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# **KABEHO MWANA:** The Rwanda Expanded Impact Child Survival Program

JOSEPHINE MUKAHIRWA, A COMMUNITY HEALTH WORKER OF 3 YEARS, VISITS THE HOME OF TUYISHIME SYLVIE, 26, IN GASAMBU TO EDUCATE ON THE IMPORTANCE OF USING A BED NET. PHOTO: ESTHER HAVENS PHOTOGRAPHY, 2010.

# THE BIRTH OF KABEHO MWANA

In 2005, Concern Worldwide's USAID-funded Child Survival Program in Rwanda's Gisagara (formerly Kibilizi) District demonstrated significant improvements in the health of women and children. One of the project's greatest achievements was supporting the Ministry of Health (MoH) in the roll-out of home-based management of malaria, which was done in partnership with the International Rescue Committee (IRC) and World Relief (WR). The program's impact was striking: timely treatment for malaria in children under five increased fourfold and 58 percent of children were being treated by a trained provider, at home, within 24 hours of the onset of fever.

Building on this success, Concern Worldwide, IRC and WR formed a consortium in 2006 to implement the Expanded Impact Child Survival Program (EIP) in partnership with the MoH. The program, called Kabeho Mwana or "Life for a Child," was designed to scale-up community case management (CCM) for malaria, diarrhea and pneumonia and promote key preventative actions at

the household level. Concern was the lead agency of the program, which was implemented from October 2006—September 2011 in six out of 30 districts in Southern and Eastern Rwanda: Gisagara, Kirehe, Ngoma, Nyamagabe, Nyamasheke and Nyaruguru.

## THE PROJECT OBJECTIVES INCLUDED:

- Increasing access to prompt first-line treatment for young children with malaria, diarrhea and pneumonia by expanding CCM, strengthening health service delivery systems and establishing performance contracting for community health worker (CHW) supervision.
- Increasing coverage of key preventive interventions by improving targeting and increasing the breadth of preventive child health services through outreach.
- Increasing adoption of key family health practices through community mobilization and social behavior change.

### Kabeho Mwana Coverage Area



### The Kabeho Mwana Intervention Mix

- Equipping, training and supporting more than 6,100 CHWs to carry out CCM at scale for three deadly but preventable childhood illnesses
- Organizing CHWs into peer-support and collaboration groups, based on the Care Group model, with the primary mission of organizing health promotion efforts through outreach and home visits
- Supporting behavior change communication through the production of visual aids
- Improving data quality and analysis for program improvement
- Strengthening health service delivery through community drug procurement and health information systems, including quality improvement tool (the IMCI Bulletin) to provide rapid information at the local level through feedback meetings between MoH/health center staff and CHWs

# PROGRAM APPROACHES

## TAKING COMMUNITY CASE MANAGEMENT TO SCALE

The greatest achievement of the Kabeho Mwana project was scaling-up CCM in partnership with the MoH. To do this, the consortium built on the existing community health system in Rwanda by using a standardized training package developed by the MoH Community Health Desk and utilizing input from the Community Health Technical Working Group.

With an extensive training plan, carried out by both the MoH and consortium partners, 6,177 CHWs from 88 health sectors were trained to implement CCM. The program also provided the CHWs the initial tools they needed to start caring for their communities, such as a lockable box for storing drugs and supplies, oral rehydration salts (including a spoon and cup for mixing), artemisin combination therapy (ACT), amoxicillin and a respiratory timer.

**The five-year program benefited more than 724,000 women and children, including more than 318,000 children under five and more than 405,000 women of reproductive age.**

As national protocols for CCM evolved throughout the life of the project, Kabeho Mwana garnered high praise in its continuous efforts to re-train and bring in additional resources to support the development of new material for the following:

- Switching from amodiaquine/sulfadoxine-pyrimethamine (AQ/SP) to ACT
- Developing CCM training protocols to integrate malaria home-based management with pneumonia and diarrhea treatment
- Discontinuation of intermittent preventive treatment (IPT) of malaria in pregnant women
- The creation of new dedicated positions at the health centers to support data collection and reporting and supervise community health activities
- A new malaria policy requiring that all cases be confirmed prior to treatment, which was implemented in health facilities and extended to the communities with Rapid Diagnostic Tests

As a result of these efforts, at the end of the project, CHWs were the first-line of treatment for caretakers of children with fever, respiratory symptoms and diarrhea—69 percent of mothers of children up to 23 months old had consulted a CHW at least once. Additionally, 40 percent of those who had a sick child in the past two weeks had consulted a CHW, a nod to the tremendous success that the program had in making care easily accessible.

