

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

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

# **Background and Significance**

Globally, an estimated 12 million adolescents (ages 15-19) and many more young women (ages 20-24) give birth every year.<sup>1</sup> 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.<sup>11</sup> 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.<sup>11</sup>

In Bangladesh, 22% of adolescent girls are married before the age of 15, leading to early sexual debut and high rates of adolescent childbearing. The median age at first marriage is 16.3 years, and 43% of women have started childbearing before turning 18. Birth intervals among women 15-49 years are generally long in Bangladesh (with a median interval of 55.7 months). Notably, the youngest mothers 15-19 years have significantly shorter intervals compared to mothers 20-29 years (25.3 months versus 49.4 months). Further, the percentage of non-first births occurring with a short interval (7-17 months) is significantly higher among adolescent girls 15-19 years at 31% compared to 5% among women 20-29 years.<sup>iv</sup> Previous research shows that Bangladeshi mothers who delivered their child after age 19 are 1.6 times more likely to utilize post-natal care (PNC) services than adolescent girls who had their child before or at age 19.<sup>v</sup> Current use of modern contraceptive methods remains lowest among adolescent 15-19 years at 44% and lower among young women 20-24 years (51%) compared to women 25-34 years (59.7%). Although post-partum family planning (PPFP) use at six months postpartum is slightly higher among mothers 15-19 (54%) and 20-24 years (52%), broader family planning (FP) trends in Bangladesh suggest that much of that uptake may be of short-acting methods; use of long acting reversible contraception (LARCs) is lowest among 15-19 year olds.vi



Global evidence shows that comprehensive efforts can contribute to increased PPFP use among FTMs.<sup>vii</sup> 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 <u>Great Roles, Equality, and Transformations (GREAT) project in Uganda</u>. 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.

## Scalable Approaches to Address Barriers to PPFP and PNC Use among First-time Mothers

<u>The Connect Project</u>, with funding from the Bill & Melinda Gates Foundation, aims to develop approaches to increase FTMs' PPFP use and coverage, timing, and quality of postnatal care that can be feasibly implemented by local and international organizations and sustained through government platforms without project funding. In Bangladesh, Connect is known as Shongzog and "enhances" <u>USAID's MaMoni Maternal and Newborn Care Strengthening</u> <u>Project (MNCSP)</u> with light-touch, scalable approaches. We use "Shongzog", which means "the connection" to refer to Connect's efforts in Bangladesh throughout this document.

#### Barriers to Use of PPFP and PNC by First-time Mothers

<u>Formative assessments</u> conducted by Connect in 2020 identified key barriers to FTMs' use of services, including PPFP and PNC, across the continuum of care.

- Family preference and tradition dictate decisions around service use, including the place of delivery, and FTMs often have little say.
- Many mothers (50% nationwide)<sup>viii</sup> **deliver at home**, and many deliver in private facilities.
- In addition, norms dictate that all **mothers remain at home for 40 days** after delivery.
- FTMs had **limited information about the purpose of services** throughout the continuum of care. In particular, many FTMs did not see a value in accessing PNC if mother and baby felt well.
- While many FTMs did adopt a short-acting PPFP method, FTMs experienced **family pressure** to have closely-spaced second pregnancies while they are young, and frequently discontinued before 12 months.

In addition to these socio-behavioral barriers, we identified health system barriers. Notably, a paid community health worker cadre, Family Welfare Assistants (FWAs), are mandated to conduct home visits to all mothers, but are under-resourced, with high vacancy rates, and face extremely high home visit targets.

#### Scalable Approaches to Improve FTMs' Use of PPFP

In 2021, Shongzog, with MaMoni MNCSP, introduced a set of "enhancements" to existing facility- and community-level government platforms. The enhancements were selected based on: 1. Potential to address the barriers above, 2. Complementarity with MaMoni MNCSP activities, and 3. Potential for sustainability in existing government platforms.

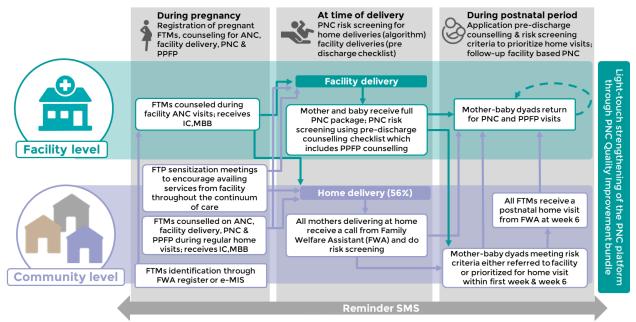
Shongzog's approaches are underpinned by a targeted PNC strategy that prioritizes visits to mothers and babies who meet risk criteria. To inform the targeted PNC strategy, Connect conducted a scoping review and a stakeholder consultation<sup>ix</sup> to identify the clinical and social risk criteria that predict poor postnatal outcomes for mothers and babies.



