IMPACT EVALUATION OF THE FIRST-TIME PARENTS ACTIVITY

Baseline Report

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ACRONYMS

AGYW	Adolescent Girls and Young Women
ARM-R	Adult Resilience Measure-Revised
CCMG	Community conservation microfinance groups
CHW	Community health worker
DiD	Difference-in-differences
DRCHCO	District Reproductive and Child Health Coordinator
FGD	Focus group discussion
FP	Family planning
FTM	First-time mother
FTP	First-time parent
GBV	Gender-based violence
IPV	Intimate partner violence
IUD	Intrauterine device
KII	Key informant interview
MIHR	MOMENTUM Integrated Health and Resilience
MNCH	Maternal, newborn, and child health
PHE	Population Health Environment
PYD	Positive youth development
PSLE	Primary school leaving exam
RCH	Reproductive and child health
RSES	Rosenberg Self-Esteem Scale
RRE	Ruaha Rungwa Ecosystem
SRH	Sexual and reproductive health
STI	Sexually transmitted infection
STEP	Southern Tanzania Elephant Program
TDHS-MIS	Tanzania Demographic and Health Survey and Malaria Indicator Survey
USAID	United States Agency for International Development
WASH	Water, sanitation, and hygiene

YP2LE	YouthPower2: Learning and Evaluation

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EXECUTIVE SUMMARY

1. PURPOSE AND PROJECT BACKGROUND

The United States Agency for International Development (USAID) tasked YouthPower2: Learning and Evaluation (YP2LE) with conducting an impact evaluation of the First-Time Parents (FTP) program in the Ruaha Rungwa Ecosystem (RRE) of Tanzania. FTP conducts group sessions with first-time mothers (FTMs) that cover topics such as the importance of antenatal and postnatal health visits, breastfeeding, maternal mental health, family planning and contraception, gender relations within couples, and natural resource management and the relationship between the environment and human health. These group sessions are paired with routine home visits to participating households. FTP also holds a smaller number of group sessions separately with the partners of FTMs and their older female relatives (e.g., mothers, mothers-in-law, aunts).

FTP is one component of the broader Population Health and Environment (PHE) Activity implemented by MOMENTUM Integrated Health and Resilience (MIHR). The PHE activity is an integrated, multi-sectoral approach that combines conservation activities and natural resource management efforts, such as microfinance and climate-smart agriculture groups, with increased access to family planning (FP) services and maternal and newborn health services and education. Several PHE components (e.g., FTP, youth clubs, model household and village) incorporate elements from these sectors. FTP also adds elements related to the empowerment of young women and gender dynamics in relationships. MIHR selected 15 villages in the RRE (districts of Iringa and Mufindi) to implement the PHE Activity; these same 15 villages will also host the FTP component.

This baseline report serves to document the situation relating to a range of topics and indicators relevant to the impact evaluation in both treatment and comparison communities at a specific point in time—before the start of MIHR's program. This information will be useful in interpreting the results of the impact evaluation. It also enables the evaluation team to consider how and to what extent the treatment and comparison groups differ and what might be the methodological implications for the impact evaluation.

2. EVALUATION METHODOLOGY AND DESIGN

A difference-in-difference quasi-experimental methodology was selected for this impact evaluation. This approach relies on the creation of a comparison group, which consists of 26 villages in the neighboring, and untreated, districts of Makete and Njombe. These 26 villages were selected to be similar in size and other characteristics (e.g., proximity to natural parks) to the 15 villages where FTP will be implemented. This evaluation uses a mixed-methods approach, combining a baseline and endline survey of FTMs with qualitative data from 22 group discussions with expected FTP participants (or individuals similar to them in comparison communities) and from 31 individual interviews of key FP and MIHR activity implementation actors.

In treatment villages, to select individuals for data collection, the evaluation team relied on lists of FTMs, their partners, and older female relatives MIHR created through the work of community health workers (CHWs). All FTMs from MIHR's lists who could be found and who accepted to participate were surveyed, thus covering all 15 villages where FTP will be implemented. In comparison villages, the evaluation team

worked with CHWs to replicate the FTP eligibility screening to identify adolescent girls and young women (AGYWs) who would be eligible for FTP, were it to be implemented in these villages. In total, the team surveyed 457 FTMs from MIHR's lists in treatment villages (an 86% response rate) and completed 436 surveys with FTP-eligible AGYWs across the 26 comparison villages.

Qualitative data collection relied on a random sample of villages from both the treatment and comparison groups. The evaluation team randomly selected a total of six villages that were set to receive FTP (out of 15) and three comparison villages (out of 26). In the six treatment villages selected, the team organized group discussions based on the MIHR's lists and conducted interviews with CHWs who will be involved in FTP programming, as well as other implementation stakeholders active in these communities (e.g., FP doctors, district reproductive and child health coordinators). In the three comparison villages selected, the team included AGYWs identified for the survey in group discussions, along with young men and older women selected with the help of CHWs and community leaders. YP2LE conducted interviews with CHWs in comparison villages and the same set of stakeholders targeted in treatment villages.

3. FINDINGS

The findings presented here focus on the research questions and thematic areas of the evaluation, while occasionally mentioning important findings related to the implementation context.

3.1 SURVEY DEMOGRAPHICS

The average age of the FTMs surveyed was 21 years old and around 20 percent were pregnant at the time the survey was conducted. Approximately half of the FTMs were married, and the other half were single. A similar split was uncovered regarding education: Approximately half of the FTMs had started or completed primary school, while the other half had completed at least some education beyond primary school. Although groups or clubs focused on sexual and reproductive health (SRH) existed in some communities, very few FTMs reported participating in them. Differences between the treatment and comparison group for the demographic variables just discussed are typically minor and not statistically significant, with some exceptions discussed later.

3.2 CONTRACEPTIVE USE

Approximately half of (non-pregnant) FTMs were "currently doing something or using a method to delay or avoid getting pregnant" when surveyed. For this key outcome variable, only a very small and statistically insignificant difference exists between respondents in treatment and comparison communities. Survey results also indicate that respondents tended to overstate the extent to which they said they used contraceptives, reflecting a certain degree of social desirability bias.

Young people and FP actors all reported that a wide range of contraceptive methods was available in both treatment and comparison communities, with government health facilities serving as the primary source. Implants and injectables were the two most widely used contraceptive methods among FTMs. Intrauterine devices (IUDs) and sterilization were unpopular, while men often disliked male condoms and used them primarily as a sexually transmitted infection (STI) protection method.

These same government facilities also served as the principal FP education resource in these communities, with CHWs extending their reach into households. Nonetheless, gaps in FP education

existed. FTMs did not always receive instructions on how to use the contraceptive of their choice and nearly half said they had not been told about the associated side-effects. Overall, community members reported a positive attitude toward FP, resulting in part from previous efforts to educate the population on FP. The key reasons respondents cited for FP use included healthy birth spacing and the freedom to determine family size and the most suitable time to have each child.

That said, younger people, and especially younger men, had more negative attitudes about FP use and are viewed as more difficult to educate on the matter. Some religious groups were also found to forbid FP use or encourage the use of traditional methods. Concerns about the side-effects of contraceptives, whether medically accepted or founded on rumors (e.g., causing cancer or sterility), were a principal reason behind negative attitudes toward FP.

Neither treatment nor comparison communities had recently hosted large-scale campaigns to promote FP, except for occasional radio and TV programming. However, community-based education efforts (e.g., outreach in public spaces, schools, community meetings) CHWs and FP professionals led were widespread in both treatment and comparison communities. Respondents widely viewed these efforts as effective. Young women also commonly discussed family planning with their mothers and friends. Young women and men who had these conversations typically perceived them as helpful and informative. FTMs expressed high trust in SRH advice from CHWs, RCH doctors, nurses, teachers, and their family. On the other hand, a significant share of young men did not discuss this topic due to cultural factors, limited interest, or shyness.

3.3 SEXUAL AND REPRODUCTIVE HEALTH

Survey results show that FTMs are widely aware of certain key information about SRH (e.g., birth spacing), but that further education remains necessary. For example, around half of FTMs did not know women could get pregnant the first time they have sexual intercourse or that they could become pregnant again after birth even if they did not have their period yet. In this context, pre- and postnatal visits are an important opportunity to educate FTMs about pregnancy, FP, nutrition and the heightened danger to pregnant women and newborns of certain diseases, asl well as to test for STIs.

FTMs in both treatment and comparison communities generally reported good access to health facilities, which enabled nearly all of them to receive antenatal check-ups and care. A little over half of FTMs had their first antenatal check-up 3–6 months into their pregnancy, while most of the rest had it in the first 3 months. These results might be in part tied to the age of the sample—CHWs noted that adolescents tend to hide their pregnancy and might skip antenatal care. FTMs generally felt that SRH services' affordability, provider's attitudes, and the location of facilities were good or slightly less than good.

Nearly all FTMs gave birth in a health facility. Postnatal care was somewhat less prevalent than antenatal care. Nonetheless, around three-fourths of FTMs had a visit to check the health of their child, typically 5 days after delivery. These checks do not necessarily focus on the mother's well-being; more than half of FTMs did not report checks on their well-being. The support fathers offered FTMs, which FTP will target through men's groups, appeared overall insufficient. CHWs and older women in general were critical of the level of support in their community, while FTMs had a more mixed view.

3.4 LIVELIHOODS AND PARTICIPATION IN ENVIRONMENTAL CONSERVATION ACTIVITIES

Very few FTMs were employed, reflecting a lack of formal employment opportunities in communities. This was particularly pronounced in treatment group communities. Half of FTMs surveyed were self-employed and 30–40 percent were unemployed. The main challenges FTMs faced in earning money were (1) lack of time, skills, motivation, or financial capital to search for opportunities; (2) limited availability of employment opportunities; and (3) discrimination. Most employed and self-employed FTMs worked in agriculture or fishing as vendors or performing manual labor; both sectors can be challenging and problematic for pregnant women and new mothers.

Some of the types of conservation and livelihood-related activities that MIHR will develop already exist in both treatment and comparison areas. This includes activities related to climate-smart agriculture, forest scouts, and beekeeping groups. However, FTMs' participation in these activities was very low regardless of community treatment status. Therefore, there is an opportunity for the program to increase participation in these types of activities, even in contexts where they are already available.

3.5 YOUNG WOMEN'S EMPOWERMENT

FTMs typically did not have control over how the budget was spent in their household; only 43 percent of FTMs in comparison villages and 31 percent in treatment villages had full or shared control. This is one area where treatment and comparison groups show a statistically significant difference. A similar pattern emerged for health care decisions, although more women reported making decisions with their partners related to health care than regarding budget. Despite a lack of control in these decisions, the vast majority of FTMs were satisfied or very satisfied with the arrangement in place, either related to budget or health care decision-making. Only 17 percent of FTMs in the survey were neutral or dissatisfied when partners made health care decisions for them. Many CHWs and FP professionals felt that women could make independent health care decisions, showing a significant gap between perception and reality.

Limited empowerment and the influence of traditional gender roles is demonstrated in the division of household tasks—most often, women were the de facto party responsible for them. Very few FTMs reported having discussed the arrangements in place and the division of household tasks, when applicable, relied on traditional views of what constitutes tasks for men and women. Tolerance for intimate partner violence (IPV) was high among FTMs, particularly in certain scenarios, such as if a woman neglects the children, where approximately half of FTMs felt a husband was justified in hitting his wife. Arguing with one's husband and using FP without his knowledge justified IPV for approximately a third and a quarter of FTMs, respectively. Despite this broader context, established and validated scales used in the FTM survey to measure FTM's self-esteem and resilience showed them as high and very high, respectively.

4. IMPLICATIONS FOR THE EVALUATION

Survey data indicate that, overall, there are no major differences between treatment and comparison groups in terms of sociodemographic characteristics, access and features of the health systems, women's empowerment and, importantly, contraceptive use. The team did find some statistically significant differences for certain key variables, such as marital status, employment, and protective assets, although they are generally small in magnitude. Regardless, the difference-in-differences design does not require

that no differences between treatment and comparison villages exist at baseline; the proposed methodology should identify the treatment effect on the outcomes of interest.

In addition, the evaluation team found few signs that survey respondents in either the treatment or comparison group participated in programs like FTP, such as peer health education groups or activities similar to those featured in the broader PHE Activity (e.g., similar conservation activities, youth clubs). This is important because it indicates that MIHR's programming will provide access to activities that are either not available in these communities or are available but young women do not participate in them.

Similarly, the team did not find evidence that either treatment or comparison communities had been the setting of external campaigns (e.g., from NGOs or the government of Tanzania) focused on FP, SRH, or maternal and child health and nutrition that could contaminate the results of the evaluation. FP professionals and CHWs serving both treatment and control communities conducted interventions on these topics using similar approaches. The availability of radio and TV programming on these topics also did not appear to be widespread and was reported in just two treatment and two comparison villages.

INTRODUCTION

The United States Agency for International Development (USAID) tasked YouthPower2: Learning and Evaluation (YP2LE) with conducting an impact evaluation of the First-Time Parents (FTP) program in Tanzania. FTP conducts group sessions with first-time mothers (FTMs) that cover topics such as the importance of antenatal and postnatal health visits, nursing, maternal mental health, family planning (FP) and contraception, and gender relations within couples. These group sessions are paired with routine home visits to participating households. FTP also holds a smaller number of group sessions with the partners of FTMs and their older female relatives (e.g., mothers, mothers-in-law, aunts). FTP is one youth-focused component of the broader Population Health and Environment (PHE) Activity implemented by MOMENTUM Integrated Health and Resilience (MIHR). MIHR initiated the PHE activity, including FTP, in the Ruaha Rungwa Ecosystem (RRE) of Tanzania in the 2022–2023 project year (FY23), while continuing to implement this Activity in two other ecosystems within the country.

YP2LE selected consortium partner NORC at the University of Chicago to lead this evaluation and DataVision as the local data collection firm. The evaluation is designed to improve understanding of how FTP interventions contribute to youth outcomes, including knowledge, attitudes, and use of modern contraceptives, and empowerment of adolescent girls and young women (AGYWs). Additionally, through this evaluation, YP2LE will contribute to USAID's Positive Youth Development (PYD) Learning Agenda by providing evidence on two key Learning Agenda themes: (1) the impact of PYD programming in low- and middle-income countries, and (2) cross-sectoral impact of PYD programs.[1]

The YP2LE team collected baseline data for the evaluation in February–March 2023. This report summarizes the main baseline findings.

PROJECT BACKGROUND

MIHR's PHE Activity is an integrated, multi-sectoral approach that combines conservation activities and natural resource management efforts with increased access to FP services and maternal and newborn health services and education. The PHE intervention MIHR implements is combined with additional sector components, such as economic strengthening, life skills, healthy relationships, and gender-based violence (GBV) prevention.[2] The FTP component incorporates several of these elements to focus overall on improving FP, maternal, newborn, and child health (MNCH), and gender outcomes among young first-time parents.

Essentially, MIHR/Tanzania seeks to improve health and strengthen health resilience at multiple levels (individual, community, health services, and health systems) through a client-centered and sustainable model to increase demand and use for FP, while also enhancing broader health (MNCH, GBV, nutrition) and non-health (water, sanitation, and hygiene [WASH], environmental protection, gender equity, economic security, and individual and community resilience) outcomes. Given the importance of a

[1] The full Learning Agenda can be accessed here: https://www.youthpower.org/pyd-learning-agenda. The inclusion of PYD-related outcomes of interest addresses key questions under the theme of PYD programming impact in low- and middle-income countries. The focus on outcomes within multiple sectors will inform thematic questions under cross-sectoral impact of PYD programs.

[2] The specific sectors addressed in the context of MIHR's integrated programming are dependent on targeted community needs, local partnerships, resources, and capacity.

multisectoral approach in fostering resilience, MIHR/Tanzania partners with other stakeholders and local actors in implementation contexts to provide cross-sectoral programming that strives to improve resilience in a holistic way (e.g., integration of livelihoods and climate change programming). MIHR's programming focus relates to key themes identified in YP2LE's literature review of evidence-based community resilience interventions to promote health outcomes among youth.[3] Specifically, as noted in that report's recommendations, this evaluation seeks to assess effects of community resilience-building interventions on health-related outcomes among young people, an identified knowledge gap particularly for community resilience programming in low- and middle-income countries.

Activities that will take place in the RRE as a part of the PHE intervention package include:[4]

- **Model households/*bomas* and villages:** Households volunteer to model healthy and sustainable behaviors for others in the community based on a checklist of 22 PHE criteria.
- **Community conservation microfinance groups:** Micro-credit groups are established to provide participants with opportunities to save money and access loans to potentially start sustainable businesses and diversify income.
- **Climate-smart agriculture groups:** Groups provide training on agriculture practices that reduce run-off into lakes and produce higher yields for farmers.
- **Youth clubs:** Clubs are held in primary and secondary schools with a focus on creating awareness about teen pregnancy and encouraging students to engage with their environment (e.g., plant trees).

These PHE activities will contribute to building awareness and adoption of positive attitudes toward environmental protection, adoption of climate-smart agricultural practices, WASH behaviors, and positive and inclusive decision-making within families (i.e., between women and men) in relation to livelihoods, financial planning, and so on. These specific outcomes should contribute to improved livelihoods and greater participation in environmental conservation activities.

The PHE interventions will be implemented in 15 villages within the Iringa and Mufindi districts in RRE in partnership with Southern Tanzania Elephants Program (STEP) and local government authorities. MIHR will lead family planning and MNCH activities, and STEP will lead conservation activities.

FTP interventions will be added to PHE activities in all 15 villages. FTP interventions will focus on youth and provide information, services, and support to FTMs aged 15–24, their partners of any age, and other key influencers (e.g., mothers and mothers-in-law) primarily in MNCH, FP, and sexual and reproductive health (SRH). FTP participants will also receive information about larger PHE initiatives taking place in their communities.

FTP activities and interventions include:

[3] Evidence-Based Community Resilience Interventions to Promote Health Outcomes and Health-Seeking Behaviors Among Adolescents and Young Adults: A Systematic Literature Review | YouthPower. And brief: YP2LE Comm Resilience SysReview_Brief_0.pdf (youthpower.org)

[4] Final activities are based on MIHR's approved work plan for project year 3.

