Ndwedwe District Child Survival Project
Cost Extension Project
Final KPC Report

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List of Abbreviations

AIDS	Acquired Immuno Deficiency Syndrome
BCC	Behavior Change Communication
CBO	Community Based Organization
CDD	Control of Diarrheal Diseases
CHC	Community Health Committee
CHW	Community Health Worker
CMR	Child Mortality Rate
CS	Child Survival
DHM	District Health Manager
DHS	Demographic and Health Survey
DHIS	District Health Information System
DHSMT	District Health System Management Team
DOH	Department of Health
HBCV	Home-Based Care Volunteer
HH/C-IMCI.	Household and Community Integrated Management of Childhood Illnesses
HIV	Human Immunodeficiency Virus
HO	Home Office
IMCI	Integrated Management of Childhood Illnesses
IMR	Infant Mortality Rate
KZN	KwaZulu-Natal
KPC	Knowledge, Practices and Coverage (Survey)
LOE	Level of Effort
MCDI	Medical Care Development International
MCH	Maternal and Child Health
MMR	Maternal Mortality Ratio
NDCSP	Ndwedwe District Child Survival Program
NGO	Non-Governmental Organization
ORS	Oral Rehydration Solution/Salts
ORT	Oral Rehydration Therapy
OVC	Orphans and Vulnerable Children
PHC	Primary Health Care
PLWA	People Living with AIDS
PLWHA	People Living with HIV/AIDS
QRI	Quarterly Reporting Instrument
RTH	Road to Health
SSS	Sugar-salt solution
STI	Sexually Transmitted Infections
TA	Traditional Authority (Tribal Authority)
TBA	Traditional Birth Attendant
TT	Tetanus Toxoid
UNDP	United Nations Development Program
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WHO	World Health Organization

Executive Summary

The Ndwedwe District Child Survival Project, located in the KwaZulu Natal province of South Africa, has completed the terms of a four-year cost-extension grant from USAID/BHR/PVC. A final Knowledge, Practices and Coverage (KPC) Survey was carried out in the Ndwedwe District over a six-day period from September 15-22, 2005. This activity was implemented through the cooperation of MCDI, the Ilembe District Department of Health and Ndwedwe tribal leaders and councils.

The total population of the project area is 152,479, including 17,161 children 0-59 months of age and 38,485 women of childbearing age. Throughout the life of the project, the goals of the NDCSP have been to reduce morbidity and mortality among children under the age of 60 months, and to improve the health status of women of reproductive age.

The objectives of the survey were to: 1) obtain population-based information on key knowledge, practices and coverage of mothers and caregivers of children age 0-23 months, 2) obtain population–based information on key knowledge, attitudes, practices and coverage of mothers and caregivers with children age 0-59 months, particularly relating to HIV/AIDS, and 3) assess the possible impact of interventions under the Ndwedwe District Child Survival Project based on baseline KPC data.

Major findings include the following:

- Knowledge about HIV/AIDS and STIs other than HIV/AIDS has improved within the project period, especially among mothers (who tend to be younger than nonmaternal caregivers). Use of condoms increased from 30% at baseline to 48%, and mothers who knew at least three ways to transmit HIV to a child increased from 54% to 78%. A full 45% of mothers and caregivers knew at least 3 symptoms of STIs in females, a 19% improvement. And 78% of mothers/caregivers were willing to allow the child under their care to play with an HIV-positive child, compared to 68% at baseline. Knowledge of at least two valid ways to reduce risk of HIV contraction also increased from 63% to 88%.

- Regarding diarrhoeal disease care and control, there was marked improvement: 97% of mothers and caregivers of children who had had diarrhea in the two weeks prior to the interview had given the child oral rehydration therapy, 28% above the 69% in the baseline survey. Also, 23% had given the child more food compared to 0% at baseline; 26% were getting more fluid compared to 1% at baseline. Those who reduced fluids during the diarrheal episode dropped from 35% to 27%; food reducers dropped from 45% to 28%, a distinct improvement. Handwashing practices, however, remain poor: Although 73% wash after toileting and 56% before food preparation, only 30% wash before feeding the child and only 8% wash at all key times. Although these are improvements from the baseline KPC survey, this is a continuing challenge in Ndwedwe and perhaps requires increased behavior change efforts.

- Breastfeeding is widely practiced: 33% of mothers of children 0-6 months of age reported exclusively breastfeeding their child, and 67% had fed their child colostrums immediately after birth. Although 75% of mothers had breastfed the child as some point, breastfeeding remains a controversial practice in Ndwedwe. With the expansion of the AIDS crises, many mothers either know or suspect they have the HIV virus and are reluctant to breastfeed for fear of transmission.

- Immunization figures were also higher, and 84% of children who a year old were fully immunized, as validated by a check of available Road to Health (RTH) immunization cards. The baseline figure was 51%. Also in the current KPC, 89% of children had received at least one measles shot, an increase of 28% from baseline, also based on cards seen.

  Full immunization coverage of all one-year-old children in the sample (90 total), whether or not a RTH card was seen, was 53% compared to 35% at baseline. Percentage of all 12-23 month children who had received at least one measles shot, also whether or not the card was available, was 56%. The baseline figure was 42%.

- An evaluation of maternal and neonatal care data indicates that knowledge of three or more danger signs of serious illness in newborns grew from 41% in the baseline report to 79% in the final report. Also, more than 50% of pregnant women are making 3 or more antenatal visits, and 97% of mothers were attended by a nurse or doctor during delivery.

The results of the survey will be presented to NDCSP stakeholders, including the Ilembe District Department of Health, tribal leaders and council members, clergy and other interested community members over the next three months.

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A. Description of Project Location

The geographic focus of the project has been Ndwedwe, a sub-district of the Ilembe District in KwaZulu Natal province of South Africa. Ndwedwe is a predominantly Zulu-speaking rural and semi-rural area 1,153 square kilometers in size and situated 80 kms north of Durban. Despite this proximity to a major urban and economic center, the sub-district has remained substantially underdeveloped, disadvantaged and poor as a result of inequities established during the Apartheid administration and the slow rate of complex reform since the political shift in 1994.

The sub-district is divided into 18 tribal or traditional authorities, each governed by a tribal leader and council. With a population density of 127 per square kilometer, communities are non-nucleated and widely dispersed over a hilly terrain. According to the 2001 South Africa Census, the population of Ndwedwe is approximately 152,479 with 38,485 women of childbearing age (15-49) and 17,161 children under five years old. (See Table 1 below).

Table I: Number of children under five years old and women of child-bearing age living in Ndwedwe

	NDWEDWE POPULATION
Children <5 years	**17,161**
Women of child-bearing age	
15-19	10,133
20-24	7,196
25-29	5,582
30-34	4,301
35-39	4,325
40-44	3,780
45-49	3,168
Total	**38,485**

Source: SA Census 2001

B. Health status of the population

Data specifically for Ndwedwe, other than those collected by the NDCSP, are for the most part unavailable. However, national, provincial and district statistical resources can provide an accurate depiction and realistic appreciation of child health and other indicators in the region.

According to the results of the most recent Demographic and Health Survey (DHS) in South Africa[1], administered in 1998, neonatal, infant, child and under-five mortality rates in KwaZulu Natal are consistently above the national average. The province has the highest child mortality rate in the country at 23.6 per thousand live births and the second highest under-five mortality rate at 74.5 per thousand live births. Mortality rates are defined as:

- Neonatal mortality: the probability of dying within the first month of life;
- Infant mortality: the probability of dying in the first year of life;
- Child mortality: the probability of dying between exact age one and five;
- Under-five mortality: the probability of dying between birth and exact age five.

A comparison of mortality rates between national and provincial averages is provided in Table 2 below.

Table 2: Mortality indicators for children under five in KwaZulu Natal and South Africa per thousand live births.

	NEONATAL MORTALITY	INFANT MORTALITY	CHILD MORTALITY	UNDER-FIVE MORTALITY
South Africa	19.8	45.4	14.7	59.4
KwaZulu Natal	23.2	52.1	23.6	74.5

Mortality figures may underestimate actual rates as it is common to not report an infant's death if it occurs shortly after birth.

Subsequent to the 1998 DHS, a 2001 study commissioned by the KwaZulu Natal Department of Health[2] set the provincial infant mortality rate even higher, at 92 per thousand live births, and the rate for Ilembe District alone at 102 per thousand. Similarly, the provincial under-five mortality rate was 132 per thousand; in Ilembe District, it was 148 per thousand. Allowing for differences in methodology between the two surveys, the increases from 1998 to 2001 may also reflect the growing toll of the expanding HIV/AIDS pandemic.

[1] Full report of the 1998 South Africa Demographic and Health Survey

[2] *Child Mortality in KwaZulu Natal*, A. Hoque, Epidemiology Unit - UKZN, 2001

The major causes of death among children under five in South Africa, assessed by the Medical Research Council in 2000[3], are lead by HIV/AIDS (40.3%), low birth weight (11.2%), diarrheal disease (10.2%), lower respiratory infections (5.8%), and protein-energy malnutrition (4.3%).

Five years later, it is reasonable to assume that the proportion of child deaths from HIV/AIDS has increased, particularly in KwaZulu Natal. At 38%, the province has the highest percentage of overall deaths due to AIDS in the country[4]. And according to a 2004 study done by the national Department of Health[5], the HIV prevalence rate among antenatal clinic attendees in KwaZulu Natal increased from 36.5% in 2002 to 40.7% in 2004, the highest of any province in South Africa.

The constraints on healthcare provision are manifest. A population of 152,479 in Ndwedwe is served by only seven primary health care (PHC) clinics, one community health center (CHC) and one referral hospital. Three area hospitals located proximate to the sub-district boundaries are also available to residents (although with additional transport cost). Ilembe District as a whole has the highest percentage of people living outside a 5km radius of a health facility (42%) and had the lowest health care expenditures per capita in the province for both 2002 and 2003. Post-Apartheid governments have developed policies and plans to upgrade primary health care and other public services. Progress continues to be slow and to have little actual impact on community members.

Adding to the challenge is the growing burden of care on healthcare professionals. Nurses in Ilembe District have the highest clinical patient load in the country at 59.3 per day, substantially above the provincial average of 33.8 per day. There is also a continuing shortage of trained healthcare workers as many are leaving the sub-district for better income opportunities. In addition to the increased patient load, the impact of HIV/AIDS is also noticeable in the reduced number of health workers available to work due to illness. As a result, Ndwedwe PHC facilities are chronically understaffed.

C. Socioeconomic status

Economic activity in Ndwedwe mainly is limited to subsistence farming and some cash cropping of sugarcane (the predominant commercial crop in KwaZulu Natal). Many residents are informal merchants who run spaza or food shops, shoe repair businesses and other small concerns within the communities. The formal unemployment figure hovers around 56%.

[3] What are the leading causes of child death in South Africa? South African National Burden of Disease Study, Medical Research Council, 2000.
[4] South African Health Review, Health Systems Trust, 2005.
[5] National HIV and Syphilis Antenatal Sero-Prevalence Survey in South Africa, Republic of South Africa Department of Health, 2004.

Ndwedwe historically has been considered a "dormitory area," providing a cheap labor supply for Durban and other affluent coastal communities. As such, there has been little in the way of manufacturing and other employment opportunities developed within the sub-district. Many of the men leave Ndwedwe to earn income in more employment-rich provinces such as Gauteng and send remittances back home. Many of the women are employed as live-in domestic help in Durban and are home only periodically. The impact of these trends has been an increase in the number of young children reared by someone other than a mother or father, an effect compounded by the growing number of parental losses due to HIV/AIDS (and maternal losses in particular as prevalence among women is increasing at a greater rate).

According to the current KPC survey, literacy rates are reasonably high in Ndwedwe as 45% of respondents have at least a secondary school education and 20% have at least completed primary school. Many residents, however, are taught and speak only Zulu, placing them at a pronounced disadvantage in the employment market beyond manual labor and domestic work. English and Afrikaan remain the primary languages of commerce in South Africa.

Seventy-nine percent (79%) of households in Ndwedwe earn less than R1,500 ($250) per month, with more than 20% receiving no regular income at all. Mothers of young children are eligible to receive a monthly government grant of up to R700 ($117) per month, and for many households this is the sole source of steady income. However, households in which orphaned children are raised by relatives or other caregivers don't always have access to these grants because they lack the child's birth certificate or the parents' death certificates, both of which are required for grant application.

D. National Standards and Practices

1. HIV/AIDS

The DOH has policies on prevention of mother-to-child HIV transmission (MTCT), management of HIV positive pregnant women, rapid HIV testing, testing for HIV, feeding of infants of HIV positive mothers, tuberculosis and HIV/AIDS, management of occupational exposures to HIV, and the syndromic case management of STIs. During this phase of the project, the Department of Health has developed and implemented new national policy on ART and continues country-wide rollout of ant-retroviral drugs.

Testing for HIV requires informed consent as well as pre-test and post-test counseling. The standard adult guidelines for rapid HIV testing discuss the ethical and legal rights of patients, and the role and indications for rapid HIV testing, which includes HIV testing and counseling, diagnosis of HIV infection, diagnosis of HIV infection in areas without local diagnostic laboratories, occupational exposure to blood or body fluids that may be infected with HIV and epidemiological surveillance and screening.

The guidelines also discuss the issues to consider such as home test kits, performing and interpreting rapid test results, predictive value of rapid tests in low HIV prevalence communities and issues regarding confirmatory tests for all patients who test positive on

the rapid tests. Pre- and post- test counseling and rapid HIV test results, its implications for health care workers, counselors, and patients are also addressed. The KZN Department of Health is providing a comprehensive guideline on ARVs. These guidelines serve to assist the clinic team in the management of patients on anti-retroviral drugs as outlined in the comprehensive plan for HIV and AIDS care, management and treatment of the national Department of Health.

2. Diarrheal Disease

The DOH protocol for standard case management of childhood diarrheal diseases, including management of dysentery and of persistent diarrhea in children, follows the 2002 KZN IMCI guidelines. These guidelines detail assessment, classification, treatment, and counseling protocols for children ages 2 months to 5 years and children ages 1 week to 2 months with varying severity of illnesses. The DOH policies are consistent with WHO/UNICEF guidelines, and the NDCSP's case management strategies have been consistent with DOH policies. The DOH has an active ORT promotion program in which clinic health educators teach mothers of diarrhea victims to mix sugar-salt solution (SSS or *sorol*). Packets of ORS are also available free of charge from all clinics and are dispensed to children who come in with dehydration. The main emphasis is on home care with SSS and increased intake of appropriate foods and fluids.

The DOH maintains very tight control over antibiotics and anti-diarrheal medications, with clear prescription protocols. Currently, antibiotics are fairly well restricted to use in cases of bloody diarrhea, and anti-diarrheal medications are not heavily used in the management of childhood diarrhea. A previous problem with irregular facility drug supplies seems to have been resolved, according to facility assessment conducted concurrently with the final KPC survey.

3. Pneumonia Case Management

The DOH follows the 2002 KwaZulu IMCI protocols for pneumonia case management. As with all KZN IMCI protocols, these are based on and consistent with WHO IMCI protocols, and the NDCSP has facilitated implementation. Professional nurses have been trained by the DOH in IMCI protocols for case management to (a) assess, (b) classify, (c) treat, and (d) counsel caregivers, message that the NDCSP has reinforced during training sessions for clinic staff. Included in the protocols are steps to recognize the signs that an antibiotic is needed for two ages groups: infants 1 week to two months of age and children 2 months to 5 years of age. Nurses are also trained to recognize the signs that the child must be referred to a higher level of care. Also included are the cut-offs for fast breathing for each of the three age groups and the antibiotics to be used for pneumonia. Facility nurses counsel caregivers regarding antibiotic use and home care for children with pneumonia when the child is brought in for diagnosis and treatment.

4. Immunization

Prior to 1995, immunization policy in South Africa was inconsistent due to the fragmented health system. The current routine childhood immunization schedule in South Africa is based on a national policy that was adopted in 1999 and is consistent with WHO guidelines. In 2003, Vitamin A supplementation was added to IMCI guidelines. There are periodic campaigns to address coverage gaps for all immunizations. A recent

successful polio, measles and Vitamin A campaign in Ilembe District achieved 36% coverage of children under five.

5. Maternal and Neonatal Care

The 2000 National Guidelines for Maternity Care in South Africa (a manual for clinics, community health centers and district hospitals), and a policy and management guideline for common causes of maternal deaths entitled "Saving Mothers," provide extremely clear instructions and protocols on maternal and newborn care. The National Guidelines manual clearly defines the functions, staffing and facilities at the clinic, community health center, level 1, 2, 3 hospitals and emergency transport systems. According to the Guidelines, all women that attend ANC should be issued with an antenatal card. This is the principal record of the pregnancy and should be completed at each antenatal clinic visit and retained by the mother until delivery.

All Ndwedwe area clinics and hospitals provide prenatal care which includes weight and blood-pressure monitoring, iron and folic acid supplementation, TT vaccination, blood tests (including blood count and RPR), and treatment of infections (including STIs).

E. Goal and objectives

The overall goal of the NDCSP has been the same throughout the life of the project: To reduce morbidity and mortality among children under the age of 60 months, and to improve the health status of women of reproductive age.

Objectives by principal intervention categories are as follows:

HIV/AIDS/STIs: 1) 65% of mothers/caregivers will be aware of at least three symptoms of STIs other than HIV/AIDS in females; 2) Mothers reporting use of condoms on last act of intercourse will increase from 30% to 50%; 3) 90% of mothers can recognize at-least three known ways in which a mother can transmit HIV/AIDS to her child; 4) 90% of mothers/caregivers will be willing to allow children under their care to play with an HIV-positive child; 5) 100% of the DOH health facilities in the project area will provide appropriate HIV/AIDS/STIs prenatal screening and counseling according to protocols; 6) 75% of households caring for OVCs will be aware of and know how to access Department of Social Welfare (DSW) grants and services; 7) 85% of high school students in schools with active school health clubs (SHCs) will be able to name at-least two strategies of HIV/AIDS prevention; and 8) 60% of high school students in schools with active SHCs report adopt of one of the three strategies of HIV/AIDS prevention (abstinence, being faithful, condom use).

Control of Diarrheal Diseases: 1) 90% of mothers and non-maternal caregivers whose child experienced a diarrheal episode during the previous two weeks will provide oral rehydration therapy (ORS, SSS or available home fluids) to the child under their care during diarrheal episodes; 2) 50% of mothers and caregivers will report that they wash their hands before feeding the child under their care; 3) 85% of mothers and caregivers whose child experienced a diarrheal episode during the previous two weeks will give the same of or more liquids than usual during diarrhea episodes.

Pneumonia Case Management: 1) 35% of mothers and caregivers whose child experienced cough with rapid or difficult breathing during the previous two weeks of children will seek medical attention by the end of the day after the onset of symptoms; 2) IMCI protocols for pneumonia diagnosis and treatment will be implemented and correctly used in 100% of the project clinics.

Immunization: 1) 70% of children aged 12-23 months are fully immunized per RTH card; 2) 80% of children aged 12-23 months will have received a measles vaccination per RTH card.

Maternal/Neonatal Care: 1) At least 60% of mothers/caregivers will be aware of two or more of the danger signs in newborns that require immediate treatment; 2) 40% of CHCs will have established a cost recovery/financial system or loan system for different priority PHC activities (e.g., transporting obstetrical emergencies, incentives for CHWs, HBCVs, etc.) 3) During their last pregnancy, 50% of women will have made an antenatal visit

during the first trimester of pregnancy and at least three antenatal visits thereafter; and 4) 80% of midwives in program area health facilities will be trained in the PEP modules.

F. Intervention activities

The Ndwedwe District Child Survival Project has been functioning in close collaboration with the KwaZulu-Natal Department of Health and the recently created Ilembe District Health Office. The NDCSP has established a strong working relationship with both the district and provincial Departments of Health, has built collaborative partnerships with local NGOs and CBOs, and has executed an array of interventions that include building the capacity of health workers at all levels, organizing communities to assume greater responsibility for their own health, and carrying out prevention and mitigation activities related to HIV/AIDS. It has initiated the introduction of facility-based IMCI in Ndwedwe and assisted the DOH in piloting an IMCI model in KZN and subsequently introduced HH/C-IMCI.

