

Contraceptive Practices and Associated Factors among Multiparous Rural Women: A Cross-Sectional Study

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Abstract

Background: Contraception is vital for reproductive health, allowing women to control fertility and attain preferred birth intervals. Despite Bangladesh's significant socioeconomic advancement, rising growth in population continues to be an ongoing challenge. This study aimed assess contraceptive knowledge, practices, and associated factors among multiparous women in rural Bangladesh regarding birth spacing.

Methods: A cross-sectional study was carried out from August to September 2024 through five Upazila Health Complexes (UHCs). A total of 100 multiparous women aged 16 to 45 years were selected through purposive sampling. Data were collected using semi-structured questionnaire through face-to-face interviews and analyzed using SPSS version 22.0. Results were presented as frequencies, percentages, and descriptive statistics.

Results: Contraceptive usage was reported by 63% of participants, with oral contraceptive pills (31%) being the most commonly used method. The predominant age group was 26–35 years, comprising 58%, while 61% possessed primary education. Health workers constituted the primary source of contraceptive information, accounting for 65%. Discontinuation was noted by 43% of users, predominantly because of side effects (47%). A majority of individuals (96%) acquired contraception via community clinics, whereas 44% reported experiencing complications.

Conclusion: Although contraceptive usage in rural Bangladesh is quite high, discontinuation related to adverse effects persists as a significant issue. Enhancing community-based services, improving counselling, and rectifying misconceptions can promote sustained contraceptive utilization.

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Introduction

Contraception, defined as the intentional prevention of conception through artificial or natural means, plays a pivotal role in reproductive health management, allowing women to make informed decisions about if and when to have children.¹ It is also a cornerstone of family planning programs, which contribute to reducing maternal mortality, preventing unintended pregnancies, and supporting economic development.^{2,3} In low- and middle-income countries (LMICs), access to modern contraceptive methods has been linked to improved maternal and child health outcomes and a reduction in poverty levels.⁴

Bangladesh has been internationally recognized for its progress in family planning, with the contraceptive prevalence rate increasing significantly over the past four decades.⁵ Despite this success, disparities remain, particularly between urban and rural populations, where social norms, limited health literacy, and geographic barriers hinder equitable access.⁶ Multiparous women—those who have delivered more than one child—represent a key demographic for contraceptive interventions. They are more likely to experience pregnancy-related complications such as postpartum hemorrhage, anemia, and hypertension, especially when interpregnancy intervals are short.^{7,8} Long-term contraceptive methods (LTCMs), including intrauterine devices (IUDs) and implants, have been shown to be cost-effective and highly efficacious in preventing unintended pregnancies among this group.^{9,10} However, uptake of these methods in rural Bangladesh remains low, often due to myths, fear of side effects, and lack of counselling.¹¹

This study was conducted to examine the contraceptive practices of multiparous women in rural Bangladesh, identify their sources of contraceptive knowledge, and explore the

factors influencing uptake and discontinuation. Such findings can inform targeted interventions to improve reproductive health outcomes and align with Sustainable Development Goal (SDG) 3.7, which calls for universal access to sexual and reproductive health services.¹²

Methods

A cross-sectional study was conducted between August and September 2024 in five UHCs: Louhojong (Munshiganj), Moksudpur (Gopalganj), Mymensingh Sadar, Sreepur (Gazipur), and Pathorghata (Barguna).

The study included 100 multiparous women aged 16–45 years who were using any form of contraception within the past year.

Purposive sampling was used to select participants attending the outpatient departments of the selected UHCs.

Data were obtained through a semi-structured questionnaire by face-to-face interviews which is conducted in Bengali by trained interviewers. The questionnaire included socio-demographic variables, contraceptive use patterns, sources of information, discontinuation reasons, and complications.

This study was conducted in accordance with the ethical principles outlined in the Declaration of Helsinki, 1964 revised and amended in October, 2024. Participation was voluntary, and informed written consent was obtained from all respondents in their native language. The consent process included a clear explanation of study objectives, procedures, potential risks and benefits, and the right to withdraw at any stage without penalty. Confidentiality and anonymity of all participants were strictly maintained, with data stored securely and accessible only to the research team.

