March 2024

Family Planning Needs across the Life Cycle in Bangladesh: Synthesis of Recent Evidence and a Proposed New Approach

Introduction

The MEASURE Evaluation and Data for Impact (D4I) project have conducted several analyses of fertility and family planning (FP) in Bangladesh in recent years (Box A.1). This Technical Brief synthesizes findings of these studies and related additional analysis across the life cycle and proposes a new person-centered approach to strengthen FP in Bangladesh. An accompanying policy brief discusses policy and program considerations to operationalize a life cycle approach to FP within the Bangladesh health system (Rahman et al., 2023).

Background: Fertility and Family Planning Use in Bangladesh Today

Fertility in Bangladesh declined from 1993 until 2011 to align with the mean ideal family size but has since stalled. Since the 2011 Bangladesh Demographic and Health Survey (BDHS), the total fertility rate (TFR) has remained at 2.3 births per woman, approximately equal to the mean ideal family size, which increased slightly to 2.3 births in the 2017/18 BDHS and remained at 2.3 in the 2022 BDHS. The decline in fertility through 2011 was associated with increased contraceptive use. However, the contraceptive prevalence rate (CPR) likewise stalled from 2011 to 2017/18, at 62% but increased slightly to 64% in 2022 (D4I, 2022; NIPORT & ICF, 2023).

Nevertheless, unintended pregnancies still occur in Bangladesh. As of 2017/18:

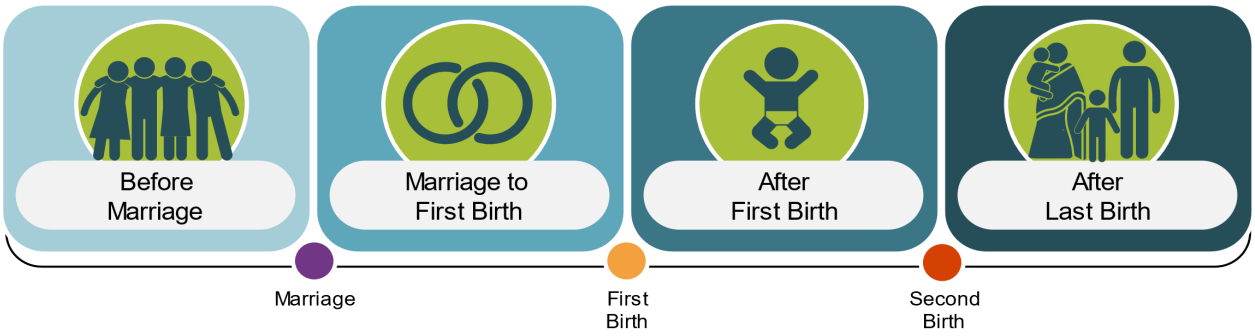
- 12% of married women had an unmet need for FP. This figure decreased to 10% in the 2022 BDHS.
- 13% of births in the last three years were mistimed.
- 8% of births in the last three years were unwanted (NIPORT & ICF, 2023; The DHS Program, n.d.).

Because the TFR has stalled at just above replacement level, the demographic context and Bangladesh's current health system context requires a new approach to the delivery of FP services.

Life Cycle Approach to Family Planning

The life cycle approach is a person-centered approach that addresses different FP needs at each stage of the life cycle. Different points in the life cycle offer different opportunities to reach individuals and couples with tailored interventions.

Figure 1. Life cycle approach to FP



Before Marriage

Before marriage, individuals and couples are interested in learning about preventing pregnancy. The 2019/20 Bangladesh Adolescent Health and Wellbeing Survey (AHWS) found that 55% of unmarried girls and 57% of unmarried boys would like information on FP. Unmarried adolescent girls were more likely to have heard of pills whereas unmarried adolescent boys were more likely to have heard of condoms. They reported a range of preferred sources for FP information; the most preferred source for boys was the internet while girls were most likely to report health providers and books as their preferred source. Only 6-7% of unmarried adolescents reported teachers as their preferred source of FP information (NIPORT, icddr,b and D4I, 2021).

