



INTERNATIONAL RESCUE COMMITTEE

**Kabare Emergency Primary Health Care Project
DEMOCRATIC REPUBLIC OF CONGO**

*Final Report
February 1, 2001 – June 30, 2003
including the period May 1 – June 30, 2003*

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Executive Summary

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Program Title:	Kabare Emergency Primary Health Care Project
Grant No.:	HDA-G-00-01-00019-00
Country/Region:	Kabare Health Zone, South Kivu Province, Democratic Republic of Congo
Disaster/Hazard:	Inadequate Access to Primary Health Care
Time Period of Report:	February 1, 2001–June 30 2003

Overall Goal/Purpose

To reduce morbidity and mortality among displaced and local populations in Kabare health zone due to the lack of access to primary health care, since the outbreak of civil war in August 1998.

The IRC had measured the baseline Crude Mortality Rate (CMR) at 2.7 per 1,000 persons per month in 2000. Extreme insecurity in the region saw this rate rise to 4.4 deaths per 1,000 persons per month (IRC survey March 2001) prior to this OFDA funded intervention. By November 2002 this figure had decreased by 22% to 3.6/1,000/month. **The most recent mortality survey, conducted in December 2003 showed a reduction in the CMR to 1.9 deaths per 1,000 persons per month.** This represents a **132%** reduction from the baseline CMR measured in March 2001 prior to the beginning of the project.

Summary of Results

Objective 1: To increase access to primary health care to the internally displaced and local populations of Kabare health zone through the provision of essential drugs and equipment, support for the indigent population, and the reinforcement of the routine immunization program.				
	2001 (Aug - Dec)	2002 (Jan - Dec)	2003 (Jan - June)	Total
% of 17 health centers that received monthly supplies of drugs, equipment, and EPI inputs	100 %	100%	99%	99.7%
% increase in average monthly attendance	+593 %	+ 957 %	+ 1,099%	1,182%
Number of indigent patients treated	38585	149,090	87,705	275,380
Total number of patients treated	43,714	159,966	90,731	294,411
% of sampled cases in accordance with SDTG	65,7%	79.8%	68.7%	71.4%

Number of reported neo-natal tetanus cases	14	5	0	19
% of target population of pregnant women reported vaccinated against tetanus	61 %	222 %	96.9 %	126.6%

Objective 2: To improve the nutritional status of children and adults in Kabare health zone by providing essential support to three local nutrition centers.				
	2001 (Oct - Dec)	2002 (Jan - Dec)	2003 (Jan - June)	Total
Number of admissions at nutrition centers	2726	4301	1711	8738
Number of exits from nutrition centers	1054	4974	2056	8084
Number of nutrition center exits due to recovery	1004	4339	1739	7082
Number of nutrition center exits due to death	8	34	14	56
Number of nutrition center exits due to transfer	33	77	75	185

Targeted Population:

Targeted Population			
<i>Health Zone</i>	<i>Activities</i>	<i>Target Sites / Health Centers</i>	<i>Beneficiary Population</i>
Kabare	<u>Primary Health Care:</u> Distribution of essential drugs and supplies; training of health center staff; financial support for indigent health care; health center physical rehabilitation	17 health centers and health center catchment areas	139,500 (population of health zone)
	<u>Nutrition:</u> Essential support to supplemental feeding centers, food delivery, household visits, referrals	7 supplementary feeding centers	
Total Beneficiaries			139,500

Geographic Location:

All activities took place in Kabare health zone, South Kivu Province, Democratic Republic of Congo.

Background

Since August 1998, the insecurity caused by the war in the Democratic Republic of Congo has severely affected the population of Kabare health zone, the most densely populated of the rural health zones in South Kivu province (430 persons per sq km). Prior to this intervention in 2001 most economic activities in the health zone had stopped or seriously slowed down. Selling crops in the markets of Bukavu remained the primary source of income for the rural poor, but few people in the city could afford to buy anything but the essentials, and consumption had dropped dramatically.

In January 2000, IRC health staff working in Kabare noticed a sharp increase in internally displaced persons entering the health zone. Nearly 15,000 people had fled Kalonge, a collectivity of 59,000 people located to the North of Kabare in Bunyakiri health zone, due to vicious attacks by the Interahamwe militias living in the forest of Kahuzi-Biega National Park. As of September, the total number of internally displaced persons (IDPs) from Kalonge had grown to 50,000 people spread out over Katana, Kabare, Walungu, and Bukavu health zones. Approximately 12,500 of these IDPs were consequently living in Kabare health zone with host families, increasing the burden on these households already struggling to provide for their own basic needs.

Furthermore, Kabare was on the brink of a medical crisis. The crude mortality rate (CMR) in Kabare for the period from January 1999 to April 2000, as measured by a survey IRC conducted in April/May 2000, was 2.7 deaths/1,000 persons/month, nearly twice the baseline rate for sub-Saharan Africa (1.5/1,000/month). The infant mortality rate was 20/1,000/month, which indicated that approximately a quarter of all children in Kabare would die before reaching their first birthday. The study found the major causes of mortality in Kabare to be diseases that are preventable or easily treatable. Additionally, the study found the CMR for Kalonge IDPs residing in Kabare and Katana health zones to be a staggering 8.6/1,000/month for the first 5 months of 2000, nearly six times the sub-Saharan Africa baseline. Malaria was the major medical cause of mortality for the IDPs. Malnutrition was also on the rise in Kabare, among the local population and the IDPs. The soil quality is generally low and the local population had missed at least one and sometimes two growing seasons as a result of insecurity. Kabare health zone had at the time the highest percentage of malnourished children and adults recorded in South Kivu at 11.3% (SCF-UK Nutritional Survey June 1999). Moreover, IRC health staff had identified large numbers of malnourished children among the IDPs from Kalonge.

Unfortunately, the primary health care system's capacity to respond to the crisis had been diminished by the protracted insecurity in the region. As a result of the deteriorating economic situation in the province, few patients were capable of paying for treatment and overall attendance at the primary health centers in Kabare was declining. Some health centers closest to Kahuzi-Biega National Park had been robbed and looted by armed militias, further reducing their capacity to serve the population. The primary health care system in Kabare had been put under additional strain by the arrival of large numbers of IDPs. Although displaced persons are within the normal criteria for indigent status and thus would receive free treatment at the health centers, the Kalonge IDPs had arrived in such large numbers that the health centers urgently needed outside assistance to ensure that the IDPs received health care.