At the **community level**, FWAs use a risk algorithm identifying mother-baby dyads meeting clinical and social risk criteria, including age and primiparity, to prioritize home visits. FWAs counsel on the importance of services across the continuum of care, distribute a mother-baby booklet, provide short-acting FP methods, and share mobile numbers for questions. FTMs receive tailored SMS with reminders about antenatal care (ANC), institutional delivery, PNC and PPFP. Shongzog enhanced courtyard meetings convened through the Expanded Programme on Immunization (EPI), by engaging FTMs and their families and communities to emphasize benefits and importance of facility-based services across the continuum of care.

At the **facility level**, FTMs receive ANC counseling that encourages facility delivery, use of PNC services, and use of PPFP for healthy timing and spacing of pregnancies. After facility delivery, mothers and babies receive tailored PNC using a pre-discharge counseling checklist that includes a risk assessment and outlines services to be provided before discharge. For mothers or babies with identified risk factors, providers delay discharge, link the mother with an FWA for successive postnatal home visitss, or conduct remote follow-up. When FTMs return for facility PNC and PPFP visits, they benefit from quality improvement efforts that aim to strengthen the quality and content of facility PNC.

Through both facility and community contacts, FTMs receive printed materials. FTMs receive an "invitation card" to visit a nearby facility for ANC, delivery and PNC services. FTMs also receive a mother-baby booklet, which provides information on essential care for mother and baby from pregnancy identification through uptake of PPFP, addressing specific misinformation about PNC and PPFP identified through Connect's formative work.



#### Figure 1: Family and Community-level Enhancements in Bangladesh.

# **Study Methodology**

In 2021, Shongzog launched small-scale testing of the program enhancements in two upazilas in Noakhali District of Chattogram Division, Companiganj and Kabirhat. These two upazilas



have a combined total population of 475,000. Testing aimed to assess the effectiveness, acceptability and feasibility of the enhancements, to identify refinements needed to Shongzog's approaches, and to inform scale-up plans. Throughout small-scale testing, Shongzog gathered evidence from the following sources:

#### **Rapid Surveys of FTMs**

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

- 1. Measure associations between program enhancements and PNC and PPFP uptake;
- 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.

Shongzog's implementing partner (Resource Integration Centre; RIC) identified FTMs, primarily through door-to-door visits to conduct a census and identify FTMs who fulfilled our sampling criteria of adolescent girls and young women 15-24 years who were pregnant for the first time or had one child under 12 months. In addition, 18 FTMs were identified through register reviews during community meetings, and 10 FTMs were identified through visits to EPI centers and satellite clinics to review registers. Survey participants were randomly drawn from the list of FTMs identified through these approaches.

Both survey rounds were delayed due to COVID-19. As a result, 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 into the Round 2 survey who would have been more likely to be exposed to the enhancements earlier on in

Contextual differences may explain some of the different findings between the two upazilas. Kabirhat has high rates of male migration. As a result, many families are wealthier, and mothers-in-law may play a more active role in decision-making when FTMs' husbands are away for work.

their pregnancy in order to ensure sufficient sampling of those who interacted with the program enhancements at different times in their pregnancy and postpartum. Given that programmatic activities at the community and facility level were already underway at the time of data collection, data from Round 1 of the survey are not meant to establish a true baseline (see box on page 6).

Round 1 data were collected between February and March 2021 and Round 2 data were collected in December 2021. In Round 1, 262 FTMs were interviewed, and 455 FTMs were surveyed in Round 2 (of which 231 were also interviewed in Round 1). The surveys were administered in Bangla 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 Bangladesh, ethics approval was received from the Innovations for Poverty Action (IPA) IRB – USA (15867).

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, number of household members, FTM literacy, household assets, and upazila of residence.



#### Implementation Learning Efforts with Providers, FTMs, and Family

Throughout small-scale implementation, Shongzog routinely gathered feedback from convenience samples of community- and facility-based providers, 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:* Shongzog convened two meetings with six FWAs and eight facility-based providers to gather insights on progress through successes, challenges, how they overcome the challenges, and their recommendations for improvement.
- *FTM pulse checks:* Shongzog conducted brief phone sessions with 20 FTMs to gather feedback about the interactions, experiences with activities, and suggestions for improvement.
- Feedback from household influencers (mothers-in-law and male partners). Shongzog convened small group discussions with 12 mothers-in-law and interviews with 12 husbands. These sessions explored the interactions and experiences between household influencers and the program enhancements, concerns, the level of their involvement, and their recommendations for improvement.

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

#### Descriptive Results: Socio-demographic characteristics of FTMs

Table 1 provides the summary statistics of the study population at Round 2.<sup>1</sup> On average, FTMs were 20.1 years old. Almost all FTMs (98.5%) interviewed had a living child while the remaining FTMs surveyed were currently pregnant with their first child. The majority (98.9%) were married and 82% of FTMs reported living with their husbands. Notably, FTMs from Companiganj upazila were more likely to be residing with their husbands compared to FTMs in Kabirhat upazila (92.3% vs. 71.9%). Approximately 88% of FTMs ages 20-25 years reported living with their mother-in-law, which was slightly lower than the 82.8% of adolescent FTMs ages 15-19 currently residing in the same house as their mother-in-law. Although only 31.6% of all FTMs had at least some secondary school or higher, there is a significant difference in educational attainment between with two age cohorts with the older FTMs ages 20-24 being more likely to have higher education levels than younger FTMs (39.8% vs 18.1%). However, slightly less FTMs 20-25 years (88.1%) were literate compared to 92.0% of adolescent FTMs ages 15-19.

