

Kanungu District Community Knowledge and Practices LQAS Survey Report

Management Sciences for Health (STAR-E)

April 2011

This report was made possible through support provided by the US Agency for International Development, under the terms of Cooperative Agreement Number 617-A-00-09-00006-00. The opinions expressed herein are those of the author(s) and do not necessarily reflect the views of the US Agency for International Development.

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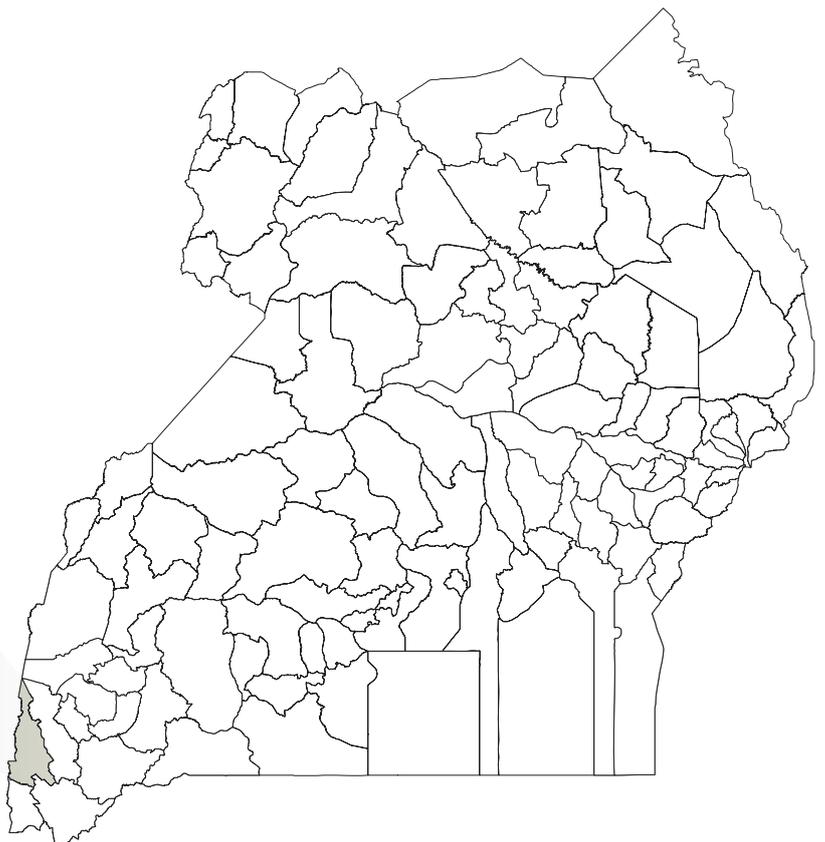
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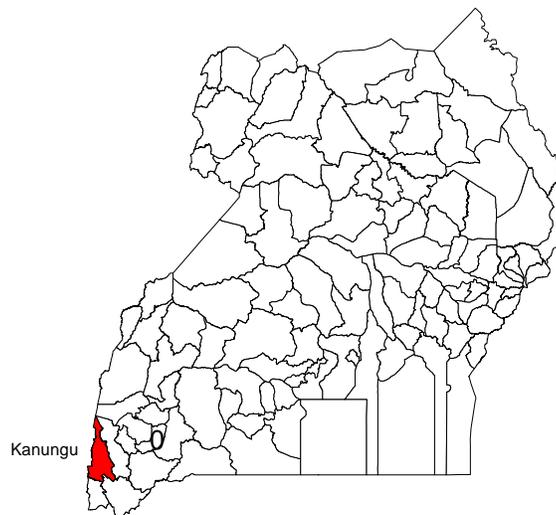


KANUNGU DISTRICT

COMMUNITY KNOWLEDGE AND PRACTICES SURVEY REPORT

APRIL 2011

Prepared by STAR- E LQAS



This document may be cited as:

Author: Management Sciences in Health (STAR-E) and Elizabeth Glaser Pediatric AIDS Foundation (STAR-SW)

Title: *Community knowledge and practices LQAS survey, 2010. Kanungu district report, May 2011.*

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Acknowledgements

STAR-E acknowledges with appreciation the cooperation it has received from the partners contributing to the 2010 LQAS survey in Kanungu district: the communities that participated, the district authorities for oversight and supervision, the district officials for carrying out the survey under the management of the STAR-SW and guidance of STAR-E projects. STAR-E thanks STAR-SW for providing the electronic survey raw data sets as soon as they were ready.

STAR-E also acknowledges the support it receives from the USAID Mission through the Agreement Officer's Technical Representative (AOTR). This survey was made possible through Cooperative Agreements 617-A-00-09-00006-00 with Management Sciences for Health and AID-617-A-00-10-00005 with the Elizabeth Glaser Pediatric AIDS Foundation.

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Abbreviations

AIDS	Acquired Immuno-Deficiency Syndrome
ANC	Antenatal care
CI	Confidence interval
DHS	Demographic Health Survey
DR	Decision rule
EGPAF	Elizabeth Glazer Pediatric AIDS Foundation
HCT	HIV counseling and testing
HIV	Human Immunodeficiency Virus
ITN	Insecticide treated nets
LC	Local Council
LQAS	Lot quality assurance sampling
MSH	Management Sciences for Health
MTCT	Mother to child transmission (of HIV)
NA	Not applicable
PMTCT	Prevention of mother to child transmission (of HIV)
SA	Supervision area
STAR-E	Strengthening TB and AIDS Response (project) in the Eastern Region
STAR-SW	Strengthening TB and AIDS Response (project) in the South Western Region
STI	Sexually transmitted infections
UBOS	Uganda Bureau of Statistics
USAID	US Agency for International Development

1. Introduction

Kanungu district in South Western Uganda is bordered by the Democratic Republic of the Congo to the west, Rukungiri District to the north and east, Kabale District to the southeast and Kisoro District to the southwest. The district is made up of eleven sub counties of Kambugu, Kanyantorogo, Kanungu Town Council, Kihihi, Kayonza, Kihihi Town Council, Kirima, Mpungu, Nyamirama, Rugyeyo and Rutenga. The district has a high altitude and is endowed with fertile soils.

Kanungu has a tropical climate receiving moderate and fairly well distributed annual rainfall of about 1,200mm. The district receives a bimodal type of rainfall from February to May and September to December; while the rest of the months are dry. Average temperatures are range from about 15 °C to 20 °C.

The 2002 national census estimated the population of Kanungu district at 205,100, with an annual population growth rate of 2%. In 2009 the population was estimated at 240,300.

2. Background to the survey

Kanungu district carried out a community-based LQAS survey to assess the level of delivery of services for HIV/AIDS, TB, child health, reproductive health and malaria. The survey was conducted in November 2010 by the USAID funded STAR-SW project and technical support from the STAR-E project. The indicators assessed were selected in consultation with district managers as well as national programme managers. The survey targeted orphans (5-17 years), the youth (15-24 years), women (15-49 years), men (15-54 years), mothers of babies under one year of age and mothers with babies between 12 and 23 months. The survey did not target pregnant women. Appendix 1 presents the list of indicators assessed by the survey.

Questionnaires were developed for each target group in consultation with various stakeholders at national and district levels to ensure conformity with national surveys such as the Demographic and Health Survey (DHS) and international survey requirements. Key terms and phrases in the questionnaires were translated into Rukiga and Runyankole language to allow uniform translation to, and understanding of, the local language phrases during face-to-face interviews in the communities.