In addition, NDCSP's accomplishments include the integration of HIV/AIDS modules into training for health workers, community health committees (CHCs) and TBAs; training of 48 HIV/AIDS lay counselors; training of 28 TBAs on PMTCT; training of 40 HBCVs and 20 community volunteers on the DOT (define) TB (define) protocol; training of 91 HBCVs in accessing grants for OVCs; establishment of a model inter-sectoral program for assisting households caring for OVC; and supported training of professional nurses in the Perinatal Education Program (PEP). The NDCSP has also worked with the Diakonia Council of Churches to involve church leaders in fighting the HIV/AIDS epidemic and organizing care and support activities for OVC and PLWHA. It has developed a guide for assessing community implementation of IMCI Key Family Practices using the GAPS Analysis Manual that is now used for training TBAs, HBCVs and Community Health Workers (CHWs) by the DOH. The supervisory system of HBCVs implemented by MCDI is the only one operating effectively in Ndwedwe.

G. Objectives of KPC Survey

The KPC Survey for the final evaluation of the NDCSP was based on established KPC objectives:

1. To obtain population-based information on key knowledge, practices and coverage from mothers and caregivers of children age 0-59 months;

2. To obtain information on key knowledge, attitudes, practices and coverage relating to HIV/AIDS from mothers and caregivers with children age 0-59 months.

3. To assess the possible impact of interventions under the Ndwedwe District Child Survival Project.

II. Survey process and partnership building

Participation of community stakeholders.
Community-based survey partners were contacted by KPC project staff to provide input for the survey process, as desired and appropriate.

The Maternal Child and Women's Health Project Manager and District Manager of the Ilembe District Department of Health were invited to review the KPC questionnaire and submit additional questions for data collection as an opportunity to gain insight from the community on a subject or subjects of interest related to child health and mother/caregiver knowledge, attitudes and practices.

Project staff also met with tribal leaders (or *ankosi*) and council members (or *induna*) in each of the three authorities randomly selected for the survey. Permission was sought to conduct the KPC survey in their areas, and the topics covered by the survey were discussed. This gave tribal leaders and council members the chance to air their concerns about child health in their communities. All authorities subsequently gave their approval for survey activities and requested that results be presented to the council and other interested community members.

Twelve survey enumerators were selected from youth VCT and support groups in Ndwedwe organized by MCDI as part of a separate project. The age range was 17 to 25 years old, and all had participated in similar data collection for MCDI in the past. Participation in the survey was an opportunity to build their capacity as enumerators and community liaisons as well as to earn income. All enumerators were selected based on possession of a matric or high-school-level degree, as they were therefore both literate and educable. All had the advantage of familiarity with local language and customs, as well as knowledge of geography and physical terrain. Although some of the enumerators were HIV-positive, all were fit to carry out their responsibilities.

Three supervisors oversaw the efforts of enumerators. One was the environmental officer from the Ilembe District Department of Health, well-experienced in survey work. One is a retired registered nurse from Nyuswa in Ndwedwe. The third was MCDI's HBCV supervisor, also a registered nurse and previously Sister in Charge of another Ndwedwe clinic, Mwolokholo. All supervisors were very familiar with the NDCSP, its activities and objectives. A fourth supervisor, also an Ndwedwe clinic nurse, was unable to participate at the last minute due to an unexpected clinic staff shortage during the survey period.

The data capturer on the project was a Health Information Manager for the KwaZulu Natal Department of Health, highly experienced in working with health data collection and analysis within the province.

Constraints in the process.

Due to budget limitations, and because this KPC survey had 41 fewer questions than the original baseline version, it was decided to hire a smaller number of enumerators than the 24 hired for the 2001 baseline survey. The training and actual survey periods were completed within the planned 9 days and on budget. However, due to the physical distance between communities and between households within each community, hiring additional enumerators might have improved initial data quality as enumerators would have had more time to conduct each interview. A significant number of questionnaires initially handed in by enumerators were missing key sections of information due to skipped or incorrect recording, as enumerators pushed to meet the daily quota set by their supervisor. As a result, some interviewees had to be revisited to complete their questionnaires thoroughly and accurately.

Another possible limitation was that enumerators might have benefited from some additional healthcare knowledge and a greater understanding of the topics covered by the questionnaire. Although the supervisors were all healthcare professionals, and the enumerators had been trained and displayed a grasp of what was being asked in each module, a deeper awareness of the purpose behind each question might also have improved their ability to fully elicit information from interviewees.

Also, there were two young men among the enumerators, which may have made the women they interviewed reluctant or unwilling to answer the more culturally- and gender-sensitive questions, such as use of a condom and knowledge of STI symptoms.

III. Methods

The questionnaire was designed to collect information from mothers and nonmaternal primary caregivers of children under 60 months of age in the following areas: (a) IMCI knowledge, practice and coverage of (1.) childhood immunization, (2) diarrhea case management, (3) pneumonia case management, and (4) child feeding; (b) maternal and newborn care, including delivery practices and postpartum care; and (c) HIV/AIDS and other sexually transmitted diseases. The questions were selected from the initial baseline

to address all NDCSP and Rapid CATCH indicators. Questions to determine demographic characteristics and socioeconomic status were also included.

One questionnaire was used to interview both mothers and caregivers, asking for information relating to the youngest child in their care who was under five years old. As with the baseline KPC survey, it was decided that administering separate questionnaires was neither cost-efficient nor effectively necessary. Questions on maternal care and delivery practices were posed only to mothers, as indicated on the questionnaire itself and stressed in enumerator training.

The English version was translated into Zulu and checked for accuracy by four native Zulu speakers. All questions had been vetted with local stakeholders and were deemed locally relevant and appropriate. A field test was conducted in three locations prior to the formal survey period, and changes were introduced into the questionnaire as a result.

See Appendix E for a copy of the questionnaire in English and in Zulu.

A. Training of supervisors and interviewers.

Enumerator and supervisor training took place over a four-day period and was conducted by the MCDI Training Manager. All training was participatory, with ample time for questions and other feedback relevant to the interview process.

The first day was for supervisors only and consisted of an overview of the NDCSP, the purpose of the KPC survey, and the training and survey period schedule. Also covered were their roles and responsibilities as supervisors and a detailed review of the questionnaire itself (including another check of local relevance and Zulu translation accuracy).

Days two and three were for the enumerators and were conducted primarily by the supervisors, all of whom are experienced trainers, to emphasize community-based participation in the survey process and build team communication. (Each supervisor was given a randomly selected team of four enumerators to oversee throughout the training and survey process.) Training focused on an overview of the project, the methodology of selecting households and interviewees, interviewing techniques, and a detailed review of the questionnaire. Enumerators also spent considerable time in active role-playing exercises to rehearse the interview process and gain confidence in handling the questions and reactions that would likely arise in the actual interviews.

During the training, handouts were provided and reviewed that included instructions on how to fill out a questionnaire, good interviewing techniques, the method of selecting households and interviewees, and a copy of the survey and consent form to review during training. (See copies of the training curriculum and all training handouts in Appendix F.)

Day four was the field test day. Supervisors and interviewers were taken to one of the identified survey clusters and went through the survey process as team. Completed questionnaires were collected at the end of the day and reviewed by the supervisors to assess enumerator performance and data quality. Supervisors then met with their teams to express support for work well done and discuss any problems and clarifications needed

B. Project indicators

The following table lists the child survival indicators that have been used as the basis for evaluating the Project's performance:

INDICATORS	DEFINITION
HIV/AIDS/STIs	
Indicator 1: 65% of mothers/caregivers will be aware of at least three symptoms of STIs other than HIV/AIDS in females.	Percentage of mothers who can name three or more symptoms of STIs in females.
Indicator 2: Mothers reporting use of condoms on last act of intercourse will increase from 30% to 50%.	Percentage of mothers who report use of a condom during the last act of intercourse.
Indicator 3: 90% of mothers will be able to recognize at least three known ways in which a mother can transmit HIV/AIDS to her child	Percentage of mothers who are able to recognize at-least three known ways of mother to child transmission of HIV/AIDS
Indicator 4: 90% of mothers/caregivers will be willing to allow children under their care to play with an HIV-positive child	Percentage of mothers and caregivers who state they are willing for a child under their care to play with an HIV-positive child.
Indicator 5: 100% of DOH health facilities in the project area will provide appropriate HIV/AIDS/ STIs prenatal screening and counseling according to protocols.	Percentage of clinics and hospitals providing HIV/AIDS/ STIs screening and counseling.
Indicator 6: 75% of households caring for OVCs will be aware of and know how to access DSW grants and services.	Percentage of caregivers caring for OVCs who have established contact with DSW.
Indicator 7: 85% of high school students in schools with active School Health Clubs (SHCs) are able to name at least two strategies of prevention	Percentage of school students in schools with active SHC can name at-least two strategies of HIV/AIDS prevention
Indicator 8: 60% of high school students in schools with active SHCs report adoption of one of three strategies of HIV/AIDS prevention (abstinence, being faithful, condom use)	Percentage of school students in schools with active SHC adopting at-least one of the three methods of HIV/AIDS prevention
CONTROL OF DIARRHEAL DISEASES	
Indicator 1: 90% of mothers and caregivers whose child experienced a diarrheal episode during the previous two weeks will provide oral rehydration therapy(ORS, SSS, or home available fluids) to the child under their care during diarrheal episodes.	Percent of mothers and caregivers who report they gave ORT during their child's last episode of diarrhea
Indicator 2: 50% of mothers and caregivers will report that they wash their hands before feeding the child under their care.	Percent of mothers and caregivers who report hand-washing before feeding children
Indicator 3: 85% of mothers and caregivers whose child experienced a diarrheal episode during the previous two weeks will give the same amount of or more liquids than usual during	Percent of mothers and caregivers who report that they gave the same or more than usual liquids during the child's last diarrhea episode.

INDICATORS	DEFINITION
diarrheal episodes.	
PNEUMONIA CASE MANAGEMENT	
Indicator 1: 35% of mothers/caregivers whose child with cough experienced rapid or difficult breathing during the previous two weeks will seek medical attention by the end of the day after the onset of symptoms.	Percent of mothers/caregivers who report they sought medical treatment for their child with cough and rapid or difficult breathing by the end of the day after the onset of symptoms.
Indicator 2: IMCI protocols for pneumonia diagnosis and treatment will be implemented and correctly used in 100% of the project clinics	Percent of clinics treating children who correctly diagnose and treat children with cough and difficult breathing according to IMCI protocols during supervisory visits.
IMMUNIZATION	
Indicator 1: 70% of children aged 12-23 months will be fully immunized per RTH card	Percent of KPC children 12-23 months of age whose RTH Cards indicate that they are fully immunized.
Indicator 2: 80% of children aged 12-23 months will have received a measles vaccination per RTH card	Percent of KPC survey children 12-23 months of age whose RTH Cards indicate that they are immunized for measles.
MATERNAL AND NEONATAL CARE	
Indicator 1: At least 60% of mothers/caregivers will be aware of two or more of the danger signs in newborns that require immediate treatment.	Percentage of mothers/caregivers who can name two or more of the danger signs in newborns.
Indicator 2: 40% of CHCs will have established a cost recovery/financial system or loan system for different priority PHC activities(e.g., transportation for obstetrical emergencies, incentives for CHWs, HBCVs, etc.)	Percentage of community based health funds established in CHC catchment areas
Indicator 3: During their last pregnancy, 50% of women will have made an antenatal visit during the first trimester of pregnancy and at least three antenatal visits thereafter	Percent of mothers who report they made one antenatal visit during their first trimester and that they made at least 4 antenatal visits in all.
Indicator 4: 80% of midwives in program area health facilities will be trained in the PEP modules.	Percentage of midwives in program area health facilities who are trained in the PEP modules.

C. Sampling design.

Standard cluster sampling design was used to randomly select 300 households, each with at least one child in the identified age group of 0-59 months. (Only the youngest child in this category was used as the focus for survey questions.) As with the baseline KPC, data was collected on children under 60 months of age rather than just those under 24 months. This is meant to provide a broader view of the impact of the HIV/AIDS crisis on child health, of particular interest in assessing the effect of changing care structures for young children. HIV/AIDS is affecting approximately 1 in every 10 Ndwedwe households and is changing care patterns for young children, and an increasing number of children lose

one or more parents to the disease and are then raised by nonparental caregivers. According to the results of MCDI's KPC 2000 project survey, this effect may be compromising the quality of care and subsequent health status of young children in Ndwedwe.

Interviews for the 2005 KPC took place at 10 households in each of 30 clusters representing a range of tribal authorities and population densities for a total of 300 households. All were selected using systematic random sampling methodology.

Enumerators were taken to the more populated area of each cluster (deemed the center) and had been instructed to then spin a pencil on a notebook. Enumerators then went in the direction in which the pencil pointed and stopped at the first house they reached. Continued instructions for household selection were as follows:

- If no one is home at the first household, face out from the front door and turn to the right. Walk in that direction until you reach the next household. Use this method each time you reach a household where no one is available to interview.

- If someone is home, introduce yourself and your purpose and ask if there is a child under 5 years old living in the household. If not, turn right at the front door and go to the next household. If there is a child under 5, ask to speak to the person who takes care of the child most of the time. Ask her or his consent to conduct the interview.

- Once an interview has been successfully completed and you're satisfied that all the answers are correct, complete, consistent and clear, turn right at the front door and go on to the next household.

- Continue until you either complete your quota of questionnaires or run out of households to visit. Contact your supervisor to check your work and transport you to the next survey area.

All enumerators used their own cell phones to stay in contact with supervisors in order to ask questions on the survey, arrange transportation or discuss problems. Supervisors accompanied enumerators who were having difficulty as needed and also administered questionnaires themselves to help meet the total daily quota of completed questionnaires.

D. Method of data collection.

The formal survey period was from September 15th through 22nd, 2005. To complete 300 questionnaires within the budgeted timeframe, enumerators and supervisors were required to complete a total of 50 questionnaires each day.

Interviews took approximately 30-45 minutes each. Throughout each survey day, enumerators submitted questionnaires to their supervisors post-interview who reviewed them for errors or omissions. Those that needed corrections or additional information

were given back to the enumerator to re-interview that mother or caregiver while still in the vicinity of the home. All questionnaires were reviewed by the MCDI field office staff at the end of each day and any errors addressed with supervisors to improve the quality of the next day's survey work. This was particularly valuable as inconsistencies in the questionnaire not previously noted were identified and successfully addressed while the survey process was still underway.

At the end of the survey period, supervisors and MCDI field office staff quality-checked all questionnaires again before delivering them to the data capturer.

E. Method of data analysis.

Survey data was tabulated and analyzed using the EPI INFO EP16 software program developed at the Centers for Disease Control and Prevention (CDC) in Atlanta, the standard software used to analyze health surveys. For this survey, frequency tables were produced and indicator percentages calculated. The resulting point estimates are in the tables below.

Because sub-sample sizes were fairly small for some questions (such as mothers-only questions, immunizations under age 1, and child feeding trends among children 0-9 months), the confidence intervals are larger than ideal to provide robust results. This is also the result of a sample of 300 that includes children 0-59 months instead of only children 0-23 months, an effect that was considered in the survey design process. However, because of the project's broader population focus on children affected by HIV/AIDS, the compromise in accuracy was deemed a necessary trade-off for a more regionally relevant set of indicators.

RESULTS

The final project KPC was based on a questionnaire with 51 questions total, a shorter and more focused version of the baseline questionnaire, which consisted of 92 questions. It was decided that due to the smaller number of enumerators and the distance between households in survey areas, a shorter questionnaire would be more efficient and would still address data needs for all project indicators.

Survey results are listed by indicator in Table 3, and a comparison between baseline and final KPC results by indicator and module follows in Table 4. Results are presented only for those indicators evaluated by the KPC survey. Results for the full list of NDCSP indicators are in a separate report on the comprehensive NDCSP final evaluation.

The use of different denominators for different questions reflects whether (1) the questions were addressed to mothers and caregivers together, or mothers alone, and (2) questions were addressed to particular cohorts of the survey population selected for specific health-related criteria, such as whether their child had been ill with diarrhea during the preceding two weeks. Three hundred and four (304) questionnaires were entered into EPI/INFO for analysis.

Table 3: 2005 Final KPC Results - Ndwedwe District Child Survival Project

Proposal Objectives	Numerator/ Denominator	Percent	Comments
HIV/AIDS/STIs Objectives (30% of LOE), by EOP:			
1. 65% of mothers/caregivers will be aware of at least three symptoms of STIs other than HIV/AIDS in females.	137/304	45%	
2. Mothers reporting use of condoms on last act of intercourse will increase from 30% to 50%.	102/212	48%	
3. 90% of mothers can recognize at least three known ways in which a mother can transmit HIV/AIDS to her child.	166/212	78%	
4. 90% of mothers/caregivers will be willing to allow children under their care to play with an HIV-positive child.	231/304	76%	
Control of Diarrheal Diseases Objectives (20% of LOE), by EOP:			
1. 90% of mothers/caregivers whose child experienced a diarrheal episode during the previous 2 weeks will provide oral rehydration therapy (ORS, SSS or available home fluids) to the child under their care during diarrheal episodes.	76/78	97%	

2. 50% of mothers/caregivers will report that they wash their hands before feeding the child under their care.	92/304	30%	
3. 85% of mothers/caregivers whose child experienced a diarrheal episode during the previous 2 weeks will give the same or more liquids than usual during diarrhea episodes	53/81	65%	
Pneumonia Case Management Objectives (20% of LOE), by EOP:			
35% of mothers/caregivers whose child with cough experienced rapid or difficult breathing during the previous two weeks will seek medical attention by the end of the day after the onset of symptoms.	64/78	82%	This refers only to those who sought treatment for cough, not for rapid or difficult breathing.
Immunization Objectives (15% of LOE), by EOP:			
1. 70% of children aged 12-23 months are fully immunized per RTH card	48/57	84%	
Analyzed for all children 12-23 months of age, card seen or not.	48/90	53%	
2. 80% of children aged 12-23 months will have received a measles vaccination per RTH card	50/57	89%	
Analyzed for all children 12-23 months of age, card seen or not.	50/90	56%	
Maternal/Neonatal Care Objectives (15% of LOE), by EOP:			
1. At least 60% of mothers/caregivers will be aware of two or more of the danger signs in newborns that require immediate treatment	239/304	79%	
2. During their last pregnancy, 50% of mothers will have made an antenatal visit during the first trimester of pregnancy and at least three antenatal visits thereafter	109/212	51%	Indicator is based on 3+ antenatal visits only.

Rapid CATCH Findings

INDICATOR	Numerator/ Denominator	Percent	Comments
Measure of child health and well-being			
% of children aged 0-23 months who are underweight (-2SD) from the median weight-for-age, according to the WHO/NCHS reference population	All children <5 seen at PHC facilities who are underweight / all children <5 in Ndwedwe population	2.5%	Indicator is taken from DHIS 2004 data as the NDCSP had no nutrition or growth monitoring component.
Prevention of Illness/Death			
% of children age 0-23 months who were born at least 24 months after the previous surviving child	9/23	39%	
% of children age 0-23 months whose births were attended by skilled health personnel	118/122	97%	
Analyzed for children 0-59 months of age	201/212	95%	
% of mothers with children age 0-23 months who received at least two tetanus toxoid injections before the birth of their youngest child	71/122	58%	89% of mothers received at least one injection.
Analyzed for children 0-59 months of age	129/212	61%	
% of children age 0-5 months who were exclusively breastfed during the last 24 hours	6/19	32%	Because a high percentage of women are HIV+, and choose not to breastfeed due to MTCT concerns, this indicator lacks relevancy for Ndwedwe.
% of children aged 6-9 months who received breastmilk and complementary foods during the last 24 hours	6/43	14%	Because a high percentage of women are HIV+, and choose not to breastfeed due to MTCT

INDICATOR	Numerator/ Denominator	Percent	Comments
			concerns, this indicator lacks relevancy for Ndwedwe. Also, measured for 5-9 months.
% of children age 12-23 months who are fully vaccinated before the first birthday	48/57	84%	Coverage is 75%, according to DHIS 2004.
% of children 12-23 months who received a measles vaccine	51/57	89%	Coverage is 83.6%, according to DHIS 2004.
% of children 0-23 months who slept under an insecticide-treated net the previous night	N.A.		Malaria was not included in the project as Ndwedwe is not a malaria-endemic area.
% of mothers/caregivers with children age 0-23 months who cite at least two known ways of reducing the risk of HIV infection	156/170	92%	
Analyzed for children 0-59 months of age	268/304	88%	
% of mothers/caregivers with children age 0-23 months who report that they wash their hands with soap/ash before food preparation, before feeding, after defecation, and after attending to a child who has defecated.	13/170	8%	

Management/Treatment of Illness			
% of mothers/caregivers of children age 0-23 months who know at least two signs of childhood illness that indicate the need for treatment	131/170	77%	
% of sick children age 0-23 months who received increased fluids and continued feeding during an illness in the past two weeks	9/41	22%	Only data on more fluid is available.

