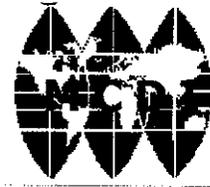


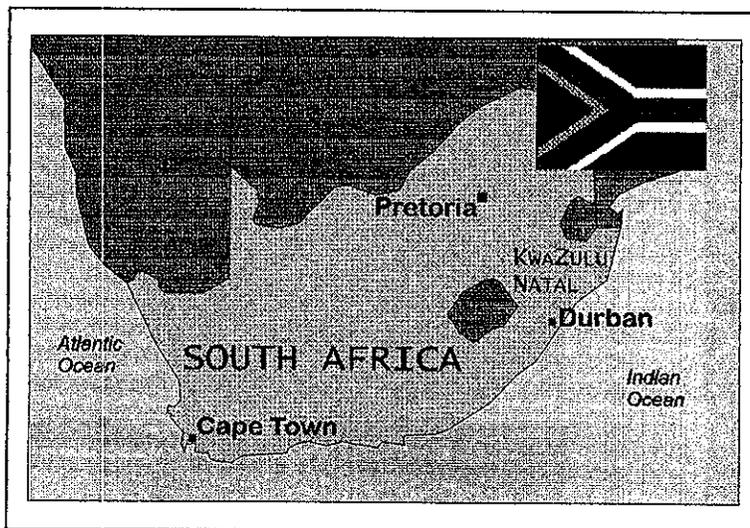
**Medical Care Development International**  
1742 R Street NW, Washington, DC 20009 \* USA  
Telephone: (202) 462-1920; Fax: (202) 265-4078  
Internet Electronic Mail: MCDI@MCD.ORG  
World Wide Web URL: WWW.MCD.ORG



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## **NDWEDWE DISTRICT CHILD SURVIVAL PROJECT KWAZULU-NATAL, SOUTH AFRICA**

**SECOND QUARTERLY REPORT**  
January – March 1998



*Cooperative Agreement No. FAO A-00-97-0025-00*

NDWEDWE DISTRICT CHILD SURVIVAL PROJECT  
QUARTERLY REPORT  
JAN. - MAR. PERIOD 1998

PREPARED BY  
DAVID W. PATTERSON  
PROJECT MANAGER

NDWEDWE DISTRICT CHILD SURVIVAL PROJECT

QUARTERLY REPORT: JANUARY 1 TO MARCH 31, 1998

List of Activities

DIP Preparation

In-Service Training for Nurses in EPI Surveillance  
 District Health System Implementation  
 EPI Cold Chain Analysis  
 Health Communications Materials Development  
 Quarterly Meetings with TBAs  
 Revision of TBA Training Curriculum

Discussion

DIP PREPARATION: DATA COLLECTION

Throughout the second quarter, the Ndwedwe Child Survival Project (NCSP) staff collected existing information -- documents, reports, maps, recording forms, personnel lists, etc. -- on the project area and on the maternal and child health services currently available to Ndwedwe women and children. As before, DIP preparation was handicapped by the fact that population-based data is not available for Ndwedwe District (or any area included in the former "black homelands") on infant mortality, maternal mortality, or on morbidity from major childhood killers such as pneumonia. Reliable statistics on even the population of the District are not available, since estimates differ by as much as 100%. Improvement in available data is expected in the near future, however, since a national census was carried out in 1997. It was hoped that the new census data would be available in time for the DIP, but processing is still underway and will not be complete before June 1998 at the earliest.

In addition to quantitative information, the DIP guidelines called for information on community knowledge, attitudes and practices (KAP) concerning the planned interventions, particularly pneumonia and diarrhea. Since most of the community knowledge issues raised by the DIP guidelines had not been examined, MCDI planned and carried out a series of focus group discussions and other PRA activities, some in collaboration with the District Health System Implementation Team (DHSIT) and some independently. A summary is as follows:

2.1.1 Knowledge and Practices Discussions with Mothers

During January-February 1998, five focus group discussions were held with mothers of young children in Ndwedwe District. An average of six women per group participated. Three of the groups were recruited from among women waiting for pediatric

services at the Oakford, Ndwedwe and Qadi Clinics. The other two groups were recruited from the community at large by TBAs who had been trained by the project in the Wosiyana and Thafamasi areas. A more detailed report follows as Attachment A, but the discussions may be summarized as follows:

