

**AFRICA CHILD SURVIVAL INITIATIVE  
COMBATING CHILDHOOD COMMUNICABLE DISEASES  
(ACSI-CCCD)**

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**THIRTEEN LESSONS  
LEARNED - 1981-1993**



**IMPLEMENTATION EXPERIENCE  
13 AFRICAN COUNTRIES  
BURUNDI, CAR, CONGO, COTE D'IVOIRE,  
GUINEA, LESOTHO, LIBERIA, MALAWI,  
NIGERIA, RWANDA, SWAZILAND, TOGO, ZAIRE**

**IN COLLABORATION WITH  
WORLD HEALTH ORGANIZATION (WHO)  
UNITED NATIONS CHILDREN'S FUND (UNICEF)  
ROTARY INTERNATIONAL**



**UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT**  
Africa Regional Project (698-0421)



**U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES**

Public Health Service  
Centers for Disease Control  
and Prevention  
International Health Program Office



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**Africa Child Survival Initiative (ACSI)  
Combatting Childhood Communicable Diseases (CCCD)**

**Implementation Experience  
13 African Countries  
Burundi, CAR, Congo, Côte d'Ivoire, Guinea,  
Lesotho, Liberia, Malawi, Nigeria,  
Rwanda, Swaziland, Togo, Zaire**

**United States Agency for International Development (USAID)  
and  
Centers for Disease Control and Prevention (CDC)**

**In Collaboration With  
World Health Organization (WHO)  
United Nations Children's Fund (UNICEF)  
Rotary International**

**Compiled from ACSI-CCCD Project Records  
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1981-1993**

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**AFRICA CHILD SURVIVAL INITIATIVE (ACSI)  
COMBATting CHILDHOOD COMMUNICABLE DISEASES (CCCD)  
OVERVIEW**

In 1981, the United States Agency for International Development (USAID) approved a regional project in Africa to:

“Strengthen the Africans’ ability to: control six communicable diseases (measles, polio, tuberculosis, diphtheria, pertussis (whooping cough), and tetanus) through the Expanded Program for Immunization (EPI); diseases of local importance such as yellow fever, and yaws, and possibly malaria at some time in the future; and provide simple treatment for the Control of Diarrheal Diseases (CDD)”

Over time, the project’s purpose has changed to better reflect its developmental emphasis:

- Strengthen the capacity of African families, communities, health providers, and governments in prevention and control of priority causes of childhood mortality, morbidity, and disability; and
- Reduce infant (<1 year), child (1-4 years), and under-5 (0-4 years) mortality.

USAID gave prime responsibility for project implementation to the Centers for Disease Control and Prevention (CDC) in Atlanta, an agency of the United States Public Health Service, through a Participating Agency Service Agreement (PASA). The project, initially scheduled to end in 1988, was extended two times, first to 1991 and then to September 1993.

The Combatting Childhood Communicable Diseases Project, or CCCD, as the project was best known, was part of a much larger global commitment to improve child survival and health in sub-Saharan Africa including:

1. Primary Health Care, as defined at Alma Ata in 1978
2. Selective Primary Health Care, as articulated by Walsh and Warren (NEJM 1979, 301:967-984)
3. WHO’s technical leadership in EPI (Expanded Programme on Immunization), CDD, and more recently ARI (Acute Respiratory Infection)
4. UNICEF’s GOBI (Growth Monitoring, Oral Rehydration, Breast Feeding, and Immunization) initiative
5. Creation by Congress in 1985 of a Child Survival appropriation account.
6. The USAID Administrator’s approval of an Agency Child Survival Strategy in 1987
7. USAID’s Africa Bureau’s Child Survival Strategy in 1987
8. The appropriation by Congress in January of 1988 of the Development Fund for Africa with a 10% required earmark for health
9. Inclusion of USAID contractors (HealthCom, PRITECH, Reach) and Peace Corps in the implementation of CCCD.

## ACSI-CCCD STRATEGIES

CCCD was designed to strengthen African capacity to improve child health and survival through 6 support and 4 technical strategies.

### Support Strategies

- Health Informations Systems - the development of systems to collect, collate, analyze, and use data for planning, implementation, management, and evaluation
- Training and Supervision - the strengthening of individual, facility, and health system capacity to provide quality preventive and curative services
- Health Education - effective communication with mothers, families, and communities in support of appropriate prevention and case management of childhood diseases
- Operations Research - the identification, investigation, and solution of problems constraining the achievement of targets
- Health Financing (1988) - the development of cost recovery mechanisms to provide for drugs and recurrent costs
- Sustainability (1991) - the development of systems to ensure the technical capacity to continue program implementation at the end of its technical assistance

### Technical Strategies for Disease Prevention and Case Management

- Expanded Programme on Immunization (EPI)
- Control of Diarrheal Diseases (CDD)
- Control of Malaria
- Control of Acute Respiratory Infection (ARI)

An estimated 50% of infant deaths and 80% of child (1-4 years) deaths are due to diseases targeted by the above four strategies. While excess morbidity and mortality represents the synergistic impact of a number of risk factors: socioeconomic (education, income); reproductive (timing of pregnancies, prenatal care, and attendance at delivery); behavioral (perception of and response to illness); and use of effective health services; there is growing evidence that disease-specific interventions are effective in reducing disease-specific mortality and increasing child survival. This has been best demonstrated for measles vaccine (Chapter on Measles by Foster in *Disease Control Priorities in Developing Countries* by the World Bank, 1993).

While progress in project implementation is well documented in the CCCD Annual Reports and in the internal and external project evaluations, the purpose of this document is to synthesize 13 major lessons learned in working with African colleagues in the implementation of child survival strategies, 1981-1993.

## FRAMEWORK FOR PROGRAM DEVELOPMENT

Experience has identified nine components as important in health strategy development and implementation:

- Problem Identification (Epidemiologic and Ethnographic)
- Policy Formulation
- Planning (Target Setting, Strategy Selection, and Work Plan Preparation)
- Training and Supervision (Quality Assessment and Quality Assurance)
- Health Education (Information, Education, and Communications)
- Service Delivery (Management, Logistics)
- Monitoring (Process, Outputs, and Impact) and Replanning
- Problem Identification and Problem Solving (Operations Research)

Within CCCD, the input needs for each of the technical strategies for components varied. For EPI and CDD, policy and targets were established globally. Priorities rested on access, utilization, the quality of implementation, coverage, and impact. In contrast, for malaria, data necessary to define the problem and set policies were not available. ARI, a relatively new global initiative, required as a first step the collection of baseline data on disease epidemiology, clinical practices, and community knowledge, attitudes, and practices. CCCD collaboration with African colleagues and governments resulted in many lessons learned that are relevant to continued implementation of child survival strategies. Thirteen lessons are summarized in this report. In the table below, are the 13 lessons categorized by project component and technical strategy.

<b>SELECTED LESSONS LEARNED THROUGH CCCD COLLABORATION</b>					
(Lessons Learned selected for inclusion in this paper are identified by page number)					
	Capacity Building	EPI	CDD	Malaria	ARI
<b>Problem Identification</b>	P4, P5			P5	P10
<b>Policy Formulation</b>	P6, P8			P8, P9	P10
<b>Planning</b>	P20			P27	P10
<b>Training and Supervision</b>	P12, P14	P13	P13, P14, P15	P27	P11
<b>Health Education</b>	P6		P6	P6	P7
<b>Service Delivery</b>		P16	P14	P9	P11
<b>Monitoring and Replanning</b>	P4, P20, P22	P16, P17, P21	P15, P21	P21	P11
<b>Problem Solving</b>	P24	P18	P15	P25	P11

# 1. RELIABLE AND TIMELY HEALTH INFORMATION IS ESSENTIAL TO PLANNING AND MANAGEMENT

## Issues

- At the initiation of CCCD, almost all participating countries lacked information systems providing timely data for planning and monitoring.
- Countries lacked microcomputer equipment and skills necessary for planning and management.

## Actions

- National systems of data collection, analysis, and reporting were assessed regarding needs and functions.
- Microcomputers, software, and training were provided.
- Surveillance systems (outpatient, inpatient) were developed and supported.

## Achievements

- Program managers developed the capacity to use microcomputers to process and analyze data, produce effective graphic presentations, and utilize data in program management.
- Managers are utilizing service and disease data to provide baseline information, set targets, and monitor program implementation.
- HIS's are documenting both successes (decreases in EPI diseases) and failures (increases in rates of malaria hospitalization and HIV prevalence).
- Lag time between annual data collection and availability for use has been reduced from 1-5 years to 3 months in most CCCD countries.
- Feedback bulletins have been established in 8 CCCD countries.

## Constraints

- Countries frequently fail to identify their needs for data: they collect too much data rather than focus on data needed at each level of the health system for policy, planning, implementation, and evaluation.
- Sensitivity, completeness, and quality of reporting still need strengthening.
- Externally funded relatively expensive surveys, such as Demographic and Health Surveys (DHS), are providing basic data for health planning and monitoring. Evolution towards sustainable national data collection systems is an important priority.
- Low cost methods to monitor mortality, such as preceding birth technique, have not been widely adopted.