Project Activities

In August 2001, IRC began supervising health facilities in Kabare health zone and supporting them with regular supplies of essential medicine and equipment. **Together, these facilities were providing primary health care services for 117,984 people.** The BCZ-Kabare (Bureau Central de Zone, the central office for the health zone) designates 12 of these as health centers (a center providing primary health care for a local catchment area population), four as health posts (a center operating in the catchment area of and supporting another health center), and one as a reference health center (a center providing primary health care for a local catchment area population and receiving referrals from other health centers). As many of the health posts are, in fact, operating as independent health centers and one

of the health centers (Mushweshwe) is operating as a reference health center, IRC and the BCZ-Kabare were working together to ensure that each facility had the appropriate designation and received adequate support. Throughout this report, all 17 facilities are referred to as health centers, except where otherwise noted. The seven supplemental feeding centers that IRC supported (Bwirembe, Cifuma, Cirunga, Ludaha, Mbiza, Mulengeza, and Mushweshwe) are also referred to as nutritional centers.

In July 2001, IRC hired the program manager, health assistant, and health monitors for the project. They began conducting assessments of the 17 health centers, negotiating the *Protocol d'Accord* with the BCZ-Kabare, and mobilizing the *Comités de la Santé* (COSAs) that manage the health centers.

When the project began in Kabare, IRC found that many health centers lacked essential medical equipment, such as stethoscopes, microscopes, and centrifuges. IRC established, in consultation with the BCZ, which equipment IRC would provide and what the health centers should purchase themselves, with the portion of their revenue designated for *frais de fonctionnement* (operating costs). In late August 2001, as IRC support to and supervision of the 17 health centers began in Kabare and continued in the neighboring health zone of Katana, the harmonization of the list of essential medicines was prioritized and completed. This permitted IRC plan its response to the health needs of the two populations more efficiently.

Based on itemized requests submitted by the health centers, IRC identified the monthly drug and equipment needs for each health center. These requests were first submitted to and examined by the BCZ and then transferred to IRC, where the health monitors, program manager, and pharmacist review the requisitions to determine what should be included in the distributions.

IRC had four health monitors for Kabare, each overseeing four or five health centers. The monitors visited each of their designated centers at least once a week, during which time they oversaw the diagnosis and treatment of patients and examined the centers' patient, drug prescription, and financial records. The monitors also carried out spot checks of the pharmacies and looked at hygiene at the health centers. This monitoring is closely linked to epidemiological surveillance and verification of health center staff adherence to the national Standard Diagnostic and Treatment. In addition, medicine and supplies for the clinical management of cholera (Ringers Lactate, soap, disinfectant, etc.) were allocated to the reference hospital at Mukongola in October, to treat patients referred from the health centers.

In August 2001, IRC health monitors began collecting weekly morbidity and mortality statistics from each health center. According to these records, the major sources of morbidity at the beginning of the program were worms, malaria, respiratory illnesses (upper and lower), diarrheal diseases, urinary track infections, and malnutrition. In addition, 15 cases of measles (the majority among vaccinated children) were recorded in September 2001, and a small outbreak of cholera (27 cases, 0 deaths) was identified in the health catchment areas of Cirhendo, Cirunga, Kinjuba, Ludaha, Mukongola, and Nshanga in October that year. Because of their epidemic potential, IRC closely followed any cases of these diseases throughout the duration of the project. IRC was also watching for any cases of Meningitis, as an epidemic began in September 2001 in the neighboring health zone of Katana; IRC health monitors and community mobilizers have been trained in early identification techniques and referral procedures for Meningitis cases.

In August 2001, IRC distributed one copy of the national Standard Diagnosis and Treatment Guidelines (SDTG) to each of the 17 health centers in Kabare and organized a six-day training session on the Guidelines for the head nurses from each center and two nurses for Mukongola Reference Hospital. **Pre- and post-tests showed the nurses' ability to apply the SDTG increased by an average of 25% over the course of the training (from 50% to 75%).** This training was followed up by IRC health monitors, who provided

ongoing refresher training and sampling of the consultation, diagnosis and treatment records during supervisory visits throughout the program.

At the beginning of the implementation period, in collaboration with IRC, the local health committees, or *comités de santé* (COSAs), in each health catchment area determined criteria for the identification of indigents in Kabare as being: the totally impoverished; the unsupported elderly; the malnourished; orphans or unaccompanied minors; the handicapped and the chronically ill; widows and widowers; those without plots of land to farm; the chronically ill, e.g. patients with TB or Diabetes; and Internally Displaced Persons. As local circumstances in each of the health catchment areas varied and the situation of Kabare health zone was prone to change, the categories remained flexible throughout the program to meet the needs of the most vulnerable populations.



Average monthly total patient attendance for the 17 health centers increased by 1,182% from 1,261 before the project began to 15,122 at the end of the project

In their weekly visits to the health centers, IRC health monitors continued to monitor the quality of care at the centers, providing advice and support to the health center staff. IRC health monitors also accompanied the health center nurses on home-visits to verify the status of patients deemed indigent and in order to guarantee that patients who can afford to pay continued to do so. During these visits, the monitors also ensured that indigent patients were informed about the indigent support program and referred them to the health center for any necessary treatment.

At the beginning of the program, IRC adopted the same system of reimbursement for Kabare as it was also beginning to use in its intervention in Katana: at the end of each month, health centers provided the coupons that had been used to the BCZ, and the BCZ collated them and passed invoices to IRC. IRC then reimbursed the centers by depositing the funds into accounts at *ECONOMAT*, a non-commercial banking institution affiliated with the Archdiocese of Bukavu. The health centers are also able to keep their savings secure in these accounts, rather than having to keep money in their villages or at the BCZ.

IRC, in coordination with UNICEF (who were providing vaccines to the Expanded Program of Immunization, or EPI, program in Kabare), monitored the health centers' needs for other EPI inputs (syringes, boxes for the disposal of used syringes, etc.) throughout the implementation period to ensure that no ruptures of stock occurred. At the start of the program all of the vaccines and some of the equipment were stored at the BCZ. **The IRC procured equipment to decentralize the conservation of vaccines, thus decreasing the time needed to transport the vaccines to the health centers.** One refrigerator was delivered to the BCZ in April 2002 and three were placed at Bugobe, Mushweshwe, and Nshanga health centers. The IRC also constructed hangars at health centers to provide shade for mothers and children waiting for CPS/CPN visits and other vaccinations.

