

Policy Brief

**Family Planning among
Adolescents and Young Adults**
Findings from
UDAYA Longitudinal Study in
Uttar Pradesh, India



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Background

Family planning (FP) is an essential investment for the health of adolescents and young women. Unintended pregnancies not only pose a serious health risk for young women, but they also affect the country’s efforts to achieve the Sustainable Development Goals (SDG) on maternal and newborn mortality.

Uttar Pradesh, home to 48.9 million adolescents, continues to face challenges in accelerating progress on health goals. The National Family Health Survey (NFHS) conducted in 2015–16 finds that 21 percent of married women in ages 20–24 years reported being married before the age of 18 years (IIPS and ICF, 2017a). The maternal mortality in the state during 2015–17 was 216 per 100,000 live births (Office of the Registrar General, India, 2019), and child mortality (age <5 years) was 78 per 1000 live births (IIPS and ICF, 2017b). Evidence further suggested that both marriage and reproduction during adolescence were risky for girls. (Santhya et al., 2017).

To study the transition of adolescents to young adulthood, Population Council with support from the Bill & Melinda Gates Foundation and the David & Lucile Packard Foundation recruited a cohort of adolescents aged 10–19 years in 2015–16—at the same time when the SDG on maternal and newborn mortality came into force—for a study called UDAYA (Understanding the lives of adolescents and young adults). Based on the data collected in 2015–16 and the 2018–19 follow-up survey conducted with the same

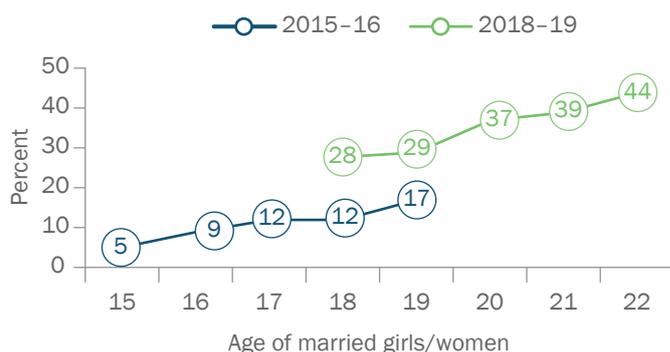


Many married adolescents and young women have experienced pregnancy loss. As high a proportion as 44 percent among 22-year-old young women who were married when they were adolescents reported experience of pregnancy loss in 2018–19.

Key takeaways

- Pregnancy and child loss are high among women married as adolescents. There was a rise in such cases as the women progressed in age and the years of marriage increased.
- There was a high level of unmet need for contraception, even as adolescents grew older. This was also true for women aged 21–22 years and who were married before the age of 19 years, where the unmet need was almost 50 percent. Therefore, the sub-group of adolescents who are married require specific programmatic attention.
- Programs did not hugely improve in-depth knowledge on modern contraceptive methods. Considering the low attention given to adolescents and young married couples until 2018, the various programmatic components had little effect on the acceptance of contraceptive methods.
- Even when the adolescents became young adults (ages 18–22 years) their agency, decision-making, and spousal communication remained low. According to the survey data until 2018–19, this stopped them from achieving better reproductive health (RH) outcomes.
- Across the two rounds of the survey for the same cohort of adolescents and young women, education was a significant predictor of contraceptive use. More importantly, quality education in schools positively affected RH outcomes and contraceptive knowledge. This evidence has not been observed previously.

Figure 1: Proportion of married adolescents’ experience of pregnancy loss in 2015–16 and at follow-up in 2018–19



cohort, this brief aims to shed light on the changing nature of reproductive health risks, contraceptive knowledge and use, and the factors affecting contraceptive use in the state of Uttar Pradesh.