- Group sessions with FTMs that cover topics such as the importance of antenatal and postnatal health visits, nursing, maternal mental health, FP/contraception, parenting, and couples' relations; peer leaders will facilitate these sessions with the assistance of community health workers (CHWs)
- CHWs-facilitated male partner sessions that cover safe pregnancies and birth, gender relationships, and fatherhood
- CHWs-facilitated mother/mother-in-law groups that cover safe pregnancies and birth, PHE, and infant health and nutrition
- Regular home visits to FTP households conducted by CHWs

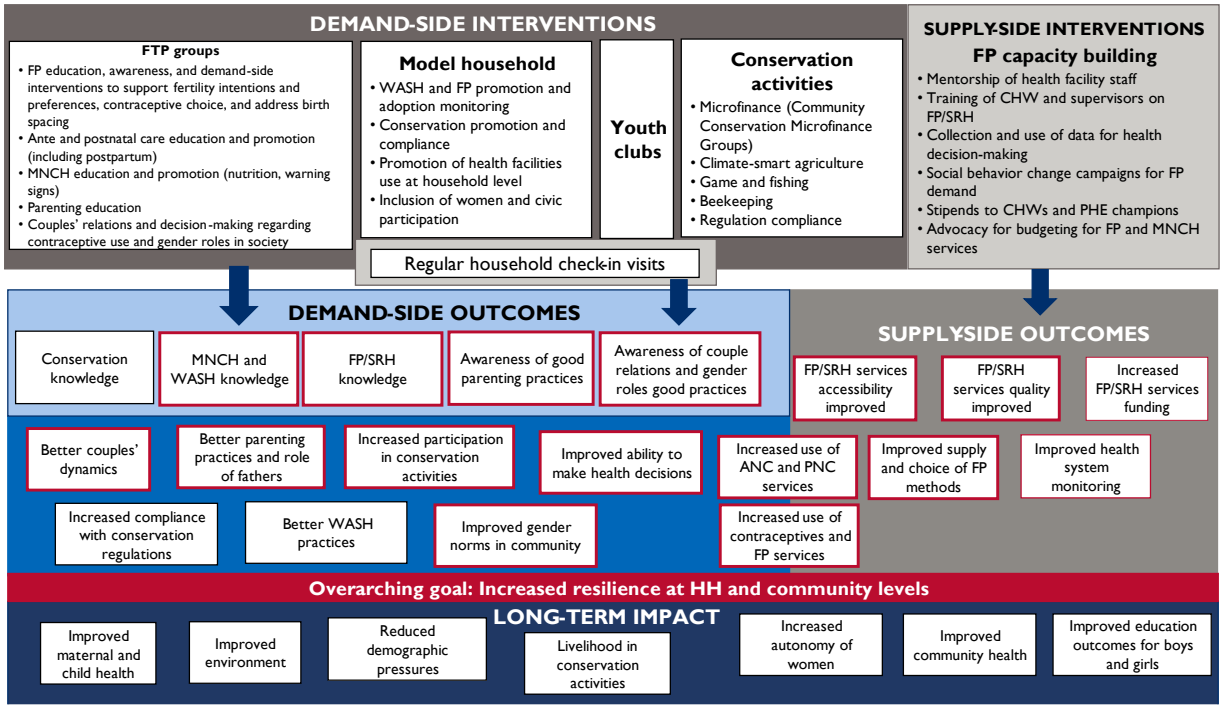
FTP programming aims to improve understanding and practice of key behaviors that will improve health, economic, and environmental outcomes for project participants and their families and communities. FTM groups, in particular, will support empowerment of young women by increasing their knowledge and agency when it comes to health-related decisions and FP. Overall, the outcomes of interest for the evaluation (the text boxes with red border in *Figure 1*) sit within the individual and household health resilience sphere, where MIHR seeks to have influence. Improvements in these outcomes at the individual and household level can then contribute to community health resilience.

CHWs play a significant role in programming success and are especially crucial to the FTP component. They are members of the community and can use their local knowledge and connections to facilitate identification and selection of FTP participants, according to program selection criteria. CHWs also conduct home visits and provide additional information, resources, and referrals for FTP program participants. CHW supervisors provide technical support to CHWs and peer leaders and participate in monthly review meetings. PHE activities are implemented with the support of PHE Champions and other relevant staff.

To provide a clearer and more complete view of the PHE Activity and the FTP component in the RRE, as outlined in MIHR's work plans and other documents, the evaluation team endeavored to create its own theory of change (TOC), which is shown in *Figure 1*.

The two top boxes of this TOC reflect demand- and supply-side interventions MIHR is undertaking as part of the PHE Activity (including FTP) in the RRE. Regular household visits by CHWs and PHE champions mediate and reinforce many of these interventions. The more immediate demand-side outcomes are shown in the box shaded in light blue. These immediate outcomes, in turn, drive the intermediate outcomes shown in the medium blue box below it. The gray box to the right of the immediate and intermediate demand-side outcomes represents the supply-side outcomes MIHR strives to produce through PHE. The text boxes with red border within the immediate and intermediate program outcomes boxes are outcomes of interest for this evaluation. The red box represents MIHR's ultimate program goal, which is out of scope for this evaluation. Finally, the dark blue box shows the long-term outcomes, which are driven by both demand-side and supply side outcomes above it and are also outside the scope for this evaluation.

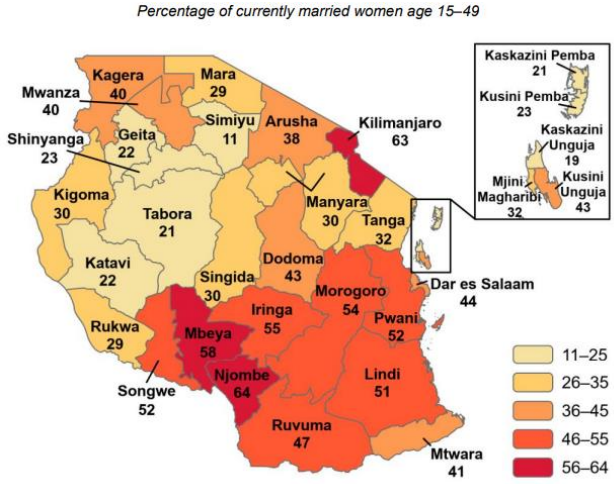
Figure 1. Evaluation team's theory of change for the PHE+FTP activity in RRE



CONTEXT

The 2022 Tanzania Demographic and Health Survey and Malaria Indicator Survey (2022 TDHS-MIS) provides valuable context on how the treatment and comparison regions for the evaluation of FTP compare to the rest of Tanzania in terms of health indicators such as FP and pregnancy. For example, the 2022 TDHS asked women about their use of modern and traditional methods of contraception. Modern methods include sterilization, condoms, and medications, and traditional methods include the rhythm and withdrawal methods. As *Figure 2* and *Table 1* demonstrate, a higher percentage of married women in Iringa and Njombe use contraceptive methods compared to the country as a whole. Notably, the data do not include information on contraceptive use by sexually active unmarried women at the regional level.

Figure 2. Contraceptive use by region



Source: 2022 TDHS-MIS

Table 1. Percent distribution of currently married women age 15-49, by contraceptive method used

REGION	ANY METHOD	ANY MODERN METHOD	ANY TRADITIONAL METHOD	N
Iringa	55.3	45.4	10.0	188
Njombe	63.7	55.5	8.2	128
Total	37.6	31.1	6.5	9,252

Furthermore, based on the 2022 TDHS-MIS, there is a higher percentage of married women who have their family planning demands satisfied and needs met in Iringa and Njombe than among total number of married women in Tanzania.

Table 2. Extent of met needs and satisfied demands related to family planning among currently married women age 15–49

REGION	UNMET NEED FOR FAMILY PLANNING	MET NEEDS	TOTAL DEMAND FOR FAMILY PLANNING	DEMAND SATISFIED	N
Iringa	12.7	55.3	68.0	81.4	188
Njombe	11.2	63.7	74.9	85.0	128
All Regions	21.0	37.6	58.6	64.2	9,252

EVALUATION OBJECTIVES AND RESEARCH QUESTIONS

The YP2LE team evaluated the impact of PHE+FTP on youth outcomes, specifically FTMs, compared to FTMs who did not participate in any PHE+FTP interventions. The objective of this evaluation was to provide USAID and other stakeholders, as well as the youth development community in general, with evidence on the impact of cross-sectoral interventions on target outcomes.

The evaluation will also inform the implementation of FTP groups. The evaluation sought to identify implementation challenges and lessons learned and use participants' views on program content to suggest improvements and identify barriers to key outcomes.

The research questions are:

1. Does integrated health programming improve the outcomes of participating youth compared to youth who do not participate? How and why?
    a. Does PHE+FTP have a significant positive impact on participating adolescent girls' and young women's use of modern contraceptives?
    b. What is the relationship between PHE+FTP participation and the following outcomes:
        i. Improved knowledge and attitudes related to SRH?
        ii. Improved livelihoods and participation in environmental conservation activities (climate smart agriculture, forest game scouts, beekeeping)?
        iii. Empowerment of young women, specifically decision-making within relationships, gender dynamics, and self-advocacy for health services?
2. According to beneficiaries, which PHE+FTP activity or selected few activities are the most responsible for any change observed in the outcomes of interest noted under question 1, and why?
3. What was the cost for USAID of treating one first time mother with (1) FTP only and (2) with FTP and PHE activities, as implemented by MIHR in the RRE? If the evaluation finds a statistically significant impact on modern contraceptive use, what was the average cost for (3) FTP only and (4) FTP and PHE, per FTM associated with such impact?

METHODOLOGY

YP2LE implemented a mixed-methods evaluation to study the impact and costs of PHE+FTP. The mixed-methods approach allowed for triangulation of findings across data sources and leveraged the strengths of each data collection method. For this evaluation, there were two waves of data collection: (1) a baseline in February–March 2023 and (2) an endline in late 2023 or early 2024. The specific timing of the endline data collection will largely be determined by the implementation schedule of FTP and an assessment of the most suitable time horizon to observe and measure the outcomes noted above.

Quantitative primary data from the baseline and endline surveys will be supplemented by qualitative primary data from key informant interviews (KIIs) and focus group discussions (FGDs). Qualitative data provide insight on questions that cannot be captured through survey data, such as more detailed information on how activities were implemented, how participants perceived and interacted with the program, and contextual factors (i.e., why and how events occurred) that may have affected implementation activities.

EVALUATION DESIGN

5.1 QUANTITATIVE DESIGN

This evaluation answers the counterfactual question: "What would have happened to program participants in the absence of the PHE+FTP intervention?" To observe the counterfactual, the ideal approach is to conduct a randomized control trial. In this case, it was not possible because the evaluation

team did not have control over the selection of communities that would receive the MIHR program. Consequently, the team approximated the counterfactual using a difference-in-difference (DiD) framework.

For a DiD approach to estimate the causal impact of a program, the key assumption is that in the absence of the program, the treatment group would observe the same change in the outcome of interest as the comparison group. This assumption is known as the parallel trends assumption. For example, for the outcome of contraceptive use, the parallel trends assumption implies that in the absence of treatment in the treatment villages, the use rate would change in the same magnitude between baseline and endline as in comparison villages.

We will conduct two waves of data collection for PHE+FTP, surveying the same respondents at baseline and at endline in treatment and comparison villages. To evaluate the program's impact on the outcomes of interest, we will compare results between the treatment and comparison groups, following:

$$y_{it} = \alpha + \beta D_i + \gamma E_t + \delta D_i E_t + u_{it} \qquad (1)$$

Where y_{it} measures the outcome of interest (e.g., contraceptive use) for participant *i* in period *t*; D_i is a dummy variable for treatment status; E_t is a dummy variable for the endline, u_{it} is an error term and α, $\beta, and\ \gamma$ are parameters to be estimated. The parameter of interest is δ, which captures the program's impact.

To enhance the robustness of the DiD model, we will use propensity score matching or entropy matching to increase the comparability of treatment and comparison groups at baseline, increasing the likelihood that the parallel trends assumption holds. For this, we will use as matching variables demographic and socioeconomic indicators collected in the baseline survey, including education level, age, and asset ownership, among others.

We will also conduct a cost effectiveness analysis. The evaluation team will work with MIHR to record sufficient cost detail—using USAID's cost reporting guidance[5]—to produce a detailed cost analysis.

5.2.1 SOCIAL DESIRABILITY BIAS

It is possible that respondents overstated the extent to which they used contraception due to social desirability. To address this issue, the survey included a list experiment on contraceptive use. In a list experiment, respondents are randomly divided into two groups (A/B). Both groups are presented with the same set of three or four statements of fact or opinion on innocuous topics (e.g., the government should invest more in hospitals). Group A also receives a statement on a potentially sensitive topic (e.g., I usually consume X type of drug), while group B only receives the common set of statements. Respondents from both groups are then asked to indicate the number of statements they believe to be true. Both groups should, on average, say that they agree with the same total number of innocuous statements, so the mean difference in the mean count between groups A and B approximates the fraction of people for which the item on contraceptive use is true.

[5] More information available at: https://www.edu-links.org/resources/usaid-cost-measurement.

5.2 QUALITATIVE DESIGN

Qualitative data were generated through a mix of FGDs and KIIs with both FTP participants and key stakeholders. The qualitative component provided important context for the discussed DiD design. At baseline, qualitative data served to supply better understanding of the implementation context (e.g., types of peer groups in the community, current perspective on SRH and health services more broadly, and current maternal and infant health and nutrition knowledge and practices), and gain insight into the challenges communities face regarding the outcomes of interest (e.g., contraception and health services more generally, gender norms, maternal and infant health and nutrition, etc.). At endline, the qualitative data will allow for comparing changes over time regarding attitudes and behaviors related to these topics, as well as provide an in-depth understanding of the implementation of FTP and PHE activities from different perspectives. For the qualitative component, questions explored the "why" and the "how" of changes observed, and covered perceived challenges, lessons learned, and recommendations. Qualitative data are also important to measure some outcomes other than contraceptive use (e.g., gender dynamics, knowledge of MNCH good practices, etc.).

5.3 INSTRUMENT DESIGN

The evaluation team developed a baseline FTM survey to collect data for estimating program impacts. The survey started with a demographics section to capture respondents' background characteristics. Then, it recorded information on outcomes of interest, including contraceptive use, livelihoods, personal finance, protective assets (e.g., self-esteem and self-efficacy), attitudes toward gender norms and SRH, and access to and satisfaction with the health system. The survey was translated into Swahili and the evaluation team it tested for functionality and fidelity before administering it face-to-face using tablets and the SurveyCTO software.

For baseline, the evaluation team developed a total of five qualitative instruments: three for FGDs with the three groups FTP targets—FTMs, male partners, and older female relatives—and two for individual interviews with CHWs and other stakeholders (e.g., clinicians, district reproductive and child health [RCH] coordinators, and head teachers). These baseline instruments explored the current challenges AGYW who are pregnant, new mothers, and their young children face; community and personal attitudes on SRH and other related topics; SRH resources in the community and their accessibility and suitability; the decision-making process related to FP and contraceptives; and gender norms and fatherhood.

Local youth researchers were involved in instrument development to ensure the relevance and clarity of questions, tailor questions to the local context, hear about their experience with and advice on broaching sensitive topics (e.g., SRH), and validate instrument translation.[6] They were also involved in piloting and were responsible for administering instruments, detailed in later sections of this document.

USAID and MIHR reviewed all data collection instruments.

[6] YP2LE identified youth researchers through existing networks in Tanzania and with support from local team members. Prior to being engaged, they were interviewed and participated in virtual meetings to discuss the project and provide initial feedback on data collection tools. Final revisions to tools prior to fieldwork were discussed as part of in-person data collection training with youth qualitative researchers. Survey enumerators were also primarily young women, who participated in a similar process to contribute to refining that instrument—the local firm identified and recruited these individuals.

5.4 SAMPLING STRATEGY AND DATA COLLECTION

The sampling strategy followed a two-stage approach: (1) selection of villages and (2) selection of participants. In late 2022, MIHR selected 15 villages for PHE+FTP treatment. The selection criteria MIHR followed were:

1. Villages located near the border of the Ruaha National Park
2. Presence of other implementing partners, in particular STEP
3. Presence of at least 45 eligible FTMs within the village (i.e., AGYW under the age of 25, who are pregnant for the first time or whose first child is under 2 years of age)

MIHR's implementation goal is to reach 30 FTMs per village to enable conducting two FTP groups of 15 participants each. However, a larger pool of potential participants is necessary to reach this goal, because some FTMs may leave the community, not be interested in the program, face family opposition for participation, and so on.

In early February 2023, MIHR started assembling lists of eligible women in the 15 treatment villages, which they shared with the evaluation team shortly afterwards. While the target was to identify 45 eligible women in each village, MIHR identified a total of 532, about 35 per village. In addition, the number of eligible women they identified was uneven across villages (i.e., significantly above or below this average in certain villages). In late February, DataVision completed interviews with 457 of these women, for a response rate of 86 percent. *Table 3* shows the data collection results.

Table 3. Data collection results in treatment villages

	COUNTS	%
Surveyed	457	86
Not eligible (age or parity)	27	5
Refused	21	4
Never answered	7	1
Other	20	4
Total	**532**	**100**

*Women were classified as non-eligible either because they were outside the target age range or had more than one child at the time of baseline. 'Other' includes cases of women that the survey team could not contact because they were not known in the village, were traveling, or provided addresses corresponding to abandoned dwellings, among other reasons.

For the comparison group, the original design aimed to survey 18 villages in the neighboring, and untreated, districts of Makete and Njombe. In each of these villages, the study team worked with the CHW(s) to assemble lists of AGYW following the same selection criteria. As data collection progressed, the evaluation team determined that it was not going to be possible to find at least 30 AGYW in each village to survey. USAID agreed with the recommendation to add 8 more villages for a total of 26 comparison villages. The study team conducted a total of 436 interviews in comparison villages.

Sampling for the qualitative component of this baseline leveraged the work and approach used for the survey. For qualitative data collection, the study team used the list of treatment (T) and comparison (C)

villages[7] and randomly selected six treatment and three comparison villages.[8] This imbalance was intentional, because we prioritized gaining an in-depth understanding of the context in treatment villages ahead of any intervention. Random selection of villages for qualitative data collection was conducted by district to make sure the proportion of villages selected reflects approximately the proportion of villages in each district in the overall study. The result of this selection process is shown in *Table 4*.

Table 4. Villages in the larger study and in the qualitative component by treatment status

GROUP AND DISTRICT	NUMBER IN OVERALL STUDY BY GROUP	NUMBER IN QUALITATIVE COMPONENT
Treatment	***15***	***6***
Iringa	9	4
Mufindi	6	2
Comparison	***18****	***3***
Njombe	10	2
Makete	8	1
Overall	***33****	***9***

* These numbers reflect the state of the comparison group when the sampling decision was made, prior to the addition of 8 extra comparison villages for the survey.

Qualitative data collection teams used information from MIHR and survey teams to schedule KIIs with CHWs in treatment communities and comparison villages, respectively. The teams recruited other KII respondents, namely district RCH coordinators, RCH doctors, and head teachers based, on discussions with CHWs and community leaders.

The process to recruit individual participants for the three types of FGDs varied slightly between treatment and comparison villages. In treatment villages, MIHR's lists included not only eligible women, but also their male partners and older female relatives, enabling the qualitative teams to recruit on that basis. In comparison villages, MIHR did not create a formal list of male partners and older female relatives, because this was not necessary for the survey and would have delayed survey data collection. Instead, the qualitative teams worked with CHWs and community leaders to replicate this process informally. This typically involved contacting these stakeholders a few days ahead of the expected arrival of the team to solicit their assistance.

Table 5 shows the number of KIIs and FGDs the team conducted in treatment and comparison villages at baseline. They held a total of 22 FGDs with an emphasis on women and men meeting MIHR's eligibility criteria. Other female relatives were given a lesser priority while maintaining a number for FGDs that provides a range of perspectives and experiences. Overall, FGDs had between 5 and 10 participants, but most featured between 7 and 9 participants.

[7] Only the original 18 comparison villages were part of the sample frame for qualitative data collection, as the decision to add comparison villages to the quantitative data collection occurred after a significant portion of the qualitative data collection had taken place.

[8] In addition, two backup treatment and one backup comparison villages were drawn ahead of time in case a replacement became necessary for any reason.

Among KII participants, CHWs were the most interviewed because they play an important role in promoting and providing access to FP in communities, know the population well through their regular interactions with them, and will be intensely involved in the FTP+PHE activities in treatment communities. In many communities visited, more than one CHW was active and whenever possible, two were interviewed separately. The team also prioritized health professionals and district coordinators to triangulate the information the CHWs provided and acquire expert perspectives. We also conducted a few KIIs with head teachers to better understand the context in schools, including how FP is treated in the curriculum and at school, the challenges youth face, resources available to youth, and how teachers view their role and support students. Teachers are also involved in the youth group component of the MIHR program, although at baseline, we did not know in which communities these groups will be organized. MIHR program documentation also suggests that teachers are useful allies in advocacy efforts to keep pregnant students and young parents in school.