Table 4: Comparison of indicator result percentages between baseline and final KPC

Cost Extension Proposal Objectives	Final KPC percent	Baseline KPC percent	Increase/ decrease from baseline
HIV/AIDS/STIs Objectives (30% of LOE), by EOP:			
1. 65% of mothers/caregivers will be aware of at least three symptoms of STIs other than HIV/AIDS in females.	45%	26%	+19%
2. Mothers reporting use of condoms on last act of intercourse will increase from 30% to 50%.	48%	30%	+18%
3. 90% of mothers can recognize at least three known ways in which a mother can transmit HIV/AIDS to her child.	78%	54%	+24%
4. 90% of mothers/caregivers will be willing to allow children under their care to play with an HIV-positive child.	76%	68%	+8%

Control of Diarrheal Diseases Objectives (20% of LOE), by EOP:			
1. 90% of mothers/caregivers whose child experienced a diarrheal episode during the previous 2 weeks will provide oral rehydration therapy (ORS, SSS or available home fluids) to the child under their care during diarrheal episodes	97%	69%	+28%
2. 50% of mothers/caregivers will report that they wash their hands before feeding the child under their care.	30%	9%	+21%
3. 85% of mothers/caregivers whose child experienced a diarrheal episode during the previous 2 weeks will give the same or more liquids than usual during diarrhea episodes	65%	50%	+15%
Pneumonia Case Management Objectives (20% of LOE), by EOP:			
35% of mothers/caregivers whose child with cough experienced rapid or difficult breathing the previous two weeks will seek medical attention by the end of the day after the onset of symptoms.	22% - fluid only	10%	Comparable data not available.

Immunization Objectives (15% of LOE), by EOP:			
1. 70% of children aged 12-23 months are fully immunized per RTH card	84%	51%	+33%
Analyzed for all children 12-23 months of age, card seen or not.	53%	35%	+18%
2. 80% of children aged 12-23 months will have received a measles vaccination per RTH card	89%	61%	+28%
Analyzed for all children 12-23 months of age, card seen or not.	56%	42%	+14%
Maternal/Neonatal Care Objectives (15% of LOE), by EOP:			
1. At least 60% of mothers/caregivers will be aware of two or more of the danger signs in newborns that require immediate treatment	79%	41%	+38%
2. During their last pregnancy, 50% of mothers will have made an antenatal visit during the first trimester of pregnancy and at least three antenatal visits thereafter	51%	20%	Final indicator is based on 3+ antenatal visits only.

Rapid CATCH Findings baseline to final comparison

INDICATOR	Final KPC Percent	Baseline KPC Percent	Increase/ decrease from baseline
Measure of child health and well-being			
% of children aged 0-23 months who are underweight (-2SD from the median weight-for-age, according to the WHO/NCHS reference population).	2.5%	N/A	Indicator is taken from DHIS 2004 data as the NDCSP had no nutrition or growth monitoring component.
Prevention of Illness/Death			
% of children age 0-23 months who were born at least 24 months after the previous surviving child	39%	N/A	N/A
% of children age 0-23 months whose births were attended by skilled health personnel	97%	87%	+10%
Analyzed for children 0-59 months of age	95%	86%	+9%
% of mothers with children age 0-23 months who received at least two tetanus toxoid injections before the birth of their youngest child	89% (based on one or more shots)	89% (based on one or more shots)	For purposes of comparison to baseline, mothers who received one or more shots was selected as the indicator.
Analyzed for children 0-59 months of age	61% (based on two or more shots)	84% (based on one shot)	
% of children age 0-5 months who were exclusively breastfed during the last 24 hours	32%	38%	- 6%
% of children aged 6-9 months who received breast-milk and complementary foods during the last 24 hours	14%	81%	-67%
% of children age 12-23 months who are fully vaccinated before the first birthday.	84%	51%	+33%
% of children 12-23 months who received a measles vaccine	89%	61%	+28%

INDICATOR	Final KPC Percent	Baseline KPC Percent	Increase/ decrease from baseline
% of children 0-23 months who slept under an insecticide-treated net the previous night	N/A		
% of mothers/caregivers with children age 0-23 months who cite at least two known ways of reducing the risk of HIV infection	92%	68%	+24%
Analyzed for children 0-59 months of age	88%	63%	+25%
% of mothers/caregivers with children age 0-23 months who report that they wash their hands with soap/ash before food preparation, before feeding, after defecation, and after attending to a child who has defecated	8%	5%	+3%
Management/Treatment of Illness			
% of mothers/caregivers of children age 0-23 months who know at least two signs of childhood illness that indicate the need for treatment.	77%	71%	+6%
% of sick children age 0-23 months who received increased fluids and continued feeding during an illness in the past two weeks	26% fluid - 28% food	1% food + fluid	Comparable data not available.

A. Demographics

The KPC survey conducted to evaluate the impact of the Ndwedwe District Child Survival Project included interviews with 212 mothers and 92 caregivers of a child under the age of five years, a total of 304 interviews (out of a planned 300). All interviewees were female. The age breakdown of respondents is below in Table 5a.

Table 5a: Age ranges of respondents by caregiver type.

Age Range	Mothers (%)	Caregivers (%)	Total
15 - 19 years	19 (9%)	4 (4%)	23 (8%)
20 - 24 years	62 (29%)	10 (11%)	72 (24%)
25 - 29 years	49 (23%)	9 (10%)	58 (19%)
30 – 34 years	35 (17%)	7 (8%)	42 (14%)
35 years and over	46 (22%)	58 (63%)	104 (34%)
Total	**211 (100%)**	**88 (97%)**	**299 (98%)**
Missing	1	4 (3%)	5 (2%)

Source: MCDI KPC 2005

The age ranges of children is broken out in Table 5b below by gender and type of caregiver.

The majority of sample children (81%) were between the ages of 0 and 23 months. The remaining 19% was in the 24-59 month range. Mothers accounted for 70% of the sample, caregivers 30%. While 100% of mothers and caregivers were female, child gender were almost evenly split between 52% boys and 48% girls.

Table 5b: Age ranges of children in sample by gender and caregiver type.

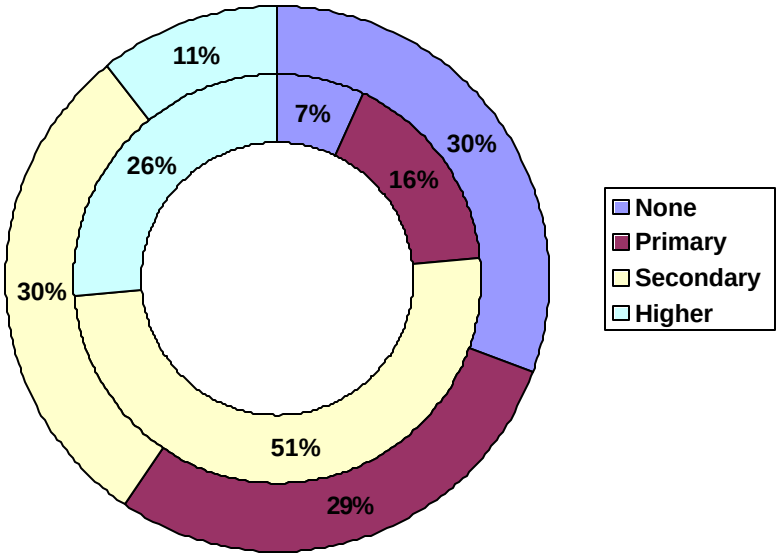
Age	Total (%)	Male	Female	Mother	Caregiver
0 – 5 mos.	26 (9%)	14	12	24	2
6 – 11 mos.	54 (18%)	29	25	38	16
12 – 23 mos.	90 (30%)	47	43	60	30
24 – 59 mos.	127 (41%)	65	62	87	40
Total	**297 (98%)**	**155 (52%)**	**142 (48%)**	**209 (70%)**	**88 (30%)**
Missing	7 (2%)				

Source: MCDI KPC 2005

The majority of respondents (93%) did no work outside the home. A larger percentage of caregivers were employed outside (16%) than mothers (4%).

As standards of education for women in underdeveloped areas go, the mothers and caregivers in the Ndwedwe sample were well educated overall, with 44% having secondary school educations and 22% above secondary school. When the data is disaggregated into type of caregiver, mothers tend to have a higher education level than nonmaternal caregivers, as illustrated in Graph 1 below: 26% of mothers versus 11% of caregivers had been educated at higher than secondary level; 50% of mothers versus 30% of caregivers had a secondary school education; and 7% of mother versus 31% of caregivers had no formal schooling. It is worth noting, however, that Zulu is the idiom of education in Ndwedwe, and a higher educational level does not necessarily produce as broadly useful an education as English-based learning.

Graph 1 : Educational Attainment for mothers and caregivers
Inside ring - mothers
Outside ring - caregivers



B. HIV/AIDS/STIs

Knowledge

Both mothers and caregivers of children in the 0-59 month age range were asked 11 questions relating to HIV/AIDS and sexually transmitted illnesses. Because of the highly sensitive nature of the questions (HIV and AIDS are still widely stigmatized in Ndwedwe, and there is also a deeply-ingrained cultural aversion to discussing anything related to sexual activity), interviewees were given the opportunity to refuse to answer any or all of these questions. It was encouraging that for the majority of questions, only a small percentage of respondents, if any, chose this option. This willingness to discuss these topics may point to both a growing readiness to talk about HIV/AIDS more openly, especially in light of its devastating impact on families and communities throughout Ndwedwe.

Interviewees were asked if they thought there were ways to avoid getting AIDS or the virus that causes AIDS. Only 7 out of 304 people refused to answer the question. Of those who did answer, 226 or 74% agreed that yes, there were ways to protect against HIV/AIDS. A larger percentage of mothers (81%) gave answered yes than caregivers (59%). Although the survey didn't identify the relationship of the caregiver to the child, it is well known to MCDI through knowledge of the project area that non-maternal caregivers are often the child's grandmothers who tend to more rooted in the traditional and so may have less awareness of HIV/AIDS information and other more recent health education messages than the generally younger mothers. Also in the age breakout for

respondents, 63% of caregivers versus 22% of mothers were in the 35 years and older age range (see Table 5a in Demographics section above).

Respondents were then asked how a person might avoid getting HIV/AIDS, and no answers were prompted. Eighty-one percent (81%) were aware of condom use for prevention, 68% of abstinence, and 31% of staying faithful to one partner, the three most widely promoted avoidance methods. Knowledge of abstinence and fidelity was higher among mothers (69% and 34%, respectively) than caregivers (65% and 22%), but more caregivers mentioned condom use (87%) than mothers (78%). Methods such as avoiding sex with prostitutes (10% overall) and avoiding sex with someone who has many other partners (15% overall) were substantially less likely to be mentioned, perhaps indicating how effective communication of the "big three" has been in these communities. Only 2% mentioned seeking out a traditional healer. The comprehensive results are presented below in Table 6.

Table 6: Mother and caregiver answers on how to avoid HIV/AIDS

	What can a person do to avoid contracting aids?		
	Mothers (%)	**Caregivers (%)**	**Total (%)**
Abstain from sex	119 (69%)	35 (65%)	154 (68%)
Use condoms	135 (78%)	47 (87%)	182 (81%)
Stay faithful to one partner	58 (34%)	12 (22%)	70 (31%)
Limit number of sexual partners	30 (17%)	11 (22%)	41 (18%)
Avoid sex with prostitutes	13 (7%)	9 (17%)	22 (10%)
Avoid sex w/person w/many partners	26 (15%)	9 (17%)	35 (15%)
Intercourse with same sex	9 (5%)	2 (4%)	11 (5%)
Avoid sex with intravenous drug users	6 (3%)	2 (4%)	8 (4%)
Avoid blood transfusions	31 (18%)	15 (28%)	46 (20%)
Avoid injections	8 (5%)	1 (2%)	9 (4%)
Avoid kissing	2 (1%)	0 (0%)	2 (1%)
Avoid mosquito bites	0 (0%)	4 (7%)	4 (2%)
Seek traditional healer's protection	3 (2%)	1 (2%)	4 (2%)
Avoid sharing razors, blades	27 (16%)	11 (22%)	38 (17%)
Refused to answer	7 (4%)	2 (4%)	9 (4%)

N = 172 for mothers; 54 for caregivers; 226 total. Note: Multiple answers allowed; no total provided.

Mothers only were asked under which of four circumstances the AIDS virus might be passed from a mother to her baby: during pregnancy, during delivery, during breastfeeding and during mixed feeding of breastmilk and solid food. 78% chose at least three answers correctly, 24% two answers, and 22% a single or no answer.

When asked what signs other than HIV/AIDS might indicate an STI in a female, 50% of mothers and 34% of caregivers were able to list three or more symptoms unprompted. When asked about signs in a male, 33% of mothers knew three or more symptoms as were 28% of caregivers. Unlike the other questions in this module, however, there was a significant number of refuse-to-answer responses - 14% for the question on symptoms of STIs in females, 17% for the question on STI symptoms in males. It is unclear whether this was due to discomfort with the question matter or just a lack of knowledge.

Attitudes and practices

Mothers alone were asked if they had used a condom the last time they had sexual intercourse. Forty-eight percent (48%) said they had used a condom, 43% said they hadn't. Surprisingly, only 4% refused to answer this rather personal question. The fact that almost half didn't use a condom is probably related to the fact that those women were married and had at least an expectation of fidelity. There is also a strong trend among men in the community to refuse to use a condom, especially with their wives if they're married.

Asked whether they would allow their child to play with another child who had HIV/AIDS, 76% of the sample said they would, 23% said they wouldn't. Mothers were more likely than caregivers to say yes (79% versus 66%, respectively), and no one refused to answer the question. When asked whether she would be willing to let the child go to school where one of the teachers had HIV/AIDS, 82% of mothers and 68% of caregivers said yes they would allow this.

Mothers and caregivers were also asked whether they would take care of a family member who had AIDS. Eighty-seven percent (87%) overall said they would be willing to do this. Mothers lead the percentages with 91% compared to 77% of caregivers expressing their willingness. Again, only a very small percentage refused to answer.

IMCI

1. Control of Diarrheal Disease

Knowledge

Only 81 mothers and caregivers had children who'd experienced diarrhea sometime in the two weeks prior to the interview. These respondents were asked what actions should be taken to help a child recover from diarrhea and were not prompted with answers. Of the four actions recommended by the WHO and mandated by the KwaZulu Natal IMCI guidelines for control of diarrheal disease – giving the child smaller and more frequent feeds, giving the child more food than usual, giving the child food with higher caloric content, and giving the child more fluids such as ORS, SSS and breast milk - percentages on correct responses varied from 46% for feeding the child food with higher caloric

content to 31% for offering the child more food than usual. The detail on all responses is in Table 7 below. Percentage of correct responses was fairly equitable between mothers and caregivers as represented in Graph II below.

Table 7: Correct actions to take when child is recovering from diarrhea.

Actions for recovery after diarrhea	Mother (% of 55)	Caregiver (% of 26)	Total	Percent of 81
Give the child smaller and more frequent feeds	19 (35%)	9 (35%)	28	35%
More food usual	17 (31%)	8 (31%)	25	31%
Give food with higher caloric content	23 (42%)	14 (54%)	37	46%
Give more fluids like sorol (sugar-salt solution), ORS, breastmilk, water	26 (47%)	9 (35%)	35	43%
Don't know	4 (7%)	1 (4%)	5	6%

N = 55 for mothers; 26 for caregivers; 81 total. Note: Multiple answers allowed; no total provided.

Attitudes and practices:

The recent-diarrhea sub-sample was asked how the child was cared for at home while ill, whether given ORS, sugar-salt solution, antibiotics or traditional medicine. Only 4% of the total sub-sample said that nothing was done, and only 11% used remedies from a traditional healer (13% of mothers and 8% of caregivers). At 69%, the majority provided sugar-salt solution (correct preparation of the solution was not queried but was assumed). And overall, 97% of respondents who were not exclusively breastfed had provided some additional oral rehydration therapy, whether ORS or sugar-salt solution. All responses are listed by treatment and caregiver type in Table 8 below.

Table 8: Home care for children with diarrhea during two weeks prior to survey interview provided by mother or caregiver.

Given to treat diarrhea at home	Mother (% of 55)	Caregiver (% of 26)	Total	Percent of 81
Nothing	2 (4%)	1 (4%)	3	4%
ORS	8 (15%)	12 (46%)	20	25%
Sugar-salt solution	43 (78%)	13 (50%)	56	69%
Antibiotic	3 (5%)	2 (8%)	5	6%
Traditional medicine	7 (13%)	2 (8%)	9	11%
Other	2 (4%)	2 (8%)	4	5%
Don't know	0 (0%)	0 (0%)	0	0%

N = 55 for mothers; 26 for caregivers; 81 total. Note: Multiple answers allowed; no total provided.

When asked about quantities of breastmilk, other liquids and food offered during the diarrheal episode, responses were mixed. According to WHO and KZN IMCI guidelines, more of everything should be offered to the child during a diarrheal episode. According to data collected, a slight majority of breastfeeding babies were given additional feeds (30%), while 27% were fed about the same amount as usual. Almost a quarter of the sub-sample (23%) were given less breastmilk. Just over a quarter of the children (26%) were offered additional liquids during diarrhea while more than half (56%) were offered about the same amount and 27% were offered less liquid. As to food offered, 22% were given more food and 44% about the same amount as usual. Only 27% were given less food. The usual explanations for reduced intake is the child's refusal to take in additional food and fluid and the caregiver's fear of causing the child to vomit from too much intake. (See Tables 9, 10 and 11 below for more detail.)

Table 9: Frequency of breastfeeding during diarrheal episode.

	Breastfeed more, less, about the same amount or stopped during diarrhea?		
	Mothers (%)	**Caregivers (%)**	**Total (%)**
Less	15 (27%)	4 (15%)	19 (23%)
About the same amount	15 (27%)	7 (27%)	22 (27%)
More	16 (29%)	8 (31%)	24 (30%)
Stopped completely	3 (5%)	0 (0%)	3 (4%)
Nonbreastfeeder	5 (9%)	5 (19%)	10 (12%)
Don't know	0 (0%)	2 (8%)	2 (2%)
Missing	1 (2%)	0 (0%)	1 (1%)
Total	**55 (100%)**	**26 (100%)**	**81 (100%)**

N = 55 for mothers; 26 for caregivers; 81 total

Table 10: Amount of fluids offered during diarrheal episode.

	Offered more, less, or about the same amount to drink during diarrhea?		
	Mothers (%)	**Caregivers (%)**	**Total (%)**
Less	18 (33%)	4 (15%)	22 (27%)
About the same amount	21 (38%)	11 (42%)	32 (52%)
More	11 (20%)	10 (38%)	21 (26%)
Exclusively breastfed	3 (5%)	0 (0%)	3 (4%)
Don't know	0 (0%)	1 (4%)	1 (1%)
Missing	3 (5%)	0 (0%)	3 (4%)
Total	**55 (100%)**	**26 (100%)**	**81 (100%)**

N = 55 for mothers; 26 for caregivers; 81 total

Table 11: Amount of food offered during diarrheal episode.

