



Africare

**Africare
Community Based Integrated Management of Childhood Illnesses Plus (CIMCI-Plus)**

Ntungamo District, Uganda

MID TERM EVALUATION REPORT

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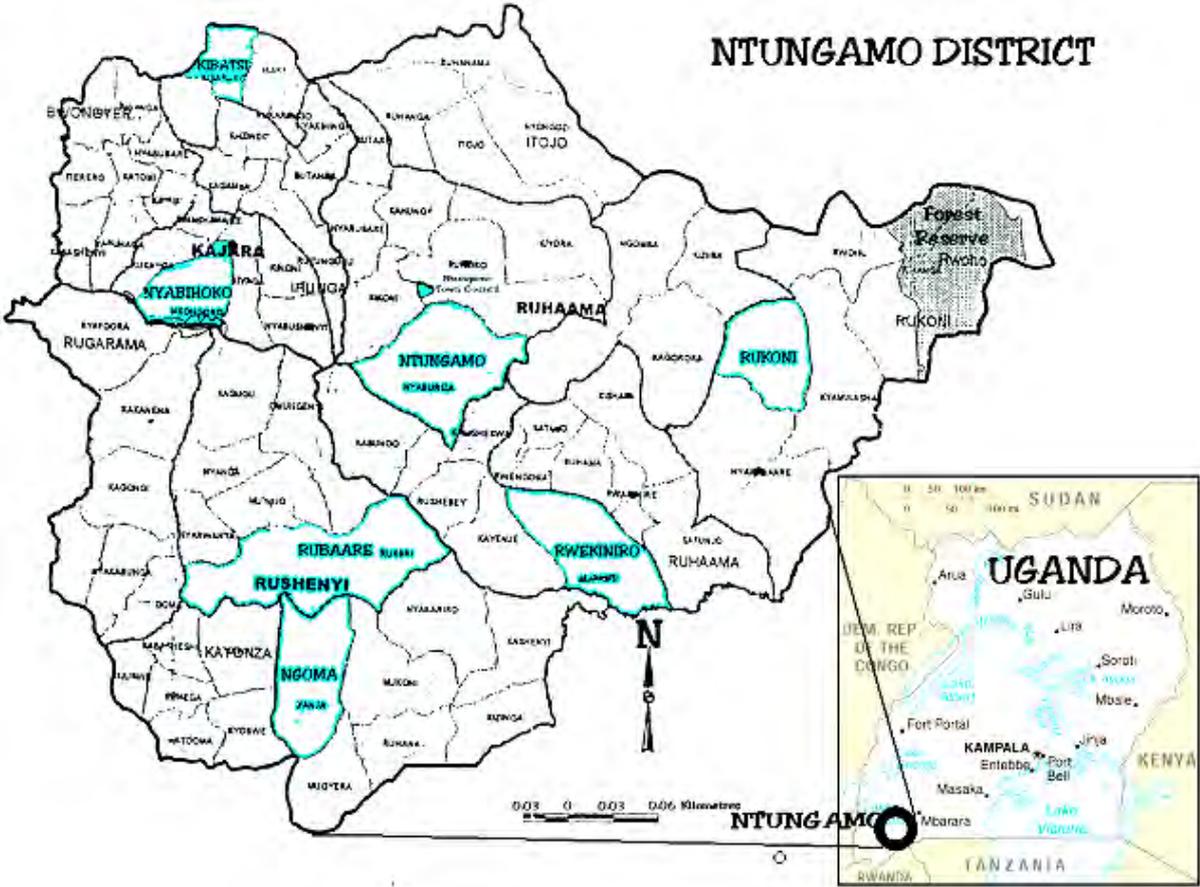
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To:

United States Agency for International Development
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Office of Health, Infectious Disease and Nutrition
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NTUNGAMO DISTRICT



Acronyms

AFW	African Well Foundation
BCC	Behavior Change Communication
CCA	Community Counseling Assistants
CHIS	Community Health Information Systems
CIMCI	Community Based Integrated Management of Childhood Illnesses
CIMS	Community Information Management System
CORPs	Community Owned Resource Persons
DDHS	District Director Health Services
DIP	Detailed Implementation Plan
EPI	Expanded Program on Immunization
FCP	Family Care Practices
FGD	Focus Group Discussions
HH	Household
HMIS	Health Information Management System
HQ	Headquarters
HSD	Health Sub-District
HU	Health Unit
HUMC	health Unit Management Committee
IEC	Information Education and communication
ITN	Insecticide Treated Mosquito Net
KI	Key Informant Interviews
KPC	Baseline Survey
LC	Local Council
LGDP	Local Government Development Plan
M&E	Monitoring and Evaluation
MEMS	Monitoring and Evaluation Management Services
MACIS	Malaria and Childhood Illness Secretariat
MoH	Ministry of Health
NECDEP	Nutrition and Early Childhood Development Project
NDHS	Ntungamo District Health Services
ORS	Oral Rehydration Salt
PDC	Parish Development Committee
PLWA	Persons Living with AIDS
PMP	Project Monitoring Plan
PMTCT	Prevention of Mother to Child Transmission of HIV/AIDS
TBA	Traditional Birth Attendant
TIPS	Trial of Improved Practices
TOT	Trainer of Trainer
TT	Tetanus Toxoid Immunization
VCT	Voluntary Counseling and Testing
VHT	Village Health Team
WUC	Water Source User's Committee

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A. Executive Summary

Africare is implementing a Community based Integrated Management of Childhood Illnesses (CIMCI)-Plus project in 7 sub counties in Ntungamo district, south-western Uganda between October 2003 to September 2008. The program aims to (1) promote knowledge and behaviors related to the prevention of childhood illnesses at the household and community levels, (2) improve home management of the sick child by promoting timely and appropriate care seeking at the household and community levels, (3) improve accessibility of under five children and women of reproductive age to quality health services and products at both the facility and community levels and, (4) strengthen national and district capacity to replicate and sustain the CIMCI approach.

The project is focusing on five technical child survival interventions: (1) Malaria, (2) Diarrhea, (3) HIV/AIDS, (4) Immunization, and (5) Nutrition, breastfeeding and micronutrients. Additional funds were secured from USAID Uganda mission to support nutrition, water and sanitation activities. The project primarily targets 82,100 beneficiaries (39,180 children under 5 and 42,911 women of reproductive age group) and indirectly targets 104,476 other people.

The program's overall progress is good and most of the targets are likely to be achieved and even surpassed. There is no doubt the Project has the potential to provide beneficial information on effective approaches to CIMCI service delivery and capacity building in the district and country. The project is on track in most of the activities listed in the DIP. The effectiveness of the technical interventions however shows a mixed picture.

- Malaria interventions (Fair Performance)
- Immunization (Good Performance)
- HIV/AIDS (Low Performance)
- Nutrition (Fair Performance)
- Diarrhoeal Disease (Fair Performance)
- Community mobilization (Good Performance)
- Communication for behavior change (Good Performance)
- Project management (Good Performance)

Key Recommendations

- **Recommendations to USAID/GH/HIDN/NUT/CSHGP,**
 - Provide technical assistance to implement the various capacity building plans
 - Replace project vehicles and de-junk old motorcycles
 - Provide technical support for Project documentation
 - Support the project to expand CIMCI interventions to other districts.
- **Recommendations to the Country Office and HQ**
 - Kampala Office should have a technical liaison office with field staff, to improve supervision, monitoring and mentoring of field activities.
 - Strengthen linkages with line ministries and equivalent district departments that have a stake in the Project activities at national level
- **Recommendations to collaborating partners**
 - District to train staff in HMIS and improve quality of data management. Support is needed to reduce manual data handling and analysis (in facilities with computers).
 - Integrate CIMS into district HMIS especially in line with the VHT concept

- Increase availability of mosquito nets and HIV/AIDS services
- ***Recommendations to the Field Office***
 - Develop guides for implementation by other partners such as supervision checklists.
 - Indicators and targets for all the result areas should be completed.
 - Deal with the slow completion of capacity building efforts among partners, and revise the capacity needs.
 - The project should continue integrating newborn health intervention to improve impact on child mortality. It is commendable that the project is considering development of funding proposals for newborn community health in light of the CIMCI experiences.
 - Do costing and ensure that resources required to achieve the scale up are realistic and sustainable.
 - Strengthen district/sub-county capacity to plan, coordinate, manage and monitor CIMCI service delivery.
 - Strengthen the CIMCI technical leadership at the various district levels.
 - Develop a clear IEC/BCC strategic plan that can be taken over by the district/partners
 - Integrate gender perspective in project activities, outputs and indicators
 - Though planned, the Project has not conducted a thorough institutional analysis of district health service system. There is also need to assess the sub-county capacity.
 - Develop tools to guide parish level CIMS analysis and use this information for decision making to improving impact of Project.

B. PROGRESS ASSESSMENT

B.1 TECHNICAL APPROACH

“Africare is the only NGO working towards CIMCI in the district”

DDHS Ntungamo

B.1.1 Project Overview

With a grant from USAID/GH/HIDN’s Child Survival and Health Grants Program, Africare is implementing a 5 year (October 2003 to September 2008) Community based Integrated Management of Childhood Illnesses (CIMCI)-Plus project in the sub counties of Bwongera, Ihunga, Itojo, Kayonza, Nyakera, Rugarama and Ruhama in Ntungamo district, south-western Uganda¹. The project goal is to contribute to the reduction of morbidity and mortality among children under 5 and improve the health status of women in the reproductive age group in Ntungamo district. The general program objectives are:

1. To promote knowledge and behaviors related to the prevention of childhood illnesses at the household and community levels
2. To improve home management of the sick child by promoting timely and appropriate care seeking at the household and community levels
3. To improve accessibility of under five children and women of reproductive age to quality health services and products at both the facility and community levels.
4. To Strengthen national and district MoH capacity to replicate and sustain the CIMCI approach

The project focuses on five technical child survival interventions: (1) Malaria², (2) Diarrhea, (3) HIV/AIDS, (4) Immunization, and (5) Nutrition, breastfeeding and micronutrients. It primarily targets 82,100 beneficiaries (39,180 children under 5 and 42,911 women of reproductive age group) and indirectly targets 104,476 other people in the 7 sub-counties.

The program builds on lessons and experiences gained in earlier CIMCI implementation (phase-1) including the CORE/BASICS Community and household IMCI Framework. Additional funds were secured from USAID Uganda mission to support nutrition, water and sanitation activities.

B.1.2 Mid-Term Progress on Technical Intervention

Malaria

(35% effort)

Malaria is the leading cause of morbidity and mortality in children under 5 and takes 35% of the project effort. The project has adapted IEC materials from the Ministry of Health malaria control program. Messages have been delivered to the community through the trained Parish Development Committees (PDCs), Sub County Trainers, Community Owned Resource Persons (CORPs) and school children, through innovative BCC activities like drama, film shows, production and distribution of IEC Materials and home visits. These have aimed at promoting recognition of childhood malaria, early care seeking, home care of sick children, use of Insecticide-Treated Mosquito Nets (ITNs) by children under 5 years and pregnant women, regular re-treatment of nets and uptake of Fansidar by pregnant women for Intermittent Presumptive Treatment of Malaria. At facility level, the project provided health education at antenatal clinics (ANC) and out patients’ department (OPD) clinics. Model homes have been used to promote good household practices and discourage harmful practices. The project has increased access to

¹ The other 8 sub-counties in the district were covered under Phase 1 that ended in September 2003

² Pneumonia is a common cause of death in children and case recognition and prompt care seeking is included under malaria

ITNs through the formation of 38 bed net clubs (above the targeted 21), each with an average membership of 20-35. These have been linked with bed-net suppliers outside the project area and an average of 35 nets per club have been purchased and distributed to members.



Demonstrating how to fix ITN

The communities were mobilized to participate in the annual national malaria days, bi-annual child health days and the national net re-treatment days. Net re-treatment has continued to be communally done during child health days. Overall, activity implementation has been on schedule.

The project progress towards benchmarks shows a mixed picture with no major changes in the technical approach made. Home care for sick children has shown improvement. Mothers interviewed during FGDs knew the danger signs in a sick child and therefore would take their sick children for treatment within 24 hours of detecting the danger signs. The mothers also show confidence in the Community Medicine Distributors established by the district. The

evaluation team notes that the project needs to work more closely with the community drugs distributors as suggested in the DIP.

Data also shows increase in timely and complete IPT uptake though progress is slow. There is need to identify those factors that are preventing the rapid achievement of IPT uptake targets.

Table 1 Progress in Malaria Interventions

Program Indicator	Jan '04	Aug '06	Target '08	Performance towards target
Care seeking				
% children 0-23 months taken for "millet" extraction	11%	8%	5%	Effective: 50% progress towards target achieved
ITN Use				
% of children 0-23 months who slept under ITN night before study	14%	10%	25%	Low effectiveness: There is a decline from baseline
IPT Use				
% pregnant women who received IPT1 and IPT2 at 4th and 7th months of gestation respectively	6%	10%	20%	Effective but slow: 29% progress towards target achieved

Source

e: Assessment made from KPC baseline (January 2004) and MTE (August 2006)

According to the Mid-Term LQAS, there is a reduction in incidents of children extracting "millet" in the community signifying effectiveness of the messages in overcoming negative community practices and beliefs to care seeking. Thus, messages should be maintained. Efforts to increase net use have not resulted in increased use among children 0-23 months, though the demand for ITNs has been created as depicted in the growing number of bed net clubs and in the focus group discussions.

Accessibility and affordability of ITN has been a major challenge for malaria control interventions in the project area. It was not possible to establish net outlets in each sub-county as

the expected leverage from PSI did not materialize and the Ministry of Health has not been able to avail the subsidized or free ITNs at government health facilities. Discussions further revealed that other organizations like ARISE and Community Orphan Protection and Empowerment (COPE) project are providing free ITNs to communities but the target sub-counties are different. The project needs to develop relationships with such organizations and the Ministry of Health or re-plan to include in their implementation approach net distribution. In the meantime the project is encouraging the formation of more ITN clubs and linking them to subsidized ITN providers.

Follow-up and next steps

- The project needs to work more closely with the community drugs distributors
- Increase advocacy for ITN use among children under 5 years with the ITN Clubs.
- Include prompt care seeking in the monitoring indicators
- Continue supporting Ministry of Health National Child Days.

Immunization

(25% effort)

Before the project, there was a marked decline in immunization coverage attributed to high drop out rates. The program has addressed the causative factors especially the failure of Health workers to follow routine outreach schedules, short and inadequate immunization sessions that are not integrated with ANC at the facilities and negative beliefs towards routine immunization and National Immunization days (NIDS).



Drama: Demonstrating role of husbands in taking children for immunisation

Through trained PDCs, CORPs and EPI mobilizes, BCC activities have been used to counter false beliefs in the community. Communities have been mobilized to utilize routine facility and outreach immunization posts, national immunization days and child days. Outreaches have become regular and are well attended. Each facility now carries out weekly/bi-weekly outreaches. Village registers have been used by CORPs and immunization mobilizes to identify and follow-up defaulting children.

Additional messages and national IEC materials (translated to the local languages) have been used to address the barriers identified in the operational

research. BCC activities have involved dissemination of key messages through drama, film shows, home visits, health education on the purpose, safety and schedule of childhood immunization, TT and vitamin A. Emphasis has been placed on utilization of out-reach sessions, static health facilities, national immunization days and National bi-annual Child days.

Table 2 Progress in Immunization Interventions

Program Indicator	Jan '04	Aug '06	Target '08	Performance towards target
% children 12-23 months fully vaccinated before 1st birthday	52%	63%	65%	Effective: 85% progress towards target
% mothers of children 0-23 months who received at least 2 doses of TT before birth	27%	34%	40%	Effective: 54% progress towards target

Source: Assessment made from KPC baseline (January 2004) and MTE (August 2006)

The mid term LQAS exposed variation in coverage between the sub-counties with Itojo and Ruhama recording the lowest coverage for childhood immunization and TT. Much of the progress is attributed to the child immunization days and increased outreach services in far off communities. The project has extensively mobilized communities to utilize out reach services. The CIMCI project utilizes the trained CORPS to carry out follow up and monitor child immunization dropouts. No changes were made in the technical approach

Causes for low coverage were identified in an operational study and key KAP gaps were incorporated in messages disseminated and in training. Routine district HMIS data and reports were incomplete and not updated. This has created a challenge of tracking progress of immunization coverage. In some instances the district has faced logistical problems in delivering vaccines to the periphery health units.

Follow up and next steps

- Continue to use the Community management information systems to identify, analyze and program for population subgroups that are failing to access immunization services.
- Focus program on promoting achievement of complete protection through five TT doses as scheduled rather than two doses of TT every pregnancy.

HIV/AIDS

(15% effort)

Through trained PDCs and CORPs, integrated messages have been disseminated regarding personal HIV/AIDS prevention (based on the ABC model) and utilization of available HIV/AIDS services. Relevant IEC materials, some developed by partners like the Straight Talk Foundation (STF), have been distributed through the CORPs to increase awareness and use of available STI, VCT and PMTCT services in the health facilities. Drama and film shows have delivered messages to different groups at community level and in schools. PLWAs have been provided with nutritional support from the supplementary Title II feeding program and in their posttest clubs are encouraged to give testimonies on positive living at district level events like the World AIDS day and various forums (including prayer sessions and community meetings).

Condoms distribution has been limited by inadequate supplies due to the government's withdrawal of the free "engabu" brand because of quality issues. Acceptance of the brand has not improved, even after improvements were made and it was re introduced in communities. Consequently only 4,400 out of the targeted 50,000 condoms were distributed.

The project has mobilized communities to use HIV/AIDS services based on understanding that HIV/AIDS services would be provided by partners like PSI, AIC, AIM³ and the Ministry of

³ Project ended in 2005

Health. This leverage was not entirely successful. As a result only 27 VCT community outreaches were supported and PMTCT services are not available in Health facilities within the project sub-counties.

Progress towards benchmark shows a mixed picture. Good progress has been made on increasing the level of awareness among mothers regarding PMTCT. However, progress is not uniform especially in Bwongera and Kayonza sub-counties where awareness seems to be low. Similarly, knowledge regarding ways of reducing risks has improved, but Ruhama sub-county is showing lower knowledge levels. It is very likely that the targets will be achieved especially if effective measures are emphasized in all the sub-counties.

Utilization of VCT and PMTCT services has remained low because of inconsistencies in availability of testing kits and Niverapine at the lower health facilities. Both HIV/AIDS service availability and social-cultural barriers limiting uptake need to be addressed. Probably more access to ART which is currently provided at the district hospital will raise uptake of VCT and PMTCT services. The project should advocate and lobby for a constant supply of test kits.

