



## KNOWLEDGE, ATTITUDE AND PRACTICE OF CONTRACEPTION AMONG ADOLESCENTS AND YOUNG ADULT WOMEN ATTENDING A TERTIARY CARE HOSPITAL OF UTTAR PRADESH, INDIA

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**ABSTRACT** **Background:** Adolescence and early adulthood represent critical stages for reproductive health education. In India, cultural stigmas and lack of access to sexual health resources result in suboptimal contraceptive knowledge, attitudes, and practices. This study aimed to assess these factors among adolescent and young adult women. **Methods:** A descriptive, cross-sectional study was conducted in secondary and tertiary care facilities in Prayagraj, Uttar Pradesh, with 230 participants aged 15–20 years. Data were collected through semi-structured interviews and analysed using SPSS version 22. **Results:** Among participants, 41.3% reported sexual activity. Contraceptive knowledge was widespread (81.3%), but attitudes varied significantly ( $p=0.022$ ), with 33.3% of adolescents (15–18 years) expressing negative attitudes. Among sexually active participants ( $n=95$ ), 76.8% used contraception, with condoms being the most common method (67.4%). Emergency contraceptive pills were reported exclusively by 21.1% of younger participants, while oral contraceptives were used only by older participants. Notably, 23.2% of sexually active participants reported no contraceptive use. **Conclusion:** While awareness of contraception is high, gaps persist in attitudes and practices, particularly among younger adolescents who exhibit reliance on emergency contraception. Comprehensive sexual education programs, stigma reduction, and improved access to contraceptive services are critical to addressing these gaps.

**KEYWORDS :** Adolescent health, contraception knowledge, reproductive health, sexual practices

### INTRODUCTION

Adolescence and young adulthood are critical phases of life marked by physical, emotional, and psychological changes. During this period, individuals begin to form attitudes and practices that significantly influence their future health and well-being. In India, where the population of adolescents and young adults constitutes a significant proportion of the total population, reproductive health remains a major area of concern. The World Health Organization (WHO) emphasizes that addressing the sexual and reproductive health needs of this group is essential to achieving sustainable development goals.

India faces considerable challenges in terms of adolescent reproductive health, as early sexual debut, lack of adequate information, and cultural taboos often result in poor contraceptive awareness and utilization. According to the National Family Health Survey-5 (NFHS-5), a substantial proportion of young women in the country have limited knowledge about contraception, leading to a high prevalence of unintended pregnancies, unsafe abortions, and maternal mortality. Adolescent pregnancies account for a significant proportion of maternal deaths and adverse neonatal outcomes, including preterm births and low birth weight, which contribute to the burden on India's healthcare system. Addressing this issue is essential for improving maternal and child health outcomes while empowering women to make informed reproductive choices.

Despite advances in healthcare infrastructure, contraceptive awareness and utilization among Indian women, particularly in the 18–20-year age group, remain suboptimal. Cultural stigmas, lack of open communication about sexual health, and inadequate access to healthcare services further exacerbate the issue. In many cases, young women lack autonomy in reproductive decision-making, influenced by patriarchal norms and limited educational opportunities. These barriers not only prevent effective contraceptive use but also discourage open discussions about family planning and reproductive health within families and communities. Although the Indian government has implemented programs such as the Rashtriya Kishor Swasthya Karyakram (RKSK) and Adolescent Reproductive and Sexual Health (ARSH) initiatives, challenges persist in reaching this

demographic effectively. A deeper understanding of their contraceptive knowledge, attitudes, and practices can bridge existing gaps and improve the delivery of reproductive health services tailored to their needs. In this context, the present study was conducted to evaluate the knowledge, attitude, and practice regarding contraception among Indian adolescent and young adult women aged 18–20 years.

### MATERIALS AND METHODS

**Type And Design Of Study:** The present study was a descriptive observational study with a cross-sectional design conducted in the department of Obstetrics and Gynecology, Swaroop Rani Nehru Hospital, Moti Lal Nehru Medical College.

**Study Population And Study Duration:** The study population consisted of adolescent girls aged 15–20 years. The study was conducted for a period of 1 year.

