

The Best Prevention Efforts begin with Compassion

Elizabeth Gatumia's commitment to helping children with rheumatic heart disease started 15 years ago when she worked as a television newscaster for *Good Morning Kenya*. Parents would often bring their sick children to her, not knowing what disease they had, and ask to put them on her show. "They would say, 'Mtoto wangu ako na ugonjwa wa moyo (My child has a heart disease).'

But they didn't know what heart disease it was," said Ms. Gatumia. Appealing to her television audience, Ms. Gatumia helped to raise the thousands of dollars needed for open-heart surgery for as many children as she could.

She was witnessing firsthand the impact of untreated rheumatic heart disease. Thanks to the widespread availability of antibiotics starting around 1946, incidence of rheumatic heart disease has declined rapidly in the United States and Western Europe, and 80% of cases now occur in low- and middle-income countries [1,2]. Current estimates say around 15 million people worldwide have rheumatic heart disease; however, recent research suggests it may be as many as 78 million people and that 1.4 million people die each year because of it [3]. In Kenya alone, there are over 200,000 new cases each year, making it the most common cardiovascular disease among children and young people [4].

Seeing families struggle with rheumatic heart disease, Ms. Gatumia realized something more needed to be done. There seemed to be an endless number of sick children, donor fatigue set in, and, even worse, she heard that some of those children she helped had died. After participating in training organized by cardiologists, Ms. Gatumia learned that the best way to get rid of rheumatic heart disease was to prevent it altogether. "The most important thing to be done was to create awareness, to educate, and to inform the general public about how to prevent rheumatic heart disease." She established the Kenyan-Heart National Foundation in 2004 and set its sights on the children and adolescents in the slums of the Nairobi Eastlands' district.

Instead of helping to facilitate valve replacement surgery for rheumatic heart disease patients,

Kenyan-Heart focused on recognizing and treating group A streptococcus early to prevent rheumatic fever and ultimately rheumatic heart disease. The organization teaches schoolchildren how to recognize the symptoms of strep throat and to practice simple but key prevention measures such as washing one's hands and covering one's mouth when sneezing or coughing. To date, Kenyan-Heart has educated nearly 11,000 schoolchildren.

Kenyan-Heart introduced innovative and age-appropriate strategies to reach children with its prevention message. The Kitchen Gardens program, which teaches schools how to create sustainable fruit and vegetable gardens, has reached 60–70% of the public schools in Nairobi. Kenyan-Heart has organized over 150 Kenyan-Heart Clubs that provide opportunities for children to learn about heart health and educate their communities through poems, skits, and dance. The 2010 Heart Clubs Day—an annual event that brings together all 150 clubs to compete in activities and showcase their prevention efforts—had 5,000 participating schoolchildren.

The success of these innovative efforts was recently recognized internationally when Kenyan-Heart won the 2011 Louise Lown Heart Hero Award from ProCor, a program of the Lown Cardiovascular Foundation that promotes cardiovascular health and information sharing in developing countries.

"Rheumatic heart disease has been all but forgotten by everyone except the families whose lives are so tragically affected by it and the health professionals who struggle to help them survive," said Professor Bongani Mayosi, head of the World Heart Federation working group on rheumatic heart disease. "Kenyan-Heart's program on rheumatic heart disease prevention is a best-practice example of the kind of awareness raising that is key to eliminating rheumatic fever ... and an important complement to providing the cost-effective and feasible prevention and control programs that have nearly eliminated the disease in wealthy and middle-income populations."

The prevention message has not stopped at rheumatic heart disease. Working with the Danish Heart Foundation and the World Heart Federation, Kenyan-Heart has turned its community-based, cost-effective prevention strategies toward other noncommunicable diseases. In 2011, Kenyan-Heart's train-the-trainers program educated more than 1800 teachers, faith-based leaders, and other adults on preventing cardiovascular disease, diabetes, and other noncommunicable diseases.

By leveraging community support into actionable prevention strategies, Kenyan-Heart is extending its broader chronic disease education efforts beyond Nairobi to the rest of Kenya. “Their work is an example of the type of cost-effective and innovative prevention programs needed to address the double burden of chronic and infectious diseases in the developing world,” said Dr. Vikas Saini, president of the Lown Foundation. “The recent U.N. Summit has shown that global leaders would like to address

this burden. By adapting their prevention message to address other noncommunicable diseases, Kenyan-Heart is showing us all the way to ensure a healthy future for coming generations.”

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