<sup>&</sup>lt;sup>1</sup> Note that we targeted FTMs 15-19 years and 20-24 years at Round 1 in February 2021. By Round 2 data collection in October 2021, some of these women had turned 25, so our age range in this period spans from 15-25 years.

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

|  | Overall | Age                      |                          | Location               |                     |
|--|---------|--------------------------|--------------------------|------------------------|---------------------|
|  | (N=455) | Age 15-<br>19<br>(N=171) | Age 20-<br>25<br>(N=284) | Companiganj<br>(N=226) | Kabirhat<br>(N=229) |
| Mean age of FTM                                      | 20.1    | 18.4                     | 21.1                     | 20.0                   | 20.1                |
| Pregnant   | 2.2%    | 1.8%                     | 2.5%                     | 0.9%                   | 3.5%                |
| Has living child                                     | 98.5%   | 98.8%                    | 98.2%                    | 100.0%                 | 96.9%               |
| Married  | 98.9%   | 99.4%                    | 98.6%                    | 98.2%                  | 99.6%               |
| Lives with husband (if married, N=450)               | 82.0%   | 84.7%                    | 80.4%                    | 92.3%                  | 71.9%               |
| Lives with mother-in-<br>law (if has MIL, N=364)     | 86.3%   | 82.8%                    | 88.3%                    | 86.3%                  | 86.2%               |
| Secondary school or<br>higher                        | 31.6%   | 18.1%                    | 39.8%                    | 31.0%                  | 32.3%               |
| Literate (N=432)                                     | 89.6%   | 92.0%                    | 88.1%                    | 87.3%                  | 92.0%               |
| FTM access to mobile<br>phone with SMS<br>capability | 83.5%   | 82.5%                    | 84.2%                    | 72.6%                  | 94.3%               |

### FTM Interactions with Enhancements

Overall, FTMs' interactions with Shongzog's enhancements were limited (Table 2).

**Contacts with FWAs.** On average, 50.9% of FTMs were contacted by FWAs through home visits and phone calls. At Round 2, approximately half of all FTMs (54%) reported contact by an FWA compared to 26.8% at Round 1, reflecting an upward trend over time. FTMs who were contacted by an FWA were contacted 4.61 times on average. There was no evidence of significant difference by age group or upazila.

**Receipt of SMS.** Overall, only 6.8% of FTMs received SMS messages with health information or reminders related to FTM and

#### Factors influencing FTMs' interactions with the enhancements

- Pause-and-reflect sessions identified vacancies and workload as key limitations to FWAs' ability to reach more FTMs.
- A nationwide lockdown from April-August 2021 further limited inperson FWA HVs, use of facility services, and community meetings.
- Technical difficulties experienced with the SMS system during the implementation period.

baby health, despite high rates of access to mobile phones with SMS capacity. Of those who received SMS messages, slightly more adolescent FTMs ages 15-19 reported receiving SMS messages than older FTMs ages 20-24 (8.8% vs 5.6%). Notably, FTMs from wealthier households were more likely to be reached by FWAs and SMS.

**Receipt of printed materials.** Receipt of the mother-baby booklet and invitation cards were low (30.6% and 48.7% of FTMs, respectively).

Attendance at community meetings. Attendance of community sensitization meetings was also lower than expected, with only 42.6% of FTMs reporting joining these meetings. FTMs with children over six months of age were 36% more likely to attend community meetings.



While there are no differences by upazila for FWA or SMS outreach, FTMs in Companiganj were between 30 and 40% more likely to receive the mother-baby booklet, receive an invitation card, and attend community engagement meetings.

|  | Overall | Age   |       | Location    |          | Sample (Panel) |         |
|--|---------|-------|-------|-------------|----------|----------------|---------|
|  |         | 15-19 | 20-25 | Companiganj | Kabirhat | Round 1        | Round 2 |
| Contacted by FWA<br>(N=448)  | 50.9%   | 53.3% | 49.5% | 54.9%       | 46.8%    | 26.8%          | 54.0%   |
| Number of times<br>contacted by FWA<br>(N=225)                       | 4.53    | 4.72  | 4.40  | 3.98        | 5.18     | 2.76           | 4.61    |
| Received SMS (N=455)   | 6.8%    | 8.8%  | 5.6%  | 6.6%        | 7.0%     | n/a            | 4.3%    |
| Received mother baby<br>booklet (N=448)                              | 30.6%   | 34.3% | 28.3% | 36.7%       | 24.3%    | n/a            | 30.8%   |
| Attended any<br>community<br>sensitization meetings<br>(CSM) (N=448) | 42.6%   | 49.1% | 38.7% | 49.6%       | 35.6%    | n/a            | 43.3%   |
| Received an invitation<br>card (N=448)                               | 48.7%   | 55.6% | 44.4% | 57.1%       | 40.1%    | n/a            | 51.3%   |

#### Table 2: FTMs' interactions with enhancements

### **Outcomes**

The following sections detail progress on key outcomes. We present findings on Shongzog's primary outcomes, uptake of PPFP and PNC, 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.