Before Marriage: Recommendations

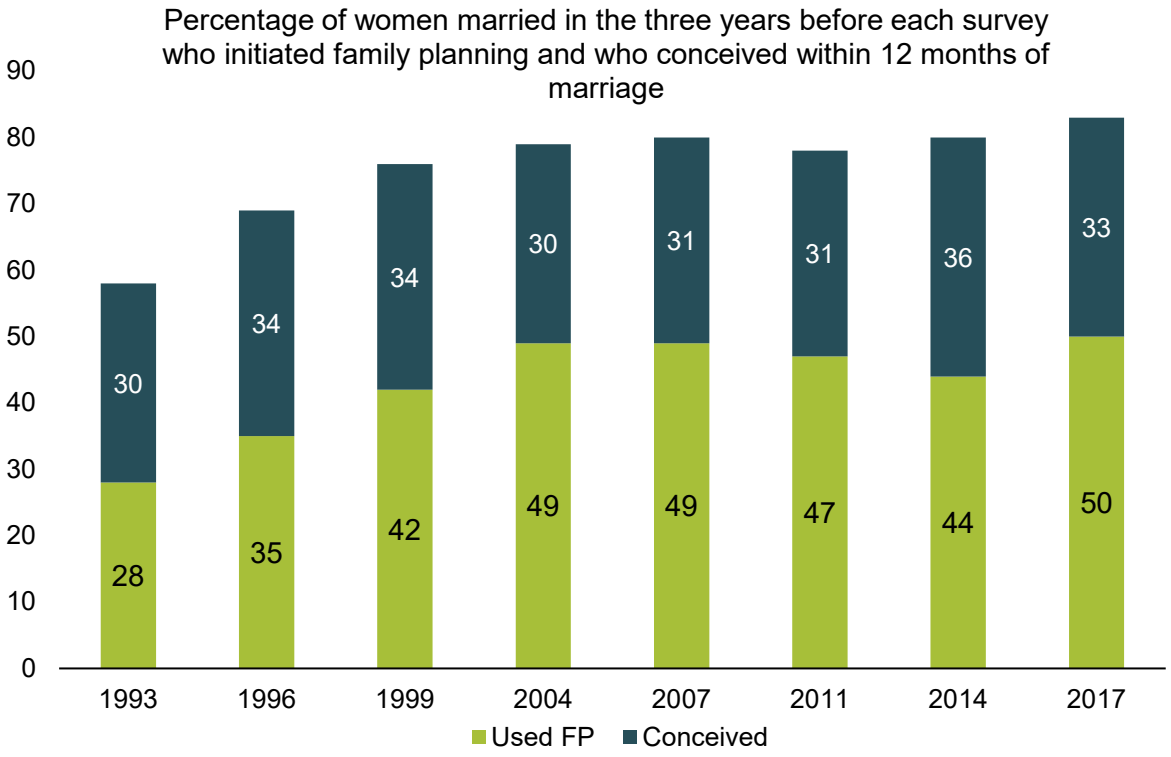
- Provide tailored information on FP to unmarried adolescent girls and boys.
- Use a variety of information channels (books, health providers, Internet).

Marriage to First Birth

D4I analysis of eight BDHS surveys found that the median age at marriage and median age at first birth increased between 1993 and 2017/18, to 17.5 and 19.5 years, respectively. The median age at first birth increased more slowly than did the median age at marriage, and the interval between marriage and first birth decreased from three to two years (Haider et al., 2022). Figure 2 presents the percentage of married women in the three years before each survey who initiated FP use and who conceived within 12 months of marriage. The initiation of FP use in the first birth interval increased until 2004 and has remained around 44% to 50% since then. There was no consistent trend in the percentage of women conceiving within 12 months of marriage before starting any contraceptive use (Haider et al.,

2022). The percentage of first births that were unintended has decreased since 1999. Approximately 10% of first births were unintended in 2017/18 (The DHS Program, n.d.).