Table 5. KIIs and FGDs conducted at baseline by type of stakeholder and treatment/comparison group

QUALITATIVE DISCUSSIONS FORMATS AND TARGET GROUPS	IRINGA AND MUFINDI (TREATMENT)	MAKETE AND NJOMBE (COMPARISON)	TOTALS
FGDs	**14**	**8**	**22**
Women eligible for FTP	6	3	9
Male partners	5	3	8
Older female relatives	3	2	5
KIIs	21	10	31
CHWs	11	3	14
District RCH coordinators	2	3	5
RCH doctors in charge	6	3	9
Head teachers	2	1	3

FINDINGS

6.1 SOCIODEMOGRAPHIC CHARACTERISTICS

KEY TAKEAWAYS

- Among the 993 FTMs surveyed (536 in treatment communities and 457 in comparison communities), the average age was 21 years old and around 20 percent were pregnant at the time the survey was conducted.[9] Approximately half of FTMs in both treatment and comparison communities were married and the other half were single.
- There are a few differences between treatment and comparison groups that are statistically significant, although they are small. Women in the treatment group owned slightly fewer assets and had marginally less education than women in the comparison group. In addition, women in the

[9] See more information on age distribution in Annex Table B.

treatment group were slightly more likely to be single than married, while the opposite was the case in the comparison group.

- Approximately half of the FTMs had started or completed primary school and the other half had started or completed secondary school or beyond. Not passing the primary school leaving exam (PSLE) and poverty were the principal reasons cited for leaving school, while less than 10 percent of respondents cited pregnancy and marriage.

Table 6 shows sociodemographic characteristics of the FTMs who participated in the survey, by treatment status. At the time the survey was conducted, in comparison villages, 21 percent of women were pregnant, while in treatment villages, this figure was 17 percent. In both groups, the average age of an FTM participants was 21 years. Very few women who participated in the survey were divorced; about half were single, and close to half were married. The survey also asked whether respondents had participated in one or more clubs or groups where they met to discuss topics related to reproductive health. As *Table 6* shows, very few women from the treatment or comparison groups participated in such groups or clubs. This is important because it shows that the FTP program will provide space for information and services that may not be readily available or accessed in these communities. The table also displays results for an index that summarizes household assets ownership. More specifically, the survey included questions about whether households owned a chair, a bed, a clock, a radio, a television, a computer, a bicycle, a motorcycle, a car/truck/boat, a refrigerator, a stove, and a plot of land. The index reflects the number of times respondents answered these questions affirmatively.

Table 6. Sociodemographic characteristics

	TREATMENT	COMPARISON	DIFFERENCE
Pregnant	**0.17**	**0.21**	**0.04**
Age	**21**	**21**	**0.03**
Marital Status			
Single	0.52	0.44	-0.09*
Married	0.47	0.55	0.08*
Divorced	0.00	0.01	0.01
Club participation	**0.02**	**0.00**	**-0.02****
Asset index	**3.71**	**4.29**	**0.58****
Currently enrolled	**0.00**	**0.00**	**0.00**
Education level			
Never schooled	0.04	0.03	-0.01
Primary (some or completed)	0.47	0.43	-0.05
More than primary	0.49	0.54	0.06
N	**457**	**536**	

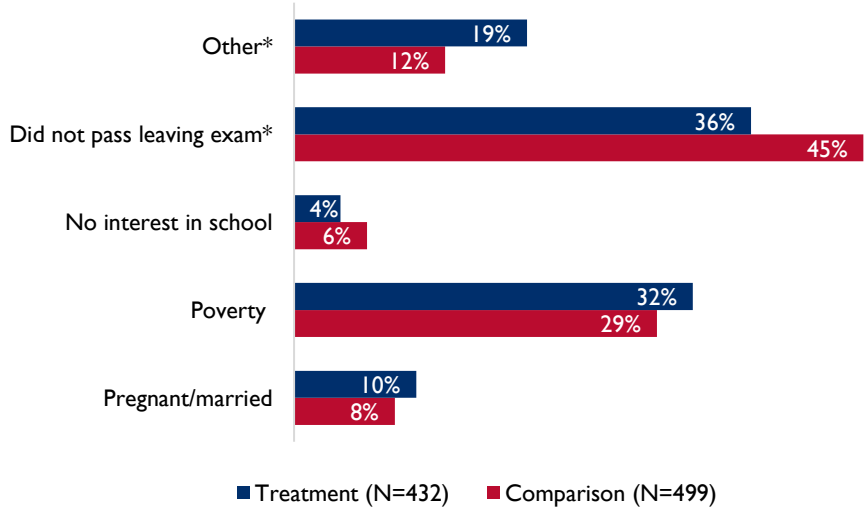
* p<.05 ** p<.01 *** p<.001

Only two respondents, both in comparison villages, were enrolled in school. In terms of respondents' education level, less than 5 percent had never attended school in both groups, 47 percent in the treatment villages and 43 percent in the comparison villages had some or completed primary school,

and 49 percent in the treatment villages and 54 percent in the comparison villages continued their education beyond primary school.

As *Figure 3* shows, less than 10 percent of women left school because they were pregnant or got married, both in treatment and comparison groups. The main reasons for leaving school were failing the PSLE, followed by poverty. There are no tuition fees for secondary school in Tanzania, so it may be a bit surprising that poverty is such a determinant of not attending school. However, tuition fees in secondary school were removed in Tanzania in 2016, meaning that some of the respondents finished primary school when secondary school fees still existed. Perhaps more importantly, there are other costs associated with attending school, including uniforms, materials, and opportunity cost.[10] Regarding the PSLE, this is likely the main reason youth are out of school in Tanzania. Students who do not pass the PSLE cannot enroll in secondary school, or repeat the exam, so failing the exam essentially means the end of their formal education. Out of 932,000 children that took the PSLE in 2019, 172,000 children did not pass. Only the differences between groups for "other" and failing the PSLE are statistically significant, as denoted by the stars in the corresponding labels.

Figure 3. Reasons for leaving school



Note: Sample sizes are lower than those in *Table 6* because respondents who had never been never in school, completed vocational or college, or were still in school, were not asked this question.

* p<.05 ** p<.01 *** p<.001

While the quantitative data did not show pregnancy as a main reason for leaving school, qualitative data highlight some of the challenges pregnant students may face in school. Pregnant students may be shamed by their peers, as well as their families. For example, a CHW in Kimande (T) stated that: *"Starting with psychological challenges, [pregnant students] are affected because ... the family may react*

[10] Opportunity cost represents the potential benefits that an individual (or organization) misses out on when choosing one alternative over another. In this case, the opportunity cost of attending school is primarily lost revenue from farming or other economic activities.

negatively and sometimes, their fellow students laugh at them. So, this may affect a pregnant student. They also can be regarded as a prostitute because they became pregnant while at school."

> *"There is not any parent who will be happy if her child become[s] pregnant at school, and under this circumstance, most parents tend to say that they are disowning the child or sending a child away from home and things like that." – Head Teacher, Idodi (T)*

Overall, sociodemographic characteristics indicate that respondents are relatively similar between treatment and comparison groups, although there are statistically significant differences in marital status and asset ownership. There is also a statistically significant difference for club participation, but even for the treatment group, the figure is very small. To control for these differences in observable characteristics, we will use DiD and matching methods to approximate FTP's causal impact on the outcomes of interest.

According to the 2022 TDHS-MIS, the percentage of surveyed women aged 15–19 who had ever been pregnant was 19.5 percent in Iringa and 25.5 percent in Njombe. Of all surveyed women aged 15–19, 22 percent had been pregnant.

6.2 IMPLEMENTATION CONTEXT – KEY CHALLENGES REPORTED FOR FTP TARGET GROUPS

KEY TAKEAWAYS

- Lack of resources and poverty are key challenges for both FTMs and pregnant women; this context has implications for nutrition for both mothers and children and FTMs' abilities to obtain care (e.g., transportation and cost of certain services) during and after pregnancy.
- Poverty and limited education in health-related topics contribute to the poor preparedness of soon-to-be and new mothers to taking on the role of motherhood.
- Both groups suffer, with some frequency, from being abandoned by the father of their child and from negative responses from families, which both exacerbate the lack of resources and the stress they already face.
- Lack of resources and limited education also affect young fathers and limit their ability and, at times, willingness to support their partner, which is a common expectation. Limited livelihood opportunities available in communities contribute to the departure of fathers, along with any legal and community repercussions they might face as a result of being responsible for a pregnancy.

6.2.1 CHALLENGES FIRST-TIME MOTHERS FACE

In both comparison and treatment communities, various study participants, including FTMs, young men, older women, RCH doctors, district reproductive and child health coordinators (DRCHCOs), and CHWs noted that FTMs had limited access to resources, such as clean water and nutrition, due to poverty. Many young FTMs do not complete school, according to an older woman in Makifu (T), and as a result, have limited economic opportunities. In addition,, if their partners abandon the young women, these challenges may be further exacerbated, according to multiple CHWs, FTMs, and older women. For example, a CHW in Malinzanga (T) said that "The first challenge is that once this girl is pregnant, when she gives birth, she is abandoned by the one who impregnated her. Therefore, the mother will struggle with nutrition and everything for her child." Multiple stakeholders such as FTMs and CHWs claimed that

unmarried mothers were more likely to be abandoned, although this phenomenon is not limited to women who are unmarried.

> *"The challenge is in knowing how to raise children. Young women have a child at an age when they still do not know how to manage their family. Therefore, what happens is [that] they fail to consider health, nutrition, and other important things about the child." – FTM FGD, Lupembe (C)*

According to FTMs in Lupembe (C), they felt unprepared for motherhood and believed that other young women felt the same way. Additionally, the FTMs in Lupembe (C) and men in Idodi (T) deemed that young mothers may lack the knowledge to care for their children, such as how and what to feed them, when the mother gives birth.

> *"Because it is [the mother's] first time having a child. They don't know a lot about how to take care of a child. For example, a child might be sick and the young mother doesn't know, especially those living alone or with their husbands/partners. Those living with their mothers can be helped by their elders." – Men FGD, Idodi (T)*

FTMs in Lupembe (C) noted that young women, in particular, were inexperienced in motherhood and needed resources such as health providers and family members to teach them how to care for their child. Further information on knowledge about how to care for children is in section 6.3 *below*.

6.2.2 CHALLENGES PREGNANT WOMEN FACE

In terms of access to health care, respondents reported multiple challenges pregnant women faced. Two older women and one CHW noted distance to health centers as a challenge for pregnant women. They also asserted that some women lacked access to the transportation necessary to access health care. Moreover, an older woman in Kimande (T) observed that pregnant women were more vulnerable to disease than to their non-pregnant peers and the distance to health centers made it more difficult for them to access other important health services, like vaccines.

Very young women may also have a harder time carrying a pregnancy because their bodies have not fully developed. Multiple respondents, such as CHWs, DRCHCOs, and community members, recognized that younger women may have smaller hips and their pelvises were not strong.[11] Additionally, a DRCHCO in Mufindi emphasized that due to their age, younger women had a higher likelihood of complications during pregnancy and delivery.

Costs to access health care is another challenge. A CHW in Idunda (C) mentioned that transportation costs to health centers may be high and other services, such as cesarean sections, were also expensive. More information on health care challenges is included in section 6.3 *below*.

According to a CHW and a man in one of the FGDs, pregnant women, like FTMs, also faced abandonment by their partners. As shown in *Table 4,* about half the surveyed sample were single, which suggests that abandonment is far from being a rare occurrence in these communities. Abandonment can cause complications with women's pregnancies, due to stress. Stress can also come from families responding negatively to their child's pregnancy. Men in Malinzanga (T) and a CHW in Ugenza (T) highlighted this challenge and the CHW stated that some families may expel their children from their home and make them live with their male partner's family instead.

[11] More information at: https://www.nytimes.com/2022/07/18/health/young-girls-pregnancy-childbirth.html.

Moreover, being pregnant in and of itself is a major source of stress, and according to older women in Kimande (T) and men in Idunda (C), this stress can contribute to poor nutrition and manifest itself in physical illness.

6.2.3 CHALLENGES FATHERS FACE

Respondents in both comparison and treatment communities reported finding work or livelihood activities to support a family as the biggest challenge first-time fathers face. An older woman in Malinzanga (T) noted that even if a man in her community were educated, he may still struggle to find work. Further, an older woman in Lupembe (C) and a man in Idunda (C) added that lack of economic opportunities may put a strain on relationships. For example, the older woman claimed that young men struggled to pay for their partners' health care expenses. Study participants did not mention how pregnancy affected male engagement in schooling.

> *"First, he marries at a young age and it's hard for him to sort stuff out. He doesn't give his wife money for food ... that is where quarrels arise between them ... Therefore, all in all, it's because of low capital." – Older Women FGD, Malinzanga (T)*

Multiple older women and FTMs stated that men who struggled financially may abandon their partners instead of helping care for their child. This issue was more common among partners who were unmarried. They reported that young men felt unprepared to take care of a family and did not want to take financial responsibility for their children. Additionally, an older woman in Lupembe (C) and a FTM in Ikangamwani (T) stated that men who have impregnated underaged girls may also flee out of fear of legal repercussions. The FTM in Ikangamwani (T) spoke from personal experience, because her partner fled their community to avoid arrest for having sex with her while she was still in school.

> *"After I gave birth to a child, my child's father ran away from home for fear of being arrested because he got me pregnant while I was in school." – FTM FGD, Ikangamwani (T)*

6.3 CONTRACEPTIVES

KEY TAKEAWAYS

- Approximately half of non-pregnant FTMs were "currently doing something or using any method to delay or avoid getting pregnant" when interviews were conducted. Only a very small and statistically insignificant difference exists between treatment and comparison communities in this regard.
- Women as a group tended to have a better attitude than men toward FP. Within these groups, AGYWs typically had more mixed views than their older peers, even if they were curious and willing to learn, whereas young men were viewed as the most negative and difficult to reach group on the subject. There was widespread agreement that the attitude in communities toward FP was much improved, largely due to CHWs' and FP professionals' education efforts.
- Regardless of sex, community members who had positive views of FP tended to cite healthy birth spacing and the freedom to determine family size and the most suitable time to have each child as key reasons for FP use.
- Reasons for a negative perspective on FP were somewhat more divided by sex. Those that were common to both sexes included fears around infertility or difficulties in getting pregnant at the

chosen time, fear of serious health problems (e.g., cancer), and concerns about typically rare but well-documented side-effects. Reasons specific to men involved fear that women would not stay faithful to them, a desire to have a large family relatively quickly, or fear that women's body or mood would be negatively affected. Women-specific reasons included concerns about how their periods would be affected, the health (weight and development) of future children, or difficult pregnancies and deliveries.

- Implants and injectables were the two most widely used contraceptive methods among FTMs. Community members, CHWs, and FP professionals indicated that IUDs and sterilization were unpopular. Men often disliked male condoms; they were primarily used as an STI protection method and more rarely, as an FP method because men preferred to shift the burden of FP to women.
- In both treatment and comparison communities, a range of family planning methods were widely available to community members who sought them, aside from occasional disruptions in supply chains affecting health facilities. Government health facilities are the principal source of contraceptives and the only continuously available source[12] for methods that require more involved interventions, such as implants, injectables, and IUDs. Male condoms are frequently distributed for free at health centers and sometimes at other specific locations in communities. They and the contraceptive pill are also available from pharmacies and routinely distributed by CHWs.
- In addition to being the most common location for community members to obtain FP methods, government health facilities are also the principal education resource for communities, with CHWs extending their reach into households. However, gaps in education provision remain. Nearly a third of FTMs reported not receiving explanations on how to use the contraceptive method of their choice, and approximately half of FTMs reported not being told about associated side-effects.
- Young women commonly discussed FP with their mothers and friends. A significant share of young men said they did not discuss this topic with family or friends due to cultural factors, limited interest, or shyness. Young women and men who had these conversations, typically viewed them as helpful and informative. FTMs expressed high trust in SRH advice from CHWs, RCH doctors, nurses, teachers, and their family. They "somewhat" trusted advice from friends and only trusted "a little" the advice of their peers more generally.
- No recent external campaigns to promote FP were reported in treatment or comparison communities, except for occasional radio and TV programming. However, community-based education efforts (e.g., outreach in public spaces, schools, community meetings) that CHWs and FP professionals led were widespread in both treatment and comparison communities. These efforts are widely viewed as effective.
- Most men and women reported that they had discussed the use of FP methods with their partner. Men were not always active participants but highlighted that they wanted to be informed. Men and women generally felt that these discussions went well and viewed positively the resulting decisions, even if they did not always use a modern contraceptive method. However, disagreements between partners regarding FP were a source of tensions in some relationships. These tensions can escalate

[12] In some communities, NGOs specialized in FP also provide these services on an occasional basis.

to anger or even physical aggression, leading some women to use contraceptives in secret, which can further anger men.

- Survey results indicate that respondents tended to overstate the extent to which they said they used contraceptives.

6.3.1 PERCEPTIONS SURROUNDING FAMILY PLANNING AND CONTRACEPTIVE USE

FGDs and KIIs provided some insight into the attitude of the broader communities where FTP will be implemented and those that serve as the comparison group for this study. Discussions with community members of different sexes and ages, FP professionals, CHWs, and other stakeholders painted a picture where most community members, in both treatment and comparison groups, have a generally positive attitude toward FP and the use of contraceptives, but with significant differences between certain groups and subgroups.

ATTITUDES AND PERCEPTIONS AMONG WOMEN

Virtually all stakeholders acknowledged that most women tended to have positive attitudes about FP and contraceptives, and women themselves confirmed this. Among the most cited advantages of FP were the recognized importance of birth spacing for the health of both the mother and the child; the ability to decide the timing of pregnancies from an economic and life stage perspective; and the ability to restrict fertility according to economic conditions.

Certain health professionals and CHWs highlighted that AGYW were likely to show less interest in FP and a more mixed attitude about the use of contraceptives than their older peers. Older women and some women eligible for the FTP program also shared this perspective. These different stakeholder groups independently identified a young woman's first pregnancy as a factor that positively influences younger women who have been opposed to or unsure of FP to ultimately practice FP. All stakeholder groups widely referenced a first pregnancy was as an event that facilitates repeated opportunities for women to receive education on FP and contraceptives when they visit the health center. A first pregnancy also exposes young women to the responsibilities and the potential economic penalties of having a child. A more rarely cited factor perceived to positively influence younger women's perceptions of FP was having single-parent status, typically because their male partners may abandon young women during or after their pregnancies. RCH doctors, CHWs, and older women often noted that young women remained very curious about the topic and willing to learn and engage in discussions. Further, despite the view that the subset of younger women had more mixed attitudes about FP, this group was reported as significant users of contraceptives, as illustrated by the quote below.

> *#3: "Young women like family planning, almost 80 percent of them are using [it]!"*
> *Moderator: "Okay, is there anyone with a different opinion?"*
> *All FGD participants: "No!"*
> *– FTM FGD, Idodi (T)*

Women who experienced significant side-effects from contraceptive use also reported \ negative views on FP. Although qualitative data collection uncovered a lot of rumors and false information about the health effects of contraceptives (e.g., infertility, cancer), some women, CHWs, and doctors noted that there could occasionally be complications and side-effects associated with contraceptive use. Some

issues also appear to be associated with non-compliance with instructions from medical professionals and health staff's errors in inserting certain contraceptive methods, such as IUDs.