The participants were asked to tell what diseases of babies and children worry them most, and why they are worried about these diseases. In every group, serious respiratory illness was mentioned, and diarrhea was mentioned in three out of five groups. The mothers were then asked to discuss their understanding of diarrhea and serious respiratory illness, including the words they commonly use for respiratory illness with rapid breathing and chest retractions. It was learned that the informants distinguish three types of diarrhea -- bloody, "green watery" and mucous diarrhea -- and that they commonly used salt-sugar solution (SSS) as taught by the clinics. All the mothers were able to correctly describe the mixing of SSS. Respiratory illness with rapid breathing and chest in-drawing is called "amahlaba," and the word "pneumonia" is recognized as a subset of "amahlaba" which is specifically caused by exposure to cold weather or chilling (other "amahlaba" may be caused supernaturally or by improper diet). All informants said they would take a child with "amahlaba" to the clinic, but most said they would try home remedies or visits to traditional healers first.

The women were also asked about their use of and satisfaction with the closest health facility. No access problems were mentioned spontaneously. The source of dissatisfaction that was mentioned most often was stock-outs of drugs or (perceived) withholding of medicines by the clinic staff. It was the view of the research team that clinic staff members are probably not "stingy" with drugs when drugs are in good supply. Instead, the supply is clearly inadequate in some clinics and in other cases, patients' expectations are not realistic (since they expect injections even when they are not appropriate).

The focus groups revealed a number of problems that will be addressed in project planning:

1) Missed Opportunities: The clinic nurses, despite government policy to the contrary, are continuing to designate one day a week as "immunization day" and to offer immunization services only on this day. Mothers are required to return on this day when their children's immunizations are seen to be due or behind schedule. Opportunities for updating immunizations for children brought to the clinic for other purposes, therefore, are usually missed.

2) Drug Stock-Outs: The clinics stocked by Montobello

Hospital -- Thafamasi and Wosiyana -- do not receive an adequate supply of medicines, and Wosiyana in particular is frequently without essential medicines such as antibiotics

3) Errors in Health Knowledge: Although health knowledge was found to be better than expected in some areas, a few potentially dangerous errors in knowledge or practices were revealed. For example, sick infants (including neonates) are often given enemas containing pharmacologically active herbs; and mothers sometimes delay taking a child with serious pneumonia to the clinic until after they have tried home remedies or traditional healers. In addition, discussions of diarrhea causes and prevention revealed a lack of awareness of the importance of exclusive breastfeeding and suggested that use of feeding bottles is very common.

#### 2.1.2. Community Participatory Rural Appraisal (PRA)

As part of its participation on the District Health System Implementation Team, MCDI designed portions of and helped to carry out the first round of a continuing series of PRA activities in Ndwedwe District. Some of these information collected through these activities was found to be relevant to the DIP requirements. Specifically, the DHSIT research teams carried out an activity examining "felt needs" by asking groups of Ndwedwe community members (organized by traditional leaders) to name the diseases that were of greatest concern. Children's diseases were named first and then the exercise was repeated for adult diseases. In both cases, each disease was written on a 3x5 card, and participants were asked to sort the cards by order of priority; first with respect to seriousness of the disease, then in order of greatest financial cost to the patient's family, and then a third time in order of perceived likelihood of contracting the illness.

The goal was to discover which illnesses were of greatest concern to the community in terms of three criteria: life-threatening potential, economic damage to the family, and perceived incidence. These exercises are still ongoing, but initial results indicated that the children's diseases that "amahlaba" (pneumonia) and diarrhea were frequently mentioned both for seriousness and perceived risk. In one area, "whooping cough" was named as a frequent and serious illness (and MCDI's clinic surveillance did in fact pick up 25 cases of pertussis among the statistics for Ndwedwe Clinic during 1997). Other interesting findings include the fact that the community is highly aware of HIV/AIDS and very concerned about it.

#### 2.1.3. DIP Drafting and Preparation:

The NCSP project staff worked with consultant Waverly Rennie

to produce the DIP document. Ms. Rennie joined the NCSP staff for three weeks in Durban for this purpose. She traveled to the project area and met the interim management team for the District as well as clinic personnel. During her stay in Durban, she developed specified sections of the DIP and undertook coordination of the document preparation process.

### 1.2 IN-SERVICE TRAINING FOR NURSES IN EPI SURVEILLANCE

On February 20, the NCSP Project Manager and IEC Specialist met with Janet Dalton, the Primary Health Care Nursing Supervisor for the Province of KwaZulu-Natal, to finalize planning for the series of EPI training workshops planned for Ndwedwe District nurses. The workshops had originally been planned for July-August 1997; but the unexpected death of the member of Ms. Dalton's staff who had been assigned to work with MCDI caused the initiation of this activity to be delayed until this quarter. At the February meeting, a schedule was set in which the EPI surveillance training would take place first, and refresher workshops in immunizations clinical practice would follow.

