

Evaluation of Season Two of *Kwishilya* and *Sinalamba* Radio Serial Dramas in Zambia

To

United States Agency for International Development (USAID) Zambia

February 2023

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ACRONYMS

aOR	Adjusted odds ratio
CPL	Cost per listener
EM	Early Marriage
FGM	Female Genital Mutilation
FP	Family planning
MCH	Maternal and child health
PMC	Population Media Center
RSD	Radio serial drama
SGBV	Sexual and gender-based violence
TRU	Technical Research Unit
USAID	United States Agency for International Development

ACKNOWLEDGMENTS

Population Media Center (PMC) is grateful for the support of the dedicated staff who made this evaluation possible. We give special thanks to Shadrick Chembe and the team from Pragma Consultancy. Many PMC staff and consultants supported this evaluation within Zambia and from headquarters, including: Clinton Sears, Cecelia Boyson, Olivia Zulu, Charles Kalonga, Eric Chiyombe, and Sandy Joseph.

EXECUTIVE SUMMARY

This report shares results from a cross-sectional quantitative survey to evaluate the impact of the second season of two PMC radio serial dramas broadcast in Zambia, including *Kwishilya* (“Over the Horizon”) in the Bemba language and *Sinalamba* (“Breaking the Barrier”) in the Lozi language. *Kwishilya* and *Sinalamba* were produced by Population Media Center – Zambia (PMC-Z) in partnership with the United States Agency for International Development (USAID).

The second season of *Kwishilya* and *Sinalamba* were broadcast from February 2022 through September 2022 in Central, Luapula, Muchinga, Northern, and Western Provinces. Each drama was comprised of 156 15-minute episodes exploring storylines related to family planning, gender-based violence, youth HIV prevention, and more. The focus audiences included women aged 15-49 years old and men aged 15-59 years old.

This evaluation uses cross-sectional survey data from a representative sample of n=5,326 households drawn from five provinces in Zambia. Ethical approval to conduct the survey was granted by ERES Converge Institutional Review Board (IRB) on October 07, 2022. The survey was administered by Pragma Consultancy, LLC. Individual women aged 15-49 years old and individual men aged 15-59 years old living in the broadcast areas were eligible to participate. Eligible respondents were asked a series of general questions about themes underlying the *Kwishilya* and *Sinalamba* storylines, as well as specific questions about their awareness and engagement with the dramas themselves.

Combined, *Kwishilya* and *Sinalamba* had an estimated potential audience of over 3 million (N=3,068,715), the number of people living in the broadcast areas between the ages of 15-49 for women and 15-59 for men. Each week, the two dramas engaged an estimated 605,796 Zambians, including over 500,000 listeners of *Kwishilya* and over 100,000 regular listeners for *Sinalamba*, with an average cost per listener of \$1.11 and \$4.70, respectively. Most listeners were ages 15-34 years old for both *Kwishilya* (67%) and *Sinalamba* (60%).

Tables 1-20 present full results for all indicators included in the survey. Several striking and statistically significant differences between listeners and non-listeners include:

Family Planning

Kwishilya listeners were over 65% more likely than non-listeners and *Sinalamba* listeners were over 90% more likely than non-listeners to believe their spouse/partner supports the use of family planning to delay or avoid pregnancy (OR 1.65, 95% CI: 1.7, 2.33, p<0.005; OR 1.94, 95% CI 1.21, 3.11, p=0.006). These are statistically significant differences in descriptive norms that demonstrate that listeners are more likely to have a positive view of family planning than non-listeners.

Gender-Based Violence

Sinalamba listeners were 37% more likely than non-listeners to believe people in their community intervene and try to stop

cases of GBV (OR 1.37, 95% CI 1.03, 1.83, p=0.032). This is a statistically significant difference in descriptive norms related to gender-based violence.

Listeners of *Sinalamba* were over 30% more likely than non-listeners to report that having multiple partners is a risk behavior related to acquiring HIV (OR 1.31, 95% CI 1.06, 1.62, p=0.013). This is a statistically significant difference in knowledge of HIV risk factors, with more listeners than non-listeners possessing this knowledge.

HIV Prevention

Further, *Sinalamba* listeners were 45% more likely than non-listeners to discuss HIV-risk with others, such as their partner, spouse, friend or relatives (OR 1.45, 95% CI 1.06, 2.00, p=0.021). This was a statistically significant difference in interpersonal communication behavior that demonstrates listeners discuss HIV-risk with others more than non-listeners.

Other impressive results:

- *Kwishilya* listeners were more than 50% more likely than non-listeners to believe they themselves can determine their family size (OR 1.53, 95% CI 1.15, 2.03, p=0.003), and were almost 20% more likely than non-listeners to be using a modern contraceptive method to delay or avoid pregnancy (OR 1.19, 95% CI 1.01, 1.40, p=0.039).
- *Kwishilya* listeners were more than 35% more likely than non-listeners to believe they can become civically engaged to register to vote (OR 1.36, 95% CI 1.07, 1.74, p=0.012) or to support women's participation in politics/ government (OR 1.35, 95% CI 1.09, 1.68, p=0.007).
- *Kwishilya* listeners were 1.42 times more than likely than non-listeners to know where to go to get tested for Covid-19 (OR 1.42, 95% CI 1.07, 1.88, p= 0.015).
- *Sinalamba* listeners were over 30% more likely than non-listeners to report having multiple partners as a risk behavior related to acquiring HIV (OR 1.31, 95% CI 1.06, 1.62, p=0.013).
- *Sinalamba* listeners were 1.45 times more likely than non-listeners to discuss HIV-risk with others, such as their partner, spouse, friend or relatives (OR 1.45, 95% CI 1.06, 2.00, p=0.021).

Some results were surprising. For *Kwishilya*, indicators related to maternal and child health show inconsistent trends with only minor differences between listeners and non-listeners or non-listeners sometimes out-performing listeners; it is important to note, however, that none of the MCH impact results for *Kwishilya* were found to be statistically significant. For example, a larger proportion of listeners than non-listeners reported knowing where to go to ask questions

about or receive support related to breastfeeding (96.6% vs 94.4%; OR 1.89, 95% CI 0.49, 7.41, $p=0.358$), however, slightly more non-listeners than listeners reporting knowing where to go to ask questions about or receive postnatal services (97.5% vs. 93.2%; OR 0.36, 95% CI 0.10, 1.39, $p=0.141$). Both indicators show very high proportions of knowledge related to maternal and child health resources among both listeners and non-listeners.

Similarly, for *Sinalamba*, a higher proportion of non-listeners reported knowing where to go to ask questions about or receive postnatal services for themselves or their children (OR 0.31, 95% CI 0.09, 1.01, $p=0.053$). This may be in part related to maternal and child nutrition programs that are concurrently implemented in the program areas during the broadcast season.

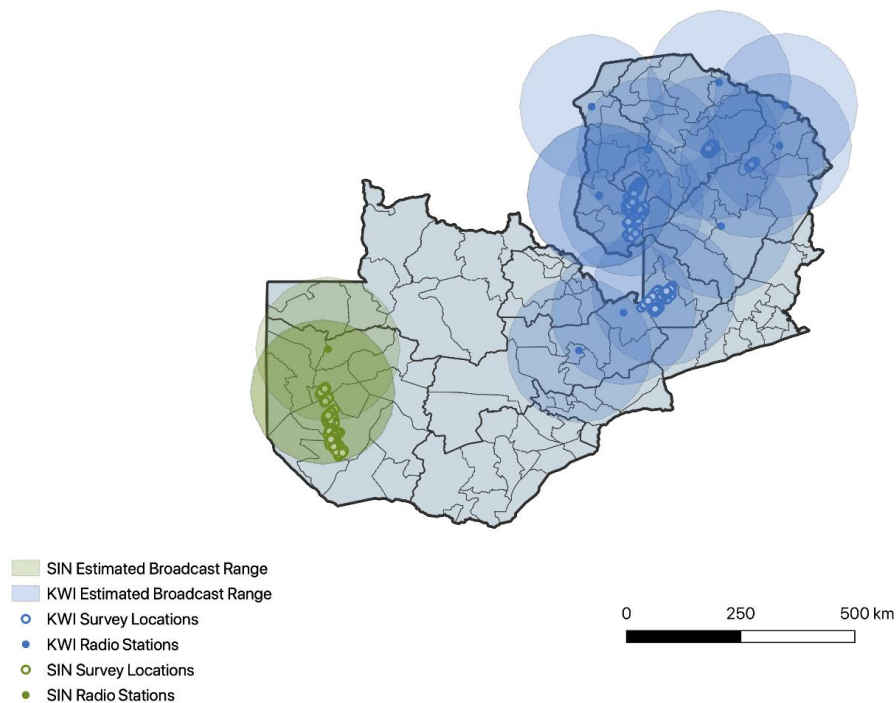
1. INTRODUCTION

Population Media Center-Zambia (PMC-Z) in partnership with USAID has been broadcasting two radio serial dramas (RSD) including *Kwishilya* (“Over the Horizon”) in the Bemba language and *Sinalamba* (“Breaking the Barrier”) in the Lozi language in the intervention districts and provinces. Through engaging narratives, both *Kwishilya* and *Sinalamba* were designed to address the following areas:

- Family Planning (FP)
- Gender-Based Violence (GBV)
- Youth HIV Prevention (YHIV)
- Girls’ Education (GE) and Early Marriage (EM)
- Maternal and Child Health and Nutrition (MCH)
- Malaria Treatment and Prevention (MAL)
- Civic Engagement (CIV)
- COVID-19 (COV)

The target audiences for both RSD included women aged 15-49 years old and men aged 15-59 years old. The 156-episode RSDs began their broadcast in February 2022 and concluded in September 2022 in Central, Luapula, Muchinga, Northern, and Western Provinces.

Figure 1. Kwishilya (KWI) and Sinalamba (SIN) Estimated Broadcast Range and Evaluation Survey Locations

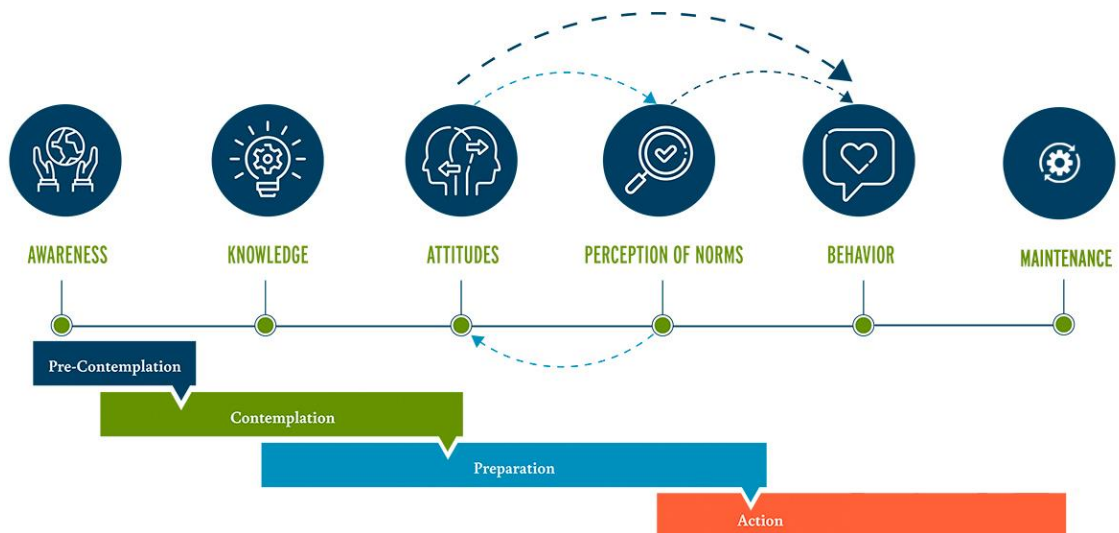


1.1 Objectives

The objectives of this impact evaluation were to:

- Understand the reach of the USAID Community Radio Programs, and to estimate the number of regular listeners and the cost to reach those regular listeners.
- Review demographic data for listeners and non-listeners (and subsequently use demographic data as controls in logistic regression models).
- Identify the degree to which listeners were impacted by the show, specifically in the four major thematic areas, including Family Planning (with supporting theme of Reproductive and Maternal Health), Nutrition, Newborn and Early Childhood Development, Gender-Based Violence (with supporting theme of Child Marriage in *Sinalamba* only), and Youth HIV Prevention, as well as the minor supporting themes, including Girls' Education, Malaria Prevention and Treatment, Civic Engagement, and Covid-19.
- Determine if listeners were impacted by the show in relation to PMC's goals to empower women and girls, stop population growth, and protect the environment.
- Collect limited feedback on *Kwishilya* and *Sinalamba* which can be used to improve future programming in Zambia and across the globe.
- Explore the degree to which *Kwishilya* and *Sinalamba* listeners progressed through PMC's stages of change model (see Figure 2 below).

Figure 2. PMC's Stages of Change model



2. METHODS

PMC undertook a competitive process to select a local research firm to collect impact data. Pragma Consultancy located in Lusaka submitted the highest rated proposal and successfully completed data collection.

2.1 Data Collection

The evaluation used a cross-sectional survey which entailed face-to face-structured interviews with eligible men (age 15-59) and eligible women (age 15-49) in sampled households. The evaluation was conducted in six intervention districts (Serenje, Samfya, Chinsali, Mongu, Senenga, and Kasama) representing rural and urban areas in Central, Luapula, Muchinga, Northern and Western provinces. Data collection began on October 11, 2022, and ended on October 21, 2022, with a validation exercise conducted prior to data collection to test the accuracy and precision of survey data.

All study participants were interviewed using a structured questionnaire. In each household one eligible participant present was interviewed. If there was more than one eligible participant in a household, research assistants selected and interviewed only one person in the household. Research assistants visited allocated households and introduced the purpose and objectives of the study to participants and determined their eligibility and interest. Eligible potential participants were interviewed. The survey data were collected using the KoBoCollect application uploaded by research assistants using Android phones and uploaded to the server as soon as was feasible (generally daily).

Of the 3,409 *Kwishilya* surveys submitted via KoBo, 20 were removed due to lack of consent and 29 were training surveys removed during routine data cleaning. 3,360 *Kwishilya* surveys were analyzed for this impact evaluation.

Of the 1,917 *Sinalamba* surveys submitted via KoBo, 14 were removed due to lack of consent, 20 were removed due to quality issues or missing data, and 19 were training surveys removed during routine data cleaning. 1,864 *Sinalamba* surveys were analyzed for this impact evaluation.

2.2 Analysis

The Technical Research Unit (TRU) at PMC led the cleaning and analysis of evaluation data, using a combination of KoBoCollect, Microsoft Excel, QGIS, and RStudio.

The RSD were analyzed separately as they have different content, were broadcast in different geographic areas and in different languages and must be treated as separate interventions. To compare listeners to non-listeners, PMC creates an exposure to help classify survey respondents. To qualify as a “regular listener” survey respondents must indicate they have (1) heard of the RSD, (2) listened to the RSD, and (3) listened at least weekly.

The evaluation research presented in this report utilized two analytical approaches. The first approach uses descriptive statistics to compare listeners and non-listeners on all the key program indicators, using cross-tabulations and chi-square statistics. Since descriptive comparisons do not control for the potential influence of demographic factors, TRU also completed multiple logistic regression analyses to control for demographic variation in age group, sex, marital status, etc. Analysis was performed by PMC staff using R v4.1.3.

PMC evaluates the impact of its interventions using the stages of behavior change adapted from social and behavioral theories, including but not limited to the (1) Transtheoretical Model, (2) Social Cognitive Theory, (3) Social Ecological Model, (4) Health Belief Model, (5) Perceived Behavioral Control, and 6) Diffusion of Innovation (Bandura, 1986). These theories posit that people go through various stages in the process of changing or adopting a behavior. PMC presents indicators grouped according to our adapted Stages of Change model. That means that readers will see indicators related to knowledge, attitudes, norms, intentions, and behaviors.

3. RESULTS

Results are organized into the following broad sections:

- 1) RSD reach, audience size, and cost per listener
- 2) Demographic factors and other descriptive statistics for each RSD, as well as figures which directly compare *Kwishilya* and *Sinalamba*
- 3) Impact of exposure to each RSD on key indicators

3.1. Reach, Audience Size, and Cost per Listener (CPL)

To contextualize programming, PMC calculates reach, audience size, and CPL for RSDs. Reach refers to the number of people who (1) live in the broadcast zone, (2) are the correct target ages—generally of reproductive age, and (3) have at least heard of the RSD. Note that reach excludes children and the elderly, as the target audience is men ages 15-59 years old and women ages 15-49 years old. Audience size is a smaller number as it considers only those who listened to the RSD one or more times a week. These “regular listeners” have been fully exposed to the social and behavior change communication program. Finally, CPL takes the cost of the production and broadcast of the RSD and divides it by number of regular listeners.