ATTITUDES AND PERCEPTIONS AMONG MEN

Young men's own views regarding FP, contraceptive use, and the perceptions other community stakeholders had of young men's views on the subject indicated a more fractured and complex picture than the one outlined for women. Some young men, seemingly a slim majority, were supportive of FP and contraception. This trend is also aligned with perceptions women and FP actors had of men's views on the matter. Young men with a positive attitude saw the same advantages in FP as women, namely the flexibility to select a period of their lives when having a child is the most convenient or suitable and healthy birth spacing. Young women in a few different groups similarly noted that young men who had economic or educational ambitions were more likely to be open to the use of contraceptives.

> *"It's about awareness and knowledge. Some prefer to have more children because they are capable of taking care of them, others are not having more children because they won't be able to provide all of their needs. So, I think that's how it is." – Men FGD, Idodi (T)*

> *#6: "There are those [young men] who agree with family planning, and there are those who disagree. Those who agree are those who have economic goals. They believe that, if they use family planning, they will be able to manage their activities well and be able to carry out family responsibilities.*
>
> *#8: For those who use family planning methods, I think they are people who have goals, but also care about [the mother's] health." – FTM FGD, Ikangamwani (T)*

Men, women, and those providing communities with FP education and services highlighted a range of reasons for the negative perceptions of FP and contraceptive use among some men. These reasons included the fact that some men wanted many children and wanted them quickly, regardless of other considerations. During discussions, this was linked in part to the fact that men are not the ones carrying the burden of pregnancy and they are sometimes subjected to social pressures to have children. Other reasons entail concerns that contraceptives lead to infertility or difficulties conceiving, to women not remaining faithful to them, to serious health risks (in their view), and so on. Many of these concerns are discussed in more detail in the subsection below.

As illustrated in the quote below, young men occasionally also expressed concerns that those who promote the use of FP influenced or manipulated women, and a few seemed to consider their inclusion in related decisions as a bulwark against these influences.

> *"Women are very influenced by the organizations that promote family planning and this leads to the fact that they even forget to involve their partners when they reach the decision to use those methods." – Men FGD, Idunda (C)*

Men's occasional distrust of those in charge of educating the community about FP and dispensing contraceptives also took other forms. In one community, several young men blamed the nurses at the health center for not teaching FP effectively, which they said, had inhibited women's use contraceptives.

Discussions with FP actors and community members of both sexes suggest that difficulties started with men often lacking interest in learning about FP and contraceptive use or only being interested in learning about condoms, the single method that directly applies to them. A common refrain in discussions was that some men thought FP was primarily a women's issue, meaning they did not see the value in learning more about it. For example, older women in one community remarked that the few young men

who came to education events often did so primarily to take condoms. Young men were also sometimes viewed as being shy or fearful about FP and contraceptives, which could have roots in limited exposure to education on the subject.

Men's position and perceptions on FP and contraceptive use had implications not just for themselves, but also their female partners and both partners' parents, who might have to shoulder an extra burden of helping to raise the child. Young men were particularly singled out as a challenging group to reach on these topics, and certain communities, including Kimande in the treatment group, appeared to host to more men with negative or mixed views about contraceptive use.

> *"When young men see the health provider is very old, they are afraid to go and get the family planning method." – DRCHCO, Njombe (C)*

Nonetheless, there was widespread agreement that FP education efforts had been bearing fruits, as illustrated by the fact that a significant number of men were open to contraceptive use in all communities where qualitative data were collected. Even young men can demonstrate interest and ask questions when the context of the discussion supports their engagement (e.g., privacy, limited age gap between the educator and the youth). According to some CHWs, the value of having men attend pre- and post-natal visits at the health center was also particularly significant for men, because it presents an opportunity to educate them in a private setting and in a sustained manner over the course of the visits.

Regardless of their own views, young men repeatedly noted that they needed to be included in their partners' decisions to use contraceptives or at a minimum, to be informed on the matter by their partner. However, this is not always easy in practice. Young men and women, as well as CHWs and health professionals, regularly noted that disagreements between partners regarding contraceptive use and FP were a source of ongoing tensions in some relationships. These tensions have been reported to sometimes reach alarming levels, as discussed in more detail in sub-section 6.3.6 *below.*

Attitudes and perceptions among other groups

Besides differences between sexes in attitudes related to FP, discussions revealed that certain other groups—such as older individuals and those affiliated with certain religious groups— tended to have a more negative attitude toward these topics. However, it was also very common for community members and FP stakeholders to report that they did not feel there was much, if any, difference between groups.

For example, older community members were usually associated with having negative views on FP and contraception. One reason for this is that they have limited familiarity with modern contraceptives and FP because this was not something they had been exposed to until recently, if at all. As noted by a CHW in Kimande (T): *"Yes, especially elders say that since they were born, they have never used family planning methods, and their lives have been good, so why now use family planning."* They might also point to traditional methods prevalent when they were young, instead of modern methods. In addition, they may be used to larger families and might want younger community members to continue down this path.

> *"[…] Family planning came after globalization. I don't think my father [would] support me to have three children when he has 20 children …. So, there is a difference [between older and younger people], that's why you may find older persons have a two-year-old child, the following child is one year old, and his wife is pregnant again." – Men FGD, Ugenza (T)*

Even if older community members were no longer having children, these attitudes could affect younger community members. Younger men and women sometimes mentioned having discussions on FP with older members of the community and feeling like older community members meddled in younger community members' lives.

Another group identified as sometime harboring more negative attitudes toward FP are leaders and members of certain religious groups. Based on discussions, certain religious groups, including the Sabbatarians and Roman Catholics, outright disallow contraception use, whereas others merely encourage using traditional methods, such as the calendar method.

> *"There is a difference across religions, because some religions do not allow the use of contraception as they say it is a sin." – FTM FGD, Malinzanga (T)*

Beyond these groups, respondents reported herders, such as the Maasai, several times as harboring more negative views on FP. A CHW noted that their nomadic lifestyle and rigid patriarchal social system led by tribal elders made this group particularly difficult to reach and educate. Finally, traditional healers were also mentioned a couple of times as having negative views on FP topics.

> *"Most traditional doctors really discourage [the use of FP], however, there are not many in our area." – CHW, Kimande (T)*

EVOLUTIONS IN ATTITUDES AND PERCEPTIONS

Qualitative data suggest that the present attitudes toward FP and the use of contraceptives, however imperfect, are the result of great strides made in recent years in both treatment and comparison communities. More detail on the education efforts identified in study communities is provided in Section 6.3.5 below.

Health personnel, CHWs, DRCHCOs, and older women widely reported these improvements, which they principally attributed to systematic and sustained efforts to educate the population, and especially youth. An older woman in Kimande (T) noted, for example: "*[Perception about FP among young people] has changed because young people are being educated for the first time, they now understand how to use these methods.*"

A CHW in Ndulamo (C) also reported that the number of health facilities in the region had significantly increased, which helped both in terms of education and availability of contraceptives.

> *"Their [community members'] attitudes have now changed because of the education they have been receiving. In the past, it was so hard to get them to listen to anything about family planning. Women used to hide from their husbands that they were using family planning methods, but now they are comfortable to come and obtain the various [contraceptive] methods, and there are also some who come with their husbands!" – DRCHCO, Kimande (T)*

Older women in several communities pointed to the significant improvements in birth spacing as reflecting this trend, as shown in this example from Makifu (T): *"Yes, there are changes because nowadays a first child [is] able to take care of the next because [the parents] wait for the first child to grown up. But in the past, there was no child spacing; a woman could have a 6-month old child and be pregnant!"*

CONCERNS AND PERCEIVED RISKS OF USING MODERN CONTRACEPTIVES

FGD participants were asked about any concerns and problems associated with FP that they or their community had heard about and whether they believed them or not. The result is an extensive list, which mixes real, but typically rare, side-effects, potential education gaps, rumors, and misinformation. Interestingly, both men and women generally expressed concerns and did so at similar frequency. However, the concerns expressed vary somewhat by sex. Additionally, they cited some concerns more frequently and explicitly in relation to certain modern contraceptive method(s). The concerns and problems reported are listed here, ordered by how frequently they were mentioned.

Changes in menstrual cycle, such as longer menstruation periods or, more rarely, absence of periods. This concern was often cited in relation to injectables. Notably, changes in menstrual cycles are a known and documented side-effect of some hormone-based contraceptives, such as injectables,[13] implants,[14] and the progestogen-only pill.[15] FGD participants pointed to their own experience or examples in their community and, therefore, widely felt this was a real concern. However, some participants acknowledged that people in their community had had a variety of experiences in this regard, including many who did not have this issue, and noted that those with sustained issues should seek medical advice and could consider changing their FP method.

> *#9: "One problem is continuous bleeding."*
> *#4: "Many complain that they bleed a lot."*
> *– FTM FGD, Lupembe (C)*

Infertility or problems with getting pregnant after use, which emerged in various forms across both sexes. Some believed that contraceptive methods could cause permanent infertility due to damage to reproductive organs. Others expressed concerns that the contraceptive drugs staid in the body for a long time after ending its use, leading to an inability to conceive when desired and to uncertainty about one's fertility status. Infertility was one of the concerns community members commonly viewed as credible rather than rumors, and they often provided first-hand experiences or pointed out examples in their community.

> *#1: "Some say that, when family planning is used for a long time, one can become barren."*
> *Moderator: "Do you think these challenges are real or stories?"*
> *#4: "These problems are real."*
> *#2: "They are real."* *– FTM FGD, Idunda (C)*

Some of the examples provided suggest that people have unrealistic expectations about how quickly they could become pregnant again after stopping the use of certain contraceptives, especially injectables, which are commonly used. Respondents may not understand that injectable contraceptives may inhibit pregnancy for an extended period post discontinuation.[16]

> *Moderator: "Do you think these challenges are real or stories?"*

[13] See for example here.
[14] See for example here.
[15] See for example here.
[16] For example, it may take 6 months to a year for a woman to be able to become pregnant after using injectable contraceptives. See https://www.nhs.uk/conditions/contraception/contraceptive-injection/.

#3: "I think it's a lie because even I once used those methods and, after removing the implant, I stayed only 2 months and got pregnant."

– Older women FGD, Idunda (C)

A lack of education about the pros and cons of the different contraceptive methods available may also be at play. In a few cases, there were hints that community members may have misunderstood or misinterpreted the education they had received. For example, a woman in an FTM FGD in Kimande (T) noted: "*It's true according to what nurses tell us: injections cause infertility, and we believe them because they are more educated than us!"* This quote may indicate that the woman misunderstood the information the FP professionals had provided, confusing a potentially extended return-to-fertility period with long-term or permanent infertility. Alternatively, it might reflect a lack of training and expertise among some FP professionals.

Other examples from respondents indicate that they sometimes blamed any contraceptive use for women's inability to get pregnant when desired, despite there being no clinical evidence to support it. This concept is something that CHWs and RCH doctors said they wrestled with often, but that it could be difficult to counter these first-hand examples with medical studies when dealing with populations that have limited education. Individual cases may also be amplified and turn into misinformation and rumors.

Serious health problems. This concern came across in various forms, but was most often tied to cancer, although other serious problems were occasionally raised, such as sustained and severe pain or swelling of the stomach. We suspect this reflects a mix of amplification of known but rare side-effects of certain contraceptives methods and rumors and misinformation. This concern was associated with contraceptives in general but occasionally, also with specific methods, like IUDs or the pill. Both men and women reported this concern, which was the one community members most frequently considered untrue, reflecting results from past and present education efforts.

"I have heard, for example, those injections and pills can cause women to get cervical cancer." – Men FGD, Makifu (T)

Fear that women would not be faithful once they use contraceptives, as they did not need to fear becoming pregnant and had more time and freedom to interact with other men. Men were the primary force behind this concern, but women were widely aware of this position and some even shared it.

"You know most of us young men think that if a woman uses family planning and stays too long without being pregnant, automatically she is free to interact with other men […]. I am taking this opportunity to represent what my fellow young men have in their minds." – Men FGD, Idodi (T)

More commonly, they worried about their male partner leaving or divorcing them and the stigma in their community that results from this way of thinking, including being called or viewed as "prostitutes" for using or even inquiring about contraceptives. Several CHWs and doctors lamented this stigma and were actively working to counter it.

"Sometimes when you ask those young mothers why they don't use any family planning methods, they say that their partner sees them as prostitutes when using those methods." – RCH doctor, Ikangamwani (T)

Effects on future children and pregnancies. This includes damage to future children's health and development, and problems with delivery or the need to rely on cesarean deliveries. Although relatively rare, this concern was primarily expressed by women.

"Concern in the use of the IUD: […] many are afraid that you will spend some time without having a child or that the child will be harmed. That, if you give birth, the child will not gain weight at all." – FTM FGD, Idodi (T)

Effects on body shape or size. This concern was consistently raised by men about women, rather than women about themselves or their peers. Unlike other concerns above, very few who mentioned this concern claimed to have witnessed it among members of their community, although change in body weight could be a medically recognized side-effect of hormonal contraceptives.

"It might be true because it changes women's body. For example, someone was thin but after using implants, they became fat!" – Men FGD, Kimande (T)

Men were also the only group in discussions that noted concerns surrounding contraceptives reducing the attraction of women to their partner.

6.3.2 MEASURES OF CONTRACEPTIVE USE

The varied perceptions of FP and contraceptive use among community members can be contrasted with survey data about reported use of contraceptives among FTMs.

The survey asked respondents who were not pregnant whether they were currently using contraception. Specifically, the question was "Are you or your partner currently doing something or using any method to delay or avoid getting pregnant?" As *Table 7* shows, 48 percent in the comparison group and 51 percent in the treatment group used contraception. Notably, the difference of 2 percentage points is small and not statistically significant. These data show that that the two groups are closely matched, with their baseline FP use being similar in addition to most of their demographic characteristics.

Table 7. Current use of contraception

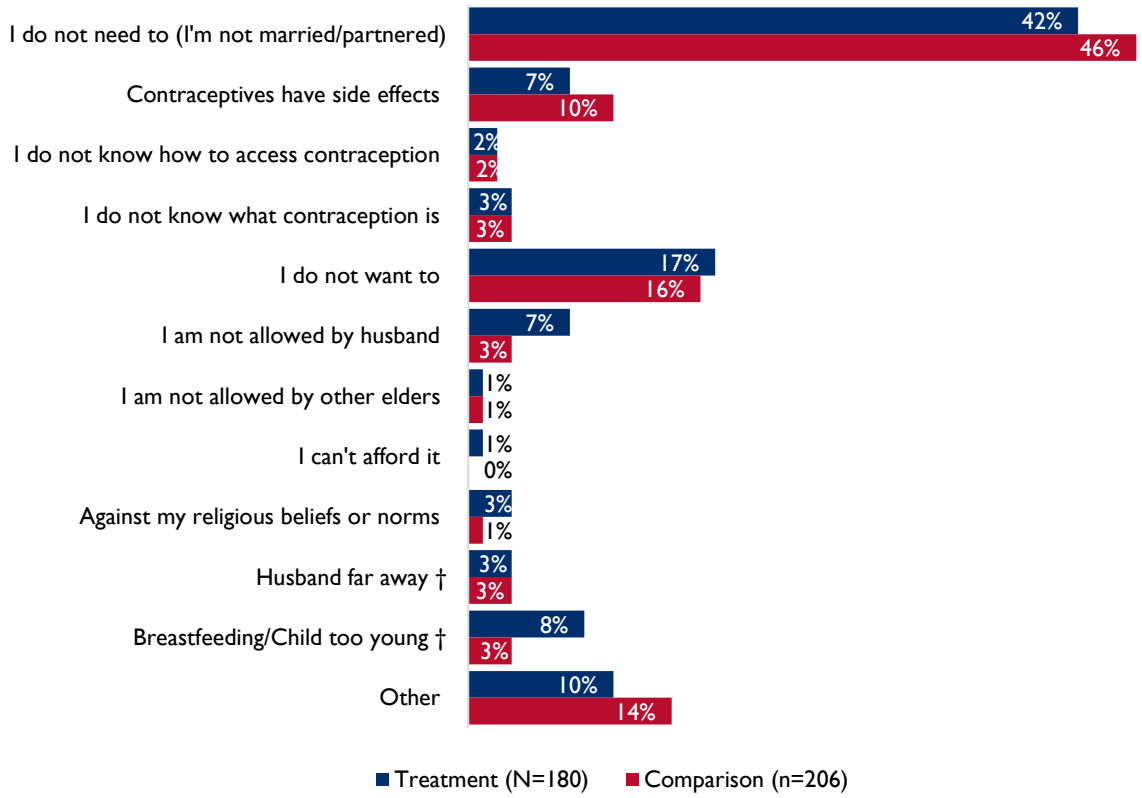
	TREATMENT	COMPARISON	DIFFERENCE
Currently using	0.51	0.48	-0.02
N	379	422	

* p<.05 ** p<.01 *** p<.001

Respondents who did not use contraception, and were not pregnant, were asked about their reasons for not using contraception. As *Figure 4* shows, the most prevalent reason was that they were single. Other factors, like concerns about side effects or that their partners did not permit the use, were also mentioned, but at a relatively low frequency. This result is consistent with findings mentioned in the previous section that sometimes partners' opposition to using contraceptives can impede women from accessing FP methods. The response options "Husband lives far away" and "Breastfeeding/child too young" were not pre-coded in the questionnaire but were recoded from the verbatim answers given where respondents selected the response option "Other."[17] None of the differences between treatment and comparison groups are statistically significant.

[17] It is not clear how to interpret the "Breastfeeding/child too young" response. One possibility is that these respondents are using breastfeeding as a contraceptive method. If this is the case, respondents should have said they used a contraceptive method (Lactational Amenorrhea method). A second possibility is that these respondents thought, mistakenly, that if the child were too young or they breastfed even irregularly, they could not get pregnant. And third, respondents may have been aware

Figure 4. Reasons for not using contraception



† We recoded some of the 'Other' options as "Husband lives far away" and "Breastfeeding/child too young." Remaining "Other" includes reasons like the respondent plans to go to the health center but has not done it yet, and the respondent has not had time to discuss with her husband.

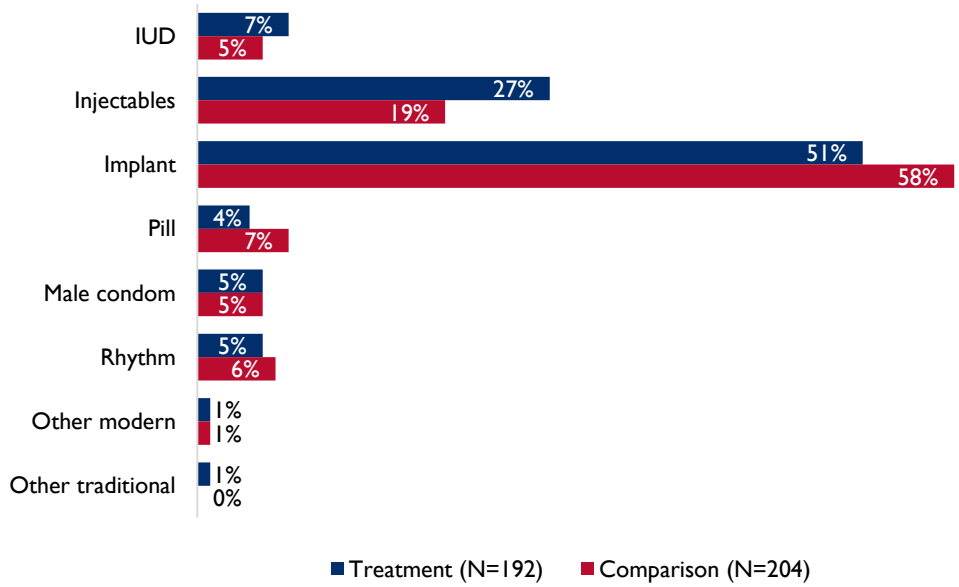
* p<.05 ** p<.01 *** p<.001

6.3.3 TYPES OF CONTRACEPTIVE METHODS USED

The survey asked FTMs currently using contraception about what type they used. As *Figure 5* shows, implants were the most popular method in both treatment and comparison communities, followed by injectables. Other methods (e.g., condoms, IUDs, and rhythm) were used less frequently. None of the differences between treatment and comparison groups are statistically significant.

that they did not use contraception and could get pregnant but decided not to use any contraception because they thought it may be harmful for the child while they breastfeed. While only a small fraction of respondents said "Breastfeeding/child too young," for the endline survey, we will refine the list of options to clarify each mother's intended response.