The EPI Surveillance training was held during the third week of March at Osindisweni Hospital. A representative from each of the health care facilities in Ndwedwe District attended the training. Its objectives were to raise awareness among the nurses of the importance of tracking outbreaks of immunizable diseases, to familiarize them with information-based planning, and to ensure that every facility in the District is collecting the information that the planned District Health System will need to carry out an effective immunization program. It should be noted that during 1997, although the NCSP recorded 204 cases of measles at the five clinics under MCDI surveillance, the environmental health officer did not receive a case investigation form (as he should have) for any of these cases.

The nurses were given hands-on instruction in procedures for reporting and following up outbreaks of each of the reportable EPI diseases (acute flaccid paralysis, neonatal tetanus, measles, and adverse events following immunization). The NCSP Project Manager attended the training session in order to be able to coordinate with the facility-based workers in future data collection activities. The project will be actively engaged in following up the training to ensure that procedures are being implemented consistently with the guidelines set by the trainers.

### 1.3 DISTRICT HEALTH SYSTEM IMPLEMENTATION TEAM

The Project Manager has continued to work closely with the

DHSIT this quarter. The purpose of this collaboration, from the perspective of MCDI, is as follows:

1) Through its participation on the DHSIT, the NCSP has the opportunity to ensure that many of its activities are embedded in the planning of the new district system. The inclusion of MCDI's activities in this system will be a guarantee of sustainability beyond the life of the project.

2) The DHSIT members, while all are qualified professionals with extensive clinical experience, do not have a great deal of experience in planning primary health care services for very low-income populations. This is because South Africa's services emphasized curative care for higher-income populations before the 1994 advent of democracy, and therefore, little training and expertise in primary health care and preventive health can be found among FSA's health care professionals. MCDI, therefore, is an important resource for the DHSIT and its participation is needed to ensure that maternal and child health activities for Ndwedwe District are designed in a way that is compatible with best practice as it is understood internationally. For example, during this quarter, MCDI has assisted the DHSIT with the following:

Creation of the District Profile: MCDI has designed both qualitative and quantitative data collection instruments for the DHSIT. These instruments have assisted the team to examine health needs, use of facilities, community perceptions of health conditions in Ndwedwe District, and background socio-economic information including issues relevant to women's status and health.

Establishment of Health Priorities: As a result of MCDI's participation on the Team, EPI has been promoted to a first line priority for the new district system. Previous to the NCSP KPC baseline survey, the government's Department of Health (DOH) had not been aware that full immunization coverage in the District was excessively low.

Inclusion of TBAs in the District System; Consistent with the DOH policy that traditional healers should be included in the District System, the NCSP has arranged for its trained TBAs to be represented among the traditional healers who will be part of an advisory group that will meet to formulate mechanisms for regularizing interaction between traditional healers and health system personnel. MCDI has suggested to the team that each clinic appoint one staff member to act as liaison with the traditional healers. The project's Health Educator is working with Ndwedwe Clinic to plan this activity.

#### 1.4 EPI COLD CHAIN ANALYSIS

During February, 1998, the Project Manager visited three Ndwedwe Clinics -- Qadi Clinic representing peri-urban facilities, Ndwedwe representing rural facilities and Wosiyana representing deep rural facilities -- with Sibongile Shezi, the acting EPI Director for KwaZulu-Natal, and Colin Willson, the Cold Chain Manager for KZN. The purpose of the visits was to assess the status of the cold chain in Ndwedwe District, including the inventory of equipment, the accuracy of cold chain procedures, and the maintenance of the record-keeping system; and to determine whether sufficient quantities of stocks were being maintained and that stocks were within their expiry dates.

A report of the Cold Chain Analysis is attached (Attachment B), but the findings in general were that the cold chain procedures, equipment and stocks in these clinics were adequate. It should be noted, however, that both Ndwedwe or Qadi Clinics had commercial refrigerators rather than refrigerators designed specifically for storage of antigens. All three clinics tend to record maximum, but not minimum, temperatures. At one clinic, the individual responsible for cold chain maintenance was unable to read the minimum-maximum thermometer (though the refrigerator provides a daily read-out of maximum and minimum temperatures). In addition, staff members were unable to interpret the temperature-indicator dot on the polio vaccines; consequently many of the vaccines at one clinic were found to have been exposed to temperatures exceeding the acceptable range, and they had to be discarded (by the assessment team). These specific inadequacies will be addressed in the next series of EPI training workshops. In addition, Janet Dalton's group has carried out a separate assessment of EPI service delivery in Ndwedwe District clinics. This groups' findings (Attachment C) will also be reflected in the design of the next training session.