<p>2,543,287 525,428</p>	<p><i>Kwishilya</i> and <i>Sinalamba</i> combined had an estimated potential audience of 3,068,715, which is the number of people living in the broadcast area between the ages of 15-49 for women and 15-59 for men.</p>
<p>1,759,955 370,427</p>	<p>Projected Reach (number who have heard of RSD)</p>
<p>503,863 101,933</p>	<p>Projected Audience (number who listen to RSD weekly)</p>
<p>373,863 89,060</p>	<p>Projected Audience (number who listen to RSD twice weekly)</p>
<p>\$1.11 \$4.70</p>	<p>Cost per Listener</p>

Table 1 below presents these results along with a summary of sample size, survey completion, and surveys used in analysis.

Table 1. Survey Completion, Reach, Audience Size, and Cost per Listener

Region	<i>Kwishilya</i> RSD	<i>Sinalamba</i> RSD	Total/Average
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Sample Size	3409	1917	5,326
Surveys Completed	3360	1864	5,224
Survey Completion Rate	98.5%	97.2%	98.1%
Surveys Used in Analysis	3360	1864	5,224
Survey Respondents Who Are Regular Listeners (listen to RSD weekly)	2326	1314	3640
Projected Reach (number who have heard of RSD)	1,759,955	370,427	2,130,382
Projected Audience (percent who listen to RSD at least weekly)	34.4%	36.4%	35.4%
Projected Audience (number who listen to RSD at least weekly)	877,434	190,933	1,068,427
Cost per Listener	\$1.11	\$4.70	\$2.91

3.2. Listenership and Demographics Factors

To qualify as a “regular listener” survey respondents must indicate they have 1) heard of the RSD, 2) listened to the RSD, and 3) listened to the RSD at least weekly. About 2,326 of survey respondents were regular listeners of *Kwishilya* (34.4%), compared to about 1,314 of respondents who were regular listeners of *Sinalamba* (36.4%). This similarity in listenership of the two broadcasts is consistent with similar levels of awareness of the broadcasts in the respective survey locations (68.6% for *Kwishilya* and 70.5% for *Sinalamba*).

In *Kwishilya* survey locations, most respondents (32.2%) own a radio themselves, while some (20.1%) live in a household with a radio, use their phone to access radio (14.9%), or use a radio at a friend’s or other location (7.7%). In *Sinalamba* survey locations, radio ownership was lower (19.3%), though more respondents use their phone to access radio (31.1%) and some live in a household with a radio (18.7%). Few *Sinalamba* survey respondents access radio via a friend’s or other location (3.5%). About one-in-four respondents in *Kwishilya* and *Sinalamba* survey locations reported no access to radio at all (23.4% and 25.6%, respectively). Among those who do have radio access, 28.9% of *Sinalamba* respondents said they can’t choose what they want to listen to on the radio compared to only 8.8% of *Kwishilya* respondents (meaning their spouse, family member or someone else chooses content). This indicates a greater barrier to accessing *Sinalamba* than *Kwishilya* for respondents in the respective survey locations.

2326 (69.2%)

1314 (70.5%)

1687 (50.2%)

1023 (54.9%)

1156 (34.4%)

679 (36.4%)

Respondents who have heard of *Kwishilya* and *Sinalamba*

Respondents who have ever listened to *Kwishilya* and *Sinalamba*

Respondents who regularly listen (once or twice a weekly) to *Kwishilya* and *Sinalamba*

Figure 3 and Figure 4 below presents demographic data for listeners and non-listeners of *Kwishilya* and *Sinalamba*, respectively. Key demographic considerations in the study population include:

- *Kwishilya* survey respondents skew towards rural (2,113 out of 3,360), whereas *Sinalamba* survey respondents are about half rural and half urban residents (928 respondents and 936 respondents).
- For both broadcasts, listeners skew towards being married while non-listeners have a larger proportion of single/never married individuals. Further, non-listeners of both shows skew towards having fewer children than listeners, particularly those with ≥ 3 children (born before *Kwishilya* and *Sinalamba* were broadcast).
- Bemba speakers dominate listenership for *Kwishilya* and Lozi speakers dominate listenership for *Sinalamba*. This is expected as *Kwishilya* is in Bemba and *Sinalamba* is broadcast in Lozi.
- Most listeners are ages 15-34 years old for both *Kwishilya* (67%) and *Sinalamba* (60%). Notably, however, compared to non-listeners ages 35 years and older, a higher proportion of respondents in this age group were listeners for *Kwishilya* (24% listeners and 18% non-listeners ages 35 years and older) and *Sinalamba* (26% listeners vs 22% non-listeners ages 35 years and older).

Figure 3. Demographic differences between Kwishilya listeners and non-listeners

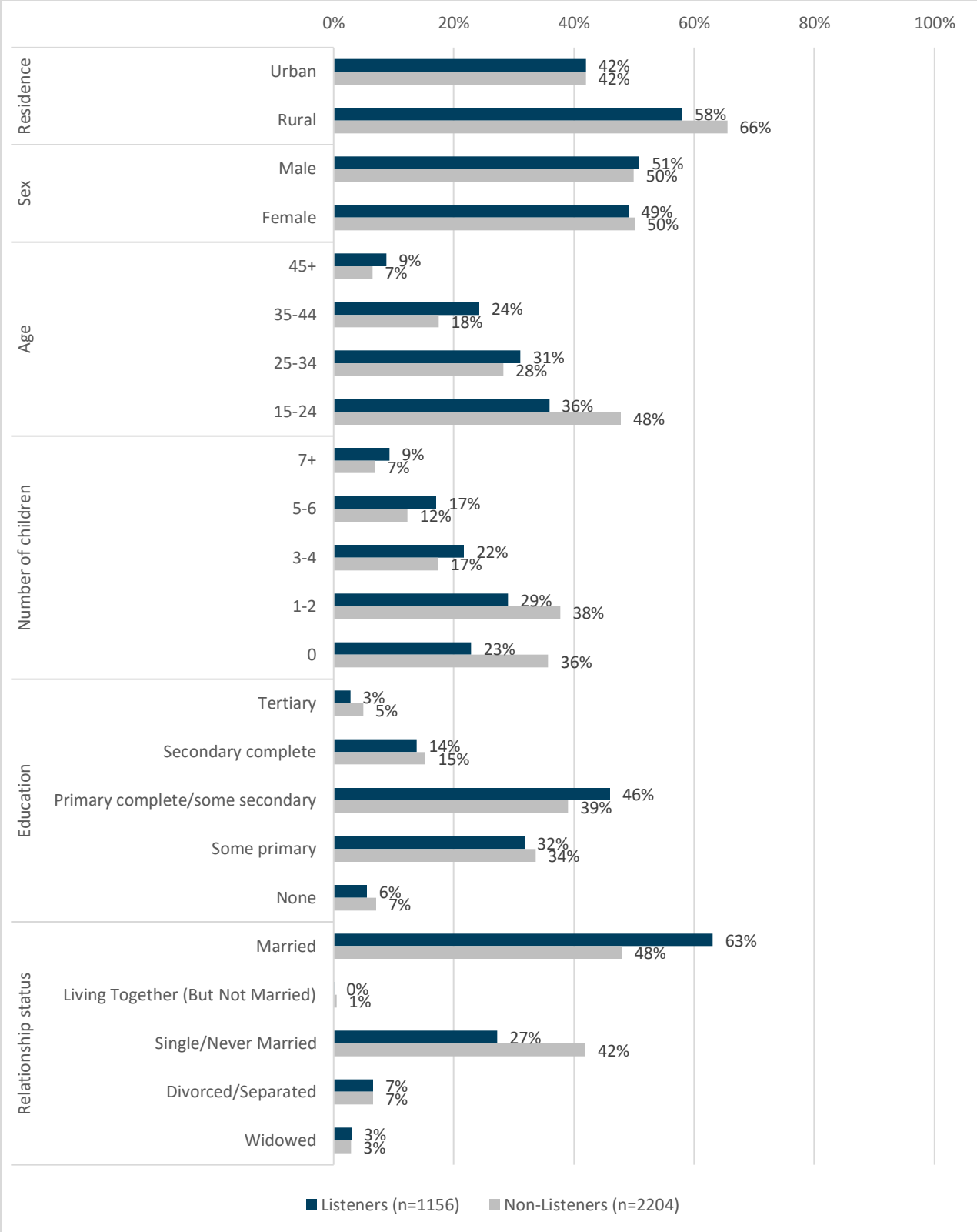
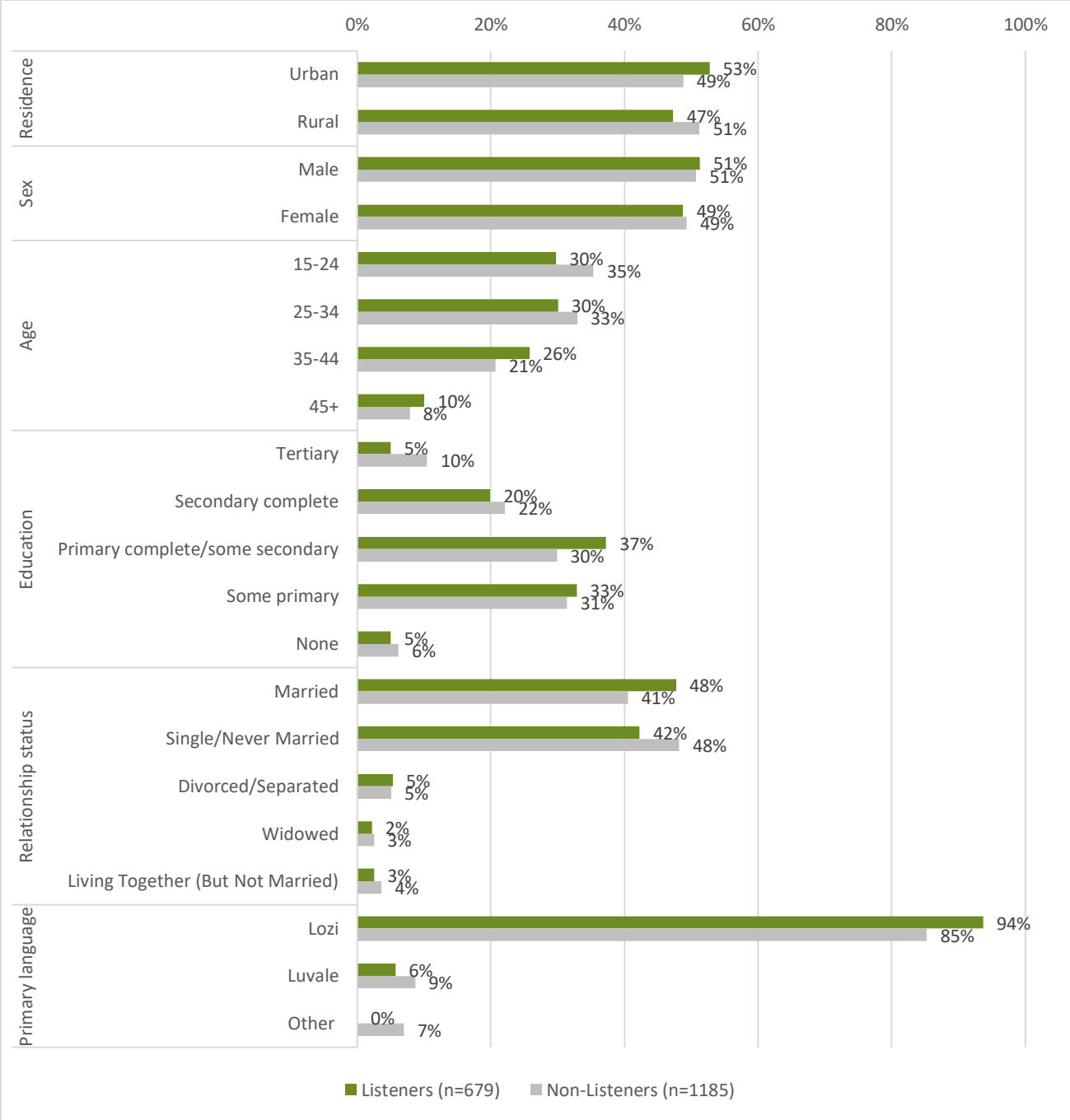


Figure 4. Demographic differences between Sinalamba listeners and non-listeners

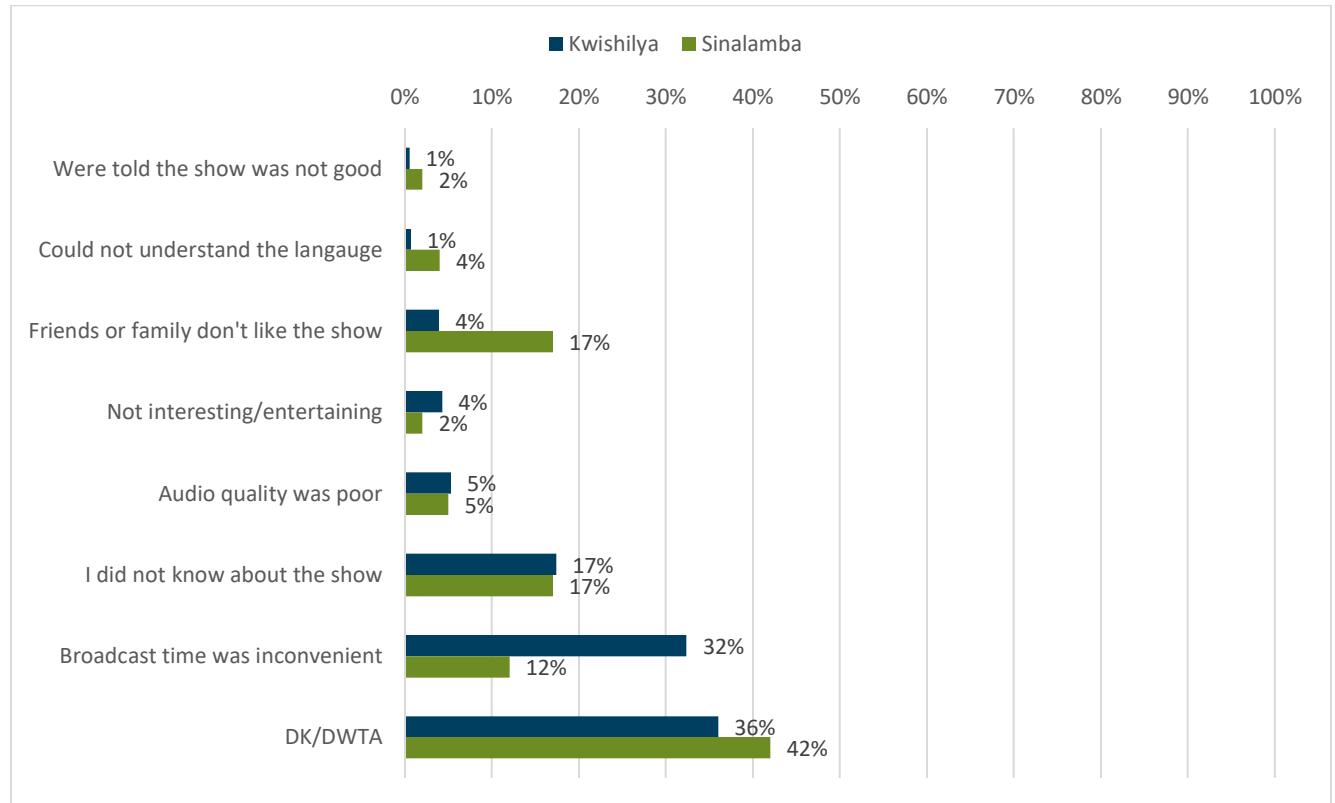


3.2.1 Non-Listeners for *Kwishilya* and *Sinalamba*

Respondents who indicated that they had heard of *Kwishilya* or *Sinalamba* but did not listen were asked to list reasons they chose not to engage with the RSD (see Figure 5 below). Broadcast time issues rise to the top with nearly 32% respondents to this question indicating the broadcast time for *Kwishilya* was inconvenient. However, lack of awareness of the show (17%) and friends/family don't like the show (17%) were the most common reasons for not listening to

Sinalamba. Broadcast issues rise to the top with nearly 32% respondents to this question indicating the broadcast time for *Sinalamba* was inconvenient.

Figure 5. Reasons why respondents did not listen to *Kwishilya* or *Sinalamba*



3.3. Impact of Exposure to Broadcasts

Sections 3.3.1 and 3.3.2 present impact data for each RSD. Indicators for the four major themes (FP, MCH/Nutrition, GBV, HIV/AIDS) are presented in their own tables and indicators for the minor themes (GE/EM, Malaria Prevention, Civic Engagement, Covid-19 Testing). Each table presents a descriptive analysis and a regression analysis.

The descriptive analysis simply provides the percent of listeners and non-listeners who answered “yes” to the indicator. This is a simple and intuitive way to screen for differences between those who were exposed to the *Kwishilya* and *Sinalamba* interventions. While a useful summary, they do not control for other demographic variables which we know can be influential, particularly sex, age, and education.