	Offered more, less, or about the same amount to EAT during diarrhea?		
	Mothers (%)	**Caregivers (%)**	**Total (%)**
Less	16 (29%)	7 (27%)	23 (28%)
About the same amount	24 (44%)	12 (46%)	36 (44%)
More	11 (20%)	7 (27%)	18 (22%)
Exclusively breastfed	2 (4%)	0 (0%)	2 (3%)
Don't know	0 (0%)	0 (0%)	0 (0%)
Missing	2 (4%)	0 (0%)	2 (2%)
Total	**55 (100%)**	**26 (100%)**	**81 (100%)**

N = 55 for mothers; 26 for caregivers; 81 total

Good sanitation practices are critical to diarrhea care and prevention and is an established key family practice. The survey included questions on handwashing practices in particular. Respondents were asked when they tended to wash their hands, with no answers prompted. The desired times include "before food preparation," "before eating," "before feeding child," "after toileting," and "after cleaning child's waste." Responses for these were worrisomely low. Although 73% mentioned washing their hands after toileting, only 42% mentioned doing so after cleaning the child's waste. Of greater concern, however, is that only 30% mentioned washing their hands before feeding the child, a key time to introduce diarrhea-causing bacteria into the child's system from soiled hands and utensils. Fifty-six percent (56%) did however mention washing their hands before food preparation. Only 8% of respondents with children in the 0-23 month age group washed their hands at all desired times. (See Table 12 below.)

Table 12: Identification of routine hand-washing practices among mothers and caregivers.

	when do your wash your hands?		
	Mothers (%)	**Caregivers (%)**	**Total (%)**
Before food preparation	121 (57%)	50 (54%)	171 (56%)
Before eating	90 (42%)	45 (49%)	135 (44%)
Before feeding child	62 (29%)	30 (33%)	92 (30%)
After toileting	151 (71%)	70 (76%)	221 (73%)
After cleaning child's waste	93 (44%)	34 (37%)	127 (42%)
Other	5 (2%)	3 (3%)	8 (3%)
Never	2 (1%)	1 (1%)	3 (1%)

2. Child feeding

Practice and coverage

Although the project did not have a specified nutrition module, good feeding practices are an important component of the IMCI approach to maintaining and promoting child health in KwaZulu Natal. These practices were therefore promoted as part of NDCSP activities, especially with regard to breastfeeding and appropriate timing of an appropriate weaning diet. As such, the current KPC survey asked mothers whether or not they had ever breastfed their child and if so, how soon after birth the child was put to the breast. Also, both mothers and caregivers of children 9 months and under were asked what the child was fed during the previous 24 hours.

Seventy-five percent (75%) of mothers had breastfed their child at some point, and 68% had put the child to the breast either within the first hour after birth, indicating that the child was fed health-enriching colostrum. The remaining 32% had first breastfed the child within or after the first 8 hours, after the colostrum was likely to have been expressed and discarded.

The WHO and KZN IMCI guidelines recommend that children be exclusively breastfed for the first 4 to 6 months of life with the addition of appropriate complementary foods during the weaning period (5 to 9 months). To evaluate these practices in Ndwedwe, the KPC survey asked mothers and caregivers of children 0-9 months what the child had consumed in the previous 24 hours. The 0-5 month-olds ideally should still be exclusively breastfed and therefore receiving nothing but breastmilk. The 5-9 month olds should be weaning and receiving clean water and other liquids as well as mashed, pureed solid or semi-solid foods in addition to breastmilk.

The 0-5 month sub-sample was particularly small with only 19 children total and 9 of the mother/caregivers as nonrespondents (for unknown reasons). Of those who did answer, 33% of the babies had received only breastmilk in the previous 24 hours. The 5-9 month sub-sample was slightly larger with 43 children total, and the majority (42%) had consumed only breastmilk while only 14% had consumed breastmilk and food, the desired diet for this age group.

Table 13: Exclusive breastfeeding rate among children under 6 months old.

	What did the child consume in the last 24 hours? (age 0-5 months) (N = 19)		
	Mothers (%)	**Caregivers (%)**	**Total (%)**
Breastmilk only	5 (28%)	1	6 (33%)
Breastmilk and plain water	1 (5%)	0	1 (5%)
Breastmilk and other liquids	1 (5%)	0	1 (5%)
Mashed, pureed solid or semi-solid foods	2 (11%)	0	2 (11%)
No response	9 (50%)	0	9 (50%)

Table 14: Complementary food diet among children 5-9 months old.

	What did the child consume in the last 24 hours? (age 5-9 months) (N = 43)		
	Mothers (%)	**Caregivers (%)**	**Total (%)**
Breastmilk only	13 (30%)	5 (12%)	18 (42%)
Breastmilk and plain water	2 (5%)	1 (2%)	3 (7%)
Breastmilk, plain water and other liquids	1 (2%)	0	1 (2%)
Breastmilk, plain water and mashed/pureed food	1 (2%)	1 (2%)	2 (5%)
Breastmilk and food	5 (12%)	1 (2%)	6 (14%)
No response	2 (5%)	2 (5%)	4 (9%)

3. Pneumonia Case Management

<u>Knowledge</u>

Unprompted, 77% of mothers and caregivers of children in the 0-23 month age group knew at least 2 of the signs of illness in a young child that require urgent care. Of single responses, the most widely known signs were a high fever (58%), excessive crying (38%), lethargic or difficult to wake (29%), and vomits everything (28%). The least mentioned sign was convulsions (1%). Only 1% could not name at least 1 sign.

Practice

A total of 78 children had had a cough within the previous 2 weeks. (Due to an error in the questionnaire, respondents were not asked about fast breathing.) This sub-sample was asked how soon professional treatment was sought, ideally by the end of the first day of illness. Eighty-two percent (82%) had sought out treatment at a health facility for their child. The majority of those (53%) brought the child to a clinic. However, it should be noted that since treatment was sought for a cough that may not have been caused by pneumonia, this may indicate an overuse of health facilities for minor illnesses.

Of those with cough during the prior two weeks, 22% received more fluid than usual.

4. Immunization

By the age of 1 year, Ndwedwe children should have received at least one dose of all essential childhood vaccinations recommended both by the WHO and the KZN DOH.

To collect certified data on the immunization status of children 12-23 months old, survey enumerators were instructed to ask the mother or caregiver if she had a Road to Health card for the child. If the answer was yes, the interviewer asked to see it. All immunization data was therefore collected from actual RTH cards, which had been filled in by clinic nurses or other healthcare professionals.

Of the 90 children in this age group included in the sample, 57 mothers and caregivers were able to produce a Road to Health card and became the sub-sample for this module.

Knowledge

All mothers and caregivers were asked when a child should get a measles shot. A total of 107 respondents or 36% of the total sample responded: 94% of this sub-sample correctly stated 9 months as the timing for the first measles shot, and 82% correctly placing the second shot at 18 months.

Coverage

The coverage figures for OPV, DPT, measles and full immunization for children 12-23 months old are below in Table 15.

Table 15: Immunization Coverage for Children 12-23 Months of Age

IMMUNIZATION TYPE	TOTAL (%)
BCG	55 (97%)
Polio 1	54 (95%)
Polio 2	55 (97%)
Polio 3	53 (93%)
DPT 1	54 (95%)
DPT 2	52 (91%)
DPT 3	50 (88%)
Measles 1	**51 (89%)**
Fully immunized by age 1	**48 (84%)**

N = 57

Coverage rates for this sub-sample were excellent with 84% of the children fully immunized by their first birthdays; 89% had received at least one measles shot, a substantial increase from the 61% coverage reported from the baseline survey. There may be self-selecting implications of such high coverage rates, i.e., mothers and caregivers who could locate and produce their child's Road to Health card may be more conscientious about the child's care and thus more likely to bring the child in for vaccinations at the scheduled times.

However, it is as likely that immunization coverage has markedly improved from a fully immunized rate of 51% in 2001 (based on RTH cards seen) due to the efforts of the NDCSP to support not only correct stocking and administration of vaccinations by facility nurses, but also to train nurses to distribute RTH cards and to record those immunizations consistently and accurately on the cards.

Full immunization coverage of all one-year-old children in the sample (90 total), whether or not a RTH card was seen, was 53% compared to 35% at baseline. Percentage of all 12-23 month children who had received at least one measles shot, also whether or not the card was available, was 56%; the baseline figure was 42%.

D. Maternal and newborn care

Knowledge

Of the 212 mothers interviewed, only 36 or 17% did not know any of the danger signs to watch for during pregnancy, such as fever; shortness of breath; bleeding; and swelling of the face, hands or body. This compares to approximately half of the 33% in the 2001 baseline survey who didn't know any of these possible symptoms of a compromised

pregnancy. In the current survey, bleeding was the most known with 48% of the sample mentioning this danger sign. (See Table 16 for details.)

Table 16: Knowledge of danger signs during pregnancy.

SYMPTOMS OF URGENT CARE NEEDED WHILE PREGNANT	TOTAL (%)
Fever	46 (22%)
Shortness of breath	45 (21%)
Bleeding	101 (48%)
Swelling of body/hands/face	82 (39%)
Other	31 (15%)
Don't know	17 (8%)

N = 212. Note: Multiple responses allowed; no totals provided.

As to the five signs of serious illness to watch for in a newborn baby – poor feeding, fast breathing, sluggishness, irritable crying, and fever – 79% could name at least two signs, and only 3% of mothers and 2% of caregivers could not name at least one sign. Irritable crying was the most mentioned sign, identified by 58% of the sample. Full response details in total and by respondent type are below in Table 17.

Table 17: Signs of serious illness in newborns known by mothers and caregivers.

SIGNS OF SERIOUS ILLNESS	MOTHERS (%)	CAREGIVERS (%)	TOTAL (%)
Poor feeding	93 (44%)	32 (35%)	125 (41%)
Fast breathing	27 (13%)	9 (10%)	36 (12%)
Sluggishness	82 (39%)	52 (57%)	134 (45%)
Irritable crying	120 (57%)	54 (59%)	174 (58%)
Fever	112 (53%)	50 (54%)	162 (54%)
Other	15 (7%)	6 (7%)	21 (7%)
Don't know	7 (3%)	2 (2%)	9 (3%)

N = 212. Note: Multiple responses allowed; no totals provided.

Coverage

1. Antenatal Care

The current KPC survey revealed that 88% of the 212 mothers in the sample had gone to a doctor (22%) or nurse (66%) for at least 1 prenatal visit. Only 9% had gone to a traditional healer and only 6% had not gone to see anyone at all about their pregnancy. Of these 187 women, 51% had gone to a health provider for 3 or more prenatal visits. This is

again a notable improvement from the 76% of the baseline sample who had seen a professional for antenatal care. The current KPC did not measure timing of the first antenatal visit, however the fact that 51% of the sample had made 3 or more antenatal visits perhaps supports the idea that more pregnant women are aware of the benefits of antenatal care and, with the support of NDCSP training and educational activities, are seeking it out earlier in their pregnancies.

2. Tetanus Toxoid Immunizations

Mothers in the current sample were asked if they remembered receiving an injection in the arm during their last pregnancy (with a clear distinction made between that and a blood draw). The question made the assumption that these were likely to have been tetanus toxoid (TT) vaccinations.

All pregnant women should get at least two TT injections. Of the 122 mothers of children in the 0-23 month age group, 58% remembered getting at least two injections.

3. AIDS Testing

When asked whether they had been counselled and tested for HIV/AIDS during their most recent pregnancy, 73% said they had, which is an increase from the baseline coverage figure of 57%. Only two women in the current sample said they didn't know whether they had been counselled and tested, and the remaining 24% said they had not.

4. Place of Delivery, Delivery Attendants and Postpartum Period

When asked where they delivered their last baby, 93% of mothers had given birth in either a hospital (61%) or a community health center (29%) or a clinic (8%). Only 5% had given birth in their own home, and only 3% had given birth in a location listed under "other." (At least one mother reported giving birth to her baby in a taxi.)

A full 85% of the sample had been assisted in delivering their baby by either a nurse (75%) or a doctor (20%). Only 5% had gotten help from a family member, and no one in the sample had delivered her baby by herself.

This again shows improvement over baseline as in 2001, 85% of mothers gave birth in a health facility, 15% had given birth at home, 14% had no professional assistance during delivery, and a small percentage did give birth alone.

V. DISCUSSION

A. HIV/AIDS/STIs

Responses to questions on HIV/AIDS and STI knowledge and attitudes in the current KPC were very encouraging and overall displayed a movement away from traditional attitudes toward HIV/AIDS – that people get it because of they're either sexually promiscuous or the victims of witchcraft – toward more enlightened views and practices. Results of the KPC show an increased and more sophisticated awareness of HIV/AIDS, including its WHO-supported and KZN DOH-promoted methods of prevention (as well as a reduced reliance on traditional healers for protection).

- 75% agreed that there were ways to avoid getting HIV/AIDS;
- 81% were aware of condom use for prevention, 68% of abstinence, and 31% of staying faithful to one partner; only 2% mentioned seeking out a traditional healer for help;
- 45% knew at least three symptom of STIs other than HIV/AIDS in females (an increase of 19% from the baseline survey).
- 76% of mothers and caregivers would allow the child to play with a friend who has HIV/AIDS; 78% would allow the child to go to a school with an HIV+ teacher, and 87% would take care of a family member with AIDS.
- 73% of mothers remembered being counseled and tested for HIV while pregnant.

Although condom usage during last sexual intercourse was only 48%, this is a promising 18% increase from baseline. Women in Ndwedwe continue to be reluctant to insist on condom use as men in Ndwedwe are generally still adverse to it, even in a monogamous relationship. Although the women may be concerned about the man having other sexual partners and putting them at risk, they often feel powerless to demand fidelity, dependent as they are on the man's financial and/or emotional support. Women also resist provoking confrontation in order to maintain even fragile marital ties, as there is a deeply ingrained precept in Zulu culture that a female is not a "real woman" unless she's married.

Knowledge levels were equivalent between mothers and caregivers, although mothers tended to have attitudes that reflected more openness to social interaction with people who have HIV/AIDS. As mentioned earlier, this is possibly due to the tendency of caregivers to be older women - grandmothers or aunts - who more deeper rooted in traditional attitudes. (The majority of caregivers in the sample were in the over-35 year age group, while the majority of mothers were in the 20-24 year age group.)

The project has had three main approaches to HIV/AIDS/STIs: 1) preventing new cases through community-based prevention and treatment programs, such as continued training of nurses on WHO/KZN DOH protocols for providing VCT, treatment and support for PLWHA, as well as on PMTCT, and supporting implementation of VCT centers in health

facilities; 2) strengthening the capacity of families and communities to meet the needs of orphans and children affected by AIDS through project such as the Mavela model crèche that provides a roster of services specifically for OVCs, including assistance with social grants and household food security support; and 3) providing support to and supervision of home-based care for PLWHA through training of CHWs and HBCVs, community elders, clergy and traditional healers on the facts of the disease, available treatments, effective precautions against the virus, and care of PLWHA within the community.

It appears that these efforts have already begun paying off in the general and significant improvement in related knowledge, practices and coverage. It is expected that the investment of education and training in Ndwedwe communities will continue to improve the status of both child and maternal health.

B. Control of Diarrheal Diseases

Data from the current KPC survey is based on responses from mothers and caregivers whose child had experienced diarrhea only in the two weeks prior to the survey. However this is likely to be representative of trends in diarrheal prevention and treatment throughout the year.

According to South Africa Health Review for 2005, KwaZulu Natal had the highest incidence of child diarrhea in the country at a rate of 244.2 per thousand children under 5 years old. The national average is 128.7 per thousand. Ilembe DHIS figures from 2004 indicate that in Ndwedwe alone there were 29.5 new cases of child diarrhea per 1,000 children under 5 reported at health facilities and 6.44 cases of diarrhea with dehydration seen. This doesn't account for cases of diarrhea, dehydration and dysentery that go unreported when children aren't brought in for care.

Most encouraging to see was a marked improvement in home-based care, especially in the amount of food and fluids provided to a child with diarrhea to combat critical loss of fluids and nutrients that place an already vulnerable child at increased risk. Only 27% of the sample gave the child less fluid, a reduction of 8% from baseline, and only 28% gave less food, down significantly from 45% in the baseline. Use of ORS and SSS increased as well, displaying the possible impact of the project's focused efforts to train healthworkers and community members on knowledge of dehydration signs and correct rehydration methods recommended in the C/HH IMCI protocol for control of diarrheal disease in young children.

Of continued concern, however, is the improved but still low levels of basic preventive sanitation habits, such as handwashing at all key times recommended in C/HH IMCI protocol. In particular, the combined mother and caregiver level for handwashing prior to feeding was only 30%, and although this was an increase from 15% in the baseline the rate could be higher. The level for after cleaning child waste was only 42% (not measured in the baseline KPC). This points to the need for continued education and reinforcement of behavior change messages to improve home sanitation practices and

decrease incidence of child diarrhea, still a major cause of child morbidity and mortality in Ndwedwe.

C. Child Feeding

In assessing child feeding practices, current KPC data revealed that 75% of mothers had breastfed their babies at some point and 67% of those mothers had fed the child colostrum. This is roughly comparable and an apparent improvement of the 1998 DHS figure of 37% in KwaZulu Natal who had given their colostrum to the child. Looking at exclusive breastfeeding rates for the first 5 months), although the KPC subsample was very small (only 19 babies between 0-5 months), only 33% had consumed only breastmilk in the previous 24 hours. This is higher than 1998 DHS rates for KZN for this age group, which were roughly 20%.

The 33% exclusive breastfeeding rate in Ndwedwe is still far below the ideal 100% rate set by the WHO and promoted through KZN DOH IMCI guidelines. A likely justification for this, again, is the high rate of HIV prevalence in Ndwedwe and the fact that a mother who either knows or suspects that she might be HIV+ may choose not to breastfeed her baby for an extended period of time if at all due to fears of transmitting the virus through her breastmilk. As such, the NDCSP has continued to facilitate PMTCT programs throughout Ndwedwe health facilities.

To evaluate whether children 5-9 months old were consuming an appropriate weaning diet of clean fluids and soft, nutrient-rich foods in addition to continued intake of breastmilk, a subsample of children in this age group was identified (N = 43) and their mother or caregiver asked what the child has consumed in the previous 24 hours. The results were slightly contradictory to those from the younger group as a larger 42% were exclusively breastfed. Only 14% were receiving breastmilk plus soft food, as recommended by WHO infant feeding standards. However, it still remains a question whether either of these child-feeding results is relevant to Ndwedwe, both because of the effect of HIV prevalence on feeding choices and the very small sample sizes from the survey.

D. Pneumonia Case Management

South Africa Health Review figures from 2002 show that KwaZulu Natal has the highest incidence of under-5 pneumonia in the country at 523 new cases per 1,000 children in this age group. The national average for that year 241 cases per 1,000 children. DHIS figures from 2004 for Ilembe indicate that with a rate of 10.45 new cases of pneumonia per 1,000 children under 5, Ndwedwe had the highest rate in the district.

There are implications that the training of facility and community healthcare workers in the need for prompt, professional treatment of a cough or fast breathing - the primary symptoms of acute respiratory infection (ARI) in children – has delivered results. A full 82% of the sub-sample brought to a health facility within the first day of evident

symptoms. The majority of these (86%) consulted the nurse at their local clinic or community health center, where NDCSP training efforts had been focused throughout Phase II. No one in the sample took the child to a traditional healer.

However, due to an error in the questionnaire, only mothers and caregivers of children who had had a cough in the prior two weeks, not necessarily rapid breathing, were asked about treatment followup. Because it is unclear how many of these children had pneumonia or just had a cough, this high response rate may indicate an overuse of clinic services for minor illness and should be investigated further.

E. Immunization

To address the question of how many children were fully immunized by their first birthday – having received all the recommended child vaccinations up to that point, including their first measles vaccination at or around 9 months – a sub-sample of children 12-23 months old was selected.