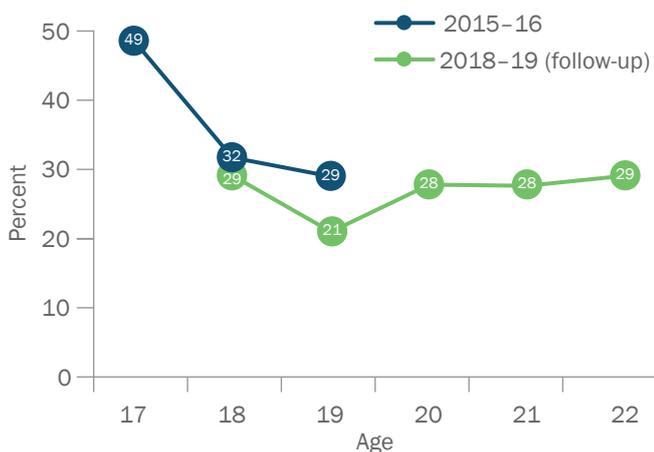
Methods

The uniqueness of the UDAYA study design is the longitudinal tracking of adolescents; thus, offering a better understanding of their reproductive journeys including knowledge and use of contraceptives. Details of the study methodology, including the sampling procedures followed for recruitment and follow-up of UDAYA study participants are available elsewhere (Santhya et al. 2017; www.projectudaya.in).

A sample of 5,656 adolescent girls in the age group of 10–19 years recruited in 2015–16. This group was re-interviewed in 2018–19 and had a follow-up rate of 81 percent. The reasons for loss to follow-up were migration of the participant (7%), refusal to be re-interviewed by the parent or guardian (4%), researchers could not track the household (4%), refusal by the participant (3%) and other reasons (2%). Cases where participants gave inconsistent responses regarding their age and/or education between the two survey rounds (2%) were also excluded during the re-interview phase. Thus, 5,525 girls were retained for analysis, and the effective follow-up rate was 79 percent.

This brief is focused on 3,365 unmarried girls and 1,390 married girls who were 15–19 years old at the time of the 2015–16 survey and who were followed up in 2018–19. Bivariate and multivariate analyses were carried out to examine the changes in reproductive health and family planning access and outcome indicators over time.

Figure 2: Pregnancy loss rate by Age



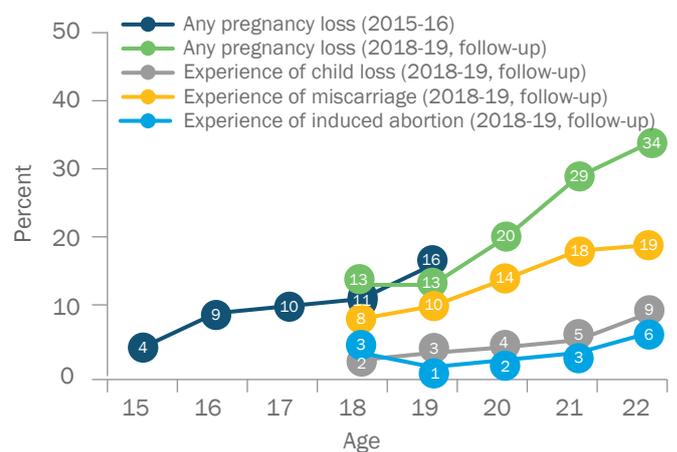
The study protocol was approved by the Institutional Review Board of the Population Council.

The Problem: Pregnancy loss in young women

Data indicate that pregnancy loss in young women is common. Pregnancy loss rate, that is, percentage of pregnancies lost out of total pregnancies among adolescents and young women is shown in Figure 2 and 3. The findings suggested that the proportion of pregnancies resulting in pregnancy loss—mostly miscarriage—were higher among women who were 17 and 18 years old (49% and 32%, respectively). After that age, the proportion of pregnancies lost remains approximately at 28 percent for women aged 19–22 years, indicating the increase in proportion of live births among women of later ages. Data from the two rounds of the survey further suggest that there was marginal change (although not statistically significant) in the proportion of pregnancies lost in 2015–16 compared with 2018–19. This was reflected in the inter-survey period, during which time minimal change in the proportion of pregnancies lost among 18-year-old girls was seen.

The data further suggested that a greater percentage of women married as adolescents experienced pregnancy loss as their age progressed. At the age of 22 years, close to one-third of women in Uttar Pradesh experienced pregnancy loss or child loss. Of these, miscarriage constitutes the major contributor, although the proportion who ever experience miscarriage remains same from the age of 20 years. After 20 years of age, either induced abortions or child deaths becomes more common, which suggests a lack of contraceptive use to space or delay births.