Table 3 Progress in HIV/AIDS interventions

Program Indicator	Jan '04	Aug '06	Target '08	Performance towards target
Knowledge of transmission				
% mothers of children 0-23 months who cite that HIV can be transmitted through pregnancy, delivery and breastfeeding	36%	47%	50%	Effective: 79% progress towards target
Knowledge of prevention practices				
% mothers of children 0-23 months who cite at least 2 known ways of reducing the risk of HIV transmission	69%	77%	80%	Effective: 73% progress towards target
Stigma				
% mothers of children 0-23 months who indicate that they can allow an HIV positive child to play with theirs	40%	32%	80%	Ineffective: situation worse than baseline

Source: Assessment made from KPC baseline (January 2004) and MTE (August 2006)

The project has already raised demand for VCT and PMTCT outreach services, however, the VCT mobile clinics run by AIC, AIM and PSI stopped, necessitating a reduction in mobilization effort. Community mobilization and sensitization activities need to give greater attention to tackling stigma, discrimination and promoting community support for PLWAs and Orphans and Vulnerable Children (OVC). The program could promote the role of CORPs and link PLWAs to other support activities as envisaged in the original proposal.

Follow up steps

- Promote functional referral linkages of VCT and PMTCT services
- Train the Community HIV/AIDS counseling Aides
- Mobilize PLWAs to play a bigger role in reducing stigma through sharing testimonies on positive living and strengthening functioning of linkages.
- Emphasize messages aimed at reducing stigma and discrimination of PLWAs

- Increase the participation of PLWAs and Post test clubs in disseminating messages and mobilizing communities in prevention and care action

Nutrition, Breastfeeding and Micronutrients Intervention (15% effort)

The program has oriented CORPs and PDCs on counseling for immediate initiation of exclusive breastfeeding and promoting complementary feeding including Vitamin A supplementation. Messages have been delivered through nutrition education sessions, home visits, model homes, drama and cooking demonstrations. Discussions have mainly been on immediate breastfeeding within the first hour of delivery, exclusive breastfeeding for the first six months, dangers of early pregnancies and balanced dieting especially while pregnant and breastfeeding. Through the “Model Home” approach and home visits carried out by the trained CORPs, project Field Officers and extension workers, needy homes have been identified and reached to ensure their participation.

About 90% of the households have backyard/front yard vegetable gardens, and 19 cooking demonstrations have been carried out with overwhelming attendance. Additional funding from USAID as a Nutrition Add-on has assisted the creation of 12 rabbit breeding units, 34 Fish ponds and a large number of vegetable nursery beds on land provided by keen community members and self-help groups. These activities have provided affordable high quality proteins and micro-nutrients. This has been in partnerships with the district Nutrition, Agriculture and Veterinary Officers and NGOs like ADRA and Kyera farm project to provide garden demonstration materials and learning sessions.

Table 4 showing progress nutrition, breastfeeding and micro-nutrients

Program Indicator	Jan '03	Aug '06	Target '08	Performance towards target
% children 0-23 months breastfed within 60 minutes of delivery	64%	68%	80%	Effective but slow: 25% progress to target
% infants 0-5 months exclusively breastfed in the past 24 hours	77%	100%	90%	Effective: Overshot target
% children 6-9 months receiving breast milk in addition to complementary foods	88%	96%	95%	Effective: Overshot target

Source: Assessment made from KPC baseline (January 2004) and MTE (August 2006)

Good progress has been made towards the benchmarks, despite nutrition activities starting the second quarter of year 2. Significant progress has been made in exclusive breastfeeding and complementary feeding practices. However, the progress on immediate initiation of breastfeeding within 1 hour of birth has only made modest change. In sub-counties like Kayonza, Bwongera and Nyakera there is a need to increase efforts promoting early initiation of breastfeeding.



Nutrition Education

Special outcomes and unexpected successes and constraints

The nutrition add on has provided tangible outputs like demonstration fish ponds, vegetable gardens, protected water sources and rabbits. These have been quickly taken up and replicated by communities. Rabbits have provided high quality protein that is largely eaten by children.

The CIMCI plus project built on the activities and lessons from the Nutrition and Early Childhood Development Project (NECDEP), ADRA, and Kyera farm.

Follow-up and next steps

- Maternal nutrition component needs to be emphasized
- Build on the existing community support groups to promote good breastfeeding practices and appropriate complementary feeding (focus should be on Infant and young child feeding).

Diarrhoeal Diseases

(10% Effort)

With additional funds from USAID mission Uganda and Africa Well Funds the project has increased safe water coverage in the district. In close collaboration with Ntungamo district water department and other partners specifically Directorate of Water Development (DWD), the project



Demonstrating use of local hand washing facilities

has improved water quality and quantity through construction/protection of 48 Community water sources, in line with the DWD national guidelines. The project has assisted the communities to select water user committees (WUC) for each water source. Each community is responsible for operation and maintenance of their water sources. A total of 165 WUC members have been trained so far and training is ongoing. The project adopted UNICEF and DWD training manuals. Hygiene promotion and diarrhea case management messages and IEC materials have been developed and incorporated in the training and supervision activities for PDCs and CORPs.

The messages emphasize the relationship between nutrition/vitamin A/Immunization status and childhood diarrhea. Other awareness creation channels include drama, film shows and display of IEC materials. Mobilization efforts by CORPs and project field staff involve home visits to villages with low household latrine coverage and other sanitation facilities like drying racks. The “Model homes” approach is being used to promote erection of locally improvised hand washing facilities and practices. Already 260 of the targeted 400 demonstration hand washing facilities have been erected in the communities. The CORPs have managed to distribute only 4,031 ORS Sockets of the targeted 50,000 to mothers with children having diarrhea.

According to the LQAS/KPC study, responses from mothers show a reduction in levels of proper hand washing practices at critical times (before feeding children, after defecation and after attending a child who has defecated and before food preparation). Treatment of diarrhea with ORS has increased and superseded the target. This might be attributed to the low target set at the start of the project. Less progress in all the indicators is observed in Ruhama, Ihunga and Kayonza. Households with designated hand washing facilities have higher levels of hand washing practices.

Table 5: Progress in control of diarrhoeal diseases Intervention

Program Indicator	Jan '03	Aug '06	Target '08	Performance towards target
% households with designated hand washing facilities that mentioned the importance of	4%	58%	10%	Effective: Overshot target by

washing hands after defecation to prevent diarrhea				far
% mothers of children 0-23 months who wash hands with soap/ash before food preparation, before feeding children, after defecation and after attending a child who has defecated	6%	2%	10%	Not Effective: Drop below baseline
% children 0-23 months with diarrhea given ORS	9%	43%	15%	Effective: Overshot target

Diarrhea care seeking practices have however not improved with only 2% (Target is 10%) of mothers being able to identify at least 2 signs of diarrhea requiring treatment. On the other hand and as mentioned earlier in B1.2 the mid term LQAS shows a reduction in treatment of the folk disease “Ebiino” (“false tooth”) at community level.

There are no changes in the technical approach and rationale. However, unexpected constraints have been experienced. ORS distribution has been inadequate because the MoH considers it a drug, so it cannot be distributed by the CORPs. The demand for water sources has exceeded the project budget. The operational research shows that though false tooth extraction has reduced, the pacifiers who have not been targeted yet, still have a big role to play in diarrhea management.

Follow-up and next steps

- Lobby for more resources to respond to the high demand for safe water.
- Improve care seeking practices
- Advocate for behavior change to influence those involved in folk treatment practices (tooth extraction) and persuade them to stop the practice.
- Advocate for the integration of sanitation and hygiene promotion into the model home approach

B.2 Cross Cutting Strategies

The key cross cutting program approaches are community mobilization, capacity building and behavior change communication⁴.

The team’s view is that the project has upheld its initial vision and that the staff and partners understand how their activities fit into the overall project. The CIMCI project has comprehensively adapted the CORE/BASICS CIMCI implementation framework in its approach. In summary the framework focuses on three main components;

1. Strengthening the linkages between the communities and health facilities
2. Improving access to information and services from the community service providers; CORPS, Sub County Trainers, EPI Mobilizes, ITN groups, and private health workers.
3. Promoting the sixteen key household behaviors through BCC activities such as: drama, songs film shows.

All the above activities are being supported by a multi-sectoral platform that has emphasizes information and tangible outputs to enhance uptake of BCC messages. These include: water source

⁴ Monitoring and evaluation is considered under program management

protection, sanitation and hygiene promotion, small animal rearing, establishing vegetable gardens and cooking demonstrations and working with other stakeholders.

B 2.1. Community Mobilization

The program used the PRA approach designed in the MOH-CIMCI communication strategy to develop mobilization activities. It is commendable that the project started with identifying and building on existing community resource persons. Additional community-based resources such as bed-net clubs, model homes and community based rabbit/fish breeding centers have been formed to cover mobilization gaps in all the technical areas. However, HIV/AIDS community resources, in particular the Community Counseling Aides (CCAs), have not been well mobilized and linked to the strengthened structures. This might be contributing to the slow progress in achieving targets.

The project identifies and utilizes community resource such as CORPs, PDCs, CCAs, EPI Mobilizers, and TBAs. The approach of establishing a multi-tier team in each sub-county ensures that capacity is built for training, supervision and implementation. This has set foundation for multi-sectoral support for the PDCs and CORPs which is commendable.

The project has also introduced knowledge and practice dimensions in household competitions into the physical household sanitation and hygiene amenities assessment of the past.

Mobilization activities have also involved advocacy with local leaders to talk about the key FCPs at district, national and other events or gatherings. Community response to mobilization has been generally adequate. The CORPs and PDCs have expressed enthusiasm in their work. Also, FGDs have shown that the community understands and identifies with the program goals and approach to improve household practices. Large numbers of people attend the events (e.g. drama, film shows, cooking demonstrations, child health days, world AIDS day) where CIMCI messages are disseminated.

The politicians used promotion of FCPs in their campaigns manifestos during the local council elections.

One Project Officer

The observation was that community demand for the project services was raised more for interventions with tangibles. The tangibles have enhanced the uptake of messages. For example, uptake of nutrition interventions like fish ponds, rabbits and vegetable gardens, as well as hand washing facilities and water source construction under diarrhea control have surpassed the end of project targets. Due to the increased demand for fishponds, rabbits and vegetable gardens, the project is guiding and providing technical support to other community members to establish their own vegetable nursery beds, rabbit breeding centers, and fish ponds for both nutrition and additional household incomes.

Social cohesion in the community has been maintained through the project life using existing structures and steering away from politics. Nevertheless, the Project needs to step up efforts to increase coherence at the lowest government structure (Sub-county) to mainstream CIMCI into sub-county and later district plans and budget allocations. On the technical aspects, direct contact between the project field officers and CORPs/PDCs has been necessary for the start up activities. The project should now focus on harnessing cohesions in the operations of technical staff at the sub-county (i.e. extension workers, health workers and other project/CBO technical staff).

In some villages, some CORPs also serve as PDCs and/or community leaders and may be overburdened with responsibilities. Having only two CORPs per village confers on them a responsibility to oversee an average of 70 households each. This becomes a full-time responsibility. There might be need to review these structures, especially in light of the national

health sector plan to establish Village health committees. Efforts should be made to increase the absolute numbers of resource persons in the community so as to reduce their burden. However, the issue of incentives (motivation) should be taken into consideration.

Barriers to full benefits still exist. During FGDs with women groups and CORPs some key barriers were identified and the table below shows how the project is attempting to address them.

Table 1: Barriers and Suggested Solutions

Main Barriers Expressed	Measures used to address Barrier
Community Barriers	
1 Men are not giving the mothers the necessary support	Messages are being developed to target men
2 Mosquito Nets on the open market are too expensive for most poor households	Develop linkages with NGOs for net distribution while waiting for government “free” nets, formation of more bed-net clubs
3 Drugs are not available at the facilities and at the Community level	Advocacy with the DDHS, interactive meetings between CORPs and facility workers
4 CORPs expected some kind of incentive at the initial stages of the Project	Continuous sensitization and mentoring by field staff Incentive e.g. recognition by certification and at community events, holding demonstration at their homes
Programmatic Barriers	
5 Too large audiences for drama (400 per show) and film (350 per show) shows	Target the shows to specific groups; Increase number of shows; obtain larger screens, need for variety of videos
6 Though not directly targeted, the community feels there is high morbidity among children aged 2-5 years	Messages have been developed to improve care for all children below 5 years
7 Changes in political and administrative leaders in some communities and sub-counties	Direct visits and one to one talks to “new” leaders by the project officers, reports

Source: Community level FGD, Document reviews and In-depth Interviews with Project Staff

B 2.2. Communication for Behavior Change

The team agrees that BCC has been a strong area of the Project. Though the focus is on the 5 technical intervention areas, messages have promoted most of the 16 key household practices through integrated IEC/BCC activities. It is also worthwhile to note that the Project messages are

based on baseline, formative studies, operational research, existing MoH CIMCI communication strategies and other partners' IEC materials.

The Project has translated existing messages and periodically developed new messages based on gaps identified from studies and implementation. The messages are continuously assessed for consistency and are within the national policies and guidelines. Also different messages have been appropriately packaged for audiences at different levels. Presentation in local languages with appropriate pictorial illustrations has ensured that messages are appropriate to the local situation. Currently, a total of over 33,000 IEC materials have been obtained and distributed to communities in the form of posters and job aides for CORPs and PDCs.

The messages and mix of BCC activities have ensured that awareness and skills are imparted to the communities. Use of model homes, home visits and drama has been particularly useful in influencing changes at the household level. Community mobilization by the CORPs and PDCs coupled with leadership advocacy activities have been emphasized by the Project. Linkages have been built to allow the facility workers to respond to the community needs through partnership defined quality (PDQ) meetings with communities and CORPs. Though this is a good feedback process, there are concerns that this mandate is still with the weak or non functioning Health Unit Management Committees (HUMC). The Project should provide some technical support in strengthening these committees and develop mechanisms for continuity of feedback to improve quality of services.

Although the main partner in the district is the Ntungamo District health services, there is need to strengthen linkages with other related sectors like agriculture, nutrition, community development and water development. The DIP has these activities spelt out especially with water development.

There is a concern that the Project may need to document a clear BCC plan detailing out steps for changing behaviors at each level. For example, at community level, it is not currently clear what channel is used to reach each target audience with what message and for what effect. It is important, especially for sustainability, that the most influential behavior factors be identified and most effective activities documented.

Some of the expected inputs/leverages from partners have not been realized. Although the project is supporting World Aids days and Child Days through advocacy and radio talk shows on HIV/AIDS, other CIMCI issues have not been carried out. Also the Project is facing difficulties in channeling messages through the TBAs whom the government is currently silent about.

The Project carried out a baseline survey and is continuously assessing the effects of the behavior change mainly through the operational research and the budding community information management system. Though the community information management system is still under development, almost all villages (460/470) are filling village record books. One sub-county (Itojo) is modeling the process of integrating the CIMS into the HMIS. The intent is to use this information for monthly decision making at community, facility, sub-county, HSD and district level to reinforce behavior change at household level. The Project should provide clear guidance for this bottom-up information flow. The likely scenario, if this guidance is not provided, is that identification of problems and adequate solutions by the communities (villages or parishes) will be difficult and consequently little use will be seen for the data collected. Furthermore, guidance on analysis and presentation of data in a meaningful way to the community or parishes is prerequisite for its use. There is also urgent need to reconcile the project led CIMS with village registers that the MoH is developing for the village health teams.

Generating innovative approaches is an inbuilt process of the CIMCI-Plus project. For example under the Nutrition Add-on component, rabbits, an excellent source of protein, are predominantly consumed by children. Discussions with the community showed that vegetables like carrots and spinach that have not culturally been considered vital are gaining acceptance. In addition, the surplus of rabbits and vegetables is sold for additional household incomes.

B 2.3 Capacity Building Approach

B.2.3.1 Strengthening Africare Capacity

The Project's internal capacity building effort has addressed internal needs, especially for the section heads. A number of project staff have been trained in various areas where low capacity has been identified. Various training opportunities outside the country have been identified by Africare headquarters and the country office with opportunities availed to the project staff. HQ and the country office also provide technical reading materials on the internet. Where available, printed material has been circulated or placed in the project office library.

Workshop reports are discussed in meetings to ensure that new materials and knowledge is disseminated. It has been however pointed out that training had concentrated mainly on monitoring and evaluation courses and left out BCC and Management. Discussions also reveal that Africare has no laid out training plan for the organization. Even when the project considers that staff skills are adequate, there needs to be a training plan that ensures new knowledge, skills and tools are continuously harnessed. For example, no field staff have received extra formal training so far.

Good progress has been achieved towards improving and expanding technical coordination and resource collaboration with local organizations and donors to enhance sustainable project activities. Africare has attracted funding to run complementary projects. For example, African Well Fund (AWF) is supporting development of safe water sources (shallow wells, springs and rain water harvesting tanks). USAID Kampala mission is supporting complementary activities under the nutrition interventions.

Key training received:

1. HIV/AIDS Development	IEC	2. CORE CIMCI implementation	3. KPC TOST
4. Documentation		5. Essential Nutrition Actions	6. Business Writing Skills
7. Performance Monitoring		8. Community Health Information System	
9. Qualitative Research Methods		10. BCC Training for Infant and Young Child Feeding.	

The project has not carried out institutional/organizational capacity assessment yet, but plans are underway to use tools from the sister COPE project

Though Africare has supported two staff to attend a documentation workshop (funded by CORE), much of the experiences are not adequately documented yet. Despite these shortfalls, the project office has ensured that all project staff share the knowledge and skills necessary to supervise CIMCI interventions through discussions and presentations in internal meetings. A Teamwork approach to field visits has ensured that staff becomes familiar with technical areas outside their professional fields.

B.2.3.2 Strengthening Local Partner Organizations

There is a consensus that Project support has played an important role in revitalizing CIMCI in the implementation sub-counties. The Project has contributed to improved inter-sectoral coordination and ownership of activities by the various partners in these sub-counties.

The Project DIP set out to have several partnerships. However these (especially those at national level) have had loose linkages with the Project. Effort is needed from the country office to initiate and encourages national level partners (Malaria Consortium, Ministry of Health, Ministry of Gender etc) to get more involved in the project especially in terms of sharing experiences and technical support.