Figure 5. Contraception methods respondents use



* p<.05 ** p<.01 *** p<.001

As discussed below, perceptions around contraceptive methods like IUDs and condoms help explain why they are seldom used.

PERCEPTIONS SURROUNDING SPECIFIC CONTRACEPTIVE METHODS

Qualitative data indicate that, while community members found all modern methods acceptable from a cultural perspective, certain methods appeared to be widely unpopular, especially sterilization and IUDs. Many factors contribute to method preference, including education about the different methods and their advantages and disadvantages, and the FP scenarios that are the most common in communities. Rumors and misinformation circulating among communities also affect perceptions, as do the real but rare side effects of various methods.

IUDs. CHWs, DRCHCOs, and RCH doctors in both treatment and comparison communities reported that IUDs were not popular. They attributed this to the more complex and intimidating procedure involved in inserting and removing the device and rumors regarding its safety. Community members in several villages echoed both concerns , along with the perceived lack of flexibility it offers compared to other methods.

> *"When it comes to using a certain method of family planning, many are afraid. For example, many are afraid of an IUD being placed in their body and what will happen. Therefore, the response is very negative for permanent contraceptive methods, much more than for short-term methods." – RCH doctor, Ugenza (T)*

Sterilization. Both community members and FP professionals and volunteers noted that sterilization was also generally unpopular. Both sexes, but men especially, disliked the idea of being unable to have children again without the need to do another surgery. It is also a more difficult procedure to obtain because it typically requires going to the regional hospital or waiting for a specialized NGO to visit, and it can be costly.

Male condom. During group discussions, men were asked about male condoms, the only short-term contraceptive method they can use directly. Reflecting the survey results shown in *Figure 2*, they had mixed perspectives about condoms, feeling that they were inconvenient and not always easily accessible. They also seemed to think of condoms first and foremost as a method to protect against STIs, with unwanted pregnancy prevention as a secondary benefit.

Men in all but one FGD raised the importance of condoms to protect themselves and their partner(s) against STIs. Many young men in FGDs viewed protection against STIs as the primary purpose of condoms and were quick to mention that they were especially critical when engaging in high-risk behaviors, such as sexual intercourse with prostitutes and casual sex.

> *"I think the main purpose of using condoms is to protect yourself from infection, but condoms are also used as one of the methods of family planning." – Men FGD, Idunda (C)*

Men also mentioned the value of condoms as a tool for FP frequently, albeit as a secondary consideration, after STI prevention. Nonetheless, these discussions made it clear that men knew condoms could serve both roles and many of them used condoms for both purposes.

Despite this widespread awareness of the benefits and importance of condoms, the views of men in FGDs and their perceptions of their peers' attitudes reflected mixed or even negative feelings toward condoms. The primary and most mentioned reason was that men felt condoms numbed or reduced the sensations of intercourse.

> *"When condoms are used, you can't feel anything, so most men in the community don't prefer to use them." – Men FGD, Ndulamo (C)*

Male dissatisfaction with condoms combined with the fact that men know that women can access other female-controlled methods allows men to either place the onus of FP use on their female partner or not to use FP methods at all. There are two other reasons that emerged less frequently but remain important. Some men noted that they felt ashamed or embarrassed when purchasing or obtaining condoms. Others mentioned that condoms were not always easily available. Although RCH doctors and CHWs frequently reported that condoms were available at health centers for free and were also provided for free during education events, they acknowledged that health centers sometimes temporarily ran out and there could be situations when men needed condoms immediately but did not have any with them. In these cases, men said they looked for condoms in shops and pharmacies, where cost can also be an issue. A few men also suggested that condoms were not sufficiently available in areas where youth congregated or found themselves in high-risk situations, such as bars.

> *"One challenge is to feel ashamed. For example, when I want a condom as a method of family planning, I feel shy to go to the store and ask for the service." – Men FGD, Idunda (C)*

Finally, men in Ugenza (T) reported that many young people in their communities did not know how to use condoms properly, and therefore, did not use them. This perspective was not found elsewhere.

Other methods. Health professionals noted that community awareness of female condoms remained low, although that method was available. Education was being conducted on the subject in at least one of the treatment communities.

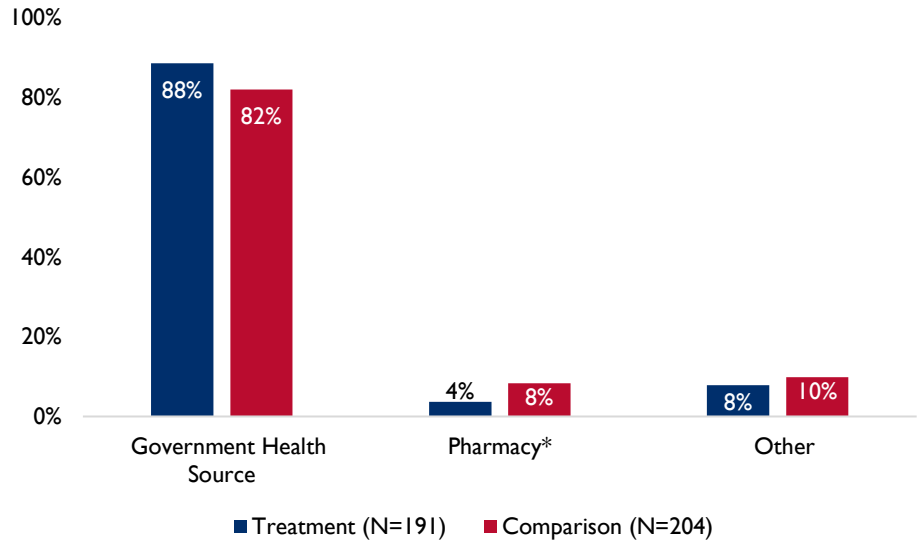
Other methods were occasionally viewed as problematic but mostly due to rumors and misinformation, as noted previously. These include concerns that implants move around the body and get lodged in various places or disappear, or injectables lead to cancer and other harms.

> *"We heard that implants disappear in the body. Others say that implants cause cancer!" – FTM FGD, Kimande (T)*

6.3.4 SOURCES AND ACCESS OF CONTRACEPTIVE METHODS

In most cases, FTM survey participants indicated they acquired contraceptive methods in a government facility, including public hospitals and dispensaries. In a few cases, respondents said they got them in pharmacies or other sources, as *Figure 6* shows. Only the difference between treatment and comparison groups for pharmacy is statistically significant, as denoted by the star in the corresponding label.

Figure 6. Sources of contraception



* p<.05 ** p<.01 *** p<.001

Survey findings align with those emerging from qualitative data. Nearly all discussion participants pointed to health facilities as their main source for modern contraceptives. Community members who participated in discussions considered the availability of contraceptive methods to be excellent. Young men, women, and older women in both treatment and comparison villages felt that all modern contraceptive methods they knew about were typically available to those interested in using them.

Occasionally, some methods were temporarily unavailable. CHWs in several communities did note that they did not always have enough contraceptive pills to meet the demand and that it may take time until they could resupply. FP professionals also reported supply challenges that affect other methods due to late orders or late delivery. However, FP professionals stated that when this happens, the relevant method(s) could usually be ordered and obtained fairly quickly from larger health facilities in the region or other suppliers.

> *"And where [contraceptive methods] are not available, we always make sure that we quickly order them from the district hospital. And when the health center lacks family planning methods, there are those who go to buy them elsewhere and then come here for injections." – RCH doctor, Ndulamo (C)*

FP professionals noted that methods, such as injectables, implants, IUDs, and sterilization, all require a visit to a health facility or visits from NGOs specialized in the provision of these methods (e.g., Marie Stopes, now called MSI Reproductive Choices) in the community. This means that communities that only have a dispensary may not be able to administer some FP methods, particularly those that require varying degrees of medical expertise to administer safely. Sterilization is particularly complex and often requires visiting a hospital or a larger health facility outside of the community or waiting for the visit of specialized NGOs. Some participants also noted that the procedure could be quite expensive. IUDs are also more complex to insert and, therefore, certain health facilities do not have the capacity to offer these services and direct patients to larger facilities.

> *"But the method that customers are asking for, and is missing, is the IUD. And this is because we still don't have a specialist who can provide that service here at our hospital." – RCH doctor, Ugenza (T)*

At the other end of the spectrum, male condoms are made available typically for free from CHWs, health facilities, dispensers, outreach/education events organized by FP professionals, and in at least some communities, district council and other government buildings. They can also typically be purchased from certain shops and pharmacies in or near communities. In this sense, they are the most accessible contraceptive method in communities. Contraceptive pills are seemingly the next most accessible form of FP, because CHWs and pharmacies can provide them, but they are not available as widely as male condoms. These factors explain why some community members felt that contraceptives for men were more widely and easily available than those for women.

6.3.5 EDUCATION AND RESOURCES FOR FAMILY PLANNING

The most widely noted education resources for youth regarding FP and contraceptives were health centers and CHWs. However, a significant share of young women and some young men reported that they sometimes also had discussions about these topics with family members and friends.

Parents were the most frequently cited members of young people's circles, particularly among FTMs. However, digging a bit deeper into participants' responses, these youths pointed to their mothers as their main interlocutor for FP-related discussions within the family. Mothers-in-law and aunts were only occasionally mentioned. Similarly, siblings were only mentioned in three FGDs. A couple of women even noted talking to their father and/or father-in-law as well.

Some older women confirmed that they did discuss these topics with their children and even their grandchildren at times. They most often talked about daughters, but a few also said they had discussed these topics with their sons or grandsons, and even their brothers.

> *Moderator: "Have you discussed family planning methods and usage with your children?"*
>
> *#4: "No, I have never discussed this with them."*
>
> *#7: "Yes, I have discussed with [my son] and he was young, so I was guiding him."*
>
> *#6: "I have my younger brothers and my sons, so I always show them how to use [family planning] and encourage them to go to the clinic to get advice. Discussion helps."*
>
> *-- Older women FGD, Kimande (T)*

CHWs in several communities reinforced these points, with a particular focus on the role of mothers to encourage and reinforce the education CHWs provided. Sometimes, these family discussions occurred

before a young person visited the health center, other times, they took place to reinforce, or contradict, education efforts from CHWs and health professionals.

Friends and acquaintances were the second most cited group youth discussed FP and contraceptives with. Interestingly, men were much more likely to mention discussions with friends rather than family members, whereas women often mentioned having discussions with both.

However, a significant share of youth reported not discussing FP and contraceptives with parents or friends. In one FGD for young men in Kimande (T), none of the young men had discussed these topics with parents or friends; in two other groups, a large majority said they had not had these discussions.

The principal reason given for not having these discussions was that talking to fathers or fathers-in-law about this topic was not culturally appropriate or even disrespectful.

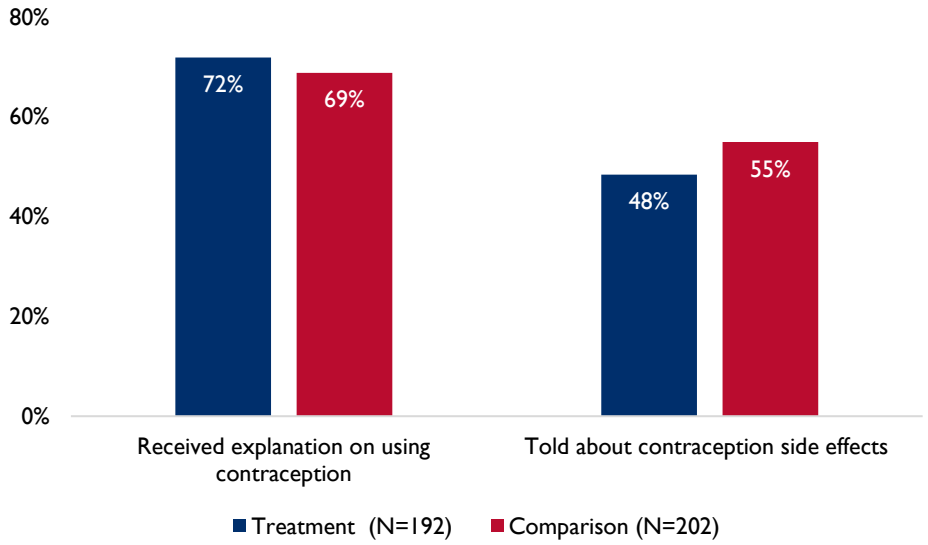
> *Moderator: "So I can see most of you have never had such discussion with their parents?"*
> *All: "Yes, most of us, we don't do that. Especially with fathers and fathers-in-law."*
> *Men FGD, Malinzanga (T)*

They did note there was less concern with friends, but their responses suggested this was a topic not easily broached in their communities. Older women also stated that it was against tradition to discuss these topics, especially before children are married. A few mentioned that they had only boys and did not think they would be interested or receptive to these discussions. Other, more rarely provided reasons included the fear that parents were not prepared to have this discussion or that it was best to leave these topics to the health centers or CHWs to cover.

Those who did report having conversations with family or friends about FP were asked whether these conversations had been helpful. In only two cases, respondents felt their conversation had not been helpful, either because they thought the message or argument made was not convincing or it was going against information they had heard elsewhere. An overwhelming majority felt these conversations were productive in various ways, such as educating them about FP, encouraging them to go to the health center, or even persuading them to use contraceptives. However, we discovered that "helpful," as understood by respondents, did not always mean positive steps toward the use of FP. In several instances, respondents felt the conversations were helpful because they had persuaded them or others they spoke with *not* to use contraceptives, often based on documented, albeit rare, side-effects.

CHWs and FP professionals play an important role in educating the population, and survey results suggest that they do a good job overall. The survey indicates that more than two-thirds of FTMs were informed about how to use their contraception method when they acquired it, although only about half were informed about possible side effects (*Figure 7*). None of the differences between treatment and comparison groups are statistically significant.

Figure 7. Information on contraception



* p<.05 ** p<.01 *** p<.001

CHWs and FP professionals were asked about attitudes among youth toward learning about FP. Their views were somewhat split, with a small majority feeling that youth generally had positive views on learning about and discussing the subject.

> *"There are challenges when you educate some young people, they don't understand at all. They say, 'I can't use it because I don't have a child,' but you instruct them, they understand and make decisions without being forced. Even today, we have mothers who have given birth, but they are young and most of them are unmarried." – RCH doctor, Kimande (T)*

They reported that young men were typically more difficult to engage than young women, reflecting the differences in attitude and comfort level noted earlier in this report. However, an important point emerging throughout these discussions was that youth who were already familiar with the topic were more open to further education and discussions. This point applied especially to young men, suggesting that educating them would largely bridge the gender gap in attitudes, but also highlighting a "chicken and egg" problem. A significant and systematic effort needs to be made to address this situation. A few CHWs remarqued that education was not enough; young men might be open to learning about FP and ask questions but, ultimately, they did not always use or support the use of contraceptives.

> *"[Young men] like learning about family planning methods but not using them. Young women learn about family planning and use them, unlike men. And women are more active because [they] are the ones facing many challenges." – CHW, Makifu (T)*

The following quote from a CHW in Ugenza (T) highlights the importance of overcoming the FP-related knowledge deficit among men: *"…Men tend to tell their wife to give birth. So, even if you educate those women on family planning, they will always listen to [their] husband, and men tend to ignore the education."* Thus, there are underlying cultural norms that need to be tackled through sustained efforts that bring together a variety of community actors and/or in diverse settings.

Campaigns external actors orchestrate (e.g., government of Tanzania, international NGOs) to promote FP and contraceptive use are one such method but were reportedly rare in both treatment and comparison

communities the team visited. Only one community in the treatment group—Malinzanga (T), and one in the comparison group—Idunda (C) hosted campaigns in the past, and these campaigns took place years prior to the baseline.

Four communities, two in the treatment and two in the comparison group, reported that radio-based programming providing FP education was available. These programs may also cover STIs and GBV. NGOs active in the FP promotion space, such as Marie Stopes and others, also periodically visited some of the communities and provided both education and services.

> *"Mostly we use the village meetings and conferences, and now we have Radio Kitulo, so if there's any problem, we go to the radio and give education." – CHW, Ndulamo (C)*

On the other hand, community-based education and awareness-raising efforts existed in many communities where we collected qualitative data. They took a variety of forms, as shown in *Table 8*. The first, community events, involved using community events held for other purposes (e.g., celebrations, local government meetings, village meetings, and even funerals) to speak briefly about the subject; or organizing events specifically about FP (e.g., FP meetings, or MNCH or health and nutrition meetings).

Public outreach included efforts such as reaching out to people at high-risk venues and public messages done by driving a car or motorbike with visual advertisements or a speaker system playing sensitization messages. Not included here are the door-to-door visits of CHWs, which in principle occurred in every community. School-based efforts typically included visits by CHWs or FP professionals, such as RCH doctors, at the request of school staff but could also include education efforts, by schools or teachers themselves, that go beyond teaching the biology curriculum. School-based efforts were often described in a way that suggests that STIs (and especially HIV/AIDS) were the primary topic, with FP being a supplementary component.

> *"Sometimes, students understand more if the topic is advocated by someone from outside of Africa. For example, someone came here to teach about early pregnancies and said that even in the United States, there is the same problem, but that most women get pregnancies when they are at the university level. So, this made students think they are not supposed to get pregnant in primary or secondary schools." – Head teacher, Idodi (T)*

Health center efforts went beyond having nurses and doctors available to answer questions. These efforts sought to organize education events that encourage group gatherings of community members to hear about and discuss FP topics. Outreach during religious events included talking about FP during church and other house of worship events or upon request from religious leaders. The Tanzanian government or local government often provide posters that are displayed in various parts of the community.

Table 8. Type of community-based education and awareness-raising efforts mentioned in communities visited for qualitative data collection

	COMMUNITY MEETINGS	PUBLIC OUTREACH	SCHOOL-BASED	HEALTH CENTERS	RELIGIOUS OUTREACH	POSTERS
Treatment communities						
Idodi	X	X	X			
Ikangamwani	X		X	X		X
Kimande		X	X	X	X	X

	COMMUNITY MEETINGS	PUBLIC OUTREACH	SCHOOL-BASED	HEALTH CENTERS	RELIGIOUS OUTREACH	POSTERS
Makifu			X			
Malinzanga		X	X	X		X
Ugenza		X				X
Comparison communities						
Idunda	X	X	X			
Lupembe	X		X	X		
Ndulamo	X	X			X	X
Total	**5**	**6**	**7**	**4**	**2**	**5**

Note that Table 8 reflects the information provided during discussions with FP professionals and volunteers, as well as with community members. It should, therefore, not be considered a systematic inventory validated across sources.

CHWs are particularly important to many of these education and awareness-raising efforts, along with RCH doctors, who sometimes participate but also support the CHWs in their daily work in the community. However, CHWs mostly do this work on a volunteer basis with limited means, and face challenges related to transportation and providing refreshments. Some CHWs also felt that additional training would be beneficial to them. They sometimes noted support from the government and the provision of some supplies, such as flyers from NGOs. CHW and FP professionals in treatment communities also often mentioned Pathfinder, sometimes providing limited information about upcoming activities.[18] This can be explained by the timing of our baseline, which occurred after Pathfinder, an implementing partner on the project, conducted some of the initial MIHR training sessions.