For each outcome, we first present trends between survey rounds, highlighting distinctions between adolescent FTMs (ages 15-19) and older FTMs (ages 20-25<sup>2</sup>) as well as between upazilas 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 Shongzog's enhancements are presented.

Table 3 provides an at-a-glance summary of associations between the enhancements and the primary PNC and PPFP outcomes, from regression analyses controlling for the factors listed above.



Papiya\*, 15 years old, and Henna\*, 18 years old, with their baby cousin, Minha\*.

<sup>&</sup>lt;sup>2</sup> 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 primary outcomes related to PNC and PPFP, for all FTMs (controlling for FTM age, child age, number of household members, FTM literacy, household assets, and upazila of residence)* <sup>a</sup> denotes findings that were significant at 0.01; <sup>b</sup> 0.05; and <sup>c</sup> 0.1.

X indicates no association between exposure to the enhancement component and the outcome of interest.

|   | PNC visit (mother)   | PNC visit (baby)          | Adopted modern<br>PPFP    | Currently using<br>modern PPFP |
|---|--|---------------------------|---------------------------|--------------------------------|
| Interperso                                    | onal Contacts  |                           |                           |                                |
| FWA contacts<br>(home visits,<br>phone calls) | 15% increase in<br>PNC visits within<br>72 hours of giving<br>birth <sup>c</sup> | 20% increase ª            | 13% increase <sup>b</sup> | 20% increase <sup>b</sup>      |
| Community<br>sensitization<br>meetings (CSMs) | 12% increase °   | 17% increase <sup>b</sup> | x                         | x                              |
|   |  |                           |                           |                                |
| Print and                                     | Electronic Materials   |                           |                           |                                |
| Invitation cards                              | x  | x                         | 15% increase <sup>b</sup> | 23% increase <sup>a</sup>      |
| Mother-baby<br>booklet                        | 27% increase <sup>a</sup>  | 32% increase <sup>a</sup> | x                         | x                              |
| SMS   | x  | x                         | 18% increase <sup>c</sup> | 39% increase <sup>a</sup>      |
|   |  |                           |                           |                                |

# **Primary Outcomes: Use of PPFP and PNC**

#### **Postpartum Family Planning Uptake**

#### Use of modern PPFP among FTMs increased over time

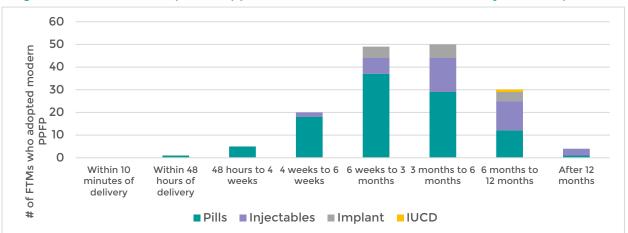
Between survey rounds, we identified increases in PPFP adoption and current use for both age groups. At Round 1, 29.9% of FTMs in our panel sample who had already given birth had

adopted a PPFP method. By Round 2, 77.7% of FTMs with a living child had adopted a modern PPFP method.

Part of the increase in PPFP use is simply related to FTMs' babies getting older; the majority of FTMs who did adopt PPFP did so six or more weeks after delivery (Figure 2). In implementation learning efforts, male partners described a preference to avoid discussion of PPFP during pregnancy, and providers described challenges in counseling on PPFP at time of delivery if it was not introduced during ANC.



#### Figure 2: Most PPFP adoption happened six or more weeks after delivery (endline panel sample)



However, regression analyses identified associations between exposure to Shongzog's enhancements, and PPFP uptake (see following Box).

#### Association between Connect's Approaches and PPFP Uptake

#### FTMs who were exposed to Connect's approaches were more likely to be using PPFP.

While some increases in PPFP use 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 were contacted by an FWA (through home visits or phone calls) were 21% more likely to be using modern PPFP (57% to 69%).
- FTMs who received an invitation card were 23% more likely to be using modern PPFP (57% to 70%).
- FTMs who received an SMS were 39% more likely to be using modern PPFP (62% to 85%).

Participating in a community sensitization meeting or receiving the mother-baby booklet were not associated with current PPFP use.

# 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 was associated with greater increases in PPFP uptake, controlling for possible confounders. Compared to FTMs who did not engage with any enhancements:

- Interacting with at least two enhancements is associated with increased likelihood of PPFP uptake.
- There are additional increases in PPFP if FTMs engage with 4 of the 5 enhancements.
- With exposure to each additional enhancement, FTMs were 5% more likely to have adopted a modern method since giving birth and 9% more likely to currently be using a modern method.