To qualify data on immunizations, information on what the child had received was collected only from mothers and caregivers who were able to produce the child's actual Road to Health card (RTHC) to show to the enumerator, regardless of whether or not they said the child had a card. The enumerator then recorded the dates of all vaccinations received in a form included in the questionnaire.

Only 57 of 90 mothers and caregivers of children in this age group were able to produce a card for the enumerator. Of these, 48 children or 84% had been fully immunized, slightly below the national target of 90% but substantially above the 50% measured in KwaZulu Natal in the 1998 DHS and markedly above the 2003 rate of 74.5% full coverage in Ndwedwe measured by DHIS. This high coverage figure reflects the improved training of facility healthworkers in correct administration of vaccines as well as regular and accurate recording of immunization and other data on the Road to Health card that every young child should have.

To gain a larger sense of coverage, full immunization status was also assessed against the total 0-23 sub-sample of 90. The resulting 53% is an increase of 18 percentage points from 35% at baseline. Similarly, measles coverage was 56% compared to 42% at baseline. Although not as dramatic, this is still indicative of significantly increased immunization coverage of children in this population.

F. Maternal and Neonatal Care

Antenatal Care

Antenatal care coverage has improved in Ndwedwe over the project period. Although the timing of the first antenatal visit was not provided for this sample in the current KPC, 87% said they had gone to a health facility for antenatal care and 51% had made 3 or more antenatal visits prior to giving birth. The rate for Ndwedwe measured in 2004 by DHIS was an average of 5.1 antenatal visits per pregnancy.

Tetanus Toxoid Immunization
Maternal cards are kept at health facilities in Ndwedwe. As such, the data on tetanus toxoid or TT shots received was based on maternal recall only. A very high percentage (58%) of mothers reported getting 2 or more injections in the arm during pregnancy, assumed to be TT injections, comparing favorably to the 75% coverage reported for Ndwedwe by DHIS data from 2004.

Place of Delivery, Delivery Attendants and Postpartum Period
Ninety percent (90%) of the mothers in the current KPC gave birth at a health facility with the help of a skilled professional, similar to baseline results.

Only 23% of mothers didn't know any of the danger signs during pregnancy, a reduction of 10% from the baseline. And only 10% knew no signs of urgent care needed in a newborn. This is perhaps the result of the Project's successful efforts to (a) increase the availability of clinic level antenatal care for pregnant women; (b) provide mobile clinic services that conduct deliveries and obstetric emergencies; (c) support community based maternal and newborn care provided by trained TBAs; (d) train CHWs, HBCVs, and CHCs in maternal and newborn care danger signs, enabling them to advise mothers to seek early medical care and conduct health education activities in their respective communities; and (e) train TBAs in the Project area to conduct safe deliveries and making timely and appropriate referrals.

DISSEMINATION OF SURVEY FINDINGS

All Project stakeholders have expressed a keen interest in learning the results of the current evaluation. As such, MCDI has made the following plans to disseminate the results in the appropriate format to each group. Report timing will be arranged in agreement between stakeholder and MCDI staff schedules. To maximize time and resources, opportunities at established centralizing events will be pursued.

KwaZulu Province and Ilembe District Department of Health
Distribution of the full report to program managers and delivery of a PowerPoint presentation summarizing findings to be delivered at a monthly district managers meeting for Ilembe at the District's Department of Health offices.

It will be left to the PHC managers at this meeting to disseminate a copy or present a summary of the results to the Ndwedwe facility staff under their supervision.

A preview of the report will be provided prior to the presentation to Ms. Janet Dalton, Maternal Child and Women's Health Program Manager for KwaZulu Natal province, Ms. Sandra Moodley, Maternal Child and Women's Health Program Manager for Ilembe District, and Ms. Sibongile Dube, Ilembe DOH District Manager.

Partner NGOs and CBOs
MCDI will arrange for representatives of Project partners to meet at MCDI's offices and view a the PowerPoint presentation on results and to receive an abbreviated copy of the full Project report, focusing on the outcomes related to their efforts on the Project.

Traditional leaders and council members
MCDI will give a short oral presentation of the Project results to all Ndwedwe tribal leaders and council members attending one of the monthly meetings arranged by the municipality. Timing to be arranged.

MCDI will also deliver a handout with results appropriately presented in basic points for leaders to distribute to members of their community. MCDI will also be available to present results to large gatherings of community members – including clergy members and traditional healers who had participated in Project training - per request of tribal authorities.

V. APPENDICES

A. Population data.

B. Survey sampling frame.

C. Project resource requirements

D. DHIS data from 2002-2004.

E. Questionnaires (English and Zulu).

F. Training curriculum and materials.

Appendix A

Population Data for Ndwedwe

1. Population of Ndwedwe Municipality per Area/Village (Census 2001)

Tribal Authority/Areas	Estimated Population	Estimated Number of Households
Amalanga	6,075	949
Chili	2,124	332
Cibane	495	77
Gcwensa	10,981	1716
Hlophe	1,469	230
Inkumba/KwaNyuswa	25,229	3942
Iqadi	7,978	1247
Khumalo	1,661	260
Luthuli	4,411	689
Mangangeni/Vumazonke	2,063	322
Mathonsi	545	85
Mlamuli Nyuswa	21,735	3396
Ndwedwe Mission	9,957	1556
Ngcolosi	2,458	384
Ngongoma/Mavela	11,642	1819
Nhlangwini	7,785	1216
Nodunga	3,012	471
Nyuswa/Nodwengu	11,574	1808
Qadi	3,163	494
Qwabe (Madundube)	2,680	419
Qwabe N	3,547	554
Shangase	7,800	1219
Wosiyane	4,112	643
Total	**152,496**	**23,828**

2. Primary Health Care Facility Catchment Population
Mid-Year Estimates for 2004 (DHIS)

Name of Health Facility	Total Cachment Population	Under 1	Under 5	Women 15-49	Youth 15-24
Chibini Clinic	13724	334	1462	3456	3125
Esidumbini Clinic	15834	385	1687	3985	3604
Kearsney Clinic	14827	360	1580	3731	3375
Nyuswa Clinic	10736	261	1144	2702	2444
Molokohlo Clinic	9769	238	1041	2458	2224
Thafamasi Clinic	7559	184	806	1902	1721
Wosiyane Clinic	7957	193	847	2003	1810
Ndwedwe CHC	63167	1536	6730	15900	14381
Montebello PHC / OPD	12471	303	1329	3138	2839
Total	**156,043**	**3,795**	**16,627**	**39,274**	**35,523**

Appendix B - Survey Sampling Frame

Attachment Cluster Sample: NDCSP KPC 2005

Enumeration Area Code	Tribal Authority	Izigodi	Est. Population	Estimated number of Households	Area	Cluster Number
	Inkumba/Nyuswa					
5436006		Abajuti	2530	395	Nyuswa Clinic	1
					Hlomantethe	2
					Mgazini	3
					Esigedleni	4
5436077		Mgetane	2350	362	Wartburg Road	5
					Matholampevu	6
5436085		Ezinyanthini	1480	228	Nyuswa North	7
					Nodwengu	8
					Sonkombo	9
	Shangase					
5436000		Ngcolosi	1480	228	Galile Community Training Centre	10
					Madlizinyoka	11
5436107		Shangase	3725	573	Tribal Court	12
					Mbuyeni	13
5436100		Ezimpondweni	1563	240	Upper Shngase	14
					Edulini	15
5436102		Nsingweni	2400	369	Thafamasi Clinic	16
					Nguza	17
5436017		Thafamasi	2700	415	Lower Shangase	18
					Nhlabaknye	19
	Ngongoma/Mavela					
5436036		Mozokhulayo	2109	324	Ndwedwe Central	20
					Mona	21
					Msunduze Reserve	22
5436044		Mpungeni	972	150	Ikhulowa	23
					Ndwedwe North	24
					Hlope	25
					Hlathikhulu	26
5436037		Mavela	2500	385	Ndwedwe South	27
					Ezidlovini	28
					Mavela Tribal Court	29
					KwaBlose	30

Appendix C

Project resource requirements

Budget & Expenditure for KPC survey - September - October 2005
(US$ = ZAR 6.20)

Activity/Item	Quantity	Budget	Expenses
Catering	12 days	5823	4690
Accommodation	12 days	1370	1130
Honorarium for interviewers during training period	12 interviewers X 3 days X R50	1800	3710
Honorarium for interviewers during survey period	12 interviewers X 6 days X R80	5760	3840
Honorarium for supervisors	2 supervisors X 10 days X R250	7500	4250
Driver fee	1 x 8 days X 200	1600	1836.9
Consultant Fee: Epi-info programming, data capturing, tabulation & tables	R500 X 8days	4000	5500
Car Hire	R500 X 1 X 12 days	6000	5134
Other	Photocopy, stationeries, etc	1500	598.19
Petrol	900 X 3 X 2 weeks	3000	1043
Contingency = R2,500		2500	0
T O T A L	ZAR	40853	31731.75
	US$	6589.19	5118.02

Appendix D

DHIS data from 2001-2004.

Indicator	Definition	Year	eNdondakusuka	KwaDukuza	Maphumulo	Ndwedwe	Grand Total
PHC total headcount	Total number of PHC headcount (Number)	2001	168,938	278,861	201,387	262,678	911,864
		2002	227,715	224,166	253,753	270,446	976,080
		2003	291,893	307,314	218,950	226,946	1,045,103
		2004	326,202	348,756	207,453	207,745	1,090,156
PHC headcount under 5 years	Total number of PHC headcount for under 5 (Number)	2001	53,394	58,550	50,498	79,147	241,589
		2002	56,080	73,645	60,626	78,837	269,188
		2003	58,619	74,309	57,604	58,138	248,670
		2004	57,037	66,327	52,333	54,889	230,586
Utilisat rate fac yy	Numerator: Total PHC headcount Denominator: Total Catchment population (%)	2001	2.04	1.49	1.70	1.55	1.68
		2002	1.74	1.73	1.85	1.66	1.74
		2003	2.16	1.76	1.77	1.48	1.78
		2004	2.4	2.0	1.7	1.4	1.9
Utilization rate <5 yy	Numerator: PHC headcount under 5 years Denominator: Catchment population under 5 years (%)	2001	3.51	3.59	3.94	4.13	3.81
		2002	3.37	4.09	4.46	4.46	4.11
		2003	4.05	4.24	3.64	3.63	3.90
		2004	3.90	3.79	3.42	3.78	3.72
Child case load	Numerator: PHC headcount under 5 years Denominator: PHC total headcount (%)	2001	19.06	24.10	30.67	30.27	25.70
		2002	21.14	23.63	31.56	29.34	26.30
		2003	20.14	24.29	26.80	25.71	23.93
		2004	17.5	19.0	25.4	26.6	21.2
DOTS Case Load	Numerator: TB patient headcount on DOTS Denominator: PHC total headcount (%)	2001	1.04	1.52	0.22	0.02	0.72
		2002	1.14	2.72	1.28	0.13	1.37
		2003	1.10	4.81	1.37	0.14	1.78
		2004	1.24	4.16	1.40	0.50	1.90
Measles 1st covr yy	Numerator: Measles 1st dose under 1 year Denominator: Target population under 1 year	2001	64.96	92.98	90.57	52.42	75.35
		2002	58.95	84.01	119.66	65.41	81.32
		2003	66.80	97.94	90.53	75.40	83.63

	(%)	2004	74.9	83.5	93.7	83.6	84.8
Imm coverage yy	Numerator: Children fully immunized under 1 year Denominator: Target population under 1 year	2001	64.00	92.85	87.25	50.40	73.83
		2002	58.52	83.44	113.76	62.48	79.06
		2003	66.76	93.29	105.02	73.24	84.87
		2004	74.7	93.5	110.0	74.5	89.3
Tet Tox rate	Numerator: Tet Tox 2/Booster dose to pregnant women Denominator: Potential ANC clients in catchment population	2001	56.96	75.45	124.61	69.78	76.11
		2002	53.83	167.83	174.24	74.39	113.48
		2003	88.66	90.61	180.81	98.76	100.58
	(%)	2004	96.48	124.74	103.75	91.02	106.50
ANC visits / client	Numerator: All antenatal visits Denominator: Antenatal 1st (booking) visits	2001	3.80	2.08	3.74	3.28	2.99
		2002	4.16	2.38	3.63	3.39	3.36
	(%)	2003	4.04	2.99	3.42	3.39	3.35
		2004	3.8	4.4	5.4	5.1	4.5
Weighing coverage yy	Numerator: Children under five years weighed Denominator: Target weightings of children under five years	2001	23.18	46.42	38.16	88.48	50.11
		2002	28.80	49.85	53.70	93.11	56.48
		2003	53.64	51.50	45.59	77.41	56.58
	(%)	2004	61.2	69.4	54.9	67.9	63.7
Not gain weight rate	Numerator: Not gaining weight under 5 years Denominator: Children under 5 years weighed	2003	0.16	0.13	1.00	0.33	0.38
	(%)	2004	2.2	2.2	1.1	2.1	2.0
Underweight <5 rate	Numerator: Underweight for age under 5 years - new cases Denominator: Children under 5 years weighed	2003	0.17	0.41	1.77	7.39	2.16
	(%)	2004	3.1	1.8	2.3	2.5	2.4
Severe malnu rate <5	Numerator: Severe malnutrition under 5 years - new ambulatory Denominator: Catchment population under 5 years	2001	2.41	1.18	2.26	2.04	1.91
		2002	2.41	1.51	2.36	1.94	1.99
		2003	0.69	1.84	1.74	2.47	1.76
	(%)	2004	3.62	1.87	2.35	2.48	2.54
Incid diarr w dehydr	Numerator: Diarrhoea with dehydration under 5	2003	7.91	4.37	6.85	6.44	6.32

	years - new ambulatory Denominator: Catchment population under 5 years (per 1000)	2004	10.4	8.2	6.7	11.2	9.0
Diarrhoea incidence	Numerator: Diarrhoea cases with and without dehydration under 5 years Denominator: Catchment population under 5 years (per 1000)	2001	27.19	23.61	39.24	24.51	28.60
		2002	21.13	20.44	34.49	24.45	25.17
		2003	19.21	23.94	27.15	34.18	26.18
		2004	30.4	32.8	25.6	29.5	29.7
Pneum inc <5	Numerator: Pneumonia under 5 years new Denominator: Catchment population under 5 years (per 1000)	2003	4.77	1.73	1.12	10.45	4.45
		2004	8.7	12.9	4.0	17.2	10.7
Women yr prot yy	Numerator: Contraceptive years dispensed Denominator: Female target population 15-44 years (%)	2001	17.05	22.02	11.13	10.30	15.60
		2002	17.15	26.30	21.21	11.69	19.32
		2003	16.92	19.35	17.15	12.01	16.51
		2004	17.63	19.35	13.72	13.43	16.45
STI part trace rate	Numerator: STI partners treated - new Denominator: STI partner notification slips issued (%)	2001	12.38	18.48	29.84	21.02	19.07
		2002	34.72	28.72	34.43	24.17	30.53
		2003	23.92	23.12	34.66	38.67	27.42
		2004	40.1	20.4	43.2	42.2	32.6
STI part notif rate	Numerator: STI partner notification slips issued Denominator: STI treated - new episodes (%)	2001	30.43	34.64	37.56	41.58	34.85
		2002	86.17	62.78	69.44	96.12	73.98
		2003	83.94	84.14	68.51	95.92	83.48
		2004	132.7	108.3	70.7	139.3	112.5
STI part treat rate	Numerator: STI partners treated - new Denominator: STI treated - new episodes (%)	2001	3.77	6.40	11.21	8.74	6.65
		2002	29.92	18.03	23.90	23.23	22.59
		2003	20.08	19.46	23.75	37.09	22.89
		2004	53.2	22.1	30.5	58.8	36.7
BCG coverage YY	Numerator: BCG doses under 1 year Denominator: Target population under 1 year (%)	2001	65.49	116.30	75.55	31.19	73.30
		2002	50.85	117.76	74.84	36.75	72.79
		2003	54.56	99.31	67.04	35.58	67.47
		2004	61.7	144.6	78.6	46.5	90.3

Male condom distribution rate	Numerator: Male condoms distributed Denominator: Male target population 15 years and older (%)	2001	3.97	5.78	6.05	3.44	4.80
		2002	4.33	6.87	4.87	3.72	5.16
		2003	3.08	4.55	4.17	3.87	3.97
		2004	2.96	4.11	3.23	3.36	3.52

Appendix E

KPC Consent forms and questionnaires (English and Zulu)

KPC SURVEY - INFORMED CONSENT

Hello. My name is _____, and I am working with an organisation called MCDI. We work with the Department of Health to train health workers to take better care of the children in your community.

We are conducting a survey and would appreciate your participation. I would like to ask you about your health and the health of your youngest child under the age of five. This information will help the Department of Health to plan health services and see whether it is meeting its goals to improve children's health.

The survey usually takes 45 minutes to complete. Whatever information you provide will be kept strictly confidential and will not be shown to other persons.

Participation in this survey is voluntary and you can choose not to answer any individual question or all of the questions. However, we hope that you will participate in this survey since your views are important.

At this time, do you want to ask me anything about the survey?

Signature of interviewer:

_____

Date: _____

RESPONDENT AGREES TO BE INTERVIEWED 1

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED 2

MCDI SOUTH AFRICA

Ndwedwe Child Survival Project

KNOWLEDGE, PRACTICES AND COVERAGE (KPC) SURVEY

IDENTIFICATION

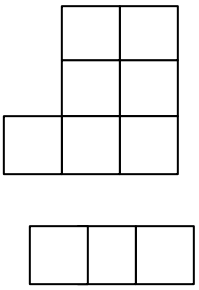
CLUSTER NUMBER.....

HOUSEHOLD NUMBER.....

MCDI only:

QUESTIONNAIRE NUMBER.....

ENUMERATION AREA NUMBER .....