Capacity building efforts with local partners have been in passing on knowledge and skills to partners through contact and mentoring processes. The major service provider of health services is the Ntungamo District Health Services (NDHS). Africare has deployed one Field Officer in each implementing sub-county who is adequately trained and with vast experience in CIMCI. Through contact with the health workers, extension workers (agriculture, water, nutrition, fisheries) and some NGOs, on job the training and mentoring in applying the CIMCI approach has been the main capacity building effort. In addition, internal capacity building activities especially for NDHS workers has been carried out, but with little linkage to project activities.

The main concern here is that capacity assessment has not been done despite having the tools to do so. Consequently, it is difficult to objectively measure changes in capacity even though discussions with partners indicated general improvement in awareness of CIMCI service provision and support.

One of the major challenges is that although about 50% of district staff are trained in CIMCI there seems to be lack of clarity regarding coordination and leadership of CIMCI at facility and district level. It is also apparent that the planned joint or complementary activities with other projects have not been realized. The Project will have to exert more effort than indicated in the DIP to address these bottlenecks. There is also need to review the focus of capacity building in light of the current phase of Project implementation. Issues of capacity to handle the phased out activities and sustainability of the indicators raised by the Project should come to the forefront in this assessment.

B.2.3.3 Health Facilities Strengthening

This is aimed at building capacity of the existing health staff and strengthening the health system. No formal assessment and responsive capacity building has yet been given to the health workers by the project. However, routine contact and mentoring has so far yielded improvements in planning and management of scheduled facility based immunization and outreach sessions, and support supervision to PDCs and CORPs. Active participation in Child Health days, World AIDS day, Day of the African Child, youth health fair etc. have been greatly supported by the project and lessons passed on to the facility staff. At facility level, the Project has worked more with the health assistants and facility In-charges.

The project staff have worked with district staff in operational research, IEC development, training and supervision, as well as collection, analysis and use of data. The district health workers have been trained in the concept of Village health Teams (VHT). This will put them in a good position to take on the PDCs and CORPs trained by the project into the wider concept of national VHTs.

Holding biannual meetings between health staff and PDCs /CORPs (under the Partnership Defined Quality Approach) has been one of the ways in which quality of care has been addressed. There is faster progress in strengthening the community-based services than in strengthening the facility-based services. The limited improvement in facility services remain a big challenge and should be strongly addressed to meet the raised community demand. Opportunities exist such as the use of “Yellow Star Standards” and support for routine facility supervision as per national supervision guidelines.

The Project has already identified the Institutional capacity assessment tools from the sister COPE project that requires urgent implementation. The strategy is to build health worker capacity

within the MoH guidelines and using government, CST and CORE manuals to promote quality of services and consistency. Due to the delay in implementation, the Project needs to re-evaluate the need to incorporate new content in light of the current project stage.

B.2.3.4 Sustainability Strategy

The Project sustainability strategy aims at partnership building, capacity building and scaling up of best practices. The Project will be handed over and implementation of preparatory activities has already started.

Table 2: Summary of the Progress in the Sustainability Activities

Strategic area	Activity summary	Implementation Status
Building partnership to facilitate evolution and continuation of Project interventions	Linking to local academic and research institutions	On course: Linkages made with MISR and ISAE. other linkages should be sought during the current Phase out/over Phase
	Linking to Government agencies	Needs more work especially with key sectors on the multisectoral platform
	Linking to other NGOs	On course. Need to do capacity assessment and fill gaps
Building capacity of local communities and organizations to Phase out to	Community structures (PDCs, CORPs, TBA, self-help groups...)	On course. Need to focus on community provider and self-help groups competence issues; mentoring
	Community committees (LCs, water, sub county	On course. Need to do capacity assessment and fill gaps focusing on community management competence issues; mentoring
	District Health system	Behind schedule. Need to do organizational capacity assessment and fill gaps
Scaling up through the MoH, NGO and FBO network	Sharing methodologies and tools with MoH, FBO, NGOs	On Course: Project staff share experiences at national level, MACIS, World bank, at district fora and in the Integrated Health Model. Also shared approaches with UPHOLD, Health Partners
	Garnering district and central government support	Slow: increase visibility/ participation/ presentations in national review and planning workshop (the project staff on several occasions attended and made presentations at national level on the CIMCI project)
	Documenting and disseminating experiences	Slow: Need technical assistance for shooting a documentary

Source: Document reviews and In-depth Interviews with Project Staff ad Partners

Currently good progress has been made on starting the planning and implementation phase for partnerships with the government and Faith Based health service providers, community based self help groups and sub-district structures. Linkages have been made with local universities and

students are carrying out fieldwork in the Africare supported communities. This adds to dissemination of the project approaches to the local academic sphere. Frequent interaction with MoH child health department has been maintained where Africare provides key lessons to inform revision of the National CIMCI guidelines and going to scale. On the other hand, community competence to participate in processes that support child survival and health is being stimulated through community groups. The Project has introduced CIMS using tools adapted from existing UNICEF tools to collect multi-sectoral data including household socio-economic status, health, agriculture and education data. This information has been used by some communities and aims to facilitate micro level planning.

The Project has a 5-year M&E framework to capture all outcomes from the supported activities. The M&E approach is based on performance indicators focusing on tracking activity outputs and intermediate results which double as objectives. Whereas the PMP is guiding the Project towards quantitative monitoring, there is need to add qualitative information regarding behavioral descriptions and capacity building. Lack of such qualitative monitoring is leaving most of the information unrecorded. Such information can be useful in refining the set quantitative indicators. For instance, where as millet and false teeth extraction is decreasing, there is a stage of *pacifiers* omitted. Some indicators only focus on enumerating drama and film shows, demonstrations held, home visits, ITN clubs formed etc. This may show the level of activity but does not reveal the results or quality of these activities. Consequently, it may be assumed that only a small proportion of the people attend dram or film shows repeatedly or that ITN group membership has little effect on expanding coverage of the target group.

There is little mention on how the Project impact will be measured. Qualitative case studies including cost benefit analysis may be designed within the remaining project life to assess this. Though it is desirable to have a limited number of indicators for reporting, the current set used to monitor local implementation need to be increased and matched with the national requirements. For instance, prompt care seeking for childhood malaria cannot be known from the current PMP indicators. It might be too late to assess pre/post intervention changes but indicators may be assessed against national averages.

The Project's aim of linking CIMS to HMIS is very commendable, especially if the data from the community registers will be discussed together with the overall HMIS in PDC meetings. Additionally, some of this information is needed by sectors other than health, such as the District Planning Department, Agriculture and Water. The project would probably need technical assistance to integrate CIMS into HMIS and local government planning process.

The Project focus has been on increasing community capacities in the first 3 years through strengthening community structures. Care is needed not to overburden these structures because of their voluntary nature of work. The voluntary capacity limits, PDCs and CORPs are comfortable, with need defining and efforts made to increase their effectiveness within these. Likewise, budgetary and human resource limitations of partners (especially NDHS) who will sustain the project need assessment. For example, translating plans into commitment of funds is a common challenge. Activities need costing done in a manner that provides guidance to district and other partners to take on activities. It may be difficult for other Projects to use the approaches especially when the Project targets fall below the national or internationally set targets.

An additional concern is that though the NDHS plans may be showing CIMCI service provision activities, the extent to which they are funded is small. Also being a community based activity, it would be strategic to set a simple approach for inclusion of CIMCI activities in the Parish and sub-county development plans. The Project needs to develop the linkages between the structures formed or strengthened to other statutory committees especially at the sub-county (the Local Councils, LGDP committees, HUMC). This is essential since the sub-counties will have the responsibility of sustaining most of the Project initiated services and structures.

CIMCI is focused more on improving practices not service delivery. The government is bent on providing ITNs, insecticides and drugs for children free of charge. However, commodities needed to support the practices currently need to be bought. The strategy developed in this instance is community financial participation using revolving funds in self-help groups. The growth in groups participating in bed-net revolving fund is testimony that poor rural mothers are willing and able to gradually mobilize funds for commodities they perceive as important for their children. Group capacity to manage funds and access social marketed commodities should be built and efforts to increase male (since they control the finances in most household) participation increased.

The project officers are commendably conversant with current thinking and best practices in community approaches and public health initiatives. An example of this is integration of newborn health messages. Recent international drive is to program for newborn mortality since it is the biggest contributor to high childhood mortality. It is commendable that the project will provide insights for national programming of newborn health interventions under CIMCI.

C. Project Management

C.1.1 Planning

Africare involved many of its partners in writing the DIP in October 2003. These are Ministry of Health (Child health division) Ntungamo district health team, District and sub-county leadership, existing CORPs, USAID Mission, Makerere Institute of Social Research and partner NGOs. Focus group discussions and individual interviews show that the Project's objectives are well understood by field staff, headquarters staff, local level partners and the community. Copies of the Project's objectives and the monitoring and evaluation plan are shared with the main implementing partners and Project monitoring data is used for planning and Project implementation. For example the data is used to identify and act on sub-counties lagging behind in activities and to provide partners with evidence that particular community interventions are feasible under prevailing conditions.

Though community based activities are according to work plan schedule as submitted in the DIP, progress in capacity building for service provision is slow.

C.1.2 Staff Training

See Africare capacity building

C.1.3 Supervision of Project Staff

The project has a well laid out supervision system. The Project Officers carry out on-going supervision of field staff. These in turn receive supervision from the country office and USAID Mission. Supervision checklists exist at project level, and supervisors observe staff performing their duties and interview staff and beneficiaries, then later discuss with the project office team to solve identified problems. Team supervision approach is used for the supervision at the project level. Supervision has been the main approach to identifying training needs and knowledge gaps. Through technical updates are regularly provided to the project team, there is no clear training plan.

Peer reviews have been tried especially during inter project manager meetings. However, this has been irregular and only few staff have cross-site visits. There is need to have a coordinated effort from the country office so that more technical staff interact in review meetings and cross-site visits.

C.1.4 Human Resources and Staff Management

Africare has a clear chain of command that lays out communication and support linkages for each staff. An organogram involving all staff has been developed. The field offices operate with the Project coordinator acting as team leader. Job descriptions for all positions exist. Project office and individual monthly work plans are promptly made. These assist in budgeting and allocation of logistics.

Definition of roles and contact linkages between the different stakeholders was outlined during development of the DIP with other partners and is in the Memorandum of Understanding with the district (biggest partner). All posts are filled (except one field officer) with competent staff. The project has so far hosted four interns (2 Ugandans and 2 International) and this has heightened performance of the field officers.

The project is using quality management approaches that emphasize team work, recognizing each workers perspective and needs and addressing problems in a timely manner. Salaries, due allowance, staff training/development and health cost refund are promptly paid. This indeed has been very crucial for motivating such caliber workers to work in the up country project.

The Project Coordinator, Research and M&E Officer and the BCC Officer meet weekly to review experiences and activities of the concluded week and plan for the coming one. Wider meetings involving Field Officers are held monthly. At the country office, all communications from the field office are addressed to the Country Representative. The project office prepares weekly and quarterly activity reports to the country office. For team work development, Africare holds quarterly technical coordination meetings that rotate in different projects and the country office. In those meetings, the team reviews the work of the previous quarter and plans for the coming quarter. Other important management and administrative issues are addressed in these meetings which keeps all staff updated with project activities.

Salaries are however comparably lower than other organizations. Staff cohesion needs to be built especially between the country and field offices. Staff turnover has been generally low in management positions but high among the Field Officers (4/7). Immediate replacements have been made for two of the Field Officer positions and the gap has not had any significant impact on Project implementation. The Project focuses on recruitment of local people who remain in the area, usually in local leadership positions. Internees are also attracted to assist in field work. There are no current plans to facilitate staff's transition to other paying jobs when the project ends.

C.1.5 Financial Management

Africare finance management is multi-tiered and uses clear accounting procedures to ensure real-time control and security of finances. Both internal and external audit procedures exist. Africare Washington ensures that all project and matching funds are spent according to cooperative agreements and submitted budgets. Funds are disbursed quarterly to the country office and monthly to the project office. Budgets are planned and distributed to the project office according to item lines and categories. This makes it difficult for the project to track the financial effort spent on each intervention. The project office submits timely financial reports and accountabilities/batches.

C.1.6 Logistics

Motorcycles for the field staff are adequate and well maintained. At project office level, lack of an adequate number of vehicles in good condition has been the biggest logistical problem and will continue to hamper field support activities during the remainder of the project life. The available 4 vehicles are too old and expensive to maintain (All are more than 8 years)⁵. Key issues to

⁵ Only one vehicle was in running condition during the MTE period, and it broke down twice during the 2 weeks of field work!

address are disposal of junk motorcycles and vehicles. The project should endeavor to obtain standardized cars and equipment. Minor repairs needed on one vehicle (Ford) and the computers provided by earlier Africare projects have not been completed due to lack of spare parts in the country. There was also a general feeling that though the procurement system is swift for local purchases, there is considerable delay in external authorization or purchases processes.

C.1.7 Information Management

Measurement of Project progress: The Project Monitoring Plan guides the measurement of the project activities towards the intermediate results and hence objectives. The PMP has effectively been used in annual and mid-term assessment. The plan uses 4 major tools to monitor and evaluate project progress.

Table 3: Project Information management Tools and Status of Implementation

Tool	Measure	Status implementation
Household KPC survey tools	Baseline and end Evaluation basing on the PMP and rapid catch indicators	On schedule: Baseline was done and results used to inform writing of revised DIP
LQAS	Monitors progress in Project results	On schedule: Results used in mid-term assessment of progress
HMIS	Monitors health care seeking behaviors	Not on Schedule: Health workers have not been trained yet
CHIS	Tracks behavior change at household and community level	On schedule: some communities have started using data for decision-making. This needs sufficient operationalization
Routine Activity monitoring tool	Accomplishment of Project process indicators, narrative	On schedule: daily, quarterly and annual compilation by field officers
Weekly reports	Weekly activities	On schedule: transmitted weekly to Washington

Source: Document reviews and In-depth Interviews with Project Staff

There is a plan for systematic introduction of Community management Information system. Household level (behavioral and amenities) data is being collected and analyzed by CORPs and PDCs and has been shared with health workers during PDQ meetings. The evaluation team found out that there is no space provided for community data in the HMIS but guidelines for this are underway. On a weekly basis, project service delivery/activity data is compiled by the field officers and forwarded to the project M&E officer to assess against the targets. The table below shows the studies so far conducted by the project.

Table 4: Assessments conducted by the Project

Assessment	Description	Key findings
Operations research into Oburo and Ebiino	Purpose: Generate factual information as to why diarrhea is linked to “Ebiino” and malaria/pneumonia linked to “Oburo” Method: Qualitative study using FGDs, KI and record	Ebino extraction still a big problem Oburo extraction decreasing

	review	
Factors affecting Immunization coverage among children under 2 years (Sept 2005)	Purpose: Examine major barriers to full immunization coverage Method: Household survey, KIs, facility records review	98% mothers aware of immunization need; low levels of awareness of community, CORPs and health workers of immunization schedule; immunization was not done daily in most clinics, husbands stop mothers
Baseline KPC	Purpose: to provide baseline data, and formative information Method: Household survey,	Poor care seeking,
Documentation and newsletters	Documentation of experiences and key lessons	Not yet been done

Use of other existing data collection systems has been a problem. The project has built on the existing BDR and home immunization registers to form the Village Record Book. The existing government HMIS has not been reliable partly because information is not used at site of collection. The project plans to carry out a skills needs assessment in HMIS use as a way of organizing effective training for the health workers to incorporate CIMS.

The CIMS provides routine data on behaviors and coverage of Project activities to the project. This information is gradually being used in project reporting and disseminated to partners for community mapping, birth and death registration and FCP coverage. Data is reviewed in meetings with the district partners. At the end of every month, a monthly project meeting is held for all staff to share the accomplishments, get feedback and plan for the following month. When the project phases out, this information is to be used at the parish and sub-county levels.

At national level, malaria and Childhood illnesses secretariat (MACIS), hosted by Africare from 2003 to 2005, has been formed. This forms the fora for dissemination of key lessons for replication in other community based Projects.

C.1.8 Technical and Administrative Support

Technical assistance has been timely and beneficial. Short-term technical assistance has been received for designing and analyzing the KPC baseline and mid-term evaluation data locally.

Anticipated technical assistance needs in the remaining life of the Project include documentation of the CIMCI, conducting the end evaluation and refining the CHIS. It is rather late for the project to implement the ISA methodology for internal capacity building but consideration is being made to continue with capacity assessments of the district and other key partners in areas of sustainability.

All staff on this Project are full time and have received satisfactory supervision from HQ. Weekly activity reports are sent to Africare HQ in Washington and reports have been shared and reviewed by other projects. The Washington advisor has twice visited the project and is constantly supporting the project through routine phone conversations and teleconferences. Within the country, technical review meetings have been held but not regularly.

C.1.9 Mission Collaboration

The project has received 3 technical support supervision visits from the mission. Frequent contact has been maintained with the mission technical managers. The ambassador has also visited the project and his presence in the community greatly contributed to community mobilization.

The mission has provided Add on Funds to expand the multisectoral platform activities of water and sanitation, vegetable gardens, animal husbandry and income generation activities with other partners.

The project has provided reports and received constant M&E support from MEMS. These reports are incorporated in the overall Mission's reporting system and contribute towards the Missions results.

D. Conclusions and Recommendations

There is no doubt the Project has big potential to provide beneficial information on effective approaches to CIMCI service delivery and capacity building in the country. The project is on track in most of the activities listed in the DIP. The effectiveness of the technical interventions however shows a mixed picture.

- **Malaria interventions (Fair Performance):** Activities have been on schedule; however performance on the impact indicators has not been commensurate. The lack of ITN contributions from partners may be contributing to the low ITN utilization, but other factors also need to be looked into and addressed. For example, there may be urgent need to review the proportion of effort put on malaria in the integrated activities.
- **Immunization (Good Performance):** Performance is so far on course and the project targets have been achieved. However, these have to be reviewed towards the national and international coverage targets.
- **HIV/AIDS (Low Performance):** This is a technical area that has had poor performance in both activities and progress towards targets. There is need to review the implementation bottlenecks with partners and work to better integrate CIMCI activities with other HIV/AIDS projects and activities in the area.
- **Nutrition (Fair Performance):** Most effort has been put on promoting food availability and preparation. There is need to put more effort on breastfeeding and care of the sick child.
- **Diarrhoeal Disease (Fair Performance):** Though a number of water sources have been developed and facilities for hand washing established, more effort is needed to improve hand washing at critical times and caring for a child with diarrhea.
- **Community mobilization (Good Performance)** has been a strong element. However, adjustments need to be made especially towards ensuring participation of the very poor people and men
- **Communication for behavior change (Good Performance)** has been the main activity area for CIMCI-Plus. Although the approach is integrated, it has to be more informative to show results in relation to each BCC activity. Also, as envisaged in the DIP, documentation of lessons learned needs to be completed as the Project progresses to ensure that lessons learned and best practices are shared and that refinement in implementation is informed by feedback from partners and outside stakeholders
- **Project management (Good Performance).** However, issues regarding staff training, transport and procurement need to be addressed. The project may also need to review the activity reporting to ascertain the level of effort put on each technical area.

