



CONCERN WORLDWIDE

Gisagara Health District (Rwanda)

CHILD SURVIVAL PROGRAM

**Knowledge, Practice and Coverage
Final Evaluation**

June. 2006

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SUMMARY

The main objective of this study conducted in June 2006 was to evaluate the knowledge, practices and coverage of services (KPC) of the population in Gisagara (former Kibilizi) district, with regard to socio- medical objectives and indicators, as defined in the child survival project. This study aims specifically at: (i) identifying the social and demographic characteristics of the target population; (ii) describing the status of health services with regard to knowledge, practices and coverage related to the four interventions of the project, namely HIV & AIDS, malaria, nutrition and maternal and child health.

This is a cross-sectional and descriptive study, based on a household survey method. The target population consists of all households residing in Gisagara district where a sample of 420 households were randomly selected that were composed by mothers aged between 15 to 49 years who had children aged between 0 to 11 months and 12 to 23 months.

A previous KPC survey was conducted on a sample of 133 fathers who had children aged less than 5 years and of 266 mothers, which results helped to inform this KPC survey. Comparative analyses are noted in this report in reference to gender questions.

The main results in the four interventions of the project are the following:

1) Malaria

- 76% of mothers know at least 2 danger signs in sick children that required an urgent medical attention and 80% know that they should seek care within first 24 hours of symptoms of fever
- 58% of children aged between 0 to 23 months who had fever were treated within 24 hours.
- 52% (versus 4.3% in 2001) of mothers have impregnated mosquito nets
- 47% (versus 0.9% in 2001) of the children slept under mosquito net the night before the survey.

2) HIV & AIDS

- 81% (versus 24.4% in 2001) of mothers know at least 2 means for prevention HIV transmission
- 81% (versus 9.5% in 2001) of mothers were tested for HIV, against 48% of fathers.
- 60% (versus 0% in 2001) of mothers received PMTCT screening services

3) Nutrition

- 87% (versus 62.6% in 2001) of children aged between 6-23 months received vitamin A in the last six months
- 65% (49.2% in 2001) of children aged between 0-23 months were weight during the last 3 months before the survey
- 36% (versus 38% in 2003) of children aged 12-23 months had chronic malnutrition (<80% weight-for-age)
- 76% (versus 64% in 2001) of children were fully immunized before the first birthday

4) Maternal and Child health

- 40% (versus 34% in 2001) of mothers received at least 2 doses of Tetanus Toxoid vaccine during their last pregnancy (verified by card)
- 55% (versus 19.0% in 2001) of mothers delivered at a health facility
- 50% (versus 8% in 2001) of mothers were assisted by a qualified health personnel during their last delivery
- 15% (versus 2.8% in 2001) of mothers know at least 3 danger signs during the post natal period
- 41% of mothers with children 0-11 months had received 2 or more intermittent presumptive treatments for malaria during their last pregnancy (confirmed by card)

In **conclusion**, the "Child Survival" program in Gisagara district attained and even exceeded its objectives. The knowledge of the population, with regard to the four interventions, has considerably improved; however the practice remains a challenge. This study will provide CONCERN/RWANDA and the Gisagara district health staff with

relevant information on the success and/or failure of the strategies and actions that were carried out, and will allow them to set up new strategies, in order to solve the remaining problems and future challenges.

Summary key indicators (KPC survey June 2006):

Questionnaire Ref Number(s)	Indicator	Numerator	Denominator	Total in Percentage	95% Confidence Interval	
					lower bound (%)	upper bound (%)
Nutrition						
67/(91)	Child weighed in past 3 months (as per card)	273	420	65.0	60.4	69.6
68	Child aged 12-23 months received Vitamin A in past six months	141	162	87.0	81.9	92.2
92	Child underweight (-2 SD WFA) (12-23 months)	85	235	36.0	29.9	42.1
93	Child 6-23 months with MUAC <125mm	32	265	12.1	8.2	16.0
HIV & AIDS						
25	Mother correctly cites at least two known ways to reduce risk of transmission of HIV & AIDS	338	420	80.5	76.7	84.3
26	Ever tested for VCT	339	420	80.7	76.9	84.5
27	Ever tested for VCT in Gisagara/Kibilizi District	299	420	71.2	66.9	75.5
37	Ever participated in PMTCT	252	420	60.0	55.3	64.7
Malaria						
22	Household has a mosquito net (observed)	219	420	52.1	47.4	56.9
16+17	Mosquito net treated in past 6 months or long lasting net (17 seusement)	195	240	81.3	76.3	86.2
18	Child slept under treated mosquito net last night	195	420	46.4	41.7	51.2
70	Mother knows child with fever requires treatment within 24 hours	336	420	80.0	76.2	83.8
71	Mother who correctly cites at least two signs that febrile children need urgent attention.	232	420	55.2	50.5	60.0
73+75	Child had fever in past 2 weeks	88	420	21.0	17.1	24.8
751+76+77	Proportion of children with fever received malaria treatment within 24 hours (in past 2 weeks)	51	88	58.0	47.6	68.3
Maternal & Newborn Care						
32 +45	Attended at least one ANC visit in last pregnancy (verified on card)	405	420	96.4	94.7	98.2
45	Attended 4 or more ANC visits (verified on card)	18	232	7.8%	4.3	11.2
35	Mother received 2 or more doses of TT during last pregnancy (self report)	262	420	62.4	57.7	67.0

Questionnaire Ref Number(s)	Indicator	Numerator	Denominator	Total in Percentage	95% Confidence Interval	
					lower bound (%)	upper bound (%)
44	Mother received 2 or more doses of TT during last pregnancy (as per card)	169	420	40.2	35.5	44.9
41	Mothers with child 0-11 months received 2 or more presumptive malaria treatments during last pregnancy (self report)	94	248	37.9	31.9	43.9
47	Mothers with child 0-11 months received 2 or more presumptive malaria treatments during last pregnancy (Verified on card)	64	158	40.5	32.9	48.2
48	Deliveries at health institution	230	420	54.8	50.0	59.5
49	Delivery by a skilled attendant (doc, nurse, aux)	209	420	49.8	45.0	54.5
(49.5)/ 50	Deliveries by trained TBA	104	420	24.8	20.6	28.9
51	Used a clean delivery kit if delivered in the home	43	202	21.3	15.6	26.9
52	Mother knows 3+ danger signs during labor & delivery	63	420	15.0	11.6	18.4
53	Infant breastfed within first hour of birth	258	420	61.4	56.8	66.1
54 / (57)	Mother received postnatal check within 48 hours of delivery (checked at least one danger sign)	151	420	36.0	31.4	40.5
58 / (61)	Baby received newborn check within 7 days of delivery (checked at least one danger sign)	117	420	27.9	23.6	32.1
62	Mother received postpartum vitamin A	237	420	56.4	51.7	61.2
63	Mother knows 3+ danger signs during postpartum period	18	420	4.3	2.3	6.2
64	Mother know 3+ danger signs for newborn	71	420	16.9	13.3	20.5
Additional Rapid Catch Indicators						
9	Mothers with child age 0-23 months who was born at least 24 months after the previous surviving child (child spacing)	110	139	79.1	72.4	85.9
9	Mothers with child age 0-23 months who was born at least 36 months after the previous surviving child (child spacing)	56	139	40.3	32.1	48.4
66	Infants aged 0-5 months exclusively breastfed in the last 24 hours	151	155	97.4	94.9	99.9
66	infants age 6-9 months receiving breastmilk and complementary foods	35	71	49.3	37.7	60.9
72	Mothers who know at least two signs of childhood illness that indicate the need for treatment	317	420	75.5	71.4	79.6

Questionnaire Ref Number(s)	Indicator	Numerator	Denominator	Total in Percentage	95% Confidence Interval	
					lower bound (%)	upper bound (%)
90	Children age 12-23 months who are fully vaccinated (against the five vaccine-preventable diseases) before the first birthday [denominator=those with cards]	108	143	75.5	68.5	82.6
90	Children age 12-23 months who received a measles vaccine (card or self reported, denominator=all children)	137	168	81.5	75.7	87.4
79	Sick children age 0-23 months who received <u>increased fluids</u> during an illness in the past two weeks	24	147	16.3	10.4	22.3
80	Sick children age 0-23 months who received continued feeding during an illness in the past two weeks	27	144	18.8	12.4	25.1
85 / (88)	Mothers of children age 0-23 months who wash their hands with soap/ash before food preparation, before feeding children, after defecation, and after attending to a child who has defecated	56	420	13.3	10.1	16.6
	Other					
12	Household currently mutuelle subscribe (card holder in 2006)	197	420	46.9	42.1	51.7
23	Mothers who state that a she either alone or jointly with her husband decide(s) on expenditure of the household income.	221	420	52.6	47.8	57.4
24	Mothers who state that the decision of place of delivery for pregnancy resides with her alone or jointly with her husband.	336	420	80.0	76.2	83.8

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ABBREVIATIONS

AIDS:	Acquired Immuno-Deficiency Syndrome
ANC:	Antenatal Clinic
ARI :	Acute respiratory infections (ARI)
CA:	Catchment Area
CHW:	Community Health Worker
COSA :	Health Committee
CSP :	Child Survival Program
DHS:	Demographic and Health Survey
DMHT:	District Management Health Team
EPI:	Expanded Program of Immunization
FARN :	Hearth
FP:	Family Planning
HBM:	Home Based Malaria Treatment
HC :	Health Centre
HF:	Health Facility
HIS:	Health Information System
HIV:	Humane Immunodeficiency Virus
KPC :	Knowledge, Practice, and Coverage
Minisanté:	Ministry of Health
PLWHA:	People Living with HIV & AIDS
PMTCT:	Prevention of Mother To Child Transmission
STD:	Sexually Transmitted Diseases
TBA:	Traditional Birth Attendant
TT:	Tetanus Toxoid
USAID :	United States Agency for International Development
VCT :	Voluntary Testing Center
WHO:	World Health Organization

I. INTRODUCTION

CONCERN/RWANDA has set up a project entitled "CHILD SURVIVAL" in the district of Gisagara (former Kibilizi district), in the Southern Province of Rwanda, since October 2001, for 5 years period, financed by the USAID. This project has as overall objective to contribute to the reduction in maternal and child mortality and morbidity, and increased life expectancy in Kibilizi District, Butare Province of Rwanda.

Concern Worldwide US, Inc. is an affiliate of Concern Worldwide which began activities in Rwanda in 1994. It is in 1998 that CONCERN/RWANDA started its technical assistance programme to the health district of Kibilizi (now Gisagara).

To achieve its goal, the project worked out an action plan with strategies based on the objectives of the Ministry of Health as well as those of the USAID in Rwanda. The main strategies are primarily based on the staff capacity building in health services and of community based organizations in order to encourage them to participate in the prevention of health problems and addressing the local population health issues.

An initial evaluation of the knowledge, practices and coverage (KPC) status of the Kibilizi district population was done at the beginning of the project, in 2001, in order to allow planning and resources allocation, related to the district health issues, specifically for the mothers and children, but also to establish basic indicators for the best follow-up and the evaluation of the program. The present study aims at evaluating the project impact on the status of knowledge, practices and coverage (KPC) of the people living in Gisagara district, at the end of the project.

II. BACKGROUND

The former health district of Kibilizi (currently called Gisagara) is located in the Southern province and includes seven Health centres which provide a minimum package of health activities to the population. The district hospital is not operating yet but its construction is almost completed. The district of Kibilizi covers two administrative districts (Mugombwa and Kibingo), with 43 sectors and 142 cells (the smallest administrative unit). In 2006, the total population is estimated at 178,502 inhabitants.

The former health district of Kibilizi was characterized by high child and maternal morbidity and mortality due mainly to poor access and quality of health services.

The *CONCERN* programme entitled " Child Survival" in Kibilizi, used three main strategies to achieve its goal: (1) Building the management capacity of the District health staff and supervisors; (2) Developing the capacities of the health staff of the district in the four program fields of intervention; and (3) to strengthen the district's community outreach approach.

The four major fields of interventions of the program are:

1. HIV & AIDS prevention
2. Malaria Control
3. Nutrition and prevention of chronic malnutrition
4. Mother and Newborn care.

The expected program outputs are:

- 1) Improved district health management systems
- 2) Improved quality of services on the four selected interventions
- 3) Increased health care coverage
- 4) Decentralized and institutionalized health services
- 5) Sensitized District Health Team and population on gender health issues
- 6) Empowered population for disease prevention and risk reduction
- 7) Improved Concern-CSP planning, design, and management capacity

This study's main objective is to describe the overall status of knowledge, practices and coverage (KPC) of the Kibilizi district population with regard to social and health objectives and indicators, such as defined by the project. This study aims specifically at:

- (i) identifying the social and demographic characteristics of the concerned population;
- (II) describing the status of health services with regard to knowledge, practices and coverage, related to the four intervention fields, namely HIV & AIDS, malaria, nutrition and maternal and child health.

This study will give CONCERN/RWANDA and the health staff, and the community based associations, the impact of their interventions and also the challenges which still remain ahead.

III. METHODOLOGY

This is a cross-sectional and descriptive study, based on a household survey method. The target population consists of all households residing in the Kibilizi health district.

1. Sampling

This KPC study targets all the households of the former Kibilizi district. This survey used a two-stage cluster sampling design. The first level involved sampling sectors, and the second level involved cells. The selection of sectors and cells were selected proportionally to their size. Ten of these sectors were selected and an average of 3 cells within each sector, for a total of 30 cells to be surveyed (see annex 1).

The sample size of this study was determined by using the formula for the simple random sampling for proportion estimate, and was adjusted for the design effect of a two-stage cluster sampling design. The sample size was obtained using the formula:

$$n \geq [Z^2 (P) (1-P)]/D^2$$

n= minimum sample size required

Z= z-score corresponding to the level of confidence

P= estimated prevalence coverage rate level to be investigated.

D= minimum tolerable error

For this survey, we used: Z=1.96; P=0.5 and D= 10%. The minimum sample size obtained is 97 (n=97). With the design effect of 2, the minimum sample size is 194. To be conservative, a total of 420 households were selected.

Thus, 14 households were surveyed in each of the 30 cells of Gisagara district. Selection of households was done as prescribed in the EPI Coverage Survey Training Manual (2):

- 1) Having reached the survey site, the team supervisor asked the local leader to lead the team to the center of the cell.
- 2) Once at the center, the team leader spun a pen or bottle to choose a direction.

- 3) The first household in that direction was chosen to participate in the survey.
- 4) Once the household was selected, the team chose the closest house in any direction as the next target.

The target population was composed of mothers aged 15-49 years which had children aged 0-23 months.

2. Development of questionnaires

One questionnaire was used for this KPC survey to collect data on mothers with children aged between 0 and 23 months old. This questionnaire was developed by the team of the CONCERN / Rwanda project, entitled "Child Survival " and used several questions from IRC questionnaire concerning the sick child module. Questions are related to the indicators in connection with the four program intervention areas. The questionnaire was tested beforehand on the field; the corrections made following this pre-test were included to the final version (see annex 2).