#### 1.5 HEALTH COMMUNICATIONS MATERIALS DEVELOPMENT

Pre-Test of Counseling Cards: The NCSP carried out a pre-test of its "Handful of Danger Signs in Newborns" counseling cards.

The "Handful of Danger Signs" materials were adapted for South Africa from a USAID model developed in Latin America. The pre-test instrument was developed from a U.S. Dept. of Health and Human Services standard question guide. The project's Health Educator visited the Ndwedwe, Oakford and Thafamasi Clinics to pre-test the cards. She asked mothers who were waiting for pediatric services to read the card (it has been translated into the Zulu language) and to answer a set of questions assessing the comprehensibility, acceptability, persuasiveness and cultural appropriateness of

the "Handful of Danger Signs" messages. Thirty mothers were interviewed.

The overall findings of the pre-test were that the messages were well understood by all mothers who read them, and that no mothers found them unacceptable or inappropriate. Several mothers commented that they found the hand a particularly useful mnemonic device for recalling the relevant symptoms of serious illness in newborns. The project staff has concluded that, as a counseling tool for trained TBAs, nurses and other health care workers, the "Handful of Danger Signs in Newborns" is an effective and appropriate means of conveying important information to new mothers. The "Handful of Danger Signs" is now being used by project-trained TBAs, and the project staff plans to scale up this tool by introducing it to the clinics.

It will be tested first at Oakford Clinic, since this clinic is one of MCDI's NGO collaborators and Sister Leona has expressed enthusiasm about its use. MCDI will also develop a poster-sized version to be displayed in clinics and other high-profile locations. Also under consideration is development of a pamphlet-sized hand-out to be attached to the Maternal Care Card (although these cards are repossessed by the clinic after births, the mothers keep them during pregnancy).

EPI Disease Translation: The government DOH has developed a set of lay definitions of the principal EPI diseases which it plans to use to inform the community about the purpose and importance of completing the immunization series. At government request, MCDI has translated these definitions into the Zulu language. The translations have been submitted to the DOH, and MCDI is awaiting their response. The NCSP will utilize these definitions in developing its IEC materials for immunizations, and the TBAs will be trained to promulgate them in their communities.

#### 1.6 QUARTERLY MEETINGS WITH TBAS

Quarterly meetings were held with TBAs from all 3 catchment areas in which training has taken place; i.e. Ndwedwe, Thafamasi and Wosiyana. Meetings included the following activities:-

- \* Data collection on individual TBA activities in their respective communities.
- \* Follow up lecture on the "Handful of Danger Signs in Newborns" as part of prevention of peri-natal morbidity and mortality. Each TBA was given a laminated picture of the hand with symptoms.
- \* General discussion on problems encountered by TBAs in their work in the communities.

\* Discussion with clinic sisters mainly about the communication between hospital staff and TBAs and the perceived problems between the two groups.

Results were as follows:

**NDWEDWE CATCHMENT AREA:-**

8 TBAs were interviewed. The figures below reflect their collective activities.

TYPE OF TASK DONE BY TBAs	NUMBER
No. Referred for pre-natal care by TBA	41
Dangerous pregnancies diagnosed by TBA. I.e. primigravida, grandmultipara, oedema, multiple pregnancy and malpresentation.	11
Births performed by TBAs	6
Women who received A.N.C. education	98
Complicated delivery diagnosed and referred, i.e. breech, convulsion, hypertension indicated on A.N.C. card.	3
Post-natal complications diagnosed and referred, i.e. anaemia, sepsis and oedema	3
Sick child seen and referred, i.e. fever, rapid respirations, indrawing and diarrhoea.	10
Post-natal visit done by TBA. Mainly neighbors.	22
Immunization cases referred.	76
Total number of deaths, i.e. 1 breech and 1 still birth.	2

**THAFAMASI CATCHMENT AREA**

5 TBAs were able to attend the meeting.

TYPE OF TASK DONE BY TBAs	NUMBER
Number referred for pre-natal by TBA.	27
Dangerous pregnancy diagnosed, i.e. primigravida, multiparous and oedema.	8
Post-natal visits by TBAs.	17
Births performed.	18