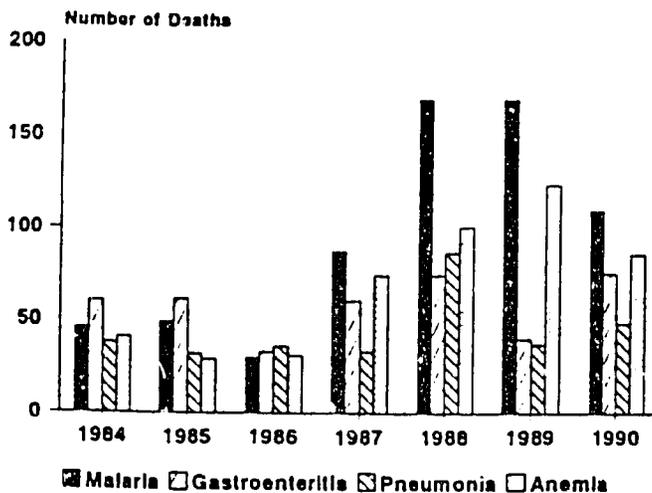
## Future Challenges

- Countries will need to increase their capacity to implement systems providing essential data for management (personnel, facility, and financial), epidemiologic surveillance, laboratory diagnosis, and impact assessment.
- Improved strategies for monitoring health behavior will need to be developed.

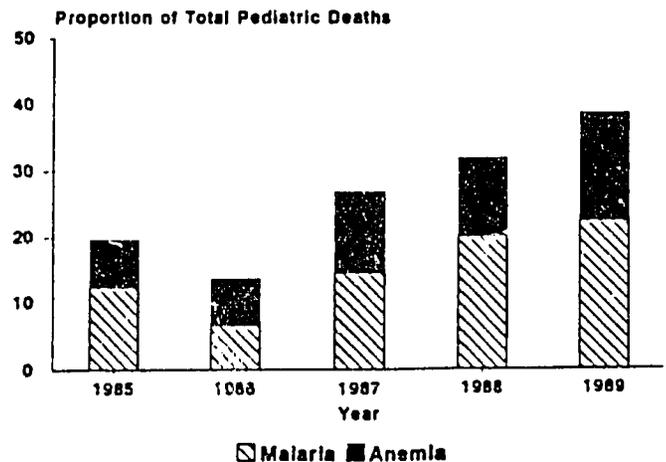
**- Case Study -  
Development of HIS in Togo**

- In 1982, Togo's Annual Statistical Report had not been published in over 5 years and was being hand-tabulated by a group of temporary Ministry Of Health (MOH) employees.
- The reportable disease list was comprised of over 400 diseases. The report consisted mostly of tables (no graphs or analysis) and was largely ignored by donors and MOH decision makers because its data was outdated and unusable.
- CCCD consultants studied the HIS in 1984-85 and made recommendations for improving the system's reliability, usefulness, and promptness. The list of reportable diseases was reduced to the 40 most frequently reported conditions that were routinely seen at the health facilities.
- In 1986, the Director of the MOH National Statistical Service conducted a national fact-finding tour of the health facilities in the country and of the local health authorities. Training and supervisory sessions were held in all 21 prefectures; feedback of results was promised by means of a quarterly bulletin.
- Computer software and hardware were supplied to the National Epidemiology Division which had been selected to be the data reception and compilation site. Simple programs were written and MOH personnel were trained in the use of computers, simple programming, and graphics. Using a simpler and more analytic format, the annual reports for 1978-1982 were published. Annual reports are now produced during the first quarter of the succeeding year.
- Supervisory visits to all health facilities were conducted quarterly by national level or local level authorities, with emphasis placed on prompt and thorough reporting by peripheral sites.
- In 1991, Togo added inpatient data to its Annual Report. These valuable data, graphically presented, have attracted the interest of MOH decision makers and officials of donor agencies for planning and programming. In the graphs below, the increase in the number and the proportion of pediatric hospital deaths from malaria and anemia signaled the emergence of *Plasmodium falciparum* chloroquine resistance and the need to revise case management recommendations.

**Pediatric Deaths by Cause  
Teaching Hospital, Lome, Togo; 1984-1990**



**Anemia and Malaria Deaths  
Child Health Unit  
Lome, Togo, 1985 - 1989**



## **II. UNDERSTANDING COMMUNITY KNOWLEDGE, ATTITUDES, AND PRACTICES IS AN IMPORTANT EARLY STEP IN PROGRAM DEVELOPMENT**

### **Issue**

- Understanding of community knowledge, attitudes, and practices (KAP) is an essential prerequisite to the development of strategies to make community health practices appropriate, relevant, and effective. (“Mother is the child’s first physician”).

### **Actions**

- CCCD utilized surveys (30 cluster and 100 household), focus groups, sentinel surveillance and key informant interviews to describe health behavior (see page 7).
- These data were used in the development of strategies for patient, caretaker, and community education.
- With assistance of Peace Corps Volunteers, community level interventions have been carried out in CAR (EPI), Liberia (revolving drug funds), and Togo (diarrhea).

### **Achievements**

- Social science research has provided KAP data on diarrhea (Burundi, Rwanda, Swaziland, Togo, Zaire), malaria (CAR, Côte d’Ivoire, Guinea, Rwanda, Togo, Malawi, Zaire), ARI (Lesotho, Swaziland) and birth spacing (Cote d’Ivoire) as an essential first step in policy development and program planning.
- Intercountry training in health education planning and management at ARHEC in Nigeria and at the School of Public Health in Kinshasa in Zaire (UNIKIN) has fostered health education programs more directly supportive of child survival objectives.
- In cooperation with HealthCom, health messages have been developed, tested, and disseminated in Lesotho, Malawi, Nigeria, Swaziland, and Zaire.

### **Constraints**

- Resources for design, support, and evaluation of community level interventions, in tandem with strengthening of health services delivery, have been limited.

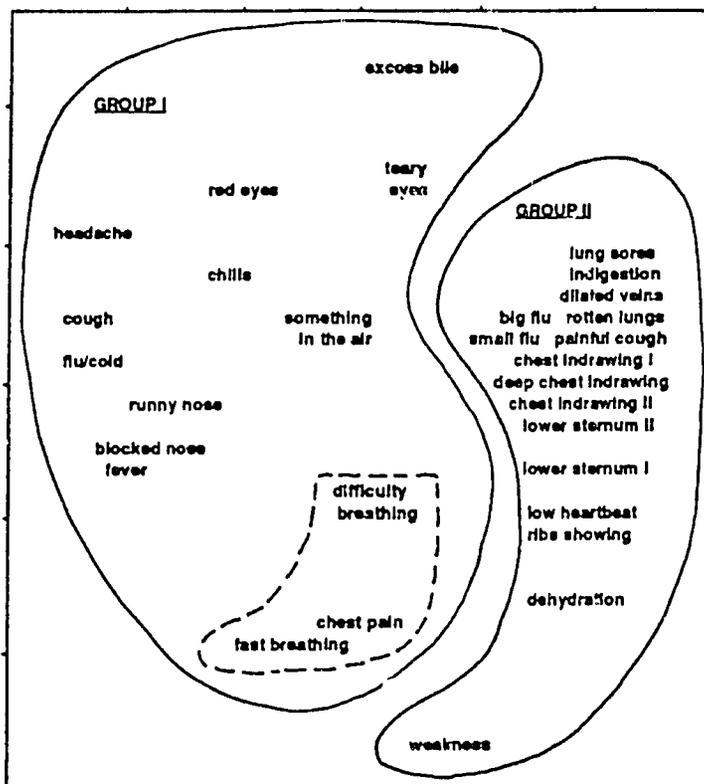
### **Future Challenges**

- Countries will need to increase operational support for health worker interventions with communities at the district level.
- Programs to understand and change individual and community behaviors will need to be carefully designed, tested, implemented, and evaluated.

- Case Study -

**Ethnographic Studies Assessing Community Understanding of ARI in Swaziland**

- During 1990-91, ethnographic studies were carried out in 17 sites throughout Swaziland, 5 urban and 12 rural. The 29 respondents were women of childbearing age who were primary caretakers of children under 5.
- These women were asked to sort 30 ARI-related siSwati illness terms into groups which they perceived as similar.
- In the multidimensional scaling (MDS) map below, items, with English translations of the siSwati terms, which are closest together on the MDS map are the items which most informants thought were similar, while the more dissimilar items were placed farther apart.



As can be seen from the above figures, respondents grouped ARI illness terms into one group of diseases they felt could be treated at home (Group I) and another group of illnesses they perceived as more serious, requiring treatment from a healer, clinic, or health center (Group II). The terms “fast breathing,” “chest pain,” and “difficulty breathing” (signs frequently associated with pneumonia) are found in Group I, rather than in Group II. This means that caretakers do not consider these signs as serious. These data have been used in the development of messages for child caretaker and community health education.

### III. DATA PROVIDE THE FOUNDATION FOR POLICY FORMULATION

#### Issues

- Countries lacked coherent national policies for case management: this was particularly true for management of fever or malaria and for ARI.
- Data needed for policy formulation were often not available.
- Increasing drug resistance to *Plasmodium falciparum* was associated with increased childhood morbidity, mortality, and anemia.