In March 2001, IRC carried out a vaccination coverage survey among children under five in Kabare, from which the target population size for vaccination was determined. For the BCG, Polio, DTCq, and Measles vaccines, the target population includes children aged zero to twelve months, and for the ATT (antenatal tetanus) vaccine, pregnant women are the target population. The estimated sizes of these target populations are based on: 1) The estimate that children under one year old and pregnant women each account for 4.4% of the population (UNHCR Reproductive Health in Refugee Settings Field Manual, 1999), and 2) The estimated population of Kabare (117,984 people). Through the provision of essential

EPI inputs and sensitization of the local community as to the importance of ensuring that both children and pregnant women complete the vaccination calendar, the IRC in collaboration with the BCZ, COSAs and health center staff continued to aim for maximum EPI throughout the health zone for the duration of the program. During weekly visits, IRC health monitors gathered health center vaccination data to monitor the EPI. In August and September 2001, IRC supported Phase II and III of the door-to-door *Journées Nationales de Vaccination* (National Vaccination Days or JNVs), against Polio in Kabare. **Approximately 27,447 children under five (116% of the target population) received second and third doses of the vaccine and Vitamin A.** In 2002 IRC supported 2 JNV polio vaccination campaigns targeting children aged 0 – 60 months. The first phase took place June 20 – 23, and IRC assisted with one health supervisor, two rental vehicles with gas, cooler boxes, megaphones, and batteries ; the campaign vaccinated 111% of the JNV target population. The second phase took place July 24-28, and IRC provided two health monitors, two rental vehicles with gas, two cooler boxes, and five megaphones with batteries; **the campaign reached 104% of the target population.**

Originally IRC planned to train and support members of the target communities as Community Health Workers (CHWs). This component of the program was to be run by the communities themselves with only limited technical support from IRC. The communities, via the COSAs, were to determine the selection process and compensation system for the CHWs.

However, when the IRC began working with the COSAs, we found that very few members had received any kind of training and that the general education standard among them was quite low. The success of the CHW plan depended greatly on the motivation of those selected, as well as the ability of the COSAs to supervise their work to ensure that the targeted communities were being reached. Neither the COSAs nor any potential CHWs had the experience or capacity to effectively carry out these roles. It was therefore decided - and agreed upon by the COSAs - that more active support should be provided by IRC in the form of trained community mobilizers. The primary function of the community mobilizers was to work closely with the COSAs, providing training in community mobilization techniques and reinforcing their capacity to transmit public health messages to the communities and identify other health-related problems. Working in conjunction with IRC health staff, the community mobilizers educated, sensitized, and trained communities on health topics such as malaria transmission and prevention, respiratory infections, diarrhea and personal hygiene, reproductive health, immunizations, nutrition, and AIDS awareness and prevention. **In November 2001, IRC distributed manuals on community mobilization and reproductive health to all 17 health centers.**



With support from IRC, WFP, and CELPA, the seven supplementary feeding centers were able to provide supplementary food for thousands of malnourished children throughout the project period.

In July 2001, IRC hired a nutritionist and began preparing for a nutritional survey in Kabare, which was carried out in August 2001. 30 clusters of 30 children (age six to 59 months) were surveyed, according to several indicators of nutritional status (weight for height, weight for age, and height for age – in comparison to the growth indexes of the National Center for Health Statistics – and the presence of nutritional edemas). The study found that approximately 16.4% of children suffer from acute malnutrition (less than 80% of the median of the weight for height index or presence of edemas), and that approximately 62.4% were chronically malnourished (less than 90% of the median of the height for age index). The study also found that, while the risk of edemas decreased with age, the risk of stunted growth increased significantly. These findings

confirmed that malnutrition constitutes a serious threat to the health of the population in Kabare, especially when considered alongside the elevated mortality levels, the presence of diseases with epidemic potential (e.g. cholera and measles), and the pillaging of armed militias that leaves families without food or tools to cultivate the land.

At the beginning of the project period, Caritas was supporting two therapeutic feeding centers in Kabare (one at the Hospital at Mukongola and one at the reference health center at Bugobe), and the Orphan Development Program International (ODPI) had begun supporting four supplemental feeding centers. In collaboration with the *Communauté des Eglises Libre Pentecôte en Afrique* (CELPA) and the United Nations World Food Program (WFP), IRC is began supervising and supporting seven supplemental feeding centers in the catchment areas of Bwirembe, Cifuma, Cirunga, Ludaha, Mbiza, Mulengeza, and Mushweshwe in October 2001. **Prior to this, in September 2001, IRC organized a workshop in diagnosis, treatment, and referral protocols for malnutrition, with the head nutritionist and two assistants from each of these centers participating (a total of 21 participants).** For the head nurses in the health catchment areas without nutritional centers, IRC health monitors organized additional seminars.

In September 2001, IRC signed a *protocole d'accord* with WFP, whereby they agreed to provide and transport essential inputs (sugar, oil, and corn-soya blend) for the seven supported centers and rations (beans, cereal, oil, and salt) for the patients' families.

These distributions allowed the centers to resume or scale up activities that had been curtailed by ruptures of stock during the previous months. Moreover, they provided the opportunity to update lists of malnourished children in each catchment area. Nutritional center staff and IRC community mobilizers visited many villages to screen and refer children and families to the centers. **As a result, 1,708 children and 1,445 families were receiving supplementary food from the seven IRC-supported centers by the end of October 2001** (children needing therapeutic feeding are referred to the therapeutic feeding centers in Bugobe and Mukongola).

In February 2002, UNICEF supplied soap and plastic sheeting for delivery to nutrition centers. Twice per week, nutrition centers prepared a nutritional porridge and distributed it to malnourished children; centers also distributed rations of beans, cereal, oil and salt to patient's families

In accordance with the provincial protocols, IRC has provided each of the seven supported centers with mebendazole for the regular (trimestrial) de-worming of the patients. Supplements of Vitamin A were included in Phase II and III of the JNVs, so a distribution of supplements was not necessary, and IRC has not provided antibiotics to the nutritional health centers as pathologies associated with malnutrition are treated at the health centers (and malnourished patients receive free care). IRC's nutritionist and health assistant analyzed the consultation records of each center to determine how much and which medicines need to be distributed each month.

IRC worked with *Food for the Hungry International* (FHI) to establish agricultural needs for the families whose children are treated at the nutrition centers. Nutritionists in the supported centers also created lists of local families that would most benefit from seed and tool distributions. Five of the IRC supported nutritional centers currently have demonstration gardens and gardening tools (ex. hoes) and seeds were distributed to each of the centers.

Outcomes and Successes

A summary of the results of the program can be found on page two, with details of results per objective to follow. In addition, it should be mentioned that the project not only increased access to primary healthcare and improved the nutritional status of the population of Kabare health zone, but also greatly strengthened the relationship and collaboration between health center staff, COSAs and the BCZS and

reinforced the capacity of all of the principal actors involved in the provision of cogs in primary health care services. Their participation and involvement in both the implementation and evaluation of the program has been constant. In May 2002, IRC held a Planning Interventions by Objectives (Planification des Interventions Par Objectifs - PIPO) workshop for all Kabare health staff, to assist them in identifying problems according to the main objectives of the Kabare health project, and to come up with effective solutions.