Data were validated, coded, and analyzed using SPSS version 22.0 (IBM Corp.,

Armonk, NY, USA). Qualitative variables were expressed as frequencies and percentages; quantitative variables were summarized as means $\pm$ standard deviations.

Results

This cross-sectional study was carried out on 100 multiparous women aging between 16 years to 45 years receiving any form of contraceptives within 1 year attending outpatient department of selected 5 Upazilla Health Complexes. Among the multiparous women, majority (58%) were between the age range of 26-35 years. (Table I). Most of the respondent multiparous women had primary level of education (61%). Uneducated/illiterate were 17%. Few of the respondents had secondary (11%) and higher secondary (9%) level of education. Only 2% of the respondents completed graduation (Figure 1). More than half of the respondents (63%) commonly use various methods of contraceptives (Figure 2). Near one third (31%) respondents of the contraceptive user took OCP. Both condom user and injectable contraceptive receiver were 17%. About 10% of respondents took implants. IUD were taken by 8% of the respondents. Female sterilization and male sterilization were the methods of contraception in 7% and 4% respondents respectively. Another 6% of respondents calculated safe period for contraception (Table II). Majority (65%) of the respondents gained first knowledge about contraception from health workers of various levels of health sectors. From friends and family, 22% of the respondents came to know about

contraceptive methods. Mass media helped to know about contraception, about 7% of the respondents. Only 6% of the respondents knew contraceptives by other ways like - leaflets, other institutions etc (Table III). Nearly half (43%) of the respondents discontinued contraceptive methods sooner or later in their lifetime. But 57% of the respondents never stopped using contraceptives (Figure III). Among the 100 respondents who discontinued contraceptives in their lifetime, most discontinued due to side effects (47%). Due to planning for pregnancy, 19% of the respondents discontinued. Disagreements with husbands (15%) and health related problems (13%) were also responsible for contraceptive discontinuation. Only 6% respondents had causes other than the above mentioned (Table IV). A vast majority (96%) of individuals reported obtaining contraceptives from the clinic. In contrast, only 4% indicated that they did not receive contraceptives from the community clinic. This highlights the high accessibility and availability of contraceptives provided by the clinic to its community (Figure 4).