Figure 3: Percent married adolescents and young women who reported loss of pregnancy or child

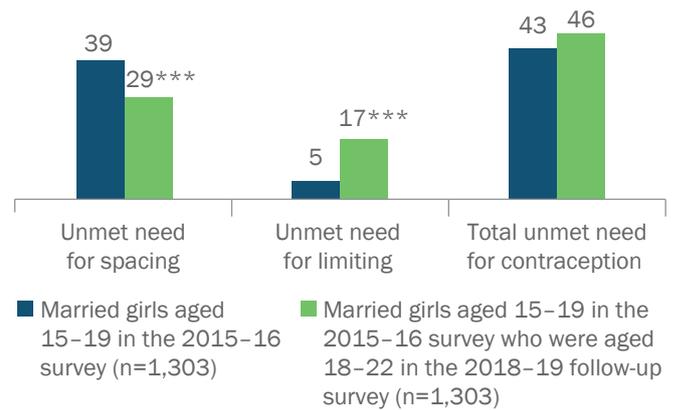


Supporting evidence for the problem: Unmet need for contraception

High unmet need for contraception among adolescents suggests that pregnancy loss may be due to high risk or unintended pregnancies. In fact, there was hardly any change in the unmet need for contraception between the survey rounds. The total unmet need for contraception increased from 43 percent among married girls in ages 15–19 years in 2015–16 to 46 percent among the same cohort in 2018–19 when they were in ages 18–22 years. Although the total unmet need remained the same, in 2015–16, more adolescents experienced unmet need for spacing methods (39%) than unmet need for limiting pregnancies (5%). In 2018–19, the unmet need for spacing methods decreased to 29 percent, whereas unmet need for limiting pregnancies increased significantly to 17 percent (Figure 4). Majority of young women below the age of 22 years and expressing unmet need for limiting pregnancies already had three or more children. The unmet need for spacing methods among zero and first parity was the highest.

About half of the young women in the age group of 18–22 years with one child wanted to delay their next pregnancy, but were not using contraception. Such a high level of unmet need suggested that girls and young women may be managing their unwanted pregnancies through induced abortions or related practices.