**Sample size:** The sample size for the present study was calculated based on the Cochran's formula. Based on the findings reported by Shukla et al.,  $p$  was considered to be 9%. At a  $d$  of 4%, and 95% confidence level, the final calculated sample size for the present study was 217, which was rounded off to 230.

**Inclusion And Exclusion Criteria:** The inclusion criteria for the present study were adolescent women aged 15–18 years of age and young adults aged 19–20 years. The exclusion criteria for the present study were the non-provision of written informed consent by participants or their caregivers (for adolescents).

**Study methodology:** After taking approval from the institutional ethical committee, patient enrolment was done after taking informed consent from the patient (19–20yr) and guardian (15–18yr). All of the participants were informed in their own language about the study and their rights for participation before providing data for the researcher-administered questionnaire. A detailed history and examination was performed for each participant. After detailed history and examination, the participants were subjected to a set of questions for assessment of sexual and reproductive health. These included sociodemographic

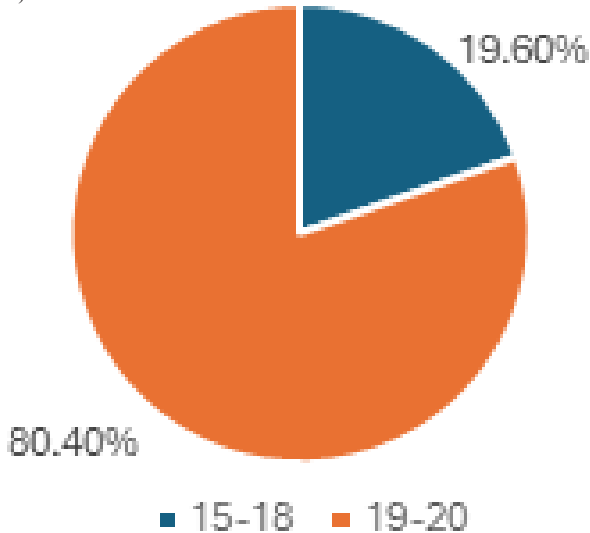
characteristics, relationship characteristics, reproductive and contraceptive behaviors.

#### Statistical Analysis:

The collected data were checked for consistency, completeness and entered into Microsoft Excel (MS-EXCEL, Microsoft Corp.) data sheet. Analysed with the statistical program Statistical Package for the Social Sciences (IBM SPSS, version 22).

#### RESULTS

The study included 230 participants, divided into two age groups: 45 (19.6%) aged 15–18 years and 185 (80.4%) aged 19–20 years. (Figure 1)



**Figure 1.** Age distribution of the participants (n=230)

A majority of the participants (80%) were from rural areas, with 68.9% of the younger group and 82.7% of the older group residing in rural regions. Socioeconomic status, assessed using the BG Prasad Scale, showed that 33.5% of participants belonged to the "upper lower" class, followed by 27% in the "middle" class. Only 9.1% were from the "upper" class, with the younger group showing a slightly higher percentage in the "lower" class (24.4%) compared to the older group (18.4%). Educational attainment differed notably between the two age groups; among participants aged 15–18 years, 44.4% had completed only primary education, while another 44.4% had reached secondary education. In contrast, a significant proportion of participants aged 19–20 years (44.9%) had completed education up to the intermediate level. Across both groups, 9.1% of participants were illiterate. (Table 1)

