



# Can light-touch approaches improve postpartum family planning adoption among first-time mothers? Evidence from Tanzania

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# Background

*Young, first-time mothers are less likely to use post-partum family planning (PPFP) and more likely to have closely-spaced second pregnancies.*

12 million adolescents (ages 15-19) and many more young women (age 20-24) give birth annually

In Tanzania, 37.1% of women have had a live birth by 19

49.2% of subsequent births to mothers ages 15-19 and 31.9% to mothers ages 20-24 occur within 24 months

Only 15.2% of sexually active 15-19 year olds use any modern FP methods; compared to 29.8% of those aged 20-24

Successful interventions at increasing PPFP have proven difficult to scale

# This study

Use data on 305 first-time mothers aged 15-24 in Kongwa District, Dodoma, Tanzania to explore the efficacy of **light-touch, scalable enhancements** aimed at improving FP access and knowledge in increasing modern PFP adoption

We explore how the association between these enhancements and PFP adoption differ between mothers aged 15-24 and the potential pathways driving these differences

- **Outcomes of interest:** Adoption of a modern method of PFP (condoms, contraceptive pills, injectables, implants, and IUDs)
- **Mechanisms:** FP Self-efficacy, FP decision-making agency

# Connect Tanzania Enhancements

Enhancements were introduced through integration with a pre-existing maternal nutrition project in January 2021



**Community level**

**Home visits** led by a community health worker (CHW) cadre. CHWs use an integrated nutrition/PPFP job aid to counsel FTMs and their male partners and/or older female relatives and provided short-acting PPFP methods (pills, condoms) and facility referrals for injectables, implants, and IUDs

Added 4 PPFP activities added to existing nutrition **community support groups (CSGs)** of 15 FTMs each. Groups met twice per month over a six-month period and include information on nutrition.

Members of CSGs were enrolled to receive **SMS** with information about nutrition and health services, and Connect added reminders about PPFP



**Facility level**

**Respectful care** on-the-job training for facility-based providers

# Data

- Quantitative data from 305 first-time mothers aged 15-24 with a child under 24 months, living in Kongwa District in Dodoma, Tanzania
- Data was collection in November 2021, after implementation of the Connect enhancements had been ongoing for 10 months
  - Data collection was in person and collected information on demographic and socio-cultural information, historical contraceptive use, PFP adoption and continuation, and related measures of FP knowledge, self efficacy, decision-making agency, etc...

# Methods

- Regression analysis of the association between the enhancements and FTM outcomes

$$y_i = a + \beta_1 \text{Enhancement}_i + X_i' \gamma + u_i$$

- Enhancements: health worker contact, meeting attendance, SMS receipt
- All regressions include controls for age of the child, FTM partnership status, household size, household wealth, and FTM literacy
- Estimate the model for FTMs aged 15-19 and 20-24 separately; estimate interactions to test for statistical differences by age

# Sample Characteristics

	(1)	(2)	(3)
	Overall	Age	
		15-19	20-25
<b>Panel A: Sample characteristics</b>			
Age	19.7	17.9 (54%)	21.7 (46%)
Child less than 6 months old	29.5%	37.8%	19.9%
Child 6-12 months old	30.2%	35.4%	24.1%
Child over 12 months old	40.3%	26.8%	56.0%
Has a partner*	54.4%	50.6%	58.9%
Household size	5.56	5.87	5.21
Total household assets (out of 22)	6.85	6.78	6.94
Literate	79.0%	72.6%	86.5%
Mobile Phone Ownership	11.8%	8.54%	15.6%
<b>Panel B: Participation in enhancements</b>			
Received home visit from CHW	74.8%	73.8%	75.9%
Number of CHW home visits (among those with a visit)	2.87	2.92	2.81
Attended more than one CSG	66.9%	64.0%	70.2%
Number of CSGs attended	3.06	3.06	3.06
Received an SMS	10.5%	6.7%	14.9%

# PPFP Adoption



# PPFP adoption by age

	(1)	(2)	(3)
		Age	
	Overall	15-19	20-25
<b>Panel A: Sample characteristics</b>			
Adopted any modern PPFP method since giving birth**	54.8%	48.2%	62.4%
Currently using any modern PPFP method**	50.8%	45.1%	57.4%
Used condom since giving birth	16.1%	13.4%	19.1%
Used pill since giving birth	6.6%	5.5%	7.8%
Used injectables since giving birth	10.5%	7.3%	14.2%
Used LARC since birth***	37.7%	32.9%	43.3%