Table I: Age distribution of the respondents

Age of the Respondents (Years)	Percentage
16-25	15%
26-35	58%
36-45	27%

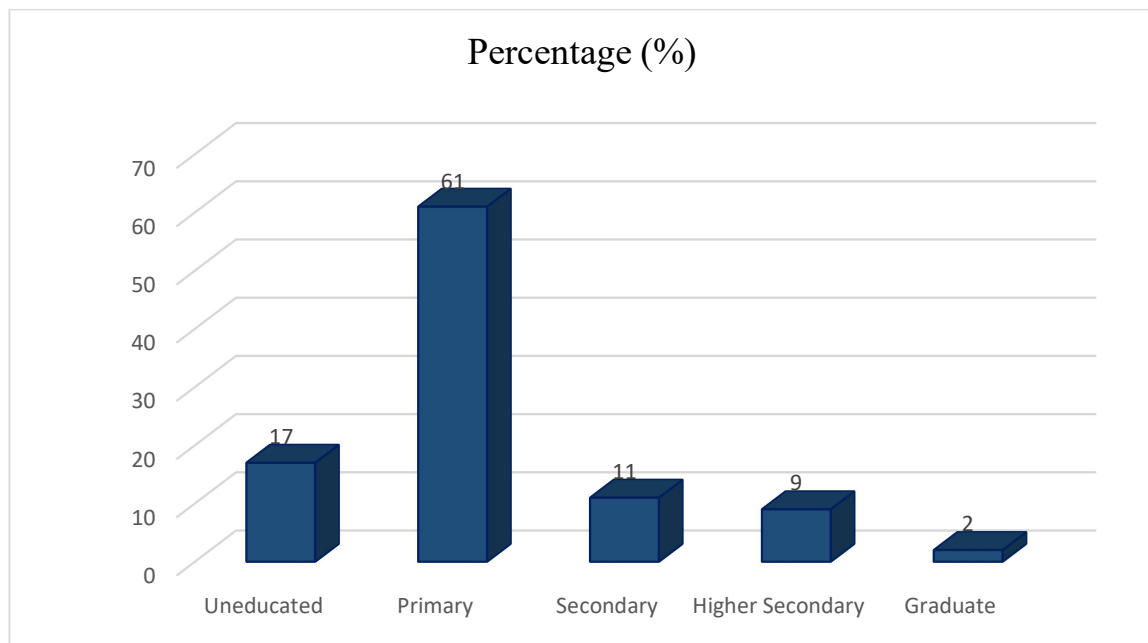


Figure 1, Educational level of the respondents

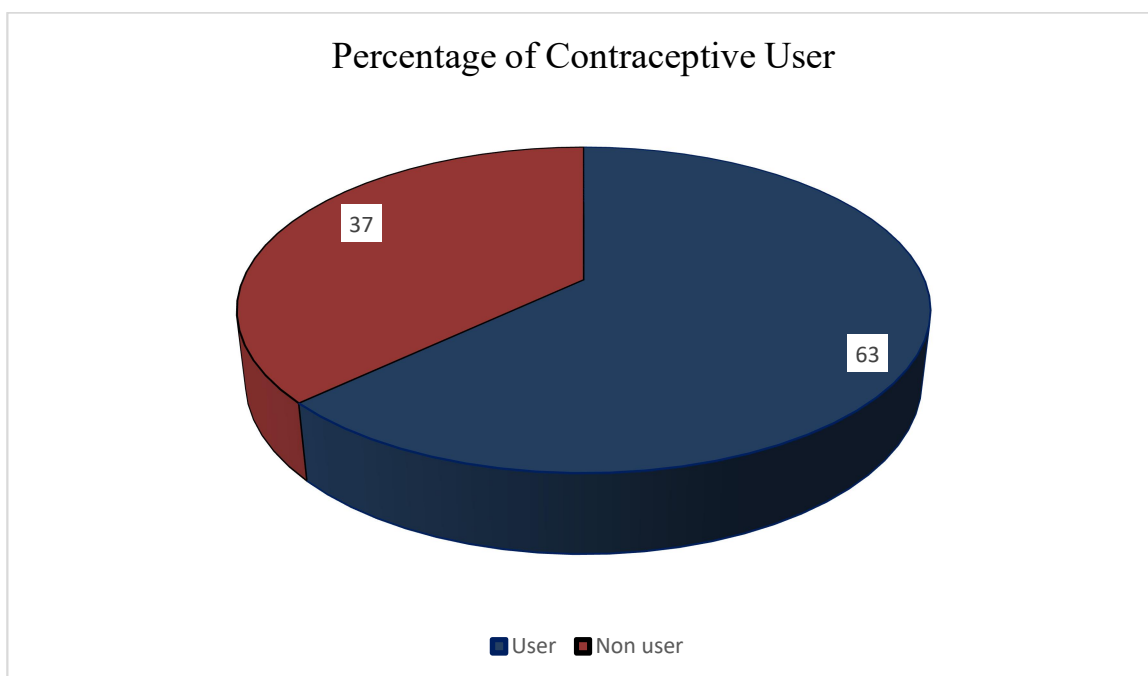


Figure 2. Percentage of contraceptive use among the respondents

Table II: Methods of contraceptives used by multiparous women

Methods of contraception	Percentage (%)
OCP	31
Condom	17
Injectable	17
Implant	10
IUD	8
Female sterilization	7
Male Sterilization	4
Safe period	6

Table III: First knowledge about contraceptives

First Knowledge about contraceptives	Percentages (%)
Health worker	65
Friends and family	22
Mass media	7
Others	6