**Table 1. Sociodemographic Characteristics Of The Participants (n=230)**

| Parameters                               | 15-18 years<br>n= 45 (19.6%) | 19-20 years<br>n = 185 (80.4%) | Total<br>N= 230 |
|------------------------------------------|------------------------------|--------------------------------|-----------------|
| Residence                                |                              |                                |                 |
| Urban                                    | 14 (31.1%)                   | 32 (17.3%)                     | 46 (20%)        |
| Rural                                    | 31 (68.9%)                   | 153 (82.7%)                    | 184 (80%)       |
| Socioeconomic status (B.G. Prasad Scale) |                              |                                |                 |
| Upper                                    | 2 (4.4%)                     | 19 (10.3%)                     | 21 (9.1%)       |
| Upper middle                             | 3 (6.7%)                     | 22 (11.9%)                     | 25 (10.9%)      |
| Middle                                   | 13 (28.9%)                   | 49 (26.5%)                     | 62 (27%)        |
| Upper lower                              | 16 (35.6%)                   | 61 (44%)                       | 77 (33.5%)      |
| Lower                                    | 11 (24.4%)                   | 34 (18.4%)                     | 45 (19.5%)      |
| Education                                |                              |                                |                 |
| Illiterate                               | 5 (11.2%)                    | 16 (8.6%)                      | 21 (9.1%)       |
| Primary                                  | 20 (44.4%)                   | 12 (6.5%)                      | 32 (13.9%)      |
| Secondary                                | 20 (44.4%)                   | 74 (40%)                       | 94 (40.9%)      |
| Intermediate                             | 0 (0%)                       | 83 (44.9%)                     | 83 (36.1%)      |

Sexual activity was reported by 41.3% of the participants, with no significant difference between the two age groups ( $p=0.889$ ). Among those aged 15–18 years, 42.2% had experienced sexual intercourse compared to 41.1% of those aged 19–20 years. (Table 2)

**Table 2. Sexual Activity Among The Participants (n=230)**

| Ever had sexual intercourse | 15-18 years<br>n= 45 | 19-20 years<br>n= 185 | Total<br>N= 230 | p-value |
|-----------------------------|----------------------|-----------------------|-----------------|---------|
| No                          | 26 (57.8%)           | 109 (58.9%)           | 135 (58.7%)     | 0.889   |
| Yes                         | 19 (42.2%)           | 76 (41.1%)            | 95 (41.3%)      |         |

\*Statistically significant

Knowledge of contraception was relatively widespread, with 81.3% of participants reporting awareness. There was no significant difference between the two groups, with 84.4% of the younger participants and 80.5% of the older participants demonstrating knowledge ( $p=0.547$ ). Attitudes toward contraception, however, varied significantly ( $p=0.022$ ). A positive attitude was noted in 82.2% of the older group compared to 66.7% in the younger group. Conversely, 33.3% of the younger participants exhibited a negative attitude, compared to 17.8% in the older group. Regarding future use of contraception, 63% of participants expressed willingness to use protection in their next sexual encounter, while 32.2% were unsure, and 4.8% indicated they would not use contraception. These responses did not differ significantly between the two groups ( $p=0.179$ ). (Table 3)

**Table 3. Knowledge And Attitude Regarding Contraception Among The Participants (n=230)**

| Parameters                                                                     | 15-18 years<br>n= 45 | 19-20 years<br>n= 185 | Total<br>N= 230 | p-value |
|--------------------------------------------------------------------------------|----------------------|-----------------------|-----------------|---------|
| Knowledge regarding protection/ contraception                                  |                      |                       |                 |         |
| Present                                                                        | 38 (84.4%)           | 149 (80.5%)           | 187 (81.3%)     | 0.547   |
| Absent                                                                         | 7 (15.6%)            | 36 (19.5%)            | 43 (18.7%)      |         |
| Attitude towards contraception                                                 |                      |                       |                 |         |
| Positive                                                                       | 30 (66.7%)           | 152 (82.2%)           | 182 (79.1%)     | 0.022*  |
| Negative                                                                       | 15 (33.3%)           | 33 (17.8%)            | 48 (20.9%)      |         |
| Will use protection/ contraception in their next episode of sexual intercourse |                      |                       |                 |         |
| No                                                                             | 0 (0%)               | 11 (5.9%)             | 11 (4.8%)       | 0.179   |
| Maybe                                                                          | 13 (28.9%)           | 61 (33%)              | 74 (32.2%)      |         |
| Yes                                                                            | 32 (71.1%)           | 113 (61.1%)           | 145 (63%)       |         |