#### Actions

- Capacity to carry out *in-vivo* studies of drug sensitivity was established in 12 endemic countries.
- Policy dialogue among government agencies, academia, and private sector was initiated.
- Together with WHO, CCCD provided leadership for strengthening capacity for malaria policy formulation and planning in 17 francophone countries (see page 27).

#### Achievements

- Drug sensitivity status is being monitored in almost all CCCD countries.
- Participating countries have utilized nationally developed drug sensitivity data in the formulation and revision of malaria treatment policies (see page 9).
- In Lesotho, surveillance data triggered the development of an ARI Strategy (see page 10).
- Needs assessment data are being used to identify performance problems and to develop continuing education strategies to upgrade the quality of prevention and case management at health facilities.
- Surveys have been conducted to document deficiencies in home and community treatment of fever.

#### Constraints

- Malaria cases and deaths increased, caused in large part by increasing levels of drug resistance.
- Implementation of chemoprophylaxis in pregnancy to reduce low birth weight failed because of the absence of an effective strategy (safe, effective drug and a feasible strategy for drug administration, page 25).

#### Future Challenges

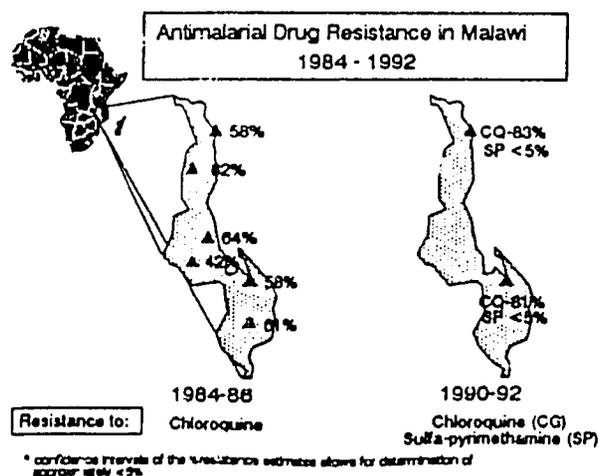
- Continued surveillance of malaria epidemiology and drug resistance and its use in policy review and revision will be needed.
- Strengthening support for national program implementation is needed.
- Research on and implementation of personal protection strategies for malaria control will need to be continued.

**- Case Study -  
Malaria Policy in Malawi**

- In 1982, Malawi had no clear malaria policy or data on *Plasmodium falciparum* sensitivity to antimalarial drugs.
- In 1984, national staff were trained in the conduct of *in-vivo* studies to assess drug efficacy.
- Data collected showed parasitologic failures to existing treatment practices using 10mg/kg of chloroquine and >50% parasite resistance but >90% clinical effectiveness using full treatment with 25mg/kg.
- A National Malaria Control Committee was formed and national malaria treatment policy of 25mg/kg over 3 days was established. A 5-year National Malaria Control Plan was instituted.
- National Treatment Guidelines were printed and distributed; training materials were developed and utilized to train health workers.
- A visual guide to educate non-literate caretakers of children on chloroquine dosage was developed by a Peace Corps Volunteer and was incorporated into local private drug-packaging.
- Annual surveillance of drug efficacy documented increasing resistance to chloroquine. Other antimalarial drugs were also evaluated.
- In 1990-1991, increasing drug resistance and new information on clinical and hematologic failures with chloroquine led to a policy change with the introduction of sulfadoxinepyrimethamine as the first line treatment of fever/malaria.
- Studies of malaria prevention in pregnancy from 1987-1992 have led to the recognition that chloroquine prophylaxis was ineffective and that sulfadoxinepyrimethamine intermittent therapy (two treatment doses - at 1st antenatal clinic visit and repeated at the start of the 3rd trimester) provides optimal benefit (see page 25).
- The second 5-year National Malaria Control Plan, and its accompanying revised treatment and prevention guidelines for case management in children and prevention in pregnant women, demonstrate policy changes based on analysis of locally collected data.

**MALARIA POLICY IN MALAWI**

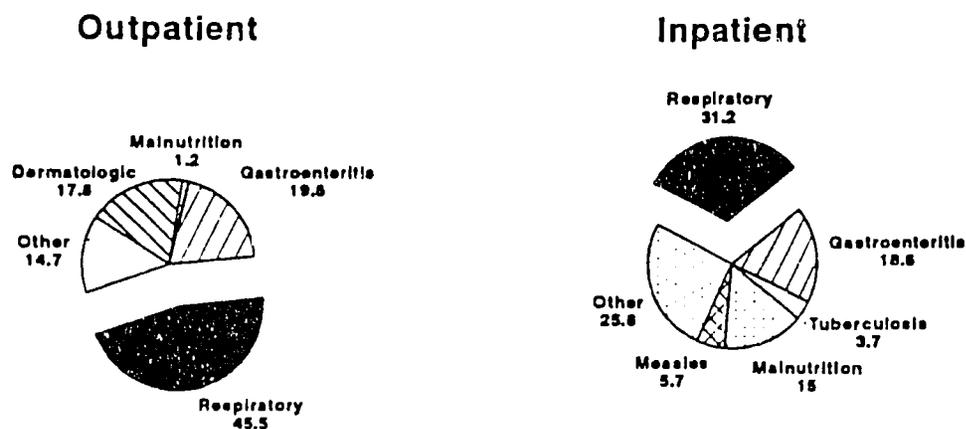
STATUS	ACTIONS
1982 - No Policy, No Data	
1984 - In - vivo studies	Malaria Committee Chloroquine 25 mg/kg 5 Year Plan Treatment Guidelines Training
1988-1990 - Monitored Drug Sensitivity	Increasing Resistance Documented
1992 R III Resistance	New Policy Sulfa Pyrimethamine



- Case Study -  
ARI Policy in Lesotho

- Lesotho's HIS documented that ARI (mainly pneumonia) accounted for nearly 25% of childhood inpatient deaths and for up to half of outpatient visits (see graph below).

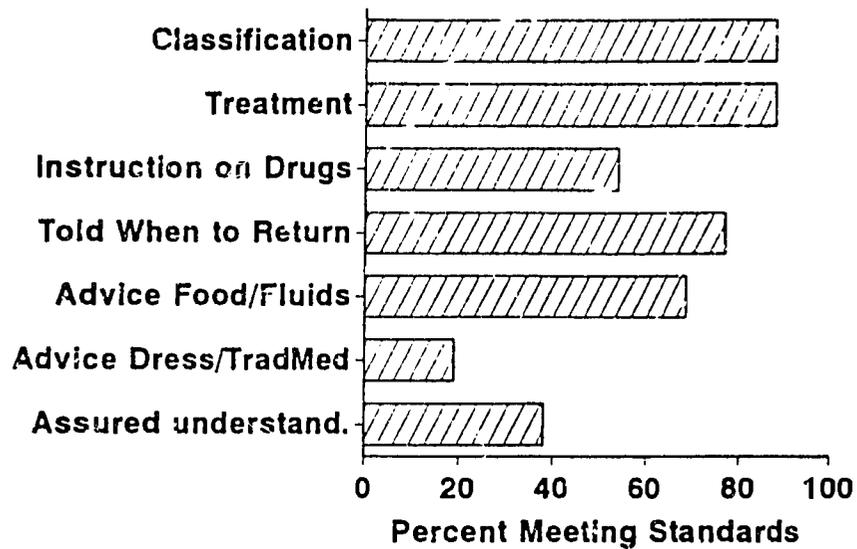
**National Pediatric Outpatient Diagnoses  
Inpatient Pediatric Admissions - QEII  
Lesotho**



- The MOH used a logical systematic approach to planning. They assessed nurses' clinical management of children with ARI and studied the signs and symptoms that predict pneumonia in Basotho children. Ethnographic studies identified ARI beliefs, practices, and terminology among persons who care for young children (see page 7).
- In December of 1989, the MOH convened an ARI program design workshop of technical experts, representatives of Health Service Areas (HSAs), local voluntary organizations, and international partners and collaboratively developed a national ARI policy and ARI program guidelines.
- A multi-disciplinary team of Basothos, including national and local level staff from the public and private sectors, and CCCD staff produced a training manual with clinical management and patient education guidelines.
- During the first year, the MOH conducted clinical training and supervision in three HSAs and trained over 80 nurses.
- Using a supervisory checklist, the ARI coordinators monitored performance in conjunction with the Control of Diarrheal Diseases coordinator.

- A first-year program review found a successful start to the program, with most nurses assessing and treating children with ARI according to national guidelines. Patient education, however, needed improvement (see graph below).

**ARI Clinical Assessment and Treatment  
26 Children Managed by 11 Trained Nurses  
Lesotho**



- Following the review, the MOH completed a 5-year national work plan, and expanded training and supervision to other HSAs.

## IV. QUALITY OF SERVICES IS CRITICAL TO EFFECTIVE PROGRAM IMPLEMENTATION

### Issues

- In 1982, national training strategies were typically evaluated by the number of courses given and person days of training. No on-the-job evaluations of training or health worker performance were being carried out.