#### The most frequently adopted PPFP methods were pills and male condoms.

Table 4 depicts the PPFP methods adopted by the 334 FTMs who adopted a modern method. Most (59.9%) adopted pills, 41.9% adopted male condoms, 19.5% adopted injectables, 8.7% adopted implants, and 1.5% adopted IUCDs. Note that some FTMs adopted more than one method, so totals may sum to over 100%.

| Method       | Overall (N=334) | Age               |                   |  |
|--------------|-----------------|-------------------|-------------------|--|
| Method       | Overall (N=554) | Age 15-19 (N=128) | Age 20-25 (N=206) |  |
| Pills        | 59.9%           | 56.3%             | 62.1%             |  |
| Male condoms | 41.9%           | 41.4%             | 42.2%             |  |
| Injectables  | 19.5%           | 22.7%             | 17.5%             |  |
| Implant      | 8.7%            | 10.9%             | 7.3%              |  |
| IUCD         | 1.5%            | 1.6%              | 1.5%              |  |

#### Table 4: PPFP methods adopted, by age

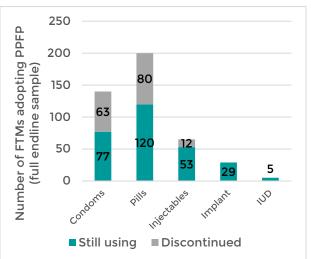
Overall, the method mix was similar across age groups. However, older FTMs ages 20-24 were slightly more likely to adopt pills than adolescent FTMs ages 15-19, who were slightly more likely to adopt injectables or implants.<sup>3</sup>

# Some FTMs who adopted short-acting methods switched to another method, but many discontinued altogether.

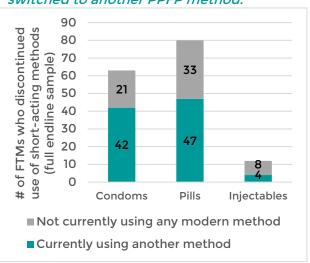
Implementation learning findings reflected a wide range of misconceptions regarding LARCs, particularly IUCD, and their side effects. These misconceptions were shared by FTMs, their family members, and by some service providers.

The majority of FTMs who discontinued condom use switched to pills (64.2%), and the majority of FTMs who discontinued use of pills switched to injectables (42.5%). No LARC adopters discontinued. However, of the 334 FTMs that adopted a method, 51 (15.27%) discontinued and were not currently using any modern method at the time of Round 2 data collection (Figures 3 and 4).





# *Figure 4: ...but many FTMs who discontinued use of short-acting methods switched to another PPFP method.*



<sup>&</sup>lt;sup>3</sup> Per the BDHS, Cirls and younger women are more likely to use short-acting FP methods, with 95.7% of 15-19 year-old and 93.5% of 20-25 year-old modern FP users using pills, condoms, or injectables.

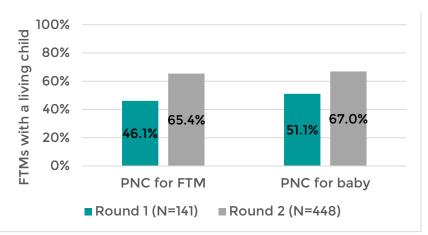


#### **Postnatal Care**

PNC use did not increase for the overall sample, but interactions with Shongzog's enhancements were associated with increases in PNC use for mother and baby.

Between survey rounds, we identified increases in the percentage of FTMs with a living child in the full sample who made PNC visits, but these increases were not statistically significant (Figure 5). A slightly higher proportion of babies than mothers received a PNC visit. Most FTMs who made a PNC visit did so within 72 hours of birth.

Figure 4: PNC visits for mother and baby increased between survey rounds for the full sample, but increases were not statistically significant



# Association between Connect's Approaches and Use of PNC for Mother and Baby

FTMs who were exposed to Connect's approaches were more likely to have accessed PNC.

While PNC use across the full sample increased only slightly, regression analyses show that exposure to enhancements was associated with improved PNC use for mother and baby.

- FTMs who received FWA contact were:
- 20% more likely to have had a PNC visit for their baby (60% to 72%).
- 15% more likely to have had a PNC visit for themselves within 72 hours of birth (58% to 66%).
- ) FTMs who attended a CSM were:
- 12% more likely to have received a PNC visit or themselves (62% to 69%).
- 17% more likely to have received a PNC visit for their baby (62%-73%).
- FTMs who received the mother-baby booklet had the strongest associations with increases in PNC:
- 27% more likely to have received a PNC visit or themselves (60%-77%).
- 32% more likely to have received a PNC visit for their baby (61%-80%).

Receiving the invitation card and receiving SMS were not associated with PNC outcomes.

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

In addition, interacting with more than one enhancement was associated with greater increases in PNC use, when controlling for possible confounders. For each additional enhancement that the FTM received, PNC use increased by about 5pp (9-13%) across outcomes.