Key Recommendations

These recommendations are interlinked, and are intended to enable the Project to build on its achievements and address gaps in service delivery, utilization and sustainability efforts.

- ***Recommendations to USAID/GH/HIDN/NUT/CSHGP,***

- Provide technical assistance to implement the various capacity building plans
- Replace project vehicles and de-junk old motorcycles
- Provide technical support for Project documentation
- Support the project to expand CIMCI and other related interventions to other districts.
- **Recommendations to the Country Office and HQ**
 - Kampala Office should have a technical liaison officer to work with field staff, to improve supervision, monitoring and mentoring of field activities.
 - Strengthen linkages with line ministries and equivalent district departments that have a stake in the Project activities at national level
- **Recommendations to collaborating partners**
 - District to train staff in HMIS and improve quality of data management. Support is needed to reduce manual data handling and analysis (in facilities with computers).
 - Integrate CHIS into district HMIS especially in line with the VHT concept
 - Increase availability of mosquito nets and HIV/AIDS services
- **Recommendations to the Field Office**
 - Develop guides for implementation by other partners such as supervision checklists.
 - Indicators and targets for all the result areas HQ should be completed.
 - Deal with the slow completion of capacity building efforts among partners, and revise the capacity needs.
 - The project should continue integrating newborn health intervention to improve impact on child mortality. It is commendable that the project is considering development of funding proposals for newborn community health in light of the CIMCI experiences.
 - Do costing and ensure that resources required to achieve the scale up are realistic and sustainable.
 - Strengthen district/sub-county capacity to plan, coordinate, manage and monitor CIMCI service delivery.
 - Strengthen the CIMCI technical leadership at the various levels in the district.
 - Develop a clear IEC/BCC strategic plan that can be taken over by the district/partners
 - Integrate gender perspective in project activities, outputs and indicators
 - Though planned, the Project has not conducted a thorough institutional analysis of the district health service system. The Sub-county capacity should also be assessed.
 - Develop tools to guide parish level CIMS analysis and use this information for decision making to improve Project impact.

Table 5: Recommendations on targeted Activity Output

ACTIVITY	TARGET (a)	TOTAL (b)	(b)/(a)	ACTION REQUIRED
1. Household visits made	5,450	20,877	383%	↑ target; targeting; phase over to CORPs
2. No. of drama groups Formed	21	25	119%	↑ target; targeting; Phase over to CORPs
3. Drama shows	500	284	57%	↑ frequency; content, Phase over to drama
- No. of people/drama		111,817		↓ audience size and segment
4. Film shows	250	79	32%	↑ pace, variety, screen size, Phase out
- No. of people /film		27,303		↓ audience size and segment
5. H/education sessions	5,000	1,974	40%	↑ frequency and focus message content
- No. of people H/educ		89,315		↓ audience size and segment
6. No. of ITN clubs formed	21	38	181%	↑ target including no. of household; Phase over to CORPs
7. No. of ITNs distributed		1,821		↑ availability; Phase over to HU

8. No. of condom distributed	50,000	4,444	9%	↑ availability and outlets to youths
9. No. of ORS Sackets distributed	50,000	4,148	8%	→ Refine approach; Phase over to HU staff
10. Mothers educated on ORS preparation & tepid sponging	42,911	22,018	52%	↑ target; Phase over to CORPs
11. Demonstrations hand washing facility formed	400	260	65%	↑ target; Phase over to H/Asst
12. Rabbit breeding centers	7	12	171%	→ management; Phase over to Agric staff
13. Fish pond established	7	34	485%	→ management; Phase over to Agric staff
14. Backyard garden established	4,200	4,902	117%	↑ target; Phase over to Agric staff
15. Cooking demonstrations	21	19	91%	↑ target; Phase over to nutrition staff
16. VCT outreaches supported	490	27	6%	Refine approach, partner with other projects Phase over to CORPs
17. No. of people getting VCT		1,441		
18. PMTCT outreach supported	210	0	0%	→ Refine approach; partner with other projects Phase over to HU staff
19. No. of women/PMTCT		0		
20. IEC materials distributed		33,184		→ Review, Phase over to HU staff
21. HH competitions held	14	3	21%	↑ frequency & coverage; Phase over to PDC
22. Bi-annual health workers, PDCs and CORPs meetings held	6	5	83%	→ meetings; Phase over to HU staff
23. Communal dipping of nets	4	3	75%	↑ target in anticipation of ↑ coverage
24. CORPS Trained	900	1,393	155%	→ supervision; Phase over to HU
25. Train EPI mobilizers Trained	84	66	79%	→ supervision; Phase over to HU
26. CCAs Trained	48	0	0%	↑ Training
27. PDCs Trained	100	80	80%	→ supervision; Phase over to HU
28. TBAs Trained	150	0	0%	↑ Training; Phase over to HU staff
29. WATSAN comm. Trained	100	0	0%	↑ Training; Phase over to WDD staff
30. Health workers Trained	60	0	0%	↑ Training; Phase over to HSD staff
31. TOT for S/C trainers	40	42	105%	→ supervision; Phase over to HU staff
32. Exchange visits supported	4	5	125%	→ supervision; Phase over to PDC
33. No. of Veg. Nursery beds	0	124		↑ target; Phase over to CORPs

Key: ↑ = Increase; → = consolidate; ↓ = Reduce.

Source: Project Monitoring and Evaluation Report

Model Home Approach

The Model Home Approach in the CIMCI-Plus project was an innovative development to address the multiple household barriers that prevent families from acting upon knowledge gained through IEC messages. The approach aimed to overcome the multitude of obstinate household barriers to adaptation of the 16 key family practices. It focused on motivating neighboring households to gain skills and confidence in discarding myths and false beliefs (e.g. regarding Oburo and ebiino extractions) and learn the ease and merits of adopting the full set of 16 practices from real life successes. It was observed that low male participation in child health and reproductive health matters was the main barrier in timely decision making and the prioritization of practices which offer the most effective tangible results.

The process involved Africare Field Staff working with trained CORPS to identify the initial existing model homes under 3 socio-economic categories. This stratification ensured that all populations were reached. A checklist was developed together with community members, listing the characteristics of a “CIMCI model home”. These included use of ITN for children, presence of latrine and hand washing facility, vegetable home garden, timely immunization, as well as boiling and storing drinking water.

The homes were encouraged to support and learn from each other so as to quickly take on and sustain the good practices. Home visits were made to negotiate with mothers and household heads on how to improve practices or put into place different items. The model home approach is guided by both Positive Deviance Model based on the premise that some solutions to community problems already exist within the community and just need to be discovered and TIPS (trials of improved practices) a behavior change tool that helps mothers and other family members actually try out and some times modify a menu of possible improved practices prepared on the basis of previous community research.

The in-puts included, training of Africare Field staff and community resource persons (CORPS) in using the Model Home Approach, jointly working out a criteria and selecting households on a voluntary basis to participate, conducting a simple baseline in the selected homes to find out things being done well, things that are missing and those that need improvement. This was followed by development of a simple 1-2 month household work plan showing what activities should be implemented or improved such as establishing a home garden, constructing a latrine and establishing a hand washing facility. The household kept a copy of the plan as a reminder and also agreed on a return visit for the supervision team to check progress.

In summary, the model home approach has proved a very effective way to reach mothers and caretakers of children, guide households to prioritize action to undertake and follow up to see what is working, common problems, and what needs improvement. The continuous household visits by Field staff and CORPS motivated households and the relatively low cost but effective and easy to replicate practices built their confidence to own and sustain the methods. To date, in the 7 sub-counties of operation there are over 2,500 model homes and the number is expected to increase since learning from one another is encouraged.

“I am very happy about this new method of learning from my neighbor. Mrs Mugabi gave me seedlings of dodo and taught me how to raise a kitchen garden and cook vegetables. In the past my children used not to like vegetables perhaps due to poor cooking methods, but now they enjoy it so much. One of my children was getting malnourished but is steadily improving, I have also started telling others and also to take children for immunization as Africare Field Officer tells us”.

Geraldine-a middle aged rural mother

ANNEX

ATTACHMENTS

Table 6: Change in Malaria Intervention Impact Indicators

Project Indicator	Jan '03	Aug '06	Target '08	Performance towards target
Feeding During Illness				
% of children with fever given same or more fluids while ill	76%	35%	90%	Low effectiveness: There is a decline from baseline
% of children with fever given same or more solid or mashed food while ill	64%	9%	-	Low effectiveness: There is a decline from baseline
Care seeking				
% children 0-23 months taken for "millet" extraction	11%	8%	5%	Effective: 50% progress towards target achieved
% children 0-23 months taken for "false tooth" extraction	43%	28%	30%	Effective: Overshot target
ITN Use				
% of children 0-23 months who slept under ITN night before study	14%	10%	25%	Low effectiveness: There is a decline from baseline
IPT Use				
% pregnant women who received IPT1 and IPT2 at 4th and 7th months of gestation respectively	6%	10%	20%	Effective but slow: 29% progress towards target achieved

Source: Baseline and Mid term surveys

Table 7: Change in HIV/AIDS Intervention Impact Indicators

Project Indicator	Jan '03	Aug '06	Target '08	Performance towards target
Knowledge of transmission				
% mothers of children 0-23 months who cite that HIV can be transmitted through pregnancy, delivery and breastfeeding	36%	47%	50%	Effective: 79% progress towards target
Knowledge of prevention practices				
% mothers of children 0-23 months who cite at least 2 known ways of reducing the risk if HIV transmission	69%	77%	80%	Effective: 73% progress towards target
Stigma				
% mothers of children 0-23 months who indicate that they can allow an HIV positive child to play with theirs	40%	32%	80%	Ineffective: situation worse than baseline

Source: Baseline and Mid term surveys

Table 8: Change in Nutrition Intervention Impact Indicators

Project Indicator	Jan '03	Aug '06	Target '08	Performance towards target
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% children 0-23 months breastfed within 60 minutes of delivery	64%	68%	80%	Effective but slow: 25% progress to target
% infants 0-5 months exclusively breastfed in the past 24 hours	77%	100%	90%	Effective: Overshot target set
% children 6-9 months receiving breast milk in addition to complementary foods	88%	96%	95%	Effective: Overshot target set

Source: Baseline and Mid Term surveys

Table 9: Change in Diarrhoeal Disease Control Intervention Impact Indicators

Project Indicator	Jan '03	Aug '06	Target '08	Performance towards target
% households with designated hand washing facilities that mentioned the importance of washing hands after defecation to prevent diarrhea	4%	58%	10%	Effective: Overshot target by far
% mothers of children 0-23 months who wash hands with soap/ash before food preparation, before feeding children, after defecation and after attending a child who has defecated	6%	2%	10%	Not Effective: Drop below baseline
% children 0-23 months with diarrhea given ORS	9%	43%	15%	Effective: Overshot target by far

Source: Baseline and Mid Term surveys

Table 10: Assessment of Behavioral Change Communication Activities

Method	Appropriateness and Effectiveness
Household level	
1 Household visits and dialogue	More household visits done (20,877) than planned (5,450). This implies an average of 1 visit per household per year. The project should identify and target those households most in need of the visit to increase effectiveness. The target should be reset.
2 Local Drama shows and songs	Drama has been the main focus because actors become change agents. 25 drama groups have been formed but this number is inadequate. The audience size per show needs to be decreased for effective discussions and assessment after each show. This may require increasing the targeted number of shows.
3 Film Shows	Only 32% of the targeted films have been shown, due to lack of vehicles. Though appropriate videos are available, the messages covered are few. Also an average audience of 350 precludes effective discussions. The screen is too small for public viewing and should be restricted to small groups. The project should consider acquiring a larger screen.
4 Health education talks	39% of the targeted number have been held mainly in households (Home visits), at community meetings and outreaches at health facilities. The number of health education talks should be increased.
Community level	
5 Printed IEC materials	Over 33,000 materials have been produced in local languages, but these have a limited effect in low literacy rural communities
6 Household sanitation competitions & model homes	In addition to having limited sustainability, this approach is not reaching the households most in need of improvement. The approach should be redirected towards “positive deviant” methodology and incorporated in the CORPs activities
7 Exchange Visits	This is on schedule but was under targeted. Ihunga sub-county serves as the early adaptor and has served as a visiting site for the remaining 6 sub-counties. Exchange visits have enabled the community members and leaders to learn how obstacles have been overcome by others in similar conditions.
8 Community dialogue meetings	This is effectively carried out by the field staff and CORPs to address local community concerns related to the Project. The CORPs also participate in parish meetings where FCP issues are discussed and decisions made by the community.
Service System	
9 Training and mentoring in CIMCI	Health workers have not been trained so far. The Project has relied on mentoring of facility staff and health assistants, but this is inadequate. The project should assess and address staff skill and attitudinal gaps in the technical, organizational and sustainability aspects of CIMCI.
10 Joint Meeting of facility workers, PDC and CORPs	5 out of the 6 targeted meetings have been held. They have created the missing link for community feed back and have been effective in improving quality of care provided. The project should institutionalize this.
Planners, policymakers	
11 Meetings and reporting	These have been effective in informing and promoting the CIMCI Project among district and national leadership. The districts should be encouraged to prioritize and allocate resources to CIMCI.

Source: Review of Project Documents

Evaluation Assessment Methodology

The assessment took place between August 14th and 31st, 2006. A team was formed comprising of representatives from the Ministry of Health, Ntungamo District Health Service, Uganda Red Cross and headed by an external facilitator. Rapid appraisal methods were used. Basing on the CSHGP USAID/GH/HIDN/NUT guidelines for Mid-Term Evaluation, assessment themes were developed. Under each of the identified themes, semi structured questions were developed and specific questions extracted for each respondent. Matrices were produced to guide data capture and analysis from document reviews. Data collection methods involved

- Reviewing the DIP against the results from the mid-term LQAS survey, activity report summaries, 1st and 2nd annual reports, action research reports and other project reports
- Field visits for observation, short conversations and focus group discussions with women, men and CORPs. A total of 12 FGDs were held in 4 of the 7 sub-counties visited
- Carrying out in-depth interviews with key partners (DDHS, HMIS officer, District Health Educator, facility in charges, Uganda Red Cross team leader, project technical officers and project field officers)

Data collected was synthesized by the evaluation team through presentations and discussions with the project team. The draft report was presented to the project office for further discussion and consensus on both the team findings and recommendations.

The three-person evaluation team based the findings in this report on a review of project documents and reports, assessment visits to three project sub-counties, and key informant interview. Documents were reviewed, their content analyzed and further questions asked of project staff, staff of collaborating organizations, and district health staff and facility staff.

Composition of the Evaluation Team

- Dr Andrew Balyeku Lead Consultant
- Mr. James Mugisha Ministry of Health.
- Mr. Twesigye James Ntungamo District Health Services.
- Mr. Ndyanabo Janes Ntungamo District Health Services.
- Mr. Baherezibwa Edson Uganda Red Cross Ntungamo Branch.
- Mr. Bwendero Ntungamo District Health Services.
- Ms Kyomujuni ARISE Ntungamo

List of Persons Interviewed and contacted

District Interviews

District Director Health Services, District HMIS focal person, Health facility in-charges at 2 Health facilities

Community Interviews

Focus group discussions held in Kamugina, Buhanama, and Kaina parishes. Interviewed CORPs and Field health workers (Health Inspectorate staff) gathered at district level, Interviewed PDCs and water user committees

Partners Interviewed

Arise
Red Cross
District Director Health Services

Africare Staff Discussed with

Kedress Natunkunda	Africare Field Officer
Jessica Katusiime	Africare Field Officer
Diana Bright	Africare Field Officer
Silvia Natukunda	Africare Filed Officer
Polly Muhwezi	Africare Field Officer
Morodokai Ahimbisibwe	Africare Field Officer
Paul Semakula	PC CIMCI Africare
Denis Nuwagaba	BCC and Training Officer
Innocent Atukunda	Research Monitoring and Evaluation Officer
Francis Musinguzi	Water Specialist

Key Documents Reviewed

1. Africare Community based integrated management of Childhood Illness Plus. Annual Report October 31, 2004
2. Africare Community based integrated management of Childhood Illness Plus. Annual Report October 31, 2005
3. Africare Community based integrated management of Childhood Illness and complementary Project in Ntungamo District. LQAS Mid-term Evaluation Report
4. Africare Community based integrated management of Childhood Illness Plus. Work Plan October 1,2003 to September 30, 2008
5. Operational Research into Oburo and Ebiino in the 7 Sub-Counties of Africare CIMCI-Plus Project in Ntungamo District. July 2006
6. Revised Detailed Implementation Plan, Africare Community based integrated management of Childhood Illness Plus. October, 2004
7. Integrated Community Health Model Africare Community based integrated management of Childhood Illness Plus. (undated)
8. Performance Monitoring Plan, Africare Community based Integrated management of Childhood Illness Plus Project
9. District and Facility HMIS reports

10. Factors Affecting Immunization Coverage among Children under 2 years in Ntungamo District, October 2005

Special reports produced by the project

1. Factors Affecting Immunization Coverage among Children under 2 years in Ntungamo District, October 2005
2. Operational Research into Oburo and Ebiino in the 7 Sub-Counties of Africare CIMCI-Plus Project in Ntungamo District. July 2006

Project Data Sheet form – updated version

Africare-Uganda Integrated Community Health Model

“Evidence-based approach that empowers communities to take charge of their health”

BACKGROUND

The Uganda Ministry of Health in BASICS II, UNICEF and WHO launched the Integrated Management of Childhood Illnesses (IMCI) approach to child survival, growth and development in June 1995. Two major components were initiated and, these included:

- 1 Improving health workers' skills in management of the common childhood illnesses,
- 2 Improving the health services delivery system.

The implementation of a third component of IMCI: **Improving household and community health practices**, started in 1999 with Kiboga District as a national pilot and learning site to develop implementation guidelines and materials. Africare had a chance to learn from Kiboga early lessons and insights. To date, CIMCI has spread to more than 40 Districts countrywide.