### Actions

- CCCD developed a strategy for and conducted needs assessments to examine adequacy of equipment and supplies, health worker performance, and caretaker understanding of actions to be taken.
- Inservice training strategies were developed to address deficiencies identified during on-site assessments of performance.

### Achievements

- In 12 CCCD countries, needs assessments documented significant gaps between expected and actual performance, including the documentation of inappropriate and occasionally dangerous practices, such as the use of needles for more than one child, use of ORT with too much salt, use of antidiarrheal drugs, and inadequate quantities of antimalarial drugs.
- Inservice education and on-the-job training were effective in targeting use of limited resources in upgrading the quality of service delivery (see page 13).
- In Rwanda, decentralized quarterly supervisory monitoring was effective in upgrading the quality of services.
- Diarrhea treatment units provided on-the-job training to upgrade clinical skills in case management of diarrhea.

### Constraints

- Since current strategies for assessing training performance and correcting deficiencies are expensive, they are only now being adapted for routine use.
- Needs for preservice training of health workers were not addressed.

### Future Challenges

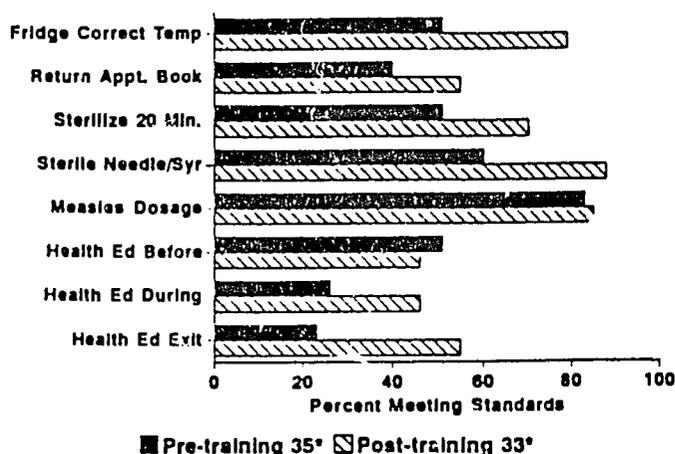
- Quality service delivery will require decentralized training that builds a network of people, institutions, and intersectoral cooperation to deliver inservice education (i.e., supervisory visits, newsletters, workshops, distance learning).
- Preservice training will need to be modified to reflect the changing epidemiology of malaria and newly involved strategies for case management.
- Quality assurance must remain an active focus of attention; quality is a product of -- and not necessarily equivalent to -- good training and supervision.

- Case Study -

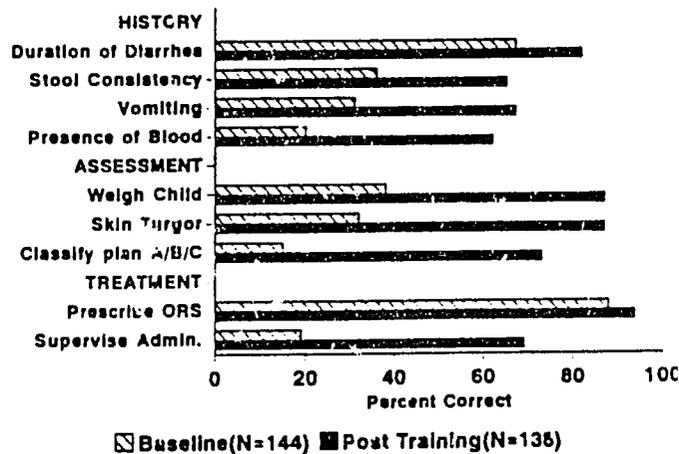
**Improving Quality of Health Facility Services in the Central African Republic**

- Health Facility Surveys (1988, 1989) documented strengths and deficiencies in health worker immunization practices and in case management of children with diarrhea.
- The MOH designed a multifaceted strategy that included development of a training plan and training materials, training of trainers, inservice training workshops, and a post training assessment of health worker practices.
- Special attention was given to sequencing training with other strategies (logistics) to improve the quality of services. The MOH assured availability of vaccines, EPI supplies, ORS packets, and mixing materials prior to training (and/or supplied them during training). Implementation of community education programs to improve service utilization were delayed until quality services could be assured.
- Regional and district medical officers were recruited into a national network of facilitators and trained in effective training techniques
- The training program used locally developed materials and focused on coverage and quality. At least 2 health agents from every fixed vaccination post participated in 5-6 day workshops in EPI and CDD case management (approximately 325 health workers were trained). Technical and administrative skills were strengthened during the workshops.
- Supervisory visits documented improvements in the quality of immunization and diarrhea case management and provided opportunities for continuing education.

**Improving Quality of EPI Services  
Pre/Post Training Assessment of Needs  
Central African Republic 1988-1989**



**Diarrhea Case Assessment & Treatment  
Facility Assessment Pre/Post Training  
Central African Republic**



## V. HANDS-ON CASE MANAGEMENT WAS AN EFFECTIVE STRATEGY TO UPGRADE THE QUALITY OF FACILITY CASE MANAGEMENT OF DIARRHEA

### Issues

- Diarrhea is a major cause of infant and child morbidity, disability, and mortality. Diarrheal mortality is caused by: 1) dehydration (20-40% of episodes), 2) invasive organisms, such as *Shigella*, and 3) chronic diarrhea leading to malnutrition.
- Simple treatment with Oral Rehydration Therapy (ORT) can prevent the consequences of dehydration. More complex treatment is required for invasive and chronic diarrheas.

### Actions

- Global policies on diarrhea treatment with ORT (hydration and feeding) have been adapted at the national level.
- Diarrhea treatment units (DTUs) are used to provide health staff with hands-on training in diarrhea case management (see page 15).
- Studies of *Shigella dysenteriae* drug sensitivity were completed.

### Achievements

- Treatment of acute dehydrating diarrheas at health facilities has improved.
- Morbidity, mortality, and costs for treatment have decreased (see page 15).
- Epidemiologic studies of *Shigella* infection in Africa show multi-drug antibiotic resistance.

### Constraints

- Home use of ORT to treat diarrhea has not met expected target of 50% of episodes. In Mangochi, Malawi, diarrhea remains the most important cause of deaths occurring in the home.
- DTUs have contributed to a reflex response to the major complaint, such as treatment of diarrhea with ORT, and the risk of overlooking other important coexisting pathologies.
- Affordable effective treatment for antibiotic-resistant *Shigella* infections is not available.

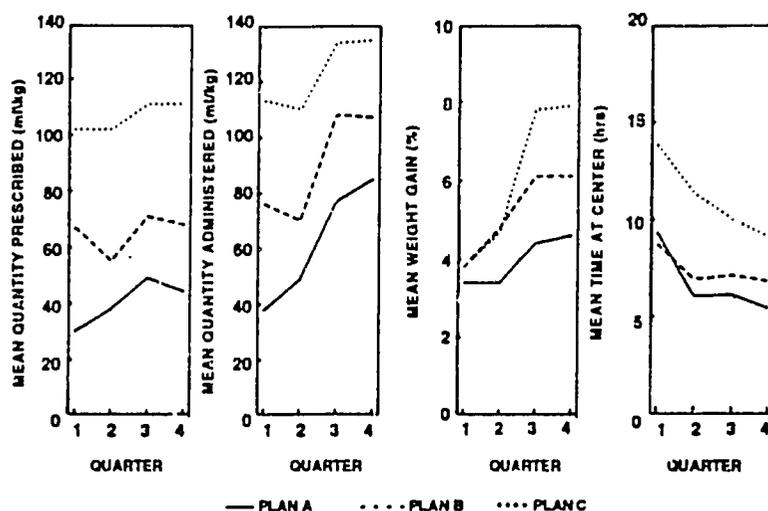
### Future Challenges

- Additional ethnographic and clinical studies are needed to better understand local practices and to develop culturally acceptable strategies for diarrhea home treatment.
- Further efforts need to be taken to reduce the use of ineffective, expensive, and sometimes dangerous antidiarrheal drugs in all sectors.
- Epidemiology of specific pathogens and chronic diarrheas need further study to identify improved strategies for prevention and treatment.
- Diarrhea treatment will need to be incorporated into evolving strategies of treating the sick child.

- Case Study -  
Diarrhea Treatment Units

- Outpatient Diarrhea Treatment Units (DTUs) were established in one or more major hospitals in each CCCD country.
- Using and adapting WHO training materials, health care providers were trained in appropriate case management.
- Training improved the quality of both outpatient and inpatient treatment of diarrhea.
- At Mamo Yemo Hospital in Zaire, operational indicators (ORT prescribed, ORT administered, weight gain, and time at center) were used both as training tools and as indicators of program effectiveness.

**SUMMARY OF ORT OPERATIONAL INDICATORS  
MEAN VALUES, BY QUARTER AND BY TREATMENT PLAN  
MAM YEMO HOSPITAL, KINSHASA, ZAIRE, 1986**



- Evaluation studies documented that outpatient ORT Units were effective in improving the quality of care and in reducing admissions, deaths, and costs.