These questionnaires have allowed collecting individual information on mothers and their child, but also about the household characteristics, such as assets, the main source of water, the type of toilets, the type of floor, the main source of cooking energy. The questionnaire also contains more specific questions about the surveyed households such as knowledge, practice and health services coverage.

In summary the questionnaire has questions on the following topics:

1. General questions:

- Social and demographic characteristics
- Possession of assets and other durable goods
- Health mutual
- Gender aspects

2. Specific questions:

- Antenatal consultation
- Antenatal, per partum and postpartum consultation
- Breastfeeding and feeding practices related to children
- AIDS and STD

- Immunization
- Children's diseases
- Children nutritional state and growth monitoring
- Breastfeeding and nutrition
- Diarrhea diseases
- New born babies' health care
- Deliveries

3. Training of investigators and field data collection

A dozen of surveyors and 4 supervisors (from the National University of Rwanda/school of Public Health) were recruited and trained during two days in field survey techniques. The training courses related primarily to: 1) the objectives of the assessment, 2) the objectives and indicators of the "Child Survival" project 3) sampling and data collection techniques, 4) data quality control and data collection 5) member's role and responsibilities.

After the training, a pre-test was carried out at Gisagara center and this site was selected because it is located close to the training site and also because it does not belong to the survey area.

For field data collection, surveyors were divided into 3 teams composed with 3-4 surveyors and one supervisor each. Each team was assigned specific sectors and cells to be surveyed. Data field collection was conducted during the period from 03 to 15 July 2006. As planned, all the 420 households were successful surveyed.

It should be noted that CONCERN/RWANDA had received a written approval from the mayor of Gisagara district before the beginning of the survey. Moreover, a verbal consent from each person interviewed was given before the beginning of the survey.

4. Data entry and Analysis

The data entry was carried out by the 3 investigators, using MS WORD and EPIDATA software. The internal coherence of the answers was checked before the analysis of the data. The statistical analyses were done MS EXCELL and STATA (version 7) software.

The data entry begun immediately on the first of field survey in order to correct potential mistakes as early as possible, and was completed one day after the end of the field survey. The internal coherence of data was checked before analysis. The statistical analyses were done using SPSS and EPINIFO 2000 software. The anthropometric analysis was done using EPIINFO 2000 in reference to CDC/WHO (3). The method used in analysing the population's wealth index was comparable to the one used in the Demographic and Health Survey (DHS) of Rwanda in 2000 (4).

The results of anthropometric analysis for weight-for-age are based on international standards of 1978. Data analyses using the new 2006 WHO/UNICEF standards are also available.

A dissemination of preliminary results was held with CONCERN team and other key partners of the district which comments and recommendations were integrated into the final report.

5. Equity Analysis

An assets index was constructed using principal components analysis on clustering of key assets of electricity, furniture, motorcycle, television, dwelling construction materials, sanitation facilities and cooking fuel. This was based on the construct developed for the 2001 Rwandan Demographic & Health Survey. Results for key project indicators were stratified among five asset quintiles which depicted the poor and richest households represented in the survey.

There are several steps to the construction of a wealth index: determination of indicator variables, dichotomization (i.e. variables that take a value of 1 if the household owns the asset and 0 if the household does not), calculation of indicator weights and the index value, and calculation of distribution cut off points. The wealth index is constructed using the method of principal components following SPSS factor analysis procedure which assign each asset a weight (factor score). In this process only the first scores were standardized in relation to a normal distribution with a mean zero and standard deviation of one. Each household was then assigned standard scores for each asset calculated based on the formula. Results are described in section 8 of this report.

IV. RESULTS

1. SOCIO-DEMOGRAPHIC CHARACTERISTICS OF HOUSEHOLDS

A total of 420 mothers and their children aged 0-23 months were surveyed during this study.

1.1 Age of Mothers and Children Surveyed

As shown in table 1, the average age of the surveyed mothers is 30 years and for children it is 9 months. The majority of the mothers (27%) are aged between 25 and 29 years, followed by the group of those aged between 30-34 and 20-24 years respectively. The mothers aged less than 20 years and those over 40 years constitute only less than 15 % of the total. Children aged less than one year constitute over 61% of the total.

Table 1: Age of mothers and children

Age group of mothers (years)	Number	Percent
<20	23	5.5
20-24	88	21.0
25-29	115	27.4
30-34	91	21.7
35-39	62	14.8
40-44	35	8.3
45-49	6	1.4
Age group of children (months)		
0-5	166	40
6-11	90	21
0-11	256	61
12-23	164	39
Total	420	100
<i>Average of age for mothers : 29.74 years</i>		
<i>Average age for children 9 months</i>		

1.2 Childbirth spacing

Among the children surveyed, the proportion of boys and girls are 52% and 48% respectively. The average number of children aged less than 5 years per household is 1.5 children. In regard to child spacing, we notice that the proportion of mothers who have children born within 24 months interval is 79% and this rate goes down to 40% when the interval is of 36 months as shown in the table 2 below.

Table 2: Childbirth spacing

Category	Number	Total	Percent
Sex			
Girls	202	420	48.1
Boys	218	420	51.9
Mothers with children aged 0-23 months born within 24 months interval	110	139	79.1
Mothers with children aged 0-23 months born within 36 months interval	56	139	40.3
Average number of children aged < 5 years per household			1.5

1.3 Living conditions of the households

Information concerning the living conditions of the households was collected during this survey, and particularly for the possession of modern assets (radio, bicycle, telephone, motor bike, vehicle, etc.) and the housing characteristics, such as the type of toilets, the type of drinking water supply, the cooking energy source, and the type of floor of the main house. These characteristics are used as proxies for the socio-economic status of households and are comparable to the ones used for the DHS Rwanda 2000(5).

Type of materiel owned by households

As shown in table 3 below, 46% of households have a radio and 19% have bicycles. Less than 1% of the households have other durable assets such as a telephone and motorcycle. No household has refrigerator nor vehicle, or electricity

Table 3: Proportion of households with durable assets

Type of assets	Number	Total	Percent
Radio	194	420	46.2
Bicycle	78	420	18.6
Telephone	6	420	1.4
Television	1	420	0.2
Refrigerator	0	420	0.0
Motorcycle	3	420	0.7
Vehicle	0	420	0.0
Electricity	0	420	0.0

Type of toilets in the households

As described below in table 4, almost 80% of the households use traditional pit latrines, 13% of the households use improved latrine, and only 0.2% of the households have a flush toilet. 6% of households have no toilet and use the bush.

Tableau 4: Toilet Type

Type of Toilet	Number	Total	Percent
Traditional pit latrine	335	420	79.8
Improved pit latrine	54	420	12.9
Flush toilet	1	420	0.2
Other latrine	3	420	0.7
No latrine, use bush	27	420	6.4

Drinking water

Most of the drinking water comes from protected public well (90%) and unprotected public well (15.4%), and only small minority get water from the river as it is indicated in the table 5 below.

Table 5: Drinking water supply

Source of drinking water	Number	Total	Percent
Open water source	12	420	2.9
Public fountain, protected	379	420	90.2
Public fountain, unprotected	29	420	6.9

Cooking energy source

The main source of energy used by almost 99% of the households to cook their food is firewood, and only 0.2% of the households use straw and/or leaves for their cooking. Please note in table 6 below that none the surveyed households use gas, electricity, or charcoal.

Table 6: Source of cooking energy

Main source of cooking energy	Number	Total	Percent
Wood	419	420	99,8
Other	1	420	0,2

Type of floor

As shown in table 7 below, the majority of the households (76%) have a dirt/sand floor, 11% of the households have cement, a small proportion of households (1-2%) has floor with dung/manure, and 7% have other types of floor.

Tableau 7: Type of floor

Type de floor	Number	Total	Percent
Dirt/sand	321	420	76.4
Dung/manure	8	420	1.9
Cement	48	420	11.4
Tile	4	420	1.0
Carpet	9	420	2.1
Other	30	420	7.2

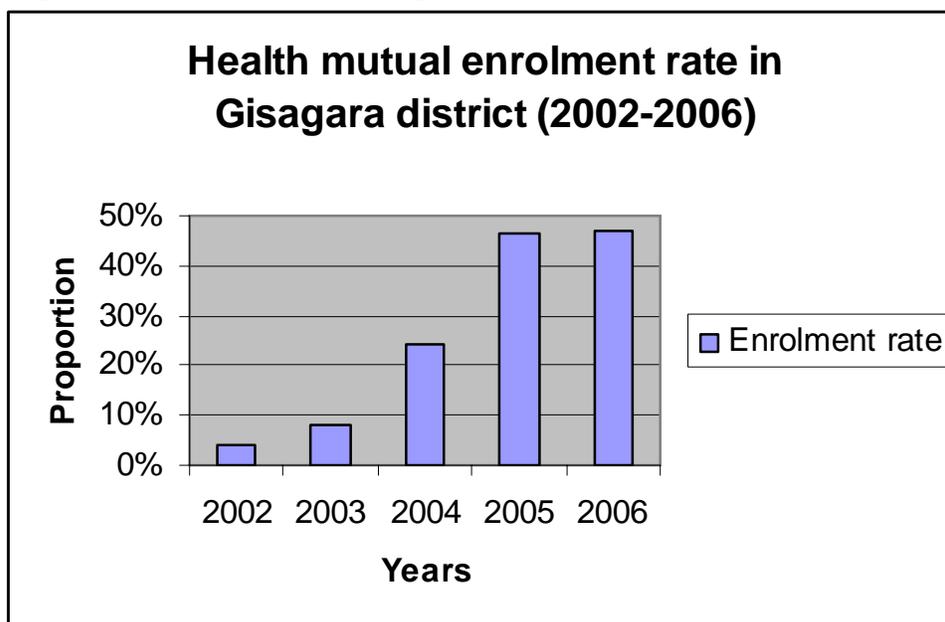
1.4 Health mutuelle enrolment

During the course of this survey, information was collected on households' enrolment into health mutual. As described in table 8 and figure 1, the average enrolment rate rose from 4% in 2002 to 47% in 2006. Households which have ever participated in health mutual is 62% with a subscription to a health insurance scheme at the time of the survey amounts to 66% but only 46% of them could be verified on cards, and the reason of this difference being that some members had expired membership for 2005 but do consider themselves as current members.

Table 8: Enrolment in health mutuelle in Gisagara District (2002-2006)

Category	2002	2003	2004	2005	2006
Members	17	34	102	195	197
Total households	420	420	420	420	420
Enrolment rate	4.0%	8.1%	24.3%	46.4%	46.9%

Figure 1: enrolment rate in Gisagara district de 2002-2006 (on cards)



1. 5 Gender and decision making

The issue about decision-making in a couple was also tackled at the time of this survey. As shown in the table 9, the decision to use the money from family production is often taken by the man in 42%, by the couple in 43%, and by the woman alone in 11% of the cases. The proportion of mothers who decide alone and or with their husband is 54%.

Tableau 9: Decision of use of money from family production

Category	Mothers (%) N=420	Fathers (%) N=133	Total (%)
Fathers	178 (42.4)	57 (43.2)	235 (42.5)
Mothers	57 (13.6)	3 (2.3)	60 (10.8)
Couple	164 (39.0)	72 (54.5)	236 (42.7)
Mother or couple	221 (52.6)	75 (56.3)	296 (53.5)
Others	19 (4.5)	0 (0.0)	19 (3.4)
Don't know	2 (0.5)	0 (0.0)	2 (0.4)
Total	420	133	553

With regard to making a decision about the place of delivery, mothers stated that they are the only ones who make the decision in 40% versus 11 % for fathers alone. The decision is jointly taken by the couple in 40% of the case. The decision is either taker by mothers or jointly with the fathers in 80% of the case. The health workers, the traditional birth

attendants and other family members intervene in the decision making process concerning the delivery site in very few cases (2.6%) as shown in table 10.

Table 10: Decision making for Place of Delivery

Category	Mothers (%) N=420	Fathers (%) N=133
Father	48 (11.4)	64 (48.1)
Mother	168 (40.0)	24 (18.0)
Couple	168 (40.0)	38 (28.6)
Mother alone/ or with husband	336 (80.0)	63 (47%)
Health worker	4 (1.0)	2 (1.5)
Traditional birth attendant	9 (2.1)	3 (2.3)
Step mother	5 (1.2)	1 (0.8)
Others	11 (2.6)	1 (0.8)
Don't know	7 (1.7)	0 (0)

2. MALARIA

2.1 Household knowledge and bed net utilization

The knowledge of households of malaria and use of anti-malaria preventive measures was assessed during this investigation. Table 11 presents a summary of the results obtained. 55% of mothers interviewed could name at two danger signs in children with fever that require immediate medical attention, and 80% of mothers know that a sick child with fever need treatment within 24 hours. More than 54% of mother stated that they had malaria during their last pregnancy, but only 40% of them slept under bed net at least for 3 months period.

The proportion of households with bed nets (physical verification) is 52%. Mother who declared that their child slept under bed net the night before the survey is 47% and the proportion of treated bed nets (including the long lasting net) within the last 6 months period is 81%.

Table 11: Malaria knowledge and practice of households

Category	Number	Total	Percent
Mothers who know at least 2 danger signs in children with fever that require immediate medical attention	232	420	55
Mother who that a sick child with fever needs to be treated within 24 hours	336	420	80
Mothers who had malaria during the last pregnancy	227	420	54
Households with bed nets (verified)	219	420	52
Children who slept under bed net the previous night	198	420	47
Mothers who slept under bed nets at least for 3 moths during the last pregnancy	171	420	40
Treated bed nets (long lasting) within 6 months period	195	240	81

2.2 Type and duration of malaria treatment

Among the children who had malaria during the last 2 weeks, 46% of them were treated within 24 hours, the majority were treated in the health facility (45%), 24% were treated by community distributors of anti-malaria drugs, 5% by pharmacists, and 5% by traditional healers as shown in table 12. 15% of children with fever were never treated.

Table 12: Place of treatment for fever

Place of treatment	Duration of treatment		Total (%)
	<= 24 hours	> 24 hours	
Distributors of anti-malaria drugs	14	7	21 (24%)
Pharmacies	2	2	4 (5%)
Health facility	21	19	40 (45%)
Traditional healers	1	3	4 (5%)
No treatment received	0	13	13 (15%)
Total (%)	38 (46%)	44 (54%)	82 (100%)

The types of drugs prescribed are Amodiaquine alone (12%) or in association with Fansidar (8%), Fansidar alone (4%), Quinine (17%) and Paracetamol (22%). The duration of treatment varied between 3 and 7 days. Drugs that were used came from health facilities (63%) and from community distributors (18%) and only small percent of drugs were bought from private pharmacies (8%) or from traditional healers (4%) as described in the table 13 below. It was noted that many mothers don't know the actual

name of specific drugs taken but rather identify them by color or packaging which many result in false reported treatments.