This report presents district results based on “cleaned” data sets on those indicators that could not be reliably reported on using the hand tabulation process. Preliminary results were available to the district within a week of the end of the data collection exercise. Those results were obtained through hand tabulation by the district workers who had collected the data.

3. Selection of Interview Villages

The UBOS 2009 list of villages with corresponding number of households was used as a sampling frame. The district was partitioned by the district managers into seven supervision areas (SAs) with STAR-E LQAS’ guidance. The SAs were non-overlapping and had a programmatic link to supervisory roles in the district.

A random sample of 19 villages was selected from each SA using probability proportional to size (PPS) sampling technique. The randomly selected villages were verified by the district to confirm their existence and correcting the misspellings of village names.

4. Selection of Households and Respondents

A starting household for conducting the interview was randomly selected using, as far as possible, up-to-date LC1 household registers. In situations where it was not possible to establish such a list of households, community maps were used to partition the village into small sections with evenly distributed known household sizes, one of which would be randomly selected and a household list developed for the selected village section. This list would form a sampling frame from which a starting household would be identified at random.

A randomly selected starting household was used to minimize sampling errors. Movement from household to household followed specific instructions. Households were judged as nearest to each other by the distance walked from door to door.

Eligible respondents for the six target groups in a household were listed and one randomly selected. If the selected respondent qualified for more than one category, he/she was randomly assigned to one target group for interview. Only one interview was conducted in any household. Identification of other eligible respondents would continue in the households nearest to the front door of the previous interview until all the six categories of respondents were interviewed in each sampled village.

5. Data Collection

The data collection exercise was carried out in one week in November 2010 immediately after a week's training in the LQAS methodology and data collection tools. Each SA had a team of two data collectors and one supervisor. Community leaders supported data collectors in locating the villages and households. Data were collected from 19 respondents for each target population in each supervision area. One hundred and thirty three respondents were interviewed from each target group for the entire district. Apart from the orphans aged 5-12 years where caregivers were interviewed, the rest of the questionnaires were administered directly to the respondents.

6. Findings

Kanungu district comprised of five supervision areas of: Kihihi, Kayonza, Kanyatorogo, Rugeyo and Kambuga. Kanungu district had not set any targets for the assessed indicators, decisions on the level of delivery of services in the SAs were based on district average coverage for each indicator. The table in Appendix 2 was, therefore, used to determine the thresholds for each indicator.

The *thresholds* are based on the sample size (in this case 19 for each target group in each SA), the district average for the indicator estimate (20%, 30%, etc.) and a precision of the indicator estimate of 92%. Each district indicator average is given with a 95% confidence interval (CI).

The LQAS survey enables identification of SA that may be below the benchmark (in this case the district average) which are "red flagged" for special attention. Kihihi was the most flagged supervision area while Kanyatorogo had just one indicator flagged as shown in Table 1.

Table 1: Number of indicators below threshold by service and supervision areas*

Service areas	Indicators					Flagged	Total	Percent flagged
	Kihihi	Kayonza	Kanyatorogo	Rugeyo	Kambuga			
HIV counseling and Testing (HCT)	4	2	0	11	1	18	140	12.9
Prevention of Mother to Child Transmission of HIV (PMTCT)	5	2	0	3	1	11	80	13.6
HIV Knowledge and Sexual Behavior	2	1	0	1	0	21	105	20
Sexually Transmitted Infections (STI)	12	4	1	1	1	19	100	19
Tuberculosis	7	1	0	0	0	0	8	0
Malaria Prevention and Treatment	2	0	0	2	0	4	40	10
Reproductive Health and Family planning	0	1	0	2	1	4	20	20
Child Health	2	0	0	0	0	2	10	20
Sanitation	3	0	0	4	0	7	25	28
Total number of red flags	37	11	1	24	4	86	595	14.5

*counts are pooled for target groups

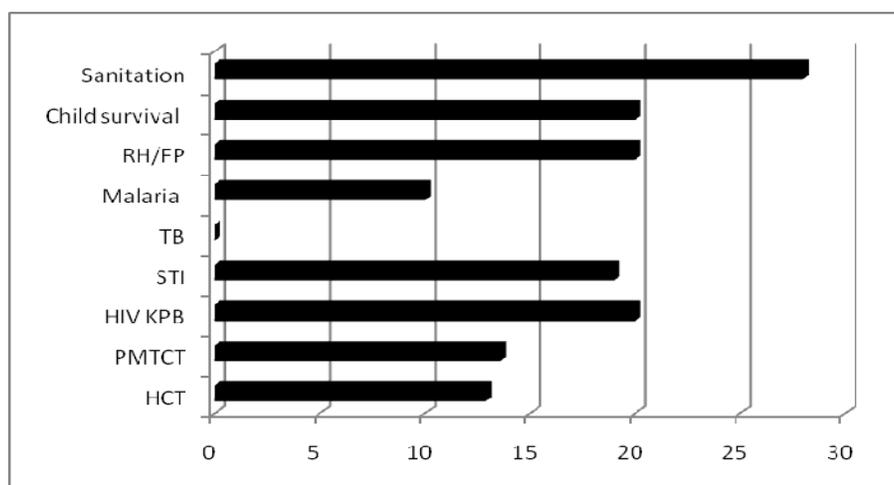


Figure 1: Percent of indicators below threshold out of the total indicators for the service area

In the following results tables, supervision areas with indicators below thresholds are marked by an asterisk (*). Thresholds of indicators with a district survey target population average below 20% are marked as “not applicable” (NA).

6.1. HIV counseling and Testing (HCT)

Figure 2 shows the distribution of flagged indicators for HCT in Kanungu district SAs. Tables 2 – 10 give the survey results of knowledge and practices in HIV counseling and testing (HCT) across SAs in the district.

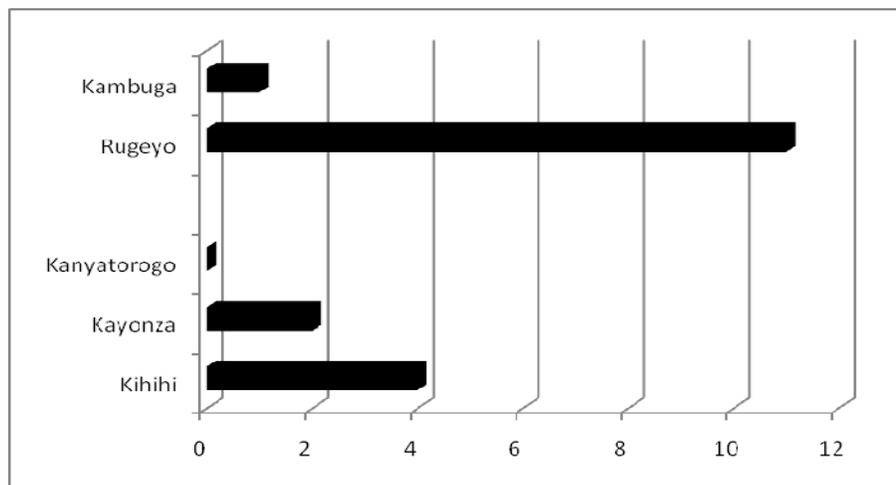


Figure 2. Number of Indicators below threshold for HCT

Figure 2 shows that apart from Kanyatorogo supervision area there was poor performance on HCT in the whole district. Rugeyo supervision area had the worst performance.