In 1999, with a four-year [October 1999-September 2003] grant from USAID/GH/HIDN's Child Survival Health Grants Program [CSHGP], Africare-Uganda launched a Community-based IMCI approach in Ntungamo District, South Western Uganda. The interventions then included; malaria, acute respiratory infections, diarrhoeal diseases and improving nutrition, breast-feeding and micronutrients. With impressive result, Africare-Uganda received a follow-on grant from USAID to support a five-year [October 2003-September 2008] CIMCI extension and new interventions: immunizations, HIV/AIDS were added.

During the project implementation, Africare began to understand the importance of the relationship between tangible approaches (i.e. construction/rehabilitation of water sources, rabbit-breeding, vegetable growing, weighing of children) and non-tangible approaches (i.e. hygiene behavior, care-seeking practices, reinforcement mobilization approaches). Africare realized that non-tangible approaches alone would not enable the project to attain its objectives. It was realized too, that additional material aspects would have to be included in order for communities to understand and put into action various health messages.

In response, Africare designed additional projects with tangible outputs namely Water for Child Health, Africare-World Space HIV/AIDS Initiative, Community Based HIV/AIDS Natural Resources Management, HIV/AIDS Volunteer Service Corps to complement CIMCI—these are referred to as “hardware components.” These hardware components reinforce the adoption of Africare's non-tangible projects—the “software components.” In doing so, the making of a powerful **Integrated Community Health Model** was born.

Africare-Uganda's Integrated Community Health Model is the product of a seven-year reflection and learning process. We are proud to share this model with our partners in development, and we encourage the adoption of this model for success in primary health care as well as community development in general. The end result aims to empower households and communities to take charge of their health.

SOFTWARE Components

Training and Capacity Building

This is a crosscutting activity for all project interventions. Knowledge and skills are passed on to beneficiaries formally through organized trainings, refresher courses, and mentoring processes. Training of CORPS, Health Workers and other stakeholders follows the MOH training curriculum and modules. The training strengthens their capacity to carry out core activities of mobilizing and sensitizing communities. The trained persons serve as role models

Concept Note

or change agents in their respective communities and play a crucial role in sustaining the practices that promote healthy living.

Behavior Change Communication (BCC)

The Behavior Change Communication (BCC) approach aims to reform unhealthy living practices such as delayed care seeking and replacing them with sixteen tested key household and community health practices categorized as: **Growth promotion and development, Disease prevention, Home Management of a sick child and Care seeking and compliance.**

One lesson we have learned is that changing people's beliefs and practices is not an easy task. It requires careful analysis of mothers and care taker's behavior so as to build on what is currently done well while focusing on weak areas or bad practices. The BCC approach applies innovative and culturally sensitive methods to deliver key health messages. These methods include the following: community drama, home visiting, household competitions, community exchange visits, radio programs, community dialogue meetings, film shows and distribution of Information Education Communication (IEC) materials.

Strengthening Community and Health Facilities Linkages

In order for the model to succeed, linkages between health facilities and communities must be strengthened. This linkage is viewed as a two-way process that promotes care-seeking behavior and follow-up of clients by health workers. Africare staff work closely with Ntungamo District Health Services to implement the CIMCI project. Through quarterly technical review meetings, pertinent issues about the project implementation and health services utilization trends are discussed. The linkages promote key household practices whilst improving the quality of care at the health facilities. Through this close interaction, the relationship between communities and health facilities is strengthened. Together, they are able to identify key health problems and find effective remedies. This approach has proved to be very successful when put into practice. A study conducted in the project area indicated that 97% of mothers sought care for their sick children, as compared to 50% in non-project areas.

Action Research and Information Management:

Action research and information management includes conducting a baseline survey to establish benchmarks, upon which the program successes are measured, a midterm review to monitor progress and a final evaluation to measure the overall impact of the program.

The WHO Thirty Cluster Knowledge Practice and Coverage (KPC) and Lotus Quality Assurance (LQAS) methodologies are applied to conduct the surveys. The component also carries out day-to-day monitoring, documentation and sharing of success stories with partners as well as developing tools for information management at community levels. Here CORPS, PDCS and S/C trainers collect information on a wide range of health issues, analyze and interpret it, and take action.

Findings from formative research studies, such as EPI, have been taken up as a guide by the District Health Team (DHT) and Africare during the Partnership Defined Quality (PDQ) meetings to discuss practical remedies for improving health services delivery and utilization.

HARDWARE Components

Hardware components include physical or material resources that accompany the software components in order for communities to fully appreciate Africare's programs. Examples of hardware components include; provision of clean safe water, optimum nutrition promotion, growth promotion and monitoring, immunization, materials support to people living with HIV/AIDS and ITN use in malaria control.

Water and Sanitation

At the start of CIMCI project in 1999, safe water coverage in Ntungamo, which was a newly created District (1993), was incredibly low. In Ngoma sub-county it was about 18%. With Africare's intervention in partnership with UNICEF a shallow well, springs, and rain harvesting tanks (at Health Facilities) have been constructed raising safe water coverage to over 85% in Ngoma. Africare works closely with district water departments to identify and jointly construct the sites. Communities provide the locally available materials such as stones, clay and labor. In addition water and sanitation committees are formed and trained to maintain and repair the facilities in future. This component has greatly contributed to the reduction of diarrheal diseases since home hygiene and sanitation using simple technologies such as, pit latrines, drying rack, boiling of water for drinking and using improved hand washing facilities are emphasized. Communities are educated about the intricate relationship between clean safe water, health, and sanitation.

Community Nutrition Actions

Poor nutrition is one of the major problems, especially among children below five years of age, due to cultural beliefs, poor feeding practices and inadequate knowledge. Under this component, Africare does the following.

- Supports the establishment of backyard gardens through the provision of technical assistance, seeds, and tools. The water sources provided irrigate the gardens too, further linking the nutrition and water component.
- Construction of fish ponds with input from communities. These ponds are stocked and community members are trained to manage them. The fish is an additional source of protein for young children and other household members.
- Supports the construction of rabbit breeding centers and these provide rabbit meat as an additional source of protein.
- Conducts nutrition education sessions which involve food and cooking demonstrations. These sessions empower communities with knowledge about how to prepare locally available foods to improve nutrition for children under five and themselves.
- Implements a sister project; The Title II Life Initiative that provides nutritional support to people infected and affected by HIV/AIDS. This project provides fortified vegetable cooking oil and corn Soya blend to supplement their diet. The title II project also provides grafted fruits and vegetables seedlings, beehives and rabbits to improve their nutrition and incomes.

Malaria Control

Malaria remains a major killer for children under five years in Uganda. Communities are educated about the economic burden and risk of malaria and are informed that the most effective way to prevent malaria is using insecticide treated nets (ITNs). Through Africare's support and encouragement, communities have formed self help ITN clubs which pool money that goes towards the purchase of ITNs. Africare endeavors to negotiate on behalf of the clubs for subsidized affordable prices. The Ministry of Health (MOH) further supports this component by re-treating the purchased ITNs bi-annually. Africare field staff working with community structures mobilize communities to take their nets to designated centers for re-treatment.

Immunization Promotion

Africare supports the Ntungamo District health Services in efforts to attain the national MOH 85% immunization target. Activities in this component include; community mobilization and sensitization on the importance of complete immunization in a child's life, educating mothers

Concept Note

and caretakers on growth monitoring and how to interpret the growth curve, and training EPI mobilizers to update their knowledge and improve on their mobilization skills. Africare supports the outreach teams by providing additional weighing scales and logistical support like transporting vaccines.

HIV/AIDS, Orphan (OVC) Support

Prevention and control of HIV/AIDS is a cross cutting intervention in the model because with the disease, all the gains made in improving people's health can be negated. The HIV component entails both software and hardware aspects for instance, creating awareness is linked to the training of community structures to equip them with counseling skills to reduce stigma. Africare also supports the District in conducting VCT and PMTCT outreaches. The hardware aspect include: food distribution to improve food security of PLWAS and their immediate family members, supporting orphans and needy children's education, and initiating income generation activities for affected households.

PARTNERSHIP and ACKNOWLEDGEMENT

Africare-Uganda integrated Community Health Model derives unique meaning from the great African saying that "One by one makes a bundle". Used in this context, it implies that the model would not have been successful without support from various stakeholders. USAID provides the much needed funding for CIMCI project.

Over the years, Starr Foundation, Africa Well Fund (AWF), Phi Delta Kappa Sorority Inc. have provided the additional funding for Africare's water and HIV/AIDS activities respectively.

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The CIMCI Project would not have been possible without continued technical support from Africare-Uganda Country Office staff, Africare Washington, and Africare Ntungamo field staff whose tireless efforts and commitment were crucial in the development and implementation of this model.

Africare is a Private Voluntary Organization and works to improve the quality of life in Africa by assisting families, villages and nations in two primary areas-food security and agriculture, and health and HIV/AIDS as well as water resource development, environmental management, literacy and vocational training, micro-enterprise development, governance and emergency humanitarian aid.

**COMMUNITY BASED INTEGRATED MANAGEMENT
OF CHILDHOOD ILLNESS (CIMCI-PLUS) PROJECT
AFRICARE - NTUNGAMO**

**FACTORS AFFECTING IMMUNIZATION COVERAGE AMONG
CHILDREN UNDER TWO YEARS IN NTUNGAMO DISTRICT:**
(A Formative Research carried out by CIMCI-Plus Project)

REPORT PREPARED BY: AFRICARE – CIMCI NTUNGAMO

OCTOBER 2005.

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Factors Affecting Immunization Coverage Among Children Under Two Years In Ntungamo District:

ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
BCC	Behavior Change Communication
CAO	Chief Administrative Officer
CIMCI	Community Based Integrated Management of Childhood Illness
CORPs	Community Owned Resource Persons
DDHS	Director of District Health Services
DHE	District Health Educator
DHT	District Health Team
DPT	Diphtheria, Pertussis and Tetanus Vaccine
EPI	Expanded Program on Immunization
HepB	Hepatitis B
HIV	Human Immuno deficiency Virus
Hib	<i>Haemophilus influenzae</i> type B Illness
HMIS	Health Management Information System
HSDs	Health Sub-Districts
HSSP	Health Sector Strategic Plan
KPC	Knowledge Practice and Coverage
MOH	Ministry of Health
OPV	Oral Polio Vaccine
PHC	Primary Health Care
TT	Tetanus Toxoid
WHO	World Health Organization

EXECUTIVE SUMMARY

Africare is implementing a five-year (October 1, 2003-September 30, 2008) Community-based Integrated Management of Childhood Illness (CIMCI- Plus) project in Ntungamo District in South Western Uganda. The major intervention areas include: malaria control (35%), Immunization (25%), Nutrition Promotion, Breastfeeding and other Micronutrients intake (15%), Diarrhea control (10%) and HIV/AIDS (15%) prevention and mitigation of its effects. The project is implementing CIMCI interventions in the sub-counties of; Bwongyera, Ihunga, Itojo, Kayonza, Nyakyera, Rugarama and Ruhaama. The target population includes children under five years (39,180), and women of child bearing age (42,911) as direct beneficiaries, as well as 104,476 indirect beneficiaries.

During September 2005, the CIMCI-Plus Project conducted a formative research on factors affecting immunization coverage in the district. The cross sectional exit study (which targeted mothers/caretakers who had just received immunization services) used both quantitative and qualitative research methods. The target respondents were 147 mothers/caretakers of children under two years, 5 DHT members, 16 Health Center staff and 24 EPI mobilizers. Mothers were randomly selected for interviews at the various immunization centers/outreaches while the other respondents were purposively selected due to their knowledge and experience regarding immunization in Ntungamo district.

The results of the study showed that 98% of the mothers/caretakers interviewed at the immunization sessions were knowledgeable about and could explain the importance of immunization. The mother/caretakers also mentioned that immunization protects children from diseases and increases the child's immunity against diseases. The other 2% of the mothers/caretakers interviewed said they take their children for immunization because they see other mothers doing the same.

Although mothers/caretakers interviewed understood the importance of immunization, very few of them (3.4%) were able to name all the immunizable diseases and the correct immunization schedule for children under one year. 58.3% of the EPI mobilizers could mention the immunizable diseases but most of them could not correctly state the immunization schedule for children under one year. Only two of the EPI mobilizers knew exactly their roles and responsibilities.

At the health units some health workers had not internalized the immunization schedule apart from the 9 months' measles vaccination. These health workers are expected to provide accurate information and advice to mothers/caretakers especially on the immunization days.

The DHT members indicated that a few health facilities immunized children on a daily basis. The study found that daily immunization takes place only at the three health sub districts (Health centre IV). As a result, some opportunities for vaccinating children are lost at the lower level health units.

Insufficient facilitation for the outreach immunization teams is one of the demotivating factors mentioned by the outreach staff. It was found that immunization activities were allocated only 10% of the overall Primary Health Care (PHC) funds in Ntungamo district. For example, a recent release for PHC activities for Ntungamo district was 14,098,800/= (USD 7,620) to support all activities for the quarter.

Immunization was allocated 1,400,000/= (USD 756) which is quite insufficient for immunization activities in a quarter.

According to the mothers/caretakers, some of the factors that hinder them from taking their children for immunization include:

- Ignorance of some mothers about the importance of immunity;
- The belief that their children will fall sick and die after immunization;
- The husbands stop mothers from taking children for immunization;
- The belief that these children whether boys or girls may not give birth in future; because health workers give them sterilizing injections.

On the other hand, most health workers appreciated the Ministry of Health Child Days strategy because it increased turn up of children at immunization sessions. This makes it possible to vaccinate those children that had missed out on the routine immunization sessions.

The health unit staff reported very minimal vaccine-stock outs which ensured the continuity of the immunization.

Though the field workers mentioned that the facilitation for immunization outreaches was not sufficient, they acknowledged receipt of the field allowances for the outreach services they provide.

The EPI mobilizers felt they were not adequately supervised and a good number of them did not have the Immunization Registers.

Most of the DHT members interviewed indicated that there had been an increase in immunization in the last three years. However, HMIS data indicated a decline in the use of antigens in the period between 2002 and 2004.

The study suggests the following recommendations in order to increase the immunization coverage for children under one year:

- Design and disseminate messages that will emphasize correct information on the effects and safety of the vaccines used.
- Intensify accurate messages on immunization to inform mothers/caretakers, EPI mobilizers and health workers about the importance of knowing and following the immunization schedule.
- Involve fathers and young men in the process of planning mobilizing and immunizing their children.
- Homes with fully immunized children should act as role model homes for mothers/caretakers who have not immunized their children.
- Intensify technical support-supervision visits to EPI mobilizers and Health workers during mobilization and while conducting immunization to fill in the information gaps.
- Lobby for the allocation of more resources from the PHC fund in order to promote EPI activities.
- Encourage joint planning and implementation by all stakeholders at the district level to ensure maximization of resources without duplicating efforts.
- Advocate for the Child Days strategy at district and sub county level and involve all stakeholders in mobilization and implementation.

1. BACKGROUND

1.1. Introduction

In January 2004, Africare conducted a Knowledge Practice and Coverage (KPC) survey in all the seven of the targeted sub-counties. The survey obtained information from mothers with children under two years of age in order to set indicators for tracking progress of the 5 key interventions implemented by the CIMCI-PLUS project.

According to the KPC survey, only 52.1% of children aged 12-23 months were fully immunized and 38.1% of the same children had received measles vaccine. These figures were below the nationally recommended immunization target of 85%. The results also indicated that 28.6% of mothers received at least two tetanus toxoid injections before the birth of their youngest child. Immunization is a core intervention area of the CIMCI Plus Project. Therefore there was a need to identify, examine and remedy the factors which affected immunization coverage in Ntungamo District.

One of CIMCI-PLUS project's objectives is to contribute to the HSSP II target of ensuring that every child is fully immunized by their first birthday, and every newborn protected from neonatal tetanus. The project will also supplement the MOH efforts to increase fully immunized children from 71% to 80%, increase DPT3/OPV 3 coverage from 83% to 90%, reduce DPT1-3 drop out from 16% to 10%, increase measles coverage from 83% to 90% and increase TT2 coverage among pregnant women from 50% to 80% (HSSP II). However, these targets cannot be achieved unless barriers to increasing immunization coverage are identified and appropriate action taken by respective stakeholders.

1.2. Study problem

The Uganda Ministry of Health recommends that all children complete their full immunization schedule before they are 12 months old. According to the HSSP II (2005/06-2009/2010 Draft 3), it was reported that the national coverage for DPT 3 rose to 83% in 2003/2004 compared to 55% pre HSSP 1 and that TT coverage improved from 42% to 50% in 2003/2004. Although there appeared to be an improvement in immunization nationally, Ntungamo presented a different picture. As seen above, the baseline KPC survey conducted in January 2004 by the CIMCI Plus in the 7 target sub-counties of Ntungamo showed that immunization levels were found to be below the national 85% target.

1.3. Goal

The goal of the study was to examine the major barriers to the full immunization coverage among children under two years of age in Ntungamo District.

1.4. Objectives

Specifically the study team set to achieve the following objectives:

- To explore the factors that exist at the health facility and community that promote or hinder increased immunization coverage.
- To establish which factors promote or hinder mothers/caretakers completing full immunization schedules for children before their first birth day
- To suggest recommendations for improving full immunization coverage in Ntungamo District in order to achieve the MOH targets.
- To disseminate the study findings so that they can be useful to both Ntungamo and other Districts with similar difficulties.

2.0. STUDY METHODOLOGY

2.1 Study location

The study was carried out in the seven sub-counties of Bwongyera, Ihunga, Itojo, Kayonza, Nyakyera, Rugarama and Ruhaama where CIMCI is operating.

2.2. Sample size and selection

A total of 147 mothers/caretakers of children aged 0-23 months were randomly selected from the mothers that had brought their children for immunization. Ten caretakers/mothers were interviewed from each facility at static and outreaches. Twenty-four EPI mobilizers and four members of the DHT were purposely selected by virtue of their position and knowledge of the subject matter. The study sample also comprised 8 health center in-charges from selected health units of Bwongyera, Kitondo, St. Lucia, Itojo Hospital, Kayonza, Nyakyera, Rugarama and Kishami

2.3. Methods of data collection

A triangulation of methods was applied. This included: (i) interviews with caretakers/mothers of children 0-23 months; (ii) Interviews with key informants; (iii) interviews with the Health Center in-charges and nurses directly involved in immunization; (iv) review of immunization registers at outreaches and static immunization sites and documents from the district health management Information systems.