Tableau 13: Type and duration of treatment against fever

Treatment received	Distributors of anti-malaria drugs					Total	Average duration (days)
	Private Pharmacies	Health facility	Traditional healers	Others			
Fansidar + Amodiaquine	3	1	3	0	1	8 (8%)	3
Fansidar	3	1	0	0	0	4(4%)	4
Amodiaquine	7	1	5	0	0	13 (12%)	3
Quinine	1	0	17	0	0	18 (17%)	7
Paracetamol	3	0	19	0	1	23 (22%)	4
Other	2	6	23	4	5	40 (38%)	
Total	19 (18%)	9 (8%)	67 (63%)	4 (4%)	7 (6%)	106 (100%)	

3. HIV & AIDS AND STD

3. 1 Households knowledge about HIV and STD

Table 13 summarizes the level of knowledge and practices concerning HIV and STD of the surveyed population. We notice that the majority of mothers (81%) know at least two means of preventing HIV transmission and the common means of prevention are abstinence, fidelity, avoiding promiscuity, and the use of condom. Most of the mothers (86%) had heard about sexually transmitted disease (STD) but only 35% could cite correctly at least 2 common signs of an STD. The major signs that were cited are pain while urinating, genital discharge, and genital ulcers.

Table 14: Knowledge about HIV and STD

Category	Number	Total	Percent
Knowledge of signs			
Mothers who know at least 2 means of prevention of HIV transmission	338	420	81
Mothers who heard about STD	360	420	86
Mother who know at least 2 signs of STD	148	420	35
Means of prevention against HIV			
Abstinence	103	420	25
Faithfulness	100	420	24
Condom	163	420	39
Avoid of sharp objects	234	420	56
Avoid charlatans	132	420	31
Avoid promiscuity	296	420	71
Don't know	13	420	3

Signs of STD			
Pelvic pain	35	420	8
Genital ulcer	103	420	25
Vaginal discharge	9	420	2
Infected discharge	149	420	36
Pain while urinating	118	420	28
Hematuria	12	420	3
Don't know	119	420	28

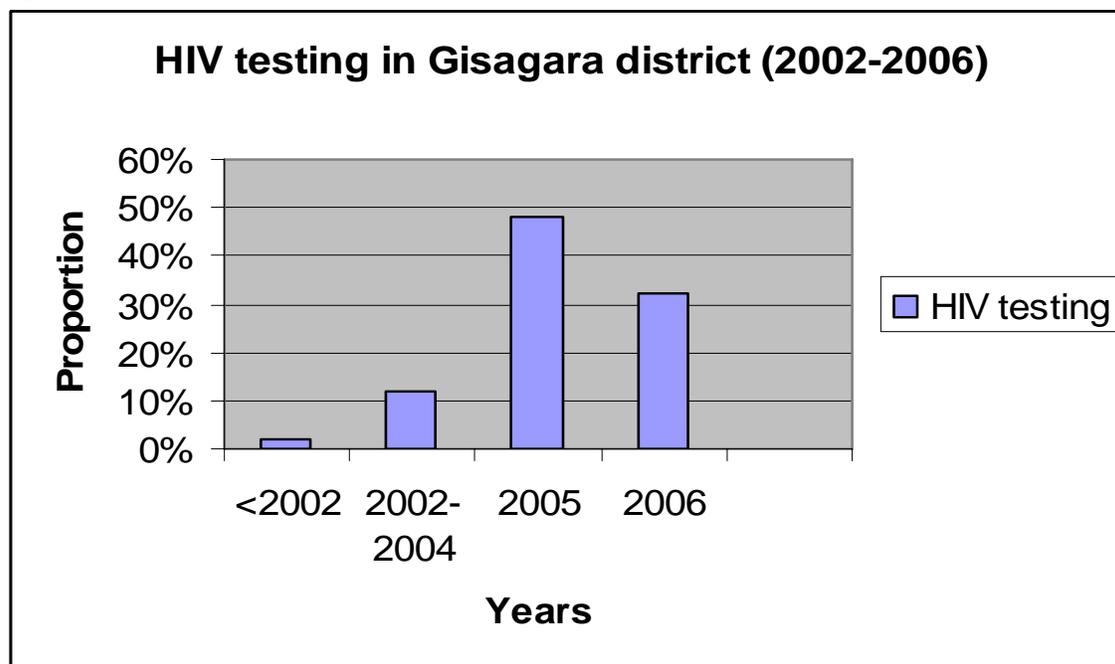
3.2 HIV Testing

As indicated in table 14 and figure 2, 81% of mothers have been tested for HIV in voluntary counselling and testing center (VCT) versus 41 % of fathers. The proportion of pregnant women who attended PMTCT counseling & testing service are 60%. HIV testing is often done at a VCT center in Gisagara district (71). The proportion of mothers who underwent HIV testing has increased over the years from 3% in 2001 to 48% in 2005. Note that in 2006 at the time of this survey, HIV testing rate was at 32%, this is because it was in mid-year and that the rate will likely increase during the remaining months of the year.

Table 15: HIV testing at VCT and PMTCT sites

Category	Mothers (%) N= 420	Fathers (%) N=133
Mothers/fathers who were tested for HIV in VCT sites	339 (80.7%)	64 (48.1%)
Mothers/fathers who were tested for HIV in VCT sites in Gisagara district	299 (71.2%)	40 (63.5%)
Mother who attended PMTCT services	252 (60.0%)	n/a

Figure 2: HIV testing in Gisagara district (2002-2006)



3.3 Support to People Living With HIV & AIDS

As indicated in table 15 below, the majority of mothers stated they were willing to help the people living with HIV & AIDS (PLWHA) and said to do the following: moral comfort (78%), feeding (27%), accompany to the health facility (15%). Less than 10% were ready to wash their clothes. Only 2% said that they would not want to help a sick AIDS patient.

Table 16: Type of support to People Living with HIV & AIDS

Category	Number	Total	Percent
Feeding	115	420	27
Washing clothes	34	420	8
Washing	24	420	6
Accompany to the health facility	63	420	15
Moral comfort	329	420	78
Nothing	7	420	2

4. NUTRITION, VITAMIN A SUPPLEMENT, AND IMMUNIZATION

4.1 Children nutritional status

It is known that the nutritional status of a child influences significantly its health. The malnourished child runs a higher risk of morbidity and mortality. This study conducted anthropometric measurement on children aged 0-23 months. Measurements of the weight and the size of their brachial perimeter (MUAC) were systematically taken to evaluate their nutritional status. These data were used to calculate indices for weight compared to the age (weight-for-age or WFA) and the MUAC compared to the age (weight-for-age). The latter was used as proxy to estimate the acute malnutrition in children (3).

The indices of WFA are expressed in terms of a number of units of standard deviation as compared to the median of the International Reference Population of NCHS/CDC / WHO or Z-score. Children who fall under less than two standard deviations below the median of the reference population are considered as malnourished, while those who are at less than three standard deviations below the median are considered to be severely malnourished (3,5).

Standard categories used for MUAC for children aged between 6-23 months are:

1) MUAC <110 mm: severe malnutrition; 2) MUAC 110-125 mm : moderate malnutrition, and 3) MUAC >125 mm : normal nutrition status. Children with MUAC below 125 mm are considered to have a delayed growth which is a sign of acute malnutrition usually due to bad feeding or disease.

In our sample, we note that 19.5% of children aged between 0-23 months have malnutrition (< 2 SD WFA) of which 12.1% have moderate malnutrition (children 12-23 months) and 7.4% with a severe malnutrition. For comparison to midterm results (2004 – 36%), the proportion of children aged 12-23 months with (< 2 SD WFA) was 36%.

As for those children with MUAC < 125 mm, we note that 12.1% aged between 6 to 23 months (total number is 265) have delayed growth; 11.3% with moderate form and 0.8% with severe form. Oedema in children was found to be present in 1.7% of cases.

Malnutrition distribution is almost equal for both boys and girls. Table 17 gives the Z-score for the weight-for-age and the MUAC.

Table 17: Nutritional status for children aged 0-23 months.

Category	Boys	Girls	Total	% total
Weight-for-Age (WFA)				
- 2 SD WFA (12-23 months)	29	22	51	12.1
- 3 SD WFA (0-23 months)	15	16	31	7.4
Normal (0-23 months)	152	177	329	78.3
Normal (12-23 months) (N=164)	n/a	n/a	105	64
MUAC : 6-23 months (N=265)				
>125 mm	117	116	233	87.9
110-125 mm	8	22	30	11.3
<110 mm	1	1	2	0.8
Oedema				
No (0-23 months)	199	214	413	98.3
Yes (0-23 months)	2	5	7	1.7

NB : SD = Standard Deviation

4.2 Growth Monitoring

Monitoring of growth in children allows detecting children with a risk of having malnutrition and this help to take appropriate preventive measures to prevent malnutrition. During this survey, investigators had to verify this information on the children health cards. After analyzing the data, we noticed that 65% of the children were had their weight checked during the last 3 month before this survey, and 29 % of children aged 12- 23 months (42 out of 143 children, and verified on cards) had received de-worming drug, mebendazole.

4.3 Infant and Young Child Feeding

Breastfeeding provides the child with a passive immunity which helps to protect him from several diseases. In Rwanda, the Ministry of Health recommends that mothers exclusively breastfeed their child as of from the first hour and during the first six months after the delivery. In addition, the Ministry advises mothers to continue breastfeeding their children up to two years old of age, with the introduction of food supplements from the age of 6 months.

The survey was carried out in all children aged from 0 to 23 months, and as shown in table 18 below, it was noticed that 96% of the children were being breastfed at the time of the survey of which 40% were still exclusively breastfed with only mother's milk.

The type of food supplements that the children received a day before the survey is basically made of cereals and starchy vegetables (41%). A quarter of the children had green vegetables, 17% had animal proteins, and only 12% had fruits. Food supplements were gradually introduced according to the age of a child; 1-2% of children at 0-5 month, 30% in children 6-11 months and 65% in children 12-23 months.

Table 18: Breastfeeding and food supplement

Category	0-5 months	6-11 months	12-23 months	Total	% (n=420)
Breastfeeding now	153 (38.1%)	92 (22.9%)	157 (39.1%)	402	96%
Food received previous day					
<i>Milk alone</i>	151 (89.3%)	11 (6.5%)	7 (4.1%)	169	40%
<i>Water</i>	0 (0.0%)	3 (18.8%)	16 (81.3%)	16	4%
Food supplement					
<i>Starchy Vegetables</i>	2 (1.1%)	39 (22.4%)	133 (76.4%)	174	41%
<i>Cereals</i>	3 (1.7%)	53 (30.5%)	118 (67.8%)	174	41%
<i>Green vegetables</i>	1 (1.0%)	24 (22.9%)	80 (76.2%)	105	25%
<i>Animal Proteins</i>	1 (1.4%)	23 (32.9%)	46 (65.7%)	70	17%
<i>Fruits</i>	1 (2.0%)	19 (37.3%)	31 (60.8)	51	12%

4.4 Immunization coverage and Vitamin A supplement

An adequate immunization coverage and Vitamin A supplement is essential to protect the child against most of childhood diseases and visual loss. In our survey, the study on the immunization coverage was limited to the children aged between 12 and 23 months which total was 168 children out 420.

More than 85% of children (143 out 168 children) had their child health cards at home at the time of the survey, which helped to confirm the self reporting of the mothers about the immunization status of their children. Table 18 gives a summary of immunization coverage of children on basis of self reporting, on cards and before the first birthday.

Immunization coverage in children is very high and overall above 96% except for measles and polio 1-3 which (91-95%). Children who are fully immunized are 76%. 42% of children had received Vitamin A supplement.

Table 19: Immunization coverage of children aged 12-23 months

Vaccines	Number	% immunization on the day of survey (cards: % immunization		% immunization on the first birthday (cards:
		Total 143)	(total 168)	total 143)
BCG	140	97.9%	83.3%	96.5%
Polio 0	131	91.6%	78.0%	90.2%
Polio 1	138	96.5%	82.1%	95.1%
Polio 2	141	98.6%	83.9%	97.2%
Polio 3	139	97.2%	82.7%	95.8%
DPT 1	138	96.5%	82.1%	95.1%
DPT 2	141	98.6%	83.9%	97.2%
DPT 3	138	96.5%	82.1%	95.1%
Measles	137	95.8%	81.5%	91.6%
Children fully immunized¹	114	79.7%	62%	76%
Vitamin A : 6-23 month	141/162	87.0%		

¹ Child is fully immunized if he receives BCG, Polio1-3, DPT1-3, and measles vaccine

5. MATERNAL AND CHILD HEALTH

5.1 Antenatal Consultation

Antenatal visit (ANC) is important since many conditions and diseases related to pregnancy can be detected and treated earlier on. As indicated in table 19A below, the number of the antenatal visits is very high because more than 96% of mothers surveyed declared that they had at least an antenatal visit during their last pregnancy, and those who self reported to have had more than four ANC are estimated at 27% versus 7% verified on cards.

Tetanus Toxoid (TT) Vaccine is given to pregnant women to prevent neonatal tetanus, which is one of the major neonatal mortality. It is advised that the mother receives at least two anti-tetanus injections during her pregnancy or only one if she already received an injection at the time of the previous pregnancy. The proportion of the mothers who received at least 2 doses of TT during their last pregnancy is 40.2%.

Tableau 19A : Antenatal Visits and Services

Category	Number	Total	Percent
Had at least one ANC during the last pregnancy	405	420	96%
Had at least 4 ANC during last pregnancy (self report)	18	253	7%
Had at least 4 ANC during last pregnancy (on cards)	68	420	27%
Had 2 TT during last pregnancy (on cards)	169	420	40%
Had 2 TT during last pregnancy (self report)	262	420	62%
Had at least two preventive treatments for malaria during the last pregnancy (mothers with child 0-11 months only) verified on card	64	158	41%
Had received iron tablets during the last pregnancy	138	420	33%
Average months of iron treatment during the last pregnancy		1.5 months	

43% of mothers stated that they took malaria preventive treatment during their last pregnancy and among this group only 6.4% took iron during more than two preventive

treatments. Iron supplement for pregnant women reduces the risks of anaemia, and anemia is often associated with a high maternal and neonatal mortality. We notice that 38% of mother had iron supplement during their last pregnancy for an average duration of 1.5 months.

Table 19B shows the relationship between the number of ANC and place of delivery, and we can see that mothers who had more than 4 ANC tend to deliver less at home (33%) as compared to those who had less than 4 ANC (42-60%), and also mothers with more than 4 ANC tend to deliver at referral hospital (11%) than those with less ANC (6%).

Table 19B: Number of ANC and place of delivery

Number of ANC (on cards)	Place of Delivery					Total
	Home	Public HC	Missionary HC	Referral hospital	Other	
4+ANC	6 (33%)	4 (22%)	6 (33%)	2 (11%)	0 (0%)	18 (7%)
3 ANC	34 (42%)	21 (25%)	19 (23%)	6 (7%)	2 (2%)	82 (32%)
2 ANC	68 (60%)	16 (14%)	18 (16%)	7(6%)	4(4%)	113 (45%)
1 ANC	17 (43%)	12 (30%)	8 (20%)	2 (5%)	1 (3%)	40 (16%)
Total	125 (49%)	53 (21%)	51 (20%)	17 (7%)	7 (3%)	253 (100%)

5.2 Delivery

As indicated in table 20A, more than fifty percent of the surveyed mothers (55%) stated that they had delivered at a health facility (48% in a health center and 7% in a hospital), and 45% had delivered at home. Concerning the assistance received during delivery, half of the mothers were assisted by the health personnel, 25% by a TBA, and 25% by either the mother herself (11%), by parents (5%), by husband (5%), or by others (5%).