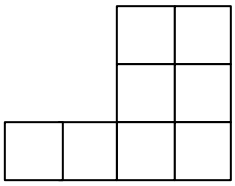
INTERVIEW DATE

RESCHEDULE INTERVIEW _____/_____/_____
(dd/mm/yy)

DAY

MONTH

YEAR



INTERVIEWER'S NAME _____

SUPERVISOR'S NAME _____

Supervisor only:

TRIBAL AUTHORITY _____

ISIGODI NAME _____ _____

RESPONDENTS ARE MOTHERS OR CAREGIVERS OF A CHILD LESS THAN 5 YEARS OF AGE

TICK ONE OF THE FOLLOWING:

NAME OF INTERVIEWEE:

A. MOTHER ☐

B. CAREGIVER ☐

C. AGE OF THE MOTHER (IN YEARS) IF INTERVIEWED [ ][ ]

D. AGE OF CAREGIVER (IN YEARS) IF INTERIVEWED [ ][ ]

E. NAME OF YOUNGEST CHILD LESS THAN 5 YEARS OLD

_____

F. SEX OF CHILD (1=MALE, 2=FEMALE) [ ]

G. DATE OF BIRTH DAY

MONTH

YEAR

H. AGE OF THE CHILD (IN MONTHS) [ ][ ]

HOUSEHOLD WATER AND SANITATION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1.	First I would like to ask some questions about your household. What is the main source of drinking water for members of your household?	PIPED WATER PIPED INTO DWELLING/ YARD/PLOT ..... 10 PUBLIC TAP ..... 11 ..... 12 WATER FROM OPEN WELL OPEN WELL IN DWELLING YARD/PLOT ..... 21 OPEN PUBLIC WELL ..... 22 WATER FROM COVERED WELL OR BOREHOLE PROTECTED WELL IN DWELLING/ YARD/PLOT ..... 31 PROTECTED PUBLIC WELL ..... 32 SURFACE WATER SPRING/RIVER/STREAM ..... 41 POND/LAKE/DAM ..... 42 RAINWATER ..... 51 OTHER_____ 96 (SPECIFY)	
2.	Does your household have a special place for hand washing?	YES ..... 1 NO 2	- - ? 4.
3.	*ASK TO SEE THE PLACE USED MOST OFTEN FOR HAND WASHING AND OBSERVE IF **EACH** OF THE FOLLOWING ITEMS ARE PRESENT*	**YES NO** (I) WATER/TAP ..... 1 2 (II) SOAP OR OTHER	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
		CLEANSING AGENT..... 1 2 (III) BASIN 1 2	
4.	When do you usually wash your hands? *CIRCLE ALL MENTIONED.*	BEFORE FOOD PREPARATION.....A BEFORE EATING .....B BEFORE FEEDING CHILDREN.....C AFTER OWN DEFECATION.....D AFTER CLEANING CHILD'S WASTE.....E NEVER……F OTHER_____ X (SPECIFY)	

BACKGROUND CHARACTERISTICS OF MOTHER/CAREGIVER

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
5.	Now, I would like to ask some questions about yourself. Have you ever attended school? *IF NO: CIRCLE 1 [NONE]* *IF YES, ASK:* What is the highest level of school you have attended: primary, secondary, or higher?	NONE ..... 1 PRIMARY (standards 1-5) ..... 2 SECONDARY(standards 6-9)..... 3 HIGHER (standard 10 and above)..... 4	
6.	Do you work to earn money? *IF NO, CIRCLE A* *IF YES*, ASK: What kind of work do you do? *CIRCLE ALL MENTIONED.*	NO OUTSIDE WORK .....A HANDICRAFTS .....B AGRICULTURAL WORKER .....C SELLING FOODS .....D SHOP KEEPER/STREET VENDOR..... E SERVANT/HOUSEHOLD WORKER ..... F SALARIED WORKER.....G OTHER_____ X (SPECIFY)	- - ? 8
7.	Who takes care of (NAME) when the mother is away from home? *CIRCLE ALL MENTIONED.*	HUSBAND/PARTNER .....A OLDER CHILDREN .....B OTHER RELATIVES .....C NEIGHBORS/FRIENDS .....D MAID..... E NURSERY SCHOOL ..... F GRANDMOTHER……..G OTHER_____ X (SPECIFY)	
8.	During the past 12 months, have you been very sick or bedridden?	YES.....1 NO 2	- - ? 1 0
9.	For how many months were you sick? *IF LESS THAN ONE MONTH, RECORD 'OO' MONTHS.*	☐☐ MONTHS	

CHILDHOOD IMMUNIZATION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
10.	Do you have a Road to Health Card for (NAME)? *IF YES, ASK:* May I see it please?	YES, SEEN ..... 1 YES, NOT SEEN ..... 2 NO, CARD LOST……..……..3 LEFT AT THE CRECHE ..... 4 NEVER HAD A CARD 5	<12

11. *FOR EACH VACCINE, COPY VACCINATION DATE WRITTEN ON THE CARD.*

			PRIMARY			BOOSTERS		
IMMUNISATIONS		Date given	Signature			Date given	Signature
B.C.G.	**1**			**2**			
Polio	**0**			**4**			
	1			**5**			
	2						
	3						
DTP	**1**			**4**			
	2			***D T***			
	3						
Hep.B	**1**						
	2						
	3						
Meas	**1**			**2**			
Vit A	**1**			**3**			
	2			**4**			
HiB	**1**			**4**			
	2			**5**			
	3						

12.	Do you know what age should a child receive a measles immunisation? 9 MONTHS; 1YEAR = 12 MONTHS ; 1 & 1/2 YEARS = 18 MONTHS; 2 YEARS = 24 MONTHS; 3 YEARS = 36 MONTHS; 4 YEARS = 48 MONTHS; 5 YEARS = 60 MONTHS	SPECIFY IN MONTHS … ☐☐ SPECIFY IN MONTHS … ☐☐ DON'T KNOW 88	

DIARRHOEA CASE MANAGEMENT

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
13.	Has (NAME) had diarrhoea in the last 2 weeks?	YES ..... 1 NO ..... 2 DON'T KNOW 8	-<19.
14.	What was given to treat the diarrhoea at home? Anything else? *CIRCLE ALL MENTIONED.*	NOTHING .....A ORS .....B SOROL (SALT-SUGAR SOLUTION) .....C ANTIBIOTIC……..……D TRADITIONAL ……..…E OTHER_____ X (SPECIFY) DON'T KNOW……8	
15.	When (NAME) had diarrhoea, did she/he breastfeed less than usual, the same, more than usual, or did he/she stop completely?	LESS ..... 1 SAME ..... 2 MORE..... 3 STOPPED COMPLETELY ..... 4 NON-BREASTFEEDER..... 5 DON'T KNOW 8	
16.	When (NAME) had diarrhoea, was he/she offered less than usual to drink, about the same amount, or more than usual to drink?	LESS ..... 1 SAME ..... 2 MORE..... 3 EXCLUSIVELY BREASTFED..... 4 DON'T KNOW 8	
17.	Was (NAME) offered less than usual to eat, about the same amount, or more than usual to eat?	LESS ..... 1 SAME ..... 2 MORE..... 3 EXCLUSIVELY BREASTFED..... 4 DON'T KNOW 8	
18.	What are important actions a mother should take when her child is recovering from diarrhoea? CIRCLE ALL MENTIONED.	GIVE THE CHILD SMALLER AND MORE FREQUENT FEEDS .....A MORE FOOD THAN USUAL..... B GIVE FOOD WITH HIGHER CALORIC CONTENT ..... C GIVE MORE FLUIDS LIKE SOROL, ORS, BREASTMILK, WATER……..…D OTHER_____ X (SPECIFY) DON'T KNOW ..... Z	

ACUTE RESPIRATORY INFECTIONS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
19.	Has (NAME) had an illness with a cough at any time in the last two weeks?	YES ..... 1 NO ..... 2 DON'T KNOW 8	]-?25.
20.	Did you seek advice or treatment outside the home for the cough/fast breathing by the end of the first day that (NAME) got sick?	YES ..... 1 NO 2	--?22.
21.	Where did you seek advice or treatment? Anywhere else? *CIRCLE ALL MENTIONED.* IF SOURCE IS HOSPITAL, COMMUNITY HEALTH CENTER, CLINIC, OR OTHER FACILITY, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	HEALTH FACILITY HOSPITAL.....A COMMUNITY HEALTH CENTER .....B CLINIC .....C OTHER HEALTH FACILITY_____ D (SPECIFY) COMMUNITY HEALTH WORKER…….E TRADITIONAL BIRTH ATTENDANT…….F TRADITIONAL HEALER.....G OTHER_____ X (SPECIFY)	
22.	When (NAME) was ill with a cough, did she/he breastfeed less than usual, the same, more than usual, or did he/she stop completely?	LESS ..... 1 SAME ..... 2 MORE..... 3 STOPPED COMPLETELY ..... 4 NON-BREASTFEEDER..... 5 DON'T KNOW 8	
23.	When (NAME) was ill with a cough, was he/she offered less than usual to drink, about the same amount, or more than usual to drink?	LESS ..... 1 SAME ..... 2 MORE..... 3 EXCLUSIVELY BREASTFED..... 4 DON'T KNOW 8	
24.	Was (NAME) offered less than usual to eat, about the same amount, or more than usual to eat?	LESS ..... 1 SAME ..... 2 MORE..... 3 EXCLUSIVELY BREASTFED..... 4 DON'T KNOW 8	

MATERNAL AND NEWBORN CARE

<u>QUESTIONS 25-32 TO BE ASKED OF THE MOTHER ONLY.</u>

(IF THE RESPONDENT IS NOT THE MOTHER, SKIP THIS SECTION AND GO ON TO THE NEXT ONE.)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
25.	Did you see anyone for prenatal care while you were pregnant with (NAME)? *IF NO: CIRCLE A [NO ONE]* *IF YES, ASK:* Whom did you see? Anyone else? *PROBE FOR THE TYPE OF PERSON AND RECORD ALL PERSONS MENTIONED BY THE MOTHER.*	NO ONE……A HEALTH PROFESSIONAL DOCTOR……B NURSE……C OTHER PERSON TRADITIONAL BIRTH ATTENDANT……D COMMUNITY HEALTH WORKER……E TRADITIONAL HEALER……F OTHER_____ X (SPECIFY) DON'T KNOW……Z	---<27. ----<27.
26.	How many times did you see someone for care during the last three months of pregnancy? *IF THE MOTHER CANNOT RECALL THE NUMBER OF TIMES SHE SAW SOMEONE FOR CARE DURING HER PREGNANCY, RECORD '98' FOR DON'T KNOW.*	NUMBER OF TIMES……||||||||	
27.	While you were pregnant with [NAME] were you tested for AIDS?	YES……1 NO……2 DON'T KNOW……8	
28.	Did you receive any injections in the arm while you were pregnant?	YES……1 NO……2 DON'T REMEMBER……8	-<30.
29.	*IF YES, ASK:* How many injections do you remember receiving while you were pregnant?	ONE……1 TWO……2 THREE……3 DON'T REMEMBER……8	
30.	What are the symptoms during pregnancy indicating the need to seek health care? *CIRCLE ALL MENTIONED.*	FEVER……A SHORTNESS OF BREATH……B BLEEDING……C SWELLING OF THE BODY/HANDS/FACE……D OTHER_____ X (SPECIFY) DON'T KNOW……Z	

PLACE OF DELIVERY AND DELIVERY ATTENDANTS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
31.	Where did you give birth to (*NAME*)?	HOME YOUR HOME……A OTHER HOME……B	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	IF PLACE OF BIRTH IS HOSPITAL, COMMUNITY HEALTH CENTER, CLINIC, OR OTHER HEALTH FACILITY, WRITE THE NAME OF THE FACILITY. _____ (NAME OF FACILITY)	HEALTH FACILITY HOSPITAL.....C COMMUNITY HEALTH CENTER.....D CLINIC.....E OTHER HEALTH FACILITY _____ F (SPECIFY) OTHER_____ X (SPECIFY)	
32.	Who assisted you with the delivery? *CIRCLE ALL MENTIONED.*	HEALTH PROFESSIONAL DOCTOR.....A NURSE/MIDWIFE.....B TRADITIONAL BIRTH ATTENDANT…… C COMMUNITY HEALTH WORKER .....D FAMILY MEMBER ..... E OTHER _____ X (SPECIFY) NO ONE .....Y	

INTEGRATED MANAGEMENT OF CHILDHOOD ILLNESSES (IMCI)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
33.	What are the signs to watch for that may indicate that a newborn baby is ill? *CIRCLE ALL MENTIONED.*	POOR FEEDING .....A FAST BREATHING.....B SLUGGISH.....C IRRITABLE CRYING.....D FEVER ..... E OTHER_____ W (SPECIFY) OTHER_____ X (SPECIFY) DON'T KNOW .....Z	
34.	Sometimes children get sick and need to receive care or treatment for illnesses. What are the signs of illness that would indicate your child needs treatment? *DO NOT LEAD BUT PROMPT. CIRCLE ALL MENTIONED.*	LOOKS UNWELL OR NOT PLAYING NORMALLY.....A NOT EATING OR DRINK ING .....B LETHARGIC OR DIFFICULT TO WAKEC HIGH FEVER.....D LOW FEVER……E FAST OR DIFFICULT BREATHING ... ...F EXCESSIVE CRYING……...G CHANGE OF COLOUR…….H VOMITS EVERYTHING.....I CONVULSIONS .....J OTHER _____ V (SPECIFY) OTHER _____ W (SPECIFY) OTHER _____ X (SPECIFY) DON'T KNOW .....Z	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
33.	What are the signs to watch for that may indicate that a newborn baby is ill? *CIRCLE ALL MENTIONED.*	POOR FEEDING ..... A FAST BREATHING ..... B SLUGGISH ..... C IRRITABLE CRYING ..... D FEVER ..... E OTHER_____ W (SPECIFY) OTHER_____ X (SPECIFY) DON'T KNOW ..... Z	
35.	When (NAME) was sick, was he/she offered less than usual to drink, about the same amount, or more than usual to drink?	LESS ..... 1 SAME ..... 2 MORE ..... 3 DON'T KNOW 8	
36.	When (NAME) was sick, was he/she offered less than usual to eat, about the same amount, or more than usual to eat?	LESS ..... 1 SAME ..... 2 MORE ..... 3 DON'T KNOW 8	

HIV/AIDS AND OTHER SEXUALLY TRANSMITTED DISEASES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
37.	Is there anything a person can do to avoid getting AIDS or the virus that causes AIDS?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8 REFUSED TO ANSWER 9	- + --?39.
38.	What can a person do to avoid contracting AIDS? Anything else? *DO NOT PROMPT. CIRCLE ALL MENTIONED.*	ABSTAIN FROM SEX ..... A USE CONDOMS ..... B LIMIT SEX TO ONE PARTNER/STAY FAITHFUL TO ONE PARTNER ..... C LIMIT NUMBER OF SEXUAL PARTNERS ..... D AVOID SEX WITH PROSTITUTES ..... E AVOID SEX WITH PERSONS WHO HAVE MANY PARTNERS ..... F AVOID INTERCOURSE WITH PERSONS OF THE SAME SEX ..... G AVOID SEX WITH PERSONS WHO INJECT DRUGS INTRAVENOUSLY ..... H AVOID BLOOD TRANSFUSIONS ..... I AVOID INJECTIONS ..... J AVOID KISSING ..... K AVOID MOSQUITO BITES ..... L SEEK PROTECTION FROM TRADITIONAL HEALER ..... M AVOID SHARING RAZORS, BLADES .. N OTHER_____ W (SPECIFY) OTHER_____ X (SPECIFY) DON'T KNOW ..... Z REFUSED TO ANSWER 9	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
39.	Can the virus that causes AIDS be transmitted from a mother to a child? During pregnancy? During delivery? During breastfeeding? When breastmilk is mixed with other foods and liquids for the child?	**YES NO DK** DURING PREGNANCY ..... 1 2 8 DURING DELIVERY ..... 1 2 8 DURING BREASTFEEDING ..... 1 2 8 MIXED FEEDING…… ….1 2 8	
40.	If a mother is infected with the AIDS virus, is there any way to avoid transmission to the baby?	YES ..... 1 NO ..... 2 DON'T KNOW 8	
41.	In a man, what signs and symptoms would lead you to think that he has sexually transmitted infections? Any others? *CIRCLE ALL MENTIONED.*	ABDOMINAL PAIN.....A GENITAL DISCHARGE/DRIPPING.....B FOUL SMELLING DISCHARGE.....C BURNING PAIN ON URINATION.....D REDNESS/INFLAMMATION IN GENITAL AREA ..... E SWELLING IN GENITAL AREA ..... F GENITAL SORES/ULCERS .....G GENITAL WARTS .....H BLOOD IN URINE .....I LOSS OF WEIGHT .....J IMPOTENCE .....K NO SYMPTOMS ..... L OTHER_____ W (SPECIFY) OTHER_____ X (SPECIFY) DON'T KNOW .....Z REFUSED TO ANSWER..... 9	
42.	In a woman, what signs and symptoms would lead you to think that she has sexually transmitted infections? Any others? *CIRCLE ALL MENTIONED.*	ABDOMINAL PAIN.....A GENITAL DISCHARGE.....B FOUL SMELLING DISCHARGE.....C BURNING PAIN ON URINATION.....D REDNESS/INFLAMMATION IN GENITAL AREA ..... E SWELLING IN GENITAL AREA ..... F GENITAL SORES/ULCERS .....G GENITAL WARTS .....H BLOOD IN URINE .....I LOSS OF WEIGHT .....J INABILITY TO CONCEIVE.....K NO SYMPTOMS ..... L OTHER _____ W (SPECIFY) OTHER _____ X (SPECIFY) DON'T KNOW .....Z REFUSED TO ANSWER..... 9	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
43.	The last time you had sexual intercourse, did you use a condom?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8 REFUSED TO ANSWER..... 9	
44.	What are good reasons for people to use a condom? DO NOT PROMPT.	TO PREVENT STDS/HIV ..... 1 TO PREVENT PREGNANCY ..... 2 TO PREVENT BOTH STDS/HIV AND PREGNANCY ..... 3 DOESN'T TRUST PARTNER/ PARTNER HAS OTHER PARTNERS ... 4 PARTNER INSISTED..... 5 OTHER _____6 (SPECIFY) DON'T KNOW ..... 8 REFUSED TO ANSWER..... 9	
45.	Would you allow your child to play with a child who has the AIDS virus?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8 REFUSED TO ANSWER..... 9	
46.	Would you allow a HIV positive teacher to work in a school where your child is?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8 REFUSED TO ANSWER…… …. 9	
47.	Would you care for a family member who has AIDS?	YES ..... 1 NO ..... 2 DON'T KNOW ..... .8 REFUSED TO ANSWER… …….. 9	

CHILD FEEDING

48.	I'd like to ask you about how you feed (NAME). Did you ever breastfeed (NAME)?	YES ..... 1 NO 2	- - ? 50.
49.	How long after birth did you first put (NAME) to the breast?	IMMEDIATELY/WITHIN FIRST HOUR AFTER DELIVERY ..... 1 WITHIN FIRST 8 HOURS ..... 2 AFTER FIRST 8 HOURS……3	
50.	I would like to ask you about the types of liquids and foods that (NAME) consumed yesterday during the day or at night. Did (NAME) have. . .	**LIQUID/FOOD CONSUMED IN LAST 24 HOURS?**	

	READ EACH OF THE FOLLOWING AND CIRCLE EACH ITEM CONSUMED.	A Breastmilk? B Plain water C Other liquids D Mashed, pureed, solid, or semi-solid foods? E Anything else? SPECIFY: _____ _____	

CHILDREN'S NAMES AND BIRTHDATES

51. What are the names and birthdates of all your children who are less than five years old?

Name:	**Date of birth: DD/MM/YYYY**
1.	
2.	
3.	
4.	

THANK YOU VERY MUCH FOR YOUR ASSISTANCE AND YOUR PATIENCE IN ANSWERING THESE QUESTIONS.

WE VALUE YOUR ANSWERS AND WILL TREAT THEM COMPLETELY CONFIDENTIALLY.

NONE OF THE INFORMATION YOU'VE GIVEN US TODAY WILL BE SHARED WITH ANYONE ELSE IN YOUR COMMUNITY.

Medical Care Development International

KPC SURVEY - INFORMED CONSENT

Sawubona, igama lami ngingu _____, ngisebenza nenhlangano ebizwa ngokuthi u-MCDI. Sisebenza noMnyango wezeMpilo ukuqeqesha izisebenzi zezempilo ekunakekeleni kangcono izingane emphakathini owakhele.

Senza uphenyo/ucwaningo, ngakho singakuthakasela ukubamba kwakho iqhaza. Ngizothanda ukukubuza ngempilo yakho kanye nempilo yomntwana wakho omncane ongaphansi kweminyaka emihlanu ubudala. Lolu lwazi luzosiza uMnyango wezeMpilo ekuhleleni izinhlelo zezempilo nokubheka ukuthi uyahlangabezana yini nezinhloso zawo zokuthuthukisa ukubhekelelwa kwempilo yengane.

Lemibuzo yophenyo ijwayele ukuthatha imizuzu engu-45 ukuyigcwalisa. Noma ngabe yiluphi ulwazi olunikayo luzogcinwa luyimfihlo futhi angeke lutshengiswe muntu.

Ukuzibandakanya kwakho kuloluphenyo kuyinto esuka kuwe ngokuzinikela futhi ungakhetha ukungaphenduli eminye yemibuzo noma yonke imibuzo. Noma kunjalo, siyathemba ukuthi uzozibandakanya naloluphenyo ngoba imibono yakho ibalulekile

Kulesikhathi, ingabe kukhona yini ofuna ukungibuza kona mayelana nophenyo?
Isayini yobuzwayo:

_____

Usuku: _____

OPHENDULAYO UYAVUMA UKUTHI ABUZWE……...…1

OPHENDULAYO AKAVUMI UKUTHI ABUZWE…….2

MCDI SOUTH AFRICA

Ndwedwe District Child Survival Project

KNOWLEDGE, PRACTICES AND COVERAGE (KPC) SURVEY

IDENTIFICATION

INOMBOLO YESIXUKU.....