Table 2: Individuals who know where they can be tested for HIV

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)	Mothers of children (0- 11 months)	Mothers of children (12- 23 months)
Kihihi	17	18	18	19	18
Kayonza	18	18	19	18	19
Kanyatorogo	18	19	19	19	19
Rugeyo	13*	17	16	19	16
Kambuga	17	18	18	18	19
Average coverage (95% CI)	87.3 (80.6-94.2)	94.7 (90.2-99.3)	94.7 (90.2-99.3)	98.0 (94.9-1.0)	95.8 (91.8-99.9)
Threshold	15	16	16	16	16
Number of SAs below threshold	1	0	0	0	0

Knowledge of sources for HIV counseling and testing services was below district average threshold in Rugeyo SA among the youth. In all the other supervision areas, across target groups, knowledge was high as shown in Table 2.

Table 3: Individuals who know two or more benefits of HCT

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)	Mothers of children (0- 11 months)	Mothers of children (12- 23 months)
Kihihi	9*	14	12*	15	15
Kayonza	14	11*	16	14*	18
Kanyatorogo	16	18	18	18	18
Rugeyo	13	17	15	18	15
Kambugo	15	19	18	17	17
Average coverage (95% CI)	70.5 (61.2-79.7)	83.2 (75.5-90.8)	83.2 (75.5-90.8)	86.3 (79.3-93.4)	87.4 (80.6-94.)
Threshold	12	14	14	15	15
Number of SAs below threshold	1	1	1	1	0

The results in Table 3 show that the indicator on individuals who knew two or more benefits of HCT was below the district average thresholds for the youth and women in Kihihi supervision area. The indicator was below district average thresholds among men and mothers of children 0-11 months in Kayonza supervision area.

Table 4: Individuals who have ever been counseled and tested for HIV

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)
Kihihi	7*	8	17
Kayonza	9	12	18
Kanyatorogo	14	10	17
Rugeyo	4*	9	8
Kambugo	9	11	14
Average coverage (95% CI)	51.1 (42.5-59.2)	52.6 (42.4-62.9)	77.9 (69.3-86.4)
Threshold	8	8	13
Number of SAs below threshold	2	0	0

Table 5: Individuals who have ever been counseled, tested and received their HIV test results

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)
Kihihi	5*	8	17
Kayonza	9	12	18
Kanyatorogo	14	10	17
Rugeyo	3*	8	6*
Kambugo	9	11	12
Average coverage (95% CI)	42.1 (32.0-52.2)	51.6 (41.3-61.8)	73.7 (64.7-82.7)
Threshold	6	8	12
Number of SAs below threshold	2	0	1

Kihihi and Rugeyo supervision areas were below the district average thresholds for accessing HCT services and receiving the test results among the youth, and among women in Rugeyo SA as shown in Table 4 and Table 5.

Table 6: Individuals who were counseled and tested for HIV in the past 12 months

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)
Kihihi	3	4	7
Kayonza	8	9	15
Kanyatorogo	11	3	8
Rugeyo	1*	2*	4*
Kambugo	4	7	7
Average coverage (95% CI)	28.4 (19.1-37.7)	26.3 (17.3-35.3)	43.2 (33.0-53.3)
Threshold	3	3	6
Number of SAs below threshold	1	1	1

Rugeyo Supervision area had poor results for history of HIV counseling and testing therefore need special attention by service providers (Table 6).

Table 7: Individuals who were counseled and tested for HIV in the past 12 months and know their HIV results

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)
Kihihi	2	2	7
Kayonza	7	9	16
Kanyatorogo	10	2	8
Rugeyo	0*	2	4*
Kambugo	3	8	7
Average coverage (95% CI)	23.1 (14.5-31.8)	24.8 (17.4-32.2)	44.2 (34.0-54.4)
Threshold	2	2	6
Number of SAs below threshold	1	0	1

The results in Table 7 shows that generally there was low performance for the indicator of individuals who were counseled and tested in the past 12 months and knew their HIV results. Rugeyo SA was below the district average thresholds for the youth and women.

Table 8: Mothers who were counseled and received an HIV test during the last pregnancy and know their results

Supervision Areas	Mothers of children (0-11 months)
Kihihi	18
Kayonza	17
Kanyatorogo	15
Rugeyo	12*
Kambugo	15

Supervision Areas	Mothers of children (0-11 months)
Average coverage (95% CI)	81.1 (73.0-89.1)
Threshold	14
Number of SAs below threshold	1

The survey showed that expecting mothers in Kanungu district are counseled and tested for HIV and know their test results as shown in Table 8. It was only in Rugeyo supervision area that the performance is below the district average threshold.

Table 9: Individuals who have ever tested for HIV and received their results as a couple

Supervision Areas	Men (15-54 yrs)	Women (15-49 yrs)
Kihihi	1	3
Kayonza	8	6
Kanyatorogo	1	2
Rugeyo	2	3
Kabugo	6	2
Average coverage (95% CI)	18.9 (10.9-27.0)	16.8 (9.1-24.5)
Threshold	1	1
Number of SAs below threshold	0	0

The findings indicated that few individuals who tested for HIV and received their results as a couple as shown in Table 9.

Table 10: Individuals who were tested for HIV and received their results and disclosed to their spouse/partner

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)
Kihihi	5	8	16
Kayonza	10	10	16
Kanyatorogo	13	10	15
Regeyo	3*	9	5*
Kambuga	4*	10	12
Average coverage (95% CI)	36.8 (27.0-46.7)	49.5 (39.2-59.7)	67.4 (57.8-77.0)
Threshold	5	7	11
Number of SAs below threshold	2	0	1

About half of the men and 67% of the women disclosed their HIV test results to their partners. The youth and women in Rugeyo SA were below the district average thresholds as were the youth in Kambuga SA (Table 10).

6.2. PMTCT knowledge and practices

Figure 3 shows the distribution of flagged indicators for PMTCT knowledge and practices in Kanungu district SAs Supervision areas performed poorly on PMTCT across the target groups apart from Kanyatorogo SA Tables 11 – 14 give the details of the results for PMTCT knowledge and practices in Kanungu district.