Table 20A: Place and assistance during delivery

Category	Number	Total	Percent
Place of delivery			
Home	190	420	45%
Health center	230	420	55%
Hospital	30	420	7%
Assistance during delivery			

Category	Number	Total	Percent
Health staff	209	420	50%
Trained TBA	104	420	25%
Herself	48	420	11%
Parents	23	420	5%
Husband	15	420	4%
Others	21	420	5%
Use of delivery kits (among home deliveries)	43	202	21%
Mothers who know at least 2 danger signs during delivery	197	420	46%
Mothers who know at least 3 danger signs during delivery	63	420	15%

Twenty-one percent of mothers who delivered at home declared to have used a clean delivery kit. Sixty-one percent (258/420) of all mothers, regardless of place of delivery, breastfed the newborn within one hour of birth.

The knowledge of mothers of the danger signs during delivery was assessed in this survey, and we noticed that 46% of mothers knew at least 2 danger signs of delivery. Table 20B summarizes the knowledge of danger signs during labor and delivery that require urgent medical attention, and most of the signs that were cited are retention of placenta more than 30 minutes (53%), haemorrhage (48%), and prolonged labor of more than 8 hours (29%).

Table 20B: Knowledge of danger signs during labor that require medical attention

Category	Number	Total	Percent
Fever	18	420	4.3%
Chills	5	420	1.2%
Labor of more than 8 hours	123	420	29.3%
Convulsions	12	420	2.9%
Loss of lot of blood	202	420	48.1%
Severe low abdominal pain	55	420	13.1%
Retention of placenta of more than 30 minutes	221	420	52.9%
Facial and hand oedema	2	420	0.5%
Others	100	420	23.8%

5.3 Post natal care

36% (151 /420) of mothers received a post natal visit within 48 hours after delivery, and this visit was done by a health personnel (61%), 21% by a pharmacist, and 18% by a TBA. This visit consisted of checking the haemorrhage (43%), the presence of fever (42%), as indicated in table 21. More than half of the mothers received Vitamin A supplement after delivery.

Table 21: Consultation of mother in post partum

Category	Checking of haemorrhage	Checking of fever	Checking of anemia	Checking vaginal discharge	Total	% of total
TBA	16	2	0	1	19	18%
Pharmacist	0	22	0	0	22	21%
Health staff	29	20	7	8	64	61%
Total	45 (43%)	44 (42%)	7 (7%)	9 (9%)	105	100%

28% (117 out of 420) of new born had medical visit within a week after delivery, and as indicated in table 22, this visit was done by a TBA (52%) and by a health staff (43%), with the aim of checking if the new born was feeding well (47%), to check the weight and the breathing (9%), to check if the umbilicus was not infected or fever (5%).

Table 22: Consultation of newborn

Category	Checking feeding	Weighting	Checking umbilicus	Checking Breathing	Checking Fever	Nothing or other	% of total
TBA	32	1	3	1	3	21	61 (52%)
Health staff	23	9	2	9	2	5	50 (43%)
Other personnel	0	0	0	0	0	6	6 (5%)
Total (%)	55 (47%)	10 (9%)	5 (4%)	10 (9%)	5 (4%)	32 (27%)	117 (100%)

Knowledge of danger signs during the post natal period

The knowledge of the mother of the danger signs during the post natal period for the mother and the new born was assessed in this survey. As indicated in table 23, 28% of

mothers know at least 2 danger signs for mothers in post partum period that require urgent medical attention. Danger signs for mothers that were the most cited are haemorrhage (88%), fever (16%), and genital tear (14%). 47% of mothers know at least 2 danger signs in new born that require medical attention and danger signs most cited are refusal to breastfeed (58%), fever (47%), and dyspnoea (21%).

Table 23: Knowledge of danger signs during the post natal period

Category	Number	Total	Percent
Danger signs for mother			
Fever	66	420	16%
Chills	22	420	5%
Smelly vaginal discharge	5	420	1%
Genital tear	58	420	14%
Loss of lot of blood	371	420	88%
Don't know	21	420	5%
Other	82	420	20%
Know at least 2 danger signs that require medical attention	118	420	28%
Danger signs for new born			
Do not breast feed	242	420	58%
Sleepy	9	420	2%
Fever	119	420	47%
Dyspnoea	87	420	21%
Vomiting	29	420	7%
Convulsions	18	420	4%
Diarrhea	26	420	6%
Born with less than 2.5Kg	13	420	3%
Do not know	26	420	6%
Other	159	420	38%
Know at least 2 danger signs that require medical attention	197	420	47%

6. TREATMENT OF CHILDHOOD ILLNESSES

6.1 Prevalence of most frequent childhood illnesses

Adequate treatment of malaria, acute respiratory infections, and diarrhea diseases can greatly reduce infant mortality in developing countries. In this survey, information was collected on the prevalence and treatment of these diseases in children. As indicated in table 24, the proportion of children aged between 0-23 months that were sick during the

last 2 weeks is estimated at 35%. Treatment of sick children was done by health personnel (42%), by community health workers (16%), and by pharmacist agents and traditional healer (<5%). Overall, the most common symptoms or diseases seen in children aged between 0-23 months fever (60%), diarrhea (40%) et vomiting (21%), et la cough (37%) ; and dyspnoea (8%).

Table 24: Prevalence and treatment of childhood diseases

Category	Number	Total	Percent
Sick during the last 2 weeks	147	420	35.0%
Who first treated the child			
None	34	147	23.0%
Traditional healer	5	147	3.4%
TBA	0	147	0.0%
Community health worker (distributors of malaria drugs)	23	147	15.5%
Pharmacist agent	7	147	4.7%
Health staff	62	147	42.2%
Other	16	147	10.8%
Type of symptoms of diseases			
Fever	88	147	59.5%
Cough	55	147	37.4%
Dyspnoea	12	147	8.2%
Vomiting	31	147	21.1%
Diarrhea	58	147	39.5%
Bloody diarrhea	2	147	1.4%
Others	33	147	22.2%

6.2 Type and quantity of food received during illness

As indicated in table 25 below, the proportion of sick children that had fluid more than usual is 16%, less than usual (43%), as usual (31%), and 9% of children never received any fluid during their illness. During illness, we notice that 19% of children had food as or more than usual, 14% had food as usual versus 34% who had less than usual. 26% of children were exclusively breastfed. After the illness, 25% of children had food more than usual, 38% had food as usual versus 17% who had less than usual. 16% of children were exclusively breastfed

Table 25: Type of food received during illness

Category	Number	Total	Percent
Fluid received during illness			
None	13	147	8.8

Less than usual	64	147	43.5
As usual	46	147	31.3
<i>More than usual</i>	24	147	16.3
Quantity of food received <u>during illness</u>			
Exclusively breastfed	37	144	25.7
None	31	144	21.5
Less than usual	49	144	34.0
As usual	20	144	13.9
<i>More than usual</i>	7	144	4.9
As or more than usual	27	144	18.8
Quantity of food received <u>after illness</u>			
Exclusively breastfed	23	144	16.0
None	3	144	2.1
Less than usual	25	144	17.4
As usual	55	144	38.2
<i>More than usual</i>	36	144	25.0
Do not know	2	144	1.4

6.3 Treatment of diarrhea diseases in children

Diarrhea diseases

Diarrhea in children can rapidly lead to a severe dehydration and can cause death if corrective measures are not taken promptly. It is recommended, in child diarrhea, to increase liquid consumption and more specifically the use of oral rehydration salt (ORS).

As indicated in table 26, almost a third of the children with diarrhea had used ORS. The proportion of children with diarrhea who used modern drugs or traditional medicine is 29%. We noticed that 21% of children who had diarrhea never took any treatment.

Table 26: Treatment of diarrhea diseases

Category	Number	Total	Percent
SRO	19	58	33%
Antibiotics and anti-diarrhea drugs	17	58	29%
Water	1	58	2%
Other (Traditional medicine)	17	58	29%
None	12	58	21%

Malaria

This disease was described in details in the previous chapter of this report.

7. PERSONAL HYGIENE

Hygiene conditions and more specifically the use of the soap by the households were assessed in this survey. As indicated in table 27, 80% of the mothers reported that they had soap at home but only 21% had actually soap after inspection. More than three quarters of mothers declared to have used soap the previous day. Mothers declared that they wash their hands with soap before cooking meals (28%), before breastfeeding (18%), after cleaning a child who defecates (13%), after being to the toilet (25%). Less than 4% of mothers had never used soap to wash their hands. Toilets were present in 92% of the households, and after inspection, we noticed that only 6% of households had adequate system for washing hands.

Table 27: Personal hygiene and usage of soap

Category	Number	Total	Percent
Have soap at home (self report)	335	420	79.8%
Have soap at home (verified)	90	420	21.4%
Used soap the previous day	321	420	76.4%
When soap is used :			
Before cooking meals	117	420	27.9%
Before breastfeeding	76	420	18.1%
Before feeding the child	70	420	16.7%
After cleaning the child who went to toilet	56	420	13.3%
After being to the toilet	103	420	24.5%
Never washed hands with soap	15	420	3.6%
Others	27	420	20.5%
Have toilet at home	388	420	92%
Adequate hand washing system	24	420	6%

8. Equity of Health Coverage and Practices

The following table demonstrates equity of health coverage and practice for key project indicators. Wealth index is measure based on the principle parts analysis using household assets, construction material and water and sanitation as proxies for wealth. The measures are based on the Demographic & Health Survey methodology used by ORC Macro.

Child survey (June 2006): Summary indicators

Questionnaire Ref Number(s)	Indicator	Numerator	Denominator	Total in Percentage	WEALTH INDEX COVERAGE				
					Q1	Q2	Q3	Q4	Q5
	Nutrition								
68	Child aged 12-23 months received Vitamin A in past six months	141	162	87.0	92.3	89.7	76.5	88.9	89.3
	HIV & AIDS								
26	Ever tested for VCT	339	420	80.7	76.5	83.7	76.7	76.3	90.4
37	Ever participated in PMTCT	252	420	60.0	57.6	60.5	54.7	60	67.5
	Malaria								
18	Child slept under treated mosquito net last night	198	420	47.1	83.3	75	78.9	69.2	92.3
	Maternal & Newborn Care								
45	Attended 4 or more ANC visits (verified on card)	18	232	7.8	10.2	6.7	7.7	2	8.6
44	Mother received 2 or more doses of TT during last pregnancy	262	420	62.4	66.3	67.9	60.5	61.7	68.6
48	Deliveries at health institution	230	420	54.7	36.5	44.2	46.5	53.8	65.1
51	Used a clean delivery kit if delivered in the home	43	202	21.3	24.1	20.8	21.7	24.3	20.7
53	Infant breastfed within first hour of birth	258	420	61.4	61.2	53.5	58.1	62.5	72.3
62	Mother received postpartum vitamin A	173	418	41.4	48.2	32.6	48.8	35.9	41.4
	Additional Rapid Catch Indicators								
12	Household currently mutuelle member	197	420	46.9	36.5	37.2	46.5	50	65.1

V. DISCUSSION

The analysis of indicators related to the four main interventions of the program “Child Survival” shows that there is a big improvement as compared to the before the implementation of the project (KPC survey of 2001) as summarized in the annexes 3 and 4 of this report.

For **malaria**, knowledge and practices of households’ for the prevention of malaria had improved. We noted that more than 53% of the mothers know at least 2 danger signs in children that require urgent medical attention. Currently, 52% of the mothers (versus 4.3% in 2001) have bed nets and 47% of their children slept under the bed net the previous night (versus 0.9% in 2001). The knowledge and practices indicators in the former Kibilizi district are higher than the national average, as compared to the results of the DHS of 2005 where less than 5% of households had bed net and only 21,4% of the mothers who had bed net at home stated that their children sleep under bed net (6, 7).

For **HIV & AIDS and STD**, the knowledge of the population also has improved, and we notice that more than 80% of mothers know at least 2 means of preventing HIV transmission compared to 24% before the beginning of the project. The other important improvement is the proportion of mothers who were tested for HIV; the rate is now 81% as compared to 9.5%, before the beginning of the project. The proportion of mothers who attended PMTCT service is 60% in 2006 versus 0% in 2001. Though a large majority of the people (86%) has heard about STD, only a third of them could cite at least 2 signs and or symptoms.

For **nutrition**, 36% of the children aged between 11 and 23 months were malnourished with 7% of them being severely malnourished. This rate is slightly below the one that was observed in the mid-term evaluation of the project (38%), but this prevalence of malnutrition has exceeded the original target of the project which was to attain at least 45% of children with chronic malnutrition. This rate is higher than the national average which is estimated at 22% in 2005 (6, 9). Big improvement in immunization of children was done, and the proportion of children who are fully immunized rose from 64% in 2001 to 80% in 2006. (6, 10). The Vitamin A supplement has remained relatively high at 62% in

2006 versus 63% in 2001. Growth monitoring of children also improved and the proportion of children who were weighted in the previous 3 months rose from 49% in 2001 to 65% in 2006.

The proportion of deliveries at a health facility increased from 19% to 48% from 2001 to 2006. This improvement could have been greater but financial accessibility to modern health services remains a principle reason for home deliveries. Participation in mutuelles is an important solution to explore.

For **maternal and child health**, it is noted that more than 50% of deliveries are attended by skilled personnel as compared to only 8% in 2001. 40% of the women received at least 2 doses of TT vaccine during their last pregnancy as compared to 24% in 2001. Preventive treatment against malaria and anemia during pregnancy rose from 33% to 43%. Deliveries at health facilities rose has doubled raising from 19% in 2001 to 55% in 2006. This proportion can be improved but it is hampered by the lack of financial means of the population to access health care services. Enrolment into health mutual is one of the solutions that need to be explored.

Diarrhea disease prevalence is still high which is due mainly to poor hygiene of the population. Only few households (6%) have adequate hand washing systems at point of latrines.

VI. CONCLUSION & RECOMMENDATIONS

In **conclusion**, the "Child Survival" program in Gisagara district attained and even exceeded its objectives. The knowledge of the population, with regard to the four interventions, has considerably improved; however the practice remains a challenge. This study will provide CONCERN/RWANDA and the Gisagara district health staff with relevant information on the success and/or failure of the strategies and actions that were carried out, and will allow them to set up new strategies, in order to solve the remaining problems and future challenges.