**Kabeho Mwana's efforts to scale-up CCM made CHWs the first-line of treatment for caretakers of children with fever, respiratory symptoms and diarrhea . . . Over the 12 months prior to the evaluation, the EIP-supported districts delivered about a third of community treatments in Rwanda in pneumonia, diarrhea and malaria.**



Mukarungwa Cecile, a community health worker in Marebe, visits the home of Josepha, 30, and Valentine, 3, to examine illness. PHOTO: ESTHER HAVENS PHOTOGRAPHY, 2010.



Janviere, 38, travels to the home of CHW Christianne, 51, to treat her 36 month old daughter, Emmerence, who has a fever. PHOTO: ESTHER HAVENS PHOTOGRAPHY, 2010.



Bahomwana care group meets in Gasambu village, Rwanda. They exchange ideas and challenges to accomplish and improve their work as a CHW. PHOTO: ESTHER HAVENS PHOTOGRAPHY, 2010.



A CHW at work. PHOTO: MEGAN CHRISTENSEN, CONCERN WORLDWIDE.

## CARE GROUPS: A SCALABLE MODEL FOR CHW SUPPORT AND SUPERVISION

Care Groups were the main vehicle for community mobilization and behavior change communication (BBC). At the start of the program, the Care Groups consisted of 10–15 volunteers who met on a bi-weekly basis together with the project staff for training and supervision. Each volunteer was then responsible for bi-monthly visits to ten households assigned to them in their communities to share health messages.

Following results from the mid-term evaluation and explicit requests by district and MoH officials, the Care Groups were rolled out to the remaining health centers in each district. The Care Groups were then modified to be made up exclusively of official CHWs (including all cadres, not just those providing CCM), rather than volunteers, per guidance from the MoH. Under the supervision of community health supervisors, the groups attended monthly trainings and carried out health promotion activities to specific households. By giving CHWs a platform to coordinate and collaborate, the new Care Groups integrated preventative and curative services in communities. Ultimately, 660 Care Groups were formed over the five-year project.

**The 660 Care Groups multiplied the impact of all CHWs by bringing both preventative and curative services directly into communities.**

## QUALITY ASSURANCE INNOVATION: THE IMCI BULLETIN

The IMCI Bulletin was a data entry form drawn from existing data sources that was designed to provide immediate feedback to the districts and health centers regarding their performance, based on a limited set of indicators:

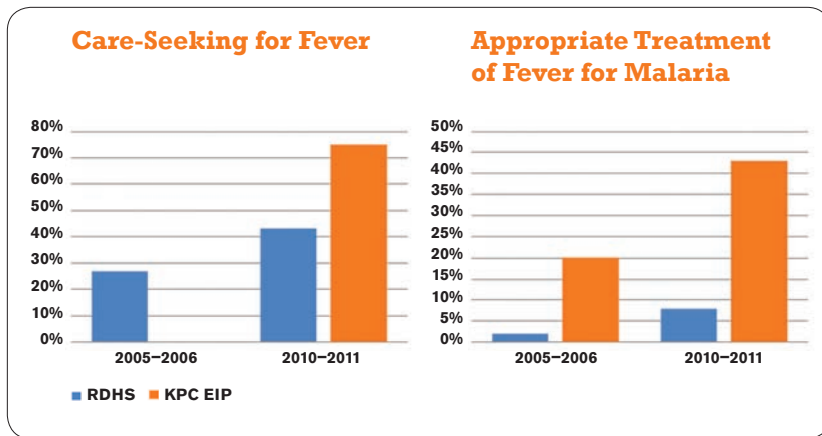
- Number of children seeking care at community and facility levels for diarrhea, respiratory symptoms and for fever;
- Availability of drugs at the CHW and facility level;
- Number of active (reporting) CHWs, supervision visits (from hospital to health center and from health center to CHWs) and meetings of cooperatives;
- Payments for services made to CHWs (“community participation”);
- Number of cases treated correctly by CHWs (based on supervisor review of the patient record);
- Monthly reports from health centers to district hospital on c-IMCI and cell-level reporting of health promotion/BCC activities to health centers.

Standards were established for Bulletin indicators, based on evidence as well as consensus. These standards then provided the facilities a basis for comparison from which they could analyze and understand their performance. The data was shared in quarterly feedback meetings between MoH, health center staff and CHWs. The IMCI Bulletin became an important tool for providing indicators of quality and coverage rather than raw data, with the intent of shifting the focus more towards decision-making and quality improvement. Over the life of the project, facility staff took on a larger role in the compilation of data and the facilitation of quarterly feedback meetings, with minimal support from Kabeho Mwana staff.

