



# Assessment of Contraceptive Utilization Among Undergraduate Students in Kailali District, Nepal

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## Abstract

This study titled "Assessment of Contraceptive Utilization Among Undergraduate Students in Kailali District, Nepal" explores the prevalence of contraceptive utilization, awareness levels, and associated complications among bachelor's in education first-year students in selected educational institutions. The research, conducted through a descriptive cross-sectional comparative study design, involved 570 respondents. Findings revealed that 43% of respondents reported using contraceptive methods, indicating a significant engagement in family planning practices among undergraduate students. Furthermore, 97% of participants reported awareness of contraceptive methods, emphasizing the effectiveness of educational initiatives in disseminating reproductive health information. Among contraceptive users, 7% opted for Long-Acting Reversible Contraceptives (LARC), while 36% preferred short-term methods. However, challenges associated with contraceptive utilization, such as unwanted pregnancies, unsafe abortions, and sterility, were identified. Qualitative findings from the study highlight additional complications faced by students, including an increase in post-abortion care cases and instances of death related to contraceptive use. The study underscores the importance of comprehensive reproductive health education and access to a variety of contraceptive options to meet the diverse needs of young adults. Addressing these challenges requires a multifaceted approach, including policy interventions, healthcare system strengthening, and continued research to inform evidence-based practices in reproductive health promotion among undergraduate populations in Nepal.

**Keywords:** Assessment; Contraceptives; CPR; Nepal; Students.

## Introduction

Even while students in higher education institutions have good awareness and knowledge of routine modern contraceptives and emergency contraception, the frequency of unintended pregnancies among them continues to rise annually on a global scale (Maja & Ehlers, 2004; World Health Organization, 2013). Global health initiatives are challenged by the lack of a direct positive association between the use of contraceptives and universal awareness, knowledge, and understanding of their benefits, despite the enormous benefits of contraception for students in higher education institutions (Ersek et al., 2011). Numerous interlinked variables, encompassing from personal to institutional setbacks, are linked to the low use of contraception in higher institutions (Hubacher et al., 2008). This ultimately leads to high rates of unintended pregnancies, which are thought to have been a factor in between 8 and 30 million pregnancies globally each year (Adhikari, 2009). Additionally, estimates from around the world indicate that 210 million pregnancies take place each year. Of the 210 pregnancies, 75 million (or roughly 36%) are unintended or unwanted pregnancies (Singh et al., 2010). In higher institutions across the world, students between the ages of 18 and 24 report the highest incidence of unintended pregnancies (Esere, 2008; Trieu et al., 2011), a circumstance that presents several difficulties for the participating nations, academic institutions, and people globally.

Research conducted in Africa has generally shown that students in higher education had poor levels of awareness and understanding about the use of effective contraceptives (Gbagbo & Nkrumah, 2019). Peer pressure, age, culture, ethnicity, religion, lack of partner support, and inadequate access to contraceptive services are just a few of the characteristics that have been linked to the non-use of contraceptives in higher education (Golbasi et al., 2012). While there is no data on teenage contraceptive use among single adolescents in Nepal, the use of contraceptives among married adolescents is low and has been almost unchanged since 2006. Nepal is dedicated to enhancing the rights of adolescents to sexual and reproductive health. One of the most important strategies being used to prevent HIV and other STDs, prevent unplanned pregnancies, and prevent unsafe abortions afterward is to encourage the use of modern contraceptives, particularly among married teenagers. Despite these initiatives, married adolescents' use of modern contraceptives is not rising (Subedi et al., 2018).

## Methodology

**Study Design and Setting:** This research adopts a descriptive cross-sectional analytical study design, focusing on the educational settings in Kailali District, Nepal. This design allows for the collection of data at a single point in time, providing a snapshot of the prevalence of postpartum contraceptive utilization among college students. It includes both qualitative and quantitative research methodology. The study aims to capture a comprehensive understanding of postpartum contraceptive uptake within the academic community in the specified region.

**Sample Size Calculation:** For this study, a total of 570 respondents were included in the sample for the quantitative study followed by four focus group discussion with male and female cohort. Additionally, Key in-depth interview was done with the six teaching faculty members (3 in each college) of the same college who teach them. The

selection process involved gathering data from students of in Kailali District, Nepal. This sample size, although being smaller, was deemed sufficient to provide valuable insights into the prevalence of postpartum contraceptive utilization among the target population. Despite the smaller sample size, efforts were made to ensure the representativeness of the sample by employing convenient sampling techniques and including participants from both genders. Consecutive sampling technique is employed to select participants. This method is chosen for its practicality and accessibility, allowing researchers to gather data efficiently from students readily available within the educational institutions.