With regard to results obtained and constraints encountered, the following recommendations are made:

- Bed net use, though satisfactory, needs to be improved in order to increasing its usage especially among children
- PMTCT services use has increased but has not reached the level of other centers and this requires to increase the sensitization and the extension of PMTCT services to all the health facilities in Gisagara district
- Delivery at health facilities has increased significantly during these last years but there is still extra effort to make so that the adequate level is attained. Enrolment in health mutual which increases health service utilization is one of the strategies to explore.
- Prenatal care service utilizations is still low and will require collaborative efforts from health staff and community volunteers in order to increase awareness of the population
- Prevalence of diarrhea disease remains high and requires new strategies especially in improving the hygiene practices of the population.

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VIII. ANNEXES

Annex 1: Sampling Framework of Sectors and Villages

SECTEURS	Cellules	Population	Team
1. Kansi	- Agatare	2.429	Day 1 <i>Team 1</i>
	- Rugarama		<i>Team 2</i>
	- Kanserege		<i>Team 3</i>
2. Kibilizi	- Gisororo	2.503	Day 2 <i>Team 1</i>
	- Burashi		<i>Team 2</i>
	- Gitwa		<i>Team 3</i>
	- Henene		Day 4 <i>Team 1</i>
3. Nyaruhengeri	- Gitwa	3.972	Day 3 <i>Team 1</i>
	- Mudoboli		<i>Team 2</i>
	- Bucyo		<i>Team 3</i>
	- Murambi		<i>J4 Team 2</i>
4. Kibingo	- Impinga	2.503	Day 5 <i>Team 1</i>
	- Gisozi		<i>Team 2</i>
5. Nyanza	- Ruvugizo	4.660	Day 6 <i>Team 1</i>
	- Nyamihatsi		<i>Team 2</i>
	- Akagarama		<i>Team 3</i>
6. Kivuru	- Mbuye	4.235	Day 7 <i>Team 1</i>
	- Akabuye		<i>Team 2</i>
	- Mujahu		<i>Team 3</i>
	- Mugobe		<i>Day 4 Team 3</i>
7. Cyumba	- Musatsi	4.774	Day 8 <i>Team 1</i>
	- Gitwa		<i>Team 2</i>
8. Kibayi	- Rwahambi	3.143	<i>Day 5 Team 3</i>
	- Kibayi		<i>Day 8 Team 3</i>
9. Mukindo	- Nyabisagara	6.602	Day 9 <i>Team 1</i>
	- Rususa		<i>Team 2</i>
	- Kanage		<i>Team 3</i>
10. Nyabitare	- Nyirakanywero	3.984	Day 10 <i>Team 1</i>
	- Mutobo		<i>Team 2</i>
	- Hemba		<i>Team 3</i>

Annex 2: Questionnaire

République Rwandaise
Ministère de la Santé
Gisagara District

Concern Worldwide
Kibilizi Child Survival
Program

CLUSTER N°|___| |___|
QUESTIONNAIRE N°|___| |___| |___|

CHILDREN 0-23 MONTHS (AMEZI: 0 – 23)

ITARIKI Y'IBAZWA
DATE D'INTERVIEW

ITALIKI Jour	UKWEZI Mois	UMWAKA Annee
<input type="text"/>	<input type="text"/>	<input type="text"/>

IZINA RY'UBAZA (Nom de l'enquêteur):	
IZINA RY'UMUGENZUZI (Nom du Superviseur):	
IBITARO BYA KIBILIZI (Hôpital de Kibilizi) :	
IVURIRO (CS):	AKARERE KA GISAGARA (District administratif)
UMURENGE (Secteur) :	AKAGARI (Cellule) :

UBWUMVIKANE

Muraho, Nitwa _____ nkaba nkora ----- . Tura kora ubushakashatsi k'ubuzima bw'ababyeyi n'abana. Twabasabaga kudufasha muri ubwo bushakashatsi. Nashakaga kubabaza ibibazo bijyanye n'ubuzima bwanyu hamwe n'ubwabana banyu. Ibizavamo bizafasha inzego z'ubuzima, hamwe n'abaterankunga kurushaho gukemura ibibazo by'ubuzima muhura nabyo. Ntabwo mbafata igihe kirekire. Ibyo mutubwira byose biraba ibanga hagati yacu.

Kudusubiza ni ubushake bwanyu, kandi mufite uburenganzira bwo kudasubiza ikibazo mwasanga kibabangamiye. Gusa turizera ko ntakibazo bibatera

Hari ikibazo mwaba mufite kubyo mbabwiye?

IYO USUBIZA YANZE, MUSHIMIRE, UMUSEZERE, UGENDE. MUGIHE YEMEYE, MUBAZE NIBA AFITE UMWANA URI HAGATI Y'AMEZI 0—23. NIBA ARI NTAWWE, MUSHIMIRE, UMUSEZERE, UGENDE. NIBA AHARI, TANGIRA IBIBAZO KUVA KURI NOMERO YA MBERE.

IBIBAZO BYEREKEYE UMUBYEYI/ QUESTIONS SUR LA MERE ELLE-MEME

1	MWITWA BANDE? <i>Quel est votre nom?</i>	
2	NYIRI URUGO NI NDE? <i>Quel est le nom du chef de ménage ?</i>	
3	MUFITE IMYAKA INGAHE ? <i>Quel âge avez-vous ?</i>	UMUBARE ____ ____ <i>Ans</i>
4	MUZI GUSOMA? <i>Savez-vous lire?</i>	0. OYA/ <i>Non</i> 1. YEGO/ <i>Oui</i>
5.	MUBYO MUTUNZE HABA HARIMO IBI BIKURIKIRA? <i>(Lequel de ce matériel disposez vous, dans votre ménage)</i>	a. Inyakiramajwi/Radio <i>Oui / Non</i> b. Igare/Bicycle <i>Oui / Non</i> c. Telefone/ou cellulaire <i>Oui / Non</i> d. Television <i>Oui / Non</i> e. Frigo <i>Oui / Non</i> f. I pikipiki/ Motorcycle <i>Oui / Non</i> g. Imodoka/ Voiture/camion <i>Oui / Non</i> h. Amashanyarazi/ Electricité <i>Oui / Non</i>
6.	MU RUGO RWANYU MUKORESHA UMUSARANE BWOKO KI? <i>(Quel type de toilette principale disposez-vous ?)</i>	1. Umwobo usanzwe wubakiye / <i>Une fosse arabe couverte de poutres</i> 2. Umusarane wa Kijyambere / <i>Une fosse améliorée couverte de dalle bétonnée</i> 3. Umusarane bakoresha amazi / <i>Toilette avec chasse d'eau</i> 4. Ubundi bwoko (bivuge / préciser) / <i>Autre type, préciser.</i> _____ 5. Ntawuhari, mu rutoki cg mu gihuru / <i>Inexistante, se débrouille dans la nature.</i>
7.	AMAZI MUNYWA N'AYO MUKORESHA MUYAVOMA HE? <i>(Avez-vous une source principale d'eau potable ?)</i>	1. Umugezi utemba/ <i>Eau de rivière courante</i> 2. Amazi y'imvura / <i>Eau de pluie</i> 3. Ivomo rusange rya Robine / <i>Robinet public</i> 4. Iliba rusange ritunganijwe neza(Kano) / <i>Une fontaine publique bien aménagée</i>

		<p>5. Iliba rusange rititaweho neza / <i>Une fontaine publique non aménagée</i></p> <p>6. Iliba bwite ritunganijwe neza / <i>Une fontaine privée bien aménagée</i></p> <p>7. Iriba bwite ridatunganijwe neza. / <i>Une fontaine privée non aménagée</i></p> <p>8. Amazi meza azanwa ni tiyo mu kigo / <i>Eau potable dans la résidence dans un tuyeau</i></p> <p>9. Amazi meza azanwa ni tiyo mu rugo / <i>Eau potable dans l'habitation par un tuteau</i></p> <p>10. <i>If has bottled water for drinking water/Eau embouteillée</i></p> <p>11. <i>if gets water from a tanker truck/Eau du camion citerne</i></p> <p>12. Indi soko y'amazi / <i>Autre source d'eau</i> _____</p>
8a.	<p>IMYUBAKIRE YO MU NZU IMBERE (AHA, NI BYIZA KUHAREBA NIBA BISHOBOKA, NIBA BIDASHOBOKA UKABAZA)</p> <p>(le type de pavement principal de la maison principale)</p>	<p>1. Ni ibyondo / <i>Le sol non pavé</i></p> <p>2. Hahomesheje amase / <i>lissé avec la bouse</i></p> <p>3. Harimo isima / <i>pavé avec ciment</i></p> <p>4. Harimo ama Karo / <i>sol carrelé</i></p> <p>5. Hakoreshejwe imigano cyangwa urubingo/ <i>fait avec des bambous ou autre branchage</i></p> <p>6. Imbaho z'ibiti / <i>fait avec les planches de bois</i></p> <p>7. Ibindi/ <i>autre, préciser</i> _____</p>
8b.	<p>MUKORESHA IKI MURI URU RUGO MU GUTEKA IBIRIBWA? (Quelle est votre source d'énergie principale dans la cuisson des aliments ?)</p>	<p>1. Inkwi / <i>Bois de chauffe</i></p> <p>2. Biogaz</p> <p>3. Nyiramugengeri / <i>la turbe</i></p> <p>4. Rechaud Kerosene /</p> <p>5. Gaz</p> <p>6. Amashanyarazi / <i>Electricité</i></p> <p>7. Amakara y'ibiti. / <i>charbon de bois</i></p> <p>8. Ibindi / (bivuge) <i>Autre, préciser</i></p> <p>_____</p>

IBIBAZO BYEREKEYE ABANA/ QUESTIONS SUR LA SANTE DES ENFANTS

9.	HARI ABANDI BANA MUFITE BARI MUNSI Y'IMYAKA ITANU? <i>Avez-vous d'autres enfants ages de moins de 5 ans</i> <i>NB : Mettre leurs dates de naissance et souligner l'enfant sélectionné pour l'enquête âgé de 0-23 mois? Si deux enfants ages de 0-23 mois, sélectionner un par hasard (utiliser une pièce de monnaie)-</i>			IGIHE YAVUKIYE/Date de naissance		
				ITALIKI	UKWEZI	UMWAK
				Jour	Mois	Année
				1.		
				2.		
3.						
4.						
10.	UMWANA URI HAGATI Y'AMEZI 0 -23 YITWA NDE ? <i>Comment s'appelle votre enfant age de 0 -23 mois</i>					
11.	IGITSINA <i>Le sexe de l'enfant sélectionné</i>	F. UMUKOBWA/ Fille M. UMUHUNGU/Garçon				
12a	Umuryango wawe wigeze uba mu bw'isungane mu kwivuzwa bita mitiweli? Niba ari Yego ni ryari? <i>(Votre ménage a-t-elle déjà fait partie d'une mutuelle de santé)</i> <i>Encercler toutes les années ou l ménage était membres d'une mutuelle.</i>	0. OYA/ Non 1. YEGO/Oui <i>(Niba ari yego, garagaza umwaka aho hepfo) :</i> 2002 2003 2004 2005 2006				
12b	If yes, please ask to see the card/ si oui , verifier la carte de mutuelle	1. Card verified for all years stated above/carte verifiée pour toutes les années 2. Card verified but not for all periods indicated above./carte verifiée mais pas pour toutes les périodes 0. no card available /carte non disponible				

IBIBAZO BYEREKEYE MALARIA /QUESTIONS SUR LE PALUDISME)

13.	MURAYIFITE ? Avez-vous une moustiquaire dans votre maison ?	0. OYA Non → 1. YEGO Oui
14.	Where did you get the net ? Ou l'avez vous acheter?	1. Market 2. FOSA 3. Neighbor/friend 88. IBINDI/Autre _____
15.	How long ago did you get your net ? pendant combien de temps possédez vous la moustiquaire?	___ ans ___ mois

16.	IRAKARIHIJE? NI UBUHE BWOKO ? <i>Est-t-elle traitée?</i>	0. OYA/ <i>Non</i> → 18 1. YEGO/ <i>Oui</i> 2. Ubwoko buza bukarihije/ <i>Long lasting</i> → 18 99. NTABIZI / <i>Ne sait pas</i> → 18
17.	MUHERUKA KU YIKARISHYA RYARI? <i>Quand est-ce qu'elle a été traitée pour la dernière fois?</i>	1. MBERE Y'AMEZI 6 <6 mois 2. HAGATI Y'AMEZI 7 NA 12 3. HEJURU Y'UMWAKA 99. NTABIZI / <i>Ne sait pas</i>
18.	(KANAKA) YARAYE MU NZITIRAMIBU IRI JORO? (<i>Nom de l'enfant</i>) a-t-il dormi sous la moustiquaire cette nuit?	0. OYA/ <i>Non</i> 1. YEGO/ <i>Oui</i>
19.	MUTWITE (KANAKA) MWIGEZE MURWARA MALARIA? <i>Avez-vous attrape le paludisme au cours de la grossesse de (Nom de l'enfant)?</i>	0. OYA <i>Non</i> 1. YEGO <i>Oui</i> 99. NTABIZI
20.	MUTWITE (KANAKA) MWARARAGA MU NZITIRAMIBU <i>Quand vous étiez enceinte de (Nom de l'enfant), dormiez-vous sous une moustiquaire ?</i>	0. OYA <i>Non</i> → 27 1. YEGO <i>Oui</i>
21.	MWAYIRAYEMO IGIHE KINGANA IKI? <i>Pendant Combien de temps avez-vous dormi sous cette moustiquaire (pendant la grossesse)</i>	_____ Amezi / <i>Mois</i>
22.	May I see the net ? /Puis je le voir?	OYA, not acceptable/ YEGO / <i>Oui</i> – net verified

GENDER QUESTIONS (Established in 2nd annual report) *Les questions relatives au genre. Ibibazo bijyane n'uburinganire bw'ibitsina.*

23.	NINDE UFATA IBYEMZO CY'IMKORESHEREZE UMUTUNGO W'URUGO? <i>Qui décide de l'utilisation de l'argent qui provient de la production familiale?</i>	1. Umugabo/ <i>L'homme</i> 2. umugore/ <i>La femme</i> 3. Bombi/ <i>Les deux</i> 88. Ibindi (bivuge) <i>Autres préciser)</i> _____ 99. Ne sait pas/ <i>Simbizi</i>
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24.	<p>NINDE ICYEMEZO CY’AHO UMUGORE AGOMBA KUBYARIRA ? <i>Qui décide l'endroit pour l'accouchement dans votre famille?</i></p>	<p>1. Umugabo/<i>Le mari</i> 2. Umugore ubwe/<i>La femme enceinte</i> 3. Bombi Les deux (<i>mari et la femme enceinte</i>) 4. Umujyanama w’ubuzima/ <i>L’animateur de santé</i> 5. Umubyaza wa Gihanga/<i>L’accoucheuse traditionnelle</i> 6. Nyirabukwe/<i>La belle-mère</i> 88. Ikindi/ <i>Autres</i> _____ 99. Simbizi/ <i>Ne sait pas</i></p>
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IBIBAZO BYEREKEYE INDWARA ZIFATA MU MYANYA NDANGA BITSINA NA SIDA. QUESTIONS SUR LES MST ET VIH/SIDA