The regression analysis uses sophisticated multiple logistic regression models which take into account demographic variables. They are far more robust at determining if there is a true

difference between listeners and non-listeners rather than a difference that is due to chance, sample bias, or other factors. The regression analysis provides two data points:

- aOR is the adjusted odds ratio. This centers around one and uses a logarithmic scale. If there is no difference between listeners and non-listeners the aOR will be 1.000. If the aOR is 2.000 that means that listeners are two times more likely to say “yes” to the indicator than non-listeners. Further, because regression uses control variables, it removes doubts that age, sex, or other factors may be driving the difference we see.
- p-value helps us understand the probability of obtaining our results. In order to feel confident our results are not due to chance; we hope to see a p-value of ≤ 0.05 . That can be interpreted as “the probability of seeing these results due to chance alone is less than or equal to 5%.” Stated another way, if we repeated our survey again and again, up to 100 times, we would get the same results 95% of the time. That is the same as 19 out of 20 times, which makes us feel comfortable that our intervention was effective. We use asterisks to show the level of significance of the p-values: One * means the observed group difference is moderately strong, two ** means the observed group difference is strong, and three *** means the observed group difference is very strong.

3.3.1 *Kwishilya* Impact Results

Tables 5-9 and Figures 6-11 below present data specific to *Kwishilya* for all four major themes (FP, MCH/Nutrition, GBV, and HIV/AIDS). Data specific to minor themes are provided thereafter.

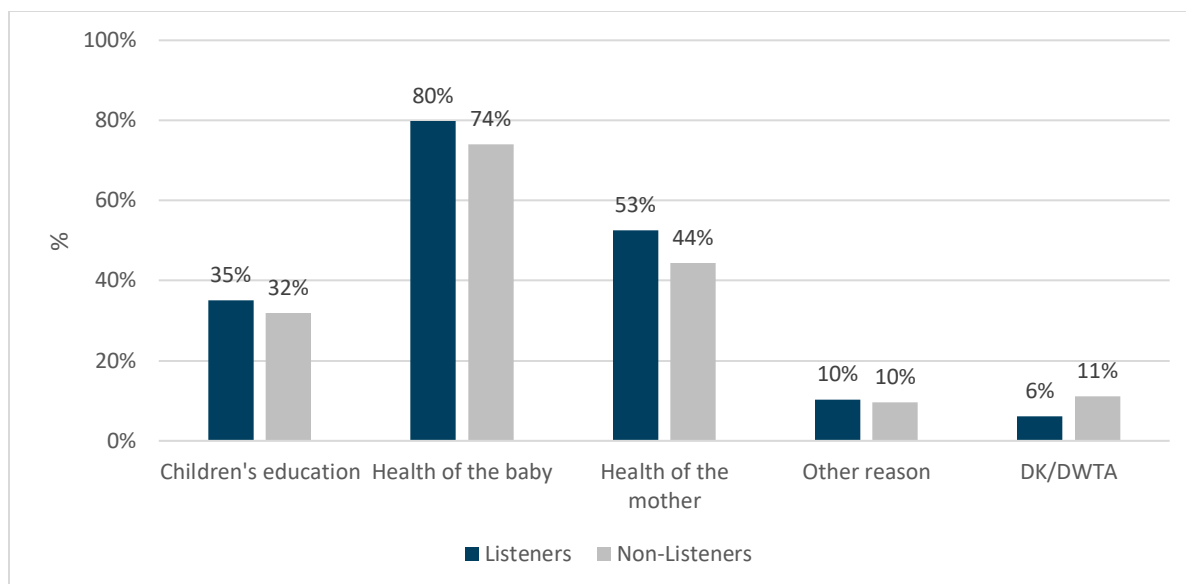
Family Planning (Statistically significant results)

- Listeners were over 65% more likely than non-listeners to believe their spouse/partner supports the use of family planning to delay or avoid pregnancy (OR 1.65, 95% CI: 1.7, 2.33, $p < 0.005$).
- Listeners were more than 50% more likely to believe they can determine their family size compared to non-listeners (OR 1.53, 95% CI 1.15, 2.03, $p = 0.003$).
- Listeners were almost 20% more likely than non-listeners to be using a modern contraceptive method to delay or avoid pregnancy (OR 1.19, 95% CI 1.01, 1.40, $p = 0.039$).
- A larger proportion of listeners reported knowledge of reasons for a couple to space their children by using a family planning method, including children’s education, health of the baby, and health of the mother (Figure 6). A statistically significant difference was observed between listeners and non-listeners for health of the baby (OR 1.41, 95% CI 1.17, 1.69, $p < 0.001$) and health of the mother (OR 1.27, 95% CI 1.09, 1.48, $p = 0.002$).

Table 5. Impact on FP (Kwishilya)

Indicators	Descriptive Analysis		Regression Analysis			
	Listeners	Non-Listeners	aOR	Lower CI	Upper CI	p-value
Do you know where to go to ask questions about or receive family planning services?	87.5%	85.3%	1.10	0.88	1.39	0.393
Do you think family planning is important enough that you will go to a clinic for services?	93.3%	92.4%	1.09	0.80	1.48	0.579
Does your spouse/partner support the use of family planning to delay or avoid pregnancy?	91.0%	87.3%	1.65	1.17	2.33	<0.005**
Are you using modern contraceptive methods to delay or avoid a pregnancy? (now or in past year)	60.4%	54.0%	1.19	1.01	1.40	0.039*
If no, do you plan to use a modern contraceptive method in the future to delay or avoid a pregnancy?	59.3%	61.8%	1.26	0.94	1.68	0.129
If yes, do you plan to continue to use a modern contraceptive method to delay or avoid a pregnancy?	96.5%	96.5%	1.23	0.71	2.13	0.462
Do you believe you can determine your family size?	93.2%	89.3%	1.53	1.15	2.03	0.003**
What is a good reason for a couple to space their children by using a family planning method?						
Children's education	35.1%	31.9%	1.09	0.93	1.28	0.270
Health of the baby	79.8%	74.1%	1.41	1.17	1.69	<0.001***
Health of the mother	52.6%	44.4%	1.27	1.09	1.48	0.002***
Other	10.3%	9.6%	1.10	0.86	1.41	0.443
Don't know/Refused	6.1%	11.1%	-	-	-	-

Figure 6. Knowledge of reasons for a couple to space their children by using a family planning method (Kwishilya)



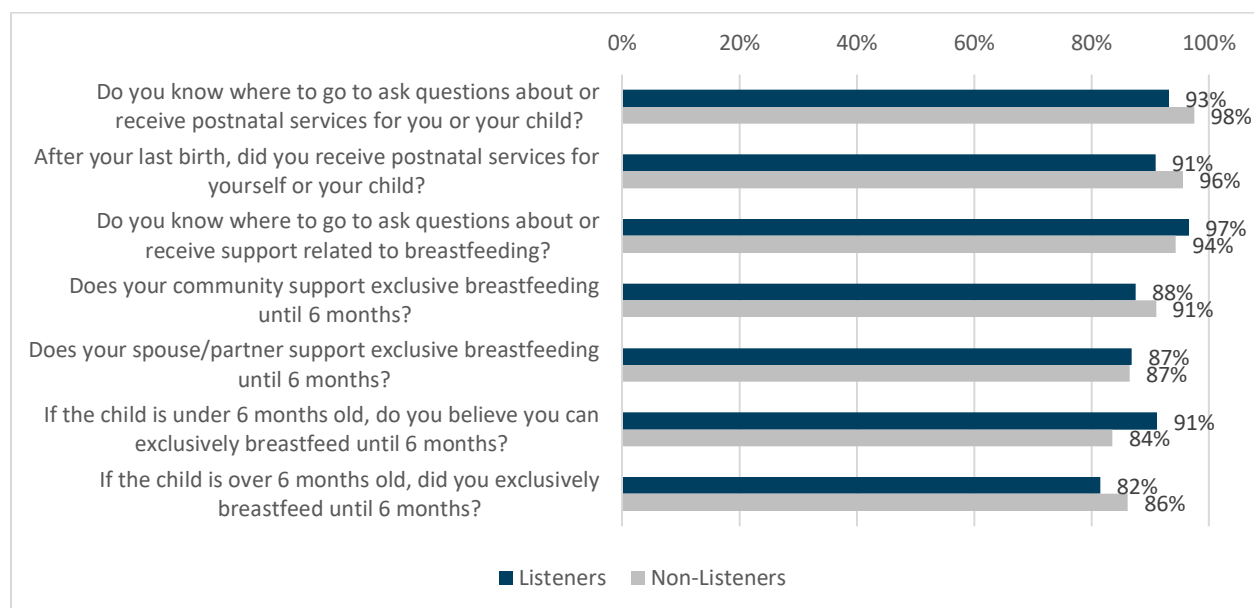
Maternal and Child Health and Nutrition, Newborn and Child Development

- Both listeners and non-listeners reported high levels of knowledge and awareness of maternal and child health and nutrition resources in their communities.
- The indicators related to this theme show inconsistent trends that demonstrate minor differences between listeners and non-listeners, with non-listeners sometimes outperforming listeners. It is important to note that none of the MCH impact results were found to be statistically significant.
- While a larger proportion of listeners than non-listeners reported knowing where to go to ask questions about or receive support related to breastfeeding (96.6% vs 94.4%; OR 1.89, 95% CI 0.49, 7.41, p=0.358), more non-listeners than listeners reporting knowing where to go to ask questions about or receive postnatal services (97.5% vs. 93.2%; OR 0.36, 95% CI 0.10, 1.39, p=0.141).
- Among women with a child *under* 6 months old, 91.3% of listeners reported believing they can exclusively breastfeed until the child reaches six months; this compares to only 83.6% of non-listeners. Conversely, among women with a child *over* 6 months old, 86.2% of non-listeners reported exclusively breastfeeding the child until 6 months old compared to 81.5% of listeners.

Table 6. Impact on Maternal and Child Health and Nutrition, Newborn and Child Development (Among women who gave birth in the 12 months preceding the survey)

Indicators	Descriptive Analysis		Regression Analysis			
	Listeners	Non-Listeners	aOR	Lower CI	Upper CI	p-value
Do you know where to go to ask questions about or receive postnatal services for you or your child?	93.2%	97.5%	0.36	0.10	1.39	0.141
After your last birth, did you receive postnatal services for yourself or your child?	90.9%	95.6%	0.44	0.15	1.33	0.145
Do you know where to go to ask questions about or receive support related to breastfeeding?	96.6%	94.4%	1.89	0.49	7.31	0.358
Does your community support exclusive breastfeeding until 6 months?	87.5%	91.0%	0.65	0.27	1.52	0.318
Does your spouse/partner support exclusive breastfeeding until 6 months?	86.9%	86.5%	1.01	0.46	2.23	0.981
If the child is under 6 months old, do you believe you can exclusively breastfeed until 6 months?	91.2%	83.6%	1.99	0.45	8.89	0.365
If the child is over 6 months old, did you exclusively breastfeed until 6 months?	81.5%	86.2%	1.00	0.35	2.87	0.997

Figure 7. Impact on MCH and Nutrition (Kwishilya)



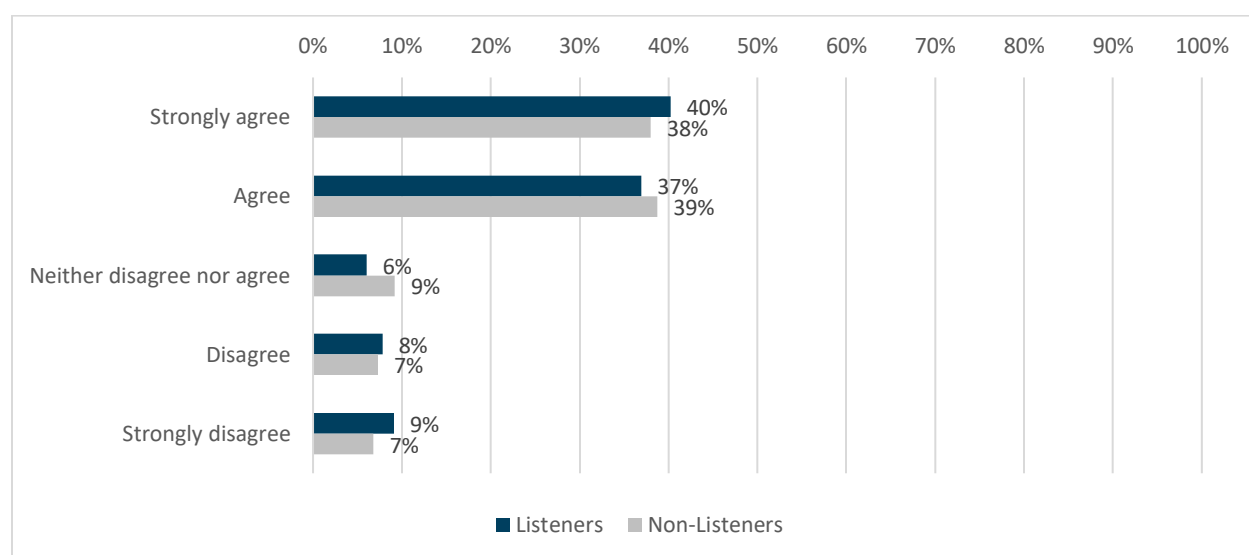
Gender-Based Violence

- Both listeners and non-listeners showed positive attitudes and social norms related to gender-based violence. None of the GBV impact results were statistically significant.
- Listeners were 50% more likely than non-listeners to make joint decisions with their partner/spouse on the purchase of major household items, however, the results were not statistically significant (OR 1.50, 95% CI 0.90, 2.49, p=0.120).

Table 8. Impact on GBV (Kwishilya)

Indicators	Descriptive Analysis		Regression Analysis			
	Listeners	Non-Listeners	aOR	Lower CI	Upper CI	p-value
Strongly agree or agree with the statement: “People in my community think that any form of SGBV is unacceptable.”	77.1%	76.7	1.05	0.90	1.23	0.510
Do people in your community intervene and try to stop cases of GBV?	87.1%	88.2%	0.90	0.72	1.14	0.400
Do people in your community expect you to intervene and try to stop cases of GBV?	81.4%	78.8%	1.07	0.88	1.31	0.492
Do you make joint decisions with your partner/spouse on the purchase of major household items?	96.7%	95.1%	1.50	0.90	2.49	0.120

Figure 8. Extent to which participants agree with the statement: “People in my community think that any form of GBV is unacceptable.” (Kwishilya)



HIV/AIDS

- Listeners were over 30% more likely to discuss HIV risk with their spouse/partner/friend or relatives relative to non-listeners (OR 1.32, 95% CI 1.06, 1.63, p=0.012).
- Similar proportions of listeners and non-listeners reported supporting the use of condoms to prevent spread of HIV, knowing where to go to source condoms, and knowing where to go to receive HIV prevention and counseling services.

Table 9. Impact on HIV Prevention (Kwishilya)

Indicators	Descriptive Analysis		Regression Analysis			
	Listeners	Non-Listeners	aOR	Lower CI	Upper CI	p-value
Are you aware of some of the risky behaviors related to acquiring HIV?	98.7%	97.7%	1.47	0.81	2.67	0.210
Do you support the use of condoms to prevent spread of HIV?	90.3%	90.2%	1.05	0.82	1.36	0.686
Do you know where to go to source condoms?	95.7%	94.6%	1.13	0.78	1.63	0.512
Do you know where to go to receive HIV prevention and counseling services?	95.9%	95.3%	1.02	0.69	1.48	0.932
Do you believe that others in your community use condoms to prevent HIV?	88.8%	91.5%	0.77	0.59	1.01	0.063
Do you believe you can access male or female condoms if you need them?	93.8%	92.7%	1.07	0.78	1.47	0.667
Do you discuss HIV-risk with your spouse/partner/ friend/relatives?	86.6%	81.1%	1.32	1.06	1.63	0.012*

Supporting themes including Girls Education, Malaria Prevention and Treatment, Civic Engagement, and Covid-19 Testing

- The difference between listeners and non-listeners was not statistically significant for indicators related to girls' education.
- Listeners were over 40% more likely than non-listeners to believe they can access an insecticide-treated mosquito net if they need them (OR 1.43, 95% CI 1.18, 1.74, p<0.001).
- Listeners were more than 35% more likely than non-listeners to believe they can become civically engaged to register to vote (OR 1.36, 95% CI 1.07, 1.74, p=0.012) or to support women's participation in politics/ government (OR 1.35, 95% CI 1.09, 1.68, p=0.007).
- Listeners were 1.42 times more than likely than non-listeners to know where to go to get tested for Covid-19 (OR 1.42, 95% CI 1.07, 1.88, p= 0.015).