Figure 4: Unmet need for contraception



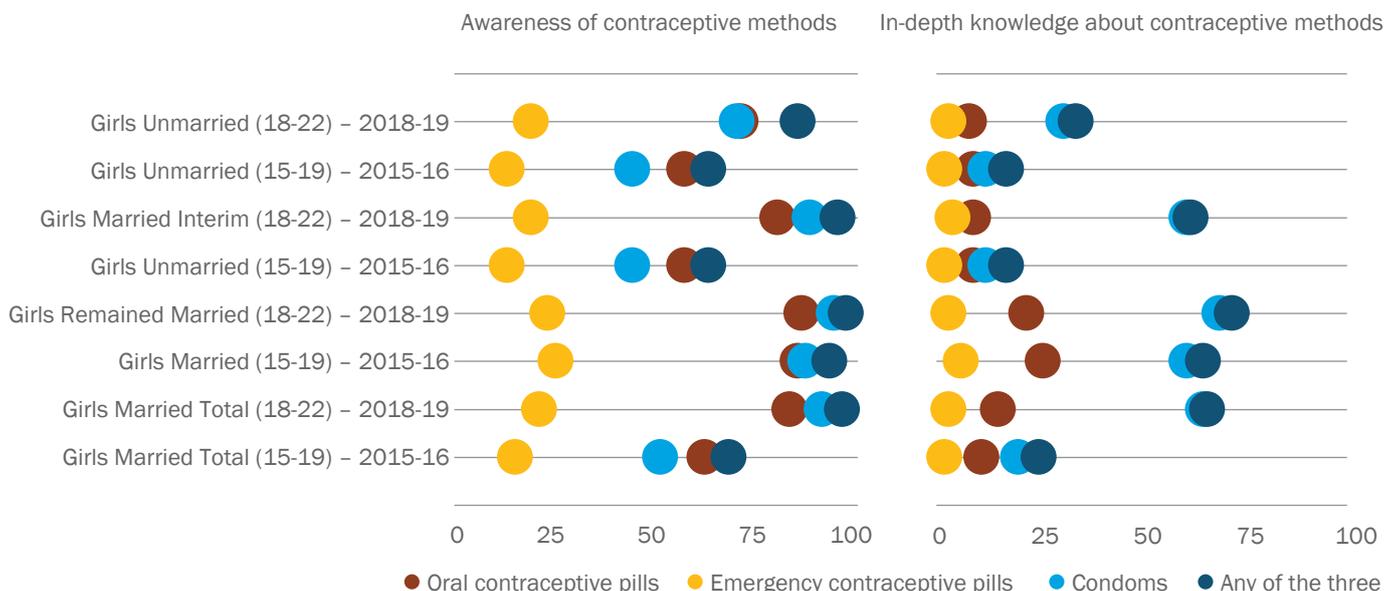
Note: *** $p \leq 0.001$

Possible reasons for unmet need for contraception

1. Low in-depth knowledge about contraceptive methods

While awareness of at least one of the three most commonly used methods of contraception—condoms, oral pills, and emergency contraceptive pills (ECP)—was high, in-depth knowledge about the methods was limited (Figure 5). Among unmarried girls, awareness about any of the three modern contraceptive methods increased from 63 percent in 2015–16 to 85 percent in 2018–19. The awareness about any of the three methods among those who married during

Figure 5: Awareness and in-depth knowledge about contraceptive methods



Note: In-depth knowledge of modern contraceptive refers to those who are aware that oral pills should be used everyday or weekly, emergency contraceptive methods should be used up to 72 hours after sexual intercourse, or one condom can be used for one sexual intercourse.

the inter-survey period was 95 percent. Among married girls in 2015–16, the awareness increased from 93 percent to 97 percent in 2018–19. Despite high awareness about use of condoms and oral pills, awareness about emergency contraceptive pills was low in the two surveys among both married and unmarried adolescents and young women.

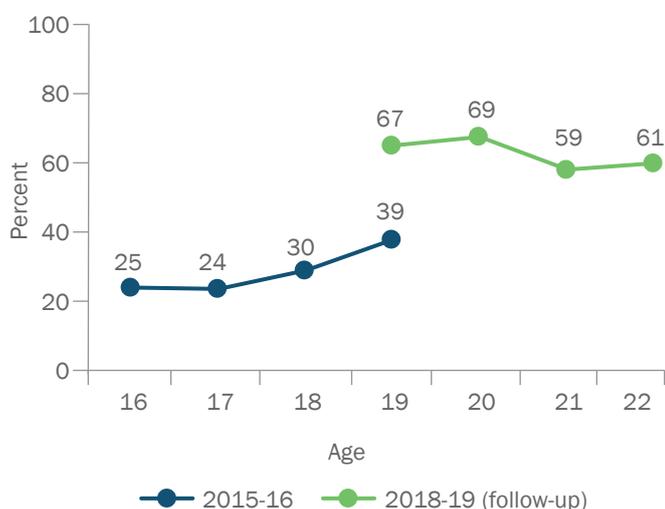
On the other hand, with the exception of knowledge on condoms among married girls, when the girls were asked specific questions to assess their in-depth knowledge about the three methods of contraception, their in-depth knowledge was limited. This could be a cause for concern in promoting use of reversible contraceptive methods.

Table 1: Specific knowledge of modern contraceptive methods by Parity, Married girls, 2018–19

Method/Parity	0	1	2	3
Oral pills	9.9	14.0	22.7	27.4
ECP	3.3	3.3	2.4	5.9
Condoms	59.2	66.1	69.7	71.5
All married girls, 2018–19	526	772	570	144

The specific knowledge of modern contraceptive methods among married girls and women with zero and one child was significantly low as compared with women who had two or more children (Table 1). Only 10 percent of married adolescents and young women with no children, for example,

Figure 6: Percent adolescents who reported having interactions with frontline workers over time