25	<p>ESE WATUBWIRA UBURYO UMUNTU YAKWIRINDA KWANDURA AGAKOKO GATERA SIDA? <i>Comment peut-on éviter d'attraper le virus du VIH?</i></p>	<p>a. Kwifata/<i>Abstinence</i> b. Kudaca inyuma uwo mwashakanye/ <i>Fidélité</i> c. Agakingirizo/<i>Condom</i> d. Kudasangira ibikoresho bikomeretsa /<i>Eviter de partager les objets tranchants</i> e. Kwirinda magendu/ <i>Eviter les charlatans</i> f. Kwirinda ubusambanyi/ <i>Eviter le vagabondage sexuel.</i> x. Ibindi (bivuge)/ <i>Autres (préciser)</i> _____ y. Simbizi/ <i>Ne sait pas</i></p>
26	<p>SINSHISHIKAJWE NO KUMENYA IGISUBIZO WABONYE, ARIKO NKENEYE KUMENYA NIBA MWABA MWARIPIMISHIJE UBWANDU BW'AGAKOKO KA SIDA? <i>Avez-vous été testé sur le VIH/ SIDA</i></p>	<p>1. YEGO/ <i>Oui</i> 2. OYA/ <i>Non</i> → Jya kuri 29</p>
27	<p>MWIPIMISHIRIJE HE ? <i>Où avez-vous été testé?</i></p>	<p>1. Mu Kigo gitanga inama kikanapima ubwandu bwa Sida muri rusange cyo muri Gisagara (VCT) / <i>Dans un des Centres VCT de Gisagara(préciser le quel)</i> _____ 2. Ahandi, havuge / <i>Ailleurs, préciser</i> _____</p>

28	NI RYARI MWIPIMISHIJE? <i>/Quand est ce que vous etes vous fait testé</i>	1. Uyu mwaka (2006)/ <i>cette année</i> 2. Ushize (2005)/ <i>l'année passé</i> 3. Mu myaka yashize 2-5 years/ <i>Dans 2 -5 ans passés</i> 4. Imyaka itanu irarenga/ <i>plus de 5 ans</i> 5.Ntabwo nibuka/ <i>Je me rappelle pas</i>
29	NI IKI WAKORERA UMUTURANYI WAVE MU GIHE YABA AFITE UBWANDU BW'AGAKOKO KA SIDA? <i>Quelle aide apporteriez-vous à votre voisin porteur du VIH/SIDA?</i>	a. Kumugaburira/ <i>Lui donner à manger</i> b.Kumukarabya/ <i>Le laver</i> c.Kumumesera/ <i>Lessiver ses habits.</i> d. Kumujyana kwa muganga/ <i>Le conduire à la FOSA.</i> e. Kumuhumuriza/ <i>Le réconforter.</i> f. Ntanakimwe/ <i>Rien</i> x. Ibindi (bivuge)/ <i>Autres (préciser) _____</i>
30	MWABA MWARIGEZE KUMVA INDWARA ZANDURIRA MU MIBONANO MPUZA BITSINA? <i>Avez-vous déjà entendu parler des M.S.T.?</i>	0. OYA/ Non 1. Yego/ Oui
31	NI IBIHE BIMENYETSO BY'INDWARA ZIFATIRA MU MYANYA NDANGA BITSINA WABA UZI ? <i>Quels sont les signes des M.S.T. que vous connaissez?</i>	a. Kubabara mu kiziba cy'inda / <i>Douleurs pelviennes</i> b. Udusebe ku myanya ndanga bitsina / <i>Lésions sur les organes génitaux.</i> c. Uruzi runuka ruva mu gitstina / <i>Pertes vaginales</i> d. Amashyira ava mu gitsina / <i>Pertes purilentes</i> e. Kunyara ukababara/ <i>Douleurs à la miction</i> f. Kunyara inkari zirimo amaraso/Sang dans les urines (<i>Hématurie</i>) x. Ibindi(bivuge) / <i>Autres(préciser) _____</i> _____ y. Ntabizi / <i>Ne sait pas</i>

**IBIBAZO BYEREKEYE IGIHE UMUBYEYI YARI ATWITE (KANAKA)
QUESTIONS SUR LA PERIODE D'AVANT LA NAISSANCE DE ((NOM DE L'ENFANT)?**

32.	MUGITWITE (KANAKA) MWIGEZE MWIPIMISHA? <i>Avez-vous reçue une consultation prénatale pendant la grossesse de (Nom de l'enfant) ?</i>	0. OYA Non → 48 1. YEGO Oui
33.	MWIPIIMISHIJE INSHURO ZINGAHE? <i>Combien de consultations prénatales avez-vous reçues?</i>	_ . _
34.	MUGITWITE (KANAKA) MWIGEZE MUTERWA URUSHINGE RW' URUKINGO RWA (AGAKWEGA) TETANOSI KU KUBOKO ? <i>Avant la naissance de (Nom de l'enfant), avez-vous recue une injection dans le bras pour vous vacciner contre le tetanos?</i>	0. OYA Non →36 1. YEGO Oui 2. NARAZIRANGIJE/ Je les ai terminé
35.	MWAZITWEWE KANGAHE? <i>Combien de ces injections avez-vous reçues ?</i>	_ _
36.	MWABA MUZI IKIGO GITANGA INAMA KIKANAPIMA UBWANDU BW' AGAKOKO KA SIDA, KIKANIBANDA KU BAGORE BATWITE? <i>Connaissez-vous les centres de PMTCT?</i>	0. OYA Non →38 1. YEGO Oui
37.	MWABA MWARA KIGANNYE? <i>Avez-vous fréquenté ce centre (PMTCT)?</i>	0. OYA Non 1. YEGO Oui
38.	MUGITWITE (KANAKA) MWAFASHE IBININI BYONGERA AMARASO ? (byerekane) <i>Quand vous étiez enceinte de (Nom de l'enfant), avez-vous pris du fer ? (MONTRER L'EXEMPLAIRE)</i>	0. OYA Non → 40 1. YEGO Oui 99. NTABIZI →40
39.	MWABIFASHE IGIHE KINGANA IKI? <i>Pendant combien de temps avez-vous pris du fer?</i>	MUNSI Y'UKWEZI _ AMEZI/Mois 99. NTABIZI/ Ne sait pas
40.	MUGITWITE (KANAKA) MWANYOYE IBININI BYA MALARIA ? <i>Avez-vous reçue des comprimés pour lutter contre le paludisme pendant la grossesse de (Nom de l'enfant) ?</i>	0. OYA Non → 42 1. YEGO Oui 99. NTABIZI → 42 Ne sait pas
41.	MWABIFASHE INSHURO ZINGAHE? <i>Combien de fois avez-vous pris des comprimés antipaludéens?</i>	_
42.	MUFITE IFISHI MWIPIMISHIRIJEHO? <i>Possédez-vous la fiche de consultations prénatales?</i>	0. OYA Non → 48 1. YEGO Oui

43.	MUSHOBORA KUYINYEREKA? <i>Puis-je la voir?</i>	0. NTIBONETSE / pas disponible → 48 1. YEGO/ <i>Oui</i>
IBIBAZO BYO KURI NOMERO 44 BYEREKEYE INKINGO ZOSE UMUBYEYI YABA YARABONYE MUBUZIMA BWE		
44.	REBA KU IFISHI UMUBARE W'INKINGO ZOSE Z'AGAKWEGA (<i>Tétanos</i>) YABONYE <i>Regarder le nombre de VAT</i>	UMUBARE <input type="text"/>
IBIBAZO BYO KURI NOMERO 45-47 BYEREKEYE INKINGO UMUBYEYI YABONYE ATWITE KANAKA/ <i>relatif aux vaccinations de la mère lors de la grossesse.</i>		
45.	REBA KU IFISHI INSHURO Y'IPIMISHIJE IGIHE YARATWITE KANAKA <i>Regarder le nombre de CPN</i>	UMUBARE <input type="text"/>
46.	REBA KU IFISHI IGIHE YAMAZE AFATA UTUNINI TWONGERA AMARASO/ <i>Regarder le temps de prise du fer</i>	UMUBARE <input type="text"/> <input type="text"/> <input type="text"/>
47.	REBA KU IFISHI INSHURO YAFASHE IBININI BYA MALARIA <i>Regarder les prises des antipaludéens</i>	UMUBARE <input type="text"/>

IBIBAZO BYEREKEYE IVUKA RYA (KANAKA) QUESTIONS SUR LA NAISSANCE DE (NOM DE L'ENFANT)

48.	UMWANA YAVUKIYE HE? <i>Le lieu de naissance ?</i>	1. I Muhira /A la maison 2. Ikigo nderabuzima cya Leta/ <i>Centre de santé public</i> 3. Ikigo nderabuzima cy'igenga/ <i>Centre de santé agréé</i> 4. Ku bitaro bikuru/ <i>Hôpital de référence</i> 88. Ahandi /Ailleurs _____
49.	NINDE WAGUFASHIJE MU KUBYARA (KANAKA)? <i>Qui vous a aide pendant l'accouchement de (Nom de l'enfant age) ?</i>	0. YARIBYAJE <i>Elle même</i> → 51 1. UMUBYEYI (nyina, nyirabukwe) <i>Parent</i> → 51 2. UMUGABO WE <i>Mari</i> → 51 3. UMUGANGA <i>Infirmier/Docteur</i> → 51 4. UMUBYAZA WA GIHANGA <i>Acc. traditionnelle</i> 5. UNDI (muvuge) / <i>Autre</i> _____ → 51

50.	<p>NIBA ARI UMUBYAZA WA GIHANGA, YITWA NDE _____ AKAGARI ATUYEMO _____ <i>Si c'est l'accoucheuse traditionnelle, quel est son nom, et sa cellule ?</i> YARAHUGUWE -----> <i>A-t-elle ete Formee?</i></p>	<p>0. OYA/ <i>Non</i> 1. YEGO/<i>Oui</i> 8. NTABIZI/<i>Ne sait pas</i></p>
51.	<p>YAKORESHEJE IBIKORESHO MUKURA KU IVULIRO AKUBYAZA? <i>Avez-vous utilise le Kit d'accouchement a domicile lors de l'accouchement de(Nom de l'enfant) ?</i></p>	<p>0. OYA/ <i>Non</i> 1. YEGO/<i>Oui</i></p>
52.	<p>MUGIHE CYO KUBYARA, NIBIHE BIMENYETSO BYAGARAGAZA INGORANE ZATUMA UMUBYEYI AJYANWA BYIHUTIRWA KWA MUGANGA? (Reka umubyeyi abyivugire) <i>Pendant l'accouchement, quels sont les signes qui montrent qu'il y a un probleme et que la femme doit aller au centre de sante ou a l'hôpital (Laissez la femme enumerer ces signes)</i></p>	<p>A. UMUBYEYI UFITE UMURIRO <i>fièvre</i> B. UMUBYEYI UFITE IGITENGO <i>frissons</i> C. GUTINDA KUNDA BIRENZE AMASAHA 8 <i>Si le travail dure plus de 8 heures</i> D. UMUBYEYI UHWERA <i>Si la femme a des convulsions</i> E. UMUBYEYI UVA CYANE <i>Si la femme perd beaucoup de sang</i> F. UMUBYEYI URIBWA CYANE MU IKIZIBA CY'INDA <i>Si la femme a des douleurs abdominales basses severes</i> G. IYANYUMA IRENGEJE IMINOTA 30 ITARAVUKA <i>Si le placenta est retenu plus de 30 minutes</i> H. UMUBYEYI UBYIMBAGATANYE MU MASO N'IBIKONJO <i>Si la femme a des oedemes a la face et aux mains</i> I. IBINDI (bivuge) <i>Autres (préciser)</i></p>
53.	<p>MUMAZE KUBYARA (KANAKA) MWAMUSHYIZE KW'IBERE HASHIZE UMWANYA UNGANA NI IKI? <i>Après la naissance de (Nom de l'enfant), quand est-ce que vous l'avez mis au sein pour la premiere fois?</i></p>	<p>0. MUNSI Y'ISAHHA/<i>Moins d'une heure</i> 1. AMASAHA 1- 24 / <i>1-24 heures</i> 2. HEJURU Y' AMASAHA 24 / <i>Plus de 24 heures</i></p>

**IBIBAZO BYEREKEYE UBUZIMA BW'UMUBYEYI NA (KANAKA)
QUESTIONS SUR LA SANTE DE LA MERE ET DE (NOM DE L'ENFANT AGE
DE 0-23 MOIS)**

54.	MU GIHE CY'IMINSI 2 YA MBERE IKURIKIYE IVUKA RYA KANAKA HARI UWABA YARAJE KUBAKURIKIRANA, [NK'URUGERO KUREBA KO MUFITE UMURIRO CYANGWA MUVA CYANE] ? Dans 48 HEURES suivant la naissance de (Nom de l'enfant), est-ce que quelqu'un est venu voir votre sante-par exemple pour verifiersi vous aviez de la fièvre ou si vous aviez perdu beaucoup de sang ?	0. OYA/ Non → 58 1. YEGO/Oui
55.	NI INDE ? Qui a fait la consultation?	1. UMUVUZI WA GIHANGA <i>Guerisseur traditionnel</i> 2. UMUBYAZA WA GIHANGA <i>Accoucheuse traditionnelle</i> 3. UMUJYANAMA W'UBUZIMA <i>Animateur de sante</i> 4. UWO MURI FORUMASIYO <i>Agent de la pharmacie</i> 5. UMUGANGA <i>personnel de FOSA</i> 6. UNDI (muvuge) <i>Autres (préciser)</i> _____ _____
56.	NIBA ARI 2 cg 3, YITWA NDE _____ AKAGARI ATUYEMO _____ Si c'est 2 ou 3, quel est son nom, et sa cellule ? YARAHUGUWE ? -----> A-t-il ete Forme?	0. OYA/ Non 1. YEGO/Oui 8. NTABIZI/Ne sait pas
57.	YAKOZE IKI (K'UMUBYEYI) ? Qu'est ce qu'il a fait pendant cette consultation?	A. KUREBA KO AVA CYANE <i>Verifier l'hémorragie</i> B. KUREBA KO AFITE UMURIRO <i>Verifier la fièvre</i> C. KUREBA KO AFITE AMARASO AHAGIJE <i>Verifier l'anémie</i> D. KUREBA KO AFITE IGISANZA KINUKA <i>Verifier a un écoulement vaginal nauseabond</i> E. NTACYO / Rien F. IBINDI (bivuge) <i>Autres(préciser)</i> _____ _____
58.	MU CYUMWERU CYAKURIKIYE IVUKA RYA KANAKA HARI UWABA YARAJE KUREBA KO AMEZE NEZA (NK'URUGERO KUREBA UMUKONDO CYANGWA KO YONKA NEZA)? Dans la semaine suivant la naissance de (nom de l'enfant) est ce que quelqu'un est venu pour verifier sa sante, par exemple regarder le cordon ombilical	0. OYA/ Non → 64 1. YEGO/Oui
59.	NINDE? Qui a fait la consultation?	1. UMUVUZI WA GIHANGA <i>Guerisseur traditionnel</i> 2. UMUBYAZA WA GIHANGA <i>Accoucheuse traditionnelle</i>