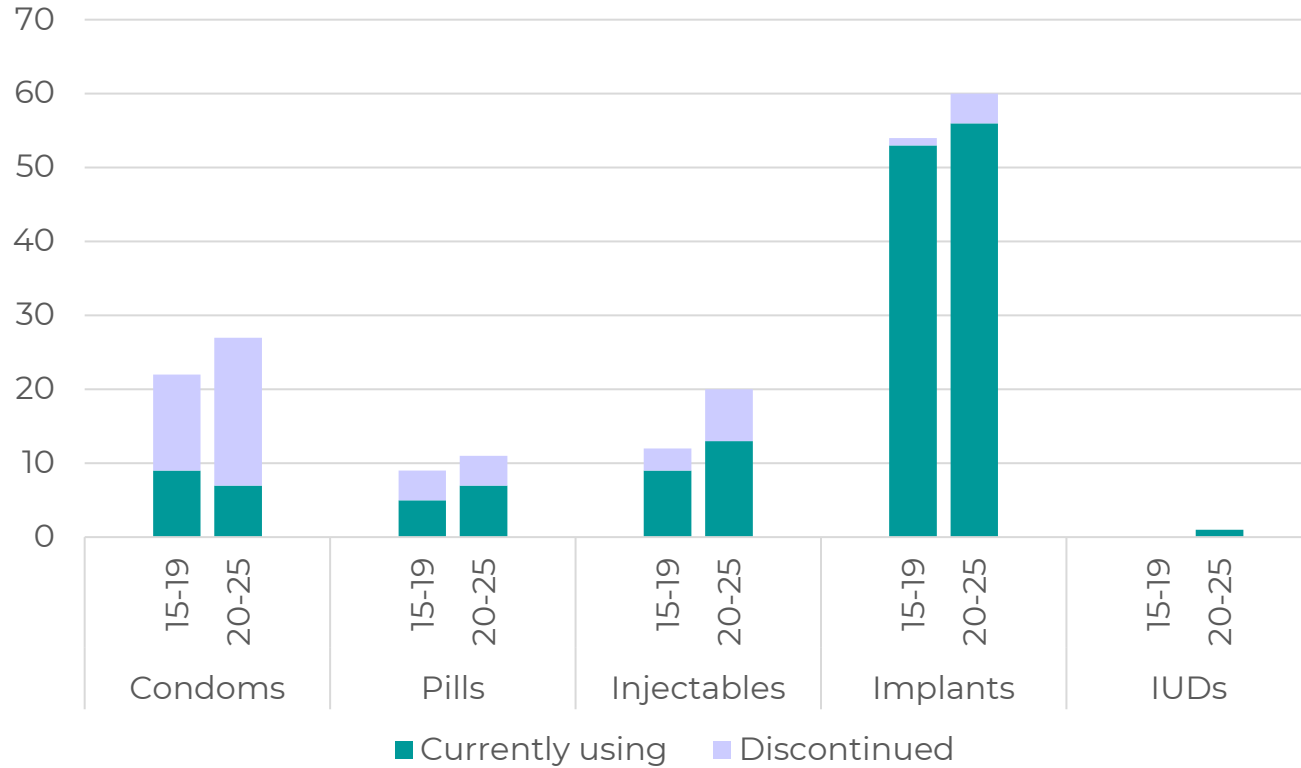
# Association of Enhancements with modern PFP Adoption

	(1)	(2)	(3)	(4)	(5)	(6)
	Adopted modern PFP since birth	Currently using modern PFP	Used condom since birth	Used pill since birth	Used injectables since birth	Used LARC since birth
<b>Panel A: FTMs aged 15-19 (N=164)</b>						
Received CHW home visit	0.130 (0.085)	0.223*** (0.080)	-0.014 (0.067)	0.040 (0.037)	0.038 (0.042)	0.110 (0.077)
Attended more than one CSG meeting	0.292*** (0.082)	0.285*** (0.080)	0.111* (0.059)	0.053 (0.038)	0.019 (0.042)	0.211*** (0.071)
Received an SMS	0.385*** (0.122)	0.406*** (0.121)	-0.052 (0.089)	-0.053** (0.022)	0.104 (0.128)	0.286** (0.120)
<b>Panel B: FTMs aged 20-25 (N=141)</b>						
Received CHW home visit	0.011 (0.092)	0.106 (0.099)	0.087 (0.067)	-0.054 (0.061)	0.054 (0.061)	0.012 (0.099)
Attended more than one CSG meeting	0.115 (0.086)	0.064 (0.088)	0.138** (0.066)	-0.035 (0.054)	0.122** (0.060)	0.030 (0.093)
Received an SMS	0.172* (0.088)	0.172* (0.093)	0.138 (0.107)	0.063 (0.084)	-0.050 (0.077)	0.117 (0.114)

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# Discontinuation by Method



# Family Planning Self Efficacy and Decision-making Agency

# What is Family Planning Self Efficacy (FPSE)?

## **Access:**

- You can obtain information about different kinds of family planning methods?
- You can obtain a family planning method even if you have to wait in long lines?

## **Communication:**

- You can talk about different family planning methods with your partner?
- You can discuss how many children you want to have with your partner?
- You can discuss family planning methods with your partner?
- You can discuss family planning methods with your friends?
- You can convince your partner that you should use family planning?