Furthermore, despite the unstable security situation and reduced access, all of the health centers had an uninterrupted supply of essential drugs and materials throughout the entire project period, the only interruption to both this and the provision of EPI inputs coming in April 2003 following insecurity caused by armed factions in Kalulu health area.

Project Performance by Objective

In order to track our effectiveness in this and other interventions, we use S.M.A.R.T. indicators, for which we assemble data through a variety of sources, each meant to balance and, when necessary, counter-balance the others. For example, the overall reduction in mortality rates is determined by mortality surveys conducted through random sampling. Attendance records are maintained by the health centers and reviewed by the IRC, as are the decisions and products of the COSA groups. The results and comments for the final quarter of the project period (May – June 2003), which have not previously been reported, are included in addition to information relating to the entire project period (February 2001 – June 2003).

Objective One

To increase access to primary health care to the internally displaced and local populations of Kabare health zone through the provision of essential drugs and equipment, support for the indigent population, and the reinforcement of the routine immunization program.

Activities:

- 1.1. To determine essential drug and equipment needs of each health center, in collaboration with the Bureau Central de Zone.
- 1.2. To procure, distribute and track the use of these essential drugs and equipment.
- 1.3. To track morbidity and mortality statistics for each health center in order to determine future drug and equipment needs, as well as to identify particular health care issues at each health center.
- 1.4. To monitor health center staff adherence to national Standard Diagnosis and Treatment Guidelines (SDTG).
- 1.5. To work closely with the health committees to determine criteria for selection of the indigent in each community.
- 1.6. To provide financial support for primary health care services to the indigent population of Kabare health zone.
- 1.7. To monitor the provision of primary health care services to the indigent to ensure accountability.
- 1.8. To procure a minimum amount of cold chain equipment, as well as vaccines and other materials related to routine immunizations.
- 1.9. To monitor the EPI program in Kabare health zone in order to assure maximum vaccination coverage for children under five and pregnant women.
- 1.10. To conduct a mortality study near the beginning of the project and again at the end of the project.
- 1.11. To design, write and distribute a CHW manual in collaboration with local health officials

- 1.12. To work with local communities to establish the system for the selection, monitoring, and compensation of the CHWs.
- 1.13. To train CHWs on public health topics, and training methodologies.
- 1.14. To establish the data collection system for the CHWs, standard forms, and reporting procedures.
- 1.15. To transmit weekly radio messages on public health issues.

Indicator	Measure														
1. Crude Mortality Rate for Kabare health zone reduced by 20% from baseline CMR identified in the mortality study IRC carried out in April/May 2000.	Crude Mortality Rate														
		<i>Date of Survey</i>		<i>Crude Mortality Rate</i>				<i>Excess Mortality Rate</i> (CMR – baseline for Sub-Saharan Africa*)				<i>% Change</i>			
		May 2000		2.7/1,000/month				1.2/1,000/month				-			
		March 2001		4.4/1,000/month				2.9/1,000/month				63% increase in CMR			
		November 2002		3.6/1,000/month				2.1/1,000/month				22 % decrease in CMR			
		December 2003		1.9/1,000/month				0.4/1,000/month				132% decrease in CMR			
	<p><i>*The baseline mortality rate for sub-Saharan Africa is 1.5/1,000/month.</i></p> <p>In March 2001, IRC conducted a mortality study in Kabare HZ, which surveyed 300 households including a total population of 1,778 people. The study collected information on deaths in those households that occurred since January 2000 and found that the crude mortality rate (CMR) was markedly higher than that measured in the Kabare survey in May 2000 (when the recall period was January 1999 to April 2000). It had increased from 2.7 deaths / 1,000 people /month to 4.4 / 1,000 / month. Among those households interviewed, the leading causes of mortality for children under five reportedly were febrile illness, malnutrition and measles. Among those five and older, malaria, violence and diarrhea were the most common causes of death. Seven deaths were related to uvulectomies, prevalent in Kabare during the 2000 survey. In May 2000, IRC conducted the first mortality survey in Kabare health zone, finding a CMR of 2.7/1,000/month. The increased CMR in 2001 is attributed to extreme insecurity in the health zone at the time, forcing populations to sleep outdoors, and making them more vulnerable to disease. The next mortality survey in the health zone was conducted by IRC in November 2002, a little over 12 months after IRC first began providing support. By this time the CMR had decreased by 22% to 3.6/1,000/month. The funding provided by OFDA for this project ended on 30 June 2003, however the IRC continued to provide assistance and implement activities with other partners, and carried out a mortality study in December 2003. The results of this most recent study showed that the CMR has again decreased to 1.9/1,000/month, representing a 132% reduction from the baseline measured in March 2001.</p>														
2. 90% of all patients receive treatment in accordance to regional standard diagnosis and treatment protocol guidelines.	SDTG Compliance														
	2001		<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>	<i>Jun</i>	<i>Jul</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>	<i>Total</i>
		Sampled								51	1,257	1,346	1,318	1,259	5,231
		SDTG+								20	772	878	915	850	3,435
		%								39.2%	61.4%	65.2%	69.4%	67.5%	65.7%
	2002		<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>	<i>Jun</i>	<i>Jul</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>	<i>Total</i>
		Sampled	1,209	1,655	1,438	1,833	2,184	2,226	2,408	2,035	2,571	2,811	N/A	N/A	20,370
		SDTG+	758	1,286	1,088	1,398	1,699	1,818	1,965	1,724	2,156	2,359	-	-	16,251
		%	62.7%	77.7%	75.7%	76.3%	77.8%	81.7%	81.6%	84.7%	83.9%	83.9%	-	-	79.8%
	2003		<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>	<i>Jun</i>	<i>Jul</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>	<i>Total</i>
		Sampled													
		SDTG+													
	%	86%	61%	58%	68%	67%	72%							68.7%	

Throughout the duration of the project, IRC health monitors have made weekly visits to health centers to supervise patient diagnosis and treatment, to examine consultation, prescription, and financial records, to conduct pharmacy spot-checks, and to train health center staff. This close monitoring also allows IRC to conduct epidemiological surveillance and verify adherence to national standards of diagnostics and treatment (SDTG). IRC has trained all 17 head nurses, and assistant nurses, on complying with the SDTG. During their weekly visits to health centers, IRC health monitors sample consultation, diagnosis, and treatment records, and monitor patient treatment, in order to measure SDTG compliance.

In February 2003, IRC began using a new system of evaluating compliance to SDTG, in which health monitors directly observe the treatment of patients instead of reviewing patient records. This system involves the observation of patients from their initial consultation through to the last services they receive from the health center. This accounts for the significant decrease in the number of sampled cases.