		<p>3. UMUJYANAMA W'UBUZIMA <i>Animateur de sante</i></p> <p>4. UWO MURI FORUMASIYO <i>Agent de la pharmacie</i></p> <p>5. UMUGANGA <i>Infirmier/Docteur</i></p> <p>6. UNDI (bivuge) <i>Autres(préciser)</i></p> <p>_____</p>
60.	<p>NIBA ARI 2 cg 3, YITWA NDE _____</p> <p>AKAGARI ATUYEMO _____</p> <p><i>Si c'est 2 ou 3, quel est son nom, et sa cellule ?</i></p> <p>YARAHUGUWE ? -----→</p> <p><i>A-t-il ete Forme?</i></p>	<p>0. OYA/ <i>Non</i></p> <p>1. YEGO/<i>Oui</i></p> <p>8. NTABIZI/<i>Ne ne sait pas</i></p>
61.	<p>YAKOZE IKI (KURI KANAKA)?</p> <p><i>Qu'est ce qu'il a fait pendant cette consultation?</i></p>	<p>A. KUREBA KO YONKA NEZA <i>Verifier s'il tete bien</i></p> <p>B. KUMUPIMA IBIRO/ <i>Peser</i></p> <p>C. KUREBA UMUKONDO <i>Verifier l'ombilic</i></p> <p>D. KURE BA UKO AHUMEKA <i>Verifier comment il respire</i></p> <p>E. KUREBA KO AFITE UMURIRO <i>Verifier la fièvre</i></p> <p>F. NTACYO / <i>Rien</i></p> <p>G. IBINDI (bivuge) / <i>Autres (préciser)</i></p> <p>_____</p>
62.	<p>MWAFASHE AKANINI KA VITAMINE A HASHIZE IGIHE KINGANA IKI MUMAZE KUBYARA (KANAKA)? (byerekane)</p> <p><i>Combien de temps apres la naissance de --- avez-vous pris une dose de vitamine A</i></p>	<p>0. NTABYO NAFASHE/<i>pas</i></p> <p>1. MU KWEZI KUMWE/<i>1 mois</i></p> <p>2. MU MEZI ABIRI /<i>2 mois</i></p> <p>8. NTABIZI/<i>Ne ne sait pas</i></p>
63.	<p>NYUMA YO KUBYARA N'IBIHE BIMENYETSO BYEREKANA INGORANE ZATUMA UMUBYEYI AJYA KWA MUGANGA</p> <p><i>Après l'accouchement, quels sont les signes qui montrent qu'il ya un probleme et que la femme doit aller au centre de sante ou a l'hopital ?</i></p>	<p>A. UMUBYEYI UFITE UMURIRO <i>Si la femme a une fièvre</i></p> <p>B. UMUBYEYI UFITE IGITENGO <i>Si la femme a des frissons</i></p> <p>C. UMUBYEYI UZANA IGISANZA KINUKA /<i>Si la femme a une decharge vaginale nauseabonde</i></p> <p>D. KWANGIRIKA KW'IMYANYA MYIBARUKIRO /<i>Si la femme a une déchirure des organes genitaux</i></p> <p>E. UMUBYEYI UVA CYANE <i>Si la femme perd beaucoup de sang</i></p> <p>F. NTABIZI/ <i>Ne sait pas</i></p> <p>G. IBINDI (bivuge)/ <i>Autre</i> _____</p>
64.	<p>NYUMA YO KUVUKA NI IBIHE BIMENYETSO BYEREKANA INGORANE ZATUMA UMWANA AGOMBA KUJYANWA KWA MUGANGA</p>	<p>A. UTONKA <i>Ne tete pas</i></p> <p>B. UHONDOBERA <i>Difficile a reveiller</i></p> <p>C. UMURIRO <i>fièvre</i></p>

<p>Après la naissance, quels sont les signes qui montrent qu'il ya un problème et que l'enfant doit aller au centre de sante ou a l'hopital?</p>	<p>D. GUHUMEKA INSIGANE <i>Respiration rapide et ou difficile</i> E. KURUKA IBYO AFASHE BYOSE <i>Vomit tout ce qu'on lui donne</i> F. GUHWERA <i>Convulsion</i> G. GUHITWA <i>Diarrhee</i> H. UWAVUTSE AFITE IBIRO BIRI MUNSI <i>2,5 KG Nait avec moins de 2.5 Kg</i> I. UMWUMA <i>Deshydratation</i> J. NTABIZI <i>ne sait pas</i> K. IBINDI (bivuge)/Autres (preciser) _____</p>
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**IBIBAZO BYEREKEYE INDYO N'IPIMISHA RY'IBIRO BYA
KANAKA QUESTIONS SUR L'ALIMENTATION ET SURVEILLANCE
NUTRITIONNELLE DE (NOM DE L'ENFANT)**

65.	(KANAKA) ARONKA? <i>Est-ce que (Nom de l'enfant) est allaite actuellement</i>	0. OYA/ Non 1. YEGO/Oui
66.	(KANAKA) YARIYE IKI EJO (umunsi n'ijoro)? <i>Qu'est-ce que (Nom de l'enfant) a reçu comme alimentation hier (jour et nuit)?</i>	<p>A. YARONSE GUSA/ <i>Allaitement seul</i> B. AMAZI <i>Eau</i> <u>Ibinyamisogwe Legumineuses</u> C. IBISHYIMBO <i>Haricot</i> D. AMASHAZA <i>Petit pois</i> E. UBUNYOBWA <i>Arachide</i> <u>Ibinyamafufu Feculants</u> F. UBUGARI CYANGWA IMYUMBATI <i>Pate de manioc ou Manioc</i> G. IGITOKI <i>Banane</i> H. IGIKOMA <i>Bouillie</i> <u>Imboga rwatsi Legumes verts</u> I. ISOMBE J. IZNDI IMBOGA/ <i>Autres légumes</i> <u>Intunga mubili zikomoka ku matungo</u> <i>Proteines animales</i> K. INJANGA <i>Petits poissons seches</i> L. IFI <i>Poisson</i></p>

		<p>M. AMAGI <i>Œuf</i></p> <p>N. INYAMA <i>Viande</i></p> <p>O. AMATA Y'INKA <i>Lait de vache</i></p> <p><i>Imbuto Fruits</i></p> <p>P. AVOKA <i>Avocat</i></p> <p>Q. IMYEMBE <i>Mangue</i></p> <p>R. IPAPAYI <i>Papaye</i></p> <p>S. IBINYOMORO <i>Prune du Japon</i></p> <p>T. MARAKUJA <i>Maracouja</i></p> <p>U. INANASI <i>Ananas</i></p> <p>V. IMINEKE <i>Banane mure</i></p> <p>W. IBINDI (bivuge) <i>Autres</i></p> <p>_____</p> <p>_____</p>
67.	<p>MURI AYA MEZI ATATU ASHIZE (KANAKA) YABA YARAPIMWE IBIRO?</p> <p>Est-ce que (Nom de l'enfant) a été pesé dans les 3 derniers mois ?</p>	<p>0. OYA Non</p> <p>1. YEGO Oui</p>
68.	<p>KANAKA AHERUKA KUBONA AKANINI KA VITAMINI A RYARI?</p> <p>Est –ce que (Nom de l'enfant) a reçu la vit A dans les 6 derniers mois (MONTRER UN EXEMPLAIRE DE VIT A) ?</p>	<p>0. NTAKO YAFASHE / N'en a pas reçu</p> <p>1. MU MEZI 4 ASHIZE/ Dans 4mois passés</p> <p>MU MEZI 6 ASHIZE/ Dans 6 mois passés</p> <p>2. Autre, préciser</p> <p>_____</p> <p>88. NTABIZI/ Ne sait pas</p>

IBINDI BIBAZO BYEREKEYE (KANAKA) AUTRES QUESTIONS SUR (NOM DE L'ENFANT)

69.	<p>UMWANA WANYU ARAMUTSE AGIZE UMURIRO, WAMUKORERA IKI ?</p> <p>Qu'est ce que vous faites pour votre enfant en cas de la fièvre ?</p>	<p>1. NDAMUVUZA/ Je le fais soigner</p> <p>2. IKINDI/ Autre _____</p>
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70.	UMUVUZA HASHIZE IGIHE KINGANA IKI AFASHWE ? Quand le faites-vous soigner ?	1. MU MASAHA 24 AFASHWE Dans les 24 heures 2. NYUMA Y'AMASAHA 24 AFASHWE Apres 24 heures 7. NTABIZI Ne sait pas
71.	NI IBIHE BIMENYETSO BIGARAGAZA UBUREMBE BW'UMWANA WAFASHWE N'UMURIRO ? Quelles sont les signes de gravite d'un enfant présentant de la fièvre ?	A. KUTONKA/ incapacité de boire-téter B. GUCIKA INTEGE/ Asthénie C. COMA/GUTA UBWENGE D. GUHWERA/ Convulsions E. KWERERUKA/Pâleur extrême/anémie F. IBINDI/ Autre _____
72.	NIBIHE BIMENYETSO BYEREKANA INGORANE ZATUMA UMWANA AGOMBA KUJYANWA KWA MUGANGA? <i>Quels sont les signes qui montrent qu'il y a un problème et que l'enfant doit aller au centre de santé ou a l'hôpital?</i>	A. NTABIZI Ne sait pas B. GUCIKA INTEGE Asthénie C. KUTARYA Ne pas manger D. KUTANYWA Ne pas boire E. GUHONDOBERA BIDASANZWE Difficile a réveiller F. UMURIRO Fièvre G. GUHUMEKA INSIGANE Respiration rapide ou difficile H. KURUKA ICYAFASHE CYOSE Vomit tout ce qu'on lui donne I. GUHWERA Convulsions J. IBINDI (bivuge) Autre (préciser) _____
73.	MU BYUMWERU BIBIRI BISHIZE, KANAKA YABA YARA RWAYE? <i>(Nom de l'enfant) a--t-il ete malade pendant les 2 dernières semaines?</i>	0. OYA/ Non → 83 1. YEGO/Oui
74.	NINDE WAMUVUYE UBWAMBERE? <i>Qui a traité l'enfant en premier?</i>	A. NTawe /personne B. K'UMUVUZI WA GIHANGA Guerisseur traditionnel C. K'UMUBYAZA WA GIHANGA Acc traditionnelle D. K'UMUJYANAMA W'UBUZIMA WA MALARIYA

		<i>Animateur de sante</i> E. UMUKOZI WO MURI FORUMASI <i>Agent de la pharmacie</i> F. KWA MUGANGA <i>Fosa</i> X. Ahandi (havuge) (<i>préciser</i> _____)		
75.	YARI YAFASHWE ATE ? <i>De quoi etait-il malade?</i>	a. UMURIRO <i>fièvre</i> A. INKORORA <i>Toux - → 79</i> B. GUHUMEKA INSIGANE <i>Respiration rapide et difficile → 79</i> C. KURUKA <i>Vomissements -- → 79</i> D. IMPISWI <i>Diarrhée -- → 78</i> E. KWITUMA AMARASO <i>Diarrhée sanglante - → 79</i> X. IBINDI (bivuge) <i>Autres (préciser)</i> _____		
76.	[FIEVRE] YABA SE YARAHawe IYIHE MITI? <i>Qu'est ce qu'il a reçu comme médicament?</i>	Traitement reçu (encercler)	No des jours que le médicament a été pris par l'enfant	Source du médicament utilise: 1 – Distributeur 2 – Pharmacie 3 – FOCA/Hôpital 4 – Guérisseur 88 – Autre (Préciser) 99 – Ne sait pas
		0. Ntayo/ <i>Rien reçu</i>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
		1. Fansidar et Amodiaquin	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
		2. Fansidar	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
		3. Amodiaquin	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
		4. Aspirine	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
		5. Simbizi/ <i>Ne sait pas</i>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
		6. Quinine	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
		88. Ikindi/ <i>autres</i> _____	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>

77.	<p>[FIEVRE] NIBA YARI AFITE UMULIRO, YATANGIYE GUHABWA IMITI NYUMA Y'IGIHE KINGANA IKI AFASHWE? <i>Si il avait la fièvre, le début de traitement a commence après combien d'heures de début de la fièvre.</i></p>	<p>1. MU MASAHA 24 AFASHWE <i>Dans les 24 heures</i></p> <p>2. NYUMA Y'AMASAHA 24 AFASHWE <i>Après 24 heures</i></p> <p>88. NTABIZI <i>Ne sait pas</i></p> <p>—> Aller au no 79 si pas de diarrhée dans les semaines passées</p>
78.	<p>[DIARHEE] IYO (KANAKA) ARWAYE IMPISWI, MUMUHA IKI? <i>Qu'est-ce que vous donnez a (Nom de l'enfant) lorsqu'il a de la diarrhee?</i></p>	<p>A. NTACYO <i>Rien</i></p> <p>B. AMAZI <i>De l'eau</i></p> <p>C. SRO/ SERUMU/ DARUZI <i>SRO</i></p> <p>D. AMAZI ARIMO ISUKARI N' UMUNYU <i>Solution sucrée salee</i></p> <p>E. AMAZI Y'UMUCERI <i>Eau de riz</i></p> <p>F. IBININI <i>Comprimés</i></p> <p>G. NTAYO YIGEZE ARWARA N'a pas encore eu la diarrhée</p> <p>X. IBINDI (bivuge) <i>Autre (préciser).....</i></p>
79.	<p>[TOUTE MALADIE]KANAKA ARWAYE, MWAMUHAYE IBYO KUNYWA NO KONKA INCURO ZINGANA IKI MUGERERANIJE N'UBUSANZWE ? <i>Pendant la maladie de (Nom de l'enfant), lui avez-vous donne en liquide?</i></p>	<p>1. NTABYO/<i>Rien</i></p> <p>2. NKEYA/ <i>Moins que d'habitude</i></p> <p>3. NK'UBUSANZWE/ <i>Comme d'habitude</i></p> <p>4. ZIRUSHIJEHO/<i>Plus que d'habitude</i></p> <p>5. NTABIZI/ <i>Ne sait pas</i></p>
80.	<p>[TOUTE MALADIE] KANAKA ARWAYE, MWAMUHAYE IBYO KURYA INCURO ZINGANA IKI MUGERERANIJE N'UBUSANZWE ? <i>Pendant la maladie de (Nom de l'enfant),lui avez-vous donne en alimentation?</i></p>	<p>1. ARONKA GUSA <i>Allaitemnt exclusif</i></p> <p>2. NTABYO/<i>Rien</i></p> <p>3. NKEYA/ <i>Moins que d'habitude</i></p> <p>4. NK'UBUSANZWE/ <i>Comme d'habitude</i></p> <p>5. ZIRUSHIJEHO/<i>Plus que d'habitude</i></p> <p>6. NTABIZI/ <i>Ne sait pas</i></p>
81.	<p>[TOUTE MALADIE]KANAKA AKIRUTSE MWAMUHAYE IBIRYO INCURO ZINGAHE MUGERERANIJE N'UBUSANZWE ? <i>Après la maladie de (Nom de l'enfant),lui avez-vous donne en</i></p>	<p>1. ARONKA GUSA <i>Allaitement exclusif</i></p> <p>2. NTABYO/<i>Rien</i></p> <p>3. NKEYA/ <i>Moins que d'habitude</i></p> <p>4. NK'UBUSANZWE/ <i>Comme d'habitude</i></p>