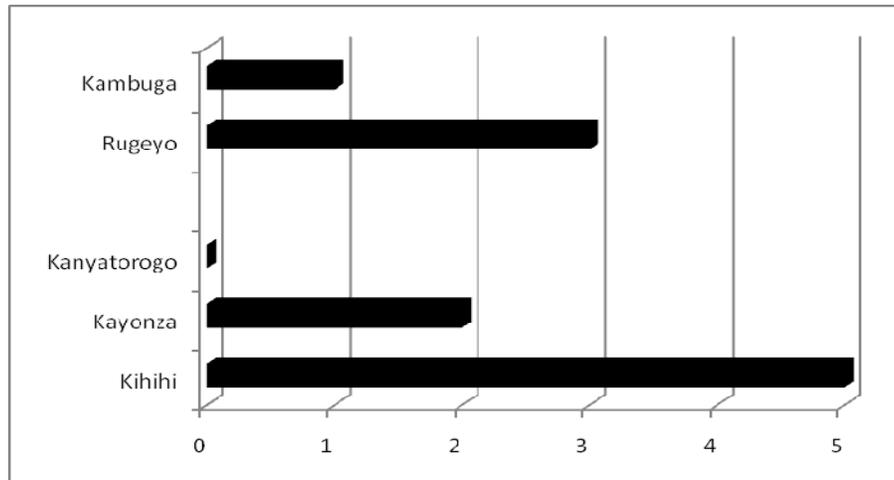


Figure 3. SAs Flagged for PMTCT knowledge and practices

Table 11: Individuals who know all 3 ways when HIV transmission occurs from an infected mother to child

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)	Mothers of children (0-11 months)	Mothers of children (12-23 months)
Kihihi	0	0	0	1	0
Kayonza	1	1	1	3	0
Kanyatorogo	1	1	2	3	4
Rugeyo	0	0	2	0	3
Kambuga	2	2	1	5	4
Average coverage (95% CI)	4.2 (0- 8.3)	4.2 (0-8.3)	6.3 (1.3- 11.3)	12.6 (5.8-19.4)	11.5 (5.0-18.1)
Threshold	NA	NA	NA	NA	2
Number of SAs below threshold	NA	NA	NA	NA	3

Table 11 shows that there is poor knowledge in all target populations MTC HIV transmission. In Kihihi SA there were no individuals among the youth, men, women and mothers of children 12-23 months who knew all the 3 ways when HIV transmission occurs from an infected mother to child. In Rugeyo SA, no individual was aware among the youth and men. It was also revealed that in Kayonza SA, mothers of children 12-23 months no one was aware of this indicator.

Table 12: Individuals who know at least two key actions that reduce MTCT of HIV

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)	Mothers of children (0-11 months)	Mothers of children (12-23 months)
Kihihi	7*	7*	8*	13	5*
Kayonza	13	13	15	14	11
Kanyatorogo	14	15	11	19	17
Rugeyo	7*	13	13	15	17
Kambuga	10	10	17	14	11
Average coverage (95% CI)	53.7 (43.5-64.0)	61.1 (51.1-71.0)	67.4 (57.8-78.0)	78.9 (70.6-87.3)	64.2 (54.4-74.0)
Threshold	8	10	11	13	10
Number of SAs below threshold	2	1	1	0	1

Knowledge on how HIV transmission from mother to child can be reduced is low in Kihhi SA in all target groups apart from mothers of children (0-11) months. In Rugeyo SA the youth are below the district average threshold (Table 12).

Table 13: Individuals who know where they can get information and services to reduce the risk of HIV MTCT

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)	Mothers of children (0-11 months)	Mothers of children (12-23 months)
Kihihi	13	17	14*	18	16
Kayonza	14	15	16	15*	13*
Kanyatorogo	18	18	18	18	17
Rugeyo	12*	17	17	18	17
Kambuga	17	17	17	17	19
Average coverage (95% CI)	77.9 (69.4-86.3)	88.4 (81.9-95.0)	86.3 (79.3-93.4)	90.5 (84.5-96.5)	86.3 (79.3-93.4)
Threshold	13	15	15	16	15
Number of SAs below threshold	1	0	1	1	1

The results in Table 13 show that the people in Kanungu district know where information on reduction of HIV MTCT can be obtained although the youth in Rugeyo SA, women in Kihhi SA and mothers of young babies in Kayonza SA were below the district average thresholds.

Table 14: Mothers of children (0-11 months) who were counseled for PMTCT services during last pregnancy

Supervision Areas	Mothers of children (0- 11 months)
Kihhihit	13
Kayonza	18
Kanyatorogo	14
Rugeyo	11*
Kambuga	11*

Supervision Areas	Mothers of children (0-11 months)
Average coverage (95% CI)	70.5 (61.2-79.9)
Threshold	12
Number of SAs below threshold	2

Table 14 shows that more than half of the mothers of children (0-11) months are counseled for PMTC services during their last pregnancy. It was however revealed that Rugeyo and Kambuga SAs are below the district average threshold and so need more intervention.

6.3. HIV/AIDS knowledge and sexual behavior

Tables 16 - 22 show details of the results for HIV/AIDS knowledge and sexual behavior Figure 4 shows that three out of the five supervision had a red flag on this service area for at least one target group.

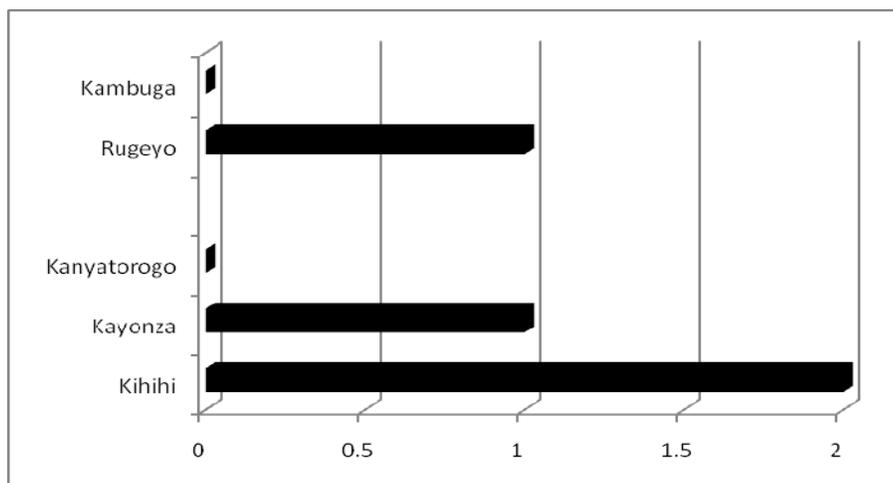


Figure 4: Number of flagged SAs for HIV/AIDS knowledge and sexual behavior

Table 15: Individuals who both correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)	Mothers of children (0-11 months)	Mothers of children (12-23 months)
Kihhi	3*	4	4	2	2
Kayonza	5	5	5	1	4
Kanyatorogo	6	5	3	4	5
Rugeyo	8	10	9	4	4
Kambuga	7	5	5	7	8
Average coverage (95% CI)	30.5 (21.1-40.0)	30.5 (21.1-40.0)	27.4 (18.2-36.5)	18.9 (10.9-27.0)	24.2 (15.4-33.0)
Threshold	4	4	3	1	2
Number of SAs below threshold	1	0	0	0	0

The survey population in Kanungu (Table 15) revealed very poor knowledge of ways of preventing the sexual transmission of HIV and the majority does not reject major misconceptions about HIV transmission. The situation is prominent among the youth in Kihihi supervision area which is below the district average threshold. It is also noted that mothers of children of 0-11 months also have very poor knowledge on STDS and HIV misconceptions.

Table 16: Individuals who know at least two ways of preventing sexual transmission of HIV

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)	Mothers of children (0- 11 months)	Mothers of children (12- 23 months)
Kihihi	10	10	12	6*	11
Kayonza	13	15	15	13	14
Kanyatorogo	15	12	14	11	10
Rugeyo	13	16	13	14	13
Kambuga	11	13	11	15	14
Average coverage (95% CI)	65.3 (55.5-75.0)	69.3 (60.0-78.9)	68.4 (58.77.9)	62.1 (52.2-72.0)	65.2 (55.5-75.0)
Threshold	11	11	11	10	11
Number of SAs below threshold	0	0	0	1	0

The survey results also show that over 60% of the people in all target groups know at least two ways of preventing sexual transmission of HIV, Kihihi supervision area however performed below district average threshold among the mothers of children (0-11) months (Table 16)..