2.4 Data analysis

Data collected were both qualitative and quantitative in nature. The analysis therefore followed both methods. Quantitative data was entered into the computer and analyzed using EPI INFO 3.3 software package. The qualitative data was categorized and analyzed manually. The frequencies of variables of interest were measured as well.

2.5. Limitations

The study envisaged reviewing documents particularly the mobilizers' immunization registers but none of the mobilizers had a register. We relied on word of mouth. It was also difficult to meet our target for members of the DHT as most of them were busy. Upon finding out that their colleagues had been interviewed, some members of the DHT were reluctant to participate in the exercise. These members said the information obtained was sufficient and we should not waste time interviewing them.

Also, only mothers who had taken their children to the immunization site were interviewed.

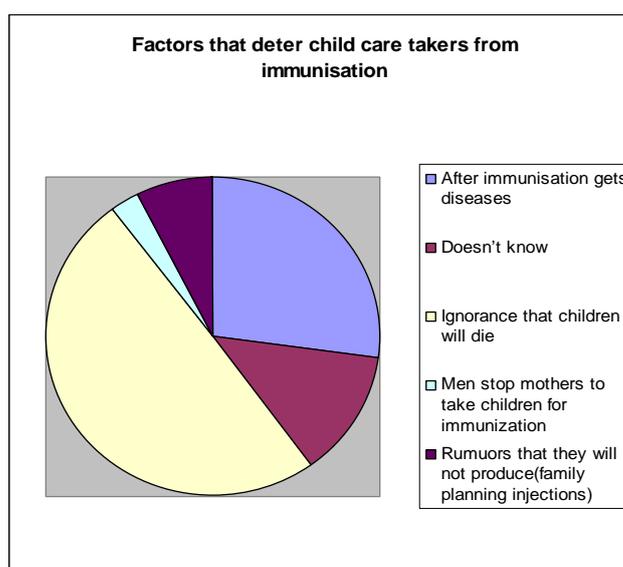
3.0 RESULTS

Caretakers/Mothers knowledge, practices and, beliefs about immunization

3.1 (i). Factors that deter some parents/caretakers from taking their children for immunization

Many caretakers mentioned that some of the factors that they thought may deter some parents/caretakers from taking their children were inadequate knowledge about immunization and the belief that children would die when vaccinated (49.7%). This misconception is a result of the first National Immunization Campaign during which mothers said children died as a result of receiving expired vaccines; others said that parents were afraid of their children becoming ill after immunization (27%).

Approximately six percent (5.5%) said that beliefs that children will fail to give birth in the future having been sterilized on immunization contributed to poor coverage of immunization. About 2.7% said some men stop their wives from taking children for immunization because they think their wives are going to meet other men. A summary of factors is indicated in the pie chart.



3.1.(ii) Reasons why some parents/caretakers fail to complete their children's immunization schedule

44.2% of the mothers/caretakers interviewed said some parents fail to complete children's immunization schedules because parents are not informed about the benefits of completing the immunization schedule. 32% said that if the child developed side effects after immunization, the parent did not take them for further immunization.. Other reasons for failure to complete immunization schedules are indicated in Table 1.

Table 1: Reasons for failure to complete immunization schedule.

Reasons for not completing immunization schedule	Frequency	Percent
Immunization side effects	47	32.00%
Laziness by the mothers	34	23.10%
Long distances	1	0.70%
Parents are not informed	65	44.20%
Total	147	100.00%

3.1.(iii) Caretakers/mothers knowledge of immunization schedules

Only 1 person out 147 (0.7%) mothers knew the correct antigens given at 10 weeks while 42 people (28.6%) knew the antigen given at 9 months. Details see table 2.

Table 2: Showing Caretakers/mothers knowledge of immunization schedule

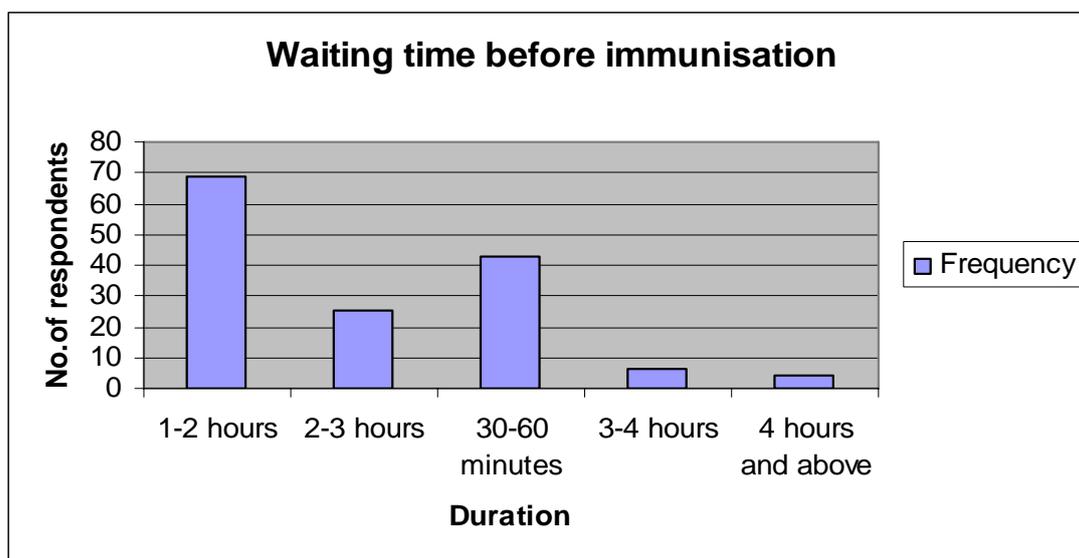
Schedule	Correct		Incorrect	
	Frequency	Percentage	Frequency	Percentage
At birth	13	8.80%	134	91.20%
At 6 weeks	6	4.10%	141	95.90%
At 10 weeks	1	0.70%	146	99.30%
At 14 weeks	5	3.40%	142	96.60%
At 9 months	42	28.60%	105	71.40%
At 6months	14	9.50%	133	90.50%
Child days	6	4.10%	141	95.90%

3.1.(iv) Caretakers/mothers’ knowledge immunizable diseases

Out of the 147 mothers interviewed, only 3.4% knew correctly all immunizable diseases while the rest (94.6%) did not know all. Most mothers mentioned measles and polio in their combinations and very few mentioned Hepatitis B and Haemophilus Influenzae type B illnesses.

3.1.(v) Waiting time before immunization

50% of the mothers interviewed said they waited between 1-2 hours, 29.3 % said waited between 30 -60 minutes, 17% waited between 2-3 hours and the rest 3 hours and above. This can be summarized by the graph below



3.1 (vi) Antigen intervals according to the recommended MOH/WHO

50.3% of the children’s cards indicated that the antigens were administered according to MOH/WHO recommended intervals. However most children’s cards indicated that they did not receive Polio 0 and when asked, most mothers said they did not deliver their children in the government health facilities. When mothers who did not follow

the vaccine intervals were asked why they had failed to do so, some of them said that sometimes health workers fail to turn up on the promised days. To quote one mother at Ngomba outreach in Nyakyera Sub-county;

“I did not follow the vaccine intervals recommended because sometimes we come and wait for health workers and they fail to turn up. They are on and off”.

“You know us women have many things that occupy our minds and if we don’t get constant reminders, we forget about the return dates”

Table 3: Antigen intervals according to the recommended WHO/WHO Protocol

	Frequency	Percent
Did not follow Recommended Antigen intervals	73	49.70%
Follow Recommended Antigen intervals	74	50.30%
Total	147	100.00%

More than half of the Child Cards seen (53.7%) had growth monitoring done every time the children went for immunization. The growth curves were well plotted. However when some mothers were asked whether the health workers interpreted the growth curves, they said that it was done rarely.

3.1 (vii) Caretakers/mothers suggestions on how to increase immunization

Most caretakers said that there should be increased mass mobilization (53%) at the community level, 26% said that there should be a law for every child to be immunized and if anybody breaks it, the officers responsible should enforce it. 7% suggested that more outreaches should be established in communities and 5% suggested that Local Councils should be involved in mobilization since they command more respect at the community level

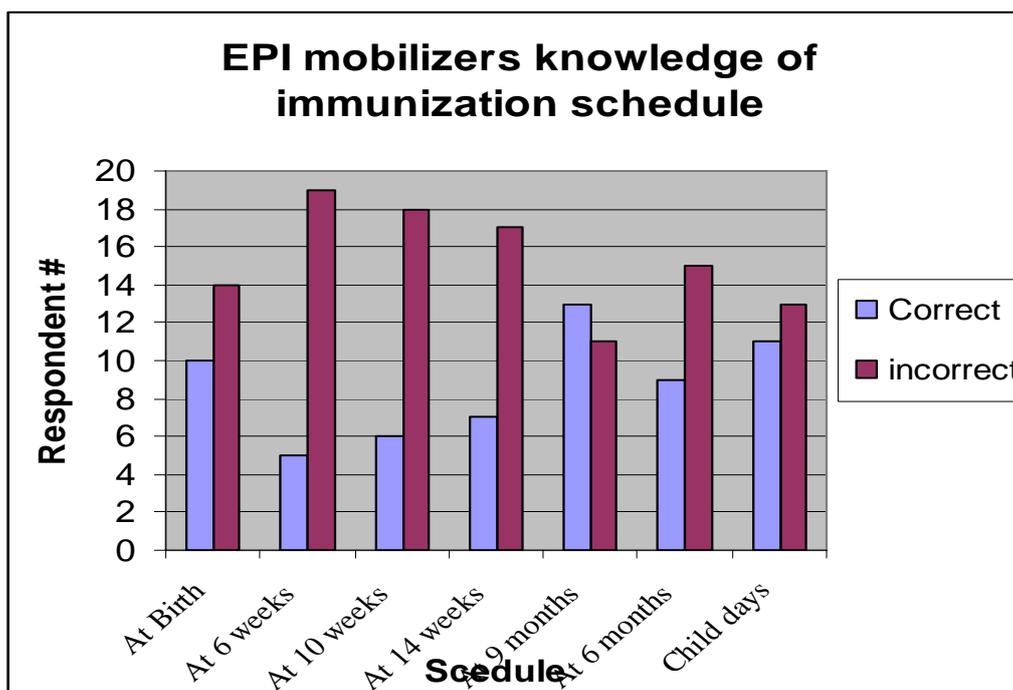
3.1 (viii) Women take children for Immunization

Evidently, from the study all the 147 people who took children to the immunization posts were mothers. This indicates that male involvement in their children’s immunization is still very low. Mothers who were asked whether they were supported by their husbands said men still perceive immunization as a woman’s responsibility.

4.0 EPI mobilizers knowledge, practices and, beliefs about immunization

4.1 EPI Mobilizers knowledge of the immunization schedule and immunizable diseases

Of the 24 EPI mobilizers only 14 knew all the immunizable diseases (58.3%) while the rest did not know all the immunizable diseases. Most of the EPI mobilizers were not knowledgeable about the immunization schedule as demonstrated in the chart below:



4.2. Mobilizers knowledge of their roles and responsibilities

Only 2 of the 24 (8.4%) mobilizers had sufficient knowledge of their roles and responsibilities. 33.3% said they mobilize for immunization, another 33.3% mentioned their role as health education while 6% said their role was to sensitize mothers about immunization only.

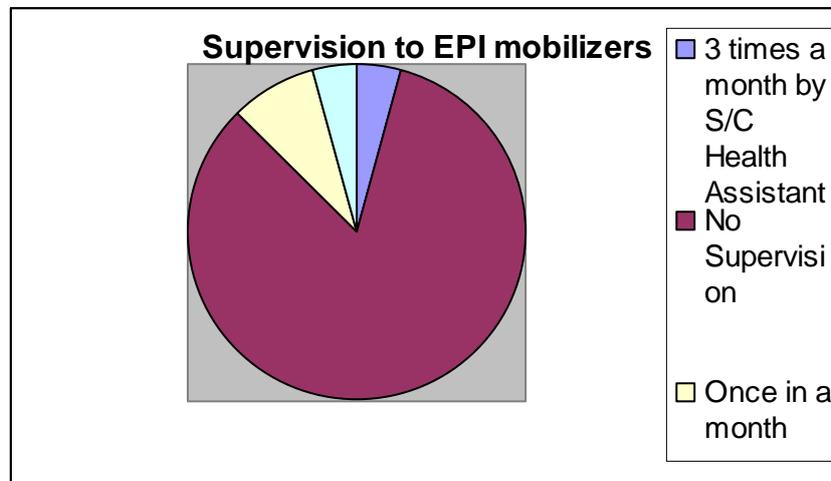
4.3. Provision of support supervision to EPI mobilizers.

83.4% of the EPI mobilizers said they had never been supervised by anybody since their training, 4.2% said they were supervised 3 times in a month by the Health Assistant, while 8.3% said they were supervised once a month. Due to lack of support supervision by anybody, the research revealed that none of the Mobilizers were using the EPI registers as most of them had small exercise books where they wrote the children's names. Some of them said the EPI registers got used up in the District and that they had never received new ones. The Chart 5 summarizes the findings.

On the other hand, when the interview team informally spoke to health workers about whether mobilizers were helping them especially in the following up of children who do not complete immunization schedules or who abscond in the middle of the

program, most of them said that most of the mobilizers were active a few months after selection and training only. After that the health workers only saw mobilizers at the outreaches or static and other mobilizers did not participate at all.

Supervision of EPI Mobilizers



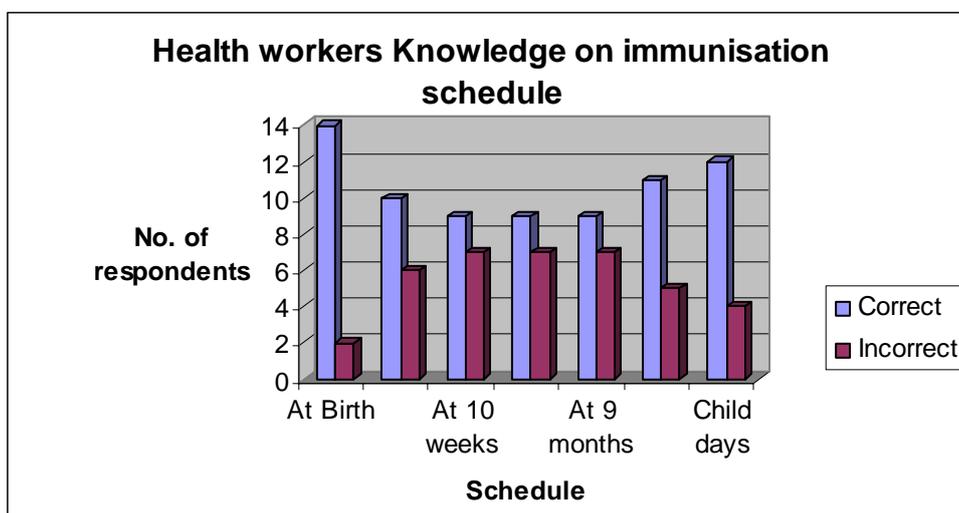
When asked why they were no longer active, the mobilizers, most of whom were found in their homes, said they lost interest because the District promised them a stipend which, though very small, was never released on time. One mobilizer from Kyobwe parish remarked thus:

*“Most of us started with determination and we could really move in the whole parish to mobilize and follow up mothers. The problem came when the District promised us some money that it has failed to give us.
if we were not told about it, we would be comfortable but sometimes we think that our money is given to health workers who refuse to give it to us and eat it”.*

5.0 Health workers knowledge, practices and, beliefs about immunization

5.1. Health workers knowledge on immunization schedule

Of the 16 Health workers interviewed 88% knew the Antigen given at Birth, 9 knew Antigen given at 10 and 14 weeks and 9 months. The Chart summarizes the findings.



5.2 How child day's strategy has created a difference

87.5% of the Health workers interviewed appreciated that the Child Days strategy had made a difference in improving immunization coverage and 31.3% said the strategy had increased turnout of children. 18.8% said that it had helped to immunize children who were missed during routine immunization and 12.5% said it enabled children to receive Vitamin A and Albendazole.

5.3 Whether Immunization is done daily

75% of the Health workers interviewed said that their health facilities were not doing immunization daily while 25% indicated that they were.

5.4 Reasons for not doing immunization daily

31.3% of the health workers interviewed said that they were not conducting daily immunization because they run a weekly static immunization clinic, their health units were not conducting deliveries, and that they operated EPI outreach clinics. 18.8% of the health workers said they avoid vaccine wastage, 6.3% said there were no children to immunize daily, and others said they had never thought about it as a health facility to conduct a daily immunization clinic.

5.5. Charting on the vaccine fridges

All the Health facilities visited kept charts to monitor refrigeration temperature as recommended but most of them had only one copy of the charting sheets filled. When they were asked what happens after submission of the sheet to the District, the Health workers said that they copied the figures to another sheet for their records. All the filed copies were not signed therefore making their validity questionable.

5.6 Availability of vaccines all the time

Most of the health centers indicated that the vaccine stocks were available all year round. However, 3 health facilities indicated that they had suffered a vaccine stock out within a period of one year.

5.7. Support supervision of the Health Facilities

95% of the Health workers interviewed said apart from the bi-weekly visits of the Cold Chain Officer, they did not get support supervision from the Health Center IV. One Health worker said that:

“It was only Kizito and Sheba who used to come and speak to us; others come and hurry to sign in the visitors’ book and go”.

Another health worker said;

“When the doctor was still at Rubaare Health Center IV, he would visit us at least once a month to ask us whether we had any problems that required their attention but since he left, there has never been any one from the Health sub district to speak to us.. Ezra also used to do that”.

5.8 Challenges met by Health facilities in executing immunization schedules

68.8% of the health workers mentioned lack of reliable means of transport as one of their greatest challenges. Health workers said that though they were given bicycles for transport, they sometimes found it difficult to use them particularly during outreaches in some far places. Other challenges are summarized in the table below:

Challenges	Frequency	Percent
Lack of reliable means of transport	11	68.80%
Low turn up of children for immunization	3	18.80%
NM	1	6.30%
Women fear TT and not taking children for immunization	1	6.30%
Total	16	100.00%

5.9 Suggestions for improving immunization coverage

37% of the health workers interviewed said that if a means of transport and field lunch allowance were availed, immunization coverage would improve. 31.3% said they only needed to be availed with reliable transport means and the other 31.3% said there was need for more sensitization about the importance of immunization in communities.