\*Statistically significant

Among the 95 participants who reported sexual activity, 76.8% reported using contraception, with no significant difference between the two groups ( $p=0.395$ ). In the younger group (15–18 years), 84.2% reported contraceptive use, while the rate was slightly lower at 75% in the older group. The type of contraception used differed significantly ( $p<0.001$ ). Condoms were the most commonly reported method, used by 67.4% of participants. In the younger group, 63.2% used condoms, while the older group reported a slightly higher rate of 68.4%. Emergency contraceptive pills were used exclusively by 21.1% of participants in the younger group, whereas none of the older participants reported using them. Combined oral contraceptive pills were used only by the older group (6.6%). Notably, 15.8% of the younger group and 25% of the older group reported not using any form of contraception. (Table 4)

**Table 4. Practice Regarding Contraception Among The Participants Ever Having Sexual Intercourse (n=95)**

| Parameters                       | 15-18 years<br>n= 19 | 19-20 years<br>n= 76 | Total<br>N= 95 | p-value |
|----------------------------------|----------------------|----------------------|----------------|---------|
| Used contraception               |                      |                      |                |         |
| No                               | 3 (15.8%)            | 19 (25%)             | 22 (23.2%)     | 0.395   |
| Yes                              | 16 (84.2%)           | 57 (75%)             | 73 (26.8%)     |         |
| Type of protection used          |                      |                      |                |         |
| Nothing                          | 3 (15.8%)            | 19 (25%)             | 22 (23.2%)     | <0.001* |
| Emergency contraceptive pill     | 4 (21.1%)            | 0 (0%)               | 4 (4.2%)       |         |
| Combined oral contraceptive pill | 0 (0%)               | 5 (6.6%)             | 5 (5.3%)       |         |
| Condom                           | 12 (63.2%)           | 52 (68.4%)           | 64 (67.4%)     |         |

\*Statistically significant

#### DISCUSSION

The study revealed that 41.3% of participants had experienced sexual activity, consistent across both age groups. The study also documented that knowledge of contraception was relatively widespread, with 81.3% of participants being aware of contraception methods. This finding aligns with the national and global emphasis on sexual

education, as highlighted by Collins et al., who emphasized the role of media and school-based programs in improving adolescent knowledge about sexual risks. However, despite widespread knowledge, attitudes towards contraception varied significantly, with 33.3% of younger participants displaying negative attitudes. This finding reflects societal taboos and stigma surrounding contraception use among younger girls, as also discussed by Ramteke et al., who identified similar trends in rural India, where cultural norms and lack of sexual education perpetuate negative perceptions about contraception.

Among sexually active participants, 76.8% reported using contraception, with condoms being the most common method (67.4%). However, emergency contraceptive pill (ECP) use was significantly higher in the younger group (21.1%). This highlights a concerning reliance on post-coital methods among younger adolescents, potentially due to unpreparedness or lack of sustained contraceptive planning. Rosenthal et al. similarly noted impulsive decision-making in younger adolescents, driven by curiosity or peer influence.<sup>9</sup>

The study further observed that 23.2% of sexually active participants did not use any form of contraception, reflecting a gap between knowledge and practice. Sandfort et al. highlighted the adverse outcomes of unprotected sexual activity, such as increased risk of sexually transmitted infections (STIs) and unintended pregnancies, especially among adolescents initiating sexual activity early. These risks are further exacerbated by societal stigma, as identified by Ramteke et al., where shame associated with discussing contraception deters adolescents from accessing preventive measures.<sup>11</sup>

In terms of age-specific contraceptive practices, condom use was higher among older participants (68.4%), while the younger group displayed greater reliance on emergency contraception. The absence of combined oral contraceptive pill (COCP) use in the younger group aligns with findings by Collins et al., where adolescents exposed to sexual content lacked a comprehensive understanding of safe contraceptive options.<sup>10</sup> The preference for condoms among participants aligns with findings from previous studies, which highlight their accessibility and perceived safety compared to other methods.

## CONCLUSION

The study revealed that although awareness of contraception was widespread, gaps were evident in attitudes and practices, with younger participants showing a higher reliance on emergency contraceptive pills and some participants not using any contraception. The findings emphasize the importance of comprehensive sexual education programs tailored to adolescents, addressing both knowledge and attitudes toward contraception. Additionally, efforts to reduce societal stigma and improve access to reproductive health services, particularly in rural areas, are critical.

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