For 2003, health monitors have found an average of 68.7% of sampled cases in accordance with the Standard Diagnosis and Treatment Guidelines, with an average of 71.4% for the entire project period.

3. Health center attendance increases by 100%.

Total Patient Attendance

	<i>Total Patient Attendance</i>	<i>Average Monthly Attendance</i>	<i>Prior year's avg. monthly attendance</i>	<i>% yearly increase in average monthly attendance</i>	<i>Average increase</i>
Pre-Project (Jan – Jul)	8,829	1,261	-	-	-
2001* (Aug – Dec)	43,714	8,742	1,261	+593%	593%
2002	159,966	13,330	8,742	+52.5%	957%
2003	90,731	15,122	13,330	+13.4%	1,099%

* Figures from 2001 are from August – December only and figures for 2003 are from January – June only

Kabare health centers have treated 294,411 patients since IRC intervention. The average monthly attendance throughout the total project period is 16,171, which represents a 1,182% increase over pre-project attendance levels (1,261 average monthly attendance prior to IRC intervention).

4. 90% of all children under 5 received the six standard childhood immunizations (as recommended by WHO).

Immunizations

BCG

<i>Year</i>	<i>Total Population</i>	<i>Children < 5 (20% of population)</i>	<i>Children < 5 Vaccinated</i>	<i>% Coverage</i>
2001*	139,500	27,900	1,094	3.9%
2002	139,500	27,900	3,391	16%
2003	139,500	27,900	3,017	10, 8 %

Polio

2001*	139,500	27,900	2,499	9 %
2002	139,500	27,900	10,349	37%
2003	139,500	27,900	10,520	37.7%

DTCoq

2001*	139,500	27,900	4,285	15%
2002	139,500	27,900	10,270	36.8%
2003	139,500	27,900	6,394	22,9%

Measles

2001*	139,500	27,900	1,173	4.2%
2002	139,500	27,900	2,855	10.2%
2003	139,500	27,900	3,022	10, 8%

	<p>*Figures from 2001 are from August – December only and figures for 2003 are from January – June only.</p> <p>The above figures represent vaccination coverage from routine <i>Enlarged Program of Immunization</i> (EPI) activities at health centers in Kabare health zone, and do not include data from local vaccination campaigns conducted by IRC, the <i>Bureau Centrale du Zone</i> (BCZ), or other humanitarian aid organizations. The above figures serve only as a general indicator of vaccination coverage in Kabare health zone, and should not be regarded as precise coverage figures for the health zone. Please note that the Polio column only includes vaccination under the EPI program and does not include the results of the <i>Journées Nationales de Vaccination</i> (National Vaccination Days or JNVs).</p>														
<p>5. 90% of pregnant women vaccinated against tetanus during project period.</p>	Tetanus Vaccination among Pregnant Women														
	<i>Year</i>	<i>Total Population</i>	<i>Pregnant Women (4% of population)</i>	<i>Pregnant Women Vaccinated against Tetanus</i>											<i>% Coverage</i>
	2001*	139,500	5,580	3,385											61%
	2002	139,500	5,580	12,411											222%
	2003	139,500	5,580	5,409											96.9%
<p>6. 90% of all coupons for indigent distributed and reconciled with health center records.</p>	Indigent Attendance														
	2001	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>	<i>Jun</i>	<i>Jul</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>	<i>Total</i>	
	2002	6,862	7,663	8,991	10,149	11,490	12,549	13,725	14,297	14,260	13,588	16,596	18,920	149,090	
	2003	17,782	14,788	15,536	13,340	12,377	11,882							85,705	

IRC began providing financial support for the care of indigent patients in mid-August 2001, in the form of coupons distributed on a monthly basis to the COSAs that manage the health centers. Coupons for medical treatment were allocated to each COSA based on a number of demographic factors including the size of the population served by the health center, the number of local indigents, and the number of resident IDPs. Each COSA and health center keeps a list of the indigents in the catchment area. When an indigent person requires medical care, they ask the health committee for a coupon. The health committee determines whether the individual is registered as an indigent and, if so, he or she is given a coupon that they then present at the health center. The health center checks their list and if the person is on the list, then the health center will accept the coupon and the indigent person will be provided with the health care that they need. At the end of each month, the COSA and health center present the list of people who received health care during the month and the cost of the treatment. IRC medical personnel then audit the list and reimburse the health center for justified costs. IRC deposits the reimbursement funds into accounts at *ECONOMAT*, a non-commercial banking institution affiliated with the Archdiocese of Bukavu. Health centers keep their savings secure in these accounts, rather than keeping money in their villages or at the BCZ. Health centers in Kabare health zone can also refer up to 25 cases per month to the general hospital at Mukongola (5 patients from health posts, 8 patients from health centers, and 12 patients from reference health centers). The treatment of referred indigent patients is also paid for by IRC. At the end of October 2001, IRC instituted quotas on the number of coupons that can be used each month at the health centers in order to limit costs.

For 2003, IRC has provided coupons for the treatment of 85,705 indigents, with a total of 273,380 indigents receiving treatment throughout the entire implementation period.

		Drugs and Supplies													
		<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>	<i>Jun</i>	<i>Jul</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>	<i>Avg.</i>	
7. 90% of all health centers have an uninterrupted supply of drugs and supplies through the project period.	2001	HCs served								17	17	17	17	17	17
		%								100%	100%	100%	100%	100%	100%
	2002	HCs served	17	17	17	17	17	17	17	17	17	17	17	17	17
		%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	2003	HCs served	17	17	17	16	17	17							17
		%	100%	100%	100%	94%	100%	100%							99%

In the first reporting period, IRC, in collaboration with the BCZ, established essential drug and equipment needs for the 17 health centers and distribution began in August 2001. The list of essential medicines was harmonized with similar lists used for the IRC health program in Katana health zone. By merging the lists, IRC was able to respond to the health needs of the two populations more efficiently.

IRC identified drug and equipment needs, based on itemized requests submitted by each health center. These requests were first submitted to the BCZ for approval, and then transferred to IRC, where the health monitors, program manager, and pharmacist reviewed the requisitions to determine what should be included in the distributions. IRC established, in consultation with the BCZ, which equipment IRC would provide and what the health centers should purchase themselves, with the portion of their revenue designated for *frais de fonctionnement* (operating costs). IRC provided essential equipment (including scales, stethoscopes, and pressure cookers) and basic office supplies in monthly and supplemental distributions. Health center staff were assisted in stock managing their stock through the use of basic inventory tools and training provided by the IRC.