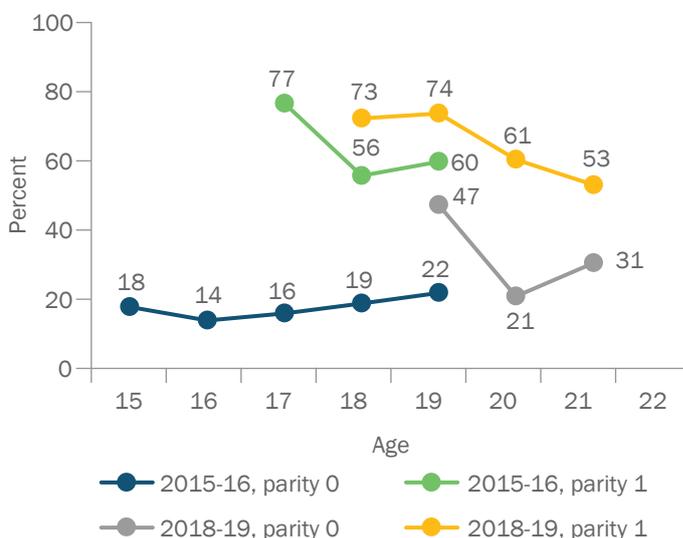


had specific knowledge about oral pills. On the other hand, data also indicated that young women in Uttar Pradesh required specific knowledge about modern contraceptive methods; specifically, method-related information for oral pills and ECPs.

2. Lack of frontline worker interactions with adolescents and young women

Frontline worker outreach to married adolescents before they had their first child was very low. Data further confirmed the assumption that frontline worker contact may be linked to maternal health, specifically institutional deliveries. Therefore, the proportion of women who were in parity 1 reporting that they have had contact with frontline workers was significantly higher than women in parity 0 (Figure 6 and 7). The finding that frontline health workers were less likely to meet married adolescents when they did not have any children is of concern, as the health workers are a significant source of correct information on contraceptive methods and also on getting access to methods. It may also be that the health workers are not trained to reach every type of potential user; the girls and health workers come from the same socio-cultural context with the inbuilt assumption that girls/young women at parity 0 will want a child and is not looking to use contraception. The data in this brief suggest that the assumption is wrong and that there is a huge potential for health workers to reach girls/young women at parity 0, who are potential users of modern methods of contraception.

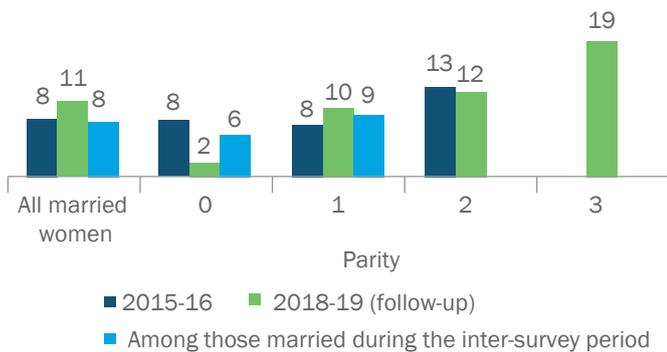
Figure 7: Percent adolescents who reported having interactions with frontline workers by parity over time



3. Low contraceptive use and skewed method-mix during early age

Married adolescents in the age group 15–19 years in 2015–16 showed only moderate change in contraceptive use when they became young adults (age group 18–22 years) in 2018–19. Data suggested that the use of any modern method of contraception increased from 8 percent to 11 percent only. Figure 8 shows that there was no significant change in contraceptive use by parity during the inter-survey period. However, contraceptive use increased with the increase in parity. The data further confirmed that married adolescents with low parity (0 or 1) who used spacing methods in 2015–16 were more likely to use contraception in parity 2+ in 2018–19. In 2015–16, among users of spacing methods at low parity (0 or 1), 42 percent were using at parity 2+ in 2018–19 as compared with eight percent among non-users of spacing methods in the same parity during 2015–16 (data not shown in figure or table).

