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BASELINE REPORT:

Quantitative Data Analysis

Masculinities, Faith, and Peace Project

Institute for Reproductive Health
Georgetown University

tearfund

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Masculinities, Faith and Peace Project

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ACRONYM LIST

CDC	Centers for Disease Control and Prevention
cRCT	Cluster Randomized Controlled Trial
FP	Family Planning
FTP	First-time Parents
GBV	Gender-based Violence
HH	Household
HTSP	Healthy Timing and Spacing of Pregnancies
IPV	Intimate Partner Violence
IRH	Institute for Reproductive Health
LARC	Long-Acting Reversible Contraceptive
MC	Modern Contraception
MFP	Masculinities, Faith and Peace
NHREC	Nigerian Health Research Ethics Committee
NMC	Newly Married Couples
SD	Standard Deviation
SGBV	Sexual and Gender-based Violence
SRH	Sexual and Reproductive Health
TM	Transforming Masculinities

EXECUTIVE SUMMARY

Background & intervention. Nigeria suffers from high rates of intimate partner violence (IPV) and low use of modern contraception. Although many factors contribute to Nigeria's poor sexual and reproductive health outcomes, including poor access to costly health services, socially constructed and enforced gender norms also play a significant role. To date, little progress has been made in understanding the role of gender norms on behaviors such as IPV and voluntary use of modern family planning, particularly at important life course transitions among young people and couples. However, norms-shifting interventions are increasingly being considered and evaluated for their potential in shifting norms and behaviors. Faith-based initiatives are one potential mechanism for norms-shifting, given the large degree of influence of religious leaders in communities in Nigeria. Adapted from the Transforming Masculinities intervention conducted in rural, eastern DRC, the Masculinities, Faith, and Peace (MFP) project adds a focus on family planning and social cohesion, in addition to IPV and gender roles in Plateau State, Nigeria. MFP is currently one of a handful of normative interventions designed for religious congregations to reduce IPV, increase voluntary FP use, and improve sexual and reproductive health outcomes by addressing the social norms that shape inequitable gender relations and prevent the use of modern FP methods. As an innovation, MFP addresses existing social and gender normative barriers to family planning use and healthy timing and spacing of pregnancies through gender transformative programming.

Study design & methods. The study is designed as a cluster randomized controlled trial with 20 Christian and Muslim congregations in peri-urban and rural communities in Plateau State, Nigeria randomly assigned to either a control or experimental group (with ten congregations—five Christian and five Muslim—in experimental groups, and ten—five Christian and five Muslim—as control groups). The target populations for the MFP intervention were 18-35 year-old women and their male partners of any age who are cohabitating, have been married for less than five years and do not share a biological child older than four years of age. A two-stage stratified sampling design was used to assign congregations and to ensure demographic similarity between control and experimental congregations. Baseline research activities were conducted by IRH with Population Council-Nigeria from April to June 2019. At baseline, 831 respondents were surveyed, with 357 individuals in experimental and 474 individuals in control congregations. The study team developed measures for attitudes and social norms related to IPV, family planning, gender equity and roles ("positive masculinities"), and social cohesion. Baseline prevalence for indicators were assessed as well as differences in these measures comparing key populations (by arm, gender, and religion).

Baseline prevalence for key indicators. At baseline, 41.6% of all non-pregnant respondents from experimental congregations reported that they were currently using a modern method of family planning within their relationship. There was a significant difference comparing reported use of modern FP by religion, with 51.1% of Christian and 37.2% of Muslim respondents reporting this behavior. About one-half held positive attitudes toward personal use of modern contraception for all young couples and more than three-quarters of respondents believed that they could use modern contraception if they wanted to. However, respondents were less likely to personally believe that use of modern family planning was appropriate for some couples (e.g., newly-married couples) and only about one-half perceived that

religious leaders and scriptures would be supportive of young couples using modern contraception. Looking at social norms, respondents were likely to perceive that their reference groups would be supportive of modern contraception use, but only about one-third of respondents perceived that modern contraceptive use was typical among young couples in their faith communities.

For IPV, at baseline, 69.2% of respondents from experimental congregations reported that they had experienced (women) or perpetrated (men) at least one form (emotional, physical, sexual) of IPV on their partners in the previous one year. Breaking this down, 62.2% reported experiencing/perpetrating a form of emotional IPV, 18.5% physical IPV, 20.5% forced sex, and 8.7% violence specifically to discourage FP use. Women were more likely to report experiencing physical, sexual, and violence to discourage FP use compared to men and Christians were more likely to report experiencing/perpetrating IPV compared to Muslims. Large majorities of respondents did not personally approve of IPV, but approximately one-quarter thought IPV was sometimes justified and nearly one-half personally believed that their religious scriptures supported a husband using violence to discipline his wife. Social norms measures suggested that IPV was neither typical nor approved behavior in their congregations.

Looking at gender roles, nearly two-thirds of respondents reported that men did not often contribute to household chores and childcare. Similar to IPV, male contribution to household work and childcare was not perceived to be typical behavior in their congregations, but most suggested that their reference groups would approve of male involvement in these activities. In general, only about one-half of respondents agreed that men and women are created equal by God. Finally, we also assessed perceptions of social cohesion in their multi-faith communities. About one-half of respondents perceived that religious conflict and mistrust was common in their communities, but such perceptions were much higher for Christian respondents compared to Muslim respondents. However, both Christian and Muslim respondents were highly likely to perceive that religious leaders in their own communities could successfully work across faiths to solve community problems.

Conclusion. These findings demonstrate several promising points of intervention to build upon as well as focus on for improving modern family planning use, reducing IPV, promoting gender equality and positive masculinities, and improving social cohesion and interfaith dialogue. In particular, findings often highlighted misperceptions around modern FP methods and important discrepancies between: women's and men's attitudes and perceptions, personal attitudes and social norms, descriptive and injunctive norms, and attitudes and social norms regarding different life stages (e.g., first time parents compared to newly-married couples). In addition, the findings demonstrate the importance of religion (i.e., scripture, influence of religious leaders and congregation members, church attendance) in these communities and its influence on FP use, IPV, gender equality, and masculinity. These findings support intervention components focusing on couple's communication and community dialogue through religious leaders and scripture as well as linking couples and communities with existing sexual and reproductive health services. These findings will be compared against findings at endline after 18 months of intervention. Difference in difference analysis will be used to assess change from baseline to endline and comparing experimental and control populations.

INTRODUCTION

BACKGROUND

The Masculinities, Family, and Peace (MFP) project is an intervention and research initiative, implemented by the Institute for Reproductive Health (IRH), Georgetown University in collaboration with Tearfund and local partners in Plateau State, Nigeria. The MFP Project is funded by the John Templeton Foundation. The overall aim of the MFP intervention is to decrease gender-based violence (GBV), create an enabling environment for family planning (FP), and foster social cohesion in Christian and Muslim communities in Plateau State, Nigeria. Specifically, MFP aims to transform the underlying social norms that impede young couples from accessing FP services, promote harmful masculinities, and enable GBV, particularly intimate partner violence (IPV).

MFP is an adaptation of the Tearfund developed Transforming Masculinities (TM) approach with additional intervention components focused on FP and social cohesion. TM is an evidence-based intervention for religious leaders and communities to promote positive masculinities and gender equality, and in doing so reduce GBV. Gender inequality is embedded in culturally constructed roles of men and women, boys and girls, and enforced through social structures, including religion and across religious scriptures.[1] TM uses a process of participatory scriptural reflection and dialogue with religious leaders and congregants to identify, create, and embrace new, positive masculine identities. IRH and partners built on the original curriculum to include components on FP and sexual and reproductive health (SRH) education and explore linkages to FP clinics and services in Plateau State, Nigeria. The intervention also engages religious leaders in peace-building and violence prevention activities to address social cohesion.

The MFP intervention in Nigeria targets couples[1] at key life stage transitions- newly married couples (NMC) and first time parents (FTP)- and their religious and community leaders to improve FP and social cohesion and reduce GBV and IPV.

INTERVENTION

The MFP intervention is implemented in five experimental communities in Plateau State, Nigeria. As a research project, five control communities have also been selected to assess the progress and impact of the intervention. One church and one mosque have been selected in each of the communities for a total of 20 congregations (ten churches and ten mosques). MFP is designed to engage religious leaders, young couples, and their wider Christian and Muslim congregations to

[1] Full eligibility criteria are discussed on page 15.

foster greater gender equality, positive masculinities, enable FP use by young couples, and improve community relationships.

The intervention uses workshops or structured small-group discussions called community dialogues. They draw on scriptural reflections on gender equality, GBV, positive masculinities, family planning and interfaith relationships and include activities targeted at:

- **Community members:** Community dialogues (guided two-hour small-group discussions) meet weekly for eight weeks. They are facilitated by gender champions for young couples within their congregations. Week 8 of the community dialogues incudes a brief health talk about modern family planning methods with a referral card given to each participant.
- **Religious leaders:** Four-day workshops for state- and congregational-level religious leaders to engage them in personal reflection and to provide leadership and support for the MFP intervention. A refresher workshop is held after the first cycle of community dialogues (three months).
- **Gender champions:** Religious leaders select key members of their congregations to be trained as facilitators of these community dialogues. Reflective workshops last four days, covering key themes including GBV and faith, power and status, and the benefits of FP (also referred to as child spacing in sensitive communities), and also include facilitation training and practice. A refresher workshop is held after the first cycle of the community dialogues (three months).
- **Wider congregation:** MFP messages are diffused beyond young couples involved in the community dialogues to all congregation members through:
    - Talks and/or sermons delivered by religious leaders (Christian and Muslim)
    - Group discussions led by religious leaders
    - Couples sharing their stories of change in congregational meetings
    - Community mobilization events focused on MFP themes

Community dialogues run for eight weeks and follow key themes each week. In Week 8, a family planning provider makes a presentation to the group on modern FP methods, their side effects, and common myths and misconceptions. During this presentation, the provider distributes referral cards to participants to access further counselling and methods, if desired, from local health centers. Thirteen health centers in the target (experimental and control) communities have been selected in this intervention. Health talks and referral cards are also given in the control congregations. The community dialogues close with a celebration event in Week 9, which brings together graduating couples from the Christian and Muslim communities, as an opportunity to share reflections and learnings together.

LITERATURE REVIEW

GENDER AND VIOLENCE IN NIGERIA

Social norms and ascribed gender roles in Nigeria endorse high fertility rates and low FP use.[2] Virility is a key masculinity characteristic and women gain their social worth as child bearers. Correspondingly, communities assign social status to men and women who have large families and expect newlyweds to start a family immediately. In much of sub-Saharan Africa, including Nigeria, men commonly make decisions as head of household, including those related to health care and FP use.[3] If women transgress their assigned gender role to support their husbands through bearing and raising children, society sanctions the use of GBV.[4] Therefore, a large family upholds both men and women's assigned gender roles and influences the use of GBV.

GBV is common in Plateau State with 13.5% of women reporting physical or sexual violence by their partner in the last 12 months, which is higher than the national average.[5] Women are susceptible to violence throughout their life course, but this is most common in their fertile years.[6] Women often report incidences of various forms of violence during their antenatal visits to health care workers.[7] Gender norms make it difficult for men who are supportive of FP use or more equitable gender relations to act counter to expected behavior. By failing to address gender and social norms, the number of unintended and poorly timed pregnancies among women will continue, resulting in poor health outcomes.[8] There is significant evidence around the importance of addressing gender inequalities and power dynamics in order to improve FP use, and that gender influences FP uptake.[9] These include knowledge that unequal power relations, men and women's attitudes toward FP, and gender roles create barriers to FP use.[10] Additionally, studies have demonstrated that IPV potentially decreases FP use by limiting joint decision-making and creating fear among women of retaliation should they use FP.[11] When approaches succeed in addressing gender norms, and increase gender equality for instance, couple communication and decision-making improves, which therefore leads to an increase in FP use.[12] Additionally, when relationships are more egalitarian, they are associated with improved use of family planning methods.[13]

NIGERIAN FAMILY PLANNING CONTEXT

Nigeria is the most populous country in Africa with an estimated population of 196 million as of 2018[14] and a population growth rate of 3.2 percent each year at 5.5 live births per woman.[15] 44% of the population is under the age of 15,[16] and the rate of teenage pregnancies is high with 23% of 15-19 year olds having begun childbearing (13.1% in Plateau State).[17]

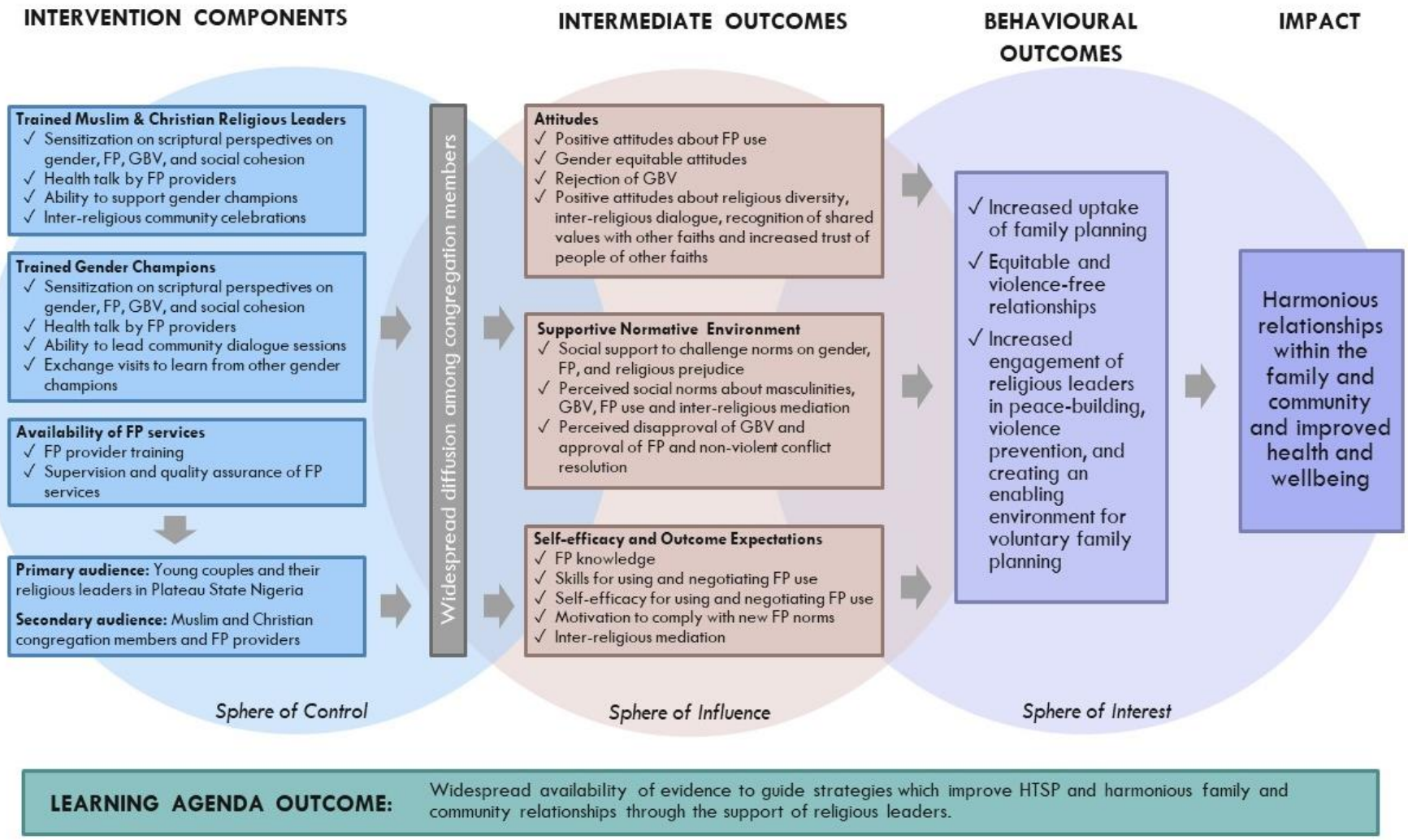
In Nigeria, only 26.3% of married women aged 15-49 reported their need for FP is satisfied with modern methods in comparison to the regional average of 44.8%.[18] 28.9% of all women use any method of contraception, with a contraceptive prevalence of women between the ages of 15 and 49 at 13.4% with 10.8% of this group using a modern method.[19] Current use of modern FP is 14.4% in Plateau State. Access to FP services is limited by prevailing social norms that value high fertility and non-use of FP. Research shows that misperceptions around modern FP as well as male partner disapproval contribute to low uptake levels.[20] In addition, polygamous marriages are looked upon favorably with 31% of women between 15 and 49 years old reporting that their husband or partner had over wives.[21] According to a study in Kaduna State, the top two reasons for non-use of FP among women who did not desire a pregnancy soon were the belief it was "unnecessary" in addition to religious or cultural opposition.[22] Early pregnancy and child marriage curtail girls' educational and vocational opportunities, contribute to the intergenerational cycle of poverty, and lead to poor SRH.[23]

RATIONALE FOR THE STUDY

Changing socially unacceptable harmful gender norms that underlie poor SRH results is an emerging area of action in global health programming. The accumulation of evidence suggests that interventions aimed at shifting normative environments should target men, women, and community structures that produce and reinforce gender norms. Those gender transformative interventions are the most promising for generating positive changes in attitudes and behaviors related to SRH, especially when they extend beyond the individual level to the social level.

The primary rationale for this proposed research study is that, should the MFP intervention prove effective in Plateau State, Nigeria this intervention provides a promising approach for facilitating normative change, which would lead to increased FP use, improved social cohesion, and reduced IPV (see Figure 1), with potential to be widely and successfully scaled up in various contexts. The study is deliberately set up to understand how to shift social norms related to FP, IPV/GBV, and social cohesion and how to measure these shifts. Going further, the MFP intervention seeks to address norms that are promulgated by religious communities – a context which has been shown to have a strong effect on social norms. We hypothesize that religious leaders and religious communities talking about gender and FP would lead to FP use through collective/social norm change including a reduction in gender-based barriers such as IPV. As such, the intervention seeks to directly address these institutional normative barriers to FP within religious communities. This research also aims to answer whether addressing social norm and diffusion ideation within these religious communities contribute to FP uptake.

Figure 1. MFP Theory of Change



EVALUATION

This evaluation was conducted to determine the extent to which MFP, a gender normative-focused FP intervention with religious leaders and religious communities, increases FP use, reduces IPV, improves social cohesion and interfaith dialogue, and promotes positive masculinities in participating congregations in Plateau State, Nigeria.

Prior to data collection, formative research was conducted in eight experimental congregations, using the Social Norms Exploration Tool (SNET), a participatory guide and set of tools to translate theory into practical guidance to inform a social norms exploration.[24] Participatory techniques including use of vignettes and reference group mapping were used to refine survey questions, particularly those used to assess social norms and the appropriate reference groups for norms pertaining to FP, IPV, social cohesion and interfaith dialogue, and positive masculinities and gender roles.

This report focuses on data from a baseline quantitative surveys conducted among 10 Christian and 10 Muslim congregations in Plateau State, Nigeria, allocated to either receive the MFP intervention in the experimental group (5 each Christian and Muslim congregations) or act as a control population (5 each Christian and Muslim congregations). The intervention focuses on couples at key life stage transitions- newly married couples and first-time parents. In practice, this means that eligibility for the study was considered based on women aged 18-35 married to a male partner (18 years and older) without children or with children under the age of five. The baseline survey was conducted from April to June 2019.

STUDY METHODOLOGY

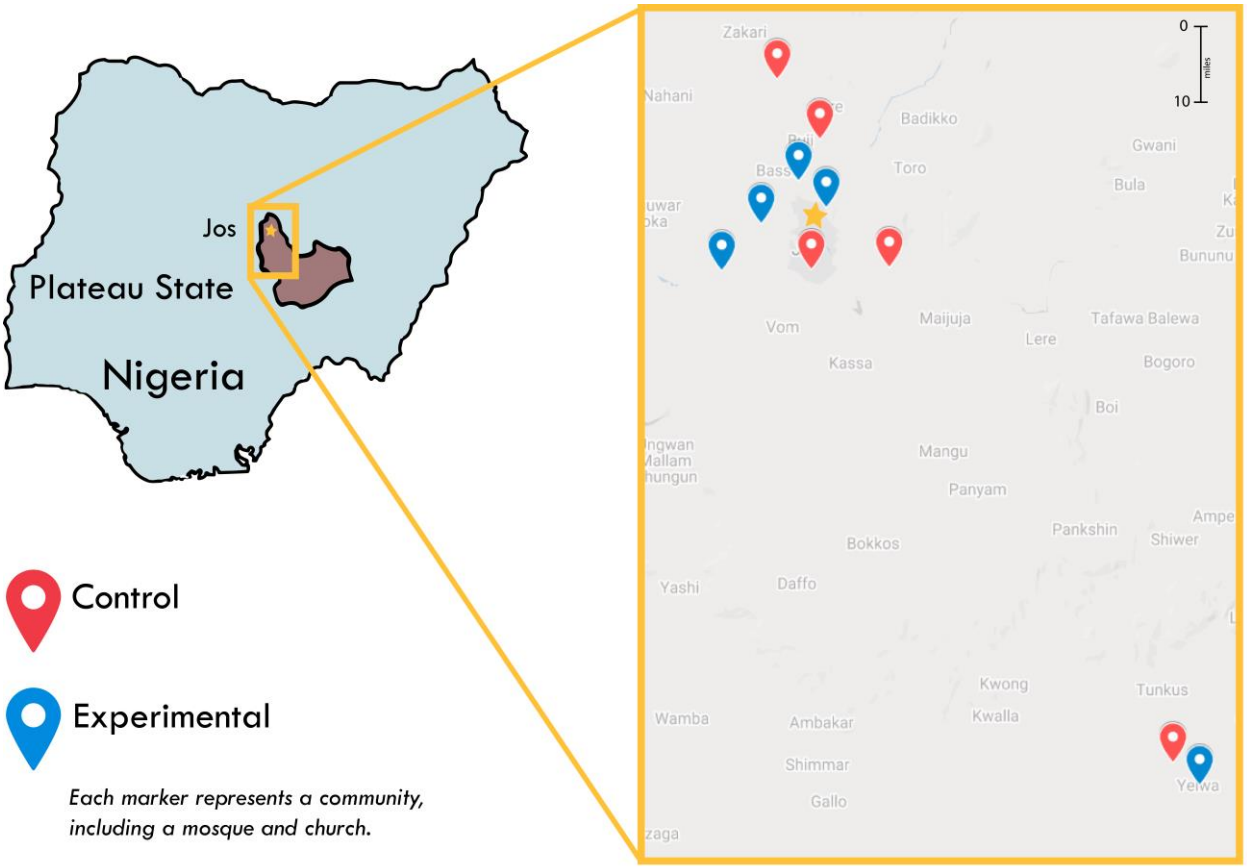
The study is designed as a cluster randomized control trial (cRCT) in 10 communities in Plateau State, Nigeria following the same individuals from baseline to endline. A two-stage stratified sampling design was used to assign congregations (and then select individual respondents) and to ensure demographic similarity between control and experimental congregations. In each of the 10 communities, there is one Christian congregation and one Muslim congregation for a total of 20 congregations. The ten communities were randomly assigned to either a control or experimental group (with five communities in each group). For each selected community, both the Christian and Muslim congregation were selected together for the control or experimental group. The baseline was conducted from April to June 2019. Quantitative data collection consisted of a survey administered to 18-35 year-old women and their partners in ten control and ten experimental congregations. The survey assessed prevalence of individual and community-level norms, attitudes, and behaviors related to FP, IPV, social cohesion and interfaith dialogue, and gender equality and gender roles prior to conduct of the intervention.

Tools were developed by IRH staff in consultation with Tearfund-UK and Tearfund-Nigeria staff. Data collection was conducted by Population Council-Nigeria and supervised by IRH using electronic data collection methods. Analysis and reporting were conducted by IRH. The study was approved by the Committee for Ethics of Georgetown University, United States and the Nigerian Health Research Ethics Committee (NHREC).

STUDY SITES

The research was conducted in 10 communities in Plateau State, Nigeria, each with a Christian congregation and a Muslim congregation. The 10 communities include: Dadinkowa, Fobur, Gurum/Mista Ali, Jebbu Bassa, Jengre, Longvel, Miango, Naraguta, Saya, and Yelwa. In examining the spread of these congregations over Plateau State, one can see that there is no specific clustering of sites (see Figure 2). Additionally, an interactive version of this map can be found online here.

Figure 2. Map of MFP Control and Experimental Sites



STUDY POPULATION & SELECTION CRITERIA

Inclusion criteria for couple survey: Women between the ages of 18-35 and their male partners of any age. In addition, we only included members of a couple that have been married within five years, that are cohabitating, and if the couple has children, their oldest shared biological child is not older than four years of age. The rationale for this target group is to catch young couples early in their married and sexual lives, at a point where they are more malleable, and for some before they start their families, while taking in consideration the high pregnancy rates among young adults in Nigeria.

Exclusion criteria for couple survey: Any couple not meeting this inclusion criterion and any individual whose partner already participated in the survey.

SAMPLE SIZE & SAMPLING PROCEDURES

The couple survey was designed to recruit 20 men and 20 women from each of the 20 congregations for a total of 800 couple members. This was based on calculating a minimum detectable effect size (i.e., difference across treatment arms) in a self-reported incidence of IPV over a six-month recall period, assuming a 0.5 probability of IPV, intra-class cluster coefficient of 0.3, power of 80%, and α=0.10 (calculation using CDC Epi Info v7).

Random sampling was conducted to select individual respondents. For random sampling, religious leaders were asked to identify eligible couples among their regular congregation attendees to generate a sampling list. The list of eligible women was ordered alphabetically, and assigned a chronological number starting with one. A random number generator was used to select among the women on the sampling list. In each congregation, we alternated between choosing the female member of the couple and the male member of the couple to maintain gender balance. Only one member from each couple was invited to participate in the survey.

DATA ANALYSIS

The survey included questions to assess demographics, attitudes, behaviors, and social norms. The diffusion survey included a more limited set of items relating to attitudes and social norms as well as items relating to communication about topics relevant for MFP messaging. The surveys were informed by the social norms exploration conducted in January 2019. The social norms exploration utilized participatory qualitative techniques to explore and confirm a range of social norms and reference groups influential for target behaviors. Findings were used to develop and refine the quantitative surveys. See Table 1 for how these concepts were treated and analyzed.

Table 1. Concepts addressed & data collected in quantitative surveys

Concepts addressed	Information collected	Outcome/ Response type	Analytic notes
Personal/couple behaviors	1. Current MC use 2. Experience (women) or perpetration (men) of IPV in the previous one year	1 survey item with multiple MC types: Binary, yes/no if reported current use of any one type of MC 7 survey items: Ordinal, 3-point Likert Scale relating to frequency of IPV; recoded as binary variable, yes/no	• Pregnant couples excluded from consideration for current MC use • MC includes reported current usage of any one of the following: condoms, oral contraceptives, injectables, implants, IUD, sterilization, SDM, or LAM • IPV assessed as any reported IPV and also categorized as emotional, physical, and/or sexual IPV
Behavioral intentions	Intention to use MC in the future	1 survey item: Ordinal, 4-point Likert Scale for likelihood of future use	
Individual attitudes	1. Toward use of FP/MC 2. Toward IPV 3. Toward gender equality and roles	26 survey items: Ordinal, 4-point Likert Scale relating to agreement/ disagreement with attitudinal statements	• 9 survey items relating to FP combined into attitudes toward FP index • 13 survey items relating to IPV combined into attitudes toward IPV index • 4 survey items relating to gender equality and roles combined into attitudes toward gender index
Self-efficacy	Reported ability to access and correctly use a MC method	3 survey items: Ordinal, 4-point Likert Scale relating to confidence in ability to access and use MC	
Couple communication	Reported discussion of FP topics with partner in the previous year	3 survey items: Binary, yes/no	• 3 survey items relating to couple communication combined into relationship quality index
Couple decision-making	Reported final decision-maker if couple disagrees about MC use	1 survey item: Three responses – husband, wife, or both	• Wife and both responses combined to create two final responses: women involved or women not involved in final decision-making
Relationship quality	Reported satisfaction with relationship in the previous year	4 survey items: Ordinal, 4-point Likert Scale relating to frequency of actions	• 4 survey items relating to relationship quality combined into relationship quality index
Social norms	1. Toward use of FP/MC 2. Toward IPV 3. Toward gender equality and roles	28 survey items: Ordinal, 4-point Likert Scale relating to perceptions of respondents of typical and approved behavior (none, some, many, most) among reference groups	• 9 survey items relating to FP • 9 survey items relating to IPV • 10 survey items relating to gender equality and roles • Factor analysis performed on all items resulting in: 2 FP social norm measures for men and women, 3 IPV social norms measures for women and 2 IPV social norms measures for men, and 2 gender equality and roles social norms measures for men and women
Reference groups	1. Toward use of FP/MC 2. Toward IPV	1 survey items with multiple-response options (among 12 potential groups based on formative findings)	
Diffusion	1. Toward use of FP and modern contraception 2. Toward IPV 3. Toward gender equality and roles	1 survey item each with Ordinal, 3-point Likert Scale relating to frequency of discussing FP, IPV, and/or gender topics in the previous 3 months	

The couple survey included questions about the specific individual- and couple-level factors described in the MFP theory of change (see Figure 1); these included individual-level demographic characteristics (e.g., age, number of children, and sex), self-efficacy to obtain and use FP, access to FP and couple-level characteristics such as relationship quality and communication. Relationship quality was assessed with a set of four items related to relationship satisfaction. Couple communication was assessed with a set of three items related to the couple's recent discussions related to FP and fertility. All items on relationship quality and couple communication were asked with binary (yes/no) response options. Age and number of children were continuous variables, while all other individual- and couple-level factors were asked with binary (yes/no) response options.

Based on findings from the SNET activity and with an eye toward developing the evidence base for normative change, the survey included an array of questions to elicit several types of individual attitudes and social norms related to behaviors of interest. Questions included personal opinions and both perceptions of social approval (i.e., injunctive norms) and community prevalence (i.e., descriptive norms) relating to FP use, IPV experience/perpetration, and positive masculinities. Across the social norms variables, the influence of a number of reference groups (i.e., different types of people thought to influence the social norm), including religious leaders, partners, and other young couples in the congregation was assessed. All attitude and social norms items were asked on four-point ordinal response scale. Factor analysis (see Appendix III) was used to identify the latent social norm constructs from social norms items included in the survey. [25] Factor analysis resulted in two constructs for social norms around FP, two relating to social norms around gender and positive masculinities, two relating to IPV for men and three relating to IPV for women.

Outcome measures for the couple survey include reported current use of modern FP methods (yes/no) by the respondent or the respondent's partner. Modern FP methods included sterilization or current use of any of male/female condoms, oral pills, injectables, implants, intra-uterine devices (IUD), Standard Days Method, and/or the lactational amenorrhea method (LAM). For IPV, seven items were assessed on a three-point ordinal response scale. Items were grouped into emotional IPV (i.e., shouting, threatening), physical IPV (i.e., slapping, punching), sexual IPV (i.e., forced sex), and IPV due to use of FP (i.e., any violence to discourage use of FP). Male respondents were asked about perpetration of IPV in their relationships and female respondents about their experience of IPV in their relationship. Men were considered to have perpetrated IPV and women considered to have experienced IPV if they reported they had "often" or "sometimes" experienced any of the forms of IPV in the previous one year assessed by the seven items. For diffusion, outcome measures included reported communication about FP, IPV, and/or positive masculinities with fellow congregants.

Descriptive analyses of the survey data were performed to understand the distributions and missingness of key variables by study arm. Key variables of interest and social norms scales were compared by study arm (control and experimental sites) as well as comparing key populations (men vs. women and Christian vs. Muslim) using chi-square tests of independence for categorical variables and t-tests for continuous (or quasi-continuous) outcomes at baseline and at endline. All analyses were completed in Stata 16.

STUDY LIMITATIONS

It is important to interpret these results with caution given the challenges of carrying out the study as designed and biases inherent in collecting self-reported information on sensitive topics. The research study deals with the sensitive topics of sexual and reproductive health, family planning, gender roles, intimate partner violence, and religious beliefs in a complex social context. In this setting, cultural taboos, shame, and stigma in this setting could impact data collection and were challenging for data collectors at some sites, despite receiving training on conducting surveys on sensitive topics. Formative work was conducted to inform survey staff on sensitive topics and how to elicit data on sensitive topics such as FP and IPV.

Several challenges emerged over the course of the study. The first challenge encountered by the Population Council-Nigeria research team related to engagement of religious leaders by study teams. Some of religious leaders were more engaged and willing to participate than others. This led to some misunderstandings when engaging congregations in the communities. The research team quickly adapted the approach of visiting each congregation prior to data collection to introduce themselves and to smooth out possible misunderstandings. During project meetings with Tearfund-Nigeria, the matter was also addressed, with Tearfund-Nigeria agreeing to discuss the study in internal meetings with congregation leaders. Additional challenges the research team faced was the diversity of doctrines within the 20 congregations and holiday schedules coinciding with the dates of data collection. The very diverse norms and schedules of the different congregations made it difficult to anticipate challenges. However, data collectors worked closely with religious leaders and authorities to accommodate and plan around potential challenges.

Apart from challenges and limitations related to the research setting and engagement of key actors, there also are challenges to the research design as a whole. The level of social desirability bias in responses can partly be influenced by whom, where, and how a person is interviewed. For future work (e.g. endline data collection), it is important to follow the approach to data collection as applied during baseline as accurately as possible to prevent lack of comparability between baseline and endline data. Social desirability bias becomes of a particular threat to time-lagged survey research, when the tendency of socially desirable responses varies between baseline and endline as it then confounds the measurement of the level of true changes between the different

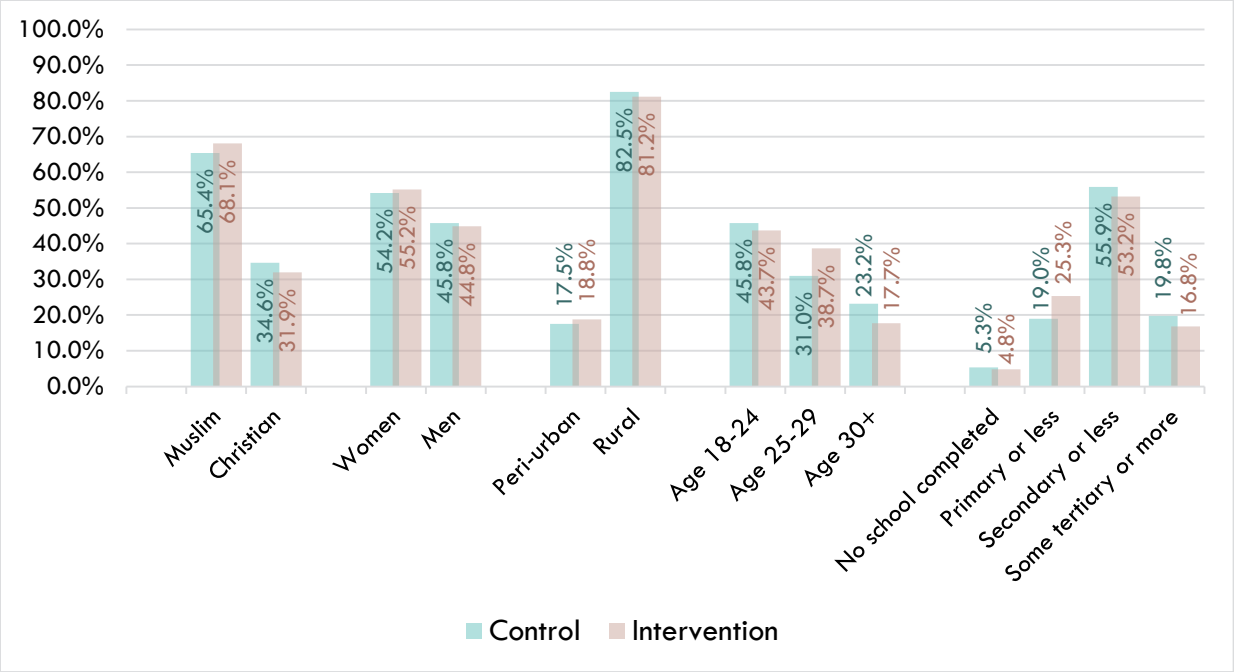
points of time. In such case, changes could not be attributed solely to the impact induced by the intervention.

A final limitation of the study raised by our team of data collectors is the length of the questionnaire specifically for the survey. The questionnaire covered a broad range of topics and was sometimes perceived as too extensive and repetitive by participants. Moreover, surveys were often conducted after religious services, when research participants could potentially be fatigued and desiring to return home. Data collectors reported on occasional loss of motivation and a decrease of concentration among surveyed participants over the course of single interviews. The survey will be streamlined at endline to reduce this limitation.

RESULTS

SAMPLE & DEMOGRAPHICS

Figure 3. Population Demographics by Intervention Arm (%)



The sample at baseline included 474 individuals in the control population and 357 individuals in the experimental population for a total of 831 individuals from 20 congregations (see Table 2, Figure 3). In the total sample, slightly more women (54.6%) were surveyed compared to men (45.4%) and more Muslims were sampled (66.5%) compared to Christians (33.5%). No significant differences in proportions by sex and religion were observed between experimental and control populations. The sample was from predominantly rural congregations (81.9%), with little difference between experimental and control samples. The mean age in experimental congregations for surveyed participants was 24.96 (SD: 4.85), which was marginally significantly ($p<0.10$) younger compared to individuals from the control sample (25.66, SD: 5.39). In both experimental and control congregations, nearly half of the sample consisted of individuals 18-24 years of age (43.7% in experimental congregations). There was a statistically significant ($p<0.05$) difference in educational attainment between the control and experimental samples. In control congregations, 75.7% of participants reported that they had some secondary education or higher compared to 70.0% of participants in experimental congregations.

Table 2. Population Demographics by Intervention Arm

		Total	Control	Experimental
n	**Total**	**831**	**474**	**357**
	Gender			
	Men	**377**	217	160
	Women	**454**	257	197
	Religion			
	Christian	**278**	164	114
	Muslim	**553**	310	243
%	**Urban Status**			
	Peri-urban		17.5	18.8
	Rural		82.5	81.2
	Age			
	Mean age, in years (SD)		25.66 (5.39)*	24.96 (4.85)*
	18-24		45.8	43.7
	25-29		31.0	38.7
	30+		23.2	17.7
	Education status			
	None		5.3	4.8
	Completed primary or less		19.0	25.3
	Completed secondary or less		55.9	53.2
	Some tertiary or more		19.8	16.8
	* p<0.10, ** p<0.05, *** p<0.01			

Nearly all participants reported that they were currently cohabitating with their partners, with the mean duration of cohabitation approximately three years in both experimental and control congregations. There was a statistically significant ($p<0.05$) difference comparing the number of participants reportedly in polyamorous relationships comparing experimental (10.9%) and control congregations (7.0%). In both experimental and control congregations, less than one-fifth of the respondents reported that they travel outside of their community at least once per month and another one-fifth that they travel outside of their community at least once every three months. There were few differences comparing control and experimental congregations by mobility. In experimental congregations, the mean number of children per participant was 1.20, with 15.1% reporting that they have not yet had children, 51.5% reporting one child, and 33.3% reporting two children with their partner. Additionally, nearly one-fifth (23.3%) of the experimental sample reported that either they or their partner were currently pregnant. There was little difference comparing experimental and control congregations by number of children

or pregnancy status. There was a statistically significant ($p<0.01$) difference comparing experimental and control congregations for household food security. In experimental congregations, 17.4% of participants reported that they had difficulty satisfying their household's food needs every week and 20.7% reported that they had difficulty satisfying their household's food needs every month compared to 12.0% and 14.1% for the control sample, respectively. See Table 3 for more information.

Table 3. Couple and Household Demographics by Intervention Arm (%)

	Control	Experimental
Cohabitation Status		
Cohabitates with partner	100	99.4
Mean years of cohabitation (SD)	3.06 (1.41)	3.13 (1.32)
In polyamorous relationship	7.0**	10.9**
Number of children with partner		
None	19.0	15.1
One	46.0	51.5
More than one	35.0	33.3
Currently pregnant	21.1	23.3
Frequency of travel outside of home community		
At least once per month	17.7	16.3
At least once per three months	20.6	18.8
Less than twice per year	61.7	64.9
Frequency of food insecurity in household		
At least once per week	12.0	17.4
At least once per month	14.1	20.7
At least once per year	13.3	10.4
Never	60.6	51.5
* p<0.10, ** p<0.05, *** p<0.01		

Over 90% of participants in both experimental and control congregations reported that religion was very important in their lives. There was a marginally statistically significant ($p<0.10$) difference comparing responses to this question by experimental (95.8%) and control (92.2%) populations. About one-half of both experimental and control congregation samples reported weekly religious attendance/observance (see Table 4).

Table 4. Religion and Religiosity by Intervention Arm (%)

	Control	Experimental
Total (n)	**474**	**357**
Religion		
Christian	164	114
Muslim	310	243
Importance of religion		
Very important	92.2	95.8
Less than very important	7.8	4.2
Frequency of religious attendance/observation	*	*
Daily	49.8	52.1
Weekly	36.3	38.7
Less than weekly	13.9	9.2
* p<0.10, ** p<0.05, *** p<0.01		

FAMILY PLANNING

Among couples not reporting that they were currently pregnant, nearly one-half (49.6%) of respondents in experimental congregations reported that they were currently using some form of FP. Respondents were also asked about what type of FP method they were using. Based on their responses, we determined that 41.6% of respondents in experimental congregations were currently using at least one form of modern contraception: 31.0% reportedly using a short-acting method (condom, oral contraceptive, injectable); 7.3% a LARC method (implant, IUD; no sterilization was reported); and 3.7% using a fertility awareness-based method - FAM (SDM, LAM). A further 8.0% of respondents in experimental congregations reported that they used a traditional form of contraception. No significant differences were seen comparing experimental and control congregation populations by use of modern contraception and types of contraception used.

There were a number of key differences in use of FP by sex and religion. Men were statistically significantly ($p<0.05$) more likely to report using any form of contraception (53.6%) compared to women (45.4%). However, this was mostly due to a higher proportion of men reportedly using non-modern forms of FP (9.4%) compared to women (5.1%). There were no significant differences by sex for using modern FP or any specific types of modern FP. By religion, Christians were statistically significantly ($p<0.01$) more likely to report using any FP (56.5%) compared to Muslims (44.9%) and to report using modern FP (51.1% vs. 37.2%). Christians were marginally statistically significantly ($p<0.10$) more likely to report using a short-acting method (35.0%) compared to Muslims (28.7%) and statistically significantly ($p<0.01$) more likely to report using a LARC method (14.8%) compared to Muslims (4.0%). However, Muslims were marginally

statistically significantly (p<0.10) more likely to use FAM (5.2%) compared to Christians (2.2%). See Table 5.

Table 5. Current Use of Contraception (%)

	Control	Experimental	Men	Women	Christian	Muslim
Total (n)	**374**	**274**	**276**	**372**	**223**	**425**
Any contraception	48.4	49.6	53.6**	45.4**	56.5***	44.9***
Modern contraception [a]	42.3	41.6	44.2	40.3	51.1***	37.2***
Short-acting modern contraception [b]	30.8	31.0	33.3	29.0	35.0*	28.7*
LARC/permanent method [c]	8.0	7.3	6.5	8.6	14.8***	4.0***
FAM [d]	4.6	3.7	5.4	3.2	2.2*	5.2*
Traditional method only [e]	6.2	8.0	9.4**	5.1**	5.4	7.8

* p<0.10, ** p<0.05, *** p<0.01

[a] Modern contraception) methods includes: condoms, oral contraceptive pills, injectables, implants, intrauterine devices (IUD), sterilization, Standard Days Method (SDM), lactational amenorrhea method (LAM)

[b] Short-acting methods includes: condoms, oral contraceptive pills, injectables

[c] LARC (long-acting reversible contraception)/permanent methods includes: implants, IUD, sterilization

[d] FAM (fertility awareness-based methods) includes: SDM, LAM

[e] Traditional method includes all other (non-modern) forms of contraception/family planning

All respondents were asked how likely they were to use a modern method of FP in the future (including currently pregnant couples). Approximately 70% or more of each of the categories reported that they were likely or very likely to use modern FP in the future. There were no significant differences by arm, sex, or religion (see Table 6).

Table 6. Intention to Use Modern Contraception (%)

	Control	Experimental	Men	Women	Christian	Muslim
Total (n)	**474**	**357**	**276**	**372**	**223**	**425**
Intend to use MC in future						
Likely	69.1	73.9	73.1	69.4	73.8	69.9
Not likely	30.9	26.1	26.9	30.6	26.2	30.1

Respondents were asked a series of questions relating to the accessibility of modern contraception in their community (see Table 7). In experimental congregations, over 95% reported that modern FP methods were available in their community, over 70% reported that a husband would provide money to purchase modern FP (77.0%), transportation to obtain modern contraception was available (76.8%), and that the respondent had the means to purchase modern FP (70.3%). Slightly less than 60% of respondents reported that they felt that the information to use modern FP was available in their community (59.1%). Respondents in control congregations were statistically significantly ($p<0.01$) more likely to report that they had the means to purchase modern FP (80.0%) and transportation to obtain modern FP was available (86.7%) compared to respondents in experimental congregation.

Breaking accessibility of modern contraception down by sex and religion, we see highly statistically significant ($p<0.01$) differences by sex with men more likely to report availability of transportation (87.0%) and the means to purchase modern FP (82.0%) compared to women (77.5% and 70.7%, respectively). In addition, men were marginally statistically significantly ($p<0.10$) more likely to report that they would provide money to purchase modern FP (80.9%) compared to women's expectations that their husband would provide money to purchase modern contraception (75.6%). By religion, Christian respondents were statistically significantly ($p<0.05$) more likely to report that modern contraception was available in their community (98.9%) compared to Muslim respondents (95.7%). As well, Christian respondents were marginally statistically significantly ($p<0.10$) more likely to report that information to use modern FP was available in their community (65.1%) compared to Muslim respondents (59.0%).

Table 7. Access to Modern Contraception (%)

	Control	Experimental	Men	Women	Christian	Muslim
Total (n)	**474**	**357**	**377**	**454**	**278**	**553**
In community, have available						
Modern contraception (MC)	97.3	96.1	96.3	97.1	98.9**	95.7**
Transportation	86.7***	76.8***	87.0***	77.5***	83.5	81.0
Financial means	80.0***	70.3***	82.0***	70.7***	78.8	74.3
Info to use	62.5	59.1	58.9	62.8	65.1*	59.0*
Husband will provide money	78.7	77.0	80.9*	75.6*	80.9	76.5
* p<0.10, ** p<0.05, *** p<0.01						

Among the 331 respondents reportedly not using modern FP methods or not currently pregnant, the majority (71.7% of experimental respondents) reported that they were not using a modern FP method for some reason (see Appendix II for data tables) related to fertility (e.g., currently trying to have a child, infertile, etc.). Only 8.0% reported that they were not using a modern FP method due to opposition to its use (e.g., partner opposed, against religion, etc.). A marginally statistically significant ($p<0.10$) higher proportion of respondents in experimental congregations (11.6%) reported that they did not use modern FP due to methods-specific reasons (e.g., high cost, side effects, etc.) compared to respondents in control congregations (6.2%). Fewer than 2.0% of respondents noted that they were not currently using a modern FP method due to lacking knowledge (e.g., knowing no source, no method, etc.). There were no significant differences comparing gender or religion by reasons for not using modern FP.

A series of attitudinal statements relating to FP were posed to respondents, who were asked whether they strongly agree, agree, disagree, or strongly disagree. Responses were combined and presented by experimental/control (see Appendix II for data tables). Among statements, there was only one notable difference comparing respondents in experimental and control congregations—respondents in control areas were statistically significantly ($p<0.01$) more likely to agree that using a modern FP method was not against their religion (62.0%) compared to respondents in experimental congregations (52.9%). Among other items, over 90% of respondents in experimental congregations agreed that modern FP is effective at preventing unwanted pregnancy and over 70% disagreed that a person using modern FP would gain a promiscuous reputation (75.4%), disagree that a husband would react negatively if his wife was using modern FP (70.9%), and 70.6% agreed that it is appropriate for first-time parents (FTP) to use modern FP. Around one-half of respondents in experimental congregations disagreed that an individual is highly likely to experience side effects if they use modern FP (57.1%), disagreed that using modern FP would lead to future difficulties in becoming pregnant (54.9%), agreed that using modern FP was not against their religion (52.9%), and agreed that it is appropriate for newly married couples (NMC) to use modern FP (47.3%).

A few notable differences were seen when looking at attitudes by sex and religion (see Appendix II for data tables). Men were marginally statistically significantly ($p<0.10$) more likely to agree that it is appropriate for NMC to use modern FP (51.7%) compared to women (45.6%), significantly ($p<0.05$) more likely to agree that modern FP is effective for preventing unwanted pregnancy (91.8%) compared to women (87.4%), and highly significantly ($p<0.01$) more likely to disagree that a husband would have a negative reaction to his wife using modern FP (80.1%) compared to women (60.1%). Muslims were marginally statistically significantly ($p<0.10$) more likely to agree that it is appropriate for FTP to use modern FP (71.4%) compared to Christians (65.1%) and to disagree that using modern FP will lead to future difficulties in becoming pregnant (57.1%) compared to Christians (50.0%). As well, Muslims were statistically significantly ($p<0.01$)

more likely to disagree that negative side effects would result from using modern FP (62.9%) compared to Christians (51.1%).

When asked about confidence in their ability to use modern FP (see Appendix II for data tables), should they desire to use, over 80% of respondents in experimental congregations reported that they were confident that they could use modern FP (81.0%) and that they were confident they could suggest using modern FP to their partner. In comparison, only 65.0% of respondents in experimental congregations reported that they were confident they could use modern FP even if their religious leaders were opposed to its use. There were no statistically significant differences comparing individuals in experimental and control congregations. Looking at differences in self-efficacy statements by sex and religion, there were no statistically significant differences by sex. However, by religion, a statistically significantly ($p<0.05$) higher proportion of Christians reported that they were confident that they could use modern FP even if their religious leaders were opposed (68.7%) compared to 61.3% of Muslims.

Respondents were asked whether they had discussed a range of SRH topics with their partner in the previous 12 months (see Appendix II for data tables). About 60% of respondents in experimental congregations reported that they had discussed the ideal number of children (62.8%) and FP (61.9%) in the previous one year. There was a marginally statistically significant ($p<0.10$) difference in the proportion of respondents in experimental congregations reportedly discussing FP in the previous one year (61.9%) compared to 55.7% of respondents in control congregations. Respondents were also surveyed about decision-making with partner related to FP. Individuals were asked if there is a disagreement in their relationship about using FP and who makes the final decision. In experimental congregations, nearly one-half of respondents (48.5%) responded that the male partner would make the final decision, 7.6% that the female partner would make the final decision, and 44.0% that both would work together to make a decision. There was a marginally statistically significantly ($p<0.10$) lower proportion of respondents in experimental congregation reporting that the female partner would be involved in the final decision (51.6%) compared to respondents in control congregations (59.5%).

There were a few notable differences in communication and decision-making observed by sex and religion (see Table 8). First, Christians were statistically significantly ($p<0.01$) more likely to report that they had discussed the ideal number of children with their partner in the past one year (78.1%) compared to Muslims (51.5%). No other differences in communication about FP by sex and religion were observed. However, for decision-making, differences by sex and religion were observed. Women were statistically significantly ($p<0.05$) more likely to report that the female partner would be involved in the final decision (58.1%) compared to men (53.6%). Similarly, Christians were statistically significantly ($p<0.01$) more likely to report that the female partner would be involved in the final decision (64.4%) compared to Muslims (51.9%).

Table 8. Family Planning Communication & Decision-making (%)

	Control	Experimental	Men	Women	Christian	Muslim
Total (n)	**474**	**357**	**377**	**454**	**278**	**553**
In past year discussed … with partner						
Ideal # children	58.7	62.8	62.9	58.4	78.1***	51.5***
FP	55.7*	61.9*	58.6	58.2	61.2	57.0
If disagree about FP, who decides	*	*	**	**	***	***
Husband	40.5	48.5	46.4	41.9	35.6	48.1
Wife	9.3	7.6	5.6	11.0	12.6	6.5
Both together	50.2	44.0	48.0	47.1	51.8	45.4
* p<0.10, ** p<0.05, *** p<0.01						

To assess important influencers or those whose opinions matter to respondents regarding FP behaviors, respondents were asked if they considered each of a range of family and community members as important references for their personal FP behaviors (see Appendix II for data tables). In experimental congregations, over three-quarters (75.1%) of respondents reported that they considered their partner to be an important reference for FP behaviors. This was followed by nearly one-third (30.5%) listing their mother/in-law, and nearly one-quarter (24.9%) listed their father/in-law. In addition, 17.9% responded that their religious leaders' and 14.9% their health workers' behaviors and opinions around FP were important to them. The profiles for reference groups were significantly different comparing experimental and control respondents across nearly all reference group types. In general, respondents in experimental areas were more likely to list friends, fathers/in-law, and religious leaders as reference groups and much less likely to report their partner and health workers as reference groups compared to respondents in control congregations. Looking at differences by sex, men were less likely to report that their partner was an important reference group and significantly more likely to report that their friends, religious leaders, and health workers were important FP reference group members compared to women. Similarly, Muslims were significantly more likely to report their friends, mothers/in-law, and fathers/in-law were important reference groups compared to Christians.

Respondents were asked a series of statements on their perceptions of typical behavior (i.e., descriptive norms) relating to FP, and were asked to respond on a 4-point Likert-scale for the statements. Respondents were asked whether they perceived that none, some, many, or most NMC and FTP in their congregations use modern FP. Responses were combined into none/some and many/most and presented in the table below (see Table 9). In experimental congregations, 26.7% of respondents reported that many or most NMC in their congregation use modern contraception and 29.4% that many or most FTP in their congregation use modern FP. There were no significant differences in perceptions of typical use of modern contraception in their congregations comparing experimental and control congregations.

Looking at descriptive norms around FP by sex and religion, there was a statistically significantly ($p<0.01$) higher proportion of women reporting that many or most FTP in their congregation were using modern contraception (32.4%) compared to men (23.6%). Statistically significant ($p<0.05$) differences by religion were seen by perceptions of descriptive norms for both NMC and FTP, with Christians more likely to perceive that many or most NMC were using modern FP (26.6%) compared to Muslims (22.5%), while the relationship was inverse with a higher proportion of Muslims perceiving that many or most FTP were using modern FP (29.7%) compared to Christians (25.9%).

Factor analysis was conducted on social norms items in the survey (see Appendix III), resulting in two social norms constructs related to FP which corresponded to descriptive norms pertaining to FP and injunctive norms pertaining to FP. Comparing mean scores (higher mean scores correspond to perceiving modern FP use is more typical of community, range 1-4) of perceptions of whether modern contraception is typical behavior in their congregations (i.e., descriptive norms), there was no statistical difference between respondents in experimental congregations (mean score of 2.19) and respondents in control congregations (mean score of 2.13). Comparing mean scores of descriptive norms by sex, women were marginally statistically significantly ($p<0.10$) more likely to perceive that use of modern FP was typical behavior in their community (mean score of 2.19) compared to men (mean score of 2.11). By religion, Christian respondents were statistically significantly ($p<0.01$) more likely to perceive that use of modern contraception was typical behavior in their community (mean score of 2.24) compared to Muslim respondents (mean score of 2.11).

Table 9. Descriptive Norms Related to Family Planning (%)

	Control	Experimental	Men	Women	Christian	Muslim
Total (n)	**474**	**357**	**377**	**454**	**278**	**553**
Perceive that many/most in congregation…						
NMC use MC	21.7	26.7	22.8	24.7	26.6**	22.5**
FTP use MC	27.6	29.4	23.6***	32.4***	25.9**	29.7**
FP descriptive norm mean score (SD)	2.13 (0.62)	2.19 (0.64)	2.11* (0.63)	2.19* (0.62)	2.24*** (0.64)	2.11*** (0.62)
* p<0.10, ** p<0.05, *** p<0.01						

Respondents were also asked a series of statements on their perceptions of approved, by their social reference groups, behavior (i.e., injunctive norms) relating to FP, and were asked to respond on a 4-point Likert-scale for the statements. Respondents were asked whether they perceived that many, most, some, or none of the members of a reference group (i.e., congregation, religious leaders, partners, important others) would approve of using modern FP.

Responses were combined into agree and disagree and presented in the table below (see **Error! Reference source not found.**). In experimental congregations, respondents, in general, perceived that many/most of: congregation members think it is appropriate for NMC (48.7%) and FTP (66.6%) to use modern FP and religious leaders think it is appropriate for NMC (40.6%) and FTP (58.5%) to use modern FP. Respondents were also asked to think specifically about these reference groups' approval of their own behavior: 73.7% of respondents reported that they perceived that those whose opinions are important to them would approve of their use of modern FP, 62.2% reported that their religious leaders would approve, and 77.3% reported that their partners would think it is appropriate for the respondent themselves to use modern FP. Few significant differences were observed comparing experimental and control congregations.

Table 10. Injunctive Norms Related to Family Planning (%)

Perceive that many/most approve use of MC	Control	Experimental	Men	Women	Christian	Muslim
Total (n)	**474**	**357**	**377**	**454**	**278**	**553**
Congregation approves						
MC for NMC	50.9	48.7	50.4	49.6	50.7	49.5
MC for FTP	67.5	66.6	67.2	67.2	66.2	67.6
Religious leaders approve						
MC for NMC	46.4	40.6	46.5**	41.8**	47.8**	41.9**
MC for FTP	61.0	58.5	60.2	59.7	59.0	60.4
Approves for respondent						
People whose opinion matter	75.9	73.7	74.0	75.8	80.2**	72.3**
Religious leaders	63.5	62.2	63.6	62.4	65.8*	61.5*
Partner	77.8	77.3	79.3	76.3	79.8	76.5
FP injunctive norm mean score (SD)	2.68 (0.54)	2.67 (0.59)	2.68 (0.60)	2.68 (0.53)	2.73** (0.54)	2.65** (0.57)
* p<0.10, ** p<0.05, *** p<0.01						

Comparing injunctive norms by sex, men were statistically significantly ($p<0.05$) more likely to perceive that religious leaders would approve of NMC using modern FP (46.5%) compared to women (41.8%). No other significant differences in perceptions of approved behavior amongst their reference groups were observed by sex. However, there were a few notable differences in these perceptions by religion. For example, Christians were statistically significantly ($p<0.05$) more likely to perceive that religious leaders would approve of NMC using modern FP (47.8%) compared to women (41.9%). Christians were also statistically significantly ($p<0.05$) more likely

to perceive that people whose opinion matters to them would approve of their own use of modern FP (80.2%) compared to Muslims (72.3%) and marginally statistically significantly ($p<0.10$) more likely to perceive that their religious leaders would approve of their own use of modern FP (65.8%) compared to Muslims (61.5%).

As mentioned, factor analysis was conducted on social norms items in the survey (see Appendix III), resulting in two social norms constructs related to FP which corresponded to descriptive norms pertaining to FP and injunctive norms pertaining to FP. Comparing mean scores (higher mean scores correspond to perceiving modern contraception use is more accepted behavior by reference groups, range 1-4) of perceptions of whether use of modern FP is accepted behavior in their congregations, there was no statistical difference between respondents in experimental areas (mean score of 2.67) and respondents in control congregations (mean score of 2.68). Comparing mean scores of perceptions of whether use of modern FP is accepted behavior in their congregations by sex, there was no statistical difference between male and female respondents (both with mean score of 2.68). There was a statistically significantly ($p<0.05$) higher mean score (2.73) for Christian respondents reporting that use of modern contraception as accepted behavior in their reference groups compared to Muslim respondents (mean score of 2.65).

INTIMATE PARTNER VIOLENCE

Perpetration of IPV was assessed using a series of statements relating to perpetration (males) and experience (females) emotional, physical, and sexual violence. Looking at perpetration/experience of IPV in experimental congregations, 58.5% of respondents reported either often or sometimes perpetrating or experiencing yelling at/by partner in the previous one year, 22.7% threatened (by) partner with physical punishment, 10.4% pushed or shook (by) partner, 9.5% slapped (by) partner, 8.9% punched (by) partner, 20.5% forced sex (by) partner, and 8.7% violence to discourage FP use of/by partner. There were few differences comparing respondents in control and experimental samples, except that respondents in control congregations were more likely to report often perpetrating/experiencing pushing or shaking (by) partner (see Table 11). In experimental congregations, 69.2% of respondents reported experiencing or perpetrating some form of IPV, which was not significantly different compared to respondents in control congregations (66.7%).

Table 11. Prevalence of Intimate Partner Violence (%)

	Control	Experimental	Men	Women	Christian	Muslim
Total (n)	**474**	**357**	**377**	**454**	**278**	**553**
In the previous year, have experienced (women)/perpetrated (men)						
Yelled at/by partner	59.1	58.5	64.2***	54.4***	75.2***	50.6***
Threatened (by) partner with physical punishment	22.6	22.7	18.6***	26.0***	31.7***	18.1***
Pushed/shook (by) partner	10.3	10.4	7.9**	12.3**	18.4***	6.4***
Slapped (by) partner	11.8	9.5	6.4***	14.5***	20.1***	6.1***
Punched (by) partner	8.0	8.9	3.4***	12.6***	14.8***	5.3***
Forced sex on/by partner	19.0	20.5	15.1***	23.4***	28.1***	15.4***
Violence to discourage FP use of/by partner	7.4	8.7	5.1**	10.3**	9.7*	7.1*
Any IPV	66.7	69.2	69.2	66.5	81.3***	60.9***
* p<0.10, ** p<0.05, *** p<0.01						

Comparing IPV experience/perpetration by sex, men were statistically significantly (p<0.01) more likely to report perpetrating yelling at their partner compared to women reporting that they have experienced being yelled at in the previous one year. For all other forms of IPV, women were statistically significantly more likely to report experiencing physical and sexual IPV and violence to discourage FP use compared to men reporting perpetrating these forms of IPV.

By religion, Christian respondents were highly statistically significantly (p<0.01) more likely to report perpetrating/experiencing all forms of IPV compared to Muslim respondents, except for violence to discourage FP use where Christian respondents were only marginally statistically significantly (p<0.10) more likely to report experiencing/perpetrating this form of IPV. When combining all types of IPV, Christian respondents were statistically significantly (p<0.01) more likely to report experiencing/perpetrating any form of IPV (81.3%) compared to Muslim respondents (60.9%).

Respondents were also asked about their exposure to violence before the age of 15 years (see Appendix II for data tables). In experimental areas, about one-third of respondents reported seeing IPV perpetrated on a female in their household before the age of 15 (29.1%) while more than three-quarters of respondents reported having been threatened with violence as a child (75.6%) and themselves experiencing violence as a child (76.5%). No statistically significant differences were seen comparing respondents in control and experimental congregations. Looking at childhood experience of violence by sex and religion, there were significant differences

($p<0.01$) in experiencing threats of violence comparing men (81.7%) and women (70.9%). By religion, Christian respondents were statistically significantly more likely to report experiencing all three types of childhood violence compared to Muslim respondents.

Respondents were posed a series of scenarios and asked if a husband is justified in perpetrating violence against his wife for each of the scenarios (see Appendix II for data tables). In experimental congregations, fewer than 25% or fewer of respondents thought a husband was justified for all of the scenarios. Respondents were most likely to believe that a husband is justified in using violence if a wife neglects the children (25.5%), uses modern FP without her husband's knowledge (23.8%), and argues with her husband (21.6%) and least likely to believe violence is justified if a wife burns food (11.2%) or refuses sex (15.4%).

For justifications of IPV by sex and religion, women were highly statistically significantly ($p<0.01$) more likely to justify the use of IPV for all scenarios. Nearly one-third of women believed that IPV was justified if a wife neglects her children, argues with her husband, or uses modern FP without her husband's knowledge compared to less than 20% of men justifying IPV for these scenarios. By religion, Christians were more likely to justify IPV across all scenarios compared to Muslims. However, differences were statistically significantly different for a wife neglecting her children ($p<0.01$), a wife burning food ($p<0.05$), and a wife using modern FP without the knowledge of her husband ($p<0.01$).

A series of attitudinal statements relating to IPV were posed to respondents, who were asked whether they strongly agree, agree, disagree, or strongly disagree. Responses were combined and presented by experimental and control samples in data tables in Appendix II. Among statements, over 90% of respondents in experimental congregations suggested that they would use non-violent strategies to reduce violence in their relationship if they knew of such strategies (99.2%) and agreed that bystanders in their communities would stop IPV if they saw it (96.1%). Over 80% of respondents reported that they disagreed that IPV was normal in their congregation (88.0%), personally believe that it is not appropriate for a man to use violence against his wife for any reason (88.0%), and disagreed that if a man does not beat his wife then members of his congregation will think he is unmanly (81.2%). However, only 45.1% of respondents in experimental congregations disagreed that a husband is supposed to beat his wife according to scripture. Few notable differences were seen comparing experimental and control congregations.

A few notable differences were seen when looking at attitudes by sex and religion. Women were marginally statistically significantly ($p<0.10$) more likely to disagree that a husband is supposed to beat his wife according to scripture (45.6%) compared to men (39.3%). As well, men were statistically significantly ($p<0.05$) more likely to disagree that IPV is normal behavior in their congregation (90.7%) compared to women (85.2%) and highly statistically significantly ($p<0.01$) more likely to disagree that a husband beats his wife to correct her behavior (74.8%) compared

to women (58.6%). Muslims were marginally statistically significantly ($p<0.10$) less likely to agree that bystanders would stop IPV if they saw it (94.6%) compared to Christian respondents (97.1%) and more likely to disagree that if a man does not beat his wife he will be seen as unmanly (83.4%) compared to Christian respondents (78.4%). As well, Muslims were statistically significantly ($p<0.05$) more likely to disagree that IPV is normal behavior in their congregation (89.5%) compared to Christians (84.2%).

To assess important influencers or those whose opinions matter to respondents regarding IPV behaviors, respondents were asked if they considered each of the groups in data tables in Appendix II important references for their personal IPV behaviors. In experimental congregations, nearly two-thirds (65.3%) of respondents reported that they considered their partner to be an important reference for IPV behaviors. This was followed by nearly one-half (49.0%) listing their mother/in-law, and 41.7% listed their father/in-law. In addition, 15.7% responded that their religious leaders' behaviors and opinions around IPV were important to them. There were a few notable differences comparing control and experimental congregations, with the latter being more likely to include mothers/in-law and fathers/in-law as a reference group for IPV behaviors. Looking at important influencers by sex, women were significantly more likely to report that their partners were important influencers (73.8%) compared to men (57.8%) and less likely to report that their friends (5.3%) and religious leaders (12.3%) were important influencers compared to men (15.1% and 20.7%, respectively). By religion, Muslim respondents were significantly more likely to report that their mother/in-law (47.9%) and father/in-law (41.1%) were important influencers compared to Christian respondents (37.4% and 28.8%, respectively).

Similar to assessing social norms for FP, respondents were asked a series of statements on their perceptions of typical behaviors (i.e., descriptive norms) pertaining to IPV and were asked to respond on a 4-point Likert-scale for the statements. Respondents were asked whether they perceived that none, some, many or most women in their congregation had experienced IPV and/or sexual violence from their partner, and responses were combined in the table below (see Table 12). In experimental congregations, 10.9% of respondents perceived that many or most women in their congregation have experienced IPV and 10.1% that many or most women in their congregation have experienced sexual violence from their husbands. There were no statistically significant differences comparing experimental and control congregations for descriptive norms pertaining to IPV. There were only marginal differences by sex and religion.

Factor analysis was also conducted on social norms items relating to IPV in the survey (see Appendix III). Among the resulting factors or domains, one corresponded to descriptive norms relating to IPV (i.e., how typical IPV is perceived to be in respondent's congregations). Comparing mean scores (higher mean scores for this factor equate with perceiving that IPV is less typical behavior in a community, range 1-4), there was no statistical difference between respondents in

experimental areas (mean score of 3.09) and respondents in control congregations (mean score of 3.08). In addition, there were no differences by sex or religion.

Table 12. Descriptive Norms Related to Intimate Partner Violence (%)

	Control	Experimental	Men	Women	Christian	Muslim
Total (n)	**474**	**357**	**377**	**454**	**278**	**553**
Perceive that many/most in congregation..						
Few women experience IPV	9.1	10.9	8.8	10.8	10.4	9.6
Few women experience sexual violence	7.8	10.1	6.9*	10.4*	7.5	9.4
IPV descriptive norm mean score (SD)	3.08 (0.49)	3.09 (0.54)	3.09 (0.47)	3.08 (0.54)	3.05 (0.45)	3.10 (0.54)
* p<0.10, ** p<0.05, *** p<0.01						

Respondents were also asked a series of statements on their perceptions of approved behaviors (i.e., injunctive norms, by their respondent's reference groups) relating to IPV and were asked to respond on a 4-point Likert-scale for the statements. Respondents were asked whether they perceived that many, most, some, or none of the members of a reference group (i.e., congregation, religious leaders, partners, important others) would approve of a man using violence against his partner, and responses were combined in the table below (see Table 13). In experimental congregations, respondents, in general, perceived that most/many: congregation members did not think it appropriate for men to use IPV (84.8%) and sexual violence (84.3%) against their partners and that religious leaders did not think it appropriate for men to use IPV (90.2%) and sexual violence (89.2%) against their partners. In their own relationships, few respondents in experimental congregations perceived that their partner approves of IPV (12.6%), but a relatively high number of respondents perceived that their partner would approve of sexual violence in their relationship (19.1%); and few respondents perceived that their religious leaders (10.4%) and important others (9.8%) would approve of IPV in their own relationships. There were a few significant differences comparing experimental and control congregations, most notably respondents in experimental congregations were statistically significantly ($p<0.05$) more likely to perceive that their congregation would approve of IPV (15.2% vs. 10.5%) and that their own religious leaders would approve of IPV in the respondent's relationship (10.4% vs. 5.9%) compared to control congregations.

Table 13. Injunctive Norms Related to Family Planning (%)

	Control	Experimental	Men	Women	Christian	Muslim
Total (n)	**474**	**357**	**377**	**454**	**278**	**553**
Perceive that many/most… approve use of IPV						
Congregation approves						
IPV	10.5**	15.2**	12.7	12.2	9.7**	13.7**
Sexual violence	18.3*	15.7*	13.0***	20.7***	12.6***	19.5***
Religious leaders approve						
IPV	7.8	9.8	8.0	9.3	4.7***	10.7***
Sexual violence	9.5	11.0	5.3***	14.1***	5.4***	12.5***
Approves for respondent						
Partner, IPV	9.1*	12.6*	5.5***	13.7***	12.2	8.9
Partner, sexual violence	14.9*	19.1*	8.2***	23.8***	14.4*	17.9*
Religious leader	5.9**	10.4**	6.7	8.8	4.3**	9.6**
Those whose opinions matter	8.5	9.8	7.1	10.6	7.5	9.8
IPV injunctive norm mean score (SD)†	3.09 (0.48)	3.10 (0.57)	--	3.09 (0.52)	3.20*** (0.49)	3.04*** (0.53)
IPV injunctive norm mean score (SD)‡	3.12 (0.56)	3.06 (0.61)	--	3.10 (0.58)	3.05 (0.60)	3.12 (0.57)
IPV injunctive norm mean score (SD)§	3.18 (0.43)	3.19 (0.46)	3.18 (0.44)	--	3.36*** (0.45)	3.09*** (0.41)

*** p<0.10, ** p<0.05, *** p<0.01**
SD = Standard deviation
† Women only, injunctive norms within faith community
‡ Women only, injunctive norms among husband/important other
§ Men only

Comparing injunctive norms by sex and religion, we see a few notable differences in individual items by sex, most notably for perceptions of acceptability of forced sex rather than physical and other forms of IPV. In general, women were more likely to perceive that sexual violence was acceptable to their congregations, religious leaders, and partners (including physical IPV as well) compared to men. Similarly, there were numerous differences comparing perceptions of Muslim and Christian respondents. In general, Muslim respondents were more likely to perceive that members of their congregation and religious leaders approve of men perpetrating IPV and sexual violence against their wives compared to Christians. As well, Muslim respondents were more likely to perceive that their religious leaders would approve of IPV within their own relationships compared to Christian respondents.

Factor analysis (see Appendix III) resulted in sex-specific domains corresponding to injunctive social norms relating to IPV (i.e., whether IPV is perceived to be approved behavior among a respondent's reference group). For women, the two domains corresponded to injunctive norms with their faith community as reference group and the other to injunctive norms with their husband and close family and friends as reference groups for approval/disapproval of IPV. For each of these three scores, there was little difference comparing respondents in experimental and control congregations. Owing to the differing results of factor analysis by sex, it is difficult to compare perceptions of injunctive norms for IPV by sex. By religion, Christian women were statistically significantly ($p<0.01$) more likely to report that IPV was not accepted behavior in their faith community (mean score of 3.20) compared to Muslim women (mean score of 3.04). Among men, Christians were statistically significantly ($p<0.01$) more likely to report that IPV was not accepted behavior in their community (mean score of 3.36) compared to Muslim men (mean score of 3.09).

POSITIVE MASCULINITIES & GENDER EQUALITY

Respondents were asked whether the male partner regularly contributed to household chores and childcare in the previous three months (see Table 14). Accordingly, 12.3% of respondents in experimental congregations reported that the male partner had often done so and a further 61.1% that the husband sometimes contributes to household work. There was a marginally statistically significant ($p<0.10$) difference between control and experimental samples, with respondents in control congregations more likely to report that husbands often contribute to household chores (17.3% vs. 12.3%). For childcare (and only among couples with children), there appeared to be significantly more male involvement compared to household chores. In experimental congregations, 37.6% of respondents reported that a husband often contributes to childcare and a further 57.1% reported that the male partner sometimes contributed to childcare. There was little difference in male engagement in childcare comparing experimental and control congregations.

By sex, there were statistically significantly ($p<0.01$) differences with men more likely to report male involvement in household chores (87.5%) and childcare (97.1%) compared to women (67.2% and 91.3%, respectively). There were no statistically significant differences for male involvement in household chores and childcare by religion.

Table 14. Male Contribution to Household Work (%)

	Control	Experimental	Men	Women	Christian	Muslim
Total (n)	**474**	**357**	**377**	**454**	**278**	**553**
In last 3 mos., male partner has contributed to						
Household chores	*	*	***	***		
Often	17.3	12.3	18.8	12.1	18.0	13.7
Sometimes	61.4	61.1	68.7	55.1	61.5	61.1
Never	21.3	26.6	12.5	32.8	20.5	25.1
Childcare†			***	***		
Often	41.0	37.6	41.4	38.0	40.4	39.1
Sometimes	52.2	57.1	55.7	53.3	54.3	54.4
Never	6.8	5.3	2.9	8.7	5.4	6.5

* p<0.10, ** p<0.05, *** p<0.01
† This question was only asked of couples with children (n=307 among men, n=379 among women, n=223 among Christians, n=463 among Muslims)

A series of attitudinal statements relating to gender equality were posed to respondents, who were asked whether they strongly agree, agree, disagree, or strongly disagree with the statements. Responses were combined and are presented by experimental/control in data tables in Appendix II. Among statements, over 90% of respondents in experimental congregations strongly agreed/agreed that a husband should give equal weight to his wife in decision-making (91.6%) and that a husband should contribute to childcare beyond just providing money (93.6%). However, fewer (73.7%) agreed that a wife should be able to express her opinion even if her husband disagrees. Finally, only about half (50.4%) agreed that men and women are created equal. No statistically significant differences were observed comparing experimental and control populations.

Significant differences were seen comparing men to women for most statements. Men were statistically significantly ($p<0.05$) more likely to agree that a husband should give equal weight to their wife in decision-making (94.4%) compared to women. In addition, men were statistically significantly ($p<0.01$) more likely to agree that a wife should be able to express her opinion even if the husband disagrees (80.9%) and that a husband should contribute to childcare beyond just providing finances (97.6%) compared to women (71.8% and 92.1%, respectively). By religion, there was a very large and highly statistically significant ($p<0.01$) difference for those agreeing that men and women are created equal—78.1% of Christian respondents endorsed this position while only 40.3% of Muslim respondents held this particular attitude.

Similar to assessing social norms for FP, respondents were asked a series of statements on their perceptions of typical behaviors (i.e., descriptive norms) pertaining to household work and childcare and were asked to respond on a 4-point Likert-scale for the statements. Respondents were asked whether they perceived that none, some, many or most men in their congregation

contributed to household chores and childcare, and responses were combined in the table below (see Table 15). In experimental congregations, 11.4% of respondents perceived that many or most men in their congregation share in household work, which was marginally significantly ($p<0.10$) less than respondents in control congregations (14.1%). For childcare, 32.0% of respondents in experimental congregations perceived that many or most men in their congregation share in childcare. Only one statement each was asked for descriptive norms around male engagement in household chores and male engagement in childcare and mean scores could not be computed.

Looking at descriptive norms around positive masculinities by sex and religion, there was little difference for the descriptive norms items. By religion, Muslim respondents were statistically significant ($p<0.01$) more likely to report that many or most husbands in their congregations contributed to household chores (15.2%) compared to 8.7% of Christian respondents and more likely ($p<0.05$) to report that many or most husbands in their congregations contributed to childcare (32.9%) compared to 25.6% of Christian respondents.

Table 15. Descriptive Norms Related to Positive Masculinities & Gender Equality (%)

	Control	Experimental	Men	Women	Christian	Muslim
Total (n)	**474**	**357**	**377**	**454**	**278**	**553**
Perceive that many/most husbands contribute to						
Household chores	14.1*	11.4*	13.8	12.4	8.7***	15.2***
Childcare	29.3	32.0	31.3	29.8	25.6**	32.9**
* p<0.10, ** p<0.05, *** p<0.01						

Respondents were also asked a series of statements on their perceptions of approved behaviors (i.e., injunctive norms, by their respondent's reference groups) relating to IPV and were asked to respond on a 4-point Likert-scale for the statements. Respondents were asked whether they perceived that many, most, some, or none of a reference group (i.e., congregation, religious leaders, partners, important others) would approve of a husband contributing to household chores and to childcare, and responses were combined in the following table (see Table 16). In experimental congregations, respondents, in general, perceived that many/most of their fellow congregation members (93.6%), people whose opinions matter to the respondent (91.7%), religious leaders (82.4%), and partners (76.7%) approved of a husband engaging in childcare. Respondents in experimental congregations were less likely to perceive these reference groups would approve of husbands contributing to household work compared to childcare. For household work, respondents from experimental congregations perceived that many/most fellow congregation members (77.9%), people whose opinions matter to the respondent (89.3%), religious leaders (68.9%), and partners (56.5%) would be supportive of a husband contributing to

household work. Respondents in control congregations were statistically significantly ($p<0.01$) more likely to perceive that their religious leaders would be supportive of a husband contributing to household work (85.4%) compared to respondents from experimental congregations (68.9%).

Factor analysis was also conducted on social norms items relating to positive masculinities in the survey (see Appendix III). Among the resulting factors or domains, one corresponded to norms relating to male contribution to household chores (i.e., whether a husband's contributing to household chores is perceived to be typical and approved behavior among a respondent's reference group) and the other corresponded to norms relating to male contribution to childcare (i.e., whether a husband's contributing to childcare is perceived to be typical and approved behavior among a respondent's reference group). Comparing mean scores (higher mean scores for this factor equate with perceiving that male engagement in these activities is more typical and accepted behavior in a community), respondents in control congregations had statistically significantly ($p<0.05$) higher mean scores for norms for a husband's involvement in household work (mean score of 2.61) compared to respondents in experimental congregations (mean score of 2.54). There were only minimal differences between respondents in experimental (mean score of 2.85) and control congregations (mean score of 2.83) for mean scores of norms relating to a husband's involvement in childcare.

There were a number of key differences in injunctive norms items pertaining to positive masculinities by sex and religion as seen in the following table (see Table 16).

A few marginally statistically significant ($p<0.10$) differences were seen in perceptions of approval of male engagement in household chores by congregation members and people whose opinions matter to respondents by religion, with Christians more likely to perceive that these reference groups would approve of male engagement in household chores compared to Muslim respondents. There were statistically significant differences in perceptions of approval of partners and religious leaders for male engagement in household chores by sex and by religion. Men were more likely to perceive that their partners would approve of male engagement in household work compared to women ($p<0.01$; 68.9% vs. 52.9%) and more likely to perceive that their partners would approve of male engagement in childcare ($p<0.05$; 83.3% vs. 74.3%) compared to women. As well, Muslim respondents were more likely to perceive that their partners would approve of male engagement in household chores compared to Christian respondents ($p<0.05$; 62.7% vs. 55.0%). Finally, men were more likely to perceive that many or most of their religious leaders would approve of male engagement in household chores compared to women ($p<0.05$; 76.9% vs. 69.0%) and Christian respondents were more likely to perceive the same compared to Muslim respondents ($p<0.05$; 76.3% vs. 70.7%).

Comparing mean scores by sex of perceptions of whether male engagement in household chores and childcare is accepted behavior in their congregations, men were statistically significantly ($p<0.01$) more likely to perceive that their reference groups approved of a husband's involvement

in household work (mean score of 2.66) compared to women (mean score of 2.51). As well, men were also statistically significantly ($p<0.05$) more likely to perceive that their reference groups approved of a husband's involvement in childcare (mean score of 2.88) compared to women (mean score of 2.81). No statistically significant differences were observed comparing mean scores by religion.

Table 16. Injunctive Norms Related to Positive Masculinities & Gender Equality (%)

	Control	Inter.	Men	Women	Christian	Muslim
Total (n)	**474**	**357**	**377**	**454**	**278**	**553**
Perceive that many/most approve of						
Congregation approves						
Husbands doing HH chores	81.8	77.9	80.3	79.9	83.9*	78.3*
Husbands doing childcare	92.2	93.6	92.6	93.0	93.2	92.6
People whose opinions matter approve						
Husbands doing HH chores	89.7	89.3	91.8	87.6	92.8*	87.8*
Husbands doing childcare	93.0	91.7	94.4	90.7	92.1	92.6
Partner approves						
Husbands doing HH chores	62.9*	56.5*	68.9***	52.9***	55.0**	62.7**
Husbands doing childcare	79.6	76.7	83.3**	74.3**	75.2*	79.9*
Religious leader approves						
Husbands doing HH chores	85.4***	68.9***	76.9**	69.0**	76.3**	70.7**
Husbands doing childcare	86.7	82.4	87.0	83.1	84.9	84.8
HH work norm mean score (SD)†	2.61** (0.49)	2.54** (0.52)	2.66*** (0.50)	2.51*** (0.50)	2.61 (0.49)	2.57 (0.51)
Childcare norm mean score (SD)‡	2.83 (0.46)	2.85 (0.49)	2.88** (0.46)	2.81** (0.48)	2.86 (0.48)	2.83 (0.47)

* p<0.10, ** p<0.05, *** p<0.01
† Includes both descriptive and injunctive norms items
‡ Includes both descriptive and injunctive norms items

Respondents were also asked a series of statements designed to assess the quality of communication and their relationship—whether they had discussed a topic in the previous month (see Table 17). Around 90% of respondents in experimental congregations reported that they had talked with their partner about things that made them happy (92.4%), their concerns (92.2%), their appreciation of their partner (88.0%), and their frustrations (87.4%) in the previous month. There were no significant differences comparing respondents in experimental or control congregations.

There were a few significant differences comparing perceptions of relationship quality by sex and religion. Men were highly statistically significantly ($p<0.01$) more likely to report that they had talked with their partner about their concerns (95.2%) and talked with their partner about things that made them happy (95.2%) in the previous one year compared to women (88.1% and 87.7%, respectively). As well, men were statistically significantly ($p<0.05$) more likely to report that they had told their partner they appreciated them in the previous month (89.7%) compared to 84.1% of women. By religion, Muslims were statistically significantly ($p<0.01$) more likely to report that they had told their partner they appreciated them (91.9%) and talked with their partner about things that made them happy (93.9%) in the previous month compared to Christians (76.3% and 85.6%, respectively).

Table 17. Relationship Quality (%)

In the past mo.	Control	Interven.	Men	Women	Christian	Muslim
Total (n)	**474**	**357**	**377**	**454**	**278**	**553**
In the past mo.						
Told partner appreciated them	85.7	88.0	89.7**	84.1**	76.3***	91.9***
Taken time to listen to partner's concerns	90.7	92.2	95.2***	88.1***	90.7	91.7
Talked about things that frustrated you	86.3	87.4	88.6	85.2	88.1	86.1
Talked about things that made you happy	90.1	92.4	95.2***	87.7***	85.6***	93.9***
* p<0.10, ** p<0.05, *** p<0.01						

SOCIAL COHESION & INTERFAITH DIALOGUE

Respondents were posed a series of attitudinal and normative statements (see Table 18) relating to social cohesion and dialogue between Muslim and Christian congregations in selected sites. They were asked whether they strongly agree, agree, disagree, or strongly disagree with such statements and responses were combined and presented by experimental/control in Table 26. Accordingly, about one-half (45.9%) of respondents in experimental congregations perceived that conflict between Christians and Muslims was common in their communities and that there was mistrust between the religious communities (51.3%). Regardless, the majority of respondents (89.6%) believed that Christian and Muslim religious leaders often work together to solve community problems in their communities, while only 10.9% held the attitude that it was wrong for Christian and Muslim religious leaders to work together to solve community problems. Over 95% of respondents believed that their congregation members and their religious leaders approved of working together across faiths to solve community problems. Respondents in

experimental congregations were statistically significantly (p<0.01) more likely to perceive that conflict between religious communities is common in their community (45.9%) compared to respondents in control congregations (31.9%).

There were a few notable differences in attitudes and social norms toward social cohesion and interfaith dialogue by gender and religion. Women were statistically significantly (p<0.05) more likely to be of the opinion that it is wrong for Christian and Muslim religious leaders to work together to solve community problems (14.5%) compared to men (8.0%). By religion, Christians were highly statistically significantly (p<0.01) more likely to perceived that conflict between religious communities was common in their community (55.8%) compared to Muslim respondents (28.9%) and also more likely to perceive that there is mistrust between Christians and Muslims in their communities (77.0%) compared to Muslim respondents (35.1%).

Table 18. Attitudes & Norms Related to Interfaith Dialogue & Social Cohesion (%)

	Control	Experimental	Men	Women	Christian	Muslim
Total (n)	**474**	**357**	**377**	**454**	**278**	**553**
In community, perceive that						
Religious conflict is common	31.9***	45.9***	35.8	39.7	55.8***	28.9***
Christian and Muslim religious leaders work together	93.9*	89.6*	93.6	90.8	83.5***	96.4***
There is mistrust b/w Christians and Muslims	47.5	51.3	48.8	49.3	77.0***	35.1***
It is wrong for Christian and Muslim religious leaders to work together	12.0	10.9	8.0**	14.5**	9.0	12.8
People in congregation whose opinions matter approve of Muslims and Christians working together	96.9	97.2	97.9	96.3	97.5	96.8
Religious leaders approve of Muslims and Christians working together	97.1	97.2	98.1	96.2	95.7	97.8
* p<0.10, ** p<0.05, *** p<0.01						

DIFFUSION

To shed some lights on the baseline levels of diffusion of intervention messaging, respondents were asked about their communication with others about FP and modern FP methods, relationship conflict and IPV, and gender and gender roles (see data tables in Appendix II). In addition, they were asked whether they have given and/or received advice or support with regards to the topic from others in their community. Finally, respondents were asked whether the primary person they speak with about these topics approves or disapproves of FP, IPV, and male involvement in women's traditional roles. In experimental congregations, 40.6% reported that they had spoken with another person about FP in the previous three months, 27.2% had

discussed relationship conflict or IPV in the previous three months, and 23.0% had discussed gender and/or gender roles with another person in the previous three months. For FP, 29.7% reported that they had given advice or support to another person and 26.6% had received advice or support from another person. Relating to IPV and conflict in their relationships, 15.7% reported that they had given advice or support to another person and 10.1% had received advice or support from another person. Finally, for gender and gender roles, 18.8% reported that they had given advice or support to another person and 16.8% had received advice or support from another person. Respondents were also asked whether they perceived that the person that they most often spoke would approve of: using FP (81.2%), avoiding IPV (89.4%), and men taking part in household chores and childcare (91.9%). No significant differences were observed comparing control and experimental populations.

Looking at diffusion by sex and religion, we see few differences by religion. However, there were a number of differences by sex. Men were slightly statistically significantly ($p<0.10$) more likely to report that they had discussed FP with another person in the previous three months (43.5%) and slightly statistically significantly ($p<0.10$) less likely to report that they had discussed IPV with another person in the previous three months (26.0%) compared to women (36.3% and 31.5%, respectively). Women were also statistically significantly ($p<0.05$) more likely to report that they had given (25.3%) and received (20.9%) support relating to gender and gender roles compared to men (15.1% and 13.5%, respectively), but women were less likely to report having received advice and/or support for FP from another person (23.1%) compared to men (31.6%).

DISCUSSION

The MFP project, being conducted in Plateau State, Nigeria, aims to transform the underlying social norms that impede young couples from accessing FP services, promote harmful masculinities, and enable GBV. We expect such normative shifts to ultimately lead to increased voluntary use of modern contraception, reduced experience of IPV, and improved social cohesion between Christian and Muslim faith communities. The MFP intervention focuses on promoting positive masculinities and gender equality through participatory scriptural reflection and dialogue with religious leaders and congregants to identify, create, and embrace new, positive masculine identities. These actions are expected to reduce social acceptance of IPV and other gender inequalities supporting early childbearing and high fertility rates and prevent women and men from accessing and using modern FP.

The baseline couple survey is being conducted as the first step of a longitudinal, cRCT design evaluating the MFP intervention. We aim to provide rigorous evidence of the effectiveness of the MFP intervention in shifting community-level norms and individual attitudes and behaviors related to FP acceptance and use, IPV acceptance, experience, and perpetration, positive masculinities and gender equality, shared decision-making, couple communication, and social cohesion—outcomes the intervention is expected and designed to impact. This report provides indicators at baseline, prior to 18 months of intervention. The endline will be conducted in late 2020 to assess changes in these outcomes.

At baseline, the sample consisted of 831 randomly selected individuals from 20 randomly selected and predominantly rural, Christian and Muslim congregations. In the baseline survey, 41.6% of respondents reported that they or their partners were currently using some form of modern contraception, with large differences in reported usage comparing Christian (51.1%) to Muslim populations (37.2%). This is considerably higher compared to the 21.4% of currently married women in Plateau State reporting using modern contraception according to the 2018 Nigeria DHS.[26] However, we did not include pregnant couples in our sample and differences may also reflect the differing nature of churchgoing populations in Plateau State. In addition, nearly three-quarters of all respondents stated that they or their partner were likely to use a method of modern contraception in the near future.

There were several findings from the baseline survey suggesting that the MFP intervention could build upon positive attitudes, norms, and behaviors regarding modern FP use. Nearly three-quarters (70.6%) of respondents in experimental congregations held the attitude that it was appropriate for FTP to use modern contraception, but only about one-half believed the same about appropriateness for NMC to use modern contraception (47.3%). In addition, nearly one-half of respondents believed that the use of modern contraception was against their religion, that use of modern contraception would lead to difficulties becoming pregnant in the future and

other side effects, and finally, nearly one-third of respondents believed that their partner would be opposed to use of modern contraception. Self-efficacy was high, with more than three-quarters of respondents believed that they or their partner could use modern contraception if they wanted to. However, this is reduced to two-thirds of respondents if asked whether they would still be able to use modern contraception if their religious leaders were opposed. Finally, about 40% of respondents reported that they have not discussed any topics related to FP in the previous year and nearly one-half reported that a husband alone makes final decisions in their relationships with regards use of FP.

For social norms around modern FP use, most respondents did not perceive that use of modern contraception was typical in their communities, with less than one-third of respondents suggesting that many or most FTP or NMC use modern contraception in their communities. However, respondents seemed more likely to perceive that modern contraception use was acceptable behavior to their reference groups compared to their perceptions of modern contraceptive use as typical behavior in their communities. Nevertheless, respondents were less likely to perceive that their religious leaders (62.2%) and fellow religious congregants (66.6% for FTP and 48.7% for NMC) would approve of modern contraception use compared to other reference groups (e.g., 73.7% approval among people whose opinions are important to the respondent); as well, respondents were much less likely to perceive that their reference groups would approve of NMC using modern contraception compared to FTP. Over three-quarters of respondents noted that their partner's opinions were important to them, followed by 30.5% listing their mothers/in-law, 24.9% their fathers/in-law, and only 17.9% listed their religious leaders and 14.9% community health workers.

Similar to use of modern FP, there were also several important findings to the intervention with regards IPV beliefs, attitudes, norms, and behaviors. In experimental congregations, 69.2% of respondents reported experiencing (among women) or perpetrating (among men) any form of IPV. Breaking this down, 62.2% reported experiencing/perpetrating a form of emotional IPV, 18.5% physical IPV, 20.5% forced sex, and 8.7% violence specifically to discourage FP use. Women were more likely to report experiencing physical, sexual, and violence to discourage FP use compared to men and Christians were more likely to report experiencing/perpetrating IPV compared to Muslims. While not directly comparable, prevalence of physical IPV in our sample is broadly consistent with the prevalence of women 15-49 reporting experiencing physical violence for Plateau State (16.6%) but considerably higher than the 10.0% reporting experiencing forced sex from the 2018 Nigeria DHS.[27]

There were also findings that suggest the MFP intervention has the potential to improve upon beliefs, attitudes, and norms supportive of violence against women. Twenty percent or more of respondents in experimental congregations believed IPV was justified if a wife neglects her children, uses FP without her husband's knowledge, or argues with her husband, and women and

Christians were considerably more likely to justify the use of IPV compared to men and Muslim respondents. Religion and scripture also played an important part in acceptance of IPV, with over half of men and women believing that according to scripture, a husband is supposed to discipline his wife, despite the large majority not personally holding the attitude that it is appropriate for a husband to beat his wife. Perhaps of high import for the intervention, very large majorities over 90% suggested that they would personally use other non-violent strategies to manage conflict with their partner if they knew of such strategies.

Survey findings on social norms around IPV seemingly demonstrate less support for IPV compared to personal beliefs and attitudes. The majority (nearly 90%) of respondents do not believe IPV to be common in their congregations and about 80% or more believe that religious leaders, members of their congregation, and members of their reference groups do not believe that it is appropriate for a husband to beat his wife. Similar to FP, nearly two-thirds of respondents reported that they considered their partner to be an important reference group member for IPV (65.3%), followed by 49.0% for mothers/in-law, 41.7% for fathers/in-law, and 15.7% of religious leaders.

For gender equality, we assessed involvement of male partners in household chores and childcare (among those couples with children). Only 12.3% of respondents suggested that the male partner often contributes to household chores and 37.6% that the male partner often contributes to childcare. Similar to attitudes, male involvement in childcare and especially in contributing to household chores was not perceived to be typical behavior in these communities. However, most respondents perceived that male involvement would be accepted behavior by their reference groups, but this was lower for male engagement in household chores (compared to childcare). Among other attitudes relating to gender equality and masculinities, only about one-half of respondents agreed that men and women are created equal and more than one-quarter held the opinion that a wife should not express her opinion on matters if her husband would disagree.

Finally, the baseline survey also collected information on respondents' perceptions of social cohesion and interfaith dialogue in their communities—an innovation of the MFP intervention. At baseline, nearly one-half of respondents in experimental congregations perceived that religious conflict is common in their communities, with Christians considerably more likely to perceive that religious conflict is common (55.8%) compared to Muslims (28.9%). Christian respondents were also more likely to perceive that there was mistrust between Christians and Muslims (77.0%) compared to Muslim respondents (35.1%). However, large majorities (>90%) of respondents from both religions perceived that it was appropriate for Christian and Muslim religious leaders to work together to solve community problems.

The above findings demonstrate several promising points of intervention to build upon as well as focus on for improving modern FP use, reducing IPV, promoting gender equality and positive

masculinities, and improving social cohesion and interfaith dialogue. In particular, findings often highlighted misperceptions around modern FP methods and important discrepancies between: women's and men's attitudes and perceptions, personal attitudes and social norms, descriptive and injunctive norms, and attitudes and social norms regarding different life stages (e.g., FTP compared to NMC). In addition, the findings demonstrate the importance of religion (i.e., scripture, influence of religious leaders and congregation members, church attendance) in these communities and its influence on FP use, IPV, gender equality, and masculinity. These findings support intervention components focusing on couple's communication and community dialogue through religious leaders and scripture as well as linking couples and communities with existing SRH services. Recommendations from baseline findings are provided in the following section.

Multiple research methodologies are being conducted to understand MFP implementation outcomes, efficacy and efficiency, and mechanisms of change in Plateau State, Nigeria. The baseline couple survey findings represent an initial look into several of these questions within the larger research agenda. Additional quantitative and qualitative research will be conducted to address these questions. In particular, the qualitative research will be informed by baseline findings as points for further investigation. Additional analytic work, particularly on creating social norms measures and investigating associations between concepts and items important to the MFP theory of change, as well as between IPV and FP outcomes, are being developed. Finally, the endline survey will take place in late 2020 and allow for investigation of the impact of the MFP intervention on key outcomes related to SRH and well-being for women and men and social cohesion among multi-faith communities in these communities.

RECOMMENDATIONS

Using the results of this baseline research, programmatic and technical modifications were made to the intervention before its rollout in the five experimental communities as they relate to SGBV/IPV, family planning, and social cohesion.

Regarding SGBV/IPV, the research results show that violence is used and accepted in homes to preserve harmony. As such, the content of the TM manual was revised to be more explicit about norms influencing violence. In addition, the training of the Gender Champions was revised to put more emphasis on facilitation of the themes related to violence within the couple, gender equality, male involvement to facilitate critical reflection of those themes. Finally, the implementation team developed a repository of scriptures in the TM manual to strengthen the messages on gender equality and male involvement. Baseline research revealed existing sensitivities around the word family planning and its benefits especially in Muslim communities.

During implementation, the term “family planning” was changed to “child spacing” in both Christian and Muslim communities. The messages conveyed to the couples through the community dialogues and to the community at large remained the same but couched in the term Healthy Timing and Spacing of Pregnancies (HTSP). This change of language allowed for constructive conversations with couples because it stresses that couples can and have the freedom to plan and choose the number of children to have keeping in mind the health of the mother and of the child. These conversations really put the well-being of the family at the center of the intervention with communities instead of FP as a way through which local and international organizations are telling communities to stop having children. Moreover, the TM manual was revised to include an entirely new section devoted to FP methods and included topics such as myths, misconceptions, and side-effects of FP methods. Finally, the intervention added a health talk at the end of each cycle of the community dialogues for religious leaders, gender champions and couples to sensitize all actors on the family planning methods available in their communities. The health talks are facilitated by trained health providers. These baseline research results revealed that norms around social cohesion in Christian and Muslim communities varied by communities with the need for more and better dialogue between communities to resolve issues.

Using the results of this research activity, the implementation team developed a social cohesion/peacebuilding program. This program serves as a platform to identify sources and causes of conflicts in communities and allows religious leaders to come together to discuss solutions. Additional topics such as SGBV/IPV are also discussed because religious leaders are often called upon to resolve conflicts between couples. Finally, the intervention team identified local community leaders in addition to women and youth leaders to support these interfaith dialogues as youth and women groups also have an important role in communities in target communities.

Overall, the design of the intervention includes a technical advisory group (TAG) comprised of religious leaders and other influential people at the community level to monitor intervention activities and provide feedback when necessary. Moreover, all intervention documents have been translated in Hausa to facilitate communities' understanding of the key topics of the intervention. Finally, a glossary of key intervention terms in Hausa was developed to ensure uniformity of all messages at all levels of implementation.

APPENDICES

APPENDIX I: RESPONDENTS BY CONGREGATION

Respondents by congregation

Total (n)	831
Experimental congregations	
Gurum/Mista Ali Church	19 (2.3%)
Gurum/Mista Ali Mosque	32 (3.9%)
Jebbu Bassa Church	24 (2.9%)
Jebbu Bassa Mosque	35 (4.2%)
Miango Church	44 (5.3%)
Miango Mosque	12 (1.4%)
Naraguta Church	8 (1.0%)
Naraguta Mosque	40 (4.8%)
Yelwa Church	20 (2.4%)
Yelwa Mosque	123 (14.8%)
Control congregations	
Dadinkowa Church	40 (4.8%)
Dadinkowa Mosque	43 (5.2%)
Fobur Church	42 (5.1%)
Fobur Mosque	7 (0.8%)
Jengre Church	27 (3.3%)
Jengre Mosque	95 (11.4%)
Longvel Church	11 (1.3%)
Longvel Mosque	11 (1.3%)
Saya Church	45 (5.4%)
Saya Mosque	153 (18.4%)

APPENDIX II: ADDITIONAL DATA TABLES

Reason for not using modern contraception by experimental/control

	Control	Experimental	p-value
Total (n)	193	138	
Among couples not using MC and/or not pregnant, do not use MC because…			
Fertility-related reasons	146 (75.7%)	99 (71.7%)	0.424
Opposition to use	15 (7.8%)	11 (8.0%)	0.947
Lacks knowledge	4 (2.1%)	2 (1.6%)	0.675
Method-related reasons	12 (6.2%)	16 (11.6%)	0.083
Other reasons	16 (8.3%)	10 (7.3%)	0.728

Reason for not using modern contraception by sex & religion

	Men	Women	p-value	Christian	Muslim	p-value
Total (n)	128	203		97	234	
Among couples not using MC and/or not pregnant, do not use MC because…						
Fertility-related reasons	94 (77.4%)	151 (74.4%)	0.848	70 (72.2%)	175 (74.8%)	0.621
Opposition to use	10 (7.8%)	16 (7.9%)	0.982	8 (8.3%)	18 (7.7%)	0.864
Lacks knowledge	4 (3.1%)	2 (1.0%)	0.155	1 (1.0%)	5 (2.1%)	0.492
Method-related reasons	11 (8.6%)	17 (8.4%)	0.944	12 (12.4%)	16 (6.8%)	0.100
Other reasons	9 (7.0%)	17 (8.4%)	0.658	6 (6.2%)	20 (8.6%)	0.467

Attitudes toward modern contraception/family planning by intervention arm

In your personal opinion…	Control	Experimental	p-value
Total (n)	474	357	
If use MC, agree will avoid unwanted pregnancy	421 (88.8%)	322 (90.2%)	0.523
If use MC, disagree lead to difficulty becoming pregnant	259 (54.6%)	196 (54.9%)	0.940
If use MC, agree not against religion	294 (62.0%)	189 (52.9%)	0.009
If use MC, disagree will get promiscuous reputation	374 (78.9%)	269 (75.4%)	0.226
If use MC, disagree negative side effects	286 (60.3%)	204 (57.1%)	0.354
If mention MC, disagree husband would have negative reaction	349 (73.6%)	253 (70.9%)	0.378
Agree it is appropriate for NMC to use MC	233 (49.2%)	169 (47.3%)	0.604
Agree it is appropriate for FTP to use MC	324 (68.4%)	25 (70.6%)	0.489

Attitudes toward modern contraception/family planning by sex & religion

In your personal opinion…	Men	Women	p-value	Christian	Muslim	p-value
Total (n)	377	454		278	553	
If use MC, agree will avoid unwanted pregnancy	346 (91.8%)	397 (87.4%)	0.043	255 (91.7%)	488 (88.3%)	0.124
If use MC, disagree lead to difficulty becoming pregnant	204 (54.1%)	251 (55.3%)	0.735	139 (50.0%)	316 (57.1%)	*0.051*
If use MC, agree not against religion	222 (58.9%)	261 (57.5%)	0.684	172 (61.9%)	311 (56.2%)	0.121

If use MC, disagree will get promiscuous reputation	285 (75.6%)	358 (78.9%)	0.264	212 (76.3%)	431 (77.9%)	0.585
If use MC, disagree negative side effects	222 (58.9%)	268 (59.0%)	0.966	142 (51.1%)	348 (62.9%)	0.001
If mention MC, disagree husband would have negative reaction	302 (80.1%)	300 (60.1%)	<0.001	206 (74.1%)	396 (71.6%)	0.448
Agree it is appropriate for NMC to use MC	195 (51.7%)	207 (45.6%)	*0.078*	142 (51.1%)	260 (47.0%)	0.269
Agree it is appropriate for FTP to use MC	262 (69.5%)	314 (69.2%)	0.917	181 (65.1%)	395 (71.4%)	*0.062*

Self-efficacy in using modern contraception by control/experimental

Confident you can…	Control	Experimental	p-value
Total (n)	474	357	
Use MC if wanted	368 (77.6%)	289 (81.0%)	0.245
Use MC even if religious leader opposed	298 (62.9%)	232 (65.0%)	0.530
Suggest MC to partner	387 (81.7%)	292 (81.8%)	0.957

Self-efficacy in using family planning by sex & religion

Confident you can…	Men	Women	p-value	Christian	Muslim	p-value
Total (n)	377	454		278	553	
Use MC if wanted	296 (78.5%)	361 (79.5%)	0.724	224 (80.6%)	433 (78.3%)	0.447
Use MC even if religious leader opposed	234 (62.1%)	296 (65.2%)	0.350	191 (68.7%)	339 (61.3%)	0.036
Suggest MC to partner	300 (79.6%)	379 (83.5%)	0.147	231 (83.1%)	448 (81.0%)	0.464

Important reference groups for family planning by control/experimental

	Control	Experimental	p-value
Total (n)	474	357	
Partner	387 (81.7%)	268 (75.1%)	0.022
Friends	24 (5.1%)	42 (11.8%)	<0.001
Mother/in-law	131 (27.6%)	109 (30.5%)	0.362
Father/in-law	87 (18.4%)	89 (24.9%)	0.022
Religious leader	58 (12.2%)	64 (17.9%)	0.022
Health worker	98 (20.7%)	53 (14.9%)	0.031
Other family member	26 (5.5%)	45 (12.6%)	<0.001
Other	11 (2.3%)	21 (5.9%)	0.008

Important reference groups for family planning by sex & religion

	Men	Women	p-value	Christian	Muslim	p-value
Total (n)	377	454		278	553	
Partner	267 (70.8%)	388 (85.5%)	<0.001	227 (81.7%)	428 (77.4%)	0.156
Friends	37 (9.8%)	29 (6.4%)	0.069	15 (5.4%)	51 (9.2%)	0.054
Mother/in-law	100 (26.5%)	140 (30.8%)	0.172	56 (20.1%)	184 (33.3%)	<0.001
Father/in-law	82 (21.8%)	94 (20.7%)	0.713	29 (10.4%)	147 (26.6%)	<0.001
Religious leader	70 (18.6%)	52 (11.5%)	0.004	34 (12.2%)	88 (15.9%)	0.157
Health worker	82 (21.8%)	69 (15.2%)	0.015	49 (17.6%)	102 (18.4%)	0.773
Other family member	27 (7.2%)	44 (9.7%)	0.194	20 (7.2%)	51 (9.2%)	0.324
Other	23 (6.1%)	9 (2.0%)	0.002	14 (5.0%)	18 (3.3%)	0.208

Experience of violence as a child by control/experimental

Before age 15, experienced…	Control	Experimental	p-value
Total (n)	474	357	
Saw woman in HH beaten by man			0.564
Often	30 (6.3%)	19 (5.3%)	
Sometimes	106 (22.4%)	85 (23.8%)	
Never	336 (70.9%)	253 (70.9%)	
Threatened with physical punishment			0.748
Often	54 (11.4%)	46 (12.9%)	
Sometimes	305 (64.4%)	224 (62.8%)	
Never	114 (24.1%)	87 (24.4%)	
Slapped/beaten			0.772
Often	55 (11.6%)	42 (11.8%)	
Sometimes	317 (66.9%)	231 (64.7%)	
Never	102 (21.5%)	84 (23.5%)	

Experience of violence as a child by sex & religion

Before age 15, experienced…	Men	Women	p-value	Christian	Muslim	p-value
Total (n)	377	454		278	553	
Saw woman in HH beaten by man			0.999			<0.001
Often	22 (5.8%)	27 (6.0%)		23 (8.3%)	26 (4.7%)	
Sometimes	87 (23.1%)	104 (22.9%)		100 (36.0%)	91 (16.5%)	
Never	267 (70.8%)	322 (70.9%)		154 (55.4%)	435 (78.7%)	
Threatened with physical punishment			0.002			0.027
Often	53 (14.1%)	47 (10.4%)		40 (14.4%)	60 (10.9%)	
Sometimes	255 (67.6%)	274 (60.4%)		187 (67.3%)	342 (61.8%)	
Never	69 (18.3%)	132 (29.1%)		51 (18.4%)	150 (27.1%)	
Slapped/beaten			0.939			0.012
Often	43 (11.4%)	54 (11.9%)		43 (15.5%)	54 (9.8%)	
Sometimes	251 (66.6%)	297 (65.4%)		185 (66.6%)	363 (65.6%)	
Never	83 (22.0%)	103 (22.7%)		50 (18.0%)	136 (24.6%)	

Justification of intimate partner violence by control/experimental

In your opinion, violence is justified if…	Control	Experimental	p-value
Total (n)	474	357	
Wife goes out w/o telling husband	79 (16.7%)	67 (18.8%)	0.431
Wife neglects children	97 (20.5%)	91 (25.5%)	0.086
Wife argues w/ husband	88 (18.6%)	77 (21.6%)	0.283
Wife refuses sex	59 (12.5%)	55 (15.4%)	0.220
Wife burns food	34 (7.2%)	40 (11.2%)	0.043
Wife uses MC w/o husband knowing	117 (24.7%)	85 (23.8%)	0.771

Justification of intimate partner violence by sex & religion

In your opinion, violence is justified if…	Men	Women	p-value	Christian	Muslim	p-value
Total (n)	377	454		278	553	
Wife goes out w/o telling husband	36 (9.6%)	110 (24.2%)	<0.001	58 (20.9%)	88 (15.9%)	0.077
Wife neglects children	53 (14.1%)	135 (29.7%)	<0.001	86 (30.9%)	102 (18.4%)	<0.001
Wife argues w/ husband	36 (9.6%)	129 (28.4%)	<0.001	64 (23.0%)	101 (18.3%)	0.105
Wife refuses sex	24 (6.4%)	90 (19.8%)	<0.001	42 (15.1%)	72 (13.0%)	0.409
Wife burns food	19 (5.0%)	55 (12.1%)	<0.001	33 (11.9%)	41 (7.4%)	0.033
Wife uses MC w/o husband knowing	64 (17.0%)	138 (30.4%)	<0.001	85 (30.6%)	117 (21.2%)	0.003

Attitudes toward intimate partner violence by control/experimental

In your personal opinion…	Con.	Exp.	p-value
Total (n)	474	357	
Disagree that a husband beats his wife to correct her behavior	322 (67.9%)	226 (63.3%)	0.164
Disagree that IPV is normal in congregation	415 (87.6%)	314 (88.0%)	0.861
Agree that bystanders will stop IPV in congregation	450 (94.9%)	343 (96.1%)	0.435
Disagree that a husband is supposed to beat wife according to scripture	194 (40.9%)	161 (45.1%)	0.229
Disagree that if man does not beat wife, congregation will think he is unmanly	389 (82.1%)	290 (81.2%)	0.758
Personally believe it is not appropriate for a man to use violence against his wife for any reason	420 (88.6%)	314 (88.0%)	0.772
I would use non-violent strategies to reduce violence in relationship if knew	459 (96.8%)	354 (99.2%)	0.023

Attitudes toward intimate partner violence by sex & religion

In your personal opinion…	Men	Women	p-value	Christian	Muslim	p-value
Total (n)	377	454		278	553	
Disagree that a husband beats his wife to correct her behavior	282 (74.8%)	266 (58.6%)	<0.001	173 (37.8%)	375 (67.8%)	0.109
Disagree that IPV is normal in congregation	342 (90.7%)	387 (85.2%)	0.017	234 (84.2%)	495 (89.5%)	0.027
Agree that bystanders will stop IPV in congregation	359 (95.2%)	434 (95.6%)	0.800	270 (97.1%)	523 (94.6%)	0.097
Disagree that a husband is supposed to beat wife according to scripture	148 (39.3%)	207 (45.6%)	0.066	126 (45.3%)	229 (41.4%)	0.282
Disagree that if man does not beat wife, congregation will think he is unmanly	315 (83.6%)	364 (80.2%)	0.210	218 (78.4%)	461 (83.4%)	0.082
Personally believe it is not appropriate for a man to use violence against his wife for any reason	338 (89.7%)	396 (87.2%)	0.277	245 (88.1%)	489 (88.4%)	0.900
I would use non-violent strategies to reduce violence in relationship if knew	372 (98.7%)	441 (97.1%)	0.130	269 (96.8%)	544 (98.4%)	0.133

Important reference groups for relationship & intimate partner violence by control/ experimental

	Control	Experimental	p-value
Total (n)	474	357	
Partner	320 (67.5%)	233 (65.3%)	0.497
Friends	42 (8.9%)	39 (10.9%)	0.321
Mother/in-law	194 (40.9%)	175 (49.0%)	0.020
Father/in-law	158 (33.3%)	149 (41.7%)	0.013
Religious leader	78 (16.5%)	56 (15.7%)	0.765
Health worker	1 (0.2%)	5 (1.4%)	0.045
Other family member	56 (11.8%)	49 (13.7%)	0.412
Other	19 (4.0%)	14 (3.9%)	0.940

Important reference groups for relationship & intimate partner violence by sex & religion

	Men	Women	p-value	Christian	Muslim	p-value
Total (n)	377	454		278	553	
Partner	218 (57.8%)	335 (73.8%)	<0.001	194 (69.8%)	359 (64.9%)	0.161
Friends	57 (15.1%)	24 (5.3%)	<0.001	27 (9.7%)	54 (9.8%)	0.981
Mother/in-law	159 (42.2%)	210 (46.3%)	0.239	104 (37.4%)	265 (47.9%)	0.004
Father/in-law	140 (37.1%)	167 (36.8%)	0.917	80 (28.8%)	147 (41.1%)	0.001
Religious leader	78 (20.7%)	56 (12.3%)	0.001	55 (19.8%)	79 (14.3%)	0.042
Health worker	4 (1.1%)	2 (0.4%)	0.293	1 (0.4%)	5 (0.9%)	0.382
Other family member	46 (12.2%)	59 (13.0%)	0.732	31 (11.2%)	74 (13.4%)	0.361
Other	26 (6.9%)	7 (1.5%)	<0.001	15 (5.4%)	18 (3.3%)	0.130

Attitudes toward gender equality by control/experimental

In your personal opinion…	Control	Experimental	p-value
Total (n)	474	357	
Agree husband should give wife equal weight in decision-making	441 (93.0%)	327 (91.6%)	0.437
Agree that men and women are created equal	254 (53.6%)	180 (50.4%)	0.366
Agree wife should be able to express opinion even if husband disagrees	368 (77.6%)	263 (73.7%)	0.185
Agree that husband should contribute to childcare beyond financial	452 (95.4%)	334 (93.6%)	0.256

Attitudes toward gender equality by sex & religion

In your personal opinion…	Men	Women	p-value	Christian	Muslim	p-value
Total (n)	377	454		278	553	
Agree husband should give wife equal weight in decision-making	356 (94.4%)	412 (90.8%)	0.046	256 (92.1%)	512 (92.6%)	0.797
Agree that men and women are created equal	197 (52.3%)	237 (52.2%)	0.988	211 (75.9%)	223 (40.3%)	<0.001
Agree wife should be able to express opinion even if husband disagrees	305 (80.9%)	326 (71.8%)	0.002	217 (78.1%)	414 (74.9%)	0.310
Agree that husband should contribute to childcare beyond financial	368 (97.6%)	418 (92.1%)	<0.001	263 (94.6%)	523 (94.6%)	0.986

Speaking with others about family planning, intimate partner violence, and/or gender by control/experimental

	Control	Experimental	p-value
Total (n)	474	357	
Have discussed FP with another person	184 (38.8%)	145 (40.6%)	0.605
Have given advice/support about FP to another person	155 (32.7%)	106 (29.7%)	0.484
Have received advice/support about FP from another person	129 (27.2%)	95 (26.6%)	0.507
Primary person spoken with approves of using FP	385 (81.2%)	290 (81.2%)	0.948
Have discussed IPV with another person	144 (30.4%)	97 (27.2%)	0.313
Have given advice/support about IPV to another person	80 (16.9%)	56 (15.7%)	0.284
Have received advice/support about IPV from another person	55 (11.6%)	36 (10.1%)	0.535
Primary person spoken with doesn't approve of using IPV	427 (90.1%)	319 (89.4%)	0.208
Have discussed gender & gender roles with another person	117 (24.7%)	82 (23.0%)	0.820
Have given advice/support about gender roles to another person	105 (22.2%)	67 (18.8%)	0.222
Have received advice/support about gender roles from another person	86 (18.1%)	60 (16.8%)	0.458
Primary person spoken with approves of men taking part in HH work & childcare	424 (89.5%)	328 (91.9%)	0.425

Speaking with others about family planning, intimate partner violence, and/or gender by sex & religion

In the past 3 months…	Men	Women	p-value	Christian	Muslim	p-value
Total (n)	377	454		278	553	
Have discussed FP with another person	164 (43.5%)	165 (36.3%)	0.056	108 (38.9%)	221 (40.0%)	0.736
Have given advice/support about FP to another person	123 (32.6%)	138 (30.4%)	0.770	86 (30.9%)	175 (31.7%)	0.914
Have received advice/support about FP from another person	119 (31.6%)	105 (23.1%)	0.012	80 (28.8%)	144 (26.0%)	0.253
Primary person spoken with approves of using FP	293 (77.7%)	382 (84.1%)	0.042	221 (79.5%)	454 (82.1%)	0.614
Have discussed IPV with another person	98 (26.0%)	143 (31.5%)	0.082	82 (29.5%)	159 (28.8%)	0.823
Have given advice/support about IPV to another person	53 (14.1%)	83 (18.3%)	0.235	41 (14.8%)	95 (17.2%)	0.671
Have received advice/support about IPV from another person	38 (10.1%)	53 (11.7%)	0.500	29 (10.4%)	62 (11.2%)	0.351
Primary person spoken with doesn't approve of using IPV	346 (91.8%)	400 (88.1%)	0.110	241 (86.7%)	505 (91.3%)	0.124
Have discussed gender & gender roles with another person	80 (21.2%)	119 (26.2%)	0.243	65 (23.4%)	134 (24.2%)	0.758
Have given advice/support about gender roles to another person	57 (15.1%)	115 (25.3%)	0.001	65 (23.4%)	107 (19.4%)	0.347
Have received advice/support about gender roles from another person	51 (13.5%)	95 (20.9%)	0.013	55 (19.8%)	91 (16.5%)	0.388
Primary person spoken with approves of men taking part in HH work & childcare	345 (91.5%)	407 (89.7%)	0.743	243 (87.4%)	509 (92.0%)	0.191

APPENDIX III: FACTOR ANALYSIS RESULTS FOR SOCIAL NORMS

Scale items for social norms regarding family planning for women

	Factor loading	Standard error	Cronbach's α
"Injunctive norms"			0.84
Members of this congregation think it is appropriate for NMC to use MC	1.00	0.00	
Members of this congregation think it is appropriate for FTP to use MC	1.04	0.04	
Religious leaders think it is appropriate for NMC to use MC	1.08	0.03	
Religious leaders think it is appropriate for FTP to use MC	1.01	0.04	
People whose opinions are important to me think I should use MC	0.97	0.04	
My partner thinks we, as a couple, should use MC	0.94	0.04	
Religious leaders in this congregation think my partner and I should use MC	0.89	0.04	
"Descriptive norms"			0.64
(How common) NMC in this congregation use MC	1.00	0.00	
(How common) FTP in this congregation use MC	0.32	0.12	

Scale items for social norms regarding gender equality/positive masculinities for women

	Factor loading	Standard error	Cronbach's α
"Gender role norms pertaining to HH chores"			0.86
Most NMC and FTP that I know in this congregation approve of the husband sharing in HH chores	1.00	0.00	
People whose opinions are important to me approve of the husband sharing in HH chores	1.08	0.03	
Religious leaders in this congregation think that my partner and I should share in the HH chores	1.11	0.03	
My partner thinks we should both share in the HH chores	1.12	0.03	
"Gender role norms pertaining to childcare"			0.84
My partner thinks we should both share in the responsibility of childcare	1.00	0.00	
Religious leaders in this congregation think my partner and I should both share in the responsibility of childcare	1.06	0.05	
Most NMC and FTP that I know in this congregation approve of the husband sharing in the responsibilities of childcare	1.14	0.05	
People whose opinions are important to me approve of the husband sharing in the responsibilities of childcare	1.19	0.05	

Scale items for social norms regarding intimate partner violence for women

	Factor loading	Standard error	Cronbach's α
"Injunctive norms—faith community"			0.85
People in this congregation expect a husband to force his wife to have sex even when she does not want to	1.00	0.00	
People in this congregation think it is ok for a husband to beat his wife at times	1.04	0.04	
Religious leaders think it is ok for a husband to beat his wife at times	1.05	0.03	
Religious leaders think it is ok for a husband to force his wife to have sex even when she does not want to	1.06	0.03	
"Injunctive norms—partner and important others"			0.78
My husband thinks it is ok for him to beat me at times	1.00	0.00	
My husband thinks it is ok for him to force me to have sex even when I do not want to	1.13	0.06	
Most NMC and FTP that I know in this congregation approve of the husband sharing in the responsibilities of childcare	1.19	0.05	
"Descriptive norms"			0.66
(How common) A husband beats his wife	1.00	0.00	
(How common) A husband forces his wife to have sex even when she does not want to	1.51	0.32	

Scale items for social norms regarding family planning for men

	Factor loading	Standard error	Cronbach's α
"Injunctive norms"			0.82
Members of this congregation think it is appropriate for NMC to use MC	1.00	0.00	
Members of this congregation think it is appropriate for FTP to use MC	1.10	0.05	
Religious leaders think it is appropriate for NMC to use MC	1.01	0.06	
Religious leaders think it is appropriate for FTP to use MC	1.03	0.05	
People whose opinions are important to me think I should use MC	1.13	0.06	
My partner thinks we, as a couple, should use MC	1.08	0.06	
Religious leaders in this congregation think my partner and I should use MC	0.99	0.05	
"Descriptive norms"			0.77
(How common) NMC in this congregation use MC	1.00	0.00	
(How common) FTP in this congregation use MC	0.91	0.15	

Scale items for social norms regarding gender equality/positive masculinities for men

	Factor loading	Standard error	Cronbach's α

"Gender role norms pertaining to HH chores"			0.84
Most NMC and FTP that I know in this congregation approve of the husband sharing in HH chores	1.00	0.00	
People whose opinions are important to me approve of the husband sharing in HH chores	1.17	0.06	
Religious leaders in this congregation think that my partner and I should share in the HH chores	1.12	0.05	
My partner thinks we should both share in the HH chores	1.27	0.06	
"Gender role norms pertaining to childcare"			0.83
My partner thinks we should both share in the responsibility of childcare	1.00	0.00	
Religious leaders in this congregation think my partner and I should both share in the responsibility of childcare	1.05	0.04	
Most NMC and FTP that I know in this congregation approve of the husband sharing in the responsibilities of childcare	1.04	0.04	
People whose opinions are important to me approve of the husband sharing in the responsibilities of childcare	1.06	0.04	

Scale items for social norms regarding intimate partner violence for men

	Factor loading	Standard error	Cronbach's α
"Injunctive norms"			0.86
People in this congregation expect a husband to force his wife to have sex even when she does not want to	1.00	0.00	
People in this congregation think it is ok for a husband to beat his wife at times	1.08	0.06	
Religious leaders think it is ok for a husband to beat his wife at times	1.21	0.06	
My wife thinks it is ok for me to force sex on her even when she does not want to	1.14	0.05	
Religious leaders in this congregation think it is ok for me to beat my wife at times	1.29	0.06	
People whose opinion is important to me think it is ok for me to beat my wife at times	1.34	0.06	
"Descriptive norms"			0.80
(How common) A husband beats his wife	1.00	0.00	
(How common) A husband forces his wife to have sex even when she does not want to	0.93	0.18	

APPENDIX IV: REPRODUCTIVE EMPOWERMENT SCALES

Sexual & reproductive healthcare provider communication by control/experimental

	Control	Experimental	p-value
Total (n)	474	357	
You and your health provider talk about using contraception	357 (75.3%)	269 (75.4%)	0.991
You can initiate conversations about contraception w/ your provider	398 (84.0%)	295 (82.6%)	0.609
You can ask your provider questions about using contraception	413 (87.1%)	314 (88.0%)	0.722
You can share your opinions about using contraception	408 (86.1%)	307 (86.0%)	0.973
When discussing contraception with provider, s/he pays attention to what you say	409 (86.3%)	315 (88.2%)	0.406

Sexual & reproductive healthcare provider communication by sex & religion

	Men	Women	p-value	Christian	Muslim	p-value
Total (n)	377	454		278	553	
You and your health provider talk about using contraception	264 (70.0%)	362 (79.7%)	0.001	216 (77.7%)	410 (74.1%)	0.262
You can initiate conversations about contraception w/ your provider	307 (81.4%)	386 (85.0%)	0.166	241 (86.7%)	452 (81.7%)	0.070
You can ask your provider questions about using contraception	323 (85.7%)	404 (89.0%)	0.151	253 (91.0%)	474 (85.7%)	0.030
You can share your opinions about using contraception	314 (83.3%)	401 (88.3%)	0.037	248 (89.2%)	467 (84.5%)	0.062
When discussing contraception with your provider, s/he pays attention to what you say	324 (85.9%)	400 (88.1%)	0.354	252 (90.7%)	472 (85.4%)	0.032

Sexual & reproductive health partner communication by control/experimental

	Control	Experimental	p-value
Total (n)	474	357	
You can initiate conversations about using contraception w/ your partner	420 (88.6%)	321 (89.9%)	0.548
You can share your opinions about using contraception w/ your partner	421 (88.8%)	329 (92.2%)	0.108
You can share your opinions about how many children you want w/ your partner	401 (84.6%)	312 (87.4%)	0.253
You can tell your partner that you don't feel like having sex without them getting angry	360 (76.0%)	283 (79.3%)	0.257
When having conversations about sex and SRH w/ partner, they pay attention to what you say	446 (94.1%)	332 (93.0%)	0.522

It is easier for you to get contraception in secret rather than try to talk to your partner to get their approval	78 (16.5%)	76 (21.3%)	0.076

Sexual & reproductive health partner communication by sex & religion

	Men	Women	p-value	Christian	Muslim	p-value
Total (n)	377	454		278	553	
You can initiate conversations about using contraception w/ your partner	331 (87.8%)	410 (90.3%)	0.246	256 (92.1%)	485 (87.7%)	0.055
You can share your opinions about using contraception w/ your partner	334 (88.6%)	416 (91.6%)	0.142	261 (93.9%)	489 (88.4%)	0.012
You can share your opinions about how many children you want w/ your partner	321 (85.2%)	392 (86.3%)	0.622	266 (95.7%)	447 (80.8%)	<0.001
You can tell your partner that you don't feel like having sex without them getting angry	321 (85.2%)	322 (70.9%)	<0.001	235 (84.5%)	408 (73.8%)	<0.001
When having conversations about sex and SRH w/ partner, they pay attention to what you say	367 (97.4%)	411 (90.5%)	<0.001	257 (92.5%)	521 (94.2%)	0.325
It is easier for you to get contraception in secret rather than try to talk to your partner to get their approval	49 (13.0%)	105 (23.1%)	<0.001	53 (19.1%)	101 (18.3%)	0.779

Sexual & reproductive health decision-making by control/experimental

	Control	Experimental	p-value
Total (n)	474	357	
You can initiate use contraception even if your partner doesn't want	107 (22.6%)	82 (23.0%)	0.893
You can refuse sex w/ your partner if you don't want	309 (65.2%)	240 (67.2%)	0.539
In most recent conversation w/ partner about contraception, a decision was made	334 (70.5%)	260 (72.8%)	0.455
Agreed with decision made about contraception	342 (72.2%)	255 (71.4%)	0.818
Who makes final decision about whether use contraception			0.662
Self	121 (25.5%)	100 (28.0%)	
Partner	159 (33.5%)	120 (33.6%)	
Other	194 (40.9%)	137 (38.4%)	
Who makes final decision about whether to use contraception			0.226
Self	119 (25.1%)	102 (28.6%)	
Partner	167 (35.2%)	138 (38.7%)	
Other	188 (39.7%)	117 (32.8%)	

Sexual & reproductive health decision-making by sex & religion

	Men	Women	p-value	Christian	Muslim	p-value
Total (n)	377	454		278	553	
You can initiate use contraception even if your partner doesn't want	71 (18.8%)	118 (26.0%)	0.014	58 (20.9%)	131 (23.7%)	0.359

You can refuse sex w/ your partner if you don't want	269 (71.4%)	280 (61.7%)	0.003	197 (70.9%)	352 (63.7%)	0.038
In most recent conversation w/ partner about contraception, a decision was made	268 (71.1%)	326 (71.8%)	0.819	210 (75.5%)	384 (69.4%)	0.066
Agreed with decision made about contraception	274 (72.7%)	323 (71.2%)	0.625	211 (75.9%)	386 (69.8%)	0.065
Who makes final decision about whether use contraception			<0.001			<0.001
Self	170 (45.1%)	51 (11.2%)		58 (20.9%)	163 (29.5%)	
Partner	28 (7.4%)	251 (55.3%)		89 (32.0%)	190 (34.4%)	
Other	179 (47.5%)	152 (33.5%)		131 (47.1%)	200 (36.2%)	
Who makes final decision about whether to use contraception			<0.001			0.013
Self	176 (46.7%)	45 (9.9%)		60 (21.6%)	161 (29.1%)	
Partner	45 (11.9%)	260 (57.3%)		96 (34.5%)	209 (37.8%)	
Other	156 (41.4%)	149 (32.8%)		122 (43.9%)	183 (33.1%)	

Sexual & reproductive health social support by control/experimental

	Control	Experimental	p-value
Total (n)	474	357	
If partner did not want to use contraception, you have friend/ family member who can help convince partner to use	346 (73.0%)	276 (77.3%)	0.156
If partner did not want to use contraception, you could go to people in your community who know about contraception who can help convince partner to use	306 (64.6%)	256 (71.7%)	0.029
If partner did not want to use contraception, you have friend/ family who can support you to get contraception anyway	254 (53.6%)	211 (59.1%)	0.113

Sexual & reproductive health social support by sex & religion

	Men	Women	p-value	Christian	Muslim	p-value
Total (n)	377	454		278	553	
If partner did not want to use contraception, you have friend/ family member who can help convince partner to use	287 (76.1%)	335 (73.8%)	0.439	220 (79.1%)	402 (72.7%)	0.043
If partner did not want to use contraception, you could go to people in your community who know about	271 (71.9%)	291 (64.1%)	0.017	196 (70.5%)	366 (66.2%)	0.209

contraception who can help convince partner to use						
If partner did not want to use contraception, you have friend/ family who can support you to get contraception anyway	217 (57.6%)	248 (54.6%)	0.396	152 (54.7%)	313 (56.6%)	0.598

Sexual & reproductive health social norms by control/experimental

	Control	Experimental	p-value
Total (n)	474	357	
Agree friends/family members you are close to can decide when they want to use contraception	327 (69.0%)	251 (70.3%)	0.682
Agree friends/family members you are close to use contraception even when their partner does not want them to	212 (44.7%)	176 (49.3%)	0.191
Agree friends/family members you are close to think you should be able to decide when to use contraception	330 (69.6%)	244 (68.4%)	0.694
Agree you would be surprised if friend/family member you are close to told you she refused sex with her partner b/c she didn't want	249 (52.5%)	205 (57.4%)	0.161
Agree friends/family members you are close to would be surprised if they knew that you refused sex with your partner b/c you didn't want	271 (57.2%)	226 (63.3%)	0.074

Sexual & reproductive health social norms by sex & religion

	Men	Women	p-value	Christian	Muslim	p-value
Total (n)	377	454		278	553	
Agree friends/family members you are close to can decide when they want to use contraception	276 (73.2%)	302 (66.5%)	0.037	187 (67.3%)	391 (70.7%)	0.309
Agree friends/family members you are close to use contraception even when their partner does not want them to	152 (40.3%)	236 (52.0%)	0.001	138 (49.6%)	250 (45.2%)	0.227
Agree friends/family members you are close to think you should be able to decide when to use contraception	278 (73.7%)	296 (65.2%)	0.008	193 (69.4%)	381 (68.9%)	0.877
Agree you would be surprised if friend/family member you are close to told you she refused sex with her partner b/c she didn't want	194 (51.5%)	260 (57.3%)	0.094	147 (52.9%)	307 (55.5%)	0.471
Agree friends/family members you are close to would be surprised if they knew that you refused sex with your partner b/c you didn't want	218 (57.8%)	279 (61.5%)	0.288	174 (62.6%)	323 (58.4%)	0.246

Critical consciousness by control/experimental

	Control	Experimental	p-value
Total (n)	474	357	
Agree women should have less say than men over using contraception	278 (58.7%)	208 (58.3%)	0.911
Agree wives shouldn't be considered their husband's property	243 (51.3%)	173 (48.5%)	0.423
Agree women should be able to initiate sex w/ their partners	444 (93.7%)	325 (91.0%)	0.153
Agree women should be able to refuse sex w/ their partner w/o fear of partner getting angry	350 (73.8%)	254 (71.2%)	0.389

Critical consciousness by sex & religion

	Men	Women	p-value	Christian	Muslim	p-value
Total (n)	377	454		278	553	
Agree women should have less say than men over using contraception	215 (57.0%)	271 (59.7%)	0.438	148 (53.2%)	338 (61.1%)	0.030
Agree wives shouldn't be considered their husband's property	184 (48.8%)	232 (51.1%)	0.510	128 (46.0%)	288 (52.1%)	0.101
Agree women should be able to initiate sex w/ their partners	360 (95.5%)	409 (90.1%)	0.003	259 (93.2%)	510 (92.2%)	0.626
Agree women should be able to refuse sex w/ their partner w/o fear of partner getting angry	275 (72.9%)	329 (72.5%)	0.878	200 (71.9%)	404 (73.1%)	0.734

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