IRC delivered essential drugs and equipment to 17 health centers in Kabare health zone. Due to an increase in the number of attacks along the border with Kahuzi-Biega National Park, in May 2002 IRC began distributing only minimum drug stocks to 10 health centers judged to be at highest risk for attacks. The majority of the drug stock for these 10 health centers was kept at IRC headquarters until security improved. IRC also postponed delivery of centrifuges and hemoglobinometers to health centers during this time.

An average of 99.7% of all health centers received an uninterrupted supply of drugs and supplies throughout the project period.

8. 90% of all health centers maintain an uninterrupted supply of EPI inputs (vaccines, syringes, cold chain equipment).

EPI Inputs														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg.
2001	HCs served								17	17	17	17	17	17
	%								100%	100%	100%	100%	100%	100%
2002	HCs served	17	17	17	17	17	17	17	17	17	17	17	17	17
	%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2003	HCs served	17	17	17	16	17	17							16.8
	%	100%	100%	100%	94%	100%	100%							99%

The supply of inputs to Kalulu health center in April 2003 was due to increased security risks following reports of armed groups in the area.

An average of 99.7% of 17 health centers received and maintained uninterrupted monthly supplies of EPI inputs throughout the project period.

9. Number of cases and deaths caused by neonatal tetanus reduced by 80% during project period.

Neonatal Tetanus Mortality														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2001		—												14
2002		—												5
2003		—												0

IRC health monitors gather weekly morbidity and mortality statistics from health centers. No cases of neo-natal tetanus have been reported in 2003.

The number of cases and deaths caused by neonatal tetanus have been reduced by 100% during the project period (in addition, more than 96% of pregnant women had received vaccinations for tetanus by June 2003)

10. Increase in

Antenatal Attendance

antenatal attendance by 50% as compared to baseline data taken at beginning of project.		Target 4% of the pop	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>	<i>Jun</i>	<i>Jul</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>	Avg.
	2001	409								168	83	180	200	220	170.2
	2002		335	413	488	449	528	606	472	349	454	375	444	561	456.2
	2003		501	441	520	503	431	434							471.2
Average antenatal attendance figures have increased by 177% between 2001 and 2003.															
11. Increase hospital births by 50% from baseline data taken at beginning of project.	Hospital Births														
		<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>	<i>Jun</i>	<i>Jul</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>	Avg.	
	2001								6	19	11	25	18	15.8	
2002	16	22	34	41	31	32	27	33	25	28	25	21	27.9		
<p>IRC does not measure the number of hospital births, however the number of births taking place at the health centers each month in 2001 and 2002 was recorded, as indicated above.</p> <p>The figures above show a 77% increase in the average number of births taking place at the health centers between 2001 and 2002.</p>															
12. Number and percentage of CHWs submitting regular reports.	CHW Reports														
	<p>IRC discontinued the CHW project in favor of hiring a team of community mobilizers who work in conjunction with IRC health staff, to educate, sensitize, and train communities on health topics such as malaria transmission and prevention, respiratory infections, diarrhea and personal hygiene, reproductive health, immunizations, nutrition, and AIDS awareness and prevention. The mobilizers visited health centers, COSAs and communities on a weekly basis, and reported both to the IRC and the BCZ throughout the duration of the project</p>														
13. 75% of all CHWs demonstrate competency on training topics (pre and post test results)	CHW Training														
	<p>Twelve community health mobilizers, to conduct community education sessions in both Katana and Kabare for the health and the water and sanitation programs, were recruited in August 2001. The mobilizers also attended the training session on the prevention and treatment of and another on Meningitis protocols. In November 2001 the twelve social mobilizers attended a training session on organizing communities in the fight against HIV and AIDS. Between 25 February and 1 March 2002, IRC trained 34 representatives from Kabare health zone on the prevention of HIV/AIDS and other sexually transmitted diseases. Also in March 2002, IRC trained 119 COSA representatives on the role of community health committees and management of health centers.</p>														
14. Number and percentage of households visited by CHWs.	CHW Household Visits														
	2003		<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>	<i>Jun</i>	<i>Jul</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>	Avg.
<p>The 12 community mobilizers regularly visited communities to identify water, hygiene and sanitation needs. IRC community mobilizers conducted household visits each week, to verify the status of indigent patients, and to follow-up with families of malnourished children, in addition to organizing meetings of local COSAs and distributing dry rations for malnourished children.</p>															
15. Number of	Radio Messages														

radio messages transmitted/month.	<p>A local musical group wrote songs for IRC in French, Swahili, and Mashi (the language of the Bashi, the major ethnic group living in Katana and Kabare) about malaria prevention and women's rights (focusing on sexual and gender-based violence). IRC submitted the songs for review by the Provincial Health Inspection, following which they were broadcast on local radio stations. One song on malaria prevention was played by local radio on Malaria Day, April 25, 2002.</p> <p>In October 2002, 2 local radio stations (Radio Maendeleo and Radio Kahuzi) began broadcasting daily IRC public service announcements and weekly half-hour radio programs on public health topics. The public service announcements and radio programs are written and recorded by IRC community mobilizers. These radio stations both cover the entire health zone. Through household visits and surveys the community mobilizers estimated that 1 in every 10 families have access to a radio.</p> <p>From October 2002 to the end of March 2003, 2 radio stations broadcast daily public service announcements and weekly radio programs, recorded by IRC staff, on public health topics.</p>
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Objective Two

To improve the nutritional status of children and adults in Kabare health zone by providing essential support to seven local nutritional centers.

Activities

- 2.1 To conduct a nutritional survey in Kabare at the beginning and end of the project.
- 2.2 To carry out nutritional assessments and trainings at all 16 health centers.
- 2.3 To procure from WFP or UNICEF and distribute to the local nutritional centers essential inputs (food, therapeutic milk) that will enable them to serve the nutritional needs of the population.
- 2.4 To provide medicines (vitamin supplements, antibiotics, and de-worming medications) to the centers.
- 2.5 To provide food and materials to allow training in food production and home gardening at all three nutritional centers and, if possible, at the other thirteen health centers.
- 2.6 To buy seeds and tools to restart operations at the demonstration gardens of the nutritional centers.