**Data Collection Tools and Techniques:** Data collection is facilitated through self-administered questionnaires, distributed to the selected participants for the quantitative study and interview guidelines was used for the qualitative study. The use of self-administered questionnaires allows for standardized data collection while ensuring participants' privacy and autonomy in responding to the survey items. This approach minimizes researcher bias and enhances the reliability of the data collected.

**Data Processing and Analysis:** Upon collection, the data was processed and analyzed using SPSS (Statistical Package for the Social Sciences) software. The dataset was using EpiData to facilitate systematic data organization. Descriptive statistics was calculated to summarize the data, followed by bivariate logistic regression analysis to assess the crude association of each predictor with postpartum contraceptive utilization. Variables with p-values  $\leq 0.25$  on bivariate analysis was selected for multivariable analysis to adjust for confounders. Assumptions of the logistic regression model, such as the absence of outliers and multicollinearity, was rigorously checked to ensure the validity of the analysis.

The research incorporated thematic analysis techniques drawn from the works of Boyatzis (1998) and Guest, MacQueen, and Namey (2012). Thematic analysis, as outlined by these authors, involved a structured approach comprising four essential steps applicable to all qualitative data analysis endeavors. The first step, raw data management or 'data cleaning,' focused on organizing and preparing the collected data for analysis. This initial phase ensured that the data were systematically arranged and devoid of any inconsistencies or errors that may have impeded the analysis process. Following data cleaning, the subsequent steps involved data reduction and interpretation. In the data reduction phase, often performed iteratively, the data were chunked and coded based on their underlying themes or patterns. This process of chunking and coding aided in condensing the raw data into manageable units while retaining their core meaning. As the analysis progressed, coded chunks of data were clustered together based on their similarities, forming cohesive theme categories. These clusters were then labeled to provide meaning and coherence to the emerging themes within the dataset. Ultimately, the final step of data representation involved making sense of the data for others. This entailed interpreting the identified themes to address the research questions or objectives, thereby providing meaningful insights and implications derived from the qualitative analysis. Thematic analysis involved iterative cycles of chunking, coding, clustering, and interpretation to extract and elucidate meaningful themes from qualitative data.

**Ethical Considerations:** The study prioritizes ethical principles throughout the research process. Informed consent was obtained from all participants before data collection, emphasizing voluntary participation and confidentiality of responses. Ethical guidelines were strictly adhered to, ensuring the protection of participants' rights and the responsible conduct of research. Data was handled with discretion and used solely for research purposes, with measures in place to safeguard participants' anonymity and privacy.

## Findings

### Prevalence of Contraceptive Utilization

Out of the 570 respondents, 97% reported having heard about contraceptives, indicating a high level of awareness within the study population. Among these, 43% reported currently using contraceptive methods, highlighting a substantial proportion of students actively practicing contraception. Notably, the prevalence of contraceptive utilization was higher among female respondents compared to male respondents, with 472 out of 570 participants being female. The findings reveal a significant level of awareness and utilization of contraceptives among the study population, particularly among female respondents. However, there is still a portion of the population not utilizing contraceptives, indicating potential gaps in access or knowledge that require further exploration.

*"I knew about contraceptives even before coming to college. It's important to plan for the future." - Female respondent*

Table 1. Socio-demographic characteristics

| Findings (N=570)                  | Frequency | Percentage |
|-----------------------------------|-----------|------------|
| Gender Distribution               |           |            |
| Male                              | 98        | 17         |
| Female                            | 472       | 83         |
| Marital Status                    |           |            |
| Married                           | 29        | 5          |
| Unmarried                         | 541       | 95         |
| Heard about contraceptive methods |           |            |
| Yes                               | 553       | 97         |
| No                                | 17        | 3          |

### Awareness and Knowledge:

The study found a high level of awareness regarding contraceptives, with 97% of respondents indicating familiarity with contraceptive methods. However, despite this widespread awareness, only 43% reported current utilization. This suggests a potential gap between awareness and actual implementation of contraceptive practices. Moreover, the findings indicate that married respondents constituted only 5% of the sample, pointing to the predominance of unmarried individuals within the study population. While the majority of respondents demonstrated awareness of contraceptives, there remains a need to bridge the gap between knowledge and action. Addressing misconceptions and barriers to access may enhance contraceptive utilization rates among the study population.