Number of women who received A.N.C education.	69
Complicated delivery diagnosed and referred.	20
Sick child seen and referred, i.e. fever.	1
Immunization cases referred.	70
Number of perinatal deaths.	0

## WOSIYANA CATCHMENT AREA

6 TBAs attended and presented the following:

TYPE OF TASK DONE BY TBAs	NUMBER
Number referred for pre-natal visit by TBA	64
Dangerous pregnancy diagnosed, i.e. oedema, malpresentation, bleeding, multiparous and a baby too small for dates.	19
Births performed	7
Number of women received ante-natal education	88
Complicated delivery diagnosed and referred, i.e. twins, ante partum haemorrhage.	2
Post-natal complications diagnosed and referred, i.e. perineal tear.	1
Immunization cases referred.	39
Sick child seen and referred, ie. fast respirations, diarrhoea, mumps x2 and tight chest.	14
Post-natal visit done by TBAs.	17
Perinatal deaths, i.e. grossly malformed infant.	1

## LECTURE ON HANDFUL OF DANGER SIGNS

The "Handful of Danger Signs in Newborns" was introduced to the TBAs in all three areas. TBAs were trained in its use as a counselling device. Each TBA received a laminated A4 sized copy to use in community. Thafamasi group had already been familiarized with the Handful of Danger Signs as part of their initial training.

This was greatly appreciated by all groups. They were all very pleased to be given laminated pictures to take with them wherever they worked. They thought these would be handy as they are not heavy and will not get dirty if taken to pension points and to communal gardens and church gatherings.

## PROBLEMS ENCOUNTERED BY TBAs IN THEIR WORK

All TBAs expressed fear of the AIDS epidemic which they have all seen in their practices. They are therefore very reluctant to deliver women without hand-gloves. Another problem was that a few women in the Ndwedwe area met with resistance from the neighbors who believed they were being paid by N.C.S.P. to teach or deliver their babies and were therefore jealous. One TBA whose husband was recently murdered for trying to trace the murderers of a few people in the area, no longer trusts anybody and is reluctant to visit people's houses. The rest of the TBAs have had no problem with social interaction.

Three infant deaths were reported during the last quarter within the catchments of practicing TBAs.

1. A stillbirth to a woman who had two previous still births. She went into labour unexpectedly. In the initial stages of labour she was attended by her relatives. The TBA was called when she was pushing. She delivered a stillborn child. This occurred at night. She went to the clinic the next morning.
2. A woman appeared to be in normal labour and she delivered normally, the baby was grossly malformed and died immediately. This woman was attended by project trained TBA. This woman went to the clinic the next day.
3. The third infant death involved a woman who went into labour at night. The delivery was handled by relatives in the initial stages. The project trained TBA was called when the presenting part had already emerged and it was realized that the child was breech. The TBA tried to assist but failed and accompanied the woman to Osindisweni.

## TBAs AND CLINIC STAFF

The clinic staff at Ndwedwe generally feel that the TBAs are not communicating sufficiently with them. In the past TBAs have complained about the negative attitudes of the staff at Ndwedwe clinic. In Ndwedwe, the TBAs appear to have been a bit scared of the clinic staff. In a meeting between the clinic sister, TBAs and N.C.S.P training co-ordinator, it was agreed that from now on, there will be regular meetings between the clinic staff and the TBAs which will be convened by these two groups without the N.C.S.P. staff. The TBAs in Wosiyana have a more cordial relationship with the clinic staff, and there does not appear to be any coordination problem in that catchment area.

The TBAs in Thafamasi wish to be introduced formally by the chief (Nkosi) to the community. Without such an introduction, they do not feel they can move about freely and safely. Although they have been delivering women in the past, they had not been involved in educating the community; and their new level of effort requires additional approvals and safeguards from the traditional authority. MCDI will attempt to arrange this.

### 1.7 REVISION OF TBA TRAINING CURRICULUM

During the quarter, the project's TBA Trainer, Thuli Ngidi, has begun to revise the TBA training program and curriculum. It was felt that a six-week program was excessively long both from the point of view of time required to master the essential material, and of the TBAs' own time schedules. The new program will last three weeks per session, and will emphasize the Gold Standards for Maternity Care and the essential messages for TBAs recommended in 1996 by the project's Maternity Care Consultant, Pamela Putney. The revision will be finished by June, 1998.