Indicator	Measure													
1. Total number of monthly admissions at the nutritional centers.	Admissions (New Cases)													
		<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>	<i>Jun</i>	<i>Jul</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>	Total
	2001										1711	538	477	2,726
	2002	510	302	389	438	337	391	235	276	369	272	377	405	4,301
	2003	250	262	444	164	334	257							1,711
	<p>In 2003, nutrition centers have reported 1,711 new admissions*. The total number of admissions for the project period is 8,738.</p> <p><i>*new admissions do not include old cases, readmissions, or children transferred from therapeutic feeding centers.</i></p>													
2. Total number of monthly exits at the nutritional centers.	Exits													
		<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>	<i>Jun</i>	<i>Jul</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>	Total
	2001										5	528	521	1,054
	2002	657	342	508	480	283	576	274	378	317	366	395	398	4,974
	2003	307	370	534	185	367	293							2,056

	In 2003, nutrition centers have reported 2,056 total exits. The total number of exits throughout the project is 8,084.														
3. Percent of enrolled children who actually attend feeding programs.	Feeding Programs														
			<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>	<i>Jun</i>	<i>Jul</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>	<i>Avg.</i>
	2001	#										154	493	447	
		%										90.1%	91.6%	93.7%	91.8%
	2002	#	493	288	365	400	324	377	263	268	348	249	344	376	
		%	96.7%	95.4%	93.8%	91.3%	96.1%	96.4%	95.6%	97.1%	94.3%	91.5%	91.2%	92.8%	94.4%
	2003	#	237	253	416	153	311	236							
		%	94.8%	96.6%	93.7%	93.3%	93.1%	91.8%							94.3%
	<i>Figures for children under the age of 15 years.</i>														
	The average percentage of children enrolled who actually attending feeding programs throughout the implementation period is 93.8%														
4. Mean weight gain of 8g/kg body weight/day for patients enrolled in supplementary feeding programs	Mean Weight Gain														
			<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>	<i>Jun</i>	<i>Jul</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>	<i>Avg.</i>
	2002	kg						1.65	1.28	0.95	1.67	1.43	2.04	2.05	1.58
	2003	kg	1.9	1.4	1.3	1.2	1.9	1.8							1.58
This indicator has not been measured as anticipated. The target mean weight gain of 8g/kg body weight/day is used in therapeutic nutritional centers, however the IRC supported seven supplementary feeding centers, in line with the needs of the target population. In supplementary feeding centers, weight gain is measured on the basis of the weight of the malnourished patient upon entry in comparison with their weight gain upon exiting the center. The potential weight gain can vary depending on the supplies and provisions available for patients in the supplementary feeding centers and in their own households. The figures above therefore show the average mean weight gain of patients enrolled in the supplementary feeding centers between June 2002 and June 2003.															
5. Weight for height percentages (W/H%).	Weight for Height %														
	IRC does not measure this indicator. The supplementary feeding centers measure progress in accordance with the national nutritional protocols of entry criteria (weight for height less than 80%) and exit criteria (weight for height 2 times more than 85%).														
6. Percent of exits from supplementary feeding program due to recovery is at least 75%.	Recoveries														
		<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>	<i>Jun</i>	<i>Jul</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>	<i>Total</i>	
	2001										0	500	504	1,004	
	2002	631	331	495	416	270	443	239	334	288	265	291	336	4,339	
	2003	263	314	450	157	316	239							1,739	
Throughout the project period, an average of 87.6% (7082 cases of recovery out of a total of 8084 between October 2001 and June 2003) of exits from supplementary feeding program were due to recovery.															
7. Percent of exits from supplementary feeding program due	Defaults														
		<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>	<i>Jun</i>	<i>Jul</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>	<i>Total</i>	
	2001										0	5	4	9	

to defaulting is less than 15%.	2002	12	1	4	53	3	124	30	38	23	89	97	50	524	
	2003	33	39	55	23	37	41							228	
	Throughout the project period, an average of 9.4% (761 cases of defaulting out of a total of 8084 between October 2001 and June 2003) of exits from supplementary feeding program were due to defaulting (abandonment of program, admission errors).														
8. Percent of exits from supplementary feeding program due to death is less than 10%.	Deaths														
		<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>	<i>Jun</i>	<i>Jul</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>	<i>Total</i>	
	2001										0	4	4	8	
	2002	8	3	4	5	4	1	1	0	0	4	1	3	34	
	2003	3	1	6	0	3	1							14	
In 2003, nutrition centers reported 14 deaths (0.7% of exits). The total number of exits due to death throughout the project is 56 (0.7% of all exits).															
9. In exits from the nutritional health centers, number/percentage transferred.	Transfers														
		<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>	<i>Jun</i>	<i>Jul</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>	<i>Total</i>	
	2001										5	19	9	33	
	2002	6	7	5	6	6	8	4	6	6	8	6	9	77	
	2003	8	16	23	5	11	12							75	
In 2003, nutrition centers reported 75 transfers for 2002 (3.6% of exits). The total number of exits due to transfer throughout the project is 185 (2.3% of all exits).															
10. Number of health counseling sessions completed with patients and their families.	Health Counseling Sessions														
	2003		<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>	<i>Jun</i>	<i>Jul</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>	<i>Avg.</i>
			80	79	78	77	96	93							84
This activity was carried out to sensitize families and communities throughout the duration of the project, both at the supplementary feeding centers and through home visits, however the figures for 2001 and 2002 are unavailable.															

Constraints

The official start date for the project was 1 February 2001, however due to several factors, principally delays in the recruitment of vital expatriate and local project staff, the program did not become operational until August 2001. Concerns about living conditions, transport and the security issues associated with living and working in Kabare led to some difficulties in recruiting field staff.

Despite the reconstruction and rehabilitation of the bridges, many roads remained impassable in the area and transporting essential drugs and supplies was therefore difficult. Rains also contributed to the already hazardous conditions, as many roads became washed away.

Initially, after the monthly drugs and equipment needs had been established based on the anticipated requirements, health center staff projections generally underestimated these needs, as attendance increased by approximately 600% between July and October 2001. Many health centers therefore had to submit emergency requisitions as they approached minimum stock. With assistance from IRC health monitors, the health center staff were able to improve their estimation of needs in the following quarter through the use of stock cards and other inventory tools provided by IRC and training in how to use them. These tools and trainings improved the internal controls for drug stocks in the centers.

Insecurity due to the ongoing war in the region was a major factor in the implementation of all project activities. Due to an increase in the number of attacks along the border with Kahuzi-Biega National Park, in May 2002 IRC began distributing only minimum drug stocks to the 10 health centers judged to be at highest risk for attacks. The majority of the drug stock for these 10 health centers kept at IRC headquarters until security improved. IRC also postponed delivery of centrifuges and hemoglobinometers to health centers during this time.

Although the head nurses from all 17 health centers received training on the standard diagnosis and treatment guidelines, during supervisory visits IRC staff found that those trained had not passed on their increased knowledge and standard practices to the assistant nursing staff in the health centers. As such, when the head nurses were away from the center and the assistant nurses treated patients the percentage of consultations in adherence with SDTG decreased. To combat this, in June 2002 the IRC conducted a further training program solely for the 17 assistant head nurses on treating patients in accordance with the SDTG.

