org and www.path.org.

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PATH is an international, nonprofit organization that creates sustainable, culturally relevant solutions, enabling communities worldwide to break longstanding cycles of poor health. By collaborating with diverse public- and private-sector partners, PATH helps provide appropriate health technologies and vital strategies that change the way people think and act. PATH's work improves global health and well-being.