## **Social Support:**

- You know other people who use family planning methods?
- You can use a family planning method even if you don't discuss it with your partner?
- You can use a family planning method even if your partner does not want you to?
- You can use a family planning method even if your mother-in law does not want you to?
- You can use a family planning method even if your parents do not want you to?
- You can use a family planning method even if your neighbors criticize you?

## **Assertiveness:**

- You can use a family planning method even if you are afraid of side effects?
- You can use a family planning method even if you experience side effects?
- You can use family planning even if you believe that family planning is a sin?
- You can continue to use of modern method of family planning even if people in your community find out?

# Family Planning Decision-making Agency (among partnered)

- **Three domains:**
  1. When to have children
  2. Whether to use family planning
  3. Which family planning method to use
- **High Agency:**

Questions	Case 1	Case 2
Did you share your opinion?	Yes	No, did not care/ already agreed
If shared opinion, did you think your opinion was valued?	Yes	--
Who had the final say?	FTM or Joint	FTM or Joint
Would you prefer to have had more influence on the decision or are you happy with your level	Satisfied or less influence	Satisfied or less influence

# FPSE and FP Decision-making Agency by age

	(1)	(2)	(3)
	Overall	Age	
		15-19	20-25
FTM doesn't know how many children she wants	0.128	0.152	0.099
<i>Family Planning Self-Efficacy</i>			
FPSE Access (2-10)	8.10	8.05	8.16
FPSE Communication (5-25)	19.97	19.43	20.60
FPSE Social Support (6-30)	23.02	22.43	23.72
FPSE Assertiveness (4-20)	15.05	14.89	15.23
<i>Decision-making Agency (Among partnered FTMs, N=166)</i>			
FTM was involved in the final say in whether to use contraception	68.7%	65.1%	72.3%
High agency, when to have children	19.9%	15.7%	24.1%
High agency, use contraception	29.5%	26.5%	32.5%
High agency, method of contraception	30.7%	30.1%	31.3%



# Association of Enhancements with FPSE

	(1)	(2)	(3)	(4)	(5)
	<b>FTM DK how many children she wants</b>	<b>FPSE Access</b>	<b>FPSE Communi- cation</b>	<b>FPSE Social Support</b>	<b>FPSE Assertive- ness</b>
<b>Panel A: FTMs aged 15-19</b>					
Received CHW home visit	-0.207*** (0.079)	0.644** (0.265)	2.027*** (0.718)	1.440 (0.886)	1.054* (0.565)
Attended more than one CSG_meeting	-0.079 (0.064)	0.478* (0.250)	1.125 (0.680)	1.053 (0.862)	0.230 (0.571)
Received an SMS	-0.169*** (0.039)	0.579* (0.347)	2.352** (0.936)	0.682 (1.833)	0.393 (0.999)
<b>Panel B: FTMs aged 20-25</b>					
Received CHW home visit	-0.071 (0.062)	-0.103 (0.265)	0.702 (0.745)	0.577 (1.087)	0.359 (0.681)
Attended more than one CSG meeting	0.034 (0.048)	0.407 (0.273)	1.043 (0.749)	0.925 (1.035)	0.572 (0.761)
Received an SMS	-0.073** (0.029)	0.027 (0.364)	0.931 (0.741)	1.796 (1.140)	1.288* (0.684)

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# Association of Enhancements with FP Decision-making Agency

	(1)	(2)	(4)	(5)
	Involvement in the final say on whether to use contraception	High agency, when to have children	High agency, use contraception	High agency, method of contraception
<b>Panel A: FTM's aged 15-19</b>				
Received CHW home visit	0.144 (0.118)	0.153* (0.087)	0.176 (0.108)	0.061 (0.119)
Attended more than one CSG meeting	0.351*** (0.113)	0.121 (0.102)	0.234** (0.111)	0.237** (0.112)
Received an SMS	0.213 (0.173)	0.430** (0.196)	0.365* (0.211)	0.154 (0.203)
<b>Panel B: FTM's aged 20-25</b>				
Received CHW home visit	0.233* (0.128)	-0.064 (0.111)	-0.108 (0.127)	-0.114 (0.126)
Attended more than one CSG meeting	0.039 (0.142)	0.153 (0.108)	0.267** (0.119)	0.026 (0.138)
Received an SMS	0.137 (0.130)	0.078 (0.166)	0.142 (0.179)	0.073 (0.176)

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# Discussion / Conclusions

- Evidence that Connect enhancements had larger associations with PFP adoption and changes in outcomes among adolescent FTMs (aged 15-19)
  - Adolescent FTMs are the most at risk for rapid, repeat pregnancies
  - Demonstrates the importance of targeting adolescents, who are more malleable stages in their life-course
- For adolescent FTMs
  - Community support groups are associated with increased self-efficacy and increased decision-making agency
  - CHW visits are associated with increases in FPSE
- Ongoing research to test these approaches at scale with randomized impact evaluations with a larger sample of FTMs

Thank you!

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