Despite the coupon system for the treatment of indigent patients ensuring that those who met the criteria were receiving the free health care services that they were in need of, it was a system that required good organization and administration on the part of the COSAs. IRC did not receive updated lists of indigents from the regional COSAs several times throughout the program and had to continuously maintain pressure on the COSAs to update their indigent lists as soon as possible. In addition, financial mismanagement was found to be a serious problem in nearly all of the health centers, with many centers using funds designated for operating costs to pay off debts. IRC staff reinforced the importance of proper financial management at the monthly health center/BCZ meetings.

At the beginning of the project, the BCZ for Kabare health zone possessed two refrigerators for vaccine preservation for the entire rural health zone. Due to the unreliability of local electrical power, these refrigerators operate on gas, as well as electricity. UNICEF was providing fuel for these refrigerators, but stopped for three weeks due to the emergency in Goma. To ensure the cold chain, the BCZ was using borrowed fuel during this time. As with its programs in other areas of the country, the IRC is finding that the vulnerability of the cold chain can have an extremely negative impact on vaccination coverage in the health zone. This was further illustrated when the refrigerator delivered to Bugobe had to be moved back to the Kabare BCZ headquarters in May 2002, following an attack by armed groups.

Unfortunately, the door-to-door strategy of the JNVs (National Vaccination Days) contributed to low EPI attendance in the health zone, as consequently mothers did not bring their children to the health centers for vaccinations, expecting the vaccinations to come to them. In addition, the figures for vaccination coverage of the EPI are made all the more difficult to determine as many vaccination record cards are lost due to the displacement of families and the pillaging of houses.

WFP was unable to provide the necessary quantity of sugar for the first distribution of essential inputs to malnourished families, which took place at the end of September 2001, so IRC had to purchase sugar locally and use vehicles from other projects to transport the materials (as WFP was unwilling to transport materials it did not purchase). Through closer collaboration between IRC and WFP, these problems were avoided in subsequent distributions.



IRC staff inspect the newly constructed bridge at Bugorhe.

Adjustments

During evaluations of the physical accessibility of the health centers in Kabare in July and August 2001, IRC found that access to Mulengeza and Mpembe health centers was severely limited, as all four bridges that connect them to the rest of Kabare had fallen into severe disrepair. With the objectives of increasing the population's access to health care and facilitating the implementation of IRC's support and supervision activities at these health centers, IRC prioritized the rehabilitation of Bugorhe Bridge and received approval from OFDA to redirect funds earmarked for the purchase of emergency medical kits to the rehabilitation of this bridge. Excavation of the site and removal of the old structure was completed in October 2001. Construction and full rehabilitation of the bridge was completed in November 2001 and connected the northern axis of Kabare with the main road heading North from Bukavu, benefiting both humanitarian and commercial traffic.

On January 17, 2002, Mt. Nyiragongo erupted near Goma, North Kivu Province, forcing a mass migration of people to the surrounding areas, including the Kabare health zone. As a result of this emergency, regional population demographics changed. IRC recognized those people displaced by the eruption as indigents, entitled to free health care in IRC supported health zones.

Coordination and Networking

The positive results achieved throughout this program would not have been possible without the collaboration and participation of all of the health worker of the zone, from the IPS (*Inspection Provinciale de Santé*) and the BCZS, through to the health center and supplementary feeding center staff, COSA members and the communities.

The coordination of assistance to Kabare health zone with other international NGOs was also crucial to the successful implementation of activities. The supplementary feeding center program in particular benefited from the combined support of CELPA, WFP, FHI and UNICEF.

In addition, IRC used funds from a separate OFDA-funded project (War Recovery Project) to conduct complementary water and sanitation activities at Kabare health centers: IRC constructed latrines, hand-washing stations, waste-pits, and placenta pits¹.

Lessons Learnt and Recommendations

While the situation in DRC remains precarious and guarantees for sustained peace are not yet tangible, the environment of improved security will enable the IRC to tailor its assistance to contribute to the consolidation of peace and reconstruction. This OFDA-funded programme of support, which spanned a period of more than 2 years, has not only addressed the health needs of thousands of war-affected people in Kabare Health Zone, it has also laid the foundations for subsequent programmes which will focus on further strengthening the capacity of health system professionals at all levels to maintain the high level of service, which has been attained during the execution of this program to date.

As can be seen from the aims, objectives and activities of this program, the IRC is taking an approach to immediate health care provision that systematically builds elements of sustainability into the project: training health center personnel, government supervisors and community representatives not only in necessary health knowledge, but also in management and accountability; supporting a fee-for-service system of health care service; engaging the community in the development and maintenance of the infrastructures needed for them to generate income to attain health; and reinforcing community and government level structures.

¹ Reports on these activities were included in the quarterly reports for grant number AOT-G-00-00-00058-00.

In order to achieve the empowerment of the local health care authorities to enable them to ensure access to health care in Kabare health zone, the IRC will take into account several lessons learnt during the course of this intervention. The first, and perhaps most crucial, of these is that more support will be directed towards consolidating the management capacities of the BCZS. The standards of service by health center staff within the standard diagnosis and treatment guidelines (SDTG) have been high throughout this program thanks to ongoing training and supervision provided by IRC. However, if this is to continue there must be continued support and supervision to the health centers from the BCZS. The peaks in the number of consultations carried out in accordance with the SDTG immediately following the training of the head nurses and again after the training of the assistant nurses shows that continued refresher training of all health center staff also needs to be conducted by the BCZS, and the IRC will work on supporting them to achieve this. The style of training is also extremely important, as this and similar primary health care projects have demonstrated that continuous on-the-job training is more effective and practical and less disruptive to the running of the health centers than one-off seminars or courses. Continuous training also ensures that all health center staff are targeted, irrespective of the length of time that they have been employed at the health center and therefore counteracts the effects that high staff turnover at the health centers can have on the provision of quality health care services.

This program has also further reinforced the importance of the role that the COSAs play within the health care system. The IRC has found that where COSAs are not assisting in the co-management of health centers alongside nursing staff, this is usually due to conflicts between the two parties or confusion as to the responsibilities of each. Therefore, in addition to conducting advanced capacity building activities with the BCZS, more support should be directed towards the COSAs, both in terms of clarifying their roles and responsibilities in collaboration with the BCZS and enabling the BCZS to provide them with ongoing training and support.

The IRC has continued to work in Kabare health zone following the conclusion of this intervention in June 2003, and will continue to do so for a further two years through funding from other donors. The focus of subsequent projects is the preparation of the BCZS staff for the assumption of full responsibility for the supervision and training of health center staff. This is being done through Training of Trainers workshops, which, in addition to other activities taking into account the lessons learnt from this and other programs and focusing on strengthening the capacity of health system professionals at all levels, should ensure the sustainability of the project after the IRC's withdrawal.

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