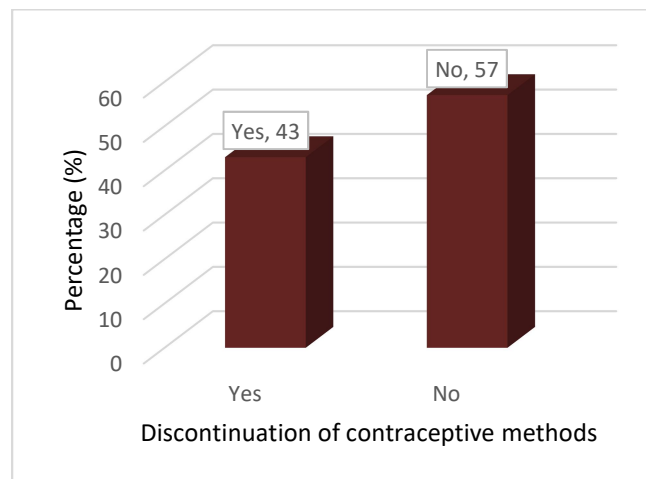


Figure 3. Discontinuation of contraceptive methods

Table IV: Causes of discontinuation of contraceptives

Causes	Percentage (%)
Side effects	47
Planning for pregnancy	19
Disagreements with husbands	15
Health related problems	13
Others	6

Supply of contraceptives by community clinic

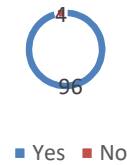


Figure 4. Supply of contraceptives by community clinics

Discussion

Contraceptive practices among multiparous women of reproductive age in rural Bangladesh reflect a complex interplay of cultural, educational, and economic factors. Despite a growing awareness of family planning benefits, many women still face significant barriers to effective contraceptive use, including limited access to healthcare services, traditional beliefs, and lack of comprehensive education on family planning options.

This study demonstrates a moderately high (63%) contraceptive prevalence among multiparous rural women in Bangladesh, aligning with recent national statistics.⁶ The predominance of oral contraceptive pills mirrors national trends, as OCPs remain the most widely promoted and accessible method in the country.^{3,9} However, the high discontinuation rate, largely due to side effects, reflects a persistent challenge seen in other LMIC contexts.^{13,14}

Among multiparous women, most (58%) were aged 26–35 years, and 61% had primary-level education. Similar patterns were observed by Nahar et al. (2021), where 73.9% of respondents were in their mid-thirties and 49% had primary education.³

Regarding contraceptive type, oral contraceptive pills (OCPs) were used by 31%

of participants, condoms and injectable contraceptives each by 17%, implants by 10%, intrauterine devices (IUDs) by 8%, female sterilization by 7%, male sterilization by 4%, and the safe period method by 6%. In contrast, a prior Bangladeshi study reported higher OCP use (52.7%) and differing rates for other methods.³ While condom and injectable use rates were similar between studies, discrepancies in other methods may be due to geographical or service-delivery differences. A meta-analysis by Hossain et al. (2024) found OCP use among one-third of reproductive-age women, with female sterilization at 8.09% and male sterilization at 2.34%,¹² aligning closely with the present findings.

Health workers emerged as the main source of contraceptive information, underscoring their pivotal role in shaping reproductive health decisions. This finding supports prior research suggesting that consistent, high-quality counselling can significantly influence contraceptive uptake and continuation.¹⁵ However, inadequate training or time constraints among health providers can lead to insufficient explanation of side effects and method switching.¹⁶

The strong reliance on community clinics for contraceptive supplies highlights the importance of government investment in primary healthcare infrastructure. Nevertheless, geographic inaccessibility, stock-outs, and cultural barriers still limit equitable distribution in some remote areas.¹⁷ To improve outcomes, interventions must integrate demand-generation strategies, such as community engagement and peer education, alongside supply-chain strengthening.

Globally, evidence shows that multi-level strategies - including expanding method mix, enhancing male involvement, and using mass

media for health promotion—are associated with higher contraceptive prevalence and lower discontinuation rates.^{18,19} Adapting these approaches to rural Bangladeshi settings could accelerate progress towards national family planning targets and SDG commitments.

Conclusion

Contraceptive use among rural multiparous women in Bangladesh is relatively high, but discontinuation remains a significant barrier. Improving counselling quality, addressing side effects proactively, and expanding access to long-term methods are critical to sustaining use. Such measures will be essential for achieving universal access to reproductive health services as outlined in SDG 3.7. Strengthening Community-Based Services, Enhanced Awareness Campaigns, Improved Side Effect Management, Public–Private Collaboration and Inclusive Research can capture a more comprehensive understanding of contraceptive use patterns.

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