"Yes, [the outreach efforts] have been effective because they get motivated every day and get [the] education that when a young lady gets [pregnant] at a young age, [it] is not good. This will help to increase the awareness." – CHW, Ikangamwani (T)

These efforts are typically targeted to either those of reproductive age or youth, but health center efforts also often specifically center on those who are already pregnant. Although CHWs and FP professionals noted that their main topic was FP, topics such as STIs and maternal and child health and nutrition were sometimes also broached. Much more rarely, the topic of GBV and intimate partner violence (IPV) was discussed. CHWs and FP professionals nearly universally felt that these various efforts had been quite effective.

6.3.6 DECISION-MAKING RELATING TO CONTRACEPTIVE USE

A majority of young men and women across nearly all FGDs reported that they had discussed the use of FP methods with their partner and often, the method that would be the most suitable to their particular situation.

Moderator: "Have you ever discussed family planning methods and usage with your wife or partner in the past?"
#4: "I have talked to her many times about this."

[18] Baseline field work was conducted after MIHR had delivered certain initial training sessions that are part of project start-up activities, but before the implementation of activities that involve or target FTPs and/or the broader community. This explains why CHWs and FP professionals sometimes mentioned Pathfinder (a MIHR consortium partner).

#2: "I have talked to her many times, and she agrees."
-- Men FGD, Ugenza (T)

How the decision-making process occurred and the outcome in terms of contraceptive use varied. In terms of the process itself, men often indicated that they were active participants in the process and some of them explained that a decision was not reached on the basis of just one discussion, but iteratively and sometimes with the support or advice from health center staff. Others took a more passive approach, where they primarily sought to be informed and allowed their partner to decide on the specific method. Either way, men repeatedly noted that they needed to be included in their partner's decision to use contraceptives or at a minimum, have their partner inform them on the matter. Women largely echoed this pattern.

"I just gave her the ground to choose which kind of family planning method she wants, then I will support. So, she was the one who chose, and we decided to use the implants method." – Men FGD, Malinzanga (T)

Regardless of the process used, men and women generally felt that the discussions went well and had positive views of the resulting decisions. The outcome that women and men often considered positive, but not always, was a decision to use contraceptives or a specific type of contraceptive. Men were somewhat more likely to feel that non-use was a positive outcome than women. Sometimes, they reported coming to an agreement around use of a specific method but had not yet acted on this choice because they were planning for the future (e.g., after lactational amenorrhea) or for unspecified reasons. More rarely, men and women reported that they could not agree on what to do or that the decision-making process did not go well, ending in disputes.

"I discussed with my wife, but we didn't agree to use because we expect family planning to be used by women not men. There is no way I can have intercourse with my wife using condoms!" – Men FGD, Kimande (T)

Men and women, as well as CHWs and health professionals, regularly noted that disagreements between partners regarding contraceptive use and FP were a source of ongoing tensions in some relationships and in certain instances, led to arguments and violence. A few times, women and health professionals noted cases in their community where men became angry or even physically aggressive with their partner during discussions about FP.

"There is a problem if a woman uses [contraceptives] but the husband doesn't want it. It happens that you meet physically, and he finds out that you are not getting pregnant, you can be beaten." – FTM FGD, Idodi (T)

Unfortunately, this can place women in situations where they either do not use contraceptives to comply with their partner's wish, despite their own preference to do so, or choose to use contraceptives in secret. In the latter case, the situation has been known to become quite dangerous, as illustrated in the quote below.

"A Maasai girl once told me that her neighbor had an implant and, after her husband saw that, he cut her with a knife and told her to take out whatever was put on her body. And my friend started to get afraid that maybe if she [did] that, she [would] be punished exactly like her friend was punished." – Men FGD, Malinzanga (T)

This type of reaction can also affect the type of contraceptives women facing difficult or hostile partners select, according to some women, CHWs, and health professionals. For example, women in these situations seemed to prefer injectables, because they are quick to administer, last reasonably long, and leave nearly no trace. Although contraceptive pills can be taken discreetly, women and CHWs reported on occasion that men opposed to FP would hide or steal their partner's contraceptive pills when they discovered them.

Some men regretted the decision to use or approve the use of contraceptives, mentioning perceived challenges with getting pregnant, or pregnant again, or side-effects their partner encountered with the method selected. Women did not report such regret, showing a noteworthy gender-related difference.

The smaller number of men who reported not having discussed FP with their partners provided a few explanations, including that women knew what they wanted to do and what method was best suited for them; that it was not habitual to discuss this topic; that there was no time to discuss it; or that they did not live with their partner, making these discussions difficult. Women reported the same challenges, along with the fact that some of them were not married and did not feel the need to discuss this topic with their partner(s).

> *"To us, you know, we do not have that tendency of talking about the issues that are related to health with our partners. We do not have that habit. When we meet, we just talk about how we can get money, life, and issues like that. It is very rare for a man to be seen talking about family planning issues with his wife." – Men FGD, Malinzanga (T)*

CHWs and FP professionals noted that, generally, the decision-making process among youth was good, and mentioned some factors that facilitated a smoother process. They highlighted that the process was less contentious when both partners were adequately educated on the subject of FP and fully understood the methods that were the most suitable to them. Yet, they recognized that women were often the ones making the final decision, in part because they were also the ones who tended to be better educated.

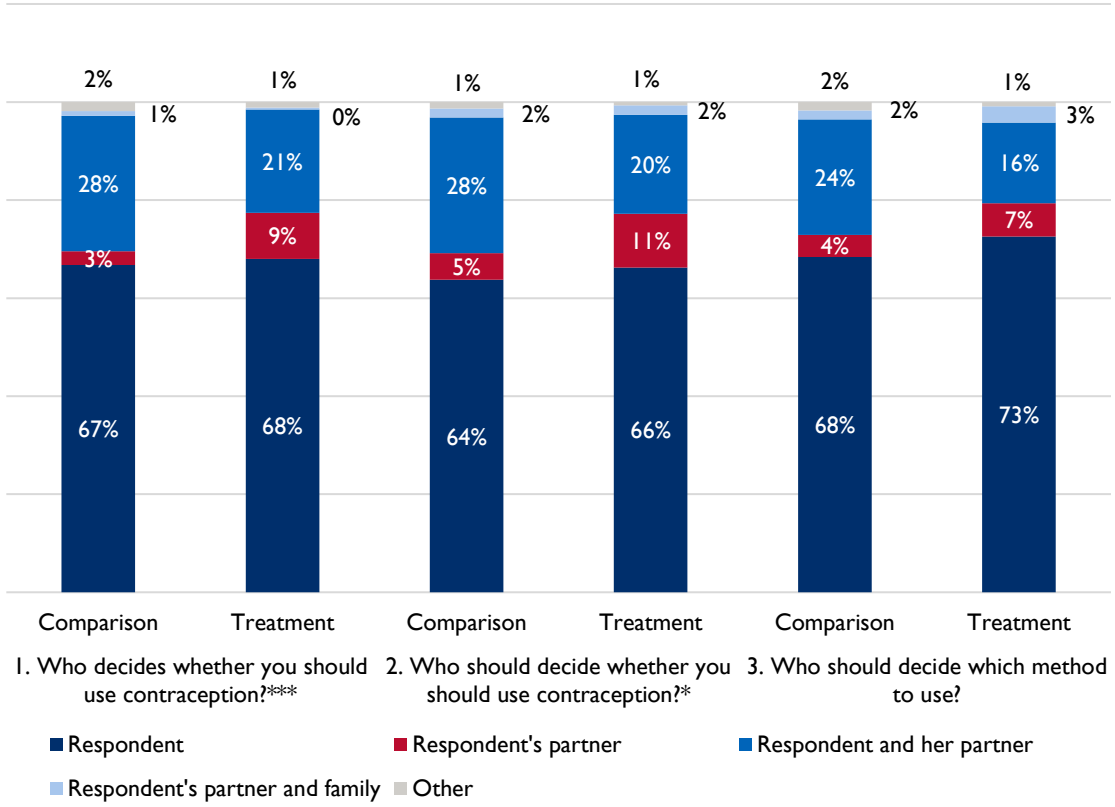
> *"In the family, men are the ones to decide if family planning methods should be applied or not. However, women decide to use family planning without telling their husbands, and when they find out quarrels starts!" – CHW, Makifu (T)*

They also highlighted the importance of gently guiding the decision-making process about whether or not to use contraceptives, rather than taking a fear-based or forceful approach. Finally, they noted that for unmarried women and younger girls, the parents were often involved, but they could be a negative influence or might act too late, after they discover their daughter is pregnant.

> *"But there are also those who live with their parents. They are influenced by their parents. When they see that their child has given birth to their first child, they advise her to use family planning." – RCH doctor, Ugenza (T)*

The FTM survey asked respondents a few questions about their decision-making process to use contraception. Specifically, the survey asked whetherf using contraception was mainly the respondent's decision or someone else's, who they thought should decide whether they should use contraception, and who they thought should decide which method to use. The responses to these questions are summarized in *Figure 8*. In both the comparison and treatment villages, the majority of respondents reported that using contraception was mainly their decision or a joint decision between themselves and their partner. However, there was a slightly higher percentage of respondents in the treatment villages who reported that their partner was the main decision-maker regarding contraception use, and these differences are statistically significant, as denoted by the stars in the label of the item. Similar patterns are observed for the other two questions.

Figure 8. Contraception use decision-making process



Note: Sample size for the treatment group is 456 and for the comparison group 535.

* p<.05 ** p<.01 *** p<.001

6.3.7 SOCIAL DESIRABILITY BIAS

To assess the extent to which respondents may overstate their use of contraceptives, we conducted a list experiment. Respondents were randomly divided into two groups (A/B). Both groups were presented with the same set of three statements of fact or opinion on innocuous topics. Group A also received a statement on the use of contraceptives, specifically "I usually use a family planning method to delay or avoid getting pregnant." Respondents from both groups were asked to indicate the number of statements they believed to be true for them. Because respondents did not answer each item but indicated the total number of statements they believed to be true, they benefitted from an extra level of confidentiality. Enumerators themselves could not tell whether respondents in Group A agreed to the sensitive item.

To assess the extent to which social desirability may bias respondents if asked the question on contraception directly, we asked group B directly the same item we included in the list experiment for group A. The results are summarized in *Table 9*. When asked directly, 70 percent of respondents said they used contraception, but when we used the list experiment to derive contraceptive use, reported

use was 54 percent, 17 percentage points lower than when asked directly.[19] This difference indicates that when asked directly, respondents overstated the extent to which they used contraceptives, but when they felt more protected by the artifact of answering as part of the item list instead of a direct question, the "true" prevalence of contraceptive use was revealed to be much lower. This suggests that social desirability biases respondents when asked directly about contraception.

Table 9. Contraceptive use-list experiment

	DIRECT QUESTION	LIST EXPERIMENT	DIFFERENCE
Currently using	0.7	0.54	0.17**

* p<.05 ** p<.01 *** p<.001

Although the evidence of social desirability bias uncovered here could raise concerns about the qualitative data reported throughout this report, we expect any such concern to be minimal. There are several reasons for this. First, although facilitators encouraged widespread participation, those who felt uncomfortable speaking about a specific topic, such as their own views, were not compelled to do so and could simply remain silent. Second, the qualitative instruments focused on perceptions about entire groups in the community (e.g., FTMs, young men), instead of asking participants to discuss in detail their own views on FP. This approach limits the risk that social desirability bias hinders participation or negatively affects the responses provided. Finally, the qualitative data we analyzed reflect a strong and consistent willingness among FGD participants to speak their mind, even if they suspected their opinion was not widely shared among group members or by the research team.

6.4 SEXUAL AND REPRODUCTIVE HEALTH

KEY TAKEAWAYS

- FTMs generally reported good access to health facilities, which enabled nearly all of them to receive antenatal check-ups and care. They generally felt that SRH services' affordability, providers' attitude, and the location of facilities were good or slightly less than good.
- A slight majority of FTMs had their first antenatal check-up 3–6 months into their pregnancy, while most of the rest had this check-up in the first 3 months. These results might be in part tied to the age of the sample—CHWs noted adolescents tended to hide their pregnancy and might skip antenatal care.
- Postnatal care was somewhat less prevalent than prenatal care among FTMs. Nonetheless, around three-fourths had a visit to check the health of their child, typically 5 days after delivery. These checks do not necessarily focus on the mother's well-being; more than half of FTMs did not report checks on their well-being.
- Pre- and postnatal visits are also an important opportunity to educate FTMs about pregnancy, FP, nutrition, and the heightened danger to pregnant women and newborns of certain diseases, such as malaria. They also offer an occasion to test for STIs. Survey results show that FTMs were widely

[19] It is worth noting that 70 percent is higher than the results reported in *Table 3*, which correspond to a similar question on contraceptive use. Although they are similar, the question considered in *Table 3* referred to *current* use, while the question in the list experiment used the word "usually," which is less restrictive and could explain the difference between the two.

aware of certain key information about SRH (e.g., birth spacing), but that further education remained necessary. For example, around half of FTMs did not know that women could get pregnant the first time they have sexual intercourse or become pregnant again after birth even if they did not have their period yet.

- The support fathers offered to FTMs, which FTP will target through men's groups, appeared overall insufficient. CHWs and older women in general were critical of the level of support in their community, while FTMs had a more mixed view.

6.4.1 HEALTH CARE DURING PREGNANCY

According to FTM survey results, respondents had relatively good access to health care facilities. In terms of access to health care during pregnancy, most mothers reported attending at least one health check-up and the first time they visited a health center was either before the first 3 months or between the third and sixth month, as *Table 10* shows.[20] None of the differences between treatment and comparison groups are statistically significant. Notably, all but two mothers (one in the treatment group and one in the comparison group) gave birth in a health facility.

Table 10. First health check-up during pregnancy (mothers)

	TREATMENT	COMPARISON	DIFFERENCE
Less than 3 months pregnant	42%	36%	-6%
3–6 months pregnant	51%	59%	8%
More than 6 months pregnant	5%	4%	-1%
Did not go	2%	1%	-1%
N	**371**	**419**	

* p<.05 ** p<.01 *** p<.001

Overall, CHWs believed that pregnant women received sufficient antenatal care, which aligns with survey data. A CHW in Ikangamwani (T) stated that women received sufficient care because they were "motivated." Another CHW in Malinzanga (T) said that "when they go to the clinic, they are given a date to return, and they always obey that." However, despite the benefits of attending health clinics, CHWs noted that getting young people to frequent them could sometimes be a challenge. Two CHWs stated that young people may feel shame or fear due to being pregnant at their age or being pregnant out of wedlock. As a result, they may resist receiving antenatal care or avoid telling people (e.g., their parents) who could help them access a health care provider. A CHW in Kimande (T) said that young women may try to hide their pregnancies for as long as possible and delay receiving services, which can be harmful to their health and the health of their fetus.

Additionally, other challenges pregnant people may face included poverty and lack of basic goods. This made it difficult for CHWs to educate pregnant women about their health needs. According to a CHW in Ikangamwani (T), young women had other concerns, such as their livelihoods, that they needed to focus on, making it hard for them to prioritize attending health clinics. Multiple CHWs also noted that financial difficulties may make it hard for women to follow guidance, such as making sure they get proper

[20] This question was also asked to pregnant women, but because they were at different stages of their pregnancy, the results are more difficult to interpret.

nutrition and avoiding strenuous physical activity, because pregnant women may have to continue working to secure their livelihoods.

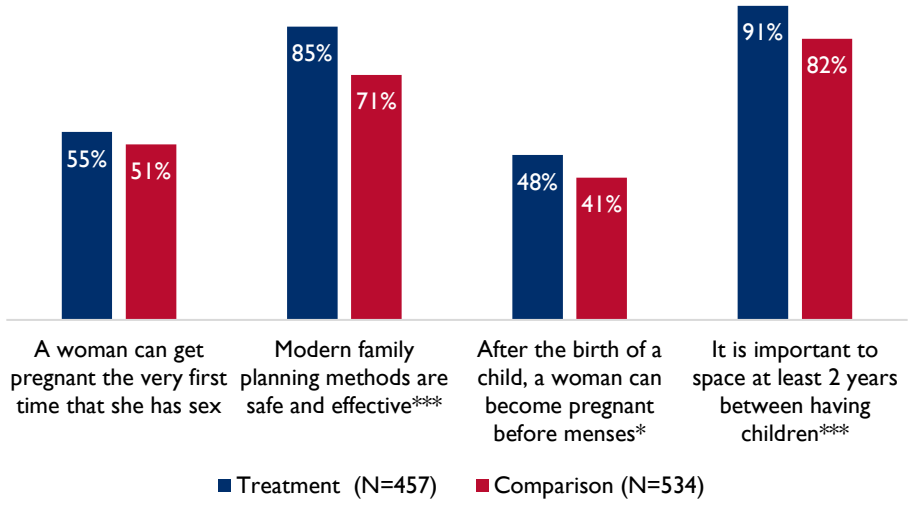
A CHW in Malinzanga (T) noted that attending a health clinic offered CHWs the opportunity to check for other potential health risks, such as the human immunodeficiency virus. CHWs can help diagnose and treat illnesses, alongside pregnancy. Various CHWs also mentioned that attending clinics offered an opportunity to provide vaccines, which help protect both the mother and fetus.

6.4.2 HEALTH CARE KNOWLEDGE

CHWs interviewed shared important knowledge they believed young pregnant people should have about their health. For example, women should learn how to spot potential signs of danger during their pregnancies, especially considering that younger pregnant people may be at more health risks during pregnancy and birth. Information regarding risks during pregnancy could be obtained at the health clinic; CHWs and older women interviewed advised women to attend the health clinic frequently. Multiple CHWs stated that pregnant women should know how to treat and prevent malaria and can obtain and learn how to use malaria nets and medicines from clinics. Furthermore, older women in Idunda (C) mentioned that women could ask their health professionals other questions about their pregnancies and learn about food to consume and activities to avoid while pregnant.

The FTM survey asked a series of true/false questions to assess the level of respondents' knowledge on SRH. The questions include whether (1) a woman can get pregnant the first time she has sex, (2) modern family planning methods are safe and effective, (3) a woman can become pregnant before menses return after giving birth, and (4) respondents think it is important to have at least 2 years of space between children. All four statements are true. The results, summarized in *Figure 8*, indicate that respondents in the treatment group were a bit more knowledgeable about SRH than the comparison group, and the differences are statistically significant for three of the four items, as the stars in the corresponding labels indicate. However, both treatment and comparison groups had room to improve, especially when we look at the first and third question.

Figure 9. SRH knowledge among treatment and comparison group FTMs



Note: Sample sizes are marginally different among questions due to item-specific missing information.

* p<.05 ** p<.01 *** p<.001

6.4.3 HEALTH CARE AFTER BIRTH

The survey included questions on care after giving birth. As *Table 11* through *Table* 14 show, in both the treatment and comparison groups, more than 70 percent of women had their baby's health checked on average 5 days after giving birth. This includes checkups occurring right after birth. This check-up was conducted in almost all cases by a doctor, a nurse, or midwife. According to survey respondents, these health professionals checked the mother's well-being after giving birth less frequently than the baby's health. When they did check the mother's well-being, the same types of health professionals (i.e., doctors, nurses, or midwives) were typically conducting this assessment.