#### PNC quality improved, but remained low overall.

In addition, we constructed quality scores for FTM PNC visits (0-5 points) and baby PNC visits (0-6 points); a PNC visit was considered a "quality" visit if all content was discussed (5 content points for FTM, 6 content points for baby). The quality of PNC as reported by FTMs increased between survey rounds. While quality PNC visits remain below 50% at Round 2, this is about twice as high as seen in Round 1 (23% for FTMs and 26% for baby at Round 1) for both FTM and baby. Average quality scores increased for both FTM (2.5 to 3.3) and baby (3.3 to 4.5) from Round 1 to Round 2, but remain lower than desired.

# Intermediate Outcomes: Knowledge, Couple Communication, Decision-Making, and FP Self-Efficacy

Table 5 provides an at-a-glance summary of associations between the enhancements and intermediate outcomes, from regression analyses controlling for the factors listed above.

#### Table 5: Associations between exposure to activities and secondary outcomes, for all FTMs

 $^{\rm a}$  denotes findings that were significant at 0.01;  $^{\rm b}$  0.05; and  $^{\rm c}$  0.1.

X indicates no association between exposure to the enhancement component and the outcome of interest.

| Couple<br>Communication  | FTMs with Final Say<br>in Decisions  | Family Planning<br>Self-Efficacy  | Knowledge  |
|--|--|---|--|
| onal Contacts  |  |   |  |
| 9% increase <sup>b</sup> in<br>FTMs discussing<br>PPFP with<br>husband | <ul> <li>When to have children:<br/>77% increase <sup>a</sup></li> <li>Number of children:<br/>70% increase <sup>a</sup></li> <li>Method of FP: 39%<br/>increase <sup>b</sup></li> </ul> | <ul> <li>Access scale: 5%<br/>increase<sup>b</sup></li> <li>Communication<br/>scale: 3% increase<sup>c</sup></li> </ul>   | x  |
| 12% increase <sup>c</sup>  | 52% increase <sup>b</sup>  | increase b  | 16% increase in<br>knowledge that it<br>is important to go<br>to the facility for a<br>check-up <sup>c</sup>   |
|  |  |   |  |
| Electronic Materials   |  |   |  |
| 14% increase ª   | <ul> <li>When to have<br/>children: 40%<br/>increase <sup>c</sup></li> <li>Method of FP: 30%<br/>increase <sup>c</sup></li> </ul>  | <ul> <li>Overall scale: 7%<br/>increase <sup>a</sup></li> <li>Access scale: 7%<br/>increase <sup>a</sup></li> <li>Communication<br/>scale: 9% increase <sup>a</sup></li> <li>Social support<br/>scale: 8% increase <sup>c</sup></li> </ul>  | 43% increase in<br>knowledge that<br>women and girls do<br>not need to be<br>accompanied by a<br>male partner to acces<br>family planning<br>services <sup>c</sup>   |
| х  | х  | Х   | Х  |
| 11% increase <sup>b</sup>  | <ul> <li>Method of FP: 64%<br/>increase <sup>b</sup></li> </ul>  | <ul> <li>Overall scale: 7%<br/>increase<sup>b</sup></li> <li>Access scale: 10%<br/>increase<sup>a</sup><br/>Communication<br/>scale: 6% increase<sup>b</sup></li> <li>Social support scale:<br/>11% increase<sup>c</sup></li> </ul>   | x  |
|  | Communication  A contacts  9% increase b in FTMs discussing PPFP with husband  12% increase c  Electronic Materials  14% increase a  X   | Communicationin Decisionsmal Contacts9% increase b in<br>FTMs discussing<br>PPFP with<br>husband• When to have children:<br>77% increase a<br>• Number of children:<br>70% increase b12% increase c• When to have children:<br>52% increase b12% increase c• When to have children:<br>s2% increase b12% increase c• When to have children:<br>contraception c14% increase a• When to have<br>children: 40%<br>increase c<br>• Method of FP: 30%<br>increase c14% increase b• When to have<br>children: 40%<br>increase c14% increase b• When to have<br>children: 40%<br>increase c11% increase b• Method of FP: 64% | Communicationin DecisionsSelf-Efficacymal Contacts9% increase b in<br>FTMs discussing<br>pPFP with<br>husband• When to have children:<br>70% increase a<br>• Method of FP: 39%<br>increase b• Access scale: 5%<br>increase c<br>• Communication<br>scale: 3% increase c12% increase c<br>• When to have children:<br>52% increase b<br>• Whether to use FP: 42%<br>increase b<br>• 29% increase in having<br>the final say on the<br>method of<br>contraception c• Overall scale: 4%<br>increase b<br>• Access scale: 5%<br>increase b<br>• Communication<br>scale: 6%<br>increase a12% increase c<br>• Whether to use FP: 42%<br>increase b<br>• 29% increase in having<br>the final say on the<br>method of<br>contraception c• Overall scale: 4%<br>increase a14% increase a<br>• When to have<br>children: 40%<br>increase c<br>• Method of FP: 30%<br>increase a• Overall scale: 7%<br>increase a<br>• Access scale: 7%<br>increase a<br>• Access scale: 7%<br>increase a14% increase b<br>• Method of FP: 30%<br>increase c• Overall scale: 7%<br>increase a<br>• Access scale: 7%<br>increase a<br> |