IMPACT OF OUTPATIENT DIARRHEA TREATMENT UNIT ON PEDIATRIC DIARRHEA ADMISSIONS, DEATHS, AND COSTS, KAMUZU HOSPITAL, MALAWI			
INDICATOR	PRE UNIT	POST UNIT	% CHANGE
% Pediatric Admission Diarrhea	14%	7%	-50%
% Mild and Moderate Diarrhea Receiving Ivs	78%	26%	-67%
% Mild and Moderate Diarrhea Receiving ORT Only	21%	69%	+70%
Diarrhea Deaths per 1000 Pediatric Admissions	12.9	7.9	-25%
Annual Recurrent Costs for Inpatient Treatment of Diarrhea	93,894 K \$52,162	64,016 K \$35,564	-32%

## VI. VACCINES CAN BE EFFECTIVELY DELIVERED IN AFRICA

### Issues

- Without immunization, an estimated 1.5 million preventable deaths would occur annually in Africa.
- An additional 300,000 children would be disabled by blindness, lameness, or malnutrition.
- Vaccine coverage rates in the first year of life were less than 20% in most CCCD countries.

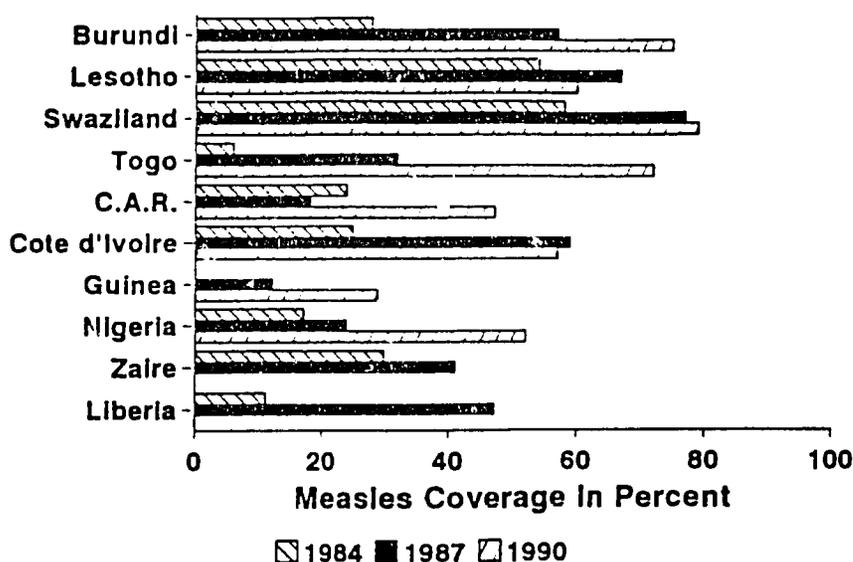
### Actions

- During the 1980s, African governments (in collaboration with WHO, UNICEF, USAID, other bilateral agencies, and Rotary International) allocated high priority and resources to EPI.
- Critical USAID/CCCD inputs supported policy formulation, quantitative assessments of performance, quality assurance (training and supervision), operational research, provision of measles vaccine, monitoring, and evaluation.

### Achievements

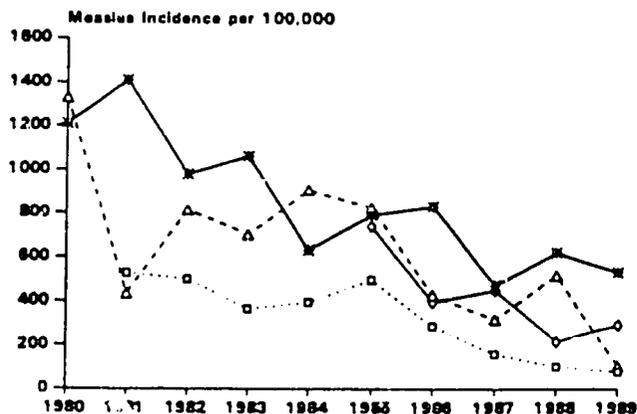
- Collaboration of ministries of health and international partners contributed to effective program implementation.
- Quality of immunization services increased markedly (see page 13).
- Vaccination coverage increased in all participating countries (see graph below).
- Sustainable campaign strategies were developed for areas with low access to health facilities, such as those in Liberia.

**Increasing Measles Vaccine Coverage  
10 CCCD African Countries  
1984, 1987, 1990**



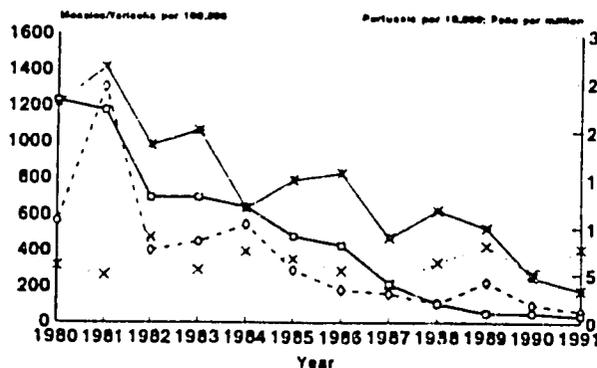
- Decreases in morbidity due to diseases preventable by immunization in the four countries with regular surveillance and for other EPI diseases (as in Burundi) were shown using improvements with HIS (see graph below).

**Measles Incidence  
Burundi, Lesotho, Togo, Swaziland**



\* Burundi 1980-9 □ Lesotho 1981-9 △ Togo 1980-9 ◇ Swaziland 1985-9

**Measles, Pertussis, Polio, & Varicella  
Incidence, Burundi 1980-1991**



\* Measles □ Pertussis △ Varicella ◇ Polio  
\* Varicella serves as an indicator of completeness and constancy of surveillance

- Based on program estimates of morbidity and mortality, coverage, and vaccine efficacy, cases occurring and deaths prevented in the 10 countries participating in CCCD in 1990 are estimated as follows: measles (3,500,000 cases and 110,000 deaths), pertussis (1,800,000 cases and 18,000 deaths), neonatal tetanus (43,200 deaths), and polio (2,000 deaths and 20,000 cases of lameness).

### Constraints

- Failure to vaccinate all children attending clinics has limited vaccine coverage (see page 18)
- Vaccine delivery capacity in two countries (Liberia and Zaire) failed because of political instability and civil war.
- Since the increases in coverage were frequently achieved by externally financed mass campaigns, resources required to maintain coverage in future years are not assured.

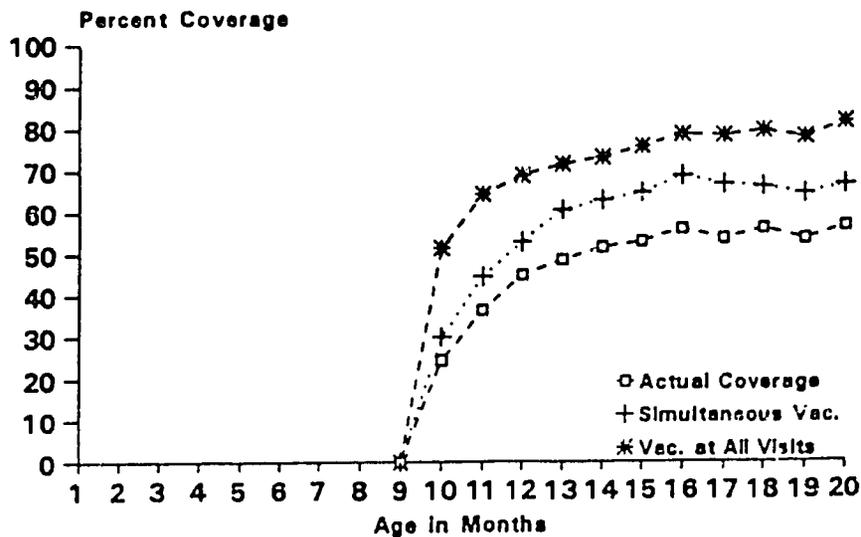
### Future Challenges

- Countries will need planning, good management, and continued resources to maintain and expand current EPI coverage.
- Countries will need to explore incorporating new antigens into vaccine delivery programs; these new vaccines will need to meet criteria of need, efficacy, and cost effectiveness.

**- Case Study -  
Increasing EPI Coverage Through Elimination of Missed Opportunities**

- Program studies of EPI show failures to meet coverage targets and identified a range of missed opportunities for immunization: 1) failure to identify a need for vaccination during screening of the vaccination card, 2) failure to provide all needed antigens during vaccination sessions, and 3) failure to screen and immunize children attending clinic for illness.
- In the Central African Republic (CAR), the dates of all health facility visits by children are recorded in the same home-based record, allowing a comprehensive evaluation of missed opportunities for vaccination. In 1990, an evaluation showed that for every measles vaccination given, there were 2.3 missed opportunities to administer measles vaccine. Elimination of all missed opportunities would have increased measles and DPT3 vaccination coverage from 54 to 76% and from 53 to 70%, respectively. Most of these increases (to 70% for measles vaccine and to 67% for DPT3) could have been achieved simply by administering all vaccinations needed at visits where at least one vaccination was given.
- Avoiding missed opportunities is a cost effective strategy to improve immunization coverage. Such strategies do not require additional staff, health facilities, vehicles, or gas apart from that needed for routine training and supervision. The study in the Central African Republic demonstrated that a policy of vaccination at every contact has the potential to achieve major increases in coverage.