**“The C-IMCI Bulletin is a mirror of our work.”**

—Rukeba Robert, hospital director and head of community health in Nyamasheke District

# RESULTS: IMPACT OF THE KABEHO MWANA COALITION

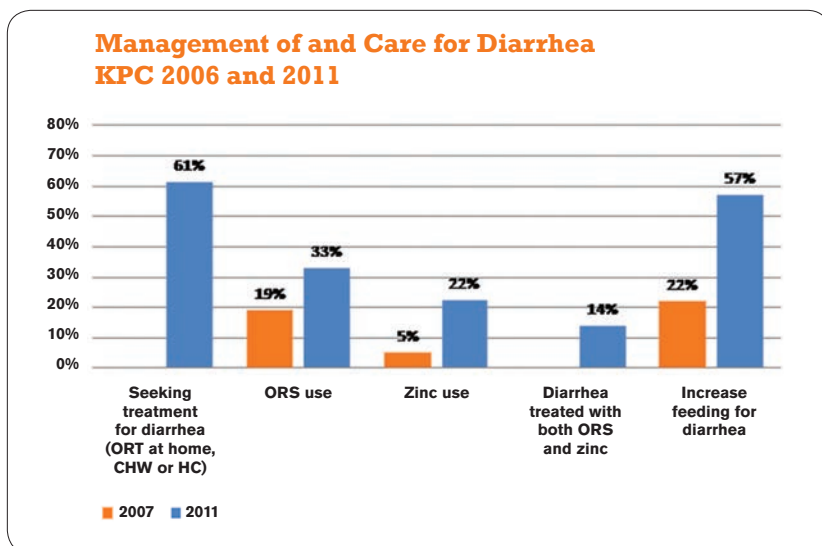


## MALARIA CONTROL

From 2006 to 2011, appropriate care-seeking for fever in the six districts reached 75 percent, and appropriate treatment jumped from 20 percent to 43 percent. These remarkable achievements could represent a third of the national gains observed between the Rwanda Demographic and Health Survey (RDHS) in 2006 and 2011.

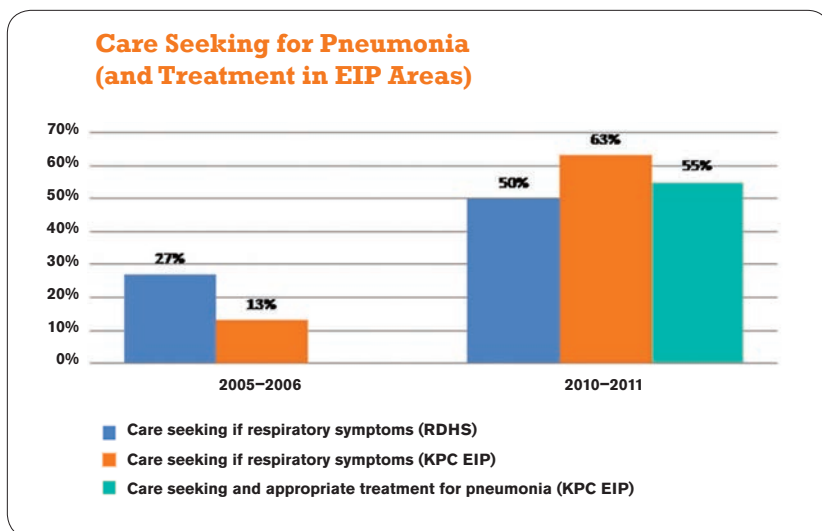
## CONTROL OF DIARRHEAL DISEASES (CDD)

Improvement in use of ORS increased from 19 percent to 33 percent. Though not statistically significant, the results do mirror that of the Rwanda Demographic Health Survey. Treatment of diarrhea with zinc progressed from less than 5 percent to 22 percent. One of the most positive results in terms of CDD is that the number of caretakers who either increased fluid intake or additional food to a child with diarrhea nearly doubled from 36 percent to 61 percent for increasing fluids, and 22 percent to 57 percent for increased feeding.



## PNEUMONIA CASE MANAGEMENT

Care-seeking for respiratory symptoms progressed nationally from 27 percent to 50 percent. Survey data indicate an even more substantial increase in the six districts, from 13 percent to 63 percent, suggesting that progress in the EIP-supported districts may be responsible for over 40 percent of the national improvement in the last five years. In addition, 54 percent of children in the six districts benefited from appropriate care-seeking as well as appropriate treatment for pneumonia (baseline unavailable; would have been below 13 percent).