Table 11. Baby's health care checked percentage and average days after birth

BABY'S HEALTH	TREATMENT	COMPARISON	DIFFERENCE
Health checked (%)	79%	73%	-6%
Average days after birth	5.5	5.2	-0.3

Table 12. Baby's health care provider

WHO CHECKED BABY'S HEALTH	TREATMENT	COMPARISON	DIFFERENCE
Doctor	39%	35%	-4%
Nurse/midwife	60%	65%	5%
Other	1%	0	-1%

Table 13. Mother's health care checked percentage and average days after birth

MOTHER'S HEALTH	TREATMENT	COMPARISON	DIFFERENCE
Health checked (%)	49%	41%	-8%
Average days after birth	13.1	10.0	-3.1

Table 14. Mother's health care provider

WHO CHECKED MOTHER'S HEALTH	TREATMENT	COMPARISON	DIFFERENCE
Doctor	42%	36%	-6%
Nurse/midwife	58%	64%	6%
Other	0%	1%	1%

6.4.4 CARE AND NUTRITION FOR YOUNG CHILDREN

When asked about knowledge young women should have about caring for their young children, CHWs and older women emphasized nutrition. An older woman in Lupembe (C), when asked about what young women should know about caring for young children, asserted that: *"…they need to know at what age*

their children should eat certain types of food. For example, a child who has reached 6 months should start eating food, but a child who has not yet reached that age should not eat food, instead he should only suckle. We are taught these things by our elders when we are young women."

Older women and CHWs in both treatment and comparison communities stated that FTMs should know to breastfeed their children in the first 6 months, then transition toward soft foods, such as porridge. Elders shared knowledge on what to feed children and CHWs taught it to FTMs.

> *"[FTMs] have to know that a child should be given light porridge when it is at the age of 6 months. They also should know that the porridge given to the child should not be cold." – CHW, Idodi (T)*

In addition to knowing what food to feed children, CHWs and older women believed that mothers needed to know how to properly breastfeed their children.

> *#2: "A mother should make sure that she eats food that will make her produce milk that is good and healthy for her baby."*
>
> *#7: "But she also needs to know which positions she needs to put her child [in] during breastfeeding. These positions are taught when they attend the clinic."*
>
> *-- Older Women FGD, Idunda (C)*

CHWs in both treatment and comparison communities stated that FTMs could access this information through them or others at health centers, alongside other medical care, such as vaccinations. Additionally, a CHW in Idunda (C) emphasized the need for themselves and other health care professionals to convey information on how FTMs could spot illness in their children. A CHW in Lupembe (C) stated that FTMs needed education on maintaining the cleanliness of their space and food in order to keep the child safe and healthy, given young children's higher susceptibility to illness.

6.4.5 HEALTH SERVICE QUALITY

The FTM survey asked respondents to rate the health services in their communities across different dimensions. These dimensions include SRH education for youth, where the nearest SRH facility is located, affordability of SRH services, attitudes of health services provider when providing SRH services to adolescents, and attitudes toward victims/survivors of domestic violence. The results, summarized in *Table 15*, indicate that on average, these aspects are rated between average and good and that there are no statistically significant differences between treatment and comparison groups.

Table 15. Rating of health services across different aspects

	TREATMENT	COMPARISON	DIFFERENCE
SRH education for youth	2.57	2.60	0.03
Where the nearest SRHS facility is located	2.91	2.78	-0.13
Affordability of SRHS	2.98	2.93	-0.05
Attitude of health services provider in provision of Adolescent SRHS	3.01	2.87	-0.14
Attitudes toward victims/survivors of domestic violence	2.35	2.47	0.13
N	**503**	**447**	

Notes: Respondents were asked to rate the health services in their communities across different dimensions. For each aspect, respondents could rate services as excellent, good, average, poor and very poor. To summarize the responses, we created an index by coding excellent as 4, good as 3, average as 2, poor as 1, and very poor as 0.

* p<.05 ** p<.01 *** p<.001

To assess the trustworthiness of health services in these communities, the FTM survey included an item where respondents were asked to indicate the extent to which they trusted different health-related resources to provide them with SRH advice. Resources included CHWs, medical staff, and family, among others. The results are summarized in *Table 16*. In most cases, the level of trust was quite high. In effect, for CHWs, doctors, nurses, and even teachers and family, the score is 2.5 or higher; given that the maximum score is 3, the level of trust with these resources is already high for both treatment and comparison villages. Regarding friends and peers, the level of trust was a bit lower both in treatment and comparison villages. Notably, the average level of trust was consistently higher for the treatment than for the comparison group, although these differences are very small and statistically significant for trust of doctors only.

Table 16. FTMs' level of trust in SRH advice provided by resources

	TREATMENT	COMPARISON	DIFFERENCE
Community health workers	2.67	2.60	-0.08
Doctors at the health center or hospital	2.81	2.70	-0.11*
Nurses at the health center or hospital	2.77	2.63	-0.13
Teachers	2.73	2.64	-0.09
Your family	2.84	2.76	-0.08
Your friends	2.09	1.96	-0.13
Your peers (incl. peer group members)	1.95	1.83	-0.12
N	**454**	**528**	

Note: Respondents were asked to indicate the extent to which they trusted different health related resources to provide them with SRH advice. For each resource, the respondents could answer whether they trusted them a lot, somewhat, a little, or not at all. To summarize the responses, we created an index by coding a lot as 3, somewhat as 2, a little as 1, and not at all as 0.

* p<.05 ** p<.01 *** p<.001

In terms of fertility preference, *Table 17* shows that, among pregnant women, 7 percent in both the treatment and comparison groups did not want to have any more children, 12 percent in the treatment group and 14 percent in the comparison group wanted to have one more child, 40 percent in both treatment and comparison groups wanted to have two more children, and 41 percent in the treatment group and 39 percent in the comparison wanted to have three or more additional children. Notably, the differences between treatment and comparison groups are very small and not statistically significant. The figures for mothers, shown in *Table 18,* are very similar to the results for pregnant women, although the differences between treatment and comparison groups are a bit larger.

Table 17. Fertility preference of pregnant women

	TREATMENT	COMPARISON	DIFFERENCE
Not to have any more children	7%	7%	0%
Have one more child	12%	14%	2%

	TREATMENT	COMPARISON	DIFFERENCE
Have two more children	40%	40%	0
Have three or more additional children	41%	39%	-2%
N	**75**	**105**	

* p<.05 ** p<.01 *** p<.001

Table 18. Fertility preferences of mothers

	TREATMENT	COMPARISON	DIFFERENCE
Not to have any more children	13%	8%	-5%
Have one more child	8%	10%	2%
Have two more children	34%	44%	10%*
Have three or more additional children	46%	38%	-8%
N	**367**	**390**	

* p<.05 ** p<.01 *** p<.001

6.4.6 FATHERHOOD SUPPORT TO FEMALE PARTNERS

Among KII and FGD respondents, there were mixed perceptions on whether fathers supported their partners enough. Overall, fathers interviewed believed that they provided enough support to their female partners, while other stakeholders, such as older women and CHWs, generally disagreed. Among FTMs, there was a relatively divided response: some felt supported enough and others did not. Forms of support FTMs, older women, and fathers mentioned included attending medical appointments, providing necessities (e.g., food and clothing), and helping care for children. A large barrier to receiving enough support, such as basic needs, that various men and women reported was poverty. A woman in Idodi (T) said that despite her husband's desires to clothe and feed her, he struggled to find employment that would allow him to do so. Another woman in Idodi (T) added that men were expected to provide this support and, therefore, must devote themselves to finding a good job, because it was their duty as a husband.

> *"Due to the unemployment of our husbands, they help us, but it is not enough because you find that he earns only enough to feed us. And [as] women, we have many needs. You find that now, you wear the same clothes all year round." – FTM FGD, Idodi (T)*

Various informants (e.g., men, older women, and CHW) asserted that men should attend antenatal and postnatal visits with their partners. An older woman in Kimande (T) believed that by attending appointments with their female partners, men can better care for their female partners during their pregnancies and better address any needs that may arise. Additionally, an RCH doctor in Idodi (T) stated that, if men attend their partners' appointments, health care providers were better able to inform fathers about changing conditions in the pregnancy and other important information.

Further, fathers may have another family they have to support. Three different groups of older women in three separate communities mentioned this notion. The older women noted that, given that fathers were responsible for multiple households, they may be less likely to provide enough support to either wife. Additionally, women whose partners had abandoned them did not receive any support from them.

Care for Children

Informants agreed that fathers played an important role in caring for and educating their children. In addition to providing necessities for the family, fathers were also responsible for teaching their children manners and proper social skills. An older woman in Idunda (C) believed that father should "*make sure that [their child] is polite to his superiors and [the father] builds the foundations for the child that will help them in the future.*"

Various stakeholders emphasized that fathers should engage with their children and spend quality time with them.

> *"Give children good foundations for life, so that later the child becomes independent on his own. But also, give him education and other basic needs, so that even when you die, he will remember you for the strong foundations that you laid for him, and it continues to help him in his life. That is the way for fathers to demonstrate affection and love for their child." – Men FGD, Idunda (C)*

When asked about the role of fathers, FTMs in Lupembe (C) responded that *"[a father should] be close to his child and make the child feel free to say anything to him."* However, an older woman in Idunda (C) cautioned that father should not be too close to their children and should be authoritative over them. She believes that a father *"[...] should show love, but not exceed the limits. He should not show him love beyond the limit until [the child] is not afraid. The child should be a little afraid of his father."*

Discipline

Generally, respondents interviewed, including FTMs, older women, and fathers believed parents should physically discipline their children. Types of physical discipline informants mentioned included whipping with a stick, spanking, and general "beating." For example, an FTM in Lupembe (C) asserted that *"for me, I will give him the punishment of whipping him with a stick, because the children of these days, even if you warn them with words, they do not listen. So, I will hit him with a stick."*

Be that as it may, some, such as an older woman in Lupembe (C) and man in Ugenza (T), preferred to scold their children first and may physically punish them if they repeat the same behavior. They also asserted that they preferred to speak with their children about their errors but will beat them if they felt like their children had not listened to them.

> *"For the first time, you warn him that what he has done is wrong, and he should correct himself for what he has done. But, if he repeats the same mistake again, he should be punished by whipping or any punishment that will teach him and ensures that he [does not] repeat the same mistake again." – Older female representative, Lupembe (C)*

Additionally, a father in Idodi (T) said he preferred to assign his children chores, such as weeding around the farm, rather than physical discipline.

Furthermore, depending on the age, an FTM in Malinzanga (T) believed that some children may be too young to receive physical punishment. They thought that a younger child should receive a warning, while older children could be physically disciplined.

> *"[A father] must punish [their child] regarding age. If the child is young, they can warn him by giving him advice, but, if the child is older, he can beat him." – FTM FGD, Malinzanga (T)*

6.5 LIVELIHOODS AND PARTICIPATION IN ENVIRONMENTAL CONSERVATION ACTIVITIES

KEY TAKEAWAYS

- Very few FTMs were employed, reflecting a lack of formal employment opportunities in communities that appeared particularly pronounced in treatment group communities. Instead, half of them were self-employed and 30–40 percent unemployed. Most employed and self-employed FTMs worked in agriculture or fishing as vendors or performing manual labor—both sectors can be challenging and problematic for pregnant women and new mothers.
- The main challenges FTMs faced in earning money were (1) lack of time, skills, motivation, or financial capital to search for opportunities; (2) limited availability of employment opportunities; and (3) discrimination.
- Some of the same types of conservation and livelihood-related activities that MIHR will develop were already in place and relatively well-known in treatment communities. They also existed and were known in comparison group communities. Regardless of community treatment status, FTMs' participation in these activities was very low, even in widely known ones, such as Community Conservation Microfinance Groups (CCMG, previously called COCOBA – Community Conservation Banks) and village saving clubs.

Table 19 shows FTMs' employment status by treatment group. Although FTP is not designed to have an impact on employment, in principle, certain components of the larger PHE Activity could affect employment or livelihoods. The results indicate that there were 32 percent of respondents not employed in comparison villages compared to 42 percent in treatment villages. This was compensated by a larger fraction of employed respondents in comparison than in treatment villages. Both of these differences are statistically significant. Finally, both in treatment and comparison villages, about half of the respondents were self-employed.

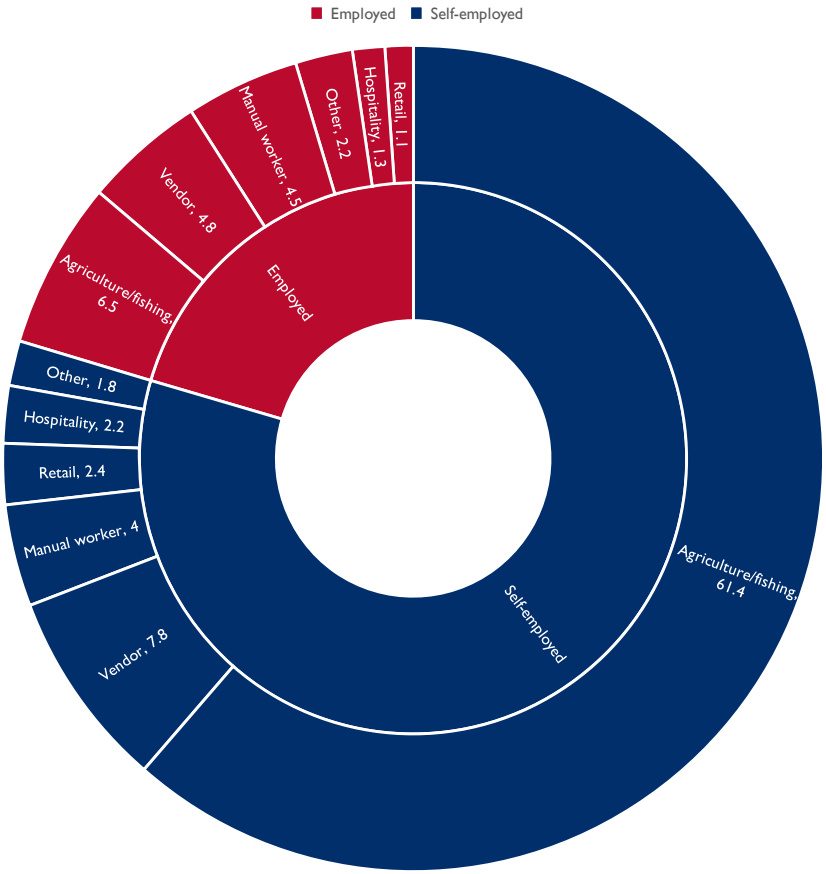
Table 19. Employment by treatment status

	TREATMENT	COMPARISON	DIFFERENCE
Not employed	42%	32%	-10%***
Employed	8%	17%	9%***
Self-employed	50%	50%	0%
N	**457**	**536**	

* p<.05 ** p<.01 *** p<.001

For those who were employed, including self-employment, *Figure 10* shows the distribution of occupations. Respondents who were self-employed largely worked in the agricultural or fishing sector. The agricultural sector includes livestock, farming, and forestry. Among employed respondents, other occupations, like vendor and manual worker, were almost as prevalent as agriculture-related work.

Figure 10. Occupation for employed and self-employed (percent)



Given the high prevalence of self-employment or non-employment, it is important to assess the main reasons for this result. Qualitative data collected from head teachers in Iringa highlight some of the perceived opportunities and challenges young people had in terms of livelihood. Young people may find work selling fruits, working in restaurants, or running small shops. However, the head teachers also noted that there were limited available jobs in their communities and some young people migrated outside their village in search of work. Much of the work available for young people was low-skills jobs; head teachers recommended interventions to help young people gain more human capital, such as training on entrepreneurship and how to lead a business.

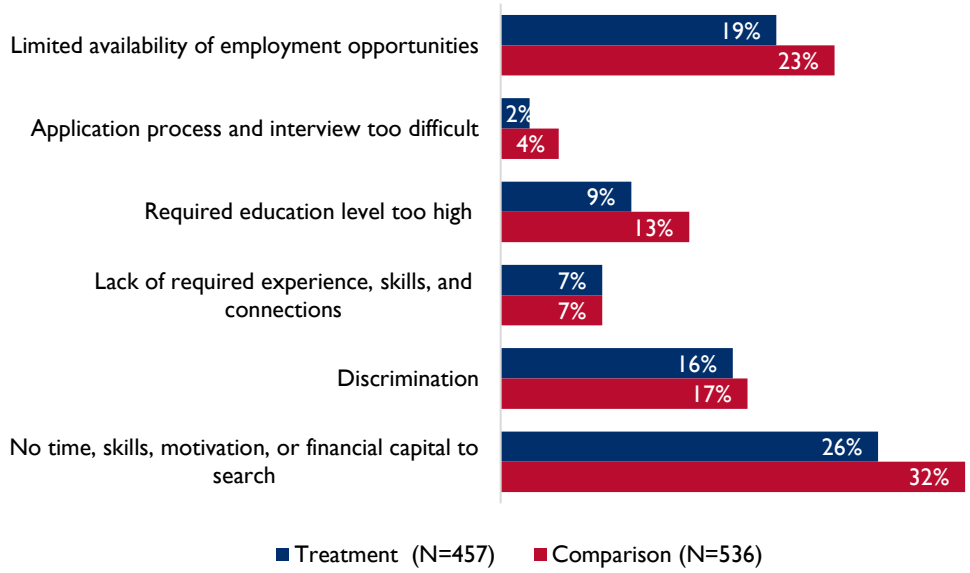
> *"We don't teach [young people] investment, which also important for them to know. There are many workers who have children, but there is no childcare. If they had [access] to that, they could do something. We lack investment skills because we think investors should be from abroad. Also, I wish we would teach them even online businesses." – Head Teacher, Idodi (T)*

In addition, there are barriers, such as lack of childcare, that make it more difficult for young parents to find work.

The survey asked FTMs about the main challenges women faced in earning money. The results, shown in *Figure 11*, indicate that the most frequently mentioned reasons were lack of time, skills, or financial capital, followed by limited labor demand and lack of education credentials, which is aligned with the

referenced qualitative results. None of the differences between treatment and comparison groups are statistically significant.

Figure 11. Reasons it is difficult to earn money



Note: Lack of time, skills, motivation, or financial capital represent three separate response options pooled together, given that these reasons all relate to challenges with searching for work.

6.5.1 IMPACTS OF PREGNANCY ON LIVELIHOOD AND OTHER ACTIVITIES

FTMs were asked about how pregnancy had affected their ability to engage in livelihood activities, as well as social activities and participation in peer groups. Women in treatment and comparison communities noted that pregnancy made it difficult to participate in the labor force, particularly physically demanding work, such as farming. In addition to decreased capacity to work, a young woman in Ikangamwani (T) said that her performance in school dropped due to pregnancy. Overall, women reported that pregnancy was tiring and it affected their ability to socialize and work. Pregnancy also made a woman in Ikangamwani (T) feel too ill to engage in social activities and another woman in Lupembe (C) said that pregnancy isolated her and made it difficult for her to stay connected with her community.

> *"I couldn't even go to talk to my friends because I was feeling bad all the time. My mouth was full of saliva all the time. I was vomiting all the time, so I couldn't stay with my friends." – FTM FGD, Ikangamwani (T)*

6.5.2 AWARENESS OF ENVIRONMENT AND LIVELIHOODS ACTIVITIES

The FTM survey asked whether respondents were aware of conservation and livelihoods activities happening in their communities. Given that MIHR plans to support conservation and livelihoods activities in the context of the PHE program, documenting the availability of these types of activities is important for understanding whether the activities that will be fielded are new to community members or not. If they are new, then there is a greater chance the program will have an impact on the expected outcomes than if the program offers activities already existing in these communities. As *Table 20* shows,

most of the planned implementation activities are focused on environmental conservation. The first two columns show the percentage of respondents who were aware of these activities in their communities, by treatment status. There is substantial variability in the level of awareness by activity. For example, while model *bomas* seemed to be practically nonexistent in both treatment and comparison communities, CCMG, and village and savings clubs were quite pervasive. About a fourth of the respondents were aware of activities related to climate-smart agriculture, forest scouting, and beekeeping.