Figure 2. FP use in the first birth interval



Source: BDHS 1993-2017 calendar data; Multiple decrement life table analysis

Marriage to First Birth: Recommendations

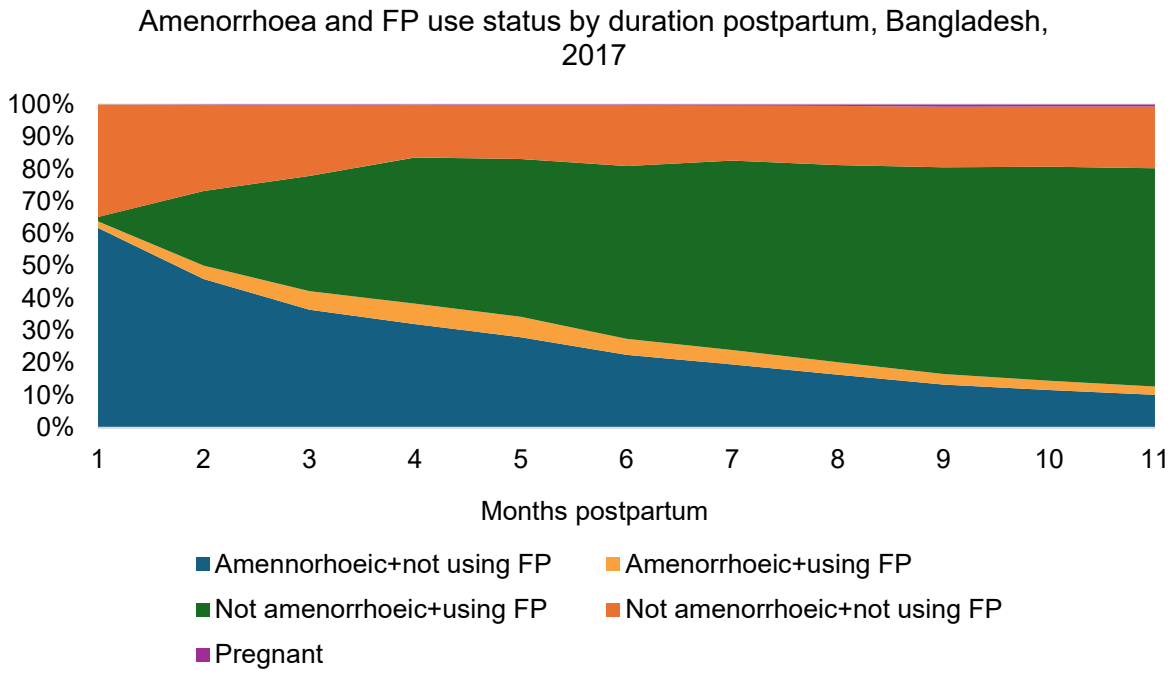
- For newly married couples who want to delay the first birth, offer a range of spacing FP methods.
- Provide behavior change communication (BCC) on the benefits of waiting until at least age 20 to have the first child.
- Increase economic opportunities available for young married women.

After First Births

In this life cycle stage FP needs to center around postpartum FP (PPFP) for spacing purposes. Although the percentage of birth intervals less than 36 months has declined since 1993, in 2017/18, 25% of births occurred before

the World Health Organization's recommended 36-month interval[1] (The DHS Program, n.d.). At the same time, the probability of a woman initiating use of contraception during the first 12 months postpartum (PP) increased significantly to 74% in 2017/18. Over time, women have been adopting PPFP earlier, with adoption being most rapid in the period two to four months after delivery (Haider et al., 2022). The pill is the most used PPFP method. Few women used long-acting reversible contraception (LARC) and permanent methods (PMs), but when they did, they started use immediately PP. Moreover, few women conceived within a year PP (Haider et al., 2022). The data revealed that—to some extent—PPFP use was substituting for postpartum amenorrhea (PPA). The initiation of PPFP use has happened earlier as the duration of PPA declined, but PPFP use occurred slightly later than the end of PPA. The gap between the median time to use of PPFP and the median duration of PPA declined from three to two months from 1993 to 2017/18 (Haider et al., 2022). Figure 3 shows individual combined amenorrhea and FP use status by PP duration as of 2017/18. Women who are not using FP and are not postpartum amenorrheic are most exposed to the risk of an early pregnancy. The probability of having resumed menstruation and not using FP declines over the first four months PP and then levels at around 20%.