INOMBOLO YOMUZI.....

OKUKA MCDI KUPHELA:

INOMBOLO YENDAWO ECWANINGWAYO……

INOMBOLO YOMQULU.....

USUKU OKUBUZWA NGALO

USUKU

INYANGA

UNYAKA

USUKU OKUYOBUYE KUBUZWE NGALO

_____/_____/_____

(dd/mm/yy)

IGAMA LOBUZAYO _____

IGAMA LOKUBHEKILE _____

OKWALOWO OBHEKA ABABUZAYO KUPHELA:

IGAMA LENDAWO _____

IGAMA LESIGODI _____

ABABUZWAYO OMAMA ABANEZINGANE EZINGAPHANSI KWEMINYAKA EMIHLANU

YENZA UMAKA KOKUKODWA KULOKHU OKULANDELAYO:

IGAMA LOBUZWAYO:

A. UMAMA

_____

B. UMZANYANA

UBULILI (OWESILISA 1, OWESIFAZANE 2) .....

USUKU LOKUZALWA

USUKU

INYANGA

UNYAKA

_____ C. UBUDALA BUKAMAMA NGEMINYAKA, UMA KUNGUYE OBUZWAYO D. UBUDALA BOMZANYANA NGEMINYAKA UMA KUNGUYE OBUZWAYO E. IGAMA LOMNTWANA OMNCANE KUNABO BONKE UMA ENEMINYAKA ENGAPHANSI KWEMIHLANU. _____	UBUDALA BOMNTWANA (IZINYANGA).....

AMANZI NEZINDLELA ZOKULAHLA IZIBI NENDLE

NO.	IMIBUZO	IZIMPENDULO	SKIP
10.	OKOKUQALA NGIZOCELA UKUKUBUZA IMIBUZO EQONDENE NEKHAYA LAKHO NIWATHATHAPHI AMANZI OKUPHUZA ASETSHENZISWA UMNDENI WAKHO?	AMANZI EZA NGAMAPAYIPI IPAYIPI ELIZA ENDLINI/ . 10 EGCEKENI..... 11 UMPOMPI WOMPHAKATHI..... 12 AMANZI AVELA EMTHONJENI OVULIWE UMTHOMBO OSEKHAYA EGCEKENI..... 21 UMTHOMBO WOMPHAKATHI..... 22 AMANZI AVELA EMTHONJENI OVALIWE UMTHOMBO OVALIWE OSEKHAYA/ OSEGCEKENI ..... 31 UMTHOMBO OVALIWE WOMPHAKATHI..... 32 AMANZI AGELEZAYO UMTHOMBO/ UMFULA ..... 41 IDAMU..... 42 AMANZI EMVULA..... 51 OKUNYE_____ 96 (CHAZA)	
11.	UMUZI WAKHO UNAYO INDAWO ETHIZE EBEKELWE UKUGEZA IZANDLA?	YEBO ..... 1 CHA 2	- - ? 4
12.	*CELA UKUBONA INDAWO ESETSHENZISELWA UKUGEZA IZANDLA UBHEKE NOKUTHI ZIKHONA YINI LEZINTO EZILANDELAYO*	**YEBO /CHA** (I)UMPOMPI WAMANZI ..... 1 2 (II) INSIPHO NOKUNYE KOKUGEZA..... 1 2 (III) INDISHI YOKUGEZELA 1 2	
13.	UVAME UKUZIGEZA NINI IZANDLA ZAKHO? *BHALA KONKE OKUSHIWO.*	NGAPHAMBI KOKULUNGISA UKUDLA ..A NGAPHAMBI KOKUDLA ..... B NGAPHAMBI KOKUFUNZA IZINGANE ... C NGEMUVA KOKUZIKHULULA..... D EMVA KOKUSHINTSHA INGANE.……E ANGIKWENZI……F OKUNYE_____X	

NO.	IMIBUZO	IZIMPENDULO	SKIP
		(CHAZA)	

IZIMPAWU EZIBALULEKILE NGOMAMA

INO.	IMIBUZO	IZIMPENDULO	SKIP
14.	MANJE NGIZOCELA UKUKUBUZA IMIBUZO EQONDENE NAWE-WAKE WAYA ESIKOLENI? *UMA ENGAKAZE AYE ESIKOLENI BHALA KU-CHA* *UMA ETHI YEBO WAGCINA KUBANI ESIKOLENI?*: primary, secondary, or higher?	CHA ..... 1 PRIMARY (standards 1-5)..... 2 SECONDARY(standards 6-9)..... 3 HIGHER (standard 10 and above)..... 4	
15.	UYASEBENZA UKUTHI UHOLE EKUPHELENI KWENYANGA? *UMA ETHI CHA KOKELEZELA U-A* UMA ETHI YEBO BUZA UKUTHI WENZA MSEBENZI MUNI? *KOKELEZELA KONKE OKUSHIWO*	ANGISEBENZELI IMALI.....A UMSEBENZI WEZANDLA .....B NGIYALIMA .....C NGIDAYISA UKUDLA .....D NGIYADAYISA/ ESITOLO/PHANDLE..... E NGISEBENZA ENDLINI..... F NGIQASHIWE .....G OKUNYE_____X (CHAZA)	- - ? 8
16.	UBANI OBHEKA U—(IGAMA) UMA UMAMA WAKHE ENGEKHO EKHAYA? *KOKELEZELA KONKE OKUSHIWO*	UMKHWENYANE/ MASIHLALISANE.....A IZINGANE EZINDALA ----------B EZINYE IZIHLOBO .....C OMAKHELWANE /ABANGANI .....D ISISEBENZI..... E E-CRECHE..... F UGOGO----------G OKUNYE_____X (CHAZA)	
17.	KULEZINYANGA EZIWU 12 UKE WAGULA KAKHULU WALALA PHANSI?	YEBO.....1 CHA 2	- - ? 10
18.	UGULE IZINYANGA EZINGAKHI? *UMA KUNGAPHANSI KWENYANGA BHALA "00".*	☐☐ MONTHS	

UKUGONYWA KOMNTWANA.

NO.	IMIBUZO	IZIMPENDULO	SKIP
10.	UNALO IKHADI LASEMTHOLAMPILO LIKA--------? UMA ETHI YEBO—NGICELA UKULIBONA?	YEBO, NGILIBONILE ……..1 YEBO ANGILIBONANGA ..... 2 LALAHLEKA……..3 LISALE E-CRECHE..... 4 AKAZE ABE NALO..... 5	- <12
11.	*KULOWO NALOWO UMJOVO BHALA USUKU AWUJOVA NGALO.*		

NO.	IMIBUZO	IZIMPENDULO	SKIP

				PRIMARY			
		IMMUNISATIONS		**Date given**	**Signature**	**BOOSTERS** **Date given**	**Signature**
		B.C.G.	**1**			**2**	
		Polio	**0**			**4**	
			1			**5**	
			2				
			3				
		DTP	**1**			**4**	
			2			***D T***	
			3				
		Hep.B	**1**				
			2				
			3				
		Meas	**1**			**2**	
		Vit A	**1**			**3**	
			2			**4**	
		HiB	**1**			**4**	
			2			**5**	
			3				

12.	UYAZI UKUTHI UMNTWANA UWUTHOLA ENGAKANANI UMGOMO WESIMINGUMUNGWANA? 9 MONTHS; 1YEAR= 12 MONTHS ; 1 & 1/2 YEARS= 18 MONTHS; 2 YEARS= 24 MONTHS; 3 YEARS= 36 MONTHS; 4 YEARS= 48 MONTHS; 5 YEARS= 60 MONTHS	BHALA IZINYANGA … ☐☐ BHALA IZINYANGA … ☐☐ ANGAZI..... 88	

UKULASHWA KWESIFO SOHUDO

NO.	IMIBUZO	IZIMPENDULO	SKIP
13.	U----------UKE WAKHISHWA ISISU EMASONTWENI AMABILI EDLULE?	YEBO ..... 1 CHA ..... 2 ANGAZI..... 8	 - + - - ? 19
14.	WAMNIKANI UKUNQANDA ISIFO SOHUDO ESEKHAYA? OKUNYE? *BHALA KONKE OKUSHIWO.*	LUTHO .....A ORS.....B SOROL (INGXUBE KASHUKELA NOSAWOTI) ....C OBULALA AMAGCIWANE.....D UMUTHI WESIZULU..... F	

NO.	IMIBUZO	IZIMPENDULO	SKIP
		OKUNYE_____ X (CHAZA) ANGAZI……..……8	
15.	NGESIKHATHI U-----EKHISHWA ISISU WAMNCELISA NGAPHANSI, NGOKUFANAYO, NGAPHEZULU, NOMA WAVELE WAMYEKISA IBELE?	NGAPHANSI ..... 1 NGOKUFANAYO..... 2 NGAPHEZULU..... 3 NGAMYEKISA IBELE..... 4 AKANCELI..... 5 ANGAZI..... 8	
16.	NGESIKHATHI U----EKHISHWA ISISU WAMNIKA OKOKUPHUZA OKUNGAPHANSI KOKUJWAYELEKILE NOMA NGOKUJWAYELEKILE KUMBE NGAPHEZULU KOKUJWAYELEKILE?	NGAPHANSI ..... 1 NGOKUFANAYO..... 2 NGAPHEZULU..... 3 UYANCELA KUPHELA..... 4 ANGAZI..... 8	
17.	NGESIKHATHI EKHISHWA ISISU U----WAMNIKA UKUDLA OKUNGAPHANSI KOKUJWAYELEKILE NOMA NGAPHEZULUNOMA NGOKUJWAYELEKILE?	NGAPHANSI ..... 1 NGOKUFANAYO..... 2 NGAPHEZULU..... 3 UYANCELA KUPHELA..... 4 ANGAZI	
18.	IZIPHI IZINTO EZISEMQOKA OKUFANELE UMAMA AZENZELE UMNTWANA NGESIKHATHI ELULAMA ESIFENI SOHUD? BHALA KONKE OKUSHIWO.	YIPHA UMNTWANA UKUDLA OKUNCANE NJALO NJALO ..... A MUPHE UKUDLA OKUNGAPHEZU KOKUJWAYELEKILE..... B MUPHE UKUDLA OKUNOMSOCO KAKHULU ..... C MNIKE ISOROL LOMA INGXUBE KASAWOTI NOSHUKELA……..……D OKUNYE_____X (CHAZA) ANGAZI ..... Z	

IZIFO ZAMAPHAPHU / ZOKUPHEFUMULA

NO.	IMIBUZO	IZIMPENDULO	SKIP
19.	U---UKE WAPHATHWA ISIFO SOFUBA KUMBE UKUKHWEHLELA KULAMASONTO AMABILI EDLULE?	YEBO ..... 1 CHA ..... 2 ANGAZI..... 8	- + - - ?25
20.	WALUFUNA USIZO NGAPHANDLE KWASEKHAYA NGOKUKHWEHLELA NOKUPHEFUMULA NGOKUSHESHA?	YEBO ..... 1 CHA 2	- - ???
21.	WALUFUNAPHI USIZO LOKWELULEKWA KUMBE UKWELAPHA UMNTWANA? KWENYE INDAWO? *BHALA KONKE AKUSHILO.* UMA AYA ESIBHEDLELA KUMBE EMTHOLAMPILO BHALA IGAMA LENDAWO. _____ (IGAMA LENDAWO)	EZIKHUNGWENI ZEMPILO ESIBHEDLELA.....A EMTHOLAMPILO OMKHULU.....B EMTHOLAMPILO.....C EZINYE IZIKHUNGO ZEMPILO_____ D (CHAZA) KUNOMPILO……..E KUMBELETHISI WASEKHAYA……F ENYANGENI KUMBE KUMTHANDAZI....G OKUNYE_____ X (CHAZA)	

NO.	IMIBUZO	IZIMPENDULO	SKIP
22.	NGESIKHATHI U (IGAMA) EKHWEHLELA WAYENCELA KANCANE KUNOKUJWAYELEKILE, NJENGOKUJWAYELEKILE NOMA NGAPHEZU KOKUJWAYELEKILE NOMA WAYEKA UKUNCELA?	NGAPHANSI----------1 NGOKUFANAYO----------2 NGAPHEZULU----------3 WAYEKA UKUNCELA----------4 AKANCELI----------5 ANGAZI----------8	
23.	NGESIKHATHI U----EKHWEHLELA WAMNIKA NGAPHANSI KWAJWAYELE UKUKUPHUZA, OKUJWAYELEKILE, OKUFANAYO NOMA NGAPHEZULU KOKUJWAYELEKILE?	NGAPHANSI----------1 NGOKUFANAYO----------2 NGAPHEZULU----------3 WAYEKA UKUNCELA----------4 AKANCELI----------5 ANGAZI----------8	
24.	KWAKUTHATHA ISIKHATHI ESINGAKANANI UKUTHI UYOFUNA USIZO EMVA KOKUBA USUBONILE UKUTHI U-----UYAGULA?	NGALOLOSUKU ..... 0 NGAKUSASA ..... 1 IZINSUKU EZIMBILI..... 2 IZINSUKU EZINTATHU KUMBE NGAPHEZULU..... 3 ANGAZI..... 8	

UKUNAKEKELWA KUKAMAMA NOMNTWANA OZELWE.

IMIBUZO 25-34 IBUZWA UMAMA KUPHELA

UMA OPHENDULAYO ENGEYENA UMAMA WOMNTWANA YEQA UYE KOKULANDEL AYO

NO.	IMIBUZO	IZIMPENDULO	SKIP
25.	UKHONA OWAKE WAMBONA UKUTHI AKUNIKE USIZO LWEZEMPILOMGESIKHATHI UKHULELWE U---------? *UMA ETHI CHA KOKELEZELA (ANGIBONANGA MUNTU)* UMA ETHI YEBO BUZISISA UKUTHI WABONA BANI? *BUZISISA UKUTHI WABONA BANI UBHALE LABO ATHI WABABONA.*	ANGIBONANGA MUNTU……A ABEZEMPILO UDOKOTELA……..B UMHLENGIKAZI……C OMUNYE UMUNTU UMBELETHISI WASEKHAYA..... D UNOMPILO ..... E INYANGA KUMBE UMTHANDAZI……F OKUNYE_____ X (CHAZA) ANGAZI……Z	---<27. ----<27
26.	NGESIKHATHI UKHULELWE U----WAMBONA KANGAKHI OZOKUNIKA USIZO? *UMA UMAMA ENGAZI UKUTHI WAMBONA KANGAKH9I OZOMNIKA USIZO BHALA U—"98" OSHO UKUTHI AKAZI.*	+ - - - - - - - + IZIKHATHI AMBONA NGAZO¦ ¦ ¦ ¦ ¦ ¦ ¦ ¦ ¦ + - - - - - - - +	

NO.	IMIBUZO	IZIMPENDULO	SKIP
27.	NGESIKHATHI UKHULELWE U---WALWENZIWA YINI UCWANINGO LWESANDULELA NGCULAZI?	YEBO----------1 CHA----------2 ANGAZI----------8	
28.	UKHONA UMJOVO OWAWUNIKWA ENGALWENI NGESIKHATHI UKHULELWE?	YEBO----------1 CHA----------2 ANGISAKHUMBULI----------8	-<30.
29.	UMA ETHI YEBO: USAKHUMBULA UKUTHI WANIKWA IMIJOVO EMINGAKHI NGESIKHATHI UKHULELWE?	OWODWA----------1 EMBILI----------2 EMITHATHU----------3 ANGIKHUMBULI----------8	
30.	IZIPHI IZIMPAWU NGESIKHATHI UKHULELWE EZINGENZA UYE KOBONA ODOKOTELA NABONESI? *KOKELEZELA KONKE AKUSHILO.*	UKUSHISA KOMZIMBA----------A IPHIKA----------B UKOPHA----------C UKUVUVUKA KOMZIMBA NEZANDLE NOBUSO .....D OKUNYE_____X (CHAZA) ANGAZI----------Z	

INDAWO ABELETHELA KUYO NABAMSIZA EBELETHA

NO.	IMIBUZO	IZIMPENDULO	SKIP
31.	WABELETHELAPHI? *UMA ABELETHEL ESIBHEDLELA KUMBE EMTHOLAMPILO BHALA IGAMA LALEYONDAWO* _____ (IGAMA LESIBHEDLELA KUMBE UMTHOLAMPILO)	EKHAYA EKHAYA LAKHE .....A KOMUNYE UMUZI.....B ESIKHUNGWENI SEZEMPILO ESIBHEDLELA .....C EMTHOLAMPILO OMKHULU.....D EMTHOLAMPILO OMNCANE..... E KWEZINYE IZIKHUNGO ZEMPILO--- _____ F (CHAZA) OKUNYE_____ X (CHAZA)	
32.	UBANI OWAKUSIZA NGESIKHATHI UBELETHA? *BHALA KONKE OKUSHIWO.*	ABEZEMPILO UDOKOTELA .....A UMHLENGIKAZI .....B UMBELETHISI WASEMAKHAYA..... C UNOMPILO .....D OWOMNDENI ..... E OKUNYE _____X (CHAZA)	

NO.	IMIBUZO	IZIMPENDULO	SKIP
		ANGISIZWANGA MUNTU.....Y	

IZIFO EZIKHUNGETHE IZINGANE (IMCI)

NO.	IMIBUZO	IZIMPENDULO	SKIP
33.	IZIPHI IZIMPAWU EZIKHOMBISA UKUTHI UMNTWANA OSANDAKUZALWA UYAGULA? *BHALA KONKE OKUSHIWO.*	UKUNGANCELI KAHLE.....A UKUPHEFUMULA NGOKUSHESHA .....B UKUCOBEKA .....C UKUKHALA OKUKHULU.....D UKUSHISA ..... E OKUNYE_____ W (CHAZA) OKUNYE_____ X (CHAZA) ANGAZI.....Z	
34.	NGESINYE ISIKHATHI UMNTWANA UYAGULA ADINGE UKWELASHWA, IZIPHI IZIMPAWU EZINGAKWENZA UMHAMBISE KWADOKOTELA KUMBE EMTHOLAMPILO UMNTWANA? *UNGAMHAMBELI PHAMBILI KODWA UMBUZISISE UKOKELEZELE KONKE AKUSHILO.*	UBUKEKA ENGAPHILILE AKADLALI NJENGOKUJWAYELEKILE.....A AKADLI AKAPHUZI LUTHO .....B UCOBEKILE AKAVUSEKI NGOKUSHESHA .....C UYASHISA KAKHULU.....D UYASHISA KANCANE……..……E UPHEFUMULA NGOKUSHESHA NOMA KALUKHUNI..... ...F UKHALA KAKHULU……....G USHINTSHE UMBALA……..…H UPHALAZA YONKE INTO.....I UYADLIKIZA.....J OKUNYE _____ V (CHAZA) OKUNYE _____ W (CHAZA) OKUNYE _____ X (CHAZA) ANGAZI.....Z	
35.	NGESIKHATHI U---EGULA WAMNIKA NGAPHANSI KWALOKHO AVAME UKUKUPHUZA NOMA OKULINGANAYO NOMA NGAPHEZULU?	NGAPHANSI..... 1 OKULINGANAYO..... 2 OKUNGAPHEZULU..... 3 ANGAZI……..….8	
36.	NGESIKHATHI U---EGULA WAMNIKA UKUDLA OKUNGAPHANSI KOKUJWAYELEKILE, NOMA OKUNGANGOKUJWAYELEKILE NOMA OKUNGAPHEZULU KOKUJWAYELEKILE?	OKUNGAPHANSI..... 1 OKULINGANAYO..... 2 OKUNGAPHEZULU..... 3 ANGAZI……..….8	