**Potentially Achievable Measles Coverage  
Through Elimination of Missed  
Opportunities, CAR, 1990\***



\* National vaccination coverage survey

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## **VII. SETTING TARGETS AND MONITORING PROGRESS PROVIDE ESSENTIAL DATA FOR PROGRAM MANAGEMENT AND MODIFICATION**

### **Issues**

- Quantitative targets are essential to effective planning, implementation, and evaluation.

### **Actions**

- Targets were established to guide collaborative planning, implementation, monitoring, and evaluation (see page 21).
- Indicators included measures of access, quality, coverage, and impact.
- Progress toward targets was assessed annually.
- Targets were added or altered in response to WHO/UNICEF guidelines, country and regional implementation experience, improved understanding of issues related to child survival, research findings, and recommendations from external evaluators (see page 21).
- In Liberia and Zaire, Mortality and Use of Health Service Surveys (MUHS) were carried out to monitor program coverage and impact (see page 22).

### **Achievements**

- Countries accepted or adapted regional targets, incorporated them into their work-plans, and utilized them for advocacy.
- Progress toward targets was substantial for EPI coverage and disease reduction, policy formulation for case and facility management of diarrhea and malaria.
- MUHS documented increases in EPI coverage and decreases in mortality (see page 23).

### **Constraints**

- Targets not achieved included home treatment of 50% of diarrhea episodes and reductions in malaria morbidity and mortality. Low home treatment rates with Oral Rehydration Therapy (ORT) were in part due to a lack of full understanding of child caretaker's knowledge, attitudes, and practices regarding diarrhea; and the failure of the treatment to do what the caretaker wants -- decreased stool output. Increases in malaria morbidity and mortality were largely due to increased drug resistance.

### **Future Challenges**

- Unmet targets, for which significant technical and programmatic information is available, identify important priorities for future child survival technical assistance.

- Case Study -  
Evolution and Achievement of Regional CCCD Targets

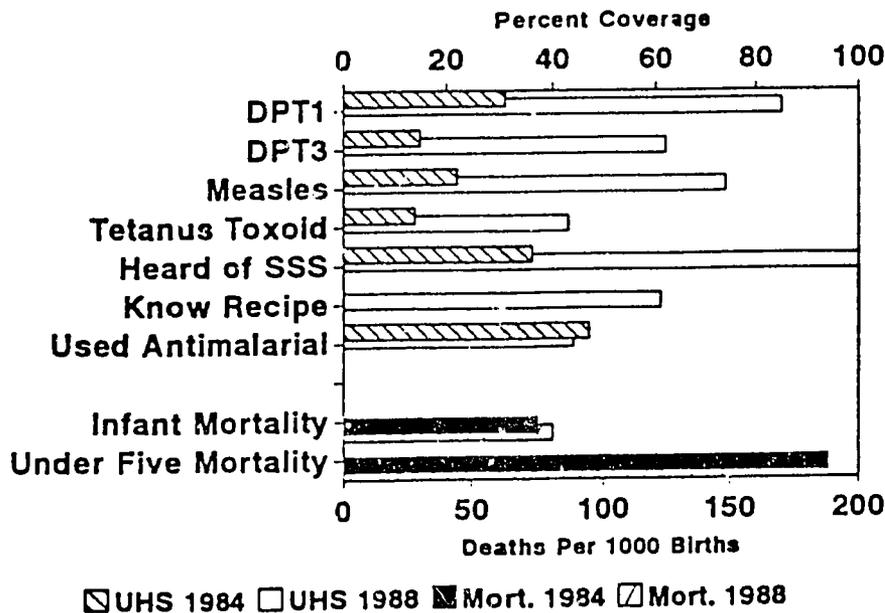
- Listed below are the targets established in the initial project paper and their modifications as evolved through implementation experience and on the advice of evaluations. Achieved figures represent the medium of reported figures for participating countries in 1984 and 1991. 1991 mortality figures are from the MUHS (see page 23).

CCCD TARGETS AND THEIR ACHIEVEMENT 1984 and 1991				
STRATEGIES	TARGETS		ESTIMATE ACHIEVED 1984	ESTIMATE ACHIEVED 1991
	1982	1987		
Under-5 Mortality		-25%		-12% - -17%
EPI				
Coverage in Infants	50%	80%	DPT1 - 21% Polio 3 - 12% Measles - 20%	DP11 - 71% Polio 3 - 53% Measles - 53%
TT in Pregnancy		60%	<10%	60%
Measles Incidence	-50%	-50%	-13%	-50%
Polio Incidence	-50%	-50%	-12%	-75%
NNT Incidence	-50%	-50%	-10%	-50%
DIARRHEA				
Policy		Yes	No	Yes
Correct Case Management at Health Facilities		90%	<10%	70% (50%-90%)
Home Treatment		50%	<10%	20% (10%-60%)
Hospital Mortality		-50%		-50% (-30% - -80%)
MALARIA				
Policy		Yes	No	Yes
Correct Case Management at Health Facilities		90%	30%	70% (50%-90%)
Home Treatment		50% Correct	50%	60% (40%-80%)
Hospital Mortality		-50%		+50%

- Case Study -  
**Mortality and Use of Health Services (MUHS) Surveys**

- An early CCCD external evaluation identified the absence of accurate baseline mortality data as a constraint to measure the program impact of CCCD strategies on child survival (under-5 mortality).
- With assistance of outside demographers, the MUHS surveys were designed to collect baseline data and assess program impact. Each survey utilized maternity histories to estimate infant and child mortality and to examine use of three health services: immunization, ORT, and antimalarial treatment of fever.
- Initial studies were carried out in Liberia, Togo, and Zaire. When the credibility of the results were questioned, repeat surveys were carried out in the same three countries.
- Followup MUHS surveys were carried out in both Liberia and Zaire.
- Results demonstrated increases in use of services and decreased mortality rates.
- As the studies were unable to collect data from identified comparison areas, the results are not in themselves conclusive. They do, however, contribute to a growing body of knowledge showing that immunization, especially measles and tetanus vaccines, are associated with increased child survival.

**Mortality and Use of Health Services  
 Kingandu, Zaire; 1984 and 1988**



LIBERIA AND ZAIRE MUHS SURVEYS 1984-5 AND 1988-9			
	1984-1985	1988-1989	%Change
<b>Liberia</b>			
Infant Mortality	240	181	-24.5%
${}_4M_1$	46	33	-28.3
${}_5M_0$	100	79	-21.0
${}_5q_0$ (Under-5)	307	270	-12.0
<b>Zaire</b>			
Infant Mortality	75.9	77.4	+2%
${}_4M_1$	29.7	19.9	-33%
${}_5M_0$	41.0	33.4	-19%
${}_5q_0$ (Under-5)	178	147	-17%

${}_5M_0$  represents the average mortality rate for those between 0 and 5

## VIII. APPLIED RESEARCH IS IMPORTANT TO SOLVING PROBLEMS ENCOUNTERED IN PROGRAM IMPLEMENTATION

### Issues

- Health problems exist for which safe, effective, affordable, and acceptable solutions are not known.
- Capacity of many African investigators to identify and solve operational problems is underdeveloped.

### Actions

- CCCD developed research review committees initially at the regional level, more recently at the country level, to support problem solving research.
- African investigators received funds to design and carry out research.
- Collaborative research has been carried out to address major health issues including: 1) malaria in pregnancy (Malawi, Nigeria, and Zaire), 2) measles in urban infants (Zaire), 3) poliomyelitis in a well-vaccinated population (The Gambia), and 4) malaria prevention through use of bed nets (Nigeria).

### Achievements

- An estimated 100 African investigators, 40 in Nigeria, carried out research with CCCD funding.
- Malaria was identified as a major preventable cause of low birth weight in first and second pregnancies (see graph page 25).
- Use of an alternative measles vaccine at 6 months of age has reduced measles incidence in Kinshasa.
- A filter paper method was developed to assess TT coverage in Burundi.
- Research carried out in The Gambia showing low polio vaccine effectiveness during the rainy season has led to a reassessment of the optimum timing for vaccine campaigns.
- Research findings were used to improve policy, strategies, service delivery, monitoring, and evaluation.

### Constraints

- Originally planned regional support for Operations Research proved difficult to manage and support (due in part to its functioning apart from ongoing implementation and accessible supervision and epidemiologic support). The subsequent country-based strategy combining these two components proved to be more effective.