Figure 3. Combined family planning use and postpartum amenorrhea status by duration postpartum



Source: D4I multistate life table analysis of BDHS 2017/18 contraceptive calendar data.

[1] WHO recommends waiting at least 24 months after a live birth before attempting to conceive another child to reduce the risk of adverse maternal, perinatal and infant outcomes (WHO. Report of a WHO technical consultation on birth spacing: Geneva, Switzerland 13–15 June 2005. Geneva: World Health Organization, 2007).

Pregnant women making contact with medically trained providers for antenatal care (ANC) and childbirth services has increased substantially in recent years, providing expanded opportunities to strengthen PPFP. About 88% of pregnant women had at least one ANC visit with a medically trained provider and 65% of women delivered their babies at a health facility, according to the 2022 BDHS (NIPORT and ICF, 2023). Although more than 50% of women received postnatal care (PNC) within two days of delivery in 2017/18, very few received information on PPFP. Private sector facilities played a major role in providing ANC and delivery services in 2017/18, contributing 64% and 31%, respectively, compared with the public sector share (36% and 14%, respectively). At the same time, 51% of women delivered at home (Haider et al., 2022).

After the First Births: Recommendations

- Update and cost the national PPFP Action Plan.
- Ensure counseling on PPFP during ANC, delivery care, and PNC.
- Strengthen the provision of PPFP counseling and services in Expanded Programme on Immunization activities.
- Engage the private sector in the provision of PPFP.
- Strengthen coordination between the Directorate General of FP (DGFP) and the Directorate General of Health Services (DGHS) for PPFP.
- Provide training on PPFP counseling to all reproductive health (RH) providers, including DGHS, DGFP, Directorate General of Nursing and Midwifery, and private and nongovernmental organization sectors.
- Ensure availability of FP commodities and logistics.
- Implement BCC activities on PPFP.

Last Desired Birth

After the last desired birth, the need for FP becomes long-term to prevent unwanted births. The 1993–2017/18 BDHS documented that the percentage of married women ages 15–49 who wanted no more children remained relatively static. In 2017/18, 60% of married women ages 15-49 wanted no more children, and 79% of women ages 15–49 with two living children wanted no more children. The median age at second birth was 23.9 years (D4I, 2022; The DHS Program, n.d.,). These findings underscore that on average couples in Bangladesh will need to use FP effectively for over 20 years to avoid unwanted pregnancies. However, only 9% of married women were using a LARC/PM in 2017/18 and this figure declined to 7.5% in 2022 (NIPORT and ICF, 2023; The DHS Program, n.d.). Public health facilities were not ready to provide LARC/PMs. A study by Haider, et al., revealed that, as of 2014, 62% to 78% of public facilities designated to provide IUDs, implants, tubal ligation (TL), and non-scalpel vasectomy (NSV) offered each method. However, only 19, 34, 15, and 23% of public facilities that provided each method were fully ready to provide IUDs, implants, TL, and NSV respectively (Haider et al., 2019). There is evidence that readiness to provide FP services

generally increased modestly in public facilities between 2014 and 2017, particularly in union level public facilities, but has since leveled off (NIPORT, ACPR, ICF, 2016; NIPORT and ICF, 2019; NIPORT and icddr,b, 2023).

The reasons for the low use of LARC/PMs can be summarized as:

1. Low facility readiness to provide them.
2. High provider vacancies at health facilities.
3. Low provision of TL and IUDs at health facilities providing delivery services.
4. Convenient access to short-acting methods through pharmacies.
5. Low knowledge levels among women about PP IUDs and TL (e.g., 12% of women knew that an IUD could be provided immediately after a normal delivery (Rahman et al., 2019).
6. Low interest in LARC/PMs (Haider et al., 2019; NIPORT and ICF, 2020; Rahman et al., 2019).