Table 10. Impact on Girls' Education, Malaria Prevention and Treatment, Civic Engagement and Covid-19 Testing (Kwishilya)

Indicators	Descriptive Analysis		Regression Analysis			
	Listeners	Non-Listeners	aOR	Lower CI	Upper CI	p-value
Do you believe that the education of young girls benefits families?	98.8%	97.8%	1.48	0.80	2.75	0.217
Do people in your community believe that girls' education is important?	93.9%	94.1%	1.03	0.75	1.43	0.844
Do you intend to enroll (or keep your daughter enrolled) in school? [Among those with school-age daughter(s)]	82.5%	80.1%	0.98	0.77	1.24	0.843
Do you believe you can access an insecticide-treated mosquito net if you need them?	82.3%	76.4%	1.43	1.18	1.74	<0.001***
Do you believe you can become civically engaged if you want to register to vote?	90.0%	85.1%	1.36	1.07	1.74	0.012*
Do you believe you can become civically engaged if you want to register your child at birth?	87.0%	83.5%	1.21	0.97	1.53	0.097
Do you believe you can become civically engaged if you want to support women's participation in politics/ government?	85.4%	80.6%	1.35	1.09	1.68	0.007*
Do you know where to go to get tested for covid-19?	93.3%	90.4%	1.42	1.07	1.88	0.015*

Core indicators

- Listeners and non-listeners showed similar patterns related to personal and perceived community ideals related to number of children. Interestingly, most participants reported a personal ideal of 3-4 children (41% listeners and 45% non-listeners), whereas perceived community ideal of 3-4 children was much lower at only 9% of listeners and 10% of non-listeners. Instead, most participants reported a perceived community ideal of 7+ children (48% listeners and 49% non-listeners).
- None of the PMC core indicators showed a statistically significant difference between listeners and non-listeners.

Figure 9. Variance in reported ideal number of children (Kwishilya)

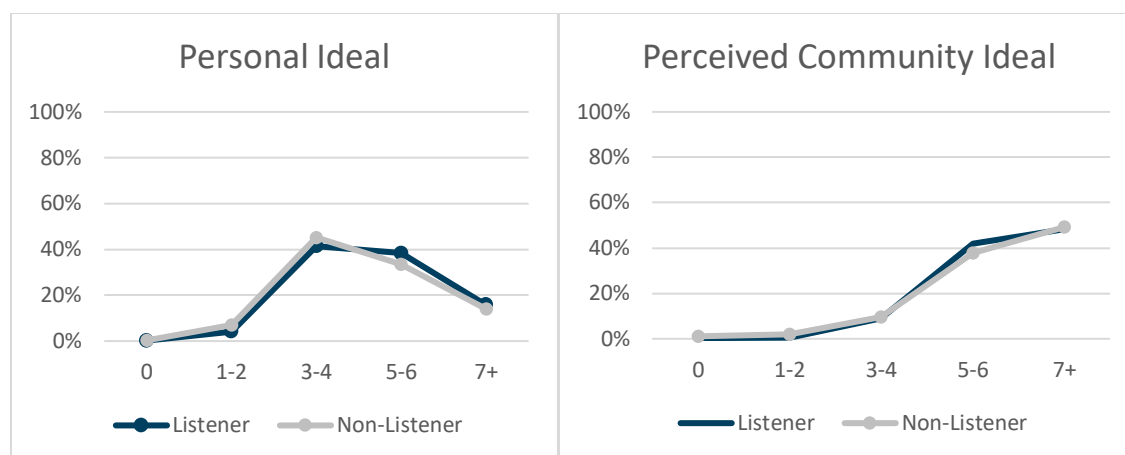


Table 11. PMC Core Indicators

Indicators	Descriptive Analysis		Regression Analysis			
	Listeners	Non-Listeners	aOR	Lower CI	Upper CI	p-value
Do you believe that modern contraceptives are safe and effective?	81.7%	80.6%	1.25	0.92	1.70	0.159
Do people in your community believe that there are health and economic benefits to having a smaller family?	93.4%	92.1%	1.12	0.91	1.37	0.275
Do you agree that daughters are equally valuable as sons?	91.7%	91.6%	0.97	0.74	1.27	0.842
Do you believe that men and women should share work and responsibilities equally in the family?	77.9%	79.5%	0.92	0.76	1.10	0.362

3.3.2 Sinalamba Impact Results

Family Planning

- Listeners were almost twice as likely to report their spouse/partner support the use of family planning to delay or avoid pregnancy (OR 1.94, 95% CI 1.21, 3.11, p=0.006).
- A high proportion of listeners and non-listeners reporting knowing where to go to ask questions about or receive family planning services. However, surprisingly, non-listeners were more likely to know where to go (OR 0.69, 95% CI 0.51, 0.92, p=0.013). This may be partly explained by other family planning programs and initiatives in the community that reach both listeners and non-listeners.

Table 12. Impact on FP (Sinalamba)

Indicators	Descriptive Analysis		Regression Analysis			
	Listeners	Non-Listeners	aOR	Lower CI	Upper CI	p-value
Do you know where to go to ask questions about or receive family planning services?	83.6%	87.3%	0.69	0.51	0.92	0.013*
Do you think family planning is important enough that you will go to a clinic for services?	94.1%	92.4%	1.50	0.90	2.50	0.123
Does your spouse/partner support the use of family planning to delay or avoid pregnancy?	43.2%	35.6%	1.94	1.21	3.11	0.006*
Are you using modern contraceptive methods to delay or avoid a pregnancy? (now or in past year)	62.7%	60.6%	1.11	0.89	1.38	0.361
If no, do you plan to use a modern contraceptive method in the future to delay or avoid a pregnancy?	15.7%	15.4%	1.11	0.76	1.62	0.599
If yes, do you plan to continue to use a modern contraceptive method to delay or avoid a pregnancy?	13.3%	13.2%	0.96	0.27	3.41	0.947
Do you believe you can determine your family size?	89.2%	89.3%	0.84	0.57	1.22	0.362
What is a good reason for a couple to space their children by using a family planning method?	-	-				
Children's education	44.1%	47.6%	0.81	0.66	1.00	0.048*
Health of the baby	73.6%	70.5%	1.12	0.90	1.41	0.304
Health of the mother	37.5%	40.9%	0.86	0.69	1.07	0.167

Maternal and Child Health and Nutrition

- Similar proportions of listeners and non-listeners reported high knowledge and social norms indicators related to nutrition, newborn and child development. None of the indicators were statistically significant.
- A higher proportion of non-listeners reported knowing where to go to ask questions about or receive postnatal services for themselves or their children (OR 0.31, 95% CI 0.09, 1.01, p=0.053). This may be in part related to MCN programs that are concurrently implemented in the program areas during the broadcast season.
- Among women with a child under 6 months old, a higher proportion of listeners than non-listeners reported believing they can exclusively breastfeed the child until 6 months old (41.3% vs 27.3%, OR 4.29, 95% CI 0.33, 56.49, p=0.269).

Table 13. Impact on Nutrition, Newborn and Child Development, and Maternal and Child Health (Among women who gave birth in the 12 months preceding the survey) (Sinalamba)

Indicators	Descriptive Analysis		Regression Analysis			
	Listeners	Non-Listeners	aOR	Lower CI	Upper CI	p-value
Do you know where to go to ask questions about or receive postnatal services for you or your child?	76.1%	89.8%	0.31	0.09	1.01	0.053
After your last birth, did you receive postnatal services for yourself or your child?	82.6%	88.6%	0.68	0.22	2.11	0.503
Do you know where to go to ask questions about or receive support related to breastfeeding?	84.8%	86.3%	0.91	0.28	3.02	0.879
Does your community support exclusive breastfeeding until 6 months?	76.1%	76.1%	0.50	0.14	1.85	0.302
Does your spouse/partner support exclusive breastfeeding until 6 months?	84.8%	83.0%	0.44	0.10	1.92	0.273
If the child is under 6 months old, do you believe you can exclusively breastfeed until 6 months?	41.3%	27.3%	4.29	0.33	56.49	0.269
If the child is over 6 months old, did you exclusively breastfeed until 6 months?	41.3%	55.7%	0.83	0.19	3.69	0.811

Gender-Based Violence

- Listeners were 1.37 times more likely than non-listeners to believe people in their community intervene and try to stop cases of GBV (OR 1.37, 95% CI 1.03, 1.83, p=0.032).
- A higher proportion of listeners than non-listeners reported people in their community expect them to intervene to try to stop cases of GBV; however, the difference was not statistically significant. Similarly, over 95% of listeners said they make joint decisions with their partner/spouse on the purchase of major household items, compared to only 82.1% of non-listeners; however, the difference was not statistically significant.

Table 14. Impact on GBV (Sinalamba)

Indicators	Descriptive Analysis		Regression Analysis			
	Listeners	Non-Listeners	aOR	Lower CI	Upper CI	p-value
To what extent do you agree with the following statement: “People in my community think that any form of GBV is unacceptable.”	83.4%	82.1%	1.12	0.85	1.47	0.427

Indicators	Descriptive Analysis		Regression Analysis			
	Listeners	Non-Listeners	aOR	Lower CI	Upper CI	p-value
Do people in your community intervene and try to stop cases of GBV?	85.1%	81.5%	1.37	1.03	1.83	0.032
Do people in your community expect you to intervene and try to stop cases of GBV?	70.8%	67.4%	1.20	0.95	1.51	0.130
Do you make joint decisions with your partner/spouse on the purchase of major household items?	95.9%	82.1%	0.71	0.33	1.53	0.378

Youth HIV Prevention

- Listeners were over 30% more likely than non-listeners to report having multiple partners as a risk behavior related to acquiring HIV (OR 1.31, 95% CI 1.06, 1.62, p=0.013).
- Listeners were 1.45 times more likely than non-listeners to discuss HIV-risk with others, such as their partner, spouse, friend or relatives (OR 1.45, 95% CI 1.06, 2.00, p=0.021).
- A similar proportion of listeners and non-listeners reporting supporting the use of condoms to prevent spread of HIV and knowing where to go to receive HIV prevention and counseling services.

Table 15. Impact on Youth HIV Prevention (Sinalamba)

Indicators	Descriptive Analysis		Regression Analysis			
	Listeners	Non-Listeners	aOR	Lower CI	Upper CI	p-value
Are you aware of some of the risky behaviors related to acquiring HIV?	97.2	96.7%	1.12	0.62	2.01	0.704
What are some of the risk behaviors related to acquiring HIV?	-	-				
Having multiple partners	61.0%	52.8%	1.31	1.06	1.62	0.013*
Not using a condom	45.2%	31.3%	0.97	0.78	1.19	0.741
Having unprotected sex	70.5%	73.4%	0.92	0.73	1.17	0.507
Other	<0%	<0%	-	-	-	-
Do you support the use of condoms to prevent spread of HIV?	95.1%	94.6%	1.14	0.71	1.84	0.592
Do you know where to go to source condoms?	98.2%	96.8%	1.51	0.76	3.00	0.235
Do you know where to go to receive HIV prevention and counseling services?	96.7%	95.4%	1.36	0.80	2.31	0.255
Do you believe that others in your community use condoms to prevent HIV?	91.4%	92.9%	0.74	0.48	1.13	0.165

Indicators	Descriptive Analysis		Regression Analysis			
	Listeners	Non-Listeners	aOR	Lower CI	Upper CI	p-value
Do you believe you can access male or female condoms if you need them?	92.3%	93.4%	0.77	0.51	1.18	0.229
Do you discuss HIV-risk with your spouse/partner/ friend/relatives?	89.0%	83.9%	1.45	1.06	2.00	0.021*

Supporting themes including Girls' Education and Early Marriage, Malaria Treatment and Prevention, and Covid-19 Testing

- The difference between listeners and non-listeners was not statistically significant for any of the indicators related to *Sinalamba's* subthemes.
- The overwhelming majority of listeners and non-listeners believe the education of young girls benefits families and intend to wait until their daughter finishes education before she marries. Over 98% of both listeners and non-listeners reported that people in their community believe that girls' education is important.
- Over 90% of listeners and non-listeners believe they can become civically engaged if they want to register to vote, or register their child at birth, or support women's participation in politics/ government.
- Over 74% of listeners voted in last year's election compared to 70.7% of non-listeners; however, the difference is not statistically significant (OR 1.06, 95% CI 0.82, 1.37, p=0.658).

Table 16. Impact on Girls' Education and Early Marriage (*Sinalamba*)

Indicators	Descriptive Analysis		Regression Analysis			
	Listeners	Non-Listeners	aOR	Lower CI	Upper CI	p-value
Do you believe that the education of young girls benefits families?	99.3%	99.2%	0.93	0.30	2.84	0.894
Do people in your community believe that girls' education is important?	98.5%	98.7%	1.12	0.45	2.84	0.804
Do you intend to enroll (or keep your daughter enrolled) in school? [Among those with school-age daughter(s)]	79.9%	97.5%	0.71	0.30	1.66	0.424
Do people in your community believe it is good for a girl to finish school before marrying?	95.2%	95.3%	0.90	0.56	1.44	0.660
Do you intend to wait until your daughter finishes her education before she marries?	99.1%	98.9%	0.67	0.16	2.73	0.572

Table 17. Impact on Malaria Prevention and Treatment, Civic Engagement and Covid-19 Testing (Sinalamba)

Indicators	Descriptive Analysis		Regression Analysis			
	Listeners	Non-Listeners	aOR	Lower CI	Upper CI	p-value
Do you believe you can access an insecticide-treated mosquito net if you need them?	58.1%	55.0%	1.22	0.99	1.52	0.068
Did you vote in the last year's General Elections?	74.4%	70.7%	1.06	0.82	1.37	0.658
Do you believe you can become civically engaged if you want to register to vote?	93.5%	94.4%	0.83	0.53	1.29	0.402
Do you believe you can become civically engaged if you want to register your child at birth?	91.0%	91.0%	0.96	0.67	1.38	0.810
Do you believe you can become civically engaged if you want to support women's participation in politics/ government?	91.0%	91.1%	0.86	0.59	1.24	0.415
Do you know where to go to get tested for covid-19?	96.0%	95.7%	1.07	0.63	1.81	0.800

Core indicators

- The difference between listeners and non-listeners was not statistically significant for any of the PMC core indicators.
- About 90% of listeners and non-listeners believe that modern contraceptives are safe and effective, and over 96% of both listeners and non-listeners agree that daughters are equally as values as sons. A smaller, though still high, proportion of the population believe that people in their community believe there are health and economic benefits to having a smaller family (86.2% of listeners and 83.4% of non-listeners).

Table 18. PMC Core Indicators (Sinalamba)

Indicators	Descriptive Analysis		Regression Analysis			
	Listeners	Non-Listeners	aOR	Lower CI	Upper CI	p-value
Do you believe that modern contraceptives are safe and effective?	90.5%	89.8%	1.07	0.74	1.55	0.712
Do people in your community believe that there are health and economic benefits to having a smaller family?	86.2%	83.4%	1.08	0.79	1.47	0.631

Indicators	Descriptive Analysis		Regression Analysis			
	Listeners	Non-Listeners	aOR	Lower CI	Upper CI	p-value
Do you agree that daughters are equally valuable as sons?	96.7%	97.2%	0.78	0.44	1.39	0.399
Do you believe that men and women should share work and responsibilities equally in the family?	82.1%	81.7%	0.94	0.72	1.23	0.644

3.4. Feedback on *Kwishilya* and *Sinalamba*

Listeners of *Kwishilya* and *Sinalamba* reported positive feedback regarding to stories’ and broadcast characteristics. The overwhelming majority of listeners for both shows reporting that the show was entertaining, realistic and believable, and broadcast at a convenient time. A smaller proportion of listeners, though still a large proportion, reported that they always told their family or friends about the show’s content and episodes. The positive feedback from listeners of both *Kwishilya* and *Sinalamba* highlights the success of the shows.

1591 (96.4%)
669 (99.4%)

Listeners who said *Kwishilya* and *Sinalamba* were entertaining.

1587 (96.7%)
660 (99.0%)

Listeners who felt the stories in *Kwishilya* and *Sinalamba* were realistic and believable.

1386 (83.9%)
558 (82.4%)

Listeners who always told their family or friends about *Kwishilya* and *Sinalamba*.

1542 (93.3%)
656 (97.6%)

Listeners who felt *Kwishilya* and *Sinalamba* were broadcast at a convenient time to list.

4. CONCLUSION

This endline evaluation sought to assess the impact of the second season of the *Kwishilya* and *Sinalamba* radio serial dramas. The assessment used cross-sectional survey data from a representative population of five provinces in Zambia to investigate whether listening to the radio serial dramas resulted in different knowledge, attitudes, behaviors, and social norms related to the major and minor themes addressed in the two dramas. PMC’s standard method of quantitative analysis using a combination of descriptive statistics and multiple logistic regression was used.

Kwishilya and *Sinalamba* engaged over half a million Zambians (N=605,796), including over 500,000 listeners of *Kwishilya* and over 100,000 regular listeners for *Sinalamba*. Multiple

logistic regressions yielded a number of statistically significant results for each drama, particularly related to family planning indicators. For example, there were statistically significant differences in descriptive norms between listeners and non-listeners, demonstrating that listeners are more likely to have a positive view of family planning than non-listeners.