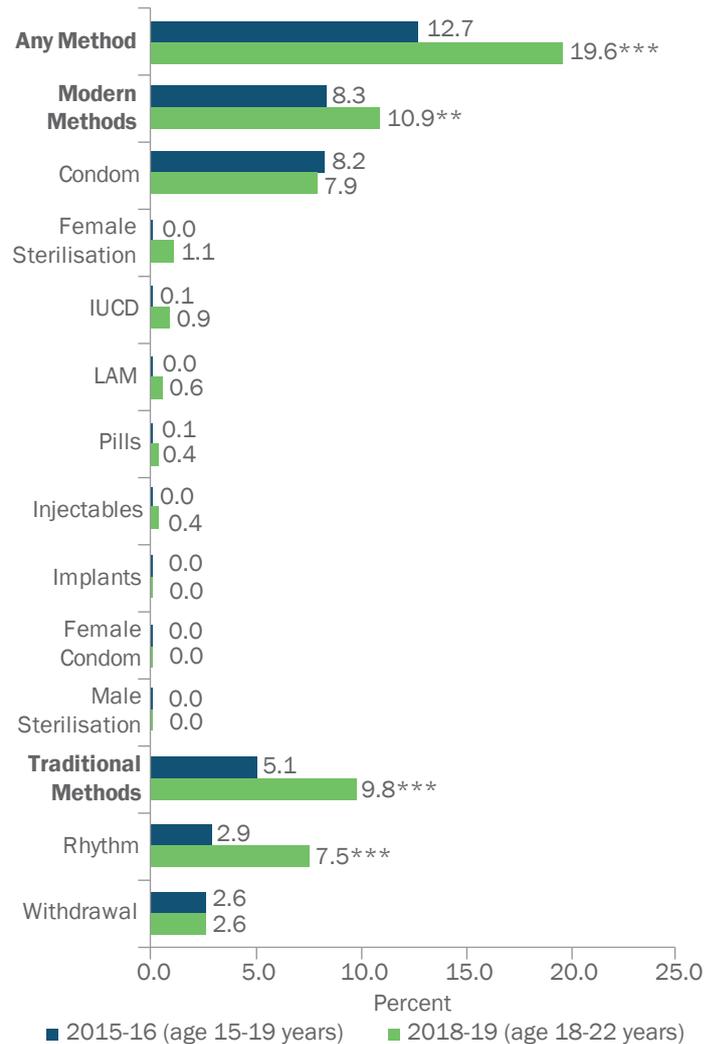
Figure 8: Percent of married women by modern contraceptive use and parity



Among those who reported use of contraception, condoms were the predominant method, indicating a skewed method-mix in the early stages of their reproductive life. Reasons for such skewed method-mix may be explored in the program outreach. An added concern is that nearly 10 percent of married young women in the age group of 18–22 years in 2018–19 used traditional methods (Figure 9).

Results from the multivariate analyses suggest that young women’s contraceptive use in 2018–19 was significantly associated with education (AOR:1.19, 95% CI:1.11–1.28), number of children ever born (AOR:1.66, 95% CI:1.22–2.26), mobility (AOR:1.71, 95% CI:1.02–2.85), and past history of contraceptive methods (AOR:6.37, 95% CI:3.38–12.03). Exposure to social media increased significantly between

Figure 9: Use of contraception by survey round



Note: ** $p \leq 0.01$; *** $p \leq 0.001$

2015–16 and 2018–19 among both the unmarried and the married cohort of adolescents.

4. Lack of women’s agency, decision-making, and exposure to educational programmes

Married adolescents’ decision-making remained low at 22 percent in both the surveys. Although the adolescents were in the 18–22 age group in 2018–19 and had borne children, their decision-making capability remained unchanged. Unmarried girls and married adolescents’ exposure to family life education and other educational programs was also limited. These factors did not show any association with contraceptive use. These findings suggest that programs need to reach girls and young women where they can be most easily accessed, for example, at home. Outreach is therefore critical for increasing women’s agency and decision-making.

5. No specific reason for non-use of contraception among young women

The survey explored reasons for non-use of contraception among married adolescents who wanted to delay having the first child. Among these adolescents, 29 percent did not specify any reason for non-use of contraception (perhaps due to low risk perception of pregnancy or ignorance), and 16 percent reported not using contraception because of no or infrequent sex with husband. These were the two most dominant reasons for non-use of contraception and highlighted the need to create awareness among young girls about their reproductive health rights and access to contraception.

Conclusion

This research study provides some key points for consideration by the Uttar Pradesh state government and the national adolescent program. In particular, findings from this longitudinal study on low specific knowledge about contraceptive methods, low contraceptive use, and high unmet need among adolescents are a cause for concern. These findings argue for better information through innovative mechanisms such as use of social media and provision of services through frontline health workers and other avenues for women and girls who are otherwise in a disadvantaged situation, specifically in rural areas of Uttar Pradesh.