After Last Birth: Recommendations

- Provide BCC on the full range of methods for limiting, including LARC/PMs.
- Strengthen counseling on and provision of LARC/PMs in PPFP services (ANC, delivery care, PNC).
- Engage the private sector in the provision of LARC/PMs in delivery care.
- Increase facility readiness to provide LARC/PMs by improving the availability of equipment and supplies.
- Expand the training of providers in LARC/PMs at facilities designated to provide these services and in the private sector.

Implementing a Life Cycle Approach: The Segmented Client Approach

The segmented client approach is a tested approach to provide comprehensive counseling tailored to a client's life cycle stage and contraceptive use experience. It defines segments based on fertility preferences and contraceptive use history and uses the idea of "progressing" through different FP methods as confidence with contraceptive use builds and RH needs evolve. The approach emphasizes informed choice, ensuring that clients have complete information on all FP methods, including their advantages and disadvantages based on their life cycle stage. Table 1 provides examples of the segmented client approach.

Table 1. Example of client segments

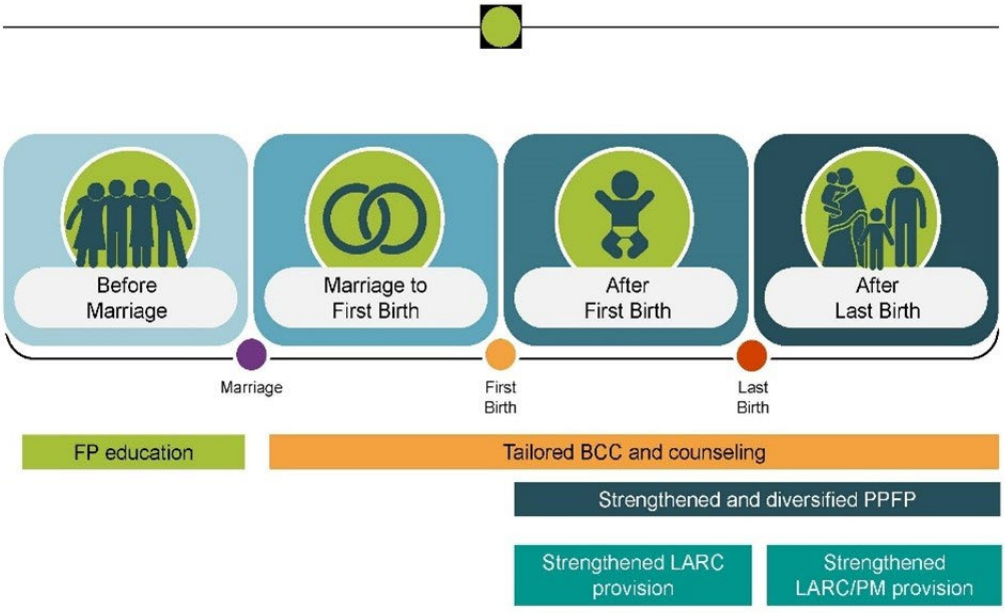
Segment	Segment Description	Counseling on Method Progression
A	Clients who do not want to have any more children and are currently using short-acting methods.	Female sterilization/NSV or IUD/Implant
B	Clients who want to space their pregnancy for more than two years and are currently using a short-acting method.	IUD/Implant
C	Clients who do not want to have any more children or who want to space their pregnancy and are not using any modern method.	Pill/Injectables/Condom

A 2020 intervention study documented that the segmented client approach increased the use of IUDs and implants by limiters and spacers (Uddin et al., 2020).