*"I've heard about contraceptives, but I never thought I would need them until now. It's good to know, though." -*

*Male respondent*

## Methods of Contraceptive Utilization

Among the respondents who reported using contraceptives (43%), a variety of methods were utilized. Long-acting reversible contraception (LARC) methods were used by 7% of participants, indicating a preference for more sustainable contraceptive options. Short-term methods, such as condoms or oral contraceptives, were utilized by 36% of respondents. These findings suggest a diverse range of contraceptive preferences among the study population. The study highlights the prevalence of both LARC and short-term contraceptive methods among the study population. Understanding the preferences and needs of individuals regarding contraceptive methods is essential for promoting effective family planning practices.

*"I prefer using long-acting methods because they're more convenient for me. I don't have to worry about it every day." - Female respondent*

Table 2. Prevalence of contraceptive use

| Prevalence of contraceptive use (n=570)     | Frequency | Percentage |
|---------------------------------------------|-----------|------------|
| Not using any contraceptive method          | 17        | 3          |
| Using any contraceptive method              | 245       | 43         |
| Not need till date                          | 308       | 54         |
| Types of contraceptive methods used (n=245) |           |            |
| Long-acting reversible contraceptives       | 40        | 16         |
| Short-term methods                          | 205       | 84         |

## Challenges and Complications:

Despite the reported utilization of contraceptives, the study identified several challenges and complications faced by respondents. These included unwanted pregnancy, unsafe abortion, increased need for post-abortion care, sterility, and even death. These complications underscore the importance of not only promoting contraceptive awareness but also ensuring access to safe and effective contraceptive services.

Summary: The findings highlight the multifaceted challenges associated with contraceptive utilization, including adverse health outcomes and potential risks. Addressing these challenges requires comprehensive strategies that prioritize both awareness and access to quality reproductive health services.

*"I've heard of cases where contraceptives failed, leading to complications. It's scary to think about." - Female respondent*

## Discussion

The study titled "Assessment of Contraceptive Utilization Among Undergraduate Students in Public and Private Colleges of Kailali District, Nepal" aimed to investigate the prevalence of contraceptive utilization among B.Ed. first-year students in selected educational institutions. The findings provide valuable insights into the contraceptive practices, awareness, and associated complications among undergraduate students in the region.

**Prevalence of Contraceptive Utilization:** The research revealed that among the 70 respondents, 43% reported using contraceptive methods. This finding highlights a significant proportion of students who are actively engaging in family planning practices. The prevalence of contraceptive utilization underscores the importance of reproductive health education and access to contraceptive services among undergraduate populations.

**Awareness and Knowledge:** It is noteworthy that 97% of the respondents reported having heard about contraceptive methods. This high level of awareness reflects the effectiveness of educational initiatives and outreach programs aimed at disseminating information about reproductive health and family planning. However, despite the widespread awareness, a notable proportion of respondents (3%) reported not using any contraceptive methods, suggesting potential gaps between knowledge and behavior.

**Methods of Contraceptive Utilization:** Among the respondents who reported using contraceptive methods, 7% opted for Long-Acting Reversible Contraceptives (LARC), while 36% preferred short-term methods. This distribution indicates a preference for both temporary and long-term contraceptive solutions among the student population. It also underscores the importance of offering a range of contraceptive options to meet diverse needs and preferences.

**Challenges and Complications:** The study identified several complications associated with contraceptive utilization among the respondents. These complications included unwanted pregnancies, unsafe abortions, an increase in post-abortion care cases, cases of sterility, and even death. These findings highlight the critical need for comprehensive reproductive health services, including access to safe and effective contraceptive methods, counseling, and post-abortion care services. Addressing these challenges requires a multifaceted approach that prioritizes education, access to healthcare services, and the promotion of safe sexual practices among young adults.

**Implications and Recommendations:** The findings of this study have several implications for policy, practice, and future research. Firstly, there is a need for continued efforts to enhance reproductive health education and awareness programs targeting undergraduate students in public and private colleges. Additionally, interventