Can light-touch enhancements improve postpartum family planning use among first-time mothers?

Findings from small-scale testing of an integrated approach in Tanzania

Background and Significance

Globally, an estimated 12 million adolescents (ages 15-19) and many more young women (ages 20-24) give birth every year.[i] Evidence demonstrates that first-time mothers (FTMs), defined as adolescent girls and young women between the ages of 15 and 24 who have one child or who are pregnant with their first baby, are vulnerable to poor health outcomes.[ii] In many contexts, the youngest mothers are also less likely than older women to access reproductive, maternal, and newborn health (RMNH) services, and are most likely to have closely-spaced second pregnancies. In addition, adolescent girls who become pregnant are likely to end their education early.[iii,iv]

In Tanzania, adolescent pregnancy is high with 27% of young women starting childbearing by the age of 19. According to the 2015-16 Tanzania Demographic and Health Survey (TDHS), 54.9% of non-first births among 15-19 year olds, and 32.6% of non-first births among 20-24 year olds, were spaced less than the recommended 24 months from the previous birth.[v] Mothers ages 15-19 also have the shortest median birth intervals at 24.1 months, while births to older mothers 20-29 years occur after longer intervals (30.7 months). Current use of modern contraception is lowest among 15-19-year olds (8.6%), and lower among 20-24 years olds (28.9%) compared with older women ages 25-34 years (35.6%).[vi] Among postpartum women, use of modern postpartum family planning (PPFP) at 12 months postpartum is lower among adolescent mothers ages 15-19 than among all other postpartum women.

Global evidence shows that comprehensive efforts can contribute to increased PPFP use among FTMs.[vii,viii] However, many efforts to date have entailed multi-level initiatives that have proven to be challenging to scale beyond small pilot areas, such as PRACHAR in India and the GREAT project in Uganda.[ix,x] Scale-up efforts are hindered by the limited platforms for deep intervention with FTMs and their key influencers—especially for community-level efforts that aim to shift social norms—and the inability to maintain needed quality and intensity without donor funding. Sustainable efforts that meet FTMs' needs and improve their RMNH outcomes are urgently needed.

Save the Children

Milken Institute School of Public Health
THE GEORGE WASHINGTON UNIVERSITY

Scalable Approaches to Address Barriers to PPFP Use among First-Time Mothers

The Connect Project, with support from the Bill & Melinda Gates Foundation, aims to develop approaches to increase FTMs' PPFP use that can both be feasibly implemented by local and international organizations and, to the extent feasible, sustained by governments without project funding. In Tanzania, Connect "enhances" USAID's Lishe Endelevu ("sustainable nutrition") project with light-touch, scalable approaches that aim to address the key barriers to FTMs' PPFP use.

Barriers to FTMs' use of PPFP

Formative assessments conducted by Connect in 2020 identified key barriers to FTMs' use of RMNCH services in Tanzania, including PPFP, across the continuum of care.

- FTMs had **limited decision-making power**; male partners and older female relatives make many decisions on their behalf, including decisions regarding fertility and PPFP.
- FTMs experienced **judgmental treatment** from health providers when accessing health services including PPFP, especially when they are younger or unmarried.
- FTMs and their families had **key misinformation** about FP in general, particularly that FP may limit their future fertility or result in malformations in babies, that male partners must accompany women and girls for FP services, and limited awareness that PPFP adopters can choose another method if they do not like the first method they try.
- We identified **missed opportunities** to address these barriers; community health workers (CHWs) often overlooked FTMs in outreach activities, and FP was often not discussed when FTMs accessed other RMNH services.

Scalable Approaches to Improve FTMs' Use of PPFP

In 2021, Connect and Lishe Endelevu introduced three community-level "enhancements" and developed one facility-level enhancement. The enhancements were selected based on the potential to address the barriers listed above, complementarity with existing Lishe Endelevu activities, and the potential for scale in the Tanzanian context.

CHW leading home visit session with FTM and family members

At the community level, Connect enhances Lishe Endelevu's existing nutrition-focused community support groups (CSGs) of pregnant and lactating mothers to integrate PPFP and to increase enrolment of FTMs in the community support groups. The Lishe Endelevu CSGs meet twice per month over a six-month period. The CHWs who facilitate CSGs also conduct home visits to FTMs, using an integrated nutrition/PPFP job aid developed under Connect. During visits, CHWs engage FTMs' male partners or older female relatives in counseling when possible, and provide short-acting PPFP methods and facility referrals for PPFP methods and other services. FTMs are

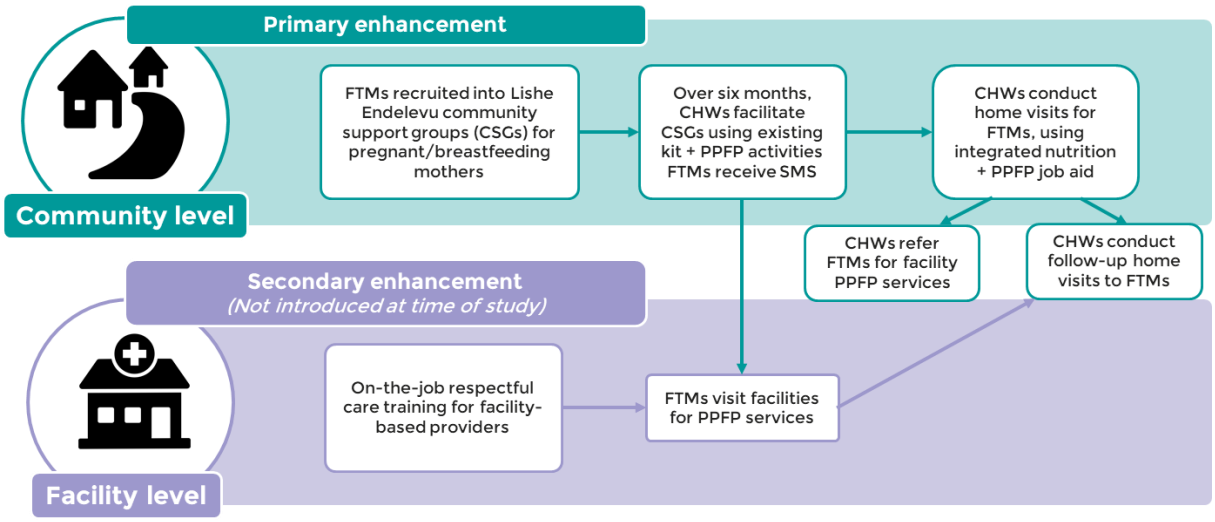
enrolled in Lishe Endelevu's existing SMS platform and receive nutrition and PPFP messages.

Connect made several key decisions during the design phase to improve scalability and sustainability of the approaches by leveraging existing platforms (e.g., existing CSGs, the CHW cadre). Notably, despite formative findings and global evidence[xi] underscoring the importance of male partners and older female relatives in decision-making on behalf of FTMs, engagement of these household members was limited to participation in home visits when feasible. In the Tanzanian context, no existing platform offered opportunities for deeper engagement with male partners or older female relatives that could be sustained beyond a time-bound donor-funded initiative.

To address harsh and judgmental treatment from facility-based providers, Connect supported the Tanzanian Ministry of Health (MOH) to develop a 12-hour gender and respectful care on-the-job training (OJT). The OJT includes provider reflection to increase self-awareness on specific biases related to FTPs and PPFP. This streamlined approach builds off more extensive efforts to address provider bias[xii] by including opportunities for reflection and dialogue to help providers to understand their own biases, to increase the potential for institutionalization within the government health system.

Connect's community-level enhancements were introduced in five wards of Kongwa district in Dodoma region in January 2021. The Respectful Care OJT had not yet been introduced at the time the surveys and analysis detailed in this brief were conducted. Figure 1 depicts the facility- and community-level enhancements.

Figure 1: Connect's "enhancements" to Lishe Endelevu in Tanzania



Study Methodology

Small-scale testing in thirteen villages of Kongwa District aimed to assess the effectiveness, acceptability and feasibility of the enhancements, to identify refinements needed to Connect's approaches and to inform scale-up plans. Connect formed 40 dedicated FTM CSGs, in two waves of 20 CSGs. Each CSG included 15 FTMs, to ensure we had a sufficient number of FTMs for learning purposes. In addition to routine monitoring efforts throughout small-scale testing, Connect gathered information from rapid surveys of FTMs and routine feedback from samples of CHWs, family members and FTMs.

Rapid Surveys of FTMs

Connect conducted two rounds (referred to as Round 1 and Round 2 hereafter) of a pre-post design survey with FTMs ages 15-24 years. The surveys aimed to:

1. Measure associations between enhancements and PPFP use among FTMs;
2. Explore FTMs' positive and negative experience with the program enhancements;
3. Identify areas for improvements needed before scale-up of tested enhancement materials; implementation approaches, and measurement; and
4. Explore socio-demographic and cultural characteristics of surveyed FTMs.

The Round 1 survey sample was drawn from a complete list of participants of the first 20 dedicated FTM CSGs. As a result of shifts in overall timelines due to COVID-19, the timing of the two rounds of the survey in relation to the introduction of the enhancements was not ideal, since the interventions were not fully rolled out. To address this issue, we recruited new FTMs from the second wave of dedicated CSGs into the Round 2 survey. These FTMs in the second wave of CSGs would have been more likely to be exposed to the full enhancement package earlier on in their pregnancy, thus ensuring sufficient sampling of those who interacted with the program enhancements at different times in their pregnancy. As programmatic activities were already underway at the time of data collection, data from Round 1 are not meant to establish a true baseline.

FTM with her child during a home visit session

Round 1 data were collected between March and April 2021. Round 2 data were collected between October and November 2021. In Round 1, 293 FTMs were surveyed, and 351 FTMs were surveyed in Round 2 (of which, 229 were also interviewed in Round 1). The surveys were administered in Kiswahili using electronic tablets.

This study received ethical approval from Save the Children's Ethics Review Committee (SCUS-ERC-FY2020-123), and The George Washington University Committee on Human Research, Institutional Review Board (NCR203091) in the United States. In addition, ethical approval was received from the National Institute for Medical Research in Tanzania.

We conducted descriptive and before-after statistical analysis of the key outcomes of interest. We used regression analyses to identify the association of the enhancements with outcomes of interest controlling for FTM age, child age, FTM partnership status, number of household members, assets, and literacy of the FTM.

Implementation Learning Efforts with CHWs, FTMs, and Family

Throughout small-scale implementation, Connect routinely gathered feedback from a convenience sample of CHWs, FTMs, and key influencers. These activities sought to gather feedback on the enhancements, identify needed revisions and support, and explore specific challenges and risks. Implementation efforts included:

- *Pause-and-reflect meetings:* Connect convened three pause-and-reflect meetings with 20 CHWs to gather insights on progress through successes, challenges, how they overcome the challenges, and their recommendations for improvement.
- *FTM pulse checks:* Connect conducted brief sessions with 77 FTMs in April/May and December 2021 to gather feedback about the interactions, experiences with activities, and suggestions for improvement.
- *Feedback from household influencers (older female relatives and male partners).* Connect convened separate group discussions with 25 older female relatives (mothers and grandmothers) and individual interviews with 12 male partners (husbands or partners in less formal unions with FTMs). These sessions explored the interactions and experiences that household influencers of FTMs had with the program enhancements, any concerns about the content, the level of their involvement and/or the involvement of FTMs, and their recommendations for improvements.

Findings from implementation learning efforts are not detailed in this brief. However, select findings are highlighted in boxes throughout to help to contextualize findings from the rapid surveys.

Results

Socio-demographic Characteristics of FTMs

Table 1 provides the summary statistics of the study population at Round 2. FTMs were on average 19.5 years old. Approximately 14% of the sample were currently pregnant; the remainder had already given birth. More than half (56%) were partnered, which we defined as married, engaged, or living with a male partner. This does not include those who had a regular boyfriend. On average, the age of marriage for current formal partnerships among FTMs ages 20-25 was 19.1 years, compared to FTMs ages 15-19 years, who reported entering their current unions or living together as married at 16.5 years. More FTMs ages 15-19 (48%) were currently living with their mothers, compared to FTMs ages 20-25 (38%). More than twice as many FTMs aged 20-25 compared to FTMs ages 15-19 reported owning or having access to a mobile phone with SMS capability, although only 10% of all FTMs reported having their own mobile phone with SMS capability. Literacy among the sample was high – 86% and 72% among FTMs ages 20-25 years and 15-19, respectively.

Table 1: Socio-demographic characteristics of FTMs at Round 2

	Overall (N=351)	Age		Partnership status	
		Age 15-19 (N=193)	Age 20-25 (N=158)	Partner (N=196)	No partner (N=155)
Age of FTM	19.52	17.78	21.66	19.76	19.23
Pregnant	13.7%	15.5%	11.4%	16.3%	10.3%
Has living child	86.9%	85.0%	89.2%	84.7%	89.7%
Partnered	55.8%	51.8%	60.8%	n/a	n/a
Age of marriage (if married or living together as if married, n=184)	17.81	16.51	19.11	n/a	n/a
Lives with mother	43.3%	47.7%	38.0%	10.2%	85.2%
Self-employed	70.7%	67.9%	74.1%	71.9%	69.0%
Salaried	2.6%	1.6%	3.8%	3.1%	1.9%
Wage worker	1.1%	1.0%	1.3%	0.0%	2.6%
Has access to mobile phone with SMS capability	12.0%	8.3%	16.5%	8.7%	16.1%
Has own mobile phone with SMS capability	10.0%	5.2%	15.8%	6.6%	14.2%
Literate	78.1%	71.5%	86.1%	70.9%	87.1%

FTM Interactions with Enhancements

All FTMs reported attending at least one Community Support Group meeting, but overall attendance was low.

At Round 2, all FTMs reported attending at least one CSG meeting, an increase from 76% at Round 1 (Table 2). However, the average number of sessions attended by FTMs was low (2.81 sessions out of roughly 12 held over the six-month period). The percentage of FTMs who attended the CSGs did not vary significantly by age group. Most FTMs (90%) indicated that they felt somewhat or very comfortable during the CSG sessions. FTMs reported finding information around FP method choices (86%) and exclusive breastfeeding (50%) most useful.

Implementation learning identified barriers to CSG attendance including lack of incentives, challenges with coordination of meetings, long distances between meeting locations and FTMs' homes, travel and other competing priorities such as work and social responsibilities, and FTMs needing to remain at home (i.e., in pregnancy, after birth).

Table 2: FTMs' Interactions with Enhancements

	FTM Age (Round 2)		Sample (Panel)		Overall Sample at Round 2 (n=351)
	15-19 (n=193)	20-25 (n=158)	Round 1 (n=229)	Round 2 (n=229)	
Ever attended a Community Support Group	100%	100%	74%	100%	**100%**
Number of CSGs attended	2.77	2.85	2.04	3.58	**2.81**
Received home visit from a CHW	71.5%	79.7%	54.3%	83.0%	**75.2%**
Number of CHW visits (n=235)	2.78	2.69	1.98	3.12	**2.74**
Received SMS messages	6.2%	13.3%	12.3%	13.5%	**9.4%**

Over 75% of FTMs received home visits.

Most FTMs (75.2%) received a home visit from a CHW. This figure increased from 54.3% at Round 1. On average, FTMs who did receive visits received 2.74 visits, with FTMs receiving more visits over time (1.98 visits at Round 1 compared to 3.12 by Round 2). Almost all FTMs who received a visit reported being very satisfied and indicated that they would like to receive more visits. The timing of home visits varied, with most visits (45.1%) occurring while the FTMs were pregnant followed by three to six months after delivery (21.3%).

Pause-and-reflect sessions with CHWs revealed that CHWs prioritized visiting FTMs who did not attend CSGs regularly, or those who showed interest in being visited more often. They also shared difficulty in visiting FTMs whom CHWs perceived to have hostile households, or whose houses were not accessible.

Less than 10% of all FTMs received SMS messages.

Only 9.4% of FTMs received SMS messages with health information or reminders related to FTM and baby health. This very low rate is at least partially due to the relatively low rates of mobile phone ownership with SMS capacity (12% among FTMs). All FTMs who received the SMS messages indicated that the information shared was helpful. Over 60% of FTMs who received SMS messages reported finding information about FP methods and exclusive breastfeeding most useful.

Outcomes

The following sections detail progress on key outcomes. We present findings on Connect's primary outcome, PPFP uptake, followed by findings on intermediate outcomes that provide insights into changes in PPFP uptake between survey rounds—couple communication, decision-making, FP self-efficacy (FPSE), and knowledge. We also present diffusion of key nutrition and PPFP information with others.

For each outcome, we first present trends between survey rounds (focusing on the panel sample), highlighting distinctions between adolescent FTMs (ages 15-19) and older FTMs (ages 20-25[1]). We also highlight distinctions between partnered (married, engaged, or living in union) and unpartnered FTMs, where relevant. Unless otherwise noted, findings are drawn from the full panel sample at both survey rounds. Following descriptions of the overall trend between survey rounds, associations of improvements with exposure to Connect's approaches—more than one CSG meeting, receipt of a home visit from a CHW, and receipt of SMS—are presented in text boxes.

Because all FTMs attended at least one CSG meeting, the analyses explore whether attending two or more CSG meetings was associated with improved outcomes.

Table 3 on the next page provides an at-a-glance summary of associations from regression analyses controlling for the factors listed above.

FTMs during CSG session on the importance of breastfeeding

[1] While all FTMs sampled at Round 1 were ages 15-24, some FTMs were age 25 at Round 2.

Table 3: Associations between exposure to activities and each outcome of interest, for all FTMs

(Controlling for FTM age, child age, FTM partnership status, number of household members, asses, and literacy of FTM)

[a] denotes findings that were significant at 0.01; [b] 0.05; and [c] 0.1.

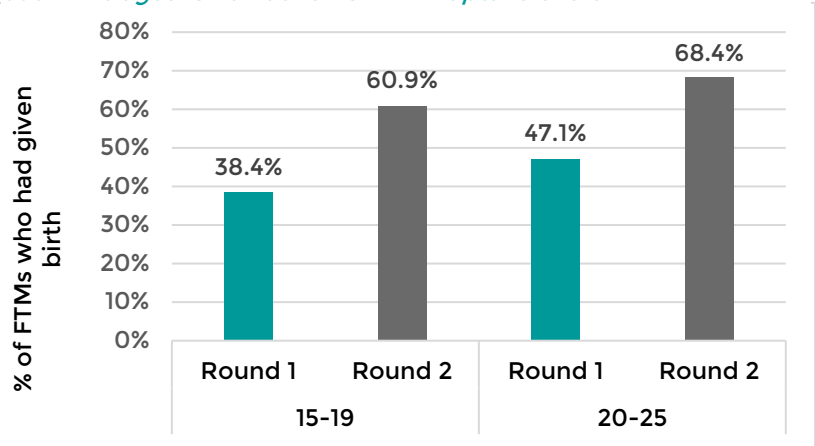
	Adopted modern PPFP	Currently using modern PPFP	FPSE	Knowledge	Couple communication	Decision-making
Attending more than one CSG meeting	**58% increase** [a]	51% increase [b]	6% improvements in Access [b] and Communication [b] scales	14% increases in knowledge for: -FP does not cause infertility [c] -FP does not cause malformations [b]	28% increase in FTMs discussing FP with partner [b]	66% increase in FTM having final say on when to have children [c]
Receiving an SMS	**47% increase** [a]	**54% increase** [a]	5% increase in Communication scale [c] 7% increase in Assertiveness scale [c]	*No association between exposure to enhancement component and outcome*	**36% increase in FTMs discussing FP with partner** [a]	91% increase in FTM having final say on when to have children [b] 74% increase in FTMs having final say on number of children [c]
Receiving a home visit from a CHW	*No association between exposure to enhancement component and outcome*	39% increase [b]	**8% increase in overall FPSE** [a] 5-8% increases in all subscales *-access 5%* [c] *-communication 8%* [a] *-social support 6%* [c] *-assertiveness 8%* [a]	**18% increase in knowledge that women can switch FP methods** [a]	28% increase in FTMs discussing FP with partner [b]	*No association between exposure to enhancement component and outcome*

Postpartum Family Planning Uptake

Use of modern PPFP among FTMs increased over time.

Overall, survey findings identified a 48% increase in actual PPFP adoption and plans to adopt for both age groups. At Round 1, 42.4% of FTMs who had given birth had adopted a modern PPFP method; by Round 2, 64.0% of those who had given birth had adopted modern PPFP. FTMs ages 15-19 had lower PPFP uptake than FTMs ages 20-24, although both age groups saw similar increases in PPFP use between survey rounds (Figure 2). Part of the increase in PPFP use is simply related to FTMs' babies getting older and the timing of home visits occurring 3-6 months following delivery; the majority of FTMs who adopted PPFP (36.2%) adopted when their baby was between six and 12 months old. However, regression analyses identified associations between exposure to Connect's enhancements, and PPFP uptake (see following Box).

Figure 2: Increases in PPFP uptake were similar for both age groups, but FTMs ages 15-19 had lower PPFP uptake overall



Implementation learning identified that home visits were preferred over CSGs for discussing FP and for planning to adopt a method.

Association between Connect's Approaches and PPFP Uptake

FTMs who were exposed to Connect's approaches were more likely to adopt PPFP.

While some increases in PPFP uptake simply reflect that PPFP uptake tends to increase over time, regression analyses show that part of this increase was related to exposure to enhancements.

- FTMs who attended more than one CSG meeting were 51% more likely to be using modern PPFP than those who attended only one CSG. 46% of FTMs who attended more than one meeting used modern PPFP, compared to 31% of those who attended only one.
- FTMs who received a CHW visit were 39% more likely to be using modern PPFP. 51% of those who received a visit used modern PPFP, compared to 36% of those who did not receive a visit.
- FTMs who received an SMS were 54% more likely to be using modern PPFP. 73% of those who received an SMS used modern PPFP, compared to 43% of those who did not receive an SMS.

FTMs who interacted with more enhancements were more likely to use PPFP than those who interacted with only one.

In addition, interacting with more than one enhancement (receiving a home visit, receiving an SMS, attending more than one CSG session) was associated with greater increases in PPFP uptake, controlling for possible confounders. Compared to FTMs who did not engage with any enhancements:

- FTMs who interacted with one enhancement were 70% more likely to use modern PPFP
- FTMs who interacted with two enhancements were 130% more likely to use modern PPFP
- FTMs who interacted with all three enhancements were 200% more likely to use modern PPFP

The implant and male condoms were the most frequently adopted PPFP methods. Table 4 depicts the PPFP methods adopted by the 167 FTMs who adopted a modern method. Most (68.3%) adopted implants, 29.3% adopted male condoms, 19.2% adopted injectables, 12.0% adopted pills, and 0.6% adopted IUDs. Note that some FTMs adopted more than one method during the study period (see following section on discontinuation), so totals may sum to over 100%.

In implementation learning, some FTMs shared that they wanted to receive FP methods during home visits, so that they could use discretely and avoid travel to a facility. However, pills and condoms were not always available for CHWs.

Table 4: PPFP methods adopted, by age and partnership status

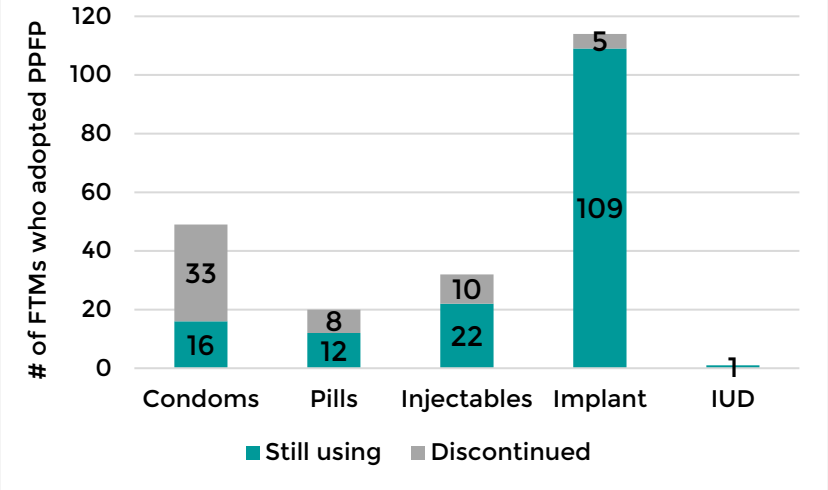
	Overall (N=167)	FTM Age		Partnership status	
		15-19 (N=79)	20-25 (N=88)	Partner (N=110)	No partner (N=57)
Implant	68.3%	68.4%	68.2%	65.5%	73.7%
Male condoms	29.3%	27.8%	30.7%	30.0%	28.1%
Injectables	19.2%	15.2%	22.7%	19.1%	19.3%
Pills	12.0%	11.4%	12.5%	12.7%	10.5%
IUD	0.6%	0.00%	1.1%	0.9%	0.0%

The method mix was similar across age groups and partnership status, with two distinctions. FTMs who did not have a partner were more likely to adopt implants than those who did have a partner (73.7% vs. 65.5%). FTMs ages 20-24 were more likely to adopt injectables than FTMs ages 15-19 (22.7% vs. 15.2%). In general, the method mix reflects FP use among girls ages 15-19.[xiii]

Some adopters of short-acting PPFP methods switched to other methods, but discontinuation was overall low.

Many adopters of short-acting methods (condoms, pills, and injectables) were not using the same PPFP method ranging from 31%-67% of adopters at R2. More than one-quarter (26.7%) of adopters of short-acting methods switched to another modern method (see Figure 3). Most FTMs who discontinued use of one method were currently using another modern method. Discontinuation and switching were much lower among long-acting reversible contraceptive (LARC) adopters. Out of all FTMs who adopted a PPFP method, only 12 were no longer using any method at the time of the survey.

Figure 3: Many adopters of short-acting FP methods discontinued or switched to another method between survey rounds



Knowledge

PPFP knowledge increased, but belief that male partner accompaniment is required to access FP remained high.

We surveyed FTMs on knowledge barriers identified in Connect's formative work (FP causes infertility, male partner accompaniment is required to access FP services, FP adopters cannot switch to another method, and FP can cause malformations in babies). Between survey rounds, we identified increases in the proportion of FTMs correctly reporting that each statement was false (Table 5).

Table 5: Percentage of FTMS with accurate knowledge regarding common PPFP misinformation, by age [2]

	15-19		20-25		Total (Panel sample)	
	Round 1	Round 2	Round 1	Round 2	Round 1	Round 2
FP is likely to cause infertility (% who responded false)	60.2%	79.3%	70.8%	80.4%	**64.6%**	**84.7%**
Women and girls must be accompanied by a male partner to access FP services (% who responded false)*	14.3%	25.9%	13.5%	25.9%	**14.0%**	**26.2%**
FP can cause malformations in babies (% who responded false)	69.9%	88.1%	70.8%	86.7%	**70.3%**	**91.7%**
If you do not like the FP method you choose first, can you switch to another (% who responded true)	82.0%	80.8%	95.8%	86.7%	**87.8%**	**85.6%**

Association between Connect's Approaches and Improved PPFP Knowledge

Attending more than one CSG meeting was associated with:

- A **14% increase** in understanding that FP does not cause infertility; **79%** of FTMs who attended more than one CSG meeting had accurate knowledge, compared to **70%** among FTMs who attended only one meeting.
- A **14% increase** in accurate knowledge that contraceptives do not cause malformations; **90%** of FTMs who attended more than one CSG meeting had accurate knowledge, compared to **79%** among those who attended only one meeting.

Receiving a visit from a CHW was associated with:

- An **18% increase** in knowledge that women can switch if they do not like the first FP method they try; **86%** of FTMs who received a visit had accurate knowledge, compared to **72%** of FTMs who did not receive a visit.

We did not identify associations between receipt of SMS and improved FP knowledge.

Additionally, interactions with the enhancements were not associated with increases in knowledge that women and girls are not required to be accompanied by a male partner for FP services. Note that while no formal policy mandates that male partners must accompany women and girls for FP services, many individual facilities or providers impose their own requirements for male partner accompaniment.

[2] Age-specific breakdowns are drawn from the full baseline sample (n=293) and full endline sample (n=351)

Most FTMs wanted to space pregnancies by at least two years. Many FTMs wanted the same number of children as their male partners did, but nearly 40% did not know their partner's preferences.

At Round 2, 95.5% of FTMs said that they wanted at least two years of spacing between the births of their children, a slight increase from 85.5% at Round 1.

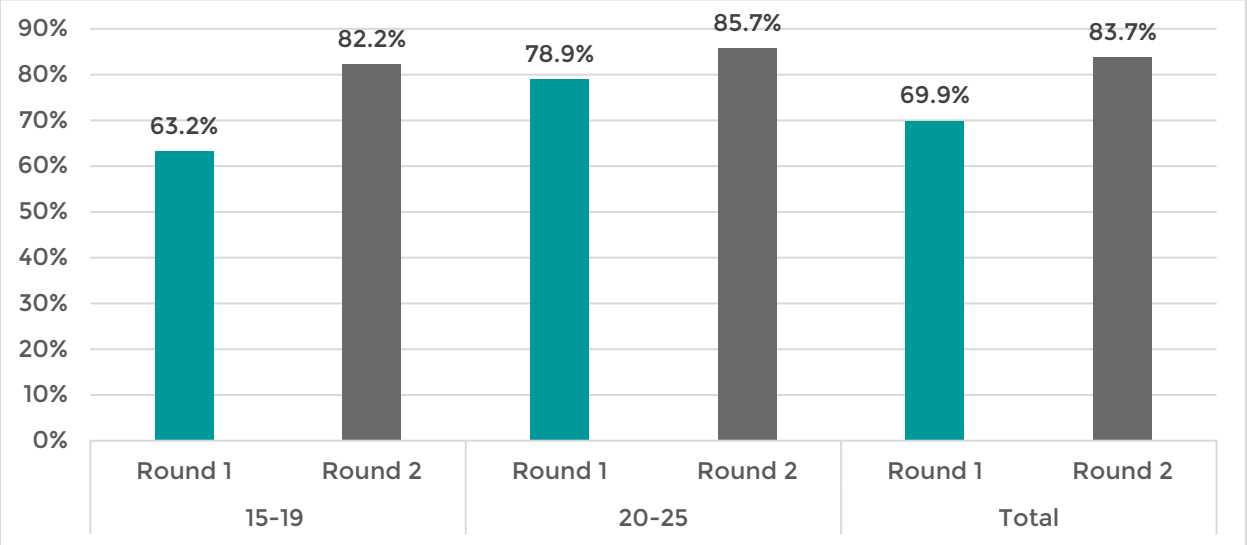
On average, FTMs wanted to have a total of 3.8 children, which is lower than the national average of 4.7 child wanted among all women. This preference was largely consistent regardless of age and partnership status. FTMs who were partnered said that their male partners wanted 4.24 children on average. Overall, 46.9% of partnered FTMs said that their male partners wanted the same number of children. Just 7.1% said that their partner wanted more children than they did, and 4.1% said that their partner wanted fewer children. However, 39.3% said that they did not know their partner's preference.

Couple Communication and Sharing of Information

Among partnered FTMs, couple communication around PPFP increased.

At Round 2, the majority of partnered FTMs (83.7%) indicated discussing PPFP with their male partner, an increase from 69.9% at Round 1 (Figure 4). PPFP discussion was more likely to happen once the child was older than six weeks, and even more likely after the child was six months old. FTMs ages 15-19 were less likely than FTMs ages 20-24 to report discussing PPFP with male partners.

Figure 4: Among partnered FTMs, PPFP discussion with male partners increased between survey rounds. FTMs ages 20-25 were more likely to report discussing PPFP with male partners.



Sharing Information with Others

Most FTMs shared nutrition or PPFP information from community support groups with others, most often with husbands or mothers.

Over half (53.4%) of FTMs reported sharing any information from the CSGs with others. These findings provide insights into FTMs' social networks and relationships. Table 6 presents the individuals with whom FTMs shared information.

Most frequently, FTMs shared information with their male partner, if they had one. Many FTMs shared with their mother (42.8%), female friend (33.7%), sister (12.3%), or mother-in-law (11.2%). FTMs ages 15-19, and those who did not have a partner, were more likely to share information with their mother (47.4% and 80%, respectively) than FTMs ages 20-24 and those who had a male partner. FTMs ages 20-24 and those who did not have a partner were more likely to share information with their sister (17.4% and 18.7%, respectively) than adolescent (ages 15-19) and partnered FTMs.

Table 6: Individuals with whom FTMs shared information from CSGs (Round 2 sample only; out of those who reported sharing any information; n=187)

	Overall	Age		Partnership status	
		Age 15-19	Age 20-25	Partner	No partner
Husband/Partner	44.4%	37.9%	51.1%	71.4%	n/a%
Mother	42.8%	47.4%	38.0%	17.9%	80.0%
Female friend	33.7%	31.6%	35.9%	30.4%	38.7%
Sister/Step-sister	12.3%	7.4%	17.4%	8.0%	18.7%
Mother-in-law	11.2%	15.8%	6.5%	16.1%	n/a%
Less than 10% of the total sample reported sharing with a female neighbor, grandmother, aunt, or other female relative. Less than 1% reported sharing with a male friend, male neighbor, father, father-in-law, grandfather, or brother.					

Table 7 presents PPFP information FTMs shared. The information most frequently shared was about FP method choices (89.3% of those who reported sharing information) and exclusive breastfeeding during the first six months of life (61%). FTMs ages 20-24 more often shared information about FP method choices, while more FTMs ages 15-19 shared information about planning for the timing of their next pregnancy. The nutrition-related information most frequently shared by FTMs was about exclusive breastfeeding during the first six months of life (shared by 61% of FTMs).

Table 7: Information from CSGs that FTMs reported sharing with others (Round 2 sample only; out of those who reported sharing any information; n=187)

	Overall	Age		Partnership status	
		Age 15-19	*Age 20-25*	*Partner*	*No partner*
FP method choices	89.3%	84.2%	94.6%	89.3%	89.3%
Importance of spacing pregnancies by 2 years	28.9%	29.5%	28.3%	28.6%	29.3%
Availability of FP services	27.3%	29.5%	25.0%	27.7%	26.7%
Plan for timing of next pregnancy	24.6%	28.4%	20.7%	25.9%	22.7%
FP method safety (e.g., do not cause infertility, do not cause malformations)	8.0%	9.5%	6.5%	8.9%	6.7%
Exclusive breastfeeding during first six months	61.0%	68.4%	53.3%	59.8%	62.7%

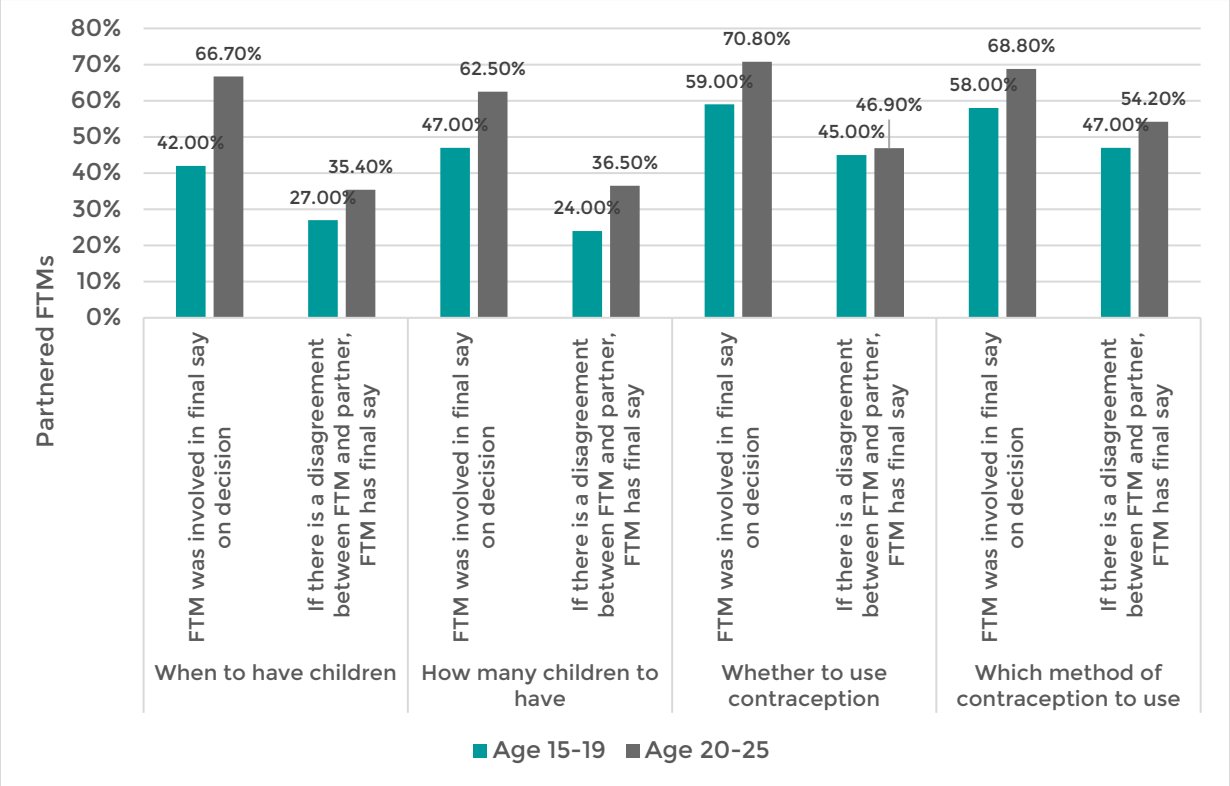
Decision-making Power

Decision-making power around FP decisions largely remained with male partners. FTMs ages 15-19 were less likely to have the final say in PPFP decisions.

> Implementation learning showed that not all FTMs were eager to engage their male partner in FP counseling, but many found it was needed to access and use PPFP. Male partners reiterated that they hold power as key decision-makers.

We asked partnered FTMs about who made final decisions related to whether and when to have children, whether to use FP, and which FP method to use. In the overall sample, we did not identify improvements in the proportion of FTMs who reported having the final say in these decisions (Figure 5). FTMs ages 15-19 were less likely than FTMs ages 20-24 to report having the final say. Final decisions around FP largely remained with male partners. However, as the following Box shows, FTMs who had interactions with the enhancements were more likely to have improvements in reported decision-making power.

Figure 5: Among partnered FTMs, reproductive decision-making power was higher for those ages 20-24 at Round 2



Association between Connect's Approaches and Decision-making

Attending more than one CSG meeting was associated with:

- **66% increase** in FTMs having the final say on when to have children; **37%** FTMs who attended more than one CSG meeting reported having the final say, compared to **22%** of FTMs who attended only one meeting.

Receiving an SMS was associated with:

- **91% increase** in FTMs having final say on when to have children; **54%** of FTMs who received an SMS reported having the final say, compared to **28%** of those who did not receive an SMS.
- Receiving an SMS was also associated with **a 74% increase** in FTMs having the final say on the number of children; **48%** of FTMs who received an SMS reported having the final say, compared to **28%** of those who did not receive an SMS.

We did not identify associations between receiving a home visit and increased decision-making power.

Additionally, increases in decision-making power related to whether to use FP and which FP method to use were not associated with exposure to any enhancement.

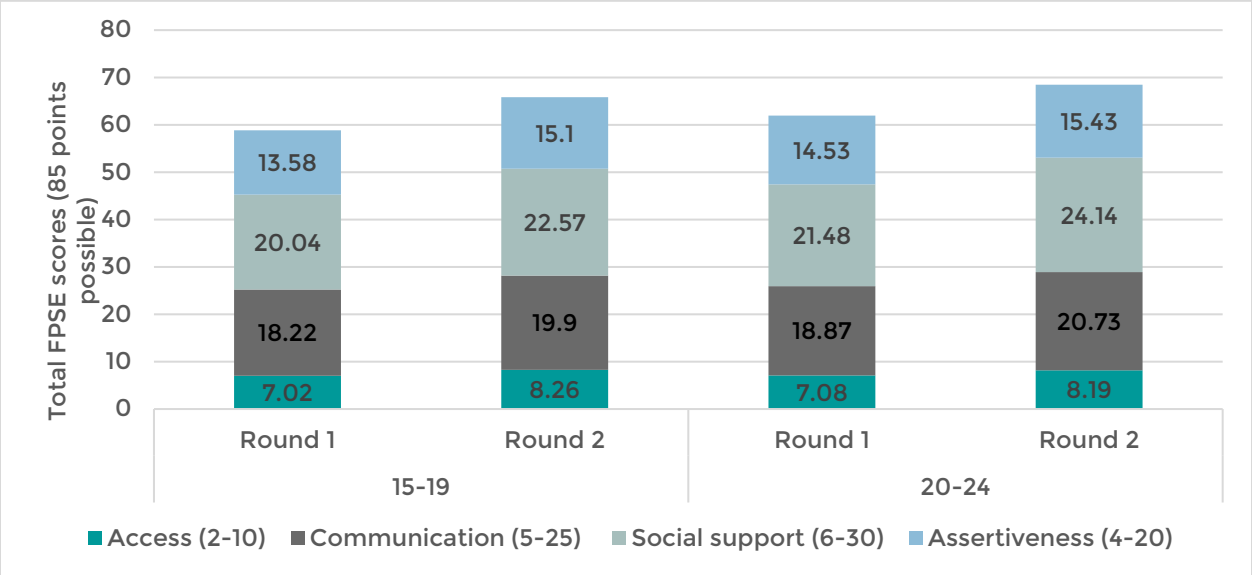
Family Planning Self-efficacy

FP self-efficacy improved across all domains.

To assess family planning self-efficacy (FPSE), we used a scale[xiv] measuring how confident FTMs felt in their ability to discuss, access and adopt FP, and to continue FP use. The scale examined four domains of FPSE: Access (2 questions), Communication (5 questions), Social Support (6 questions), and Assertiveness (4 questions).

We identified positive and statistically significant increases for the total FPSE scale and all sub-scales. The percentage improvements were similar for both age groups, but FTMs ages 15-19 started from lower values (Figure 6).

Figure 6: Family Planning self-efficacy scores increased for all domains, for FTMs ages 15-19 and those ages 20-24



Association between Connect's Approaches and FP Self-Efficacy

Analyses identified positive associations between receiving a CHW visit, or attending more than one CSG meeting, with improvements in FPSE domains.

- Receiving a home visit was associated with an **8% increase** in the total FPSE scale, and **5-8% increases** in all subscales.
- Participating in more than one CSG meeting was associated with **6% increases** in both the access and communication subscales.
- Receiving an SMS was associated with a **5% increase** in the communication subscale and a **7% increase** in the assertiveness subscale.

We also identified evidence that exposure to more than one enhancement was associated with larger increases across all scales for 15-19 year-olds, and for assertiveness and communication for 20-24 year-olds. **Exposure to two enhancements was associated in an increase in the total scale by 12% for 15-19 year-olds, compared to a 6% increase if they engaged with only one enhancement.**

Implications and Recommendations

Survey findings suggest that scalable efforts designed to enhance existing platforms with low-dosage engagement of FTMs (attending two or more CSG meetings, receiving two to three home visits from a CHW, receiving SMS) can effectively improve PPFP uptake and other key outcomes among both adolescent and older FTMs.

While findings underscore the potential of light-touch approaches, they also point to several limitations and areas for improvement or deeper exploration. The following section highlights key considerations for program and research efforts, with relevance both to Connect's scale-up of the enhancements in Tanzania, and to community efforts with FTMs in other settings.

CHW-led CSG session with FTMs

Gaps in coverage of enhancements were identified, and may have inhibited further progress.

Exposure to enhancements was associated with improvements in most outcomes, including PPFP uptake. However, coverage was limited; many FTMs attended only one CSG meeting (out of as many as 12 offered over the six-month period), nearly one-quarter did not receive a home visit, and less than 10% received SMS. Given that exposure to the enhancements was associated with positive outcomes, efforts to improve enhancement coverage could be beneficial. However, low mobile phone ownership among FTMs will limit improved coverage of SMS.

Despite overall increases in PPFP uptake, decision-making power largely remained with male partners.

The limited movement on the decision-making outcome suggests that shifting deeply-seated social norms underpinning decision-making may require deeper engagement than feasible with light-touch engagement of male partners through scalable platforms. In addition, a large proportion of partnered FTMs did not know their partner's fertility preferences, which

suggests a gap in couple communication. While deeper engagement to shift social norms and bolster couple communication skills could further accelerate PPFP uptake, we did not identify existing platforms to engage the male partners of FTMs, and such efforts may not be scalable or sustained in the context without project funding.

Requirements for male partner accompaniment may deter service use.

While Tanzanian policies *prioritize* and *recommend* male partner involvement in services, they do not *require* male partner accompaniment. Yet a high proportion of FTMs believed that male partner accompaniment was required for FP services, echoing a formative research finding that some providers required FTMs to bring a partner. Other efforts[xv] have deepened insights into the unintended consequences of efforts to encourage male partner participation in antenatal care services in Tanzania, with some providers denying care to unaccompanied women, and others offering preferential treatment to those accompanied by a partner. While efforts to encourage male partner involvement in health services are well-intended, some providers may interpret policy to require male partner accompaniment and deny or deter service use among girls and women, including FTMs, who are single or whose male partners are unavailable or unsupportive. This is a significant barrier to PPFP uptake that must be addressed.

Differences between adolescent and older FTMs suggest that deeper attention to adolescent FTMs may be merited.

Compared to older FTMs (ages 20-24), adolescent FTMs (ages 15-19) were under-represented in community activities, and adolescent FTMs who were reached had lower PPFP uptake than older FTMs. This echoes findings from other settings.[xvi] Adolescent FTMs had an earlier age of marriage and lower literacy rates and mobile phone access, compared to FTMs who were able to delay their first pregnancy until their early twenties. Further, there is evidence that younger FTMs may have benefited more from the enhancements than the older FTMs, in part due to their greater 'baseline' vulnerability. For some girls, pregnancy in adolescence may reflect underlying disparities; further efforts are needed to understand the underlying vulnerabilities and inform programmatic responses.

Limitations

The survey findings should be considered in light of a few limitations. First, the study is a pilot study and thus has a small sample size, thereby limiting the ability to precisely measure small changes. Second, the study specifically consisted of FTMs from dedicated CSGs and investigated their experience with program enhancements. Third, the analysis should be interpreted as highlighting associations, not uncovering the causal impact of the program enhancements. Further, there were variations in timing of exposure to the program enhancements during FTMs' pregnancy due to the delayed introduction of the program enhancement driven by COVID-19. Data quality issues also limited our ability to interrogate certain questions.

Conclusion

Importantly, the study findings discussed in this brief report demonstrate that light-touch, scalable enhancements have potential to improve FTMs' PPFP use in Tanzania, and deepen insights into scalable approaches for FTMs. Despite the trade-offs required to design scalable enhancements and noted gaps in delivery of the full enhancement package, we identified positive associations between the enhancements and key outcomes of interest (PPFP uptake, communication, self-efficacy, and knowledge). Design trade-offs for sustainability, including the limited engagement of male partners due to the lack of a scalable platform, may have impeded improvements in decision-making power. Yet the potential of light-touch enhancements to contribute to improved outcomes among FTMs is clear.

CHW-led CSG session with FTMs

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