Findings related to the program themes yielded multiple statistically significant results for each radio serial drama:

Kwishilya listeners:

- Believes their spouse/partner supports the use of family planning to delay or avoid pregnancy (aOR 1.65, 95% CI: 1.7, 2.33, $p < 0.005$).
- Believes they themselves can determine their family size (aOR 1.53, 95% CI 1.15, 2.03, $p = 0.003$)
- Uses a modern contraceptive method to delay or avoid pregnancy (aOR 1.19, 95% CI 1.01, 1.40, $p = 0.039$).
- Believes they can become civically engaged to register to vote (aOR 1.36, 95% CI 1.07, 1.74, $p = 0.012$).
- Supports women's participation in politics/ government (OR 1.35, 95% CI 1.09, 1.68, $p = 0.007$).

Sinalamba listeners:

- Believes their spouse/partner supports the use of family planning to delay or avoid pregnancy (aOR 1.94, 95% CI 1.21, 3.11, $p = 0.006$).
- Believes people in their community intervene and try to stop cases of GBV (aOR 1.37, 95% CI 1.03, 1.83, $p = 0.032$).
- Knows that having multiple partners is a risk behavior related to acquiring HIV (aOR 1.31, 95% CI 1.06, 1.62, $p = 0.013$).
- Discuss HIV-risk with others, such as their partner, spouse, friend or relatives (OR 1.45, 95% CI 1.06, 2.00, $p = 0.021$).
- Knows having multiple partners as a risk behavior related to acquiring HIV (aOR 1.31, 95% CI 1.06, 1.62, $p = 0.013$).

Some results were surprising. For *Kwishilya*, indicators related to maternal and child health show inconsistent trends with only minor differences between listeners and non-listeners or non-listeners sometimes out-performing listeners; however, none of the MCH impact results for v were found to be statistically significant. Further, in some cases, indicators show very high proportions of knowledge related to maternal and child health resources among both listeners and non-listeners. Similarly, for *Sinalamba*, a higher proportion of non-listeners reported knowing where to go to ask questions about or receive postnatal services for themselves or their children (OR 0.31, 95% CI 0.09, 1.01, $p = 0.053$). This may be in part related to maternal and child nutrition programs that are concurrently implemented in the program areas during the broadcast season. More in-depth qualitative data would allow us to better understand and interpret the context and factors that influence these findings.

APPENDIX A – REFERENCES

Bandura A. 1986. Social Foundations of Thought and Action: A Social Cognitive Theory. Englewood Cliffs NJ: Prentice-Hall and 2) DiClemente RJ, Crosby RA, Kegler MC, eds. 2002. Emerging Theories in Health Promotion Practice and Research. San Francisco: Jossey-Bass.

APPENDIX B – DATA TABLES

Complete data tables for all analyses are included in this annex. The main body of the report presents the most relevant data drawn from the tables below.

Table 1. Survey Sample Details

Province	Population	Sample Size	Number of Respondents	% Listeners (n)
Northern	759,534	-	1052	3% (417)
Central	880,358	-	861	26% (297)
Luapula	638,229	-	1254	32% (371)
Muchinga	485,256	-	193	6% (70)
Subtotal		3409	3360	34.4% (1156)
Western	525,428			
Subtotal		1917	1864	36.4% (679)
Total	3,288,805			

Table 2. Survey Completion, Reach, Audience Size, and Cost per Listener

Region	<i>Kwishilya</i> RSD	<i>Sinalamba</i> RSD	Total/Average
Sample Size	3409	1917	5,326
Surveys Completed	3360	1864	5,224
Survey Completion Rate	98.5%	97.2%	98.1%
Surveys Used in Analysis	3360	1864	5,224
Survey Respondents Who Are Regular Listeners (listen to RSD weekly)	2326	1314	3640
Projected Reach (number who have heard of RSD)	1,759,955	370,427	2,130,382
Projected Audience (percent who listen to RSD at least weekly)	34.4%	36.4%	35.4%
Projected Audience (number who listen to RSD at least weekly)	877,434	190,933	1,068,427
Cost per Listener	\$1.11	\$4.70	\$2.91

Table 5. Impact on FP (Kwishilya)

Indicators	Descriptive Analysis		Regression Analysis			
	Listeners	Non-Listeners	aOR	Lower CI	Upper CI	p-value
Do you know where to go to ask questions about or receive family planning services?	87.5%	85.3%	1.10	0.88	1.39	0.393
Do you think family planning is important enough that you will go to a clinic for services?	93.3%	92.4%	1.09	0.80	1.48	0.579
Does your spouse/partner support the use of family	91.0%	87.3%	1.65	1.17	2.33	<0.005**

Indicators	Descriptive Analysis		Regression Analysis			
	Listeners	Non-Listeners	aOR	Lower CI	Upper CI	p-value
planning to delay or avoid pregnancy?						
Are you using modern contraceptive methods to delay or avoid a pregnancy? (now or in past year)	60.4%	54.0%	1.19	1.01	1.40	0.039
If no, do you plan to use a modern contraceptive method in the future to delay or avoid a pregnancy?	59.3%	61.8%	1.26	0.94	1.68	0.129
If yes, do you plan to continue to use a modern contraceptive method to delay or avoid a pregnancy?	96.5%	96.5%	1.23	0.71	2.13	0.462
Do you believe you can determine your family size?	93.2%	89.3%	1.53	1.15	2.03	0.003**
What is a good reason for a couple to space their children by using a family planning method?						
Children's education	35.1%	31.9%	1.09	0.93	1.28	0.270
Health of the baby	79.8%	74.1%	1.41	1.17	1.69	<0.001
Health of the mother	52.6%	44.4%	1.27	1.09	1.48	0.002
Other	10.3%	9.6%	1.10	0.86	1.41	0.443
Don't know/Refused	6.1%	11.1%	-	-	-	-

Table 4. Impact on Nutrition, Newborn and Child Development, and Maternal and Child Health (ONLY AMONG WOMEN WHO GAVE BIRTH IN THE 12 MONTHS PRECEDING THE SURVEY)

Indicators	Descriptive Analysis		Regression Analysis			
	Listeners	Non-Listeners	aOR	Lower CI	Upper CI	p-value
Do you know where to go to ask questions about or receive postnatal services for you or your child?	93.2%	97.5%	0.36	0.10	1.39	0.141
After your last birth, did you receive postnatal services for yourself or your child?	90.9%	95.6%	0.44	0.15	1.33	0.145
Do you know where to go to ask questions about or receive support related to breastfeeding?	96.6%	94.4%	1.89	0.49	7.31	0.358
Does your community support exclusive breastfeeding until 6 months?	87.5%	91.0%	0.65	0.27	1.52	0.318

Indicators	Descriptive Analysis		Regression Analysis			
	Listeners	Non-Listeners	aOR	Lower CI	Upper CI	p-value
Does your spouse/partner support exclusive breastfeeding until 6 months?	86.9%	86.5%	1.01	0.46	2.23	0.981
If the child is under 6 months old, do you believe you can exclusively breastfeed until 6 months?	91.2%	83.6%	1.99	0.45	8.89	0.365
If the child is over 6 months old, did you exclusively breastfeed until 6 months?	81.5%	86.2%	1.00	0.35	2.87	0.997

Table 6. Impact on SGBV

Indicators	Descriptive Analysis		Regression Analysis			
	Listeners	Non-Listeners	aOR	Lower CI	Upper CI	p-value
To what extent do you agree with the following statement: “People in my community think that any form of SGBV is unacceptable.”		-	-	-	-	-
Strongly agree	40.2%	38.0%				
Agree	36.9%	38.7%				
Neither agree nor disagree	6.0%	9.2%				
Disagree	7.8%	7.3%				
Disagree strongly	9.1%	6.8%				
Strongly agree or agree with the statement: “People in my community think that any form of SGBV is unacceptable.”			1.05	0.90	1.23	0.510
Do people in your community intervene and try to stop cases of SGBV?	87.1%	88.2%	0.90	0.72	1.14	0.400
Do people in your community expect you to intervene and try to stop cases of SGBV?	81.4%	78.8%	1.07	0.88	1.31	0.492
Do you make joint decisions with your partner/spouse on the purchase of major household items?	96.7%	95.1%	1.50	0.90	2.49	0.120

Table 7. Impact on Youth HIV Prevention

Indicators	Descriptive Analysis		Regression Analysis			
	Listeners	Non-Listeners	aOR	Lower CI	Upper CI	p-value
Are you aware of some of the risky behaviors related to acquiring HIV?	98.7%	97.7%	1.47	0.81	2.67	0.210
What are some of the risk behaviors related to acquiring HIV?			-	-	-	-
Having multiple partners	21.4%	29.2%	0.68	0.57	0.81	<0.001
Not using a condom	56.0%	52.1%	1.18	1.02	1.38	0.028
Having unprotected sex	50.7%	51.6%	0.90	0.77	1.05	0.193
Other	82.0%	84.8%	-	-	-	-
Do you support the use of condoms to prevent spread of HIV?	90.3%	90.2%	1.05	0.82	1.36	0.686
Do you know where to go to source condoms?	95.7%	94.6%	1.13	0.78	1.63	0.512
Do you know where to go to receive HIV prevention and counseling services?	95.9%	95.3%	1.02	0.69	1.48	0.932
Do you believe that others in your community use condoms to prevent HIV?	88.8%	91.5%	0.77	0.59	1.01	0.063
Do you believe you can access male or female condoms if you need them?	93.8%	92.7%	1.07	0.78	1.47	0.667
Do you discuss HIV-risk with your spouse/partner/ friend/relatives?	86.6%	81.1%	1.32	1.06	1.63	0.012

Table 8. Impact on Girls' Education

Indicators	Descriptive Analysis		Regression Analysis			
	Listeners	Non-Listeners	aOR	Lower CI	Upper CI	p-value
Do you believe that the education of young girls benefits families?	98.8%	97.8%	1.48	0.80	2.75	0.217
Do people in your community believe that girls' education is important?	93.9%	94.1%	1.03	0.75	1.43	0.844
Do you intend to enroll (or keep your daughter enrolled) in school? [Among those with school-age daughter(s)]	82.5%	80.1%	0.98	0.77	1.24	0.843

Table 9. Impact on Malaria Prevention and Treatment

Indicators	Descriptive Analysis		Regression Analysis			
	Listeners	Non-Listeners	aOR	Lower CI	Upper CI	p-value
How many insecticide-treated mosquito net does your household have?			0.83	0.71	0.96	0.015
0	42.5%	50.2%				
1-2	42.4%	38.2%				
3-4	12.9%	10.4%				
5-6	2.2%	1.2%				
How many pregnant women slept under insecticide-treated mosquito net the previous night?			1.34	0.62	2.89	0.455
0	25.0%	19.0%				
1-2	73.6%	80.3%				
3-4	1.4%	70.0%				
5-6	0.0%	0.0%				
How many children under the age 5 slept under insecticide-treated mosquito net the previous night?			1.57	0.97	2.56	0.068
0	10.7%	6.6%				
1-2	82.5%	88.4%				
3-4	6.8%	4.9%				
5-6	0.0%	0.2%				
How often do you sleep under an insecticide-treated mosquito net?	-	-	0.61	0.30	1.24	0.173
Never	1.9%	3.1%				
Rarely	2.2%	5.4%				
Sometimes	12.4%	9.9%				
Most nights	19.3%	21.1%				
Always	64.0%	60.5%				
Do you believe you can access an insecticide-treated mosquito net if you need them?	82.3%	76.4%	1.43	1.18	1.74	<0.001

Table 10. Impact on Civic Engagement and Covid-19 Testing

Indicators	Descriptive Analysis		Regression Analysis			
	Listeners	Non-Listeners	aOR	Lower CI	Upper CI	p-value
Did you vote in the last year's General Elections?	71.7%	65.0%	1.06	0.89	1.27	0.522
Do you believe you can become civically engaged if you want to register to vote?	90.0%	85.1%	1.36	1.07	1.74	0.012
Do you believe you can become civically engaged if you want to register your child at birth?	87.0%	83.5%	1.21	0.97	1.53	0.097
Do you believe you can become civically engaged if you want to	85.4%	80.6%	1.35	1.09	1.68	0.007

Indicators	Descriptive Analysis		Regression Analysis			
	Listeners	Non-Listeners	aOR	Lower CI	Upper CI	p-value
support women's participation in politics/ government?						
Do you know where to go to get tested for covid-19?	93.3%	90.4%	1.42	1.07	1.88	0.015

Table 11. PMC Core Indicators

Indicators	Descriptive Analysis		Regression Analysis			
	Listeners	Non-Listeners	aOR	Lower CI	Upper CI	p-value
Do you believe that modern contraceptives are safe and effective?	81.7%	80.6%	1.25	0.92	1.70	0.159
Do people in your community believe that there are health and economic benefits to having a smaller family?	93.4%	92.1%	1.12	0.91	1.37	0.275
Do you agree that daughters are equally valuable as sons?	91.7%	91.6%	0.97	0.74	1.27	0.84
Do you believe that men and women should share work and responsibilities equally in the family?	77.9%	79.5%	0.92	0.76	1.10	0.36

Table 12. Impact on FP (Sinalamba)

Indicators	Descriptive Analysis		Regression Analysis			
	Listeners	Non-Listeners	aOR	Lower CI	Upper CI	p-value
Do you know where to go to ask questions about or receive family planning services?	83.6%	87.3%	0.69	0.51	0.92	0.013
Do you think family planning is important enough that you will go to a clinic for services?	94.1%	92.4%	1.50	0.90	2.50	0.123
Does your spouse/partner support the use of family planning to delay or avoid pregnancy?	43.2%	35.6%	1.94	1.21	3.11	0.006
Are you using modern contraceptive methods to delay or avoid a pregnancy? (now or in past year)	62.7%	60.6%	1.11	0.89	1.38	0.361
If no, do you plan to use a modern contraceptive method in the future to delay or avoid a pregnancy?	15.7%	15.4%	1.11	0.76	1.62	0.599

Indicators	Descriptive Analysis		Regression Analysis			
	Listeners	Non-Listeners	aOR	Lower CI	Upper CI	p-value
If yes, do you plan to continue to use a modern contraceptive method to delay or avoid a pregnancy?	13.3%	13.2%	0.96	0.27	3.41	0.947
Do you believe you can determine your family size?	89.2%	89.3%	0.84	0.57	1.22	0.362
What is a good reason for a couple to space their children by using a family planning method?	-	-				
Children's education	44.1%	47.6%	0.81	0.66	1.00	0.048
Health of the baby	73.6%	70.5%	1.12	0.90	1.41	0.304
Health of the mother	37.5%	40.9%	0.86	0.69	1.07	0.167
Other	0%	0%				
Don't know/Refused	0%	0%	-	-	-	

Table 13. Impact on Nutrition, Newborn and Child Development, and Maternal and Child Health (ONLY AMONG WOMEN WHO GAVE BIRTH IN THE 12 MONTHS PRECEDING THE SURVEY) (Sinalamba)

Indicators	Descriptive Analysis		Regression Analysis			
	Listeners	Non-Listeners	aOR	Lower CI	Upper CI	p-value
Do you know where to go to ask questions about or receive postnatal services for you or your child?	76.1%	89.8%	0.31	0.09	1.01	0.053
After your last birth, did you receive postnatal services for yourself or your child?	82.6%	88.6%	0.68	0.22	2.11	0.503
Do you know where to go to ask questions about or receive support related to breastfeeding?	84.8%	86.3%	0.91	0.28	3.02	0.879
Does your community support exclusive breastfeeding until 6 months?	76.1%	76.1%	0.50	0.14	1.85	0.302
Does your spouse/partner support exclusive breastfeeding until 6 months?	84.8%	83.0%	0.44	0.10	1.92	0.273
If the child is under 6 months old, do you believe you can exclusively breastfeed until 6 months?	41.3%	27.3%	4.29	0.33	56.49	0.269
If the child is over 6 months old, did you exclusively breastfeed until 6 months?	41.3%	55.7%	0.83	0.19	3.69	0.811

Table 14. Impact on SGBV (Sinalamba)

Indicators	Descriptive Analysis		Regression Analysis			
	Listeners	Non-Listeners	aOR	Lower CI	Upper CI	p-value
To what extent do you agree with the following statement: “People in my community think that any form of SGBV is unacceptable.”						
Agree/Strongly Agree	83.4%	82.1%	1.12	0.85	1.47	0.427
Neutral	16.9%	17.9%	-	-	-	-
Do people in your community intervene and try to stop cases of SGBV?	85.1%	81.5%	1.37	1.03	1.83	0.032
Do people in your community expect you to intervene and try to stop cases of SGBV?	70.8%	67.4%	1.20	0.95	1.51	0.130
Do you make joint decisions with your partner/spouse on the purchase of major household items?	95.9%	82.1%	0.71	0.33	1.53	0.378

Table 15. Impact on Youth HIV Prevention (Sinalamba)