	<i>alimentation?</i>	<p>5. ZIRUSHIJEHO/<i>Plus que d'habitude</i></p> <p>6. NTABIZI/<i>Ne sait pas</i></p>
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UMUSARANE N'ISABUNE (la latrine et du savon)

83.	MUGIRA AGASABUNE HANO MURUGO? <i>Avez vous un savon?</i>	<p>0. OYA / Non</p> <p>1. YEGO / Oui</p>
84.	WIGEZE UKARABA N' AGASABUNE EJO CYANGWA NONE ? <i>Depuis hier vous etes vous laver avec le savon?</i>	<p>0. OYA / Non</p> <p>1. YEGO / Oui</p>
85	NI RYARI MUKARABA INTOKI N'ISABUNE ? <i>Quand est ce que vous utilisez le savon en vous lavant les mains?</i>	<p>A. MBERE YO GUTEGURA IBYO KURYA <i>Avant la préparation du repas</i></p> <p>B. MBERE YO KONSA UMWANA <i>Avant d'allaiter un enfant</i></p> <p>C. MBERE YO KUGABURIRA UMWANA <i>Avant de nourrir un enfant</i></p> <p>D. AMAZE GUHEHA UMWANA <i>Après avoir nettoyer un enfant qui vient de déféquer</i></p> <p>E. AVUYE KWITUMA <i>Après avoir déféqué</i></p> <p>F. SINKARABA ISABUNE / <i>Ne se lave jamais les mains avec du savon</i></p> <p>G. IBINDI (bivuge) / <i>Autres (préciser) :</i> _____</p> <p>_____</p>
86.	NSHOBORA KUREBA UMUSARANE URUGO RUKORESHA?/ <i>Je peux voir la toilette que dispose votre ménage</i>	<p>0. OYA / Non -> Fin d'enquête</p> <p>1. YEGO / Oui</p>
87.	[MUKIRI AHO BITUMA, MUBAZE] "MUSHOBORA KUNYEREKA AHO MUKARABIRA INTOKE NIBYO MWABA MUKORESHA MUKARABA?" <i>Etant encore sur les lieux,</i>	<p>1. YEGO / OUI</p> <p>5. Si AHABUGENEWE , <i>pas commode</i>-> 89</p> <p>0. NTA RUHUSHYA, <i>pas de permission</i> -> 89</p>

	<i>cherchez a savoir s'ils ont un systeme commode de se laver les mains après avoir fait les selles?</i>	
88.	ISABUNE YABA SE IHARI? Le savon est-il disponible	0. OYA / <i>Non</i> 1. YEGO / <i>Oui</i>

IFISHI MUPIMISHIRIZAHO KANAKA / La fiche de l'enfant

Seulement pour les enfants de 12 a 23 mois

→ Si l'enfant a moins de 12 mois allez y à la question n° 92

89.	MWABA MUFITE IFISHI MUPIMISHIRIZAHO KANAKA Avez-vous une fiche de santé de (nom de l'enfant)	0. Non, L'enfant n'a pas de carte 1. La carte se trouve au FOSA 2. La carte est perdu 3. Oui																																																				
90.	REBA KU IFISHI INKINGO YABONYE (<i>Vaccins recus</i>) UZANDUKURE	<table border="1"> <thead> <tr> <th></th> <th style="text-align: center;"><i>Jour</i></th> <th style="text-align: center;"><i>Mois</i></th> <th style="text-align: center;"><i>Année</i></th> </tr> <tr> <th></th> <th style="text-align: center;">ITALIKI</th> <th style="text-align: center;">UKWEZI</th> <th style="text-align: center;">UMWAKA</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">BCG</td> <td style="text-align: center;"> _ _ </td> <td style="text-align: center;"> _ _ </td> <td style="text-align: center;"> _ _ </td> </tr> <tr> <td style="text-align: center;">POLIO 0</td> <td style="text-align: center;"> _ </td> <td style="text-align: center;"> _ </td> <td style="text-align: center;"> _ </td> </tr> <tr> <td style="text-align: center;">POLIO 1</td> <td style="text-align: center;"> _ </td> <td style="text-align: center;"> _ </td> <td style="text-align: center;"> _ </td> </tr> <tr> <td style="text-align: center;">POLIO 2</td> <td style="text-align: center;"> _ </td> <td style="text-align: center;"> _ </td> <td style="text-align: center;"> _ </td> </tr> <tr> <td style="text-align: center;">POLIO 3</td> <td style="text-align: center;"> _ </td> <td style="text-align: center;"> _ </td> <td style="text-align: center;"> _ </td> </tr> <tr> <td style="text-align: center;">PENT 1</td> <td style="text-align: center;"> _ </td> <td style="text-align: center;"> _ </td> <td style="text-align: center;"> _ </td> </tr> <tr> <td style="text-align: center;">PENT 2</td> <td style="text-align: center;"> _ </td> <td style="text-align: center;"> _ </td> <td style="text-align: center;"> _ </td> </tr> <tr> <td style="text-align: center;">PENT 3</td> <td style="text-align: center;"> _ </td> <td style="text-align: center;"> _ </td> <td style="text-align: center;"> _ </td> </tr> <tr> <td style="text-align: center;">ISERU/ Rougeole</td> <td style="text-align: center;"> _ </td> <td style="text-align: center;"> _ </td> <td style="text-align: center;"> _ </td> </tr> <tr> <td style="text-align: center;">VIT.A</td> <td style="text-align: center;"> _ </td> <td style="text-align: center;"> _ </td> <td style="text-align: center;"> _ </td> </tr> <tr> <td style="text-align: center;">Mebendazole</td> <td style="text-align: center;"> _ </td> <td style="text-align: center;"> _ </td> <td style="text-align: center;"> _ </td> </tr> </tbody> </table>		<i>Jour</i>	<i>Mois</i>	<i>Année</i>		ITALIKI	UKWEZI	UMWAKA	BCG	_ _	_ _	_ _	POLIO 0	_	_	_	POLIO 1	_	_	_	POLIO 2	_	_	_	POLIO 3	_	_	_	PENT 1	_	_	_	PENT 2	_	_	_	PENT 3	_	_	_	ISERU/ Rougeole	_	_	_	VIT.A	_	_	_	Mebendazole	_	_	_
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91.	REBA KU IFISHI INSHURO YAPIMWE MU MEZI ATATU ASHIZE/ <i>Nombre de fois que</i> (<i>Nom de l'enfant</i>) a été pese <i>selon la fiche</i>	_ _ Umubare <i>Nombre</i>																																																				

IMILIRE Y'UMWANA (Etat nutritionnel de l'enfant [TOUS LES ENFANTS DE 0 a 23 MOIS])

92.	NSHOBORA GUPIMA IBIRO BYA (KANAKA)? <i>Puis-je peser (Nom de l'enfant)?</i>	IBIRO __ __ , __ <i>Poids Kg grammes</i>
93.	PIMA UMUZENGURUKO W'AKABOKO. Taille Bras PB / Périmètre brachial de l'enfant	IBIRO __ __ __ <i>Mm</i>
94.	REBA NIBA HARI AHO ABYIMBAGANYE PRESENCE DE L'OEDEME	0. OYA / Non (pas d'oedeme) 1. YEGO / Oui (Oedeme present)

NTA BIBAZO MWABA MUFITE MWAMBAZA?

Avez-vous des questions a me poser ou quelques choses a ajouter?

REBA NIBA IBIBAZO BYOSE BYABAJIWE

Vérifiez si toutes les questions ont été posées

**MURAKOZE CYANE. TWIZEYE KO IBYO MWATUBWIYE BIZADUFASHA
KURUSHAHO GUKEMURA IBIBAZO BY'ABANA N'ABABYEYI MU KAGARI
KANYU K'UBUZIMA. TUZABAGEZAHO IBYAVUYE MURI UBU
BUSHAKASHATSI MU GIHE KITARAMBIRANYE.**

**Merci beaucoup. Nous espérons que vos réponses vont nous aider a trouver des
solutions aux problèmes de sante des enfants et des femmes dans votre district. Nous
vous communiquerons les résultats de cette enquête dans les meilleurs délais.**

ANNEX 3: RAPID CATCH INDICATORS: Baseline survey (2002), Midterm survey (2005) and Final survey (2006)

INDICATOR AND DEFINITION			Baseline Survey (Jan 02) (Cluster) N=422			Midterm Survey (Jan 04) - LQAS N=133			Final Evaluation (June 06) (Cluster) N=420		
			Total	%	Remarks	Total	%	Remarks	Total	%	Remarks
UNDERWEIGHT CHILDREN	Percentage of children age 0-23 months who are underweight (-2 SD from the median weight-for-age, according to the WHO/NCHS reference population)	Numerator No. of children age 0-23 months whose weight (Rapid CATCH Question 7) is -2 SD from the median weight of the WHO/NCHS reference population for their age	0	n/a		51	38%	12-23 months	59	36%	12-23 months
		Denominator Number of children age 0-23 months in the survey who were weighed (response=1 for Rapid CATCH Question 6)	0			133		164			
BIRTH SPACING	Percentage of children age 0-23 months who were born at least 24 months after the previous surviving child	Numerator No. of children age 0-23 months whose date of birth is at least 24 months after the previous sibling's date of birth (Rapid CATCH Question	261	74%	0-23 months	0	n/a		110	79%	
		Denominator Number of children age 0-23 months in the survey who have an older sibling	354			0			139		
DELIVERY ASSISTANCE	Percentage of children age 0-23 months whose births were attended by skilled health personnel	Numerator No. of children age 0-23 months with responses =A ('doctor'), B ('nurse/midwife'), or C ('auxiliary midwife') for Rapid CATCH Question 10D	29	8%		37	28%	all facility deliveries with skilled attendant	230	55%	
		Denominator Number of children age 0-23 months in the survey	365			133		420			
MATERNAL TT	Percentage of mothers of children age 0-23 months who received at least two tetanus toxoid injections before the birth of their youngest child	Numerator Number of mothers of children age 0-23 months with responses=2 ('twice') or 3 ('more than two times') for Rapid CATCH Question 9	100	45%		90	68%	0-11 months	262	62%	0-23 months
		Denominator Number of mothers of children age 0-23 months in the survey Number of mothers of children age 0-23 months with responses=2 ('twice') or 3 ('more than two times') for Rapid CATCH Question 9 Denominator Numerator: Number of mothers of children a	220			132		420			

INDICATOR AND DEFINITION			Baseline Survey (Jan 02) (Cluster) N=422			Midterm Survey (Jan 04) - LQAS N=133			Final Evaluation (June 06) (Cluster) N=420		
			Total	%	Remarks	Total	%	Remarks	Total	%	Remarks
EXCLUSIVE BREASTFEEDING	Percentage of infants age 0-5 months who were exclusively breastfed in the last 24 hours	Numerator Number of infants age 0-5 months with only response=A ('breastmilk') for Rapid CATCH Question 13	75	74%		n/a		151	97%		
		Denominator Number of infants age 0-5 months in the survey	102					155			
COMPLEMENTARY FEEDING	Percentage of infants age 6-9 months receiving breastmilk and complementary foods	Numerator Number of infants age 6-9 months with responses= A ('breastmilk') and D ('mashed, pureed, solid, or semi-solid foods') for Rapid CATCH Question 13	66	94%		86%	6-11 months	35	49%		
		Denominator Number of infants age 6-9 months in the survey	70					71			71
FULL VACCINATION	Percentage of children age 12-23 months who are fully vaccinated (against the five vaccine-preventable diseases) before the first birthday	Numerator Number of children age 12-23 months who received Polio3 (OPV3), DPT3, and measles vaccines before the first birthday, according to the child's vaccination card (as documented in Rapid CATCH Question 15)	132	64%		72%		108	76%		
		Denominator Number of children age 12-23 months in the survey who have a vaccination card that was seen by the interviewer (response=1 'yes, seen by interviewer' for Rapid CATCH Question 14)	205					133			143
MEASLES	Percentage of children age 12-23 months who received a measles vaccine	Numerator Number of children age 12-23 months with response=1 ('yes') for Rapid CATCH Question 16	159	78%		72%		137	82%		
		Denominator Number of children age 12-23 months in the survey	205					133			168
BEDNETS	Percentage of children age 0-23 months who slept under an insecticide-treated bednet the previous night (in malaria-risk areas only)	Numerator Number of children age 0-23 months with 'child' (response=A) mentioned among responses to Rapid CATCH Question 18 AND response=1 ('yes') for Rapid CATCH Question 19	3	1%		21%		195	46%		
		Denominator Number of children age 0-23 months in the survey	422					266			420

INDICATOR AND DEFINITION			Baseline Survey (Jan 02) (Cluster) N=422			Midterm Survey (Jan 04) - LQAS N=133			Final Evaluation (June 06) (Cluster) N=420		
			Total	%	Remarks	Total	%	Remarks	Total	%	Remarks
DANGER SIGNS	Percentage of mothers who know at least two signs of childhood illness that indicate the need for treatment	Numerator Number of mothers of children age 0-23 months who report at least two of the signs listed in B through H of Rapid CATCH Question 20	305	72%		22	17%	Malaria signs among WRA	317	75%	
		Denominator Number of mothers of children age 0-23 months in the survey	422			133			420		
SICK CHILD	Percentage of sick children age 0-23 months who received increased fluids and continued feeding during an illness in the past two weeks	Numerator Number of children age 0-23 months with response=3 ('more than usual') for Rapid CATCH Question 22 AND response=2 ('same amount') or 3 ('more than usual') for Rapid CATCH Question 23	11	8%		n/a		24	16%		
		Denominator Number of children surveyed who were reportedly sick in the past two weeks (children with any responses A-H for Rapid CATCH Question 21)	131					147			
HIV & AIDS	Percentage of mothers of children age 0-23 months who cite at least two known ways of reducing the risk of HIV infection	Numerator Number of mothers of children age 0-23 months who mention at least two of the responses that relate to safer sex or practices involving blood (letters B through I & O) for Rapid CATCH Question 25	103	24%		98	74%		338	80%	
		Denominator Number of mothers of children age 0-23 months in the survey	422			133			420		
HANDWASHING	Percentage of mothers of children age 0-23 months who wash their hands with soap/ash before food preparation, before feeding children, after defecation, and after attending to a child who has defecated	Numerator Number of mothers of children age 0-23 months who mention responses B through E for Rapid CATCH Question 26	0	n/a		37	28%	One activity	56	13%	5 activités
		Denominator Number of mothers of children age 0-23 months in the survey	0			133			420		