6.0 DHT members knowledge, practices and beliefs about immunization

6.1 DHT member's knowledge of whether there was an increase or a decline in the last 3 years.

Most of the DHT members interviewed (75%) indicated that there was an increase in immunization for the last three years for all the Antigens but the HMIS data indicated a decline for all the Antigens in the years 2002, 2003, and 2004 as can be summarized in the table below.

HIMS data on Immunization coverage for the last 3 years (2002-2004)

Antigen	2002	2003	2004
▪ BCG	101	97	36
▪ OPV ₃	94	88	84
▪ DPT ₃ +HEPB ₃ +HIB ₃	91	85	84
▪ Measles	77	84	82
▪ TT ₂	49	35	52

6.2 Suggestions for improving immunization coverage.

All the DHT members said that the following were necessary to improve immunization coverage:

- Intensifying support supervision,
- Recruitment of more health workers,
- Joint planning for support supervision to health facilities, EPI mobilizers and CORPs with organizations promoting immunization like Africare,
- Timely release of funds could improve immunization coverage.

On the other hand 50% of the respondents said health workers who fail to do their duties should be removed from the program. Members of DHT said that despite

Factors Affecting Immunization Coverage Among Children Under Two Years In Ntungamo District:

reports being made about non-performing persons, the CAO's office took no further action in most cases.

4.0 CONCLUSION AND RECOMMENDATIONS

The study findings indicated that EPI mobilizers and some health workers did not know the immunization schedule and all the immunizable diseases. This was perceived as one of the main reasons why the mothers/caretakers also did not have sufficient knowledge on the diseases and their schedules. This is the reason why some caretakers were not taking their children to complete the immunization schedule. The EPI mobilizers did not give them accurate information. Refining and intensifying through refresher trainings to inform EPI mobilizers and Health workers about the immunization schedule and immunizable diseases should be done. In turn they will educate caretakers and mothers.

A number of mothers were of the view that there were still misconceptions in the communities about the safety of vaccines. Mothers also thought children were not immunized owing to their parents' concerns about the safety of the vaccines, and the effect of immunization on children's health and future parenting life. These beliefs come about probably due to insufficient knowledge about the process and benefits of immunization. Educating caretakers/mothers about the importance of immunization and dispelling fears about the safety of vaccines should be intensified by the EPI mobilizers, health workers and CORPs in communities.

It was evident from the study that all the 147 people that took children to the immunization posts were mothers. These mothers, when asked, said their husbands were not involved in their children's immunization, thus mothers received little or no support from their husbands. The involvement of men in their children's immunization should be encouraged during all BCC activities. Health workers should treat these men with respect and guide them, thereby overcoming the misconception that only women are responsible for children's immunization.

Homes with fully immunized children should act as role models in order to encourage parents who have not immunized their children to learn about the benefits of immunization from those who have.

As identified by most health workers and EPI mobilizers, technical support supervision is an area that requires immediate attention. The DDHS's office should intensify support supervision visits to the Health Center IVs. Likewise Health Centre IVs should carry out support visits to the health facilities they supervise. EPI mobilizers should be supported and supervised more too.

A number of children missed out on immunization because health facilities did not carry out immunization daily. If the health facilities were flexible enough to offer immunization daily, then possibly more children would receive vaccines and complete their immunization schedules.

More funds should be allocated to PHC in order to enable EPI activities to obtain a bigger percentage of the budget for immunization.

It is recommended that joint planning and implementation be carried out by all stakeholders in the District involved in immunization. This will ensure maximization of resources and increased efforts.

The role of Child Days should be emphasized as it leads to an increase in coverage and additional benefits previously discussed. More support should be provided and stakeholders should participate in mobilization of communities.

Annex 1: Question Guide for Health Center In-Charges and Health Workers who participate directly in Immunization

Respondent Number-----

Date of interview

Name of the interviewer.....,

Signature of the interviewer

Remarks by the supervisor.....

.....

Signature of the supervisor.....

Introduction and purpose

I'm called.....(name) working with Africare Project Ntungamo. Thank you for the services being rendered here. Africare is doing this research in collaboration with Ntungamo District health services. The purpose is to generate information that will be used to initiate discussion that will bring about a variety of possible strategies to improve immunization coverage in the district. Your views in the study are therefore very crucial to achieve the objectives of the study. The information collected from each of you is strictly confidential from others. You are therefore requested to be honest when answering questions. Do you agree to participate in the interview?. If the respondent agrees, proceed with the questionnaire. If the respondent refuses, terminate the interview.

Background information

Name of the Health Worker

Title

Duration of service at the Health unit.....

Sub-county.....

Name of the Health Unit.....

Questions

1. Is your unit doing immunization daily?

(a) Yes/No. -----

(b) If no give reasons?-----

2. Do you screen any children less than 24 months who are brought to the Health Units for what ever reason for their immunization status? Yes/No-----
 (a) *If yes*, do you vaccinate those children that needed vaccines?
 Yes/No-----
 (b) If no give reasons-----

3. Would you open a vaccine vial if one child presents to the H/unit for immunization? Yes/No? -----
 (a) If Yes, give reasons-----

 (b) If No, give reasons-----

4. Do you Immunize women aged 15-49 years at your health units? Yes/No-----
 (a) If No, give reasons-----

5. Do you participate in routine immunization? Yes/No-----
 (a) If yes, what role do you play?-----

 (b) What activities do you carry out during an immunization clinic?
 (i)Registration
 (ii) Health Education
 (iii) Weighing
 (iv) Screening
 (v) Vaccine Administration
6. Was your fridge continuously working well in the past 12 months?
 (a) Yes or No-----
 (b) If No why-----

 (c) When the fridge was not working, what did you do?

7. Did you have vaccine stock outs in the past 12 months?
 (a) Yes/No-----
 (b) If yes did you place an order immediately after the supplies ran out?
 Yes/No----- (If *no skip to e*)
 (c) If yes, how immediate was it (*circle the correct response*)
 (i) Within one day

- (ii) Within one week
- (iii) Within one month
- (iv) Others (specify) -----

(d) How long did it take to receive those orders?

- (i) Within one day
- (j) One week
- (ii) Two weeks
- (iii) One month
- (v) Others (specify) -----

(e) If no why wasn't the order placed immediately?-----

8. Do you operate outreach services on regular basis?

(c) Yes/No-----

(d) If no, why?-----

9. Are you normally facilitated to conduct outreaches? Yes/No-----.

If yes what forms of facilitation do you get?-----

10. Do you know the immunizable diseases in Uganda now? Yes/No-----

If yes can you mention them? **(Circle all the answers mentioned)**

- (i) Poliomyelitis (Polio)
- (ii) Tuberculosis (TB)
- (iii) Diphtheria
- (iv) Measles
- (v) Tetanus
- (vi) Whooping cough
- (vii) Hepatitis B (Liver disease)
- (viii) Haemophilus influenzae type B Illness (Meningitis and Pneumonia)

11. Do you know the Uganda national immunization schedule?

Yes/No-----

If yes, list the Antigen and when it is given **(Check with 'X' in the correct and incorrect columns as appropriate)**

Age of child	Vaccine	Disease prevented	Correct	incorrect
At birth or soon after birth	Oral polio ₀ , BCG	Polio and Tuberculosis		
6 weeks old	Oral polio ₁ , DPT ₁ -HepB ₁ +Hib ₁	Polio, diphtheria, whooping cough, tetanus, Hepatitis B & haemophilus influenzae type B Illness		

10 weeks old	Oral polio ₂ , DPT ₂ -HepB ₂ +Hib ₂	Polio, diphtheria, whooping cough, tetanus, Hepatitis B & haemophilus influenzae type B Illness		
14 weeks	Oral polio ₃ , DPT ₃ -HepB ₃ +Hib	Polio, diphtheria, whooping cough, tetanus, Hepatitis B & haemophilus influenzae type b Illness		
9 months	Measles	Measles		
Vitamin A supplementation and Deworming				
6 months old and every 6 months until 5 years	Vitamin A drops in the mouth	Blindness and strengthens resistance against other diseases		
Child Days April October	Mebendazole /albendazole and vitamin A supplementation	Worm infestation, and blindness, strengthens resistance against other diseases		

12. (a) Are you aware of Child Days strategy? Yes/No----- (if no skip to 13)

(b) Do you think that the strategy has created any difference in improving the immunization coverage in your catchment area? Yes/No-----

(i) If yes how -----

(ii) If No why -----

13. Do you know your target population -children under 1 year? (verify and write the figure)----

(b) What are your immunization coverage rates for the last 1-year?

Antigen	Coverage
OPV ₃	
DPT ₃	
Measles	

14. (a) Do you conduct home visits for EPI monitoring in your catchment's population to find out immunization trends? -Yes/No-----If No give reasons-----

(b) If yes what are the common problems associated with immunization schedules

15. What challenges do you have as a Health facility in executing your immunization schedules?-----

16. What suggestions do you give to improve the immunization coverage?-----

Do you have any other comments or questions related to this interview?

Thank you for your time and active participation

Annex B) Question Guide for EPI Mobilizers

Respondent Number-----

Date of interview.....

Name of the interviewer.....,

Signature of the interviewer

Remarks by the supervisor.....

.....

Signature of the supervisor.....

Introduction and purpose

I'm called.....(name) working with Africare Project Ntungamo. Thank you for the services being rendered here. Africare is doing this research in collaboration with Ntungamo District health services. The purpose is to generate information that will be used to initiate discussion that will bring about a variety of possible strategies to improve immunization coverage in the district. Your views in the study are therefore very crucial to achieve the objectives of the study. The information collected from each of you is strictly confidential from others. You are therefore requested to be honest when answering questions. Do you agree to participate in the interview?. If the respondent agrees, proceed with the questionnaire. If the respondent refuses, terminate the interview.

Background information

Name of the Mobiliser

Date of interview.....

Sub-county.....

Name of the Health Unit/outreach post.....

Questions

1. How were you selected and by who?-----

2. Did you receive any training after selection? Yes/No-----

3. If yes what were you trained in and for how long?-----

----- How many
immunizable diseases do we have in Uganda now? ____

Can you list them? (**Circle all the mentioned**)

(i) Poliomyelitis (Polio)

(ii) Tuberculosis (TB)

(iii) Diphtheria

(iv) Measles

(v) Tetanus

- (vi) Whooping cough
- (vii) Hepatitis B (Liver disease)
- (viii) Haemophilus influenzae type B Illness (Meningitis and Pneumonia)

5. Do you know at which age each vaccine, Vitamin A, Mebendazole /albendazole is administered and for what purpose? (*Check with 'X' in the correct and incorrect columns as appropriate*)

Age of child	Vaccine	Disease prevented	Correct	Incorrect
At birth or soon after birth	Oral polio ₀ , BCG	Polio and Tuberculosis		
6 weeks old	Oral polio ₁ , DPT ₁ -HepB ₁ +Hib ₁	Polio, diphtheria, whooping cough, tetanus, Hepatitis B & haemophilus influenzae type B Illness		
10 weeks old	Oral polio ₂ , DPT ₂ -HepB ₂ +Hib ₂	Polio, diphtheria, whooping cough, tetanus, Hepatitis B & haemophilus influenzae type B Illness		
14 weeks	Oral polio ₃ , DPT ₃ -HepB ₃ +Hib	Polio, diphtheria, whooping cough, tetanus, Hepatitis B & haemophilus influenzae type b Illness		
9 months	Measles	Measles		
Vitamin A supplementation and De-worming				
6 months old and every 6 months until 5 years	Vitamin A drops in the mouth	Blindness and strengthens resistance against other diseases		
Child Days April October	Mebendazole /albendazole and vitamin A supp	Worm infestation, and blindness strengthens resistance against other diseases		

6. What roles do you play in your community?-----

7. How do you collaborate with health workers at immunization centers/outreaches? (Probe to know if the health workers think they are useful in increasing immunization coverage)-----

8. Are you aware of the Child Days strategy?

(a). Yes/No-----

(b). If yes how and if no why, do you think that the strategy has created any difference in improving the immunization coverage in your catchment area?-----

(c). If no give reasons.....

.....
.....
.....

9. Compared to the last 2 years, what is your view about the current immunization coverage trend?

Low/ High. -----

(a) If High, give reasons-----

(b) If low/decline, give reasons.-----

(c). What steps are you putting in practice to increase the coverage?-----

(d). What challenges do you face in executing your activities?-----

10. How are you facilitated to carry out your mobilization?-----

11. Do you know your target population for under 1 yrs' (Review the record book) -----

12. How are the community leaders involved in EPI activities?-----

13. Do you have any suggestions on how we can increase immunization coverage?

Do you have any questions related to what we have discussed?

Thank you for your time and active participation

C.1.10

Annex C) Question guide for members of the DHT

Respondent Number-----

Date of interview.....

Name of the interviewer.....,

Signature of the interviewer-----

Remarks by the supervisor.....

.....

Signature of the supervisor.....

Introduction and purpose

I'm called.....(name) working with Africare Project Ntungamo Thank you for the services being rendered here. Africare is doing this research in collaboration with Ntungamo District health services. The purpose is to generate information that will be used to initiate discussion that will bring about a variety of possible strategies to improve immunization coverage in the district. Your participation is voluntary and your views in the study are very crucial to achieve the objectives. The information collected from each of you is strictly confidential from others. You are therefore requested to be honest when answering questions. Do you agree to participate in the interview?. If the respondent agrees, proceed with the questionnaire. If the respondent refuses, terminate the interview.

Background information

Name of the DHT member

Title

Duration in service.....

1- From your supervisory visits and reports, do you think there has been a change in immunization for all the antigens for the last three years? Yes/No-----

2-If yes, what are those changes? (Increase or decline)-----

3-What are the possible causes of those changes? -----

4. Review records for the last 3 years.....

Immunization coverage for the last three years

Antigen	2002	2003	2004
BCG			
OPV ₃			
DPT ₃ + HepB ₃ +Hib ₃			
Measles			
TT ₂			

5- How many of your Health facilities carry out immunization daily?

For those that are not carrying out immunization daily what are the reasons?-----

6-Did you have vaccine stock outs in the past 12 months? Yes/No-----

If yes, what supplies ran out and why?-----

7-Do you have any other partners (NGOs, CBOs, and FBOs) involved in immunization in the District? Yes/No-----If yes, can you mention them and their role?-----

8-What challenges do you normally face in achieving full immunization coverage for the District?-----

9-What mechanisms are you putting in place to address the challenges?-----

10-What is your overall budget for PHC and what percentage does EPI take?-----

11. Do you have any suggestions on how we can increase immunization coverage?-----

Do you have any questions related to what we have discussed?

Thank you for your time and active participation

D) Question guide for Parents/ Caretakers of under 2 children

(Exit interview)

Respondent Number-----

Date of interview.....

Name of the interviewer.....,

Signature of the interviewer

Remarks by the supervisor.....

.....

Signature of the supervisor.....

Introduction and purpose

Thank you for bringing the child for immunization. Africare is doing this research in collaboration with Ntungamo District health services. The purpose is to generate information that will be used to initiate discussion that will bring about a variety of possible strategies to improve immunization coverage in the district. Your participation is voluntary and your views in the study are very crucial to achieve the objectives. The information collected from each of you is strictly confidential. You are therefore requested to be honest when answering questions

Do you agree to participate in the interview?. If the respondent agrees, proceed with the questionnaire. If the respondent refuses, terminate the interview.

Background information

Name of the Mother/Caretaker

Gender: (i) Male (ii) Female

Marital Status:(i) Married (ii) Single (ii) Widow (iv) Divorced (v) Other...

Level of education (i) Primary (ii) Secondary (iii) Tertiary (iv) None (v) Other....

Occupation.....

Village.....Parish.....Sub-county-----

Name of the Health Unit/Outreach.....Code-----

--

1. Did you take all your children for immunization? Yes/No-----

If yes, give reasons -----

If no, give reasons-----

2. What do you think are factors that deter some parents/caretakers from taking their children for immunization?-----

3 Why do parents/caretakers fail to take their children to complete immunization schedules?-----

4. Do you have a health card for your child? Yes/No-----

(Verify whether the child completed/will complete immunization in the first year of his/her life and also look at the interval between antigens whether they are the ones recommended by WHO/MOH. Also observe whether growth monitoring is done and plotted on the road to health ever time a child goes for immunization)-----

5. What distance (Kms) do you travel to bring children for routine immunization? -----

6. How do you travel to the immunization site? -----

7. For how long do you wait before your child is immunized? -----

8. How are you handled by the health workers at immunization center when you take your children for immunization/ Vaccination?-----

9. When you visit the health center/outreach, what services do you receive from the health workers other than immunization?-----

b) When you take your child for immunization, does the health worker advise you to come back to complete the a full immunization schedule?-----

10. Do you believe that immunization protects your children from diseases? Yes/No. -----

If yes, how?-----

If no, why?-----

11. Do you know the immunizable diseases? Yes/No-----

If yes, can you mention them? **(Circle all the answers mentioned)**

- i. Poliomyelitis (Polio)
- ii. Tuberculosis (TB)
- iii. Diphtheria
- iv. Measles
- v. Tetanus
- vi. Whooping cough
- vii. Hepatitis B (Liver disease)
- viii. Haemophilus influenzae type B Illness (Meningitis and Pneumonia)

12. Do you know the immunization schedules?

Yes/No-----

If yes, list the Antigen and when it is given` (**Check with ‘X’ in the correct and incorrect columns as appropriate**)

Age of child	Vaccine	Disease prevented	Correct	incorrect
At birth or soon after birth	Oral polio ₀ , BCG	Polio and Tuberculosis		
6 weeks old	Oral polio ₁ , DPT ₁ -HepB ₁ +Hib ₁	Polio, diphtheria, whooping cough, tetanus, Hepatitis B & haemophilus influenzae type B Illness		
10 weeks old	Oral polio ₂ , DPT ₂ -HepB ₂ +Hib ₂	Polio, diphtheria, whooping cough, tetanus, Hepatitis B & haemophilus influenzae type B Illness		
14 weeks	Oral polio ₃ , DPT ₃ -HepB ₃ +Hib	Polio, diphtheria, whooping cough, tetanus, Hepatitis B & haemophilus influenzae type b Illness		
9 months	Measles	Measles		
Vitamin A suplimentation and Deworming				
6 months old and every 6 months until 5 years	Vitamin A drops in the mouth	Blindness and strengthens resistance against other diseases		
Child Days April October	Mebendazole /albendazole and vitamin A supp	Worm infestation, and blindness strengthens resistance against other diseases		

13. Do you know or believe in any other ways by which children could be protected from diseases other than immunization? Yes/No-----

If yes, mention them-----

14. Do you have any suggestions on how we can increase immunization coverage ?-----

Do you have any comments/questions regarding what we have discussed?