Conclusion

Given the new demographic and health system landscape in Bangladesh, a new approach to FP is warranted at all levels of the health system. The life-cycle approach is person-centered—it considers individuals' needs at different points in their reproductive lives and at time-of-service use. Specific recommendations for each life cycle stage emphasize BCC, tailored FP education and counseling, and strengthened and diversified provision of PPFP and of LARC/PMs (Figure 4). The approach can use the large and vibrant public and private sectors to provide FP, especially PPFP. To achieve these objectives, FP services must be improved in both the public and private sectors, particularly in the readiness of providers and facilities to offer LARC/PMs, communication between FP workers and clients (including counselling tailored to couples' fertility preferences), and PPFP service provision.

Figure 4. Operationalization of the life cycle approach to FP service delivery



Suggested Citation

Rahman, M., Haider, M.M., Rahman, M.M., Khan, S., & Curtis, S. (2023). Policy Brief: Family planning needs across the life cycle in Bangladesh: System Considerations for the DGFP and DGHS. Chapel Hill, NC, USA: Data for Impact.

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[1] Data for Impact [2] icddr,b

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Annex

Box A.1 Bangladesh Family Planning Publications

Rahman, M., Haider, M., Chakraborty, N., Curtis, S. (2022) Potential for further fertility decline in Bangladesh and the implications for the National Family Planning Program. Technical Brief. Chapel Hill, NC, USA: Data for Impact, University of North Carolina (https://www.data4impactproject.org/wp-content/uploads/2022/11/Bangladesh-Fertility-Decline_FS-22-587-D4I_508c.pdf)

National Institute of Population Research and Training (NIPORT), International Centre for Diarrhoeal Disease Research, Bangladesh (icddr,b), and Data for Impact. (2021). Bangladesh Adolescent Health and Wellbeing Survey 2019–20: Final Report. Dhaka, Bangladesh, and Chapel Hill, NC, USA: NIPORT, icddr,b, and Data for Impact, University of North Carolina (http://rdm.icddrb.org/bangladesh-adolescent-health-and-wellbeing-survey-2019-20/)

Rahman, M, Haider M., Ahmed, A., Barkataki, S. (2020). The availability of and readiness for providing long–acting contraceptives and permanent methods in Bangladesh. Policy Brief. Chapel Hill, NC, USA: Data for Impact, University of North Carolina. (Facility-readiness-LARC-policy-plan-Bangladesh_WP-20-242-D4I.pdf (data4impactproject.org))

Rahman, M., Haider, M., Curtis, S. (2020). Potential interventions to improve the use of long–acting reversible contraceptives and permanent methods in Bangladesh. Policy Brief. Chapel Hill, NC, USA: Data for Impact, University of North Carolina. (Potential interventions to improve the use of long-acting reversible contraceptives and permanent methods in Bangladesh)

Md. Jasim Uddin, Md. Wazed Ali, Hemel Das, Quamrun Nahar, Mizanur Rahman. (2020). Segmented–Client Communication Intervention for Improving the Use of Long–Acting Reversible Contraceptives and Permanent Methods in Rural Bangladesh. Dhaka, Bangladesh, and Chapel Hill, NC, USA: Research for Decision Makers, icddr,b, and Data for Impact, University of North Carolina. (D4I-RDM-segmented-client-study-TR-20-429-D4I-final.pdf)

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Rahman, M., Curtis, S., E–Ijdi, R., Haider, M., Imam, A., Ahmed, A., Bloom, S. (2019). Impact Evaluation of the Mayer Hashi II Project in Bangladesh. Chapel Hill, NC, USA: MEASURE Evaluation, University of North Carolina (Impact Evaluation of the Mayer Hashi II Project in Bangladesh)

This publication was produced with the support of the United States Agency for International Development (USAID) under the terms of the Data for Impact (D4I) associate award 7200AA18LA00008, which is implemented by the Carolina Population Center at the University of North Carolina at Chapel Hill, in partnership with Palladium International, LLC; ICF Macro, Inc.; John Snow, Inc.; and Tulane University. The views expressed in this publication do not necessarily reflect the views of USAID or the United States government. FS-24-658 D4I.