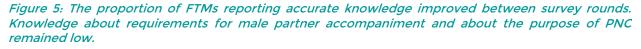
#### Knowledge

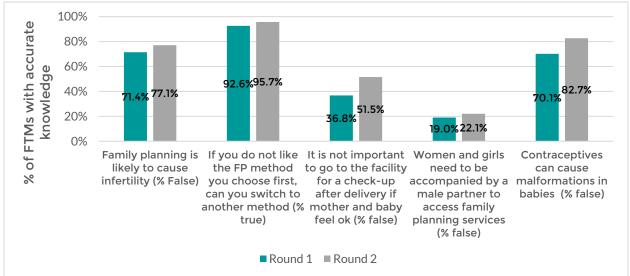
Knowledge improved slightly, but key knowledge gaps remain.

Knowledge improved for each area between survey rounds (Figure 6). Notably, knowledge around two areas remained very low. Nearly half of FTMs stated that PNC was not important if mother and baby feel well, and only 22% of FTMs knew that male partner accompaniment is not required for women and girls to access FP services. Knowledge scores for the three other areas (*FP can cause infertility, FP adopters cannot* 

Implementation learning showed that some male partners perceived FP discussions as "not a man's place", and that many mothers-inlaw also had limited understanding of the importance of PNC.

*switch to another method, FP can cause malformations in babies)* was relatively high at Round 1 but improved slightly by Round 2.





#### Association between Connect's Enhancements and Knowledge

Only two enhancements were associated with improvements in key knowledge:

- Attending a CSM was associated with a 16% increase in knowledge that it is important to go to the facility for a check-up (from 55% to 63%).
- Receiving an invitation card was associated with a 43% increase in knowledge dispelling the misperception that women and girls need to be accompanied by a male partner to access FP services (from 16% to 23%).



#### **Couple Communication**

# Couple communication around PPFP increased.

At Round 2, the majority of FTMs (87.4%) reported discussing PPFP with their male partner, a 65% increase from Round 1. PPFP discussion was more likely to happen once the child was older than six weeks.

Survey findings on FP discussions align with implementation learning findings, which showed that spouses were aware of key messaging that FTMs received during home visits and/or PNC visits, including PPFP information.

#### Association Between Connect's Enhancements and Couple Communication

Three enhancements were positively associated with FTM discussion of PPFP with male partners:

- FTMs who received FWA contact were 9% more likely to have discussed PPFP with their partner (84%-92%).
- Those who received an SMS were 11% more likely to have discussed PPFP with their partner (86%-95%).
- Those who received invitation cards were 14% more likely to have discussed PPFP with their partner (84%-95%).

The mother-baby booklet and CSM were not associated with increased discussions with partner.

For each additional enhancement FTMs interacted with, the likelihood of discussing FP increased by 5%.

#### **Decision-making Power**

# Although decision-making power among the full sample declined between survey rounds, FTMs who interacted with Shongzog's enhancements had improved power in decisions related to fertility and PPFP.

We asked FTMs about who made final decisions related to when to have children, how many children to have, whether to use FP, and which FP method to use. Among the full sample, the proportion of FTMs who reported having the final say in these decisions declined between survey rounds.

However, as the following box shows, FTMs who interacted with the enhancements were more likely to have improvements in reported decision-making power.

#### Association between Connect's Enhancements and Decision-Making Power

#### As Table 2 details:

- FWA contact, CSMs, and invitation cards were positively associated with large increases (40-77%) in the likelihood that the FTM had the final say in deciding when to have children.
- FWA contact, SMS, CSMs, and invitation cards were all positively associated with increases (28-64%) in the likelihood that the FTM had the final say in deciding which FP method to use.
- The mother-baby booklet was not associated with any improvements in decision-making power.



- For each additional enhancement FTMs interacted with:
- The likelihood of FTMs having the final say when to have children increased by 38%.
- The likelihood of FTMs having the final say regarding the contraceptive method increased by 14%.



#### Family Planning Self-efficacy

Family planning self-efficacy declined between survey rounds for the overall sample, but scores improved for FTMs exposed to several enhancements.

To assess family planning self-efficacy (FPSE), we used a scale<sup>x</sup> 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).

Among the full sample, we identified reductions in FPSE between Round 1 and Round 2 in the total scale (3 points). The reduced overall FPSE scale was driven by reductions in the social support scale (1.6 points) and the assertiveness scale (1.2 points). However, as the following box depicts, interactions with several of Shongzog's enhancements was positively associated with improved FPSE.



Samia\*, 17 years old, sitting in her classroom.