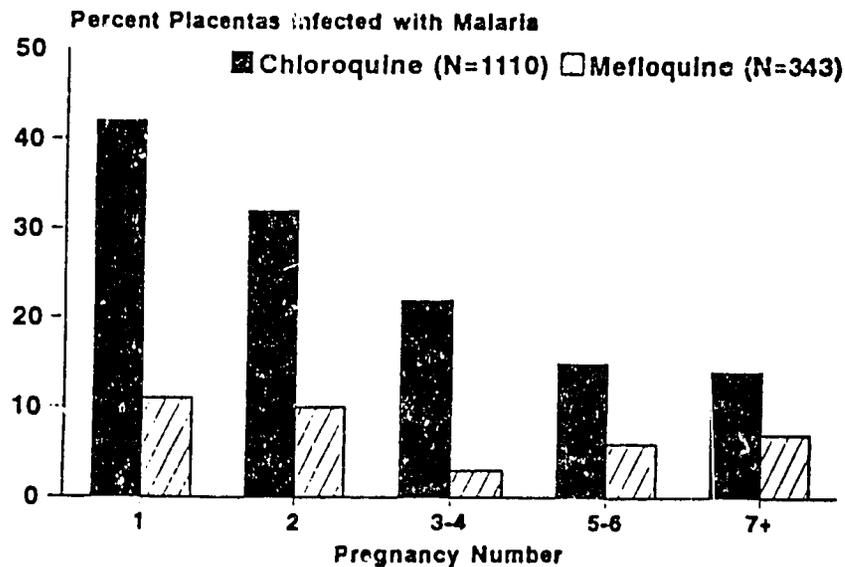
### Future Challenges

- Strengthening African research capacity will be a continuing priority and will require long-term training and mentoring in research methodologies and increased funding.
- Incorporation of research findings into implementation is a continuing challenge.

**- Case Study -  
Malaria In Pregnancy, Mangochi, Malawi**

- In 1984, research information suggested that malaria in pregnancy was associated with low birth weight (LBW). WHO recommended prophylaxis with chloroquine (CQ) throughout pregnancy. However, the advent of widespread CQ-resistance left health workers with little confidence in low dose CQ.
- A series of studies were conducted in Mangochi, Malawi to examine both biologic and programmatic questions.
- More than 4,000 pregnant women in Malawi were enrolled in the study to examine the effect of prophylaxis with CQ or mefloquine (MQ), a highly effective antimalarial drug.
- Results demonstrated that: 1) use of an effective antimalarial drug would reduce peripheral blood and placental parasite infection and reduce the frequency of LBW in babies born to these women; 2) CQ, used with several different dosing regimens, showed little benefit in clearance of parasites or protection from LBW; and 3) LBW was strongly associated with risk of death in both neonatal and post-neonatal periods.
- A second study evaluated locally available and affordable drugs (CQ and sulfadoxine-pyrimethamine [SP]) to identify the optimal regimen for treating pregnant women and keeping them free of malaria parasites. This study showed that two doses of SP given at initial antenatal clinic visit on or after four months and at the beginning of the third trimester was the most effective regimen. In addition, the regimen could be given with tetanus toxoid for concurrent delivery.
- As a consequence of the above results, Malawi malaria policy is being changed to prevention in pregnancy using SP (as noted above).

**Placental Malaria at Delivery  
By Pregnancy and Chemoprophylaxis Type  
Malawi - September 1987 - September 1989**



## **IX. REGIONAL PROJECTS ARE AN EFFECTIVE STRATEGY FOR TECHNICAL ASSISTANCE**

### **Issues**

- Child survival issues of policy, planning, implementation, and evaluation are similar in many African countries.
- Individual bilateral projects often lack the capacity provided by regional projects to make investments in project design and innovation, training (ARHEC), research (the Magochi project); and information sharing (consultative meetings, bilingual reports).

### **Actions**

- USAID's CCCD project provided a regional mechanism to facilitate the simultaneous implementation of technically consistent and coordinated child survival programs and a mechanism to share lessons learned.
- USAID funded a core of technical experts committed to capacity development, the achievement of targets, and the identification of and solution to problems.
- Regional linkages provided a mechanism for the sharing of expertise (e.g., joint training of Burundian, Congolese, Central Africans, and Zairian in malaria drug sensitivity testing; Zaire training of Guineans in malaria drug sensitivity testing-1988) and information at consultative meetings and through bilingual reports.

### **Achievements**

- CCCD provided African Ministries of Health access to a wide range of quality technical experts on a continuing basis. The regional mechanism facilitated continuity of program direction and short term technical assistance.
- Regional courses in health education were established at Ibadan (anglophone) and Kinshasa (francophone).
- The malaria initiative (see page 27) provided simultaneous assistance to 17 African countries in policy formulation, planning, implementation, and monitoring.
- Knowledge gained and shared strengthened country capacity to sustain elements of implementation (currently being evaluated by USAID sustainability team).
- Results of major research investments, such as the Magochi malaria and pregnancy study, were shared with other countries. African capacity in the planning, implementation, and evaluation of child survival strategies increased during this period of project implementation. Ten factors contributed to this success (see page 28).

### **Constraints**

- Ownership issues regarding centrally-funded and mission-funded projects frequently clouded the identification of the most effective and efficient mechanisms for technical assistance.

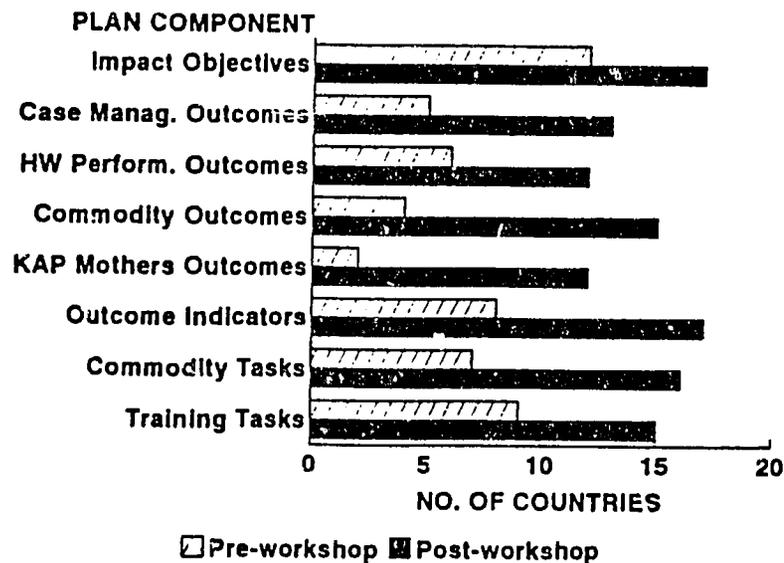
### **Future Challenges**

- Child survival programs in Africa need to maintain the same level of technical excellence within the emerging strategy of decentralized managed bilateral projects.

- Case Study -  
Malaria Initiative in Francophone Africa

- The Initiative is a systematic approach for: 1) policy development, 2) program planning, 3) program implementation, and 4) program evaluation. The steps are carried out sequentially and consist of a workshop followed up with in-country consultations to refine plans and prioritize activities for implementation.
- Policy Development: In June 1991, 17 francophone African countries participated in a policy development workshop for malaria control. The workshop products were national policy statements summarizing guidelines for case management and prevention. The number of countries which included sulfadoxine-pyrimethamine as the second-line drug increased from 1 to 17 countries.
- Program Planning: In March 1992, program managers and representatives from CDC and WHO developed a curriculum for a workshop on program planning and management.
- In June 1992, 17 francophone countries participated in a workshop on malaria program planning and management. The products were drafts of national program plans.
- At the close of the workshop, there was an increase in the number of national malaria control plans that included specific recommended components critical to systematic planning.

**Country Malaria Plans Meeting Criteria  
Pre/Post Planning Workshop-Abidjan 5/92**



- Program Implementation: Countries are currently implementing their program plans. Activities focus on improving the management of essential drugs, training and supervision, and patient education.
- Program Evaluation: Program managers are developing indicators to evaluate the effectiveness of their malaria control programs.

**- Case Study -**  
**Factors Contributing to Effective ACSI-CCCD Implementation**

Ten factors contributed to the effectiveness of CCCD in strengthening African capacity. These can be broadly divided into political will, project design, and institutional support.

Political Will:

1. “Improved health and survival of the African child” provided a vision well matched with political, humanitarian, and scientific priorities.
2. Child survival was identified as a priority by major international, bilateral, and PVO organizations: WHO (EPI, CDD, and malaria), UNICEF (GOBI - Growth Monitoring, Oral Rehydration, Breast-feeding, and Immunization), USAID (Twin Engines - EPI/CDD), and Rotary International (polio).
3. African countries, individually and collectively, adopted and endorsed child survival as a priority.
4. The decade of the 1980s was, for the participating African countries, a time of relative political stability.
5. Despite an average 15% decrease in per capita income, financial resources were available nationally and internationally for sustained collaboration.

Project Design:

6. The regional project utilized a critical mass of technical, logistic, management, and research expertise on child health in tropical Africa.
7. The regional project provided an efficient and effective network for development, testing, and sharing of:
  - technical information
  - formative research for program development
  - new approaches to quality assurance, (such as needs assessments and continuing education)
  - strengthened systems for the collection, analysis, use, and dissemination of health information
  - research findings, (such as malaria drug sensitivity)
  - effective use of institutions created to serve a regional function (ARHEC, UNIKIN, Mama Yemo DTU)

8. USAID Missions, the Africa Bureau, S&T (now R&D Health), and CDC shared an effective collaborative commitment to the implementation of the CCCD Project.