INGCULAZI NEZIFO ZOCANSI

NO.	IMIBUZO	IZIMPENDULO	SKIP

NO.	IMIBUZO	IZIMPENDULO	SKIP
37.	KUKHONA YINI UMUNTU ANGAKWENZA UKUZIVIKELA EGCIWANENI ELIYISANDULELA NGCULAZI NAKUYO INGCULAZI UQOBO?	YEBO ..... 1 CHA ..... 2 ANGAZII ..... 8 UYALA UKUPHENDULA 9	- + - - < 39
38.	UMUNTU ANGENZENJANI UKUZIVIKELA ANGATHOLI INGCULAZI? OKUNYE? MUSA UKUMGUBHA NGEMIBUZO BHALA LOKHO AKUSHILO	YITHI CHA OCANSINI.....A SEBENZISA IJAZI.....B THEMBEKA KUMNGANE WAKHO UYE NOMUNTU OYEDWA OCANSINI .....C YEHLISA INANI LALABO OYA NABO OCANSINI .....D MUSA UKUYA OCANSINI NABADAYISA UMZIMBA ..... E MUSA UKUYA OCANSINI NOMUNTU OYA OCANSINI NABANTU ABANINGI..... F BALEKELA UKULALA NABONGQINGILI .....G BALEKELA UKULALA NALABO ABAJOVA IZIDAKAMIZWA.....H BALEKELA UKUTHOLA IGAZI LOMUNYE UMUNTU .....I BALEKELA UKUJOVA.....J BALEKELA UKUQABULANA .....K BALAKELA UKULUNYA OMIYANE ..... L FUNA USIZO LOKUZIVIKELA ENYANGENI NOMA KUMTHANDAZI.....M UNGASEBENZISI IZINSINGO ESEZIKE SATSHENZISWA ABANYE ABANTU ...N OKUNYE_____ W (CHAZA) OKUNYE_____ X (CHAZA) ANGAZI.....Z WALILE UKUPHENDULA 9	
39.	IGCIWANE ELIYISANDULELA NGCULAZI LINGADLULELA KUMNTWANA? NGESIKHATHI UMAMA EKHULELWE? NGESIKHATHI EBELETHA? NGESIKHATHI ENCELISA? UMA UBISI LWEBENE LUXUTSHWA NOKUNYE UKUDLA KWENGANE?	**YEBO CHA NGAZI** EKHULELWE..... 1 2 8 EBELETHA..... 1 2 8 ENCELISA..... 1 2 8 LUXUTSHWA……1 2 8	
40.	UMA UMAMA ENEGCIWANE ELIYISANDULELA NGCULAZI KUKHONA OKUNGENZIWA UKUVIKELA UMNTWANA UKUTHI ANGALITHOLI?	YEBO ..... 1 CHA ..... 2 ANGAZI..... 8	
41.	EMNWTINI WESILISA YINI ENGAKWENZA UCABANGE UKUTHI UNEZIFO ZOCANSI?	UKUPHATHWA ISISU.....A UKUVUZA NGAPHAMBILI.....B AMANZI ANUKAYO APHUMA KUYE....C UKUSHISA KOMCHAMO.....D	

NO.	IMIBUZO	IZIMPENDULO	SKIP
	OKUNYE? *BHALA KONKE OKUSHIWO..*	UKUVUVUKA NOKUBA BOMVU ENDAWENI YANGASESE ..... E IZILONDA NGAPHAMBILI.....G IZINSUMPA NGAPHAMBILI.....H IGAZI EMCHAMENI .....I UKUNCIPHA EMZIMBENI .....J UKUWA KWENDUKU.....K AKUKHO ZIMPAWU..... L OKUNYE_____W (CHAZA) OKUNYE_____ X (CHAZA) ANGAZI.....Z WALILE UKUPHENDULA 9	
42.	EMNTWINI WESIFAZANE IZIPHI IZIMPAWU EZINGAKWENZA UBONE UKUTHI UNESIFO SOCANSI? KUKHONA OKUNYE? *BHALA KONKE OKUSHIWO.*	UBUHLUNGU BESISU.....A UKUPHUMA KWAMANZI NGAPHAMB--B AMANZI ANUKAYO NGAPHAMBILI .....C UKUSHISA KOMCHAMO.....D UKUBA BOMVU NGAPHAMBILI..... E UKUVUVUKA ..... F IZILONDA NGAPHAMBILI.....G IZINSUMPA NGAPHAMBILI.....H IGAZI EMCHAMENI .....I UKUZACA .....J UKUNGATHOLI BANTWANA .....K AKUKHO ZIMPAWU..... L OKUNYE _____ W (CHAZA) OKUNYE _____ X (CHAZA) ANGAZI.....Z UYALA UKUPHENDULA..... 9	
43.	NGESIKHATHI UGCINA UKUHLANGANA NOBABA WA SEKHAYA NAYISEBENZISA IKHONDOMU NA?	YEBO ..... 1 CHA ..... 2 ANGAZII ..... 8 UYALA UKUPHENDULA..... .9	
44.	IZIPHI IZIZATHU EZENZA UMUNTU ASEBENZISE IKHONDOMU? *UNGAMHAMBELI PHAMBILI.*	UKUVIMBELA IZIFO ZOCANSI----------1 UKUVIMBELA UKUKHULELWA----------2 UKUVIMBELA INGCULAZI NEZIFO ZOCANSI NOKUKHULELWA..... ..3 AKAMTHEMBI UMLINGANI WAKHE UNABANYE……4 KWASHO UMLINGANI WAKHE……...5 OKUNYE_____6 (CHAZA) ANGAZI----------8 ANGIFUNI UKUPHENDULA----------9	

NO.	IMIBUZO	IZIMPENDULO	SKIP
45.	UNGAMVUMELA UMNTANAKHO ADLALE NOMNTWANA ONEGCIWANE LESANDULELA NGCULAZI?	YEBO ..... 1 CHA ..... 2 ANGAZI ..... 8 UYALA UKUPHENDULA..... .9	
46.	UNGAMVUMELA UTHISHA UNEGCIWANE LESANDULELANGCULAZI AFUNDISE ESIKOLENI ESIFUNDA INGANE YAKHO?	YEBO ..... 1 CHA ..... 2 ANGAZI ..... 8 UYALA UKUPHENDULA.....9	
47.	UNGAMHLENGA OWOMNDENI ONESIFO SENGCULAZI?	YEBO ..... 1 CHA ..... 2 ANGAZI ..... 8 UYALA UKUPHENDULA..... 9	

UKONDLA INGANE

48.	NGICELA UKWAZI UKUTHI UMUPHA KANJANI UKUDLA U---- WAMNCELISA U--------?	YEBO ..... 1 CHA 2	- - ? 50.
49.	WAMNCELISA EMVA KWESIKHATHI ESINGAKANANI EZELWE?	EMVA KOKUMBELETHA NGEHORA LOKUQALA EBELETHIWE----------1 EMAHORENI ANGU8 OKUQALA ----------2 NGEMUVA KWAMAHORA ANGU8 OKUQALA----------3	
50.	UMA UMNTWANA EPHAKATHI KWEZINYANGA EZINHLANU NEZINGU 9 BUZA UMAMA NOMA UMZANYANA LEMIBUZO: NGIZOCELA UKUKUBUZA NGEZINHLOBO ZEZIPHUZO EZIPHUZWE U-----IZOLO EMINI NASEBUSUKU *MFUNDELE ZONKE LEZINHLOBO UKOKELEZELE KONKE AKUSHOYO*	**OKUPHUZWAYO NOKUDLIWAYO AKUTHATHE KULAMAHORA ANGU 24?** A. UBISI LWEBELE? B. AMANZI? C. OKUNYE OKUPHUZWAYO? D. UKUDLA OKUCUTSHUZIWE? E. OKUNYE? CHAZA:	

AMAGAMA EZINGANE NEZINSUKU ZOKUZALWA KWAZO

51. Obani amagama ezingane zakho ezincane azingaphansi kweminyaka emihlanu, kanye nezinsuku zazo zokuzalwa?

Igama:	**Usuku lokuzalwa: DD/MM/YYYY**
1.	
2.	
4.	
3.	

NGIYABONGA KAKHULU NGOSIZO LWAKHOEKUPHENDULENI LEMIBUZO SIZOYIGCINA KAHLE LENKULUMO IBE IMFIHLO YETHU.

AKUKHO OSITSHELE KONA ESIZOKUXOXELA ABANYE EMPHAKATHINI .

Appendix F

Training curriculum and materials.

KPC Survey
Training Curriculum
12-15 September 2005

Day 1: Supervisor Training – Osindisweni Hospital

Time	Topic	Personnel
8:30 – 9:00	▪ Welcome and orientation to training and survey schedule. ▪ Overview of MCDI Ndwedwe Child Survival Project - Objectives and activities. ▪ Overview of survey and purpose. ▪ Review of schedule for training and survey period. *Handout:* Schedule for training and survey period. ▪ Distribution of folders.	**Thuli**
9:00 – 10:15	▪ Explanation of supervisor's role. *Handouts:* - List of supervisor tasks - List of selected communities and number of households in each community. ▪ Discussion of household/respondent selection method *Handout:* - Decision criteria for selecting households/ respondents. ▪ Questions and discussion (throughout)	**Martha**
10:15 – 10:30	Tea break	

Time	Topic	Personnel
10:30 – 12:00	▪ Overview of questionnaire - areas of inquiry ▪ Questionnaire review – through diarrhoea case management ▪ Questions and discussion (throughout)	**Martha**
12:00 – 1:00	Lunch	
1:00 – 2:30	▪ Questionnaire review – remainder of questionnaire. ▪ Discussion of data collection, quality control and the 4C concept – correctly, completely, consistently and clearly. ▪ Discussion of consent form. *Handout:* - Questionnaire quality control checklist - Consent form ▪ Questions and discussion (throughout)	**Martha**
2:30 – 2:45	Break	
2:45 – 4:00	▪ Discussion of good interviewing techniques *Handout:* - Outline of good interviewing techniques ▪ Overview of plan for Tuesday and Wednesday's interviewer training. **Conclusion of Day 1**	**Thembelihle**

Day 2: Interviewer Training – Osindisweni Hospital

Time	Topic	Personnel
8:30 – 9:30	▪ Welcome and orientation to training and survey schedule *Handout:* - Training and survey schedule ▪ Ice-breaker exercise	**Thuli**
9:15 – 10:15	▪ Overview of survey and purpose ▪ Explanation of supervisor's role ▪ Explanation of interviewer's role ▪ Breaking into teams – 4 interviewers for each of 3 supervisors. ▪ Questions and discussion (throughout)	**Thuli**
10:15 – 10:30	Tea break	
10:30 – 12:00	▪ Questionnaire review – through diarrhoea case management: - How to fill out questionnaires properly. - How to quality check questionnaires. - Understanding of questions and what's being asked. ▪ Questions and discussion (throughout)	**Supervisor**
12:00 – 1:00	Lunch	
1:00 – 2:30	▪ Questionnaire review – remainder of questionnaire: - How to fill out questionnaires properly. - How to quality check questionnaires. - Understanding of questions and what's being asked. ▪ Questions and discussion (throughout)	**Supervisor**
2:30 – 3:15	▪ Discussion of household/respondent selection criteria.	**Thembelihle**

Time	**Topic**	Personnel
	▪ Discussion of confidentiality, consent and how to administer consent form. *Handout:* - Consent form	
3:15 – 4:00	▪ Review of training topics covered in Day 2. ▪ Overview of next day's training ▪ Question and answer period. **Conclusion of Day 2**	**Thuli**

Day 3: Interviewer Training – Osindisweni Hospital

Time	**Topic**	Personnel
8:30 – 9:30	▪ Review of previous day's training activities. ▪ Question and answer period.	**Thuli**
9:30 – 10:15	▪ Discussion of good interviewing techniques. *Handout:* - Guidelines on good interviewing techniques.	**Thembelihle**
10:15 – 10:30	Tea break	
10:30 – 11:00	▪ Interview role playing - demonstration ▪ Questions and discussion (throughout)	**Thuli, Thembe, and supervs.**
11:00 – 12:00	▪ Practice interview session – triad exercise with supervisors and teams – one person is the interviewer, one is the respondent, the others are the supervisor and/or observer. One full interview is completed and questionnaire reviewed for quality control.	
12:00 – 1:00	Lunch	
1:00 – 3:00	▪ Practice interview session – triad exercise with supervisors and teams (roles switched). Two completed interviews and quality checks.	
3:00 – 3:15	Break	
3:15 – 4:00	▪ Group discussion of interviewing exercises – questions and issues raised, points clarified. ▪ Overview and logistics of Day 4 field exercise.	
	Conclusion of Day 3	

Day 4: Interviewer Training – Field Test in Mavela

Time	Topic	Personnel
8:00 – 8:15	▪ Interviewer teams meet with supervisors to: - Discuss plan for the day. - Get questionnaire copies and folders with pens.	
8:15 - 9:00	▪ Supervisors and interviewers transported to Mavela clusters	
9:00 – 4:00	▪ Interviewers conduct survey on randomly selected households that fit criteria – at least one child less than 5 years old, focusing on the youngest child and interviewing the child's primary caregiver. ▪ Supervisors to observe one interview per team member. ▪ Expectation of results: 16 questionnaires per team completed.	
4:00 – 4:30	▪ Teams transported back to Osindisweni – opportunity to discuss questions and issues that arose. ▪ MCDI staff available telephonically to answer questions and resolve problems. **Conclusion of Day 4 and KPC Training Period**	

KPC 2005 Training Handouts

Supervisor responsibilities

- Oversees a team of 3 to 4 interviewers. Takes an active role in motivating and improving the performance of interviewers.
- Assists in training interviewers beginning on Day 2.
- Responsible for observing at least 1-2 interviews each day, identifying where help is needed and providing it.
- Responsible for quality-checking all questionnaires, making sure questions have been answered correctly, completely, consistently and clearly.
- Reviews all of the completed interview forms before the Interview Team leaves the community to gather additional information or correct errors, as needed.
- Provides on-site assistance to Interviewers regarding interviewing techniques and answers to survey-related questions.
- **Responsible for 16 completed questionnaires from her team for each day of the survey.**
- Has a thorough understanding of the MCDI KPC questionnaire – what questions are being asked and why the information is important.
- Understands who is to be interviewed and how respondents are selected within MCDI-designated communities.
- Understands the training and survey schedule.
- Understands the logistics involved in team transport, selecting households in survey areas, and delivery of quality-checked questionnaires to MCDI.
- Registers unusual events, situations or problems to be discussed with MCDI personnel at earliest opportunity (see contact numbers below).

MCDI contact numbers

Martha Benezet
072 947 6723

Thuli Ngidi
082 710 6565

Thembelihle Dludla
083 263 4282

KPC Survey 2005

The role of the interviewer

The interviewer has *the most important role* in the KPC survey process. He or she is the one who asks questions and collects the information that indicates how successful the MCDI Child Survival Project in Ndwedwe has been in reaching its goals.

The data you collect over the next 10 days will be compiled, analysed and reported to the Department of Health in KwaZulu Natal, tribal leaders in Ndwedwe communities, and the project's funders in Washington DC.

So we're relying on you and your abilities, because we need you to do your work according to the 4 C's - correctly, completely, consistently and clearly.

- Correctly – you must make sure you're asking the questions and recording the answers correctly. If you're unsure about a question, your interviewee will be confused as well. Ask your supervisor if you're not sure about a question or how to record the answer on the questionnaire form.

- Completely – make sure the answers you get are the whole answer to the whole question. Don't leave anything out. Ask your interviewee to repeat her answer if you didn't get it all the first time. Keep asking her to repeat it until you get it all down. It's worth risking some minor irritation to get all the information needed.

- Consistently – make sure you're asking the right questions and skipping those that don't apply to your interviewee. Follow the form in order, question by question, and only skip questions where the form indicates that you should. Every question and every questionnaire is important and should be treated as such.

- Clearly – make sure the answers that you record are easy to read. Print all responses and make letters and numbers distinct. Otherwise the information is unusable and the time has been wasted.

Interviewer responsibilities

- Works as part of a 3 to 4 person team with 1 supervisor.

- Understands and follows the criteria on how to select households for interviews in MCDI-designated communities – the criteria for how a mother/caregiver should be selected and approached.

- Understands the purpose of the consent form and how to present it to respondents and obtain their permission to be interviewed.

- Understands the questionnaire THOROUGHLY – what questions are being asked, how the answers should be recorded, what questions to ask each respondent and what questions should be skipped according to that respondent's relationship to the child.

(continued)

- Complies with directions provided by his/her team supervisor and completes the number of questionnaires required.
- Asks questions of the supervisor WHENEVER something is confusing or unclear.
- Always uses good interviewing techniques, as presented in training.
- Reviews the questionnaire before leaving the household to make sure all answers have been correctly, completely, consistently and clearly recorded.
- Delivers the questionnaire to the Supervisor who checks it immediately for completeness or unclear responses while still in the field.
- Notifies the Supervisor of any problems experienced in the field.
- Returns to the household if the Supervisor requests clarification of any item on the questionnaire.

Thank you. We couldn't do this without you!

Contact numbers for questions:

Sister Florence Kunene
072 495 4399

Sister Thokozani Mbatha
072 676 3382

Sister Thuli Ngidi
082 710 6565

Sister Thembelihle Dludla
083 263 4282

Proper interviewing techniques

Good Interviewers:

1. Introduce themselves, the name of the organization with which they work and the purpose of the survey.

3. Maintain the confidentiality of the survey. If there are people around the person being interviewed, they politely ask onlookers to leave.

4. Explain to interviewees that they do not have to take part in the survey and that their answers will be kept confidential and obtain their consent before commencing the interview.

5. Ask the questions exactly as they are written.

6. Speak loudly and clearly. Ask the questions in a respectful manner.

7. Make eye contact with the interviewee. (Do not just stare at the questionnaire.)

8. Be professional and objective. Remain neutral as the answers are given. (Do not laugh, compliment, or correct a response. Do not imply that some answers are better than others.)

9. Ask "Anything else?" after each answer in a question allowing multiple responses.

10. Repeat the question exactly as it is written if the respondent is silent after a particular question is asked.

11. Reword the question without changing the meaning, if the respondent still does not understand it after it has been repeated exactly as written.

12. Ask questions with patience and wait for the response. Never try to suggest or lead a respondent to a specific answer. (Ask "where did you seek advice when your child got sick?," not "Did you take your child to the clinic when he was sick?"

13. Never assume a response without asking. For example, if a respondent reports not giving water to a child, do not assume that the child is NOT getting teas.

14. Never ask a closed-ended question when an open-ended question is possible. For example, instead of asking, "Is this child under 5 years old?" good Interviewers ask, "How many years of age is this child?"

15. Use the child's name and/or correct sex (he or she) when asking a question, when possible.

16. Probe for accurate answers. For example, if an answer seems to be inconsistent with previous information given by the interviewee or if there is some reason to doubt an answer, good Interviewers try to discover the truth by asking the interviewee another question. However, good Interviewers are not overly persistent because the interviewee may change the answer thinking the Interviewer is dissatisfied with the response.

Selecting KPC Interviewees

The people who must be interviewed for this survey are mothers who have at least one child under 5 years old who they care for. If the mother isn't available, whoever is the child's main caregiver will do.

If there is more than one child under 5 in the household, find out which child is the youngest and interview only that child's mother or caregiver.

What is random interviewing?

To make sure the information being collected is a reflection of the general community, choosing what houses to interview must be done randomly throughout that community.

This avoids bias, or results that don't accurately reflect what the majority of people in the community know and think, or how they act in caring for their children.

How to select a household for an interview

Once the survey team has reach the designated cluster site, try to identify the centre of the cluster (or the most populated area) and go there.

Choose a direction to start looking for households to interview. Spin a pen on a flat surface and go in the direction that it points to. Stop at the first house you see.

IF no one is home…

> Turn right at the front door and go to the next household you see.

IF someone is home…

> Introduce yourself and your purpose, and ask if there is a child under 5 years old living in the household.
>
> IF no – turn right at the front door and go to the next household.
>
> IF yes – ask to speak to the child's mother or caregiver and ask her or his consent to be interviewed.

Once an interview has been completed and you're satisfied that all the answers are correct, complete, consistent and clear, turn right at the front door and go on to the next household. Continue until your either complete your quota of questionnaires or run out of households to visit. Contact your supervisor to transport you to the next survey area.