Indicators	Descriptive Analysis		Regression Analysis			
	Listeners	Non-Listeners	aOR	Lower CI	Upper CI	p-value
Are you aware of some of the risky behaviors related to acquiring HIV?	97.2	96.7%	1.12	0.62	2.01	0.704
What are some of the risk behaviors related to acquiring HIV?	-	-				
Having multiple partners	61.0%	52.8%	1.31	1.06	1.62	0.013
Not using a condom	45.2%	31.3%	0.97	0.78	1.19	0.741
Having unprotected sex	70.5%	73.4%	0.92	0.73	1.17	0.507
Other	<0%	<0%	-	-	-	-
Do you support the use of condoms to prevent spread of HIV?	95.1%	94.6%	1.14	0.71	1.84	0.592
Do you know where to go to source condoms?	98.2%	96.8%	1.51	0.76	3.00	0.235
Do you know where to go to receive HIV prevention and counseling services?	96.7%	95.4%	1.36	0.80	2.31	0.255
Do you believe that others in your community use condoms to prevent HIV?	91.4%	92.9%	0.74	0.48	1.13	0.165
Do you believe you can access male or female condoms if you need them?	92.3%	93.4%	0.77	0.51	1.18	0.229

Indicators	Descriptive Analysis		Regression Analysis			
	Listeners	Non-Listeners	aOR	Lower CI	Upper CI	p-value
Do you discuss HIV-risk with your spouse/partner/ friend/relatives?	89.0%	83.9%	1.45	1.06	2.00	0.021

Table 16. Impact on Girls' Education and Early Marriage (Sinalamba)

Indicators	Descriptive Analysis		Regression Analysis			
	Listeners	Non-Listeners	aOR	Lower CI	Upper CI	p-value
Do you believe that the education of young girls benefits families?	99.3%	99.2%	0.93	0.30	2.84	0.894
Do people in your community believe that girls' education is important?	98.5%	98.7%	1.12	0.45	2.84	0.804
Do you intend to enroll (or keep your daughter enrolled) in school? [Among those with school-age daughter(s)]	79.9%	97.5%	0.71	0.30	1.66	0.424
Do people in your community believe it is good for a girl to finish school before marrying?	95.2%	95.3%	0.90	0.56	1.44	0.660
Do you intend to wait until your daughter finishes her education before she marries?	99.1%	98.9%	0.67	0.16	2.73	0.572

Table 18. Impact on Malaria Prevention and Treatment (Sinalamba)

Indicators	Descriptive Analysis		Regression Analysis			
	Listeners	Non-Listeners	aOR	Lower CI	Upper CI	p-value
How many insecticide-treated mosquito net does your household have?	38.4%	39.5%	-	-	-	-
How many pregnant women slept under insecticide-treated mosquito net the previous night?	13.6%	19.6%	-	-	-	-
How many children under the age 5 slept under insecticide-treated mosquito net the previous night?	42.2%	48.4%	-	-	-	-
How often do you sleep under an insecticide-treated mosquito net?	-	-	0.88	0.67	1.17	0.383
Do you believe you can access an insecticide-treated mosquito net if you need them?	58.1%	55.0%	1.22	0.99	1.52	0.068

Table 19. Impact on Civic Engagement and Covid-19 Testing (Sinalamba)

Indicators	Descriptive Analysis		Regression Analysis			
	Listeners	Non-Listeners	aOR	Lower CI	Upper CI	p-value
Did you vote in the last year's General Elections?	74.4%	70.7%	1.06	0.82	1.37	0.658
Do you believe you can become civically engaged if you want to register to vote?	93.5%	94.4%	0.83	0.53	1.29	0.402
Do you believe you can become civically engaged if you want to register your child at birth?	91%	91%	0.96	0.67	1.38	0.810
Do you believe you can become civically engaged if you want to support women's participation in politics/ government?	91.0%	91.1%	0.86	0.59	1.24	0.415
Do you know where to go to get tested for covid-19?	96.0%	95.7%	1.07	0.63	1.81	0.800

Table 20. PMC Core Indicators (Sinalamba)

Indicators	Descriptive Analysis		Regression Analysis			
	Listeners	Non-Listeners	aOR	Lower CI	Upper CI	p-value
Do you believe that modern contraceptives are safe and effective?	90.5%	89.8%	1.07	0.74	1.55	0.712
Do people in your community believe that there are health and economic benefits to having a smaller family?	86.2%	83.4%	1.08	0.79	1.47	0.631
Do you agree that daughters are equally valuable as sons?	96.7%	97.2%	0.78	0.44	1.39	0.399
Do you believe that men and women should share work and responsibilities equally in the family?	82.1%	81.7%	0.94	0.72	1.23	0.644

APPENDIX C – BROADCAST SCHEDULE

The table below presents the broadcast partners, coverage, and date of final broadcast for *Kwishilya* and *Sinalamba*.

Table A1. Radio Serial Drama (RSD) Broadcast Partners and Locations

Broadcaster	Province	District	Drama	Date of Final Broadcast (2022)
Serenje Radio Station	Central	Serenje	Kwishilya	30.09.22
Mpika Radio Station	Muchinga	Mpika	Kwishilya	30.09.22
Mkushi Radio Station	Central	Mkushi	Kwishilya	30.09.22
KNC Radio Station	Central	Kabwe	Kwishilya	30.09.22
Radio Luswepo	Northern	Mbala	Kwishilya	30.09.22
Oblate Ilesli Radio Station	Western	Mongu	Sinalamba	30.09.22
Bangwela Radio station	Luapula	Samfya	Kwishilya	30.09.22
Luapula Radio Station	Luapula	Nchelenge	Kwishilya	30.09.22
Lwansase Radio Station	Northern	Luwingu	Kwishilya	30.09.22
Radio Yangeni	Luapula	Mansa	Kwishilya	30.09.22
Isoka Radio Station	Muchinga	Isoka	Kwishilya	30.09.22
Radio Lyambai	Western	Mongu	Sinalamba	30.09.22
Tuta Radio	Luapula	Mansa	Kwishilya	30.09.22
Chete Radio Station	Muchinga	Nakonde	Kwishilya	30.09.22
Radio Mano	Northern	Kasama	Kwishilya	30.09.22
Muchinga Radio	Muchinga	Chinsali	Kwishilya	30.09.22
Lukulu Radio Station	Western	Lukulu	Sinalamba	30.09.22

APPENDIX D – KWISHILYA STORYLINE SUMMARIES

Whole Drama Brief Synopsis

Kwishilya (“Over the Horizon”) is a radio serial drama that shows the lives of different characters residing in four neighboring semi-urban and rural areas. The areas are Chumbu, Mwendapole, Chilye and Mwendapole. Throughout the course of 156 episodes (Four(4) years and four(4) months in drama time) Four storylines address Gender Based Violence, Family Planning, Nutrition and HIV.

The storylines are centered on the following transitional characters.

1. Chansa a 29 year old male who is torn between abusing his wife as a form of discipline or using appropriate methods of communication in order to resolve differences.
2. Memory a 23 year old young lady trying to navigate her way through the temptations, struggles and lessons of relationships.
3. Katoloshi a 29 year old male who is faced with the question whether he should have more children or consider Family Planning.
4. Nsama a 27 year old married woman who after having a child is faced with the task of ensuring that the child is properly fed.

Chansa’s Story (GBV)

Chansa used to live well. He had a decent job with a wife and son. This changed when he lost everything and had to move to the village. For some time now, he has been trying to adjust to life in the village and constantly assures his wife that all will be restored with time. Trouble starts when his wife finds a job and he starts to feel less of a man, with time, this develops into surges of jealousy and insecurity. Through all this, his best friend tries to steer him into the direction of “You need to discipline her, and she will fall in line”. On the other hand, his loving elder sister Nachilindi strongly discourages any form of physical, verbal or sexual abuse. How will Chansa navigate his way out of this predicament he faces with a wife he loves so much?

Memory’s Story (HIV)

Memory is a very beautiful 22-year-old young lady, she is focused and has firm ambitions about becoming a success. She starts off with a stable boyfriend who she loves, and he loves her but her beauty starts to draw the attention several men each coming with varying temptations. After a few financial struggles with the boyfriend, Memory’s temptations intensify, and this is not helped by her sister-in-law Peggy who encourages her to capitalize on this attention and make the most of her beauty. However, her HIV positive close friend Musonda uses her experience to caution Memory about the dangers of succumbing to the temptations of multiple partners. Will Memory give in to the temptations?

Nsama (Nutrition)

Nsama loves children. She absolutely adores them. This love grew even more after she suffered the tragic circumstance of a painful miscarriage during her first pregnancy which came at a time she was longing for her baby to arrive. Fortunately for her, she gets pregnant again and this time she delivers a wonderful baby. She is now faced with a very key question. How will she ensure that this baby is raised in the best possible way. She is torn. Will she follow the traditional beliefs of her neighbor and friend Felistus or does she listen to her close friend Mwenya who uses her experience to help Nsama with informed information on the proper nutrition for her child?

Katoloshi's Story (Family Planning)

Katoloshi has been through a lot, over the past five(5) years his temper would get the better of him to the extent that he would hit his wife. After a series of unfortunate events including his incarceration, Katoloshi is a changed man. He loves his wife dearly now and always resolves conflict in a controlled manner. All is well until his mother suggests that this may be time to have more children, his wife does not think this is such a good idea, with time, the conversation shifts to the use of Family Planning. His intrusive mother will not allow any talk of such "modern medicines" she points out the local beliefs and consequences. Meanwhile, Katoloshi's best friend firmly stands by how Family Planning will be beneficial for Katoloshi and his family by stressing the aspects of the mother's health and spacing. How will Katoloshi navigate his way out of this one?

APPENDIX E – SINALAMBA STORYLINE SUMMARIES

Brief Synopsis of the Serial Drama

Siñalamba (Breaking Barriers) is a radio serial drama that shows the lives of different characters living in three distinct settings of urban, peri-urban and rural. These settings include Nandunga, Mutuya and Kanangelelo as indicated in the grid above. The people in these settings know each other and visit one another.

The main drivers of the storylines are the transitional characters:

Kamungoma, a 25-year-old man who has just relocated from the city to the rural Nandunga setting is now faced with trying to be what the rural people call “a real man.” He does not have any child yet (which is one of the main characteristics of a “real man” in the rural areas), and thus he is under pressure to be a real man, and to make sure his “town” wife gets to learn the proper way of giving a man respect and how to behave as a married woman.

Sepo, an 18-year-old girl, followed her elder sister to Nandunga and is finding life in the rural setting to be difficult. She decides to leave her elder sister to go to Kanangelelo to take a job found for her by her old school friend Sibupiwa. While there, she learns exactly what her friend Sibupiwa does (white collar prostitution). Pressured with poverty but still wanting desperately to continue her education, she has to make a decision: either to start doing what her friend is doing or not.

Liyemo, a 17-year-old girl, survived an attempt by her father (Mayamba) to marry her off at an early age in her native village of Nandunga. Now, she has been brought to Mutuya to stay with her uncle Sikwelembe and attend school. She is in grade 10. She wants to have a boyfriend like her cousin Lumenyo, who has a lovely girlfriend Zwelo. Of all people, she falls deeply in love with Nyungano, the ex-convict. Is she going to sleep with him without protection? Does she know how to protect herself from unplanned pregnancy? Is she going to be in a position to negotiate for condom use, and or get to know how to use Contraceptive Methods to prevent unwanted pregnancy? The details are in Liyemo life story.

Nyambe, a 30-year-old man, just relocated from his father’s village in Nyengo to live with his mother Sakubita in Nandunga. He knows nothing about good nutrition for children and pregnant women. Nyambe wants to have more children. He sees family planning as detrimental to having a big family. He came under a lot of pressure after his first three children were taken away from him because he was not the real father. He trusts his mother’s advice when it comes to the right food for children and expectant mothers, but perhaps she is not giving the best advice?

APPENDIX F – KWISHILYA EVALUATION TOOL

Consent Script

Read this aloud and go to the next screen. The consent questions will appear after you read through the whole script.

Introduction: Good morning/afternoon. My name is [NAME OF ENUMERATOR]. Thank you for taking the time to talk with me. I am working with Pragma Consultancy collaboration with Population Media Center-Zambia. We are doing a survey to find out what people know, think and do about family planning, nutrition, gender-based violence, and youth HIV prevention.

Purpose: Results from this survey will help us to learn how well our programs are working in Zambia and also to plan better programs to improve health in Zambia.

Procedures: Your household was selected together with 4800 other households to take part in this survey randomly or by chance, much like picking an orange out of a basket without looking. If you agree to participate in this survey, you will be interviewed face-to-face and the interview will last about 30 minutes. We will ask you to choose a place where we can talk in private. To protect your privacy, your name will not appear on any study materials. The answers we collect from you will not be shown to anyone outside of the study team.

Risks/Discomfort: The only risk to participating in this survey is that some questions may make you uncomfortable. If some questions make you uncomfortable you do not have to answer them. You can just tell me you don't want to answer. We will not use your name or other personal information to avoid harm or embarrassment to you as a study participant.

Benefits: There is no direct benefit or any monetary compensation for your participation in this study. However, the information we collect will help develop better programs and health services for people in Zambia.

Voluntary participation: Your participation in this study is purely voluntary and you have the right to withdraw at any time without any penalty. If you choose to opt out of the study at the beginning or before completion, this data will be destroyed and will not contribute to the final analysis. You are free to accept or decline to participate in this study.

Data management: We are not collecting names, phone numbers, addresses or other personal information; however, we are recording the location of each interview. After data collection is complete, PMC will delete the location data. No personal information will be kept. Only PMC will have access and use of the data, which will be used for this study and possibly for future studies.

Questions: This study has been reviewed and approved by ERES Converge. I am going to give you contact information in case you have any questions about the study in the future. The contact information is for Population Media Center Zambia (PMC-Z) and Pragma Consultancy.

[DO NOT READ] Give the interviewee paper with contact name(s) and phone number(s).

Remember, you can ask any questions you have at any time. [FOR MINORS] There are some questions that you may find too difficult, irrelevant or not appropriate for you to answer. Please feel free to indicate so and such questions will be skipped.

Question Group 1 – Consent

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
enum	1.1	[DO NOT READ] Select your name from the list below	Select One [Enumerator names]	Can be programmed into survey during enumerator training
consent1	1.2	We are only able to interview people who are between the ages of 15 and 49 years old. Can you confirm you are in the range? Later I will ask for your exact age. <i>NOTE: Respondents must be between the ages of 15-49. If they are not, ask if you can interview someone in the household who is in that age range.</i>	Select One No Yes	No -> 13.2
consent2	1.3	Do you live in this household? <i>Note--there is no "don't know" or "don't want to answer" option for this question. We can only interview people who are sure that they live in this household.</i>	Select One No Yes	No -> 13.2
consent3	1.4	Do you agree to participate in this survey? <i>Saying "yes" means that you agree that 1) Information about the study has been read to you, and 2) You have been given time to comprehend the information. Also, 3) You have been given an opportunity to ask questions. 4) You voluntarily consent to participate in the study. [FOR MINORS] 5) Your guardian has also provided assent (in addition to your consent) for you to participate in the study.</i>	Select One No Yes	No -> 13.2

Survey

Each section below has a PMC variable code which must be used in the final dataset, as well as a number (#) for reference during survey writing, editing, and training. Only the questions and answers will appear on the mobile device while using KoBoCollect.

Question Group 2 – Survey Information

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
loc1	2.1	[DO NOT READ] Select the Province and District you are in	Select One [Province, District] Central Province, Serenje District Luapulo Province, Samfya District Muchinga Province, Luapula District Northern Province, Kasama District	Admin Level 1 & 2
loc2	2.2	Enter the locality name for the Enumeration Area.	Open-ended	Admin Level 3
hh_num	2.3	[DO NOT READ] Enter the number of the household (household ID)	Integer	
res	2.4	[DO NOT READ] Select Residence of the District you are in	Urban Rural	-> 3.1

Question Group 3 – Demographics

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
d1_sex	3.1	Can you please confirm your sex?	Select One Female Male Don't Know (888) Don't want to answer (999)	Answers 888 and 999 are to be included for all optional questions (3.1 onwards)
d2_age	3.2	How old were you at your last birthday? <i>Ages should be between 15-49 for women and 15-59 for men, however you can use</i>	Integer	Enter '888' for don't know; '999' for doesn't want to answer.