Table 17: Individuals who have ever used a condom when having sexual intercourse

Supervision Areas	Men (15-54 yrs)	Women (15-49 yrs)	Mothers of children (0-11 months)
Kihihi	6	3	5
Kayonza	9	5	5
Kanyatorogo	11	4	7
Rugeyo	4	4	2
Kambuga	9	5	4
Average coverage (95% CI)	43.3 (32.9-53.8)	22.6 (13.9-31.2)	24.2 (15.4-33.0)
Threshold	6	2	2
Number of SAs below threshold	0	0	0

Condom use is extremely low in Kanungu district as all the supervision areas are below 50% as shown in

Table 17. Women and mothers of children (0-11) months had an extremely low average coverage of condom use. Authorities need to identify reasons for the low condom use since this is a core HIV prevention strategy.

Table 18: Individuals who had sex with only one sexual partner in the last 12 month

Supervision Areas	Men (15-54 yrs)	Women (15-49 yrs)
Kihihi	17	18
Kayonza	17	15
Kanyatorogo	14	15
Rugeyo	15	13
Kambuga	14	17
Average coverage (95% CI)	81.0 (73.0-89.1)	82.1 (74.3-89.0)
Threshold	14	14
Number of SAs below threshold	0	0

Table 19: Individuals who have had sex with more than one sexual partner in last 12 months and report using a condom at last sexual intercourse

Supervision Areas	Men (15-54 yrs)	Women (15-49 yrs)
Kihihi	2	0
Kayonza	0*	0
Kanyatorogo	6	3
Rugeyo	2	1
Kambuga	6	1
Average coverage (95% CI)	18.1 (10-24.4)	6.0 (0.8-11.4)
Threshold	1	NA
Number of SAs below threshold	1	NA

Table 18 shows that there is low level of multiple sexual partner activity in Kanungu district. It is difficult to judge the reliability of the information in Table 19. The district authorities need, however, to reinforce proper condom use strategies among all population groups.

Table 20: Individuals who perceive low or no risk of getting HIV/AIDS infection

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)
Kihihi	9	2	0
Kayonza	7	4	4
Kanyatorogo	6	1	2
Rugeyo	7	1	2
Kambuga	9	0	0
Average coverage (95% CI)	5.0 (30.0-50.0)	8.4 (2.7-14.1)	8.4 (2.7-14.)
Threshold	N/A	NA	NA
Number of SAs below threshold	N/A	NA	NA

Kanungu district demonstrated a very low perception of the risk of getting HIV/AIDS infection as shown in Table 20. This is an alarming situation which needs to be addressed by implementers.

Table 21: Sexual behavior and circumcision among the youth

Supervision Areas	Youth (15-24 yrs) who		
	initiated intercourse before 15yrs	know at least three correct steps on how to use a condom	are circumcised
Kihihi	2	5	1
Kayonza	0	3	2
Kanyatorogo	1	1*	0
Rugeyo	0	7	0
Kambuga	3	4	3
Average coverage (95% CI)	6.3 (1.3-11.3)	21.1 (12.7-29.4)	6.3 (1.3-11.3)
Threshold	NA	2	NA
Number of SAs below threshold	NA	1	NA

Table 21 shows very few of the youth initiated sex before the age of 15 years. There is, however, low knowledge of proper condoms use. The district authorities need to reinforce condom use strategies among the youth including their proper use. The results also show that very few of the youth are circumcised.

6.4. Sexually Transmitted Infections (STI) knowledge

Tables 22 – 25 show results of knowledge of sexually transmitted infections (STI). Figure 5 shows that all SAs: in Kanungu had at least one red flag on this service area. The situation was worse in Kihihi supervision area

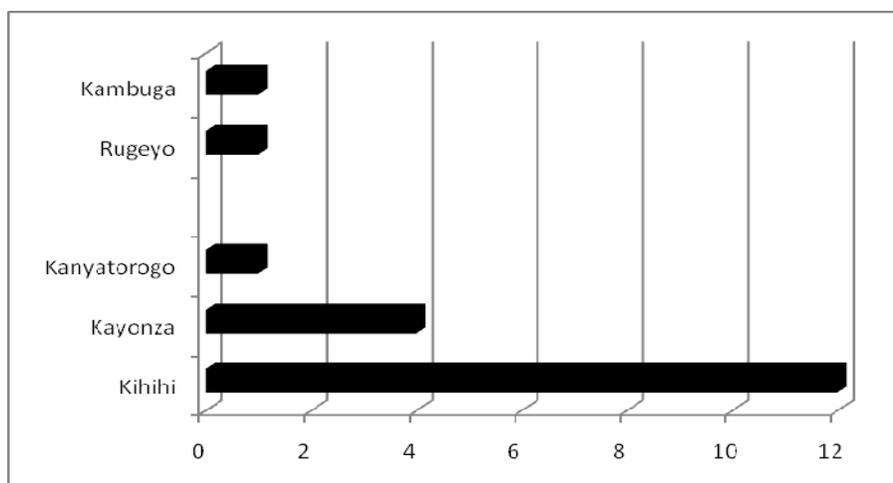


Figure 5. Number of flagged SAs for STI Knowledge

Table 22: Individuals who correctly identify at least two common symptoms of STIs in men

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)	Mothers of children (0-11 months)	Mothers of children (12-23 months)
Kihihi	5*	11*	3*	2*	3*
Kayonza	6	16	3*	2*	1*
Kanyatorogo	9	17	5	5*	6
Rugeyo	9	15	8	4*	7
Kambuga	15	16	13	12	12
Average coverage (95% CI)	46.3 (36.1-56.5)	78.9 (70.6-87.3)	33.7 (24.0-43.4)	36.1 (27.8-44.3)	30.5 (21.1-40.0)
Threshold	7	13	4	6	4
Number of SAs below threshold	1	1	2	4	2

Table 23: Individuals who correctly identify at least two common symptoms of STIs in women

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)	Mothers of children (0-11 months)	Mothers of children (12-23 months)
Kihihi	1*	6	8*	10	5*
Kayonza	9	5*	12	10	10
Kanyatorogo	8	9	13	11	12
Rugeyo	6	7	11	6*	11
Kambuga	8	15	14	15	17
Average coverage (95% CI)	33.7 (24.0-43.4)	44.2 (34.0-54.4)	61.1 (51.1-71.0)	54.7 (44.5-64.9)	57.9 (47.8-68.0)
Threshold	4	6	10	8	9
Number of SAs below threshold	1	1	1	1	1

The results in Table 22 and Table 23 indicated that men can identify symptoms of STIs in men than the other target population. In the other population, less than 50 percent can correctively identify STI symptoms in men or women. Kihhihi supervision area needs more attention as all the target groups are below the district average thresholds. Women in Kayonza SA and mothers of children in Kihhihi, Kayonza, Kanyatorogo and Rugeyo SAs need further attention. It is also noted that men and the youth cannot correctly identify common symptoms of STIs in women.