Institutional Strengths of CDC:

9. Project funds supported a critical mass of managerial and multi-disciplinary scientific expertise at CDC.
10. The CCCD Project was built on a two-decade history of mutually valued collaboration between African countries and CDC in training (Africa and U.S.), epidemic investigation and control, program implementation, and research.

## **X. TECHNICAL OFFICERS (TOs) IN MINISTRIES OF HEALTH PROVIDE AND FACILITATE EFFECTIVE TECHNICAL ASSISTANCE**

### **Issues**

- In the 1980s, MOH program managers and administrators lacked critical skills in planning, program advocacy, management, logistics, implementation, monitoring, and evaluation, -- within their own bureaucracy and the donor community.
- Optimum strategies for technical assistance in Africa were not well defined. For example, were multi-person project teams, a technical officer with short-term technical assistance, or only short-term technical assistance a better choice?

### **Actions**

- Long-term TOs were housed within MOHs in 11 of 13 countries, where they worked as close advisors to CCCD Project program managers for a period of 2-4 years.

### **Achievements**

- TOs provided on-the-job mentoring to multiple counterparts within the MOH, and identified appropriate CDC, USAID, WHO, or UNICEF training.
- TOs served as excellent linkages between MOH and USAID.
- TOs were effective facilitators of program development and implementation, including management of technical assistance (identifying needs, providing in-county support, and following-up on recommendations).
- Direct access to a separate account for project support (suballocation) provided fiscal flexibility and frequently catalyzed timely program implementation.
- TO placement contributed to ownership of the project by the MOH: "perceived ownership of the CCCD project components is clear. It is locally perceived that the CCCD project components address the needs of Nigerians, demonstrating a positive effect on the future of CCCD project sustainability." (AFR/ONI/TPPI Sustainability Assessment, 1992)

### **Constraints**

- In two countries, poor communication between the TOs and USAID, as well as policy differences between USAID and CDC, resulted in decisions not to extend otherwise effective bilateral activities.
- In Nigeria, housing of CCCD staff within USAID was identified by the MOH as a barrier to institutional development.

### **Future Challenges**

- In a time of limited resources, personnel and positions, and the need for administrative support within USAID missions, it is important to recognize the need for, importance of, and catalytic effectiveness of TOs working with and as part of government institutions.

- Case Study -  
**Advantages of Technical Officer Assignment in MOH**

By Dr. Mpolai Moteetee, Head, Family Health Division  
Ministry of Health, Kingdom of Lesotho

- Accessibility: Having the TO in the MOH itself fostered closer working relationships between the TO and the MOH staff. This ready access increased the effectiveness of technical assistance in all program areas, both technical and administrative. Even when the TO maintained another office at the USAID Mission, he still needed a permanent space at the MOH to meet and work with counterparts.
- Job training for counterparts: Improved access to the TO meant increased technical and management training for MOH counterparts. Developing work plans with MOH staff, jointly monitoring program progress, analyzing data, and translating them into effective action not only produced practical, relevant documents, but they also helped counterparts learn and master the process of developing them. A good example was the close collaboration between the TO and the CDD Program Manager – quality time spent together analyzing the data on childhood diarrhea morbidity and mortality led to the establishment of and monitoring systems for ORT Units and Corners in health facilities nationwide.
- Learning culturally-appropriate working relations: Being physically located in the MOH, the TO gained a better appreciation for the local culture and working environment including critical ideas such as how to dress, what to say, and how to advise. Having this closer exposure to the culture clearly increased the TO's effectiveness in Lesotho.

## **XI. LOCAL LEADERSHIP IS KEY TO PROGRAM IMPLEMENTATION**

### **Issues**

- Physicians and paramedical personnel, with limited training and experience in management, are frequently called upon to make programmatic decisions.

### **Actions**

- Technical Officers from CCCD were assigned to the MOHs to work with program manager counterparts in Preventive Medicine, Primary Health Care, EPI/CDD/Malaria, and to provide on-the-job training in skills development in planning, logistic support, implementation, monitoring, and evaluation of child survival programs.
- Regional meetings were effective mechanisms to share information and participate in joint problem solving, as demonstrated at the Dakar workshops in 1993.

### **Achievements**

- Management skills of counterparts (2-4 per country) were strengthened.
- Leadership skills are being demonstrated at national and international levels (see page 29).

### **Constraints**

- The importance of developing management skills was not fully recognized in early program planning and in allocation of training resources.

### **Future Challenges**

- Management and technical training are equally important in the development of African leadership and the strengthening of African capacity to plan, implement, monitor, and evaluate health programs.
- Capacity for on-the-job problem solving management, effectively and efficiently carried out through CCCD, should be institutionalized.

**- Case Study -**  
**Impact of CCCD on My Professional Career**

By Okwo Bele, EPI Manager, WHO Brazzaville

I have had 12 years of professional career experience in the field of public health and, for 7 of them, I was fully involved in implementing the CCCD project as a Provincial Project Coordinator (1982-1984) and as the National Officer in Charge of EPI and Evaluation (EPI, CDD, Malaria) (1984-1989).

In general, I believe that the ability to manage a public health programme is the most important skill I acquired. This includes preparing plans of operations, implementing and supervising activities, monitoring progress, and evaluating achievements. The project provided me with the following opportunities for developing and acquiring skills:

- day-to-day work with qualified CDC epidemiologists and technical officers;
- contacts with highly qualified international experts through project-related activities; e.g., programme reviews, field activities, international working trips.
- institutional training in epidemiology and public health organized through the project in Zaire and at one of the best schools of public health in the United States; and
- exchange of experiences with other country CCCD projects during visits and international meetings.

More specifically, I consider data management (including use of personal computers) leading to action as the most critical skill I have acquired so far. The measles demonstration project in Kinshasa is the outcome of this skill and the result of contacts I made with international experts in measles control.

## **XII. ADMINISTRATIVE SUPPORT IS CRITICAL TO PROGRAM SUCCESS**

### **Issues**

- Complex projects such as ACSI-CCCD require flexible and dependable administrative mechanisms to be successful.

### **Actions**

- Budgets were prepared for headquarters, regional, country, and USAID/W staff, and for special purpose projects.
- Long and short-term personnel were recruited, hired, assigned, evaluated, and rewarded. Time and attendance and pay audits were maintained.
- Administrative support was provided for travel.
- Services, supplies, and equipment for field and headquarters' staff were procured and monitored.
- Charges were recorded, verified, and billed.

### **Achievements**

- Expert appointment mechanism and ceiling-exempt positions were utilized to provide rapid response to requests from MOHs for a broad range of technical assistance.
- Suballocation procedures provided ready access of funds for local operations, making possible the hiring of local staff, purchasing of commodities, training of nationals, conduct of research, and attendance at biennial Consultative Meetings.
- Microcomputers were procured, tested, loaded with software, shipped and (when necessary) repaired.
- Support was provided to field, headquarters, and USAID/W staff involved in the project.
- Support was coordinated with other USG organizations and international agencies to leverage contributions to the project.

### **Constraints**

- Full understanding of the collaboration needed between the USAID missions and CDC was never realized.
- The management load on USAID Missions to utilize suballocation procedures was substantial.
- Overseas postings were delayed because of security clearance processing.

### **Future Challenges**

- Mechanisms are needed to share and replicate the administrative knowledge and experience gained in CCCD to future USAID technical assistance projects in Africa.

### **XIII. USAID-CDC PARTNERSHIP WAS AN EFFECTIVE MECHANISM FOR DIRECTING TECHNICAL ASSISTANCE**

On January 6 and 7, 1993, USAID and CDC senior staff responsible for ACSI-CCCD management reviewed their experiences regarding successes, failures, and future implications. Key issues related to lessons learned are summarized below. A full report of the retreat is in preparation.

#### **Goals and Targets**

- Projects with energetic commitment to, and mutual pursuit of, common goals are likely to succeed.
- Simple well-stated strategies are important to project success.
- Ability to set and monitor progress towards achievements of targets needs to be a part of all new projects.

#### **Commitment**

- A long term, continuous commitment is the key to developing capabilities within African ministries of health.
- The high level of energy and vigor demonstrated by CDC in the implementation of ACSI-CCCD after 12 years is significant.
- Effective technical assistance was achieved through partnerships with African leaders, based on mutual respect and trust.

#### **Leadership**

- A cadre of highly-qualified African technical leaders was either strengthened or developed in most ACSI-CCCD countries.

#### **Advocacy**

- The use of data is critical for all phases of program implementation and for developing and maintaining advocacy.
- Regional HIS data contributed to common programming directions, providing a “critical mass” of data for extrapolating conclusions. Regional data improved advocacy and credibility for child survival.

#### **Collaboration**

- USAID and CDC linkages were productive. These allowed rapid deployment and continuity of technical support.
- USAID and CDC can work well together. Collaboration, however, was not automatic; it required effort, trust, and transparency. Where trust was not found, technical assistance faltered and led to ineffectiveness.
- Activities were carried out efficiently and well when USAID and CDC understood each other’s organization.
- Local USAID support mechanisms were crucial and contributed to the effectiveness of technical officers.