Recommended policy actions

1. Delay age at marriage as reproductive health risks are higher among those married below the age of 18 years.
2. Formalise frontline health worker (FLW) outreach to unmarried and married adolescents with reporting systems under health management information system (HMIS).
3. Bring reforms in schools to provide comprehensive reproductive health information, specifically for girls on agency and decision-making about when and how many children to have.

Recommended program actions

1. Undertake a systematic approach to build competency of frontline health workers for effective communication with unmarried and married adolescents.
2. Share specific information in schools and facilities about contraceptive methods and have extensive talks on delaying first pregnancy through use of modern contraceptive methods.
3. Emphasise on the communications related to young women's contraceptive needs and their rights and choices at facilities, village health and nutrition day (VHND), and other related platforms. Make contraceptive methods available through more ways than usual to enable young people's access.
4. Develop, test and evaluate programs to improve the agency, mobility and decision-making of women among very young age groups (even before marriage).

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Annexure

Key indicators	Unmarried girls aged 15–19 years in 2015–16			Married girls aged 15–19 years in 2015–16			Married in the interim survey period
	2015–16 (15–19 years)	2018–19 (18–22 years)	p-value (paired t-test)	2015–16 (15–19 years)	2018–19 (18–22 years)	p-value (paired t-test)	2018–19
	%	%		%	%		%
Pregnancy related							
Pregnancy loss rate ¹	—	—	—	31.0	28.6	0.231 ²	26.4
Proportion of adolescents who experienced pregnancy loss/child loss	—	—	—	13.3	38.9	0.000	13.6
Contraceptive use related							
Awareness of any three modern contraceptive methods ³	63.3	84.6	0.000	93.3	97.4	0.000	95.0
In-depth knowledge of any three modern contraceptive methods ³	17.0	33.9	0.000	65.3	71.8	0.000	62.1
Current use of any contraceptive method	—	—	—	12.7	19.6	0.000	12.4
Current use of modern contraceptive method	—	—	—	8.3	10.9	0.007	7.9
Unmet need for contraception	—	—	—	43.3	45.8	0.182	45.7
Unmet need for contraception (Parity 0)	—	—	—	37.1	14.2	0.000	32.9
Unmet need for contraception (Parity 1)	—	—	—	55.2	35.9	0.000	59.3
Agency and decision-making							
Mobility ⁴	72.1	70.3	0.952	25.2	46.6	0.000	30.5
Decision-making on all three items ⁵	25.3	24.5	0.306	22.2	21.7	0.961	23.1
Exposure to media and programs							
Own mobile phone	8.6	32.6	0.000	33.7	47.2	0.000	59.1
Use of social media	5.9	29.3	0.000	2.9	15.2	0.000	23.8
Family life education	17.5	22.0	0.000	11.6	12.6	0.000	13.3
Had interacted with FLW	8.0	22.2	0.000	31.6	60.9	0.000	46.3
Exposed to school health program	10.9	5.1	0.000	1.5	0.3	0.000	0.5
Members of groups	4.9	1.9	0.000	4.8	3.5	0.061	1.3
Ever participated in vocational training	12.3	34.4	0.000	16.0	25.4	0.000	30.7
Socio-demographic characteristics							
Percent completed 8 th std	76.7	80.9	0.000	58.9	59.6	0.000	70.2
Percent completed 10 th std	48.2	65.0	0.000	31.0	32.2	0.000	38.8
Awareness of legal age at marriage for girls	57.3	62.0	0.000	52.6	60.5	0.000	60.4

Notes: ¹Percentages of pregnancies lost out of total pregnancies; ²Independent sample t-test; ³Oral pills, emergency contraception, and condom; ⁴Allowed to a) visit alone any shop/market/friend/relative inside the village/ward, b) visit alone any shop/market/friend/relative outside the village/ward, and c) attend any program in the village/ward; ⁵Respondents take decisions alone or jointly on all three of the following: a) till which standard respondent will study, b) major household purchases, and c) whether respondent should work or stay at home.

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