Table 24: Individuals who know three or more actions to take when she/he has a sexually transmitted infection

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)	Mothers of children (0-11 months)	Mothers of children (12-23 months)
Kihihi	5*	6*	7*	7	4*
Kayonza	10	11	9	8	9
Kanyatorogo	14	13	13	15	13
Rugeyo	7	12	12	8	10
Kambuga	7	3*	9	7	6

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)	Mothers of children (0-11 months)	Mothers of children (12-23 months)
Average coverage (95% CI)	45.3 (35.1-55.5)	47.4 (37.1-57.6)	52.6 (42.4-62.7)	47.4 (37.1-57.6)	44.2 (34.0-54.4)
Threshold	7	7	8	7	6
Number of SAs below threshold	1	2	1	0	1

The LQAS community survey in Kanungu district highlighted the need for educating the population, men and women, on sexually transmitted infections. People do not know the common symptoms and consequently do not know what to do if they have a sexually transmitted infection (Table 24).

Table 25: Individuals who know a health facility where they can receive STI treatment

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)	Mothers of children (0-11 months)	Mothers of children (12-23 months)
Kihihi	17	19	19	19	18
Kayonza	18	18	17	19	18
Kanyatorogo	18	18	17	17	19
Rugeyo	18	19	19	18	19
Kambuga	19	19	18	18	19
Average coverage (95% CI)	94.7 (90.2-99.3)	97.9 (95.0-100)	94.7 (90.2-99.3)	95.8 (91.6-99.9)	93.0 (95.0-100)
Threshold	16	16	16	16	16
Number of SAs below threshold	0	0	0	0	0

Table 25 shows that people in Kanungu district know the sources of STI treatment.

6.5. Knowledge on Tuberculosis

Figure 6 shows that there are TB-related issues that need to be addressed in Kihihi and Kayonza supervision areas.

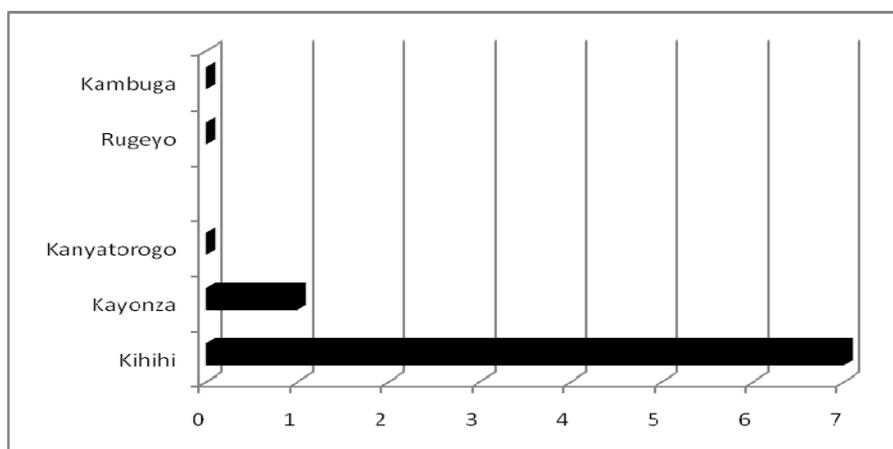


Figure 6. Number of flagged SAs for TB knowledge

Table 26: Individuals who know that TB is a curable disease

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)
Kihihi	13	18	15
Kayonza	17	18	14
Kanyatorogo	12	19	16
Rugeyo	13	15	15
Kambuga	15	18	16
Average coverage (95% CI)	73.7 (64.7-82.7)	92.6 (87.3-98.0)	80.0 (71.8-88.2)
Threshold	12	16	13
Number of SAs below threshold	0	0	0

There is high knowledge, among the population, that TB is a curable disease

Table 27: Individuals who know at least two signs and symptoms of TB

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)
Kihihi	7*	12*	5*
Kayonza	12	15	12
Kanyatorogo	14	17	14
Rugeyo	13	17	18
Kambuga	14	16	17
Average coverage (95% CI)	63.2 (53.3-73.0)	81.0 (73.0-89.1)	69.5 (60.0-78.9)
Threshold	10	14	11
Number of SAs below threshold	1	1	1

Table 28: Individuals who know how TB is transmitted

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)
5.3 Individuals who know how TB is transmitted			
Kihihi	11*	7*	5*
Kayonza	15	14	17
Kanyatorogo	15	13	10
Rugeyo	13	13	14
Kabuga	13	13	15
Average coverage (95% CI)	70.5 (61.2-79.7)	63.2 (53.3-73.0)	64.2 (54.4-74.0)
Threshold	12	10	10
Number of SAs below threshold	1	1	1

Knowledge on TB signs and mode of transmission ranged between 60% and 80% (Table 27: Individuals who know at least two signs and symptoms of TB. Kihihi supervision area was, however, below district average threshold across all the target population.

Table 29: Individuals who know the risk of not completing TB treatment

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)
Kihihi	10	11	6*
Kayonza	8	6*	10
Kanyatorogo	11	11	13
Rugeyo	13	17	14
Kambuga	9	14	14
Average coverage (95% CI)	53.7 (43.5-63.9)	62.1 (52.2-72.0)	60 (50.0-70.0)
Threshold	8	10	9
Number of SAs below threshold	0	1	1

Knowledge of the risks associated with not completing TB treatment was above 50% across target populations, however the men in Kayonza and women in Kihihi SAs need to be addressed as their performance was below the district average.

Table 30: Individuals who know the nearest place to receive TB treatment

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)
Kihihi	18	19	19
Kayonza	18	19	19
Kanyatorogo	17	19	18
Rugeyo	18	19	18
Kambuga	18	19	19
Average coverage (95% CI)	93.7 (88.7-97.7)	100 (95.2-100)	97.9 (95.0-100)
Threshold	16	16	16
Number of SAs below threshold	0	0	0

The population in Kanungu district demonstrated that they know where to receive TB treatment.

6.6. Knowledge and practices of Malaria prevention and treatment among mothers of children (0-11 months)

Error! Reference source not found. shows that Kihihi and Rugeyo performed poorly in comparison with other SAs for most malaria knowledge and prevention practices indicators.

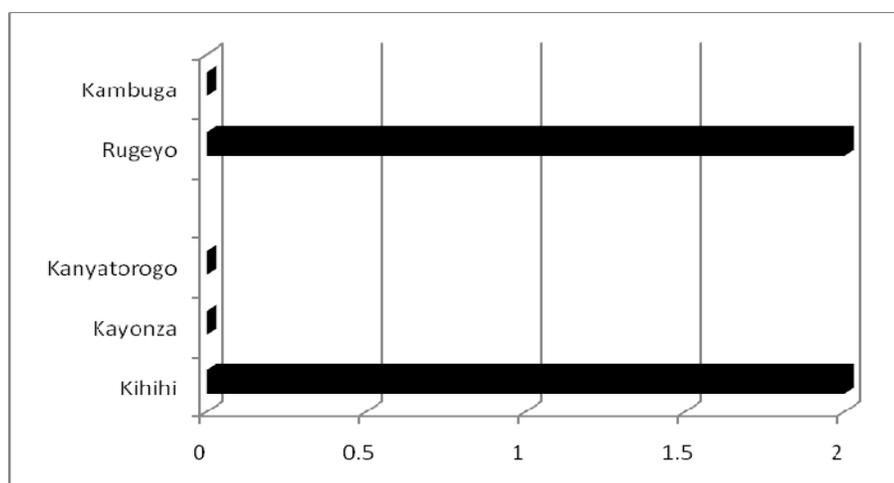


Figure 7. Knowledge and practices of Malaria prevention and treatment among mothers of children (0-11 months)