Thank you for your time and active participation

**COMMUNITY BASED INTEGRATED MANAGEMENT
OF CHILDHOOD ILLNESS (CIMCI-PLUS) PROJECT
AFRICARE - NTUNGAMO**

OPERATIONS RESEARCH INTO OBURO AND EBIINO FOLK DISEASES

**REPORT PREPARED BY: AFRICARE – CIMCI NTUNGAMO
July 2006.**

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ABSTRACT

This operations research was carried out to learn more about the belief in “ebiino” and “oburo” folk diseases. This report will be used to generate more effective BCC strategies that reduce extraction. Focus group discussions and key informant interviews were carried out in the seven sub-counties of the Africare CIMCI-Plus Project. It was found that the communities still hold deeply rooted belief in the diseases, and that extraction is still carried out. Africare, and its partners, must carry out increased sensitization and health education about the dangers of extraction, in order to change these perceptions.

1.0 INTRODUCTION

1.1 Background

Many communities in Ntungamo believe that “ebiino,” or false tooth disease, is a disease that affects every child at an early age including immediately at birth or a few days after. Symptoms are close to those of diarrhea, but mothers/caretakers believe that the disease cannot be treated by western medicine. Instead, the affected children are brought to local specialists who extract what they call a maggot like insect from the gums of the children. Some children’s teeth are not extracted. Instead, the local specialist rubs herbs on the gum, which are believed to stop the development of the false tooth. This process is called silencing, and is normally done when the false teeth are still very young in development.

The concept of “oburo,” or millet disease, is derived from the belief that there are millet like nodules in the chest of the sick person. It is believed that this disease also affects children in Ntungamo District. The signs and symptoms of “oburo” are similar to Pneumonia and Malaria.

In January 2004, Africare conducted a baseline KPC survey in all seven of the targeted sub-counties. The survey obtained information from mothers with children under two years of age and helped the project set indicators for tracking progress of the five key intervention areas of malaria, CDD, HIV/AIDS, immunization and nutrition, breastfeeding and micro nutrients implemented by CIMCI-Plus project.

According to the KPC survey, 42.5% of the children aged 0-23 months were taken for false tooth extraction and 10.6% were taken for millet extraction. These folk diseases are widely believed in and according to informal discussions with mothers and child caretakers; unless a child is taken for extraction, the disease cannot be cured. Based on this background, CIMCI-Plus project found it necessary to conduct an in depth study in this area.

Objectives

The goal of this study is to generate factual information on why diarrhea is linked to “ebiino,” and why malaria/pneumonia is linked to “oburo.” This will help the project design more appropriate BCC interventions. The following are the specific objectives of the study.

1. To explore why caregivers are bringing their children for extraction.
2. To find out people’s perceptions about the causes of “ebiino” and “oburo” diseases, and how they are related to causes of diarrhea and malaria/pneumonia.
3. To use the information gathered from the study to develop effective BCC interventions to demystify the existence of “ebiino” and “oburo” folk diseases.
4. To suggest ways on how Africare can “buy the extractors out” of their practice.

2.0 STUDY METHODOLOGY

2.1. Study location

The study was conducted in the 7 sub-counties of Bwongyera, Ihunga, Itojo, Kayonza, Nyakyera, Rugarama and Ruhama where CIMCI-Plus operates.

2.2. Methods of data collection, sample size and selection

The study was qualitative, employing three data collection methods for triangulation purposes. These methods included:

- **Focus group discussions (FGD's):** Focus group discussions were held with mothers and grandparents of children under two years who had taken their children for “ebiino” and “oburo” extraction. 6 FGD's (3 “ebiino”, 3 “oburo”) were held and FGD's comprised a homogenous group of 8-12 participants. Ntungamo district is homogenous in ethnicity therefore FGD's were evenly distributed through CIMCI-Plus sub-counties.

Purposive sampling was done for all the participants who included people who had taken their children for either “ebiino” or “oburo” extraction. Tape recorders were used to capture FGD's opinions, and notes taken concurrently. Teams included 3 people, a facilitator, an observer and a note taker.

- **Key Informant Interviews (KII):** Key informant interviews were held with 7 extractors/silencers, 7 health workers and 10 mothers of children under two years, and 10 grandmothers for both the “oburo” and “ebiino” cases. KII used the same study teams as those used in FGD's.
- **Records:** Records from the health facilities and extractors/silencers were reviewed when available. We were interested in finding out about care-seeking practices after extraction from a trained health worker, as well as whether any documentation on the patients is kept.

2.3 Data Analysis

The study was descriptive. Data collection was qualitative and analyzed manually through categorization and coding of responses by the study team members, each day after fieldwork.

A report including results and recommendations on how to operationalize the study was made. The report will be disseminated at sub-county, district and national levels.

3.0 RESULTS AND DISCUSSION

3.1 “EBIINO”

Common perceptions about “ebiino”

Almost all of the respondents in the focus group discussions and key informant interviews said they knew and heard about the existence of “ebiino” disease. The only exceptions were 3 grandmothers in Itojo sub-county, who responded that the disease did not exist. “Ebiino” is the most common term for the condition. Some other terminologies used to describe “ebiino” were:

- “*Ebiharahano*”
- “*Ebicori*”
- “*Ebyomukanwa*”
- “*Ebikoko byomukanwa*”
- “*Ebyakaragwe*”
- “*Ebinyamaishwa*”
- “*Ebinyangondokyera*” (*snails*)

The respondents from each of the focus groups and interviews gave a variety of perceptions and beliefs about the origin and of the disease. The most frequent answer given from the

Operations Research into Oburo and Ebiino Folk Diseases

focus group discussions was that “ebiino” originated from Northern Uganda, particularly Acholi land, and that it came to the area in the 1970’s or early 1980’s as remarked by one of the mothers “when Acholi soldiers came to the western region they married the Banyankole girls, and it is through these inter-regional marriages that “ebiino” was spread”. Another belief in relation to “ebiino” having originated from Northern Uganda was that the disease came about during Idi Amin’s regime, when the people from northern Uganda came to the west and started mixing with the locals. Other respondents said “ebiino” originated from Buganda through witchcraft. Another mother remarked thus “Baganda women used to put the extracted “ebiino” in front of people’s houses, and recite a curse such that if a pregnant woman passed these “ebiino”, their child would get “ebiino” after birth.”

The responses to questions about the causes of the disease were equally varied. One common thread was that the child contracts the disease while in the mother’s womb. Some other perceptions about the causes of the disease include:

- When a pregnant mother eats diseased maize
- The disease is not passed from child to child
- It is caused by a decaying tooth, and the “maggot” develops inside the tooth
- It is caused by an allergy
- ”Ebiino” occurs if a pregnant mother “comes across” an extracted false tooth
- Some extractors cause the disease by bewitching pregnant mothers

The focus groups were asked to talk about the signs and symptoms of “ebiino” and a variety of responses were given. The most common responses given were:

- Vomiting
- Diarrhea
- Fever
- Failure to breast feed or lack of appetite
- Licking the lips or scratching the gums
- Swelling of the gum

The respondents were asked to list differences between “ebiino” and diarrhea. Their responses are given in the following table. The most common difference was that “ebiino” does not respond to treatment. Many people believe that “ebiino” can not be treated by western medicine. *One middle aged mother said:*

“when my child was six months, she developed diarrhea. I tried to give her herbs at home but she could not get better. I was advised by my neighbor to take the child to the hospital which I did. I spent two full weeks in Itojo hospital but the condition did not change. I escaped from the hospital and took her to the extractor that I knew but never believed in, within two days, she became better and got cured completely”

“ebiino”	Diarrhea
Still has diarrhea even after treatment of diarrhea	Diarrhea stops after treatment
High body temperature (fever)	Low/ normal body temperature
Cough	No cough
Itching of the gum	No itching of the gums
Frothing in the mouth	Absence of froth

Less dehydration

More dehydration

Table 1: Differences between “ebiino” and diarrhea

The Process of Extraction and Silencing

Silencers, on examining the child’s gums, rub the gum with herbs. The mothers and silencers believe that the “ekiino” dies within the gum without extraction. Respondent 5 from the mothers’ focus group in Ruhama said that the child is taken to the silencer at a very young age, before they have acquired the disease. The silencer uses herbs, which are rubbed onto the child’s gums to prevent the child from acquiring “ebiino”, ensuring the child never suffers from the disease.

The process of extraction described by all the respondents was similar. The extractor examines the mouth of the child, feeling and prodding the gums for the “ebiino”. Once he/she has established the presence of “ebiino,” usually indicated by swollen gums, the extractor uses a sharp, metallic object to remove white tooth-like, maggot-shaped structures from the gum. In some instances, such as Ihunga, the mothers said these “ebiino” could be black in color and roll about after removal. The most common tool in all sub-counties was a bicycle spoke sharpened at the tip. The tools used are of poor hygiene, and have not been boiled, heated or sterilized. After extraction the tools are either not cleaned or a piece of polythene is used to wipe blood off. Sometimes the same tool is used on two or more children.

A wide variety of responses were given when the respondents were asked about the procedures after the extraction, such as referral to a health facility or administration of drugs or herbs. Some caregivers were advised to rub herbs, honey, or sugar on the gums to quicken the healing process. Some children are given anti-biotic injections, or aspirin or panadol for pain. Usually the caretaker is advised to take the child to a health facility only if the child’s condition doesn’t improve.

The cost of the procedure varies in different areas. The price may also vary depending on the experience of the extractor, or the number of teeth extracted. The following table gives cost in, Ugandan Shillings, of extraction by sub-county.

Sub-County	Cost of Extraction
Bwongyera	7000 – 10000
Ihunga	7000 – 10000
Rugarama	1000 – 2000
Kayonza	2000 – 6000
Itojo	1500 – 3000
Ruhama	3000 – 4000
Nyakyera	5000

Table 2: Cost of False Teeth Extraction by Sub-County

The Practitioners

Almost all of the respondents said that extractors learn the trade by observing other extractors. In some cases it is a practice handed down through generations from grandparents to children. In Ruhama respondents said the extractors do it by “trial and error methods” and extraction is a means of getting income. All respondents said that the extractors don’t receive

any formal training, nor are they registered with the Traditional Healers and Herbalists Association.

Decision Making

When a child is sick, the mother usually decides to take the child to an extractor. A less common response was that the mother must get the consent of the father before taking the child to an extractor. The respondents in the men's focus group said that it was mainly fathers who made the decision on where the child should be taken for care seeking as remarked by one father "*Its us men that determine where a child should be taken for care seeking because we are the ones with money*". Most groups reported that if the child's problem was "ebiino" then he/she usually gets better; however, if the condition worsens then both parents decide to seek help from the health units.

The Child's Condition after Extraction

Respondents said that if the child had "ebiino" then he would be cured after extraction, with instant relief. After extraction, diarrhea stops immediately, child starts feeding again, breathing normalizes, and vomiting stops and body temperature goes back to normal. However, some children do get complications from the procedure. The complications that were reported by caregivers differed from those given by health workers.

Common caregiver responses:

- *Failure to grow teeth*
- *Swollen cheeks and gums*
- *Infection*

Common health worker responses:

- *Anemia*
- *Dehydration*
- *Wound sepsis*

Eradication

Most respondents said that they did not know how to eradicate "ebiino" and extraction, or that it could not be eradicated. However, the most common suggestions were increased health education by health workers, or preventing the extractors from practicing. Some respondents also said that it could be prevented by silencing all newborn children.

Respondents were also asked to list ways that diarrhoeal diseases could be prevented. The most common responses were as follows.

- *Keep clean/ good hygiene*
- *Have and use latrines, wash hands after going to the latrine*
- *Drink boiled water*
- *Wash the plate before serving food*
- *Wash hands before eating*
- *Cover food properly*

3.2 "OBURO"

Common perceptions about "oburo"

All the respondents said that they had heard about the "oburo"/millet disease and that it was existent in their communities albeit at varying levels. Some respondents said "oburo" was not very common in their communities, while others said that the practice of extraction was gradually diminishing. Many respondents said that pneumonia is often mistaken for "oburo".

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The majority of respondents said that they did not know any other terms for “oburo,” however, some respondents mentioned “Obujuma” and “Ebyomukifuba.”

Most of the respondents were unsure about the exact origins of the disease. A wide variety of answers was given. Answers included Bunyoro, Buganda, Mbarara, and the Acholi region. Buganda was the most frequent answer, but no clear consensus emerged. However, most of the respondents said that the disease was first heard of from 1975 – 1980.

The responses about the causes of the disease were equally varied. The disease is said to affect people of all ages, however, children are the most commonly affected. Some of the perceptions on the cause of the disease are:

- *The disease is caused by drinking unboiled milk*
- *The disease is less common in the dry season and early rains*
- *Can be passed from one child to another*
- *Children get the disease during harvesting time*
- *Extractors bewitch pregnant mothers*

Respondents were asked to list the signs and symptoms of a child with “oburo.” The most common answers were:

- *Pain below nipples*
- *Child feels pain when lifted*
- *Difficulty in breathing*
- *High temperature*
- *Coughing*

Many of the respondents believe that “oburo” is the same as malaria or pneumonia, or that they sometimes occur together. However, many of these people still believe that extraction is a cure. Some respondents believe that the diseases are different. The most common differences given were that “oburo” can be felt in the chest, and that “oburo” does not respond to treatment as remarked by one mother *“If you don’t cut the chest and remove ‘oburo’ the child cannot get cured even if you give injections and tablets”*.

The Process of Extraction and Silencing

Most of the respondents described the process of extraction similarly, with a few variations. First, the extractor examines the child. This is done by “feeling” for the disease on the chest, armpit, or behind the shoulders. Some respondents said the examination involves lifting the child. On ascertaining the presence of oburo, the extractor cuts the child with a razor blade, and extracts “fatty small things.” The substance has been described as white or black. A second method is to burn the chest with a hot metal rod. The most common tool for extraction is a razor blade, usually provided by the mother. The tools are not boiled or sterilized, and most of the extractors do not wash their hands before operating. Some respondents said that the disease could be prevented by scratching the chest with a razor blade and then using herbs to silence the disease.

There was less consensus about procedures after the extraction. Some respondents said that the wound is dressed with a clean cloth to prevent infection. Some children are given antibiotic injections, or panadol for pain as remarked by one mother *“after my child was extracted, the extractor gave me panadol and told me to keep the wound clean”*. One respondent said that a hot metal rod is placed in the wound to stop bleeding; however, many responded that the wound does not bleed. Children are usually referred to health facilities only if “oburo” is not diagnosed, or the child’s condition does not improve.

Different amounts for the cost of the procedure were given in different areas. Some respondents said that the price varies with the experience of the extractor. At times, the price

may also be negotiable. The following table lists the reported price of extraction in Ugandan Shillings by sub-county.

Sub-County	Cost of Extraction
Bwongyera	3000 – 10000
Ihunga	4000 – 5000
Rugarama	1000 – 2000
Kayonza	2000 – 3000
Itojo	2000 – 3000
Ruhama	4000
Nyakyera	3000 – 4000

Table 2: Cost of “Oburo” Extraction by Sub-County

The Practitioners

Almost all of the extractors said that they learn the trade by observing other extractors. One extractor said, “*I had a Mwaamba sister-in-law who used to extract millet when I was still young. I used to watch what she used to do and at times my sister-in-law would explain the process of extraction to me*”. All respondents said that the extractors do not receive any formal training, nor are they registered with the Traditional Healers and Herbalist association.

According to the extractors that were interviewed, on average an extractor operates on 12 children per month. The highest number of extractions per month was 30, reported in Ruhaama Sub-County, and the lowest was two.

Decision Making

As with “ebiino,” when a child is sick with “oburo”, the mother usually makes the decision to go to an extractor. Some respondents said that the mother must get the consent of the father before taking the child to an extractor. In men’s focus groups, the respondents usually said that it was mainly fathers who made the decision on where the child should be taken for care. Most respondents said that if the condition worsens, both parents decide to seek help from the health centers.

The Child’s Condition after Extraction

Most respondents said that, after extraction, a child with “oburo” is cured immediately. The child’s temperature returns to normal, pneumonia, diarrhea, coughing, and vomiting stop, breathing normalizes, and the child starts gaining weight. Respondents said that if the child’s condition does not improve, the treatment was delayed too long. Many respondents reported complications from the procedure, however, the responses from caregivers and health workers differed.

Common caregiver responses:

- *Wounds on the chest*
- *Scars*
- *Death*
- *Bleeding*
- *Some girls may not develop breasts, or their breasts may be deformed.*

Common health worker responses:

- *Scars of fresh cuts on chest*

- *Infection*
- *Wound sepsis*

Eradication

Respondents were asked what could be done to eradicate “oburo” from their communities. Most people said that they did not know, or that nothing could be done. However, many people suggested increased health education, such as encouraging mothers to seek care early, to reduce the presence of “oburo.”

Respondents were also asked to list ways that malaria and pneumonia could be reduced in their communities. The responses to this question were:

- *Mothers can drink boiled water to avoid spreading cough to their children*
- *Immunization*
- *Use of insecticide treated mosquito nets*
- *Throwing away broken containers*
- *Draining stagnant water*
- *Seeking early treatment*

4.0 Conclusion and Recommendations

From the above results and discussion, it can be concluded that the belief in the diseases of “ebiino” and “oburo,” is still widespread. However, the belief in “ebiino” existence is more, while fewer people believe in the existence of “oburo.” Similarly, the belief in extraction as a cure for both diseases is deeply rooted in all seven sub-counties of Ntungamo, and extraction for both diseases is still carried out. Most respondents said that diseases do not respond to “western medicine,” leading us to believe that many people resort to extraction out of desperation. However, it was also concluded that the belief in “ebiino” and “oburo” is a deeply rooted cultural phenomenon, such that when a child exhibits the signs and symptoms of these diseases, care from health units is rarely sought and the child is taken to the extractor straight away.

These beliefs may not be easily changed within a period of time, but with constant sensitization, health education by Africare, health partners and the leadership some people’s beliefs may be changed and the practice of extraction may reduce. There was no relation between the perceived causes of “ebiino” and “oburo” and the causes of diarrhea, pneumonia/malaria. Actually most respondents believed ‘oburo’ was actually pneumonia or malaria.

From the operations research carried out and the results obtained, it is recommended that Africare and its partners carry out increased sensitization and health education about the dangers of extraction. This process should take into consideration that many people hold deeply rooted beliefs in the existence of these diseases, and it will take a considerable amount of time to change these perceptions.