#### Association between Connect's Enhancements and Family Planning Self-efficacy

Despite overall stagnant FPSE scores, some enhancements are positively associated with improved FPSE scores:

- FTMs who had contact with an FWA had a 5% increase in the access scale (from 7.9 to 8.4), and a 3% increase in the communication scale (from 20.8 to 21.3%).
- FTMs who attended a community sensitization meeting had a 4% increase in the overall FPSE scale (from 60.2-62.6), a 5% increase in the access scale (from 8-8.4), and a 6% increase in the communication scale (from 20.6-21.8).
- FTMs who received an invitation card had a 7% increase in the overall scale (from 59.3-63.5), a 7% increase in the access scale (from 7.9-8.5), a 9% increase in the communication scale (from 20.3-22.1), and an 8% increase in the social support scale (from 18.6-20.1).
- FTMs who received an SMS had a 7% increase in the overall scale (from 60.7-65.2), a 10% increase in the access scale (from 8.1-8.8), a 6% increase in the communication scale (from 20.9-22.3), and an 11% increase in the social support scale (from 19.1-21.2).

Interacting with at least one enhancement was associated with increased FPSE, with additional gains if the FTM engaged with all five enhancements.



# **Implications and Recommendations**

Survey findings show that scalable efforts designed to enhance existing platforms with lowdosage engagement of FTMs can effectively improve PPFP and PNC uptake in Bangladesh. In addition, the light-touch enhancements demonstrated potential to improve couple communication, FP self-efficacy, and FTMs' decision-making power.

While findings underscore the potential of these light-touch approaches to contribute to PPFP and PNC outcomes, 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 Shongzog's scale-up of the enhancements in Bangladesh, and to efforts with FTMs in other settings.

**Coverage of FWA contacts was lower than ideal.** Just over half of FTMs sampled were contacted by FWAs through phone calls or home visits. Since receiving contact from an FWA was positively associated with each of the outcomes of interest, efforts to reach more FTMs through FWAs could further improve outcomes. However, as coverage is limited by high rates of vacancies and unrealistic workloads for FWAs, improved resourcing of the FWA cadre to improve coverage is needed.

Misconceptions on the need for male accompaniment persist. Although women are not required to be accompanied by a male partner to access FP services at a health facility, many FTMs' knowledge on this remains low. Deliberate efforts to tackle knowledge barriers around male partner requirements preventing FP service utilization are important to improve outcomes.

#### While strong PPFP adoption is positive, there is room for improvement in several key areas:

- Timing of PPFP uptake. The majority of FTMs who adopted PPFP did so after six weeks following delivery. Further efforts are needed to understand barriers to earlier PPFP uptake, particularly among FTMs who deliver in facilities. Strengthening PPFP counseling in ANC is important to encouraging earlier uptake, and requires strengthening provider capacity as well as identifying and addressing normative factors that may limit discussion of PPFP during pregnancy.
- **Discontinuation of short-acting methods.** The factors driving high uptake of shortacting methods and high rates of discontinuation within the first year postpartum, and how these factors can be addressed through scalable approaches, need to be better understood.
- **Promotion of LARCs.** Misconceptions related to LARCs are common among FTMs and providers. Actions to dispel myths and misconceptions around the effects of long-acting methods are needed, given that discontinuation is lower among FTMs.

**Despite improvements, perceptions that postnatal care is not important require further exploration.** While knowledge that PNC is important even when mother and baby feel well improved between survey rounds, scores remained low at Round 2. Improving counseling during pregnancy to emphasize the importance of seeking PNC, and gaining a deeper understanding of FTMs' needs during the postnatal period and how facility PNC services align with their identified needs, will be key to improve demand-creation efforts. In 2022, Shongzog began an exploratory study to identify FTMs' needs and expectations during the postnatal period, and findings will inform efforts to improve timely PNC services use among FTMs.



Milken Institute School of Public Health The george washington University

### Limitations

The survey findings should be considered in light of several limitations. First, the study is a pilot study with a small sample size, thereby limiting the ability to precisely measure small changes. Moreover, it is prepost design. Thus, the analysis should be interpreted as highlighting associations, not uncovering the causal impact of the program enhancements. Further, there was variation in timing of exposure to the program enhancements during FTMs' pregnancy due to the delayed introduction of the program enhancement driven by COVID-19. Relatedly, nationwide COVID-19 lockdowns (April-August 2021) may have limited FTMs' in-person interactions with FWAs, facility services, and community meetings.

#### **Conclusions**

The findings presented in this brief indicate that lighttouch and scalable program enhancements hold promise for increasing PPFP adoption among FTMs in Bangladesh and add to the knowledge base around scalable approaches for FTMs. Notably, the findings demonstrate that the program enhancements are associated with increased PPFP adoption among FTMs and improvements in PNC quality. Despite system-level challenges and gaps in coverage of the enhancements, evidence generated from this study indicates that lighttouch program enhancements have the potential to improve outcomes and meet FTMs' needs.



Samia, 17 years old, with her grandmother, outside her home.



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\*Names of subjects in photos have been changed to protect identities.

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