Table 31: Details of the results for malaria treatment and practices among mothers of children (0-11 months)

Supervision Areas	Malaria treatment and prevention among mothers of children 0 – 11 months			
	Children who had fever in the two weeks preceding the survey and received treatment with ACTs within 24 hours of onset of fever	Mothers who received two or more doses of IPTp during their last pregnancy in the last two years	Children who slept under a ITN the night preceding survey	Mothers who always slept under an ITN during last pregnancy
Kihihi	5	14	11	9*
Kayonza	7	12	15	13
Kanyatorogo	2	13	11	13
Rugeyo	1	9*	11	8*
Kambuga	3	11	15	16
Average coverage (95% CI)	18.9 (10.9-27.0)	62.1 (52.2-72.0)	66.3 (56.6-76.0)	62.1 (52.2-72.0)
Threshold	1	10	11	10
Number of SAs below threshold	0	1	0	2

Table 32: Details of the results for knowledge of malaria prevention among mothers of children (0-11 months)

Supervision Areas	Malaria treatment and prevention among mothers of children 0 – 11 months			
	Mothers who know two or more ways to prevent malaria	Mothers who know two or more signs and symptoms of malaria	Mothers who know how malaria is transmitted	Households with at least 1 ITN
Kihihi	5	14	17	12*
Kayonza	7	14	18	16

Supervision Areas	Malaria treatment and prevention among mothers of children 0 – 11 months			
	Mothers who know two or more ways to prevent malaria	Mothers who know two or more signs and symptoms of malaria	Mothers who know how malaria is transmitted	Households with at least 1 ITN
Kanyatorogo	9	17	19	14
Rugeyo	9	17	18	14
Kambuga	6	11	17	17
Average coverage (95% CI)	38.0 (28.0-47.8)	76.8 (68.2-85.5)	93.7 (88.7-98.7)	76.8 (68.2-85.5)
Threshold	5	13	16	13
Number of SAs below threshold	0	0	0	1

Table 31 shows that treatment for malaria among children is very low in the district and that IPT use to the minimum recommended dosage during the pregnancy is about 60%. Although there was generally good levels of knowledge about how malaria is transmitted (Table 32), the results also revealed that Kihihi supervision area, performed poorly on the indicator on the households with ITN.

6.7. Reproductive Health and Family planning

Table 33: Details of the results for reproductive health and family planning knowledge and practices among women

Supervision Areas	Mothers of children 0 – 11 months who			Women (15-49 yrs) who
	attended ANC at least 4 times during last pregnancy	delivered their last baby in a health facility	were assisted by a skilled health worker during last delivery	desire to use a family planning method but cannot access it
Kihihi	13	14	16	
Kayonza	10*	13	13	
Kanyatorogo	12	16	15	
Rugeyo	17	7*	8*	
Kambuga	10*	15	14	
Average coverage (95% CI)	65.3 (55.5-75.0)	68.4 (58.9-77.9)	69.5 (60.0-78.9)	
Threshold	11	11	11	NA
Number of SAs below threshold	2	1	1	NA

Table 33 shows that more than 50% of mothers are doing well on reproductive health indicators. Kayonza and Kambuga SAs however, need more attention on ANC attendance. Fewer women in Rugeyo SA delivered their most recent baby in a health centre. Mothers assisted by skilled health workers were below the district average threshold in Rugeyo SA.

6.8. Child survival

Table 34 show details of the results for Child Survival practices among the women with children aged 12-23 months. Kihihi performed poorly in having children fully immunized as shown in Table 34. Table 35 also shows that Kihihi experiences poor health seeking behaviors for children.

Table 34: Children who are fully vaccinated

Supervision Areas	
Kihihi	11*
Kayonza	18
Kanyantorogo	17
Rugeyo	17
Kambuga	16
Average coverage (95% CI)	83.2 (75.4-90.8)
Threshold	14
Number of SAs below threshold	1

Table 35: Children with any of fever, diarrhea or pneumonia seeking care from health workers within 24 hours of illness

Supervision Areas	
Kihihi	6*
Kayonza	10
Kanyantorogo	10
Rugeyo	10
Kambuga	9
Average coverage (95% CI)	48.0 (37.1-57.6)
Threshold	7
Number of SAs below threshold	1

6.9. Sanitation

Table 36 shows that there is a high degree of personal hygiene demonstrated by hand washing with soap after visiting a toilet across all population groups surveyed. However Rugeyo supervision area performed poorly among all target population apart from the youth, Kihihi SA was also below the district average threshold among men and mothers.

Table 36: Details of the results for sanitation practices

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)	Mothers of children (0-11 months)	Mothers of children (12-23 months)
8.4 Individuals who wash their hands with soap after visiting the toilet					
Kihihi	13	12*	12	9*	8*
Kayonza	15	18	16	17	16
Kanyantorogo	14	16	12	11	13
Rugeyo	13	11*	8*	8*	9*
Kambuga	16	17	14	16	14
Average coverage (95% CI)	74.7 (65.8-83.6)	77.9 (69.4-86.4)	65.3 (55.5-75.0)	64.2 (54.4-74.0)	63.2 (53.3-73.0)
Threshold	12	13	11	10	10
Number of SAs below threshold	0	2	1	2	2

7. Conclusion

The LQAS survey results show that performance improvement effort is most required in Kihihi, Kayonza and Rugeyo supervision areas. The district should investigate the reasons for poor performance in all the service areas.

Appendix 1: List of indicators

SN	Indicator	Status
1	HIV counseling and Testing (HCT)	
1.1	% of Individuals who know where they can be tested for HIV	Assessed
1.2	% of Individuals who know two or more benefits of HCT	Assessed
1.3	% of Individuals who have ever been counseled and tested for HIV	Assessed
1.4	% of Individuals who have ever been counseled, tested and received their HIV test results	Assessed
1.5	% of Individuals who were counseled and tested for HIV in the past 12 months	Assessed
1.6	% of Individuals who were counseled and tested for HIV in the past 12 months and know their HIV results	Assessed
1.7	% of Individuals who were counseled and received an HIV test during the last pregnancy and know their results	Assessed
1.8	% of Individuals who have ever tested for HIV and received their results as a couple	Assessed
1.9	% of Individuals who were tested for HIV and received their results as and disclosed to their spouse/partner	Assessed
2	Prevention of Mother to Child Transmission of HIV (PMTCT)	
2.1	% of Individuals who know how HIV transmission occurs from an infected mother to child	Assessed
2.2	% of Individuals who know two (2) key actions that reduce MTCT of HIV	Assessed
2.3	% of Individuals who know where they can get information and services to reduce the risk of MTCT of HIV	Assessed
2.4	% of Mothers of children (0-11 months) who were counseled for PMTCT services during last pregnancy	Assessed
3	HIV Knowledge and Behavior Change	
3.1	% of Individuals who both correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission	Assessed
3.2	% of Individuals who know at least two ways of preventing sexual transmission of HIV	Assessed
3.3	% of Individuals who have ever used a condom when having sexual intercourse	Assessed
3.4	Percentage of individuals who had sex with more than one sexual partner in the last 12 months	Assessed
3.5	Percentage of individuals who have had sex with more than one sexual partner in last 12 months and report using a condom at last sexual intercourse	Assessed
3.6	Percentage of individuals who had sexual intercourse with a non marital or non cohabiting sexual partner in the last 12 months.	Not Assessed
3.7	Percentage of individuals who had sexual intercourse with a non marital or non cohabiting sexual partner in last 12 months and used a condom at last higher risk sex	Not Assessed
3.8	Percentage of individuals who ALWAYS used a condom when they had sexual intercourse with a non marital or non cohabiting sexual partner in the last 12 months	Not Assessed
3.9	% of Individuals who perceive low or no risk of getting HIV/AIDS infection	Assessed
3.10	Percentage of never-married Youth who have ever had sexual intercourse	Not Assessed
3.11	Percentage of Youth who have had sexual intercourse before the age of 15	Assessed
3.12	Percentage of Youth who know at least three correct steps on how to use a condom	Assessed
3.13	Percentage of Youth who report the use of a condom the first time they had sexual intercourse	Not Assessed
3.14	Percentage of males who are circumcised	Assessed
3.15	Percentage of Young Males who were circumcised at a health facility	Not Assessed
3.16	Percentage of the general population aged 15+ years who know at least three benefits of ART	Not Assessed