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
		<i>888 for 'don't know' and 999 for 'don't want to answer'</i>		
d3_lang	3.3	What language do you normally speak with your family at home?	Select One Bemba Nyanja Tonga Kaonde Lozi Lunda Luvale English	
d4_educ	3.4	What is your highest level of education?	Select One None Some primary Primary complete/some secondary Secondary complete Tertiary	
d5_mar	3.5	What is your relationship status?	Select One Single/Never Married Living Together (But not Married) Married Divorced/Separated Widowed	
d6_rel	3.6	What religion do you follow?	Select One Christian Islam Traditional Other	
d6_rell	3.6a	Specify the "other" religion you follow:	Text field	
d7_child	3.7	How many children have you (or your partner) given birth to? Enter 0 if they have no children. If it is a minor and	Integer (must be positive number)	If >=1 -> 3.8 If 0 -> 5.1

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
		does not want to answer, enter 999.		
d8_infant	3.8	Are any of your children 12 months old or younger?	Select One No Yes	If No ->5.1 If Yes ->3.9
d9_birth	3.9	How old is your youngest child (in months)?	Integer (must be positive number)	

Question Group 4 – Nutrition, Newborn, and Child Development, and Maternal and Child Health sub-theme

[Only for women who gave birth in the 12months preceding the survey]

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
mch1	4.1	Do you know where to go to ask questions about or receive postnatal services for you or your child?	Select One No Yes	Knowledge
mch2	4.2	After your last birth, did you receive postnatal services for yourself or your child?	Select One No Yes	Behavior
nut1	4.3	Do you know where to go to ask questions about or receive support related to breastfeeding?	Select One No Yes	Knowledge
nut2	4.4	Does your community support exclusive breastfeeding until 6 months? <i>Define EBF as giving only breastmilk and no other food or liquid</i>	Select One No Yes	Descriptive Norm
nut3	4.5	Does your spouse/partner support exclusive breastfeeding until 6 months?	Select One No Yes	Descriptive Norm
nut4a	4.6a	If the child is under 6 months old, do you believe you can exclusively breastfeed until 6 months? <i>Reminder EBF is giving only breastmilk and no other food or liquid</i>	Select One No Yes	Self-efficacy
nut4b	4.6b	If the child is over 6 months old, did you exclusively breastfeed until 6 months? <i>Reminder EBF is giving only breastmilk and no other food or liquid.</i>	Select One No Yes	Behavior

Question Group 5 – Family Planning (FP)

[READ] I'm now going to move into questions about family planning first. Then we'll talk about gender-based violence, nutrition, youth HIV prevention, girls' education, malaria prevention and treatment, civic engagement with a focus on adolescents, and covid-19.

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
fp1	5.1	Do you know where to go to ask questions about or receive family planning services?	Select One No Yes	Knowledge
fp2	5.2	Do you think family planning is important enough that you will go to a clinic for services?	Select One No Yes	Attitude
fp3	5.3	[For those Married/Living with Partners] Does your spouse/partner support the use of family planning to delay or avoid pregnancy?	Select One No Yes	Descriptive Norm
fp4	5.4	Are you using modern contraceptive methods to delay or avoid a pregnancy? You can be using them now or any time in the past year.	Select One No ->5.5a Yes ->5.5b	Behavior
fp5a	5.5a	If no, do you <i>plan</i> to use a modern contraceptive method in the future to delay or avoid a pregnancy?	Select One No Yes	Intention
fp5b	5.5b	If yes, do you <i>plan</i> to continue using a modern contraceptive method to delay or avoid a pregnancy?	Select One No Yes	Intention
fp6	5.6	Do you believe you can determine your family size?	Select One No Yes	Self-efficacy
fp7	5.7	What is a good reason for a couple to space their children by using a family planning method? <i>DO NOT READ OUT RESPONSE CATEGORIES. MULTIPLE RESPONSES POSSIBLE</i>	Select Multiple Children's education Health of baby Health of mother Other (specify) Don't Know/Refused	Attitude

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
fp7a	5.7a	Specify the "other" good reason for a couple to space their children by using a family planning method:	Text field	

Question Group 6 – Sexual and Gender-Based Violence (SGBV) (Early Marriage sub-theme is only addressed in Sinalamba)

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
sgbv1	6.1	To what extent do you agree with the following statement: “People in my community think that any form of SGBV is unacceptable.” [READ THE RESPONSE OPTIONS OUT LOUD]	Select One Strongly agree Agree Neither agree nor disagree Disagree Strongly Disagree	Injunctive Norm
sgbv2	6.2	Do people in your community intervene and try to stop cases of SGBV?	Select One No Yes	Descriptive Norm, can disaggregate by sex
sgbv3	6.3	Do people in your community EXPECT YOU to intervene and try to stop cases of SGBV?	Select One No Yes	Injunctive Norm, can disaggregate by sex
sgbv4	6.4	Do you make joint decisions with your partner/spouse on the purchase of major household items?	Select One No Yes	Behavior

Question Group 7 – Youth HIV Prevention

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
yhiv1	7.1	HIV is the virus that can lead to AIDS. Are you aware of some of the risky behaviors related to acquiring HIV?	Select One No -> 7.3 Yes ->7.2	Knowledge
yhiv2	7.2	What are some of the risk behaviors related to acquiring HIV? [Select all that apply. DO NOT READ RESPONSES OUT LOUD.]	Select Multiple Having multiple partners	Knowledge

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
			Not using a condom Having unprotected sex Other/Specify Don't Know	
yhiv2a	7.2a	If Other, specify some of the risk behaviors related to acquiring HIV:	Text field	
yhiv3	7.3	Do you support the use of condoms to prevent spread of HIV?	Select One No Yes	Descriptive Norm
yhiv4	7.4	Do you know where to go to source condoms?	Select One No Yes	Knowledge
yhiv5	7.5	Do you know where to go to receive HIV prevention and counseling services?	Select One No Yes	Knowledge
yhiv6	7.6	Do you believe that others in your community use condoms to prevent HIV?	Select One No Yes	Descriptive Norm
yhiv7	7.7	Do you believe you can access male or female condoms if you need them?	Select One No Yes	Self-efficacy
yhiv8	7.8	Do you discuss HIV-risk with your spouse/partner/ friend/relatives?	Select One No Yes	Behavior

Question Group 8 – Subthemes: Girls' Education, Malaria Prevention and Treatment, Adolescent Civic Engagement, Covid-19

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
ged1	8.1	Do you believe that the education of young girls benefits families?	Select One No Yes	Attitude
ged2	8.2	Do people in your community believe that girls' education is important?	Select One No Yes	Descriptive Norm
d10_daught	8.3	[FILTER BY 3.7 = Yes] Do you have a daughter?	Select One No ->8.5	Demographic

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
			Yes ->8.4	
ged3	8.4	Do you intend to enroll (or keep your daughter enrolled) in school?	Select One No Yes	Behavior
mal1	8.5	How many insecticide-treated mosquito net does your household have?	Integer Number____	Behavior If none ->8.12
mal2	8.6	How many pregnant women slept in your household the previous night?	Integer Number____	Behavior If none ->8.8
mal3	8.7	[FILTER 8.6 > 0] How many pregnant women slept under insecticide-treated mosquito net the previous night?	Select One Number	Behavior
mal4	8.8	How many children under the age of 5 slept in your household the previous night?	Integer Number____	Behavior If none ->8.10
mal5	8.9	[FILTER 8.8 > 0] How many children under the age 5 slept under insecticide-treated mosquito net the previous night?	Select One Number	Behavior
mal6	8.10	How often do you sleep under an insecticide-treated mosquito net?	Select One Never Rarely (1x/week or less) Sometimes (2-3x/week) Most nights (4-5x/week) Always (more than 5x/week)	Behavior
mal7	8.11	Do you believe you can access an insecticide-treated mosquito net if you need them?	Select One No Yes	Self-efficacy
civ1	8.12	Did you vote in the last year's General Elections?	Select One Not eligible No Yes	Behavior

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
Civ2	8.13	Do you believe you can become civically engaged if you want to register to vote?	Select One No Yes	Self-efficacy
Civ3	8.14	Do you believe you can become civically engaged if you want to register your child at birth?	Select One No Yes	Self-efficacy
Civ4	8.15	Do you believe you can become civically engaged if you want to support women's participation in politics/ government?	Select One No Yes	Self-efficacy
cov1	8.16	Do you know where to go to get tested for covid-19?	Select One No Yes	Knowledge

Question Group 9 – PMC Core

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
core1	9.1	What is your ideal number of children? 888 for "don't know" and 999 for "don't want to answer"	Integer	
core2	9.2	What do people in your community think is the ideal number of children? 888 for "don't know" and 999 for "don't want to answer"	Integer	
core3	9.3	Do people in your community believe that there are health and economic benefits to having a smaller family?	Select One No Yes	
core4	9.4	Do you believe that modern contraceptives are safe and effective?	Select One No Yes	
core5	9.5	Do you agree that daughters are equally valuable as sons?	Select One No Yes	
core6	9.6	Do you believe that men and women should share work and responsibilities equally in the family?	Select One No Yes	

Question Group 10 – Listenership

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
lis0	10.0	Do you or your household own a radio, or do you have access to a radio? <i>If YES, choose the best option. The question is trying to understand if people have any radio in their life (answer choices 1, 2, 3, or 4) or if they do not (answer choice 5)</i>	Select One 1) Yes - I own a radio 2) Yes - My household owns a radio 3) Yes - I have access to a radio at my friend's house or other location 4) Yes, I listen to the radio on my phone 5) No - I do not own or have access to a radio	If No → 10.2
lis1	10.1	Are you able to choose what you listen to on the radio?	Select One No Yes	
lis2	10.2	Do you know about the radio serial drama called <i>Kwishilya</i> ? <i>This question asks if people know about or heard of Kwishilya.</i>	Select One No Yes	No -> 13.1
lis3	10.3	Have you ever listened to <i>Kwishilya</i> ? <i>This question asks if people ever listened to one or more episodes of Kwishilya</i>	Select One No Yes	No -> 10.7
lis4	10.4	Over the past year, how often did you listen to <i>Kwishilya</i> ? Choose the best answer from the list that I read to you. <i>This question asks how often people listened to Kwishilya</i>	Select One Twice a week (always) Once a week (usually) At least once a month (sometimes) Only a few times (rarely)	

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
lis5	10.5	What messages do you recall hearing in the drama? [DO NOT READ RESPONSES OUT LOUD]	Select Multiple Family Planning GBV HIV/AIDS Maternal and Child Health Malaria Nutrition Civic Engagement Early Marriage Other, specify Don't know Don't want to Answer	Other - >10.5a
lis5a	10.5a	Specify the "other" message you recall hearing in the drama:	Text field	
lis6	10.6	I'm going to read you a list of character names. Can you tell me which one was NOT a character in <i>Kwishilya</i> ? [READ OUT THE RESPONSES]	Katoloshi Bana Kalulete Musonda Memory Mofya	->11.1
lis7	10.7	Why didn't you listen to <i>Kwishilya</i> ? Select all the answers that apply	Select Multiple <i>Kwishilya</i> was not interesting/entertaining The broadcast time was not convenient I could not understand the language of the broadcast The audio quality was poor I did not know about the show I was told the show was not good	

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
			My friends or family don't like to listen to the show	

Question Group 11 – Program Feedback (Listeners Only)

[READ] I want to ask you a few questions about *Kwishilya* so the writers and producers of the show can improve other shows in the future.

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
kwis1	11.1	Was <i>Kwishilya</i> entertaining?	Select One No Yes	
kwis2	11.2	Who were your favorite characters in <i>Kwishilya</i> ?	Select Multiple [List characters] Bana Chipasha Bana Kalulete Bana Maggie/Moze Beatrice (Bee) Bonwell (Ba Molu) Boss Bupe CBD Danger Chansa Chaibela Cleo Felix Henry Kaluba Kasongo Katoloshi Memory	

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
			Musonda Mwango MK Mwenya Na Chilufya Nachilindi Nsama Peggy Samson Sukuntu	
kwis3	11.3	Were the stories in <i>Kwishilya</i> realistic and believable?	Select One No Yes	
kwis4	11.4	Did you tell your close friends or family about <i>Kwishilya</i> ?	Select One No Yes	
kwis5	11.5	Was <i>Kwishilya</i> broadcast at a good time for you to listen?	Select One No Yes	
kwis6	11.6	Do you have any feedback to give to <i>Kwishilya</i> producers and writers? I can record your comments.	Audio recording	-> 12.1

Question Group 12 – Stages of Change (Listeners Only)

For the last set of questions, I’m going to ask you to think about how the different storylines in *Kwishilya* worked together. That means Katoloshi ‘s story where he is faced with questions of whether he should have more children or consider Family Planning, Chansa ‘s story of abusing his wife, Nsama’s story on child nutrition and Memory’s story of struggles and lessons of multiple relationships. *Kwishilya* is intended to be an entertaining story that also provides different points of view to help the audience discuss and learn about important social issues. We don’t expect you to remember all of the details of the *Kwishilya* plot, so these questions about the drama as a whole. For each statement I’m going to read to you, there are five answer choices. They ask how influential *Kwishilya* was to you. You can tell me you 1) strongly agree, 2) agree, 3) neither agree nor disagree, 4) disagree, or 5) strongly disagree. If you don’t know the answer or don’t want to answer, that is OK. Just let me know.

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
soc1	12.1	<i>Kwishilya</i> made me aware of new social issues that I had never heard of before.	Select One SA, A, NAND, D, SD	Awareness/Pre-contemplation
soc2	12.2	<i>Kwishilya</i> helped me increase my knowledge on issues I was aware of.	Select One SA, A, NAND, D, SD	Knowledge/Contemplation
soc3	12.3	<i>Kwishilya</i> changed my attitudes about sensitive topics that affect my community.	Select One SA, A, NAND, D, SD	Attitudes/Contemplation
soc4	12.4	<i>Kwishilya</i> made me reflect on what people in my community consider normal.	Select One SA, A, NAND, D, SD	Descriptive Norms/Preparation
soc5	12.5	<i>Kwishilya</i> inspired me to do some things differently or make changes in my life.	Select One SA, A, NAND, D, SD	Behavior/Action
soc6	12.6	<i>Kwishilya</i> inspired me to make changes in my life and helped build my confidence to stick to those changes.	Select One SA, A, NAND, D, SD	Maintenance/Action

Question Group 13 – Conclusion

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
thanks	13.1	Thank you for participating in our survey. We appreciate your time!	None	END
earlyend	13.2	I'm sorry, but you are not eligible to participate in the survey. Thank you for your time!	None	END

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
geopoint	14.1	[DO NOT READ] Collect GPS coordinates of the interview location.	Geopoint [$\leq 5m$ accuracy]	

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
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*It can take 1-2 minutes to collect GPS coordinates.
While you are waiting, you can ask if they have any more questions about the survey.*

APPENDIX G – SINALAMBA EVALUATION TOOL

Consent Script

Read this aloud and go to the next screen. The consent questions will appear after you read through the whole script.

Introduction: Good morning/afternoon. My name is [NAME OF ENUMERATOR]. Thank you for taking the time to talk with me. I am working with Pragma Consultancy collaboration with Population Media Center-Zambia. We are doing a survey to find out what people know, think and do about family planning, nutrition, gender-based violence, and youth HIV prevention.

Purpose: Results from this survey will help us to learn how well our programs are working in Zambia and also to plan better programs to improve health in Zambia.

Procedures: Your household was selected together with 4800 other households to take part in this survey randomly or by chance, much like picking an orange out of a basket without looking. If you agree to participate in this survey, you will be interviewed face-to-face and the interview will last about 30 minutes. We will ask you to choose a place where we can talk in private. To protect your privacy, your name will not appear on any study materials. The answers we collect from you will not be shown to anyone outside of the study team.

Risks/Discomfort: The only risk to participating in this survey is that some questions may make you uncomfortable. If some questions make you uncomfortable you do not have to answer them. You can just tell me you don't want to answer. We will not use your name or other personal information to avoid harm or embarrassment to you as a study participant.

Benefits: There is no direct benefit or any monetary compensation for your participation in this study. However, the information we collect will help develop better programs and health services for people in Zambia.

Voluntary participation: Your participation in this study is purely voluntary and you have the right to withdraw at any time without any penalty. If you choose to opt out of the study at the beginning or before completion, this data will be destroyed and will not contribute to the final analysis. You are free to accept or decline to participate in this study.

Data management: We are not collecting names, phone numbers, addresses or other personal information; however, we are recording the location of each interview. After data collection is complete, PMC will delete the location data. No personal information will be kept. Only PMC will have access and use of the data, which will be used for this study and possibly for future studies.

Questions: This study has been reviewed and approved by ERES Converge. I am going to give you contact information in case you have any questions about the study in the future. The contact information is for Population Media Center Zambia (PMC-Z) and Pragma Consultancy. [DO NOT READ] Give the interviewee paper with contact name(s) and phone number(s). Remember, you can ask any questions you have at any time. [FOR MINORS] There are some questions that you may find too difficult, irrelevant or not appropriate for you to answer. Please feel free to indicate so and such questions will be skipped.

Question Group 1 – Consent

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
enum	1.1	[DO NOT READ] Select your name from the list below	Select One [Enumerator names]	Can be programmed into survey during enumerator training
consent1	1.2	We are only able to interview people who are between the ages of 15 and 49 years old. Can you confirm you are in the range? Later I will ask for your exact age. <i>NOTE: Respondents must be between the ages of 15-49. If they are not, ask if you can interview someone in the household who is in that age range.</i>	Select One No Yes	No -> 13.2
consent2	1.3	Do you live in this household? <i>Note--there is no "don't know" or "don't want to answer" option for this question. We can only interview people who are sure that they live in this household.</i>	Select One No Yes	No -> 13.2
consent3	1.4	Do you agree to participate in this survey? <i>Saying "yes" means that you agree that 1) Information about the study has been read to you, and 2) You have been given time to comprehend the information. Also, 3) You have been given an opportunity to ask questions. 4) You voluntarily consent to participate in the study. [FOR MINORS] 5) Your guardian has also provided assent (in addition to your consent) for you to participate in the study.</i>	Select One No Yes	No -> 13.2

Survey

Each section below has a PMC variable code which must be used in the final dataset, as well as a number (#) for reference during survey writing, editing, and training. Only the questions and answers will appear on the mobile device while using KoBoCollect.

Question Group 2 – Survey Information

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
loc1	2.1	[DO NOT READ] Select the District of Western you are in	Select One District 1 District 2	Admin Level 2
loc2	2.2	Enter the locality name for the Enumeration Area.	Open-ended	Admin Level 3
hh_num	2.3	[DO NOT READ] Enter the number of the household (household ID)	Integer	
res	2.4	[DO NOT READ] Select Residence of the District you are in	Urban Rural	-> 3.1

Question Group 3 – Demographics

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
d1_sex	3.1	Can you please confirm your sex?	Select One Female Male Don't Know (888) Don't want to answer (999)	Answers 888 and 999 are to be included for all optional questions (3.1 onwards)
d2_age	3.2	How old were you at your last birthday? <i>Ages should be between 15-49 for women and 15-59 for men, however you can use 888 for 'don't know' and 999 for 'don't want to answer'</i>	Integer	Enter '888' for don't know; '999' for doesn't want to answer.
d3_lang	3.3	What language do you normally speak with your family at home?	Select One Bemba Nyanja Tonga	

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
			Kaonde Lozi Lunda Luvale English	
d4_educ	3.4	What is your highest level of education	Select One None Some primary Primary complete/some secondary Secondary complete Tertiary	
d5_mar	3.5	What is your relationship status?	Select One Single/Never Married Living Together (But not Married) Married Divorced/Separated Widowed	
d6_rel	3.6	What religion do you follow?	Select One Christian Islam Traditional Other	
d6_rel1	3.6a	Specify the "other" religion you follow:	Text field	
d7_child	3.7	How many children have you (or your partner) given birth to? Enter 0 if they have no children. If it is a minor and does not want to answer, enter 999.	Integer (must be positive number)	If yes -> 4.1 If no -> 5.1
d8_infant	3.8	Are any of your children 12 months old or younger?	Select One No Yes	If No ->5.1 If Yes ->3.9
d9_birch	3.9	How old is your youngest child (in months)?	Integer (must be positive number)	

Question Group 4 – Nutrition, Newborn, and Child Development, and Maternal and Child Health sub-theme

[Only for women who gave birth in the 12months preceding the survey]

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
mch1	4.1	Do you know where to go to ask questions about or receive postnatal services for you or your child?	Select One No Yes	Knowledge
mch2	4.2	After your last birth, did you receive postnatal services for yourself or your child?	Select One No Yes	Behavior
nut1	4.3	Do you know where to go to ask questions about or receive support related to breastfeeding?	Select One No Yes	Knowledge
nut2	4.4	Does your community support exclusive breastfeeding until 6 months? <i>Define EBF as giving only breastmilk and no other food or liquid</i>	Select One No Yes	Descriptive Norm
nut3	4.5	Does your spouse/partner support exclusive breastfeeding until 6 months?	Select One No Yes	Descriptive Norm
nut4	4.6a	If the child is under 6 months old, do you believe you can exclusively breastfeed until 6 months? <i>Reminder EBF is giving only breastmilk and no other food or liquid</i>	Select One No Yes	Self-efficacy
nut4b	4.6b	If the child is over 6 months old, did you exclusively breastfeed until 6 months? <i>Reminder EBF is giving only breastmilk and no other food or liquid.</i>	Select One No Yes	Behavior

Question Group 5 – Family Planning (FP)

[READ] I'm now going to move into questions about family planning first. Then we'll talk about gender-based violence, nutrition, youth HIV prevention, girls' education, malaria prevention and treatment, civic engagement with a focus on adolescents, and covid-19.

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
fp1	5.1	Do you know where to go to ask questions about or receive family planning services?	Select One No Yes	Knowledge

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
fp2	5.2	Do you think family planning is important enough that you will go to a clinic for services?	Select One No Yes	Attitude
fp3	5.3	[For those Married/Living with Partners] Does your spouse/partner support the use of family planning to delay or avoid pregnancy?	Select One No Yes	Descriptive Norm
fp4	5.4	Are you using modern contraceptive methods to delay or avoid a pregnancy? You can be using them now or any time in the past year.	Select One No ->5.5a Yes ->5.5b	Behavior
fp5a	5.5a	If no, do you <i>plan</i> to use a modern contraceptive method to delay or avoid a pregnancy?	Select One No Yes	Intention
fp5b	5.5b	If yes, do you <i>plan</i> to continue using a modern contraceptive method to delay or avoid a pregnancy?	Select One No Yes	Intention
fp6	5.6	Do you believe you can determine your family size?	Select One No Yes	Self-efficacy
fp7	5.7	What is a good reason for a couple to space their children by using a family planning method? <i>[DO NOT READ RESPONSES OUT LOUD. MULTIPLE RESPONSES POSSIBLE]</i>	Select Multiple Children's education Health of baby Health of mother Other (specify) Don't Know/Refused	Attitude
fp7a	5.7a	Specify the "other" good reason for a couple to space their children by using a family planning method:	Text field	

Question Group 6 – Sexual and Gender-Based Violence (SGBV) and Early Marriage sub-theme

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
sgbv1	6.1	To what extent do you agree with the following statement: “People in my	Select One Agree	Injunctive Norm

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
		community think that any form of SGBV is unacceptable.” [READ THE RESPONSE OPTIONS OUT LOUD]	Somewhat agree Neither agree nor disagree Somewhat disagree Disagree	
sgbv2	6.2	Do people in your community intervene and try to stop cases of SGBV?	Select One No Yes	Descriptive Norm, can disaggregate by sex
sgbv3	6.3	Do people in your community EXPECT YOU to intervene and try to stop cases of SGBV?	Select One No Yes	Injunctive Norm, can disaggregate by sex
sgbv4	6.4	Do you make joint decisions with your partner/spouse on the purchase of major household items?	Select One No Yes	Behavior
em1	6.5	Do people in your community believe that it is good for a girl to finish school before marrying?	Select One No Yes	Descriptive Norm <i>Sinalamba Only</i>
d10_daught	6.6	[FILTER BY 3.7 = Yes] Do you have a daughter?	Select One No Yes	If No ->7.1
em2	6.7	Do you intend to wait until your daughter finishes her education before she marries?	Select One No Yes	Behavior <i>Sinalamba Only</i>

Question Group 7 – Youth HIV Prevention

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
yhiv1	7.1	HIV is the virus that can lead to AIDS. Are you aware of some of the risky behaviors related to acquiring HIV?	Select One No -> 7.3 Yes ->7.2	Knowledge
yhiv2	7.2	What are some of the risk behaviors related to acquiring HIV? [Select all	Select Multiple Having multiple partners	Knowledge

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
		that apply. DO NOT READ RESPONSES OUT LOUD.]	Not using a condom Having unprotected sex Other/Specify Don't Know	
yhiv2a	7.2a	If Other, specify some of the risk behaviors related to acquiring HIV:	Text field	
yhiv3	7.3	Do you support the use of condoms to prevent spread of HIV?	Select One No Yes	Descriptive Norm
yhiv4	7.4	Do you know where to go to source condoms?	Select One No Yes	Knowledge
yhiv5	7.5	Do you know where to go to receive HIV prevention and counseling services?	Select One No Yes	Knowledge
yhiv6	7.6	Do you believe that others in your community use condoms to prevent HIV?	Select One No Yes	Descriptive Norm
yhiv7	7.7	Do you believe you can access male or female condoms if you need them?	Select One No Yes	Self-efficacy
yhiv8	7.8	Do you discuss HIV-risk with your spouse/partner/ friend/relatives?	Select One No Yes	Behavior

Question Group 8 – Subthemes: Girls' Education, Malaria Prevention and Treatment, Adolescent Civic Engagement, Covid-19

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
ged1	8.1	Do you believe that the education of young girls benefits families?	Select One No Yes	Attitude
ged2	8.2	Do people in your community believe that girls' education is important?	Select One No Yes	Descriptive Norm

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
ged3	8.3	[FILTER BY d10_daught = Yes] Do you intend to enroll (or keep your daughter enrolled) in school?	Select One No Yes	Behavior
mal1	8.4	How many insecticide-treated mosquito net does your household have?	Select One 0 1 2 3 5 5+	Behavior
mal2	8.5	How many pregnant women slept in your household the previous night?	Integer Number_____	Behavior If none ->8.7
mal3	8.6	How many pregnant women slept under insecticide-treated mosquito net the previous night?	Select One Number Don't Know	Behavior
mal2	8.7	How many children under the age of 5 slept in your household the previous night?	Integer Number_____	Behavior If none ->8.9
mal3	8.8	How many children under the age 5 slept under insecticide-treated mosquito net the previous night?	Select One Number Don't Know	Behavior
Mal4	8.9	How often do you sleep under an insecticide-treated mosquito net?	Select One Never Rarely (1x/week or less) Sometimes (2-3x/week) Most nights (4-5x/week) Always (more than 5x/week)	Behavior
Mal5	8.10	Do you believe you can access an insecticide-treated mosquito net if you need them?	Select One No Yes	Self-efficacy
civ1	8.11	Did you vote in the last year's General Elections?	Select One Not eligible No Yes	Behavior

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
Civ2	8.12	Do you believe you can become civically engaged if you want to register to vote?	Select One No Yes	Self-efficacy
Civ3	8.13	Do you believe you can become civically engaged if you want to register your child at birth?	Select One No Yes	Self-efficacy
Civ4	8.14	Do you believe you can become civically engaged if you want to support women's participation in politics/government?	Select One No Yes	Self-efficacy
cov1	8.15	Do you know where to go to get tested for covid-19?	Select One No Yes	Knowledge

Question Group 9 – PMC Core

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
core1	9.1	What is your ideal number of children? <i>888 for "don't know" and 999 for "don't want to answer"</i>	Integer	
core2	9.2	What do people in your community think is the ideal number of children? <i>888 for "don't know" and 999 for "don't want to answer"</i>	Integer	
core3	9.3	Do people in your community believe that there are health and economic benefits to having a smaller family?	Select One No Yes	
core4	9.4	Do you believe that modern contraceptives are safe and effective?	Select One No Yes	
core5	9.5	Do you agree that daughters are equally valuable as sons?	Select One No Yes	
core6	9.6	Do you believe that men and women should share work and responsibilities equally in the family?	Select One No Yes	

Question Group 10 – Listenership

PM C Cod e	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
lis0	10.0	Do you or your household own a radio, or do you have access to a radio? <i>If YES, choose the best option. The question is trying to understand if people have any radio in their life (answer choices 1, 2, 3, or 4) or if they do not (answer choice 5)</i>	Select One 1) Yes, I own a radio 2) Yes, My household owns a radio 3) Yes, I have access to a radio at my friend's house or other location 4) Yes, I listen to the radio on my phone 5) No, I do not own or have access to a radio	If No → 10.2
lis1	10.1	Are you able to choose what you listen to on the radio?	Select One No Yes	
lis2	10.2	Do you know about the radio serial drama called <i>Sinalamba</i> ? <i>This question asks if people know about or heard of Sinalamba.</i>	Select One No Yes	No -> 13.1
lis3	10.3	Have you ever listened to <i>Sinalamba</i> ? <i>This question asks if people ever listened to one or more episodes of Sinalamba</i>	Select One No Yes	No -> 10.7
lis4	10.4	Over the past year, how often did you listen to <i>Sinalamba</i> ? Choose the best answer from the list that I read to you. <i>This question asks how often people listened to Sinalamba</i>	Select One Twice a week (always) Once a week (usually) At least once a month (sometimes) Only a few times (rarely)	

PM C Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
lis5	10. 5	What messages do you recall hearing in the drama? [Select all that apply. DO NOT READ RESPONSES OUT LOUD]	Select Multiple Family Planning GBV HIV/AIDS Maternal and Child Health Malaria Nutrition Civic Engagement Early Marriage Other, specify Don't know Don't want to Answer	Other - >10.5a
lis5a	10. 5a	Specify the "other" message you recall hearing in the drama:	Text field	
lis6	10. 7	I'm going to read you a list of character names. Can you tell me which one was NOT a character in <i>Sinalamba</i> ?	Mayamba Nyambe Kwalombota Libongani Nyungano	->11.1
lis7	10. 7	Why didn't you listen to <i>Sinalamba</i> ? Select all the answers that apply	Select Multiple <i>Sinalamba</i> was not interesting/entertai ning The broadcast time was not convenient I could not understand the language of the broadcast The audio quality was poor I did not know about the show I was told the show was not good	

PM C Cod e	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
			My friends or family don't like to listen to the show	

Question Group 9 – Program Feedback (Listeners Only)

[READ] I want to ask you a few questions about *Sinalamba* so the writers and producers of the show can improve other shows in the future.

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
sin1	11.1	Was <i>Sinalamba</i> entertaining?	Select One No Yes	
sin2	11.2	Who were your favorite characters in <i>Sinalamba</i> ?	Select Multiple [List characters] Akakandelwa (Aka) Beta Brenda Haakwebe Induna Stanimezi Kamungoma Libongani Liyemo Lumenyo Sikwelembe Lungowe (Lulu) Makabweka Mayamba Lishebo Mbaita Meamui	

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
			Mushitu Mutambelwa Mwenda Simushi Namakau Nambula Namukolo Njamba Nyambe Nyangano Sianga Petronella Sakubita Sepo Sibupiwa Sikwelembe Tabo Simushi Zwelo	
sin3	11.3	Were the stories in <i>Sinalamba</i> realistic and believable?	Select One No Yes	
sin4	11.4	Did you tell your close friends or family about <i>Sinalamba</i> ?	Select One No Yes	
sin5	11.5	Was <i>Sinalamba</i> broadcast at a good time for you to listen?	Select One No Yes	
sin6	11.6	Do you have any feedback to give to <i>Sinalamba</i> producers and writers? I can record your comments.	Audio recording	-> 12.1

Question Group 12 – Stages of Change (Listeners Only)

For the last set of questions, I'm going to ask you to think about how the different stories in *Sinalamba* worked together. That means Kamungoma's story about GBV, Sepo's and Sibupiwa's story about HIV, Liyemo's story on adolescent sexual reproductive health and girl child

education, and Nyambe’s story of family planning use and nutrition. *Sinalamba* is intended to be an entertaining story that also provides different points of view to help the audience discuss and learn about important social issues. We don’t expect you to remember all of the details of the *Sinalamba* plot, so these questions about the drama as a whole.

For each statement, I’m going to read you there are five answer choices. They ask how influential *Sinalamba* was to you. You can tell me you 1) strongly agree, 2) agree, 3) neither agree nor disagree, 4) disagree, or 5) strongly disagree. If you don’t know the answer or don’t want to answer, that is OK. Just let me know.

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
soc1	12.1	<i>Sinalamba</i> made me aware of new social issues that I had never heard of before.	Select One SA, A, NAND, D, SD	Awareness/Pre-contemplation
soc2	12.2	<i>Sinalamba</i> helped me increase my knowledge on issues I was aware of.	Select One SA, A, NAND, D, SD	Knowledge/Contemplation
soc3	12.3	<i>Sinalamba</i> changed my attitudes about sensitive topics that affect my community.	Select One SA, A, NAND, D, SD	Attitudes/Contemplation
soc4	12.4	<i>Sinalamba</i> made me reflect on what people in my community consider normal.	Select One SA, A, NAND, D, SD	Descriptive Norms/Preparation
soc5	12.5	<i>Sinalamba</i> inspired me to do some things differently or make changes in my life.	Select One SA, A, NAND, D, SD	Behavior/Action
soc6	12.6	<i>Sinalamba</i> inspired me to make changes in my life and helped build my confidence to stick to those changes.	Select One SA, A, NAND, D, SD	Maintenance/Action

Question Group 13 – Conclusion

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
thanks	13.1	Thank you for participating in our survey. We appreciate your time!	None	END

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
earlyend	13.2	I'm sorry, but you are not eligible to participate in the survey. Thank you for your time!	None	END

PMC Code	#	Question	Answers [constraint]	Skip Pattern (to #) or Notes
geopoint	14.1	[DO NOT READ] Collect GPS coordinates of the interview location. <i>It can take 1-2 minutes to collect GPS coordinates. While you are waiting, you can ask if they have any more questions about the survey.</i>	Geopoint [$\leq 5m$ accuracy]	