When asked about conservation-related activities, head teachers interviewed in Idodi (T) and Makifu (T) stated that they were aware of the planting and protection of trees in their communities, as well as an effort to shift away from burning firewood to gas. However, efforts to switch to gas had been challenging due to the cost of fuel. A head teacher stated that, *"[we] have seen many people now using gas in their homes. That is to say, they don't cut trees for firewood. However, the price of gas is still high, [and] it cannot be afforded by everyone."*

Although awareness seemed high for some of these activities, as *Table 20* shows, actual participation was low across all of them, as *Table 21* shows. Notably, the figures reflect participation of either the respondent or her partner, so these should be considered an upper bound of actual respondents' participation. Along these lines, although awareness is already high for some of these activities, participation is low for all of them, implying that there is substantial opportunity for MIHR's programming efforts to promote and increase take-up of these activities.

Table 20. Awareness of environmental conservation and other activities

	TREATMENT	COMPARISON	DIFFERENCE
Model *boma*	5%	2%	-3%
CCMG	80%	64%	-24%**
Village savings clubs	51%	53%	2%
Youth clubs	21%	15%	-6%
Climate-smart agriculture	28%	24%	-4%
Forest scout	32%	28%	-4%
Beekeeping group	31%	20%	-9%
Crop protection team	12%	4%	-8%*
Other	0%	0%	0%
N	**457**	**536**	

* p<.05 ** p<.01 *** p<.001

Table 21. Participation in environmental conservation and other activities

	TREATMENT	COMPARISON	DIFFERENCE
Model *boma*	0%	0%	0%
CCMG	7%	7%	0%
Village savings clubs	4%	5%	1%
Climate-smart agriculture	1%	1%	0%

	TREATMENT	COMPARISON	DIFFERENCE
Forest scout	5%	7%	2%
Beekeeping group	1%	0%	-1%
Crop protection team	0%	1%	1%
Other	0%	0%	0%
N	**457**	**536**	

* p<.05 ** p<.01 *** p<.001

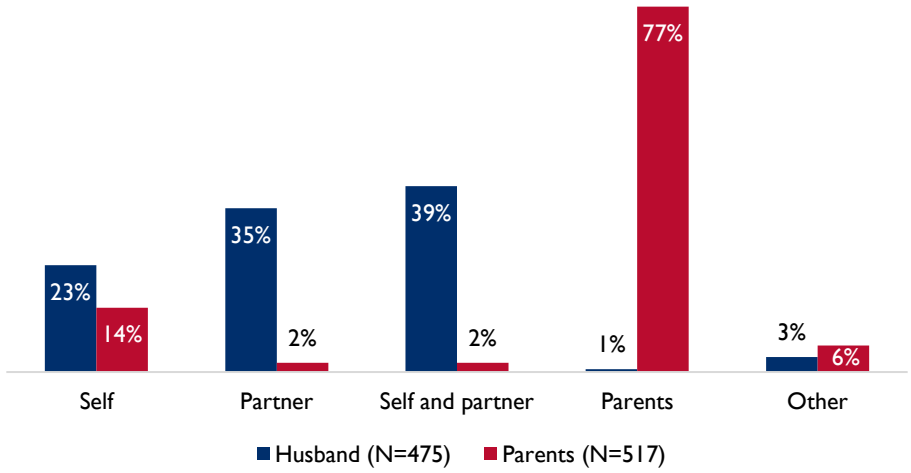
6.6 EMPOWERMENT OF YOUNG WOMEN

KEY TAKEAWAYS

- FTMs typically did not have control over how the budget was spent at home, especially if they lived with their parents. This is one area where treatment and comparison groups show a relatively important difference. The vast majority of FTMs were satisfied or very satisfied with the arrangement in place relating to the budget. This result held true even when their partner or parents had control.
- A similar pattern emerged for health care decisions. The principal difference compared to budget decisions was that more women reported making these decisions with their partners. These findings contradict the perception many CHWs and FP professionals reported, who often felt that women could make independent health care decisions. There might also be some community-level differences at play. The level of satisfaction with this situation was very high across the board, and only 17 percent of FTMs were neutral or dissatisfied when partners were deciding for them.
- Young men and women sometimes noted a division of household tasks between them and their partner, but most often, women were the *de facto* party responsible for doing these tasks. Very few reported having discussed the arrangements in place and the division, when applicable, relied on traditional views of what constitutes tasks for men and women.
- Tolerance for IPV was relatively high among FTMs, particularly for certain scenarios, such as if a woman neglects the children, where approximately half of FTMs felt a husband was justified in hitting his wife. Arguing with one's husband and using FP without his knowledge justified IPV for approximately a third and a quarter of FTMs, respectively.
- Measures of FTM self-esteem and resilience are quite similar between comparison and treatment groups. They reflect very high resilience and high self-esteem overall.

To assess how decisions are made within the household, the FTM survey asked respondents who decided how the household budget was spent. *Figure 12* summarizes the results of this question by whether respondents lived with their parents or their husband. Women who lived with their parents had very little agency on how the budget was spent. In fact, 77 percent of women who lived with their parents said their parents decided how the budget was spent, while only 14 percent said they (the respondent) decided how the budget was spent. In contrast, women living with their husband had more agency on how the budget was spent—23 percent of them said they decided how the budget was spent, 39 percent said they and their husbands did, and only 35 percent said their husband alone made the related decisions.

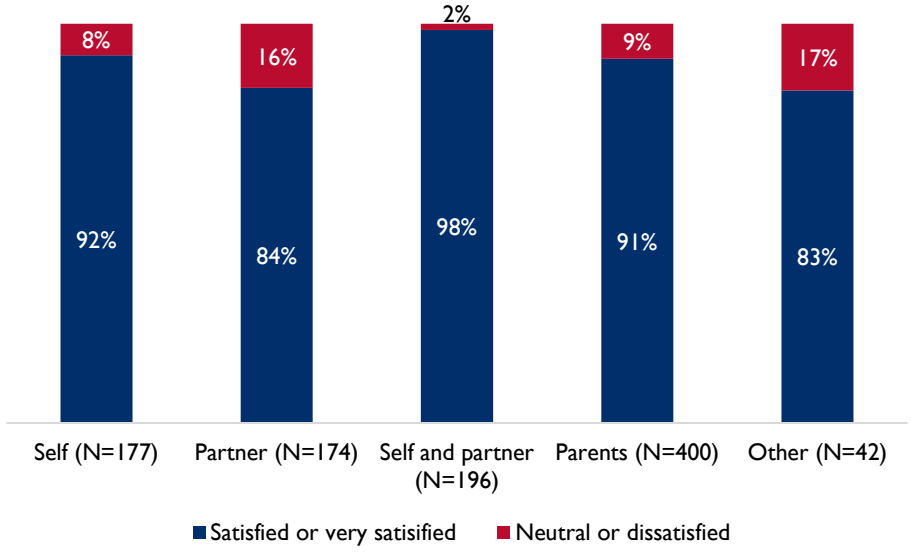
Figure 12. Who decides how the budget is spent at home by whom respondents live with



Note: All respondents lived with either her husband or her parents or both. Only six respondents lived with her husband and her parents. In this figure, those six cases are classified as living with her parents.

The survey also asked whether the respondent was satisfied with who made the household budget decisions. As *Figure 13* shows, almost all respondents were satisfied when they and their partners made the budget decisions; however, the results indicate that most respondents were satisfied with who made the decisions about the budget at home, regardless of who that person was.

Figure 13. Level of satisfaction with who decides how the budget is spent



6.6.1 DIVISION OF LABOR

To explore other aspects of women's empowerment, qualitative data were collected on decision-making related to division of labor within households. Among FTMs and men in both treatment and comparison communities, some stated that there was a division of tasks within the household, while others reported that the woman was responsible for all household chores. Furthermore, most participants claimed that they did not have a discussion with their partners about the division of household labor. For example, a man in Idodi (T) stated that *"a woman already knows her responsibilities."* For households that did not have a division of household tasks, the couples almost universally did not discuss who would be responsible for duties such as cleaning the home, cooking, and so on.

FGD participants discussed household responsibilities in gendered terms, with multiple men and women claiming that there were "father" and "mother" jobs. Based on qualitative responses, culture seems to be a large factor in this framing and limits what work men and women can do at home. Multiple FGD informants believed that their communities would not permit men and women to work outside of their designated realms. A man in Makifu (T) stated that there was division of household tasks in his house, but that *"it depends [on] the different tribes, because, in the other tribe, they believe that women cannot collect water. They only believe women['s] tasks are those in the kitchen."*

6.6.2 SATISFACTION WITH HEALTH CARE-RELATED DECISIONS

The survey asked who made health care-related decisions, which includes but is not limited to FP, in the household. *Figure 14* shows that the results were similar as in the question about budgetary decisions. Specifically, respondents' parents were the most cited decision-makers when it comes to health care. None of the differences between treatment and comparison groups are statistically significant.

Figure 14. Who makes health care-related decisions

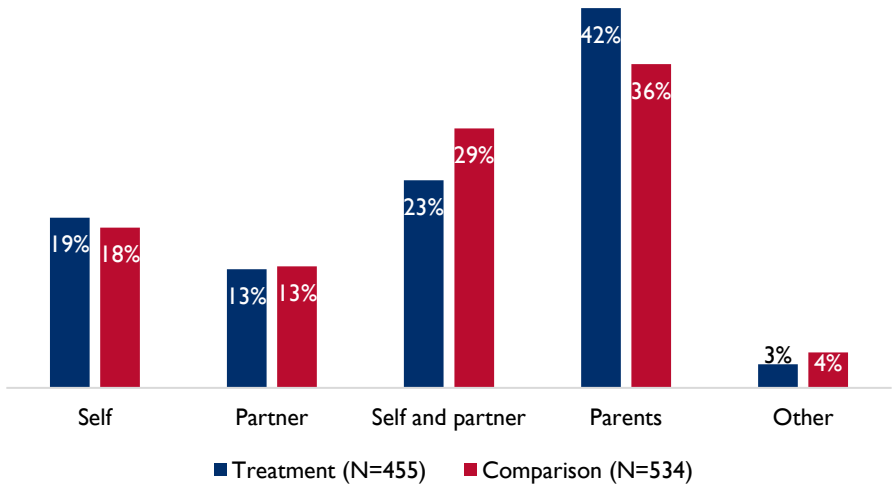
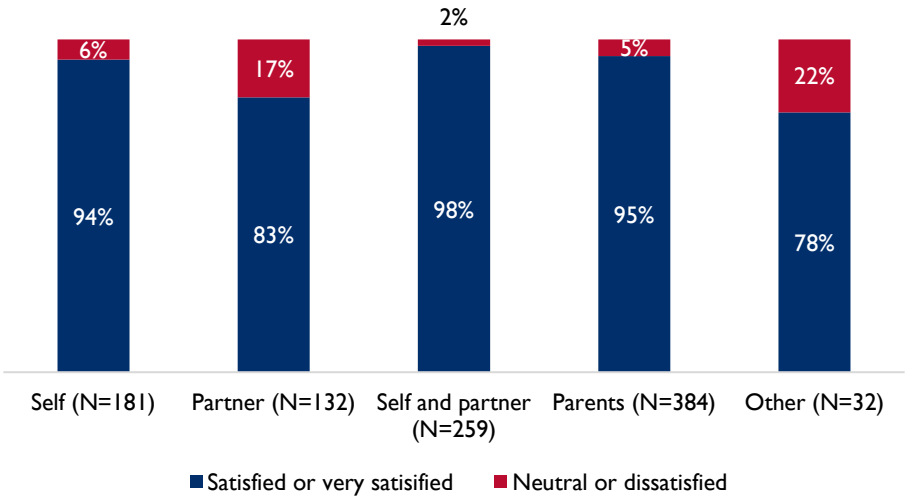


Figure 15 shows how satisfied respondents were with who made the health care decisions at home. Notably, although proportionally respondents were a bit less satisfied when their partner alone was the decision-maker, most respondents were satisfied with who made the budgetary and health care decisions at home overall, regardless of who that person was.

Figure 15. Level of satisfaction with who makes health care-related decisions



CHWs believed that the ability of women to make independent health care decisions varied by community. For example, according to CHWs, RCH doctors, and DRCHCOs, it was typical for women to make their own decisions on their health care in Idunda (C), and Ikangamwani (T), Mufindi (T), and Ugenza (T).[21] However, RCH doctors in Lupembe (C) and Makifu (T) claimed that only a few women had been able to make their own health care decisions in certain communities and independent decision-making depended on the environment and people women lived with. For example, women involved their partners in their FP decisions, as well as other trusted resources, such as family members. An RCH doctor in Iringa (T)[22] noted that collaborative decision-making, in some instances, could allow men and women to share the burden of collecting and using FP methods. Parents of a couple can advise them on decision-making. However, another RCH doctor in Iringa noted that, if a single woman chose to use FP methods, her family might shame her and so she would likely seek FP methods in secret.

Although it is up to the woman to include her male partner in her decision to take contraceptives, by not including their male partners in their decision-making, a CHW in Idodi (T) believed conflict may arise within households. They thought secrecy would, ultimately, lead to distrust within the relationship.

"[Women] must involve their husbands. If she decides to go alone, it often causes conflict in the house. However, for those who are not married yet, they can just go and check for their health." – CHW, Idodi (T)

That being said, women in comparison and treatment communities continued to access contraceptives without the knowledge of their male partners. An RCH doctor in Ndulamo (C) reported that in some cases, women would leave health care documents at the hospital, stating that "some leave their clinic card at the hospital for fear that their husbands will hide the cards." Women feared that their partners would limit their access to contraception if they knew they accessed services.

[21] DRCHCOs are responsible for entire districts and are typically based in the administrative center of the district. In this case, the DRCHCO was based in Mufindi, which is host to treatment villages.
[22] Ibid.

"Because women are the ones facing more challenges when they are pregnant, they decide to use family planning. However, their partners do not allow that. [They think] that if they allow them to use family planning, [the woman] will be sleeping around with [other] men. [So, women] use family planning methods secretly, and they don't prefer pills because they might be seen at home." – CHW, Makifu (T)

6.6.3 AGENCY

FTM survey respondents were asked two questions about agency. Specifically, the survey asked respondents to say, on a scale of 1 to 10, how much control they had when it came to whom they spent time with outside the house, where 1 means their partner or another household member had full control and 10 means the respondent did. A similar question was asked about the extent to which respondents had control over leaving the house to visit family members. *Table 22* shows the mean and median for these items. None of the differences between treatment and comparison groups are statistically significant.

Table 22. Mean and median for agency related items (1-10 scale)

	TREATMENT	COMPARISON	DIFFERENCE
People they can spend time with outside the house			
Mean	6.0	5.4	-0.6
Median	5	5	0
Leaving the house to visit family members			
Mean	5.0	4.8	-0.2
Median	5	5	0
N	**457**	**533**	

Note: On the scale of 1 to 10 used for these two questions, 1 means respondent's partner or another household member has full control and 10 means the respondent does.

Multiple older women the team interviewed in comparison communities believed that women were acknowledged as integral to their households and communities and were able to achieve and thrive in leadership roles. Furthermore, they cited seeing women in positions of power as a symbol of change and representation of women's capabilities, because these leadership positions had been traditionally held by men. However, this is not a universally held view among those we interviewed. Multiple older women in treatment communities maintained that women should carry out traditional duties in their households and listen to their parents or husbands. Other older women in treatment communities said that women were viewed as children under the care of their families rather than adults with their own agency.

Table 23 presents the results of a group of questions that asked respondents whether husbands were justified in hitting or beating their wives in different scenarios. The table shows the percentage of respondents that said husbands were justified in each scenario, by treatment status. The results indicate that roughly half of the respondents in both treatment and comparison groups believed that husbands were justified in hitting their wives if they neglected their children. For the other scenarios, the percentages are lower, but still non-negligible. For example, 17 percent of the treatment group and 16 percent of the comparison group believed that husbands were justified in hitting their wives if they burned the food. Of note, the percentage of respondents that believed husbands were justified in hitting

their wives was consistently higher in the treatment group than the comparison group, across all scenarios, although none of the differences are statistically significant.

Table 23. Cases where husbands are justified in hitting or beating their wives

	TREATMENT	COMPARISON	DIFFERENCE
If she goes out without telling him	0.30	0.22	-0.08
If she neglects the children	0.51	0.46	-0.05
If she argues with him	0.37	0.31	-0.06
If she refuses to have sex with him	0.17	0.16	-0.01
If she burns the food	0.17	0.13	-0.04
If she uses FP without his knowledge	0.29	0.24	-0.05
N	**452**	**523**	

Note: Sample sizes are marginally different among questions due to item-specific missing information.

* p<.05 ** p<.01 *** p<.001

6.6.4 PROTECTIVE ASSETS

Finally, the survey recorded data on two protective assets, self-esteem and resilience. Protective assets are skills or competencies individuals can employ to overcome an obstacle or challenge. Because the program aims to improve FTMs' empowerment and decision-making skills, we collected data on self-esteem using the Rosenberg Self-Esteem Scale (RSES) (Rosenberg 1965) and resilience using the Adult Resilience Measure-Revised (ARM-R) (Resilience Research Centre 2018; and Jefferies, McGarrigle, and Ungar 2018).

The RSES has 10 items about respondents' feelings and attitudes toward themselves (e.g., "I feel that I have good qualities"). It uses a 4-point Likert scale: Strongly agree, Agree, Disagree, or Strongly disagree. Each item is scored on a 0–3 scale, and some items are reverse scored. An index is calculated as the sum of the 10 items, so the minimum is 0 and the maximum is 30. The score is constructed so that higher scores reflect more self-esteem.

The ARM-R has 17 items about respondents' resilience skills and resources (e.g., "I feel that I belong in my community"). It uses a 5-point Likert scale: A lot, Quite a bit, Somewhat, A little, and Not at all. Each item is scored on a 1–5 scale, and no items are reversed scored. An index is calculated as the sum of the 17 items, so the minimum score is 17 and the maximum is 85. The score is constructed so higher scores reflect more resilience. *Table 24* shows means for the two calculated scores, by treatment status. In both cases, the treatment group has a higher mean score; while the differences are statistically significant, they are small relative to the mean, especially in the case of the reliance score.

Table 24. Self-esteem and resilience

	TREATMENT	COMPARISON	DIFFERENCE
Self-Esteem	25.22	23.91	-1.31**
Resilience	78.67	76.66	-2.00*
N	**457**	**536**	

* p<.05 ** p<.01 *** p<.001

CONCLUSIONS

One of the key objectives of the baseline data is to document the situation and context in both treatment and comparison communities and examine whether there are major differences between the two groups. In general, the differences found throughout this report are consistently minor across major variables of interest, including sociodemographic characteristics, health systems, women's empowerment and, importantly, contraceptive use. However, we found some statistically significant differences for certain key variables, such as marital status and protective assets. The proposed DiD design does not require that there be no differences between treatment and comparison villages, but it is important to keep in mind that the two groups are not observationally equivalent at baseline.

We found no sign that survey respondents participated in programs like FTP or the larger PHE Activity. For example, almost no respondent said they had participated in clubs or groups where they met to discuss topics related to SRH. Although respondents were aware of certain programs that are part of the PHE interventions, like savings clubs or beekeeping, actual participation was rare. This is important because it indicates that FTP+PHE will provide access to activities that are either not available in these communities or are available but women do not participate in them.

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