**Survey data suggest that care-seeking for respiratory symptoms jumped from 13 percent to 63 percent, suggesting that progress in the EIP-supported districts may be responsible for more than 40 percent of the national improvement in the last five years.**

*It is important to note that EIP-supported districts make up 18 percent of the RDHS denominator. The data presented here is not comparing EIP to RDHS data, but simply providing a benchmark of the secular national trend during the same period.*

# THE IMPACT OF KABEHO MWANA ON CHILD NUTRITION

Malnutrition is a contributing cause of death in half of all cases of mortality due to childhood illnesses in Rwanda. In 2009, Concern and its partners successfully integrated Community-Based Management of Malnutrition (CMAM) into the EIP program, providing an integrated model for nutrition and IMCI services. Kabeho Mwana trained CHWs to conduct active and passive case finding, screen for moderate and severe acute malnutrition using mid-upper arm circumference (MUAC) measurement tape, provide nutrition counseling during household visits and conduct monthly growth monitoring sessions. CHWs referred children with severe acute malnutrition to health facility-based outpatient therapeutic programs, whereby children were provided a weekly supplement of ready-to-eat therapeutic food.

Because of this intervention, more than 3,800 children with moderate acute malnutrition were referred to participatory and community-based programs based on

the Positive Deviance/Hearth and Community Kitchen methodologies and more than 8,000 children with severe acute malnutrition were successfully treated at the facility level. As a result, data from baseline and end-line nutrition surveys demonstrate a significant decrease in the prevalence of severe acute malnutrition in the program area, from 0.9 percent (95 percent Confidence Interval 0.5–1.5) to 0.1 percent (95 percent CI 0.0–0.3). Through Kabeho Mwana's pioneering efforts to integrate CMAM into IMCI services, the project successfully built evidence to advocate for the inclusion of CMAM into the national nutrition protocol.

**Integrating child nutrition into the Kabeho Mwana training program led to a significant decrease in severe acute malnutrition among children in the program area—from 0.9 percent (95 percent Confidence Interval 0.5–1.5) to 0.1 percent (95 percent CI 0.0–0.3).**



Janviere, 38, travels to the home of CHW Christianne, 51, to treat her 36-month-old daughter, Emmerence, who has a fever. PHOTO: ESTHER HAVENS PHOTOGRAPHY, 2010.

# A COMMUNITY-BASED APPROACH FOR SCALE-UP

While the EIP's mandate was to provide technical assistance to the MoH for the national scale-up of CCM, the project operated at the district and sector levels to provide day-to-day technical support, tools and mentoring to operationalize routine monitoring and reporting systems, strengthen supervision and medical stock management and expand community outreach. The EIP approach to CCM scale-up emphasized on-the-ground capacity building, both through formal trainings and continuous presence at the facility and community-levels, so that knowledge was translated into practice.

Over the five years of the project, the EIP played a pivotal role in the scale-up of CCM in Rwanda. The EIP's field presence, at the district, facility and community levels, supported bottom-up operationalization of national policies. This field presence proved how critical coaching and support at the operational level is

in order to build capacity. The successes of the EIP not only demonstrate the vital importance of technical assistance and guidance from both the central and field levels, but also how building from the ground-up is essential in scaling up CCM and preventing deaths of children under five.

**“Kabeho Mwana showed that building from the ground up is essential and complementary to central grand designs. MoH staff at all levels praised Kabeho Mwana lavishly for its field presence. The program demonstrated the imperious necessity of coaching and accompaniment at the most operational levels, and in between these levels, in order to build capacity.”**

—Dr. Eric Sarriot, External Final Evaluation Consultant

## CASE STUDY: Community Health Workers Saving Lives in Rwanda

In April 2011, four-year-old Kennedy developed a cough and fever. His mother, Jean D'arc Kayitesi, 28, took him immediately to their village's community health worker, Concessa Kantarama, who lived only 500 yards away from them. Concessa examined Kennedy and used a respiratory timer to count the number of breaths and measure how fast he was breathing—all skills she had learned during her Kabeho Mwana trainings.

Kennedy had a fever and his breathing was faster than normal, so Concessa used the algorithm and treatment protocol from her trainings to make the appropriate diagnoses of malaria and pneumonia. She immediately started treatment with an antibiotic and provided an anti-malarial drug and taught Jean how to administer the medicine and what to look out for and do if he Kennedy's condition did not improve.

Thankfully, Concessa's treatment plan worked and Kennedy survived—something that might not have happened had they not had a CHW nearby to turn to.

Until recently, children could only be assessed and treated for pneumonia at a formal health center or hospital. However, Kabeho Mwana's efforts to train CHWs to manage pneumonia at the community-level means that more patients now have access to early treatment for pneumonia.

In 2010 alone, the CHWs supported by Kabeho Mwana in Gisagara district treated 1,050 children under five with pneumonia. Ninety-six percent of these children recovered following treatment by a community health worker, with no deaths and the remaining 4 percent being referred to a health facility.



LEFT: Four-year-old Kennedy with his mother. RIGHT: Kennedy and his mother with their local CHW Concessa. PHOTOS: CONCERN WORLDWIDE.



PHOTO: ESTHER HAVENS PHOTOGRAPHY, 2010.



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