SN	Indicator	Status
4	Sexually Transmitted Infections (STI)	
4.1a	% of Individuals who correctly identify at least two common symptoms of STIs in men	Assessed
4.1b	% of Individuals who correctly identify at least two common symptoms of STIs in women	Assessed
4.2	% of Individuals who know three or more actions to take when she/he has a sexually transmitted infection	Assessed
4.3	% of Individuals who know a health facility where they can receive STI treatment	Assessed
5	Tuberculosis	
5.1	Percentage of individuals who know that TB is a curable disease	Assessed
5.2	Percentage of individuals who know at least two signs and symptoms of TB	Assessed
5.3	Percentage of individuals who know how TB is transmitted	Assessed
5.4	Percentage of individuals who know the risk of not completing TB treatment.	Assessed
5.5	Percentage of individuals who know the nearest place to receive TB treatment.	Assessed
6	Malaria Prevention and Treatment	
6.1	% of Children 0-11 months who had fever in the two weeks preceding the survey and received treatment with ACTs within 24 hours of onset of fever	Assessed
6.2	% of mothers of children 0-11 months who received two or more doses of IPTp during their last pregnancy in the last two years	Assessed
6.3	% of Children 0-11 months who slept under a ITN the previous night	Assessed
6.4	% of mothers of children 0-11 months who always slept under an ITN during last pregnancy	Assessed
6.5	% of Individuals who know two or more ways to prevent malaria	Assessed
6.6	% of Individuals who know 2 or more signs and symptoms of malaria	Assessed
6.7	% of Individuals who know how malaria is transmitted	Assessed
6.8	% of households with at least 1 ITN	Assessed
7	Reproductive Health and Family planning	
7.1	Percentage of currently married women aged 15-49 years who are using any family planning method.	Not Assessed
7.2	Percentage of sexually active women age women 15-49 years who are using any modern method of family planning.	Not Assessed
7.3	Percentage of Individuals who attended ANC at least 4 times during last pregnancy	Assessed
7.4	Percentage of Individuals who delivered their last baby in a health facility	Assessed
7.5	Percentage of Individuals who were assisted by a skilled health worker during last delivery	Assessed
7.6	Percentage of women 15-49 years who desire to use a family planning method but cannot access it.	Assessed
8	Child survival indicators	
8.1	Percentage of children 12-23 months who are fully vaccinated	Assessed
8.2	Percentage of children under 5 years with diarrhea in the last two weeks receiving ORT	Not Assessed
8.3	Percentage of children under 5 years with any of fever, diarrhea or pneumonia seeking care from health workers within 24 hours of illness	Assessed
8.4	Percentage of individuals who wash their hands with soap after visiting the toilet	Assessed

Tally of assessed indicators

Service area	Number of assessed indicators	Total number of indicators

HIV counseling and Testing (HCT)	9	9
Prevention of Mother to Child Transmission of HIV (PMTCT)	4	4
HIV Knowledge and Sexual Behavior	9	16
Sexually Transmitted Infections (STI)	4	4
Tuberculosis	5	5
Malaria Prevention and Treatment	8	8
Reproductive Health and Family planning	4	6
Child Health	2	3
Sanitation	1	1
Total	46	56

Appendix 2: LQAS Decision Rule table

Sample Size*	LQAS Table: Decision Rules for Sample Sizes of 12-30 and Coverage Targets/Average of 10%-95%																		
	Average Coverage (Baselines) / Annual Coverage Target (Monitoring and Evaluation)																		
	10%	15%	20%	25%	30%	35%	40%	45%	50%	55%	60%	65%	70%	75%	80%	85%	90%	95%	
12	N/A	N/A	1	1	2	2	3	4	5	5	6	7	7	8	8	9	10	11	
13	N/A	N/A	1	1	2	3	3	4	5	6	6	7	8	8	9	10	11	11	
14	N/A	N/A	1	1	2	3	4	4	5	6	7	8	8	9	10	11	11	12	
15	N/A	N/A	1	2	2	3	4	5	6	6	7	8	9	10	10	11	12	13	
16	N/A	N/A	1	2	2	3	4	5	6	7	8	9	9	10	11	12	13	14	
17	N/A	N/A	1	2	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
18	N/A	N/A	1	2	2	3	4	5	6	7	8	9	10	11	12	13	14	16	
19	N/A	N/A	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
20	N/A	N/A	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	17	
21	N/A	N/A	1	2	3	4	5	6	8	9	10	11	12	13	14	16	17	18	
22	N/A	N/A	1	2	3	4	5	7	8	9	10	12	13	14	15	16	18	19	
23	N/A	N/A	1	2	3	4	6	7	8	10	11	12	13	14	16	17	18	20	
24	N/A	N/A	1	2	3	4	6	7	9	10	11	13	14	15	16	18	19	21	
25	N/A	1	2	2	4	5	6	8	9	10	12	13	14	16	17	18	20	21	
26	N/A	1	2	3	4	5	6	8	9	11	12	14	15	16	18	19	21	22	
27	N/A	1	2	3	4	5	7	8	10	11	13	14	15	17	18	20	21	23	
28	N/A	1	2	3	4	5	7	8	10	12	13	15	16	18	19	21	22	24	
29	N/A	1	2	3	4	5	7	9	10	12	13	15	17	18	20	21	23	25	
30	N/A	1	2	3	4	5	7	9	11	12	14	16	17	19	20	22	24	26	

N/A: *Not Applicable*, meaning LQAS cannot be used in this assessment because the coverage is either too low or too high to assess an SA. This table assumes the lower threshold is 30 percentage points below the upper threshold.

Light-shaded cells indicate where *alpha* or *beta* errors are greater than or equal to 10%.
 Dark-shaded cells indicate where *alpha* or *beta* errors are greater than 15%.

STRENGTHENING DISTRICT MONITORING & EVALUATION SYSTEMS

Acknowledgements

Developed with support and funding from USAID under terms of the Cooperative Agreement 617-A-00-09-00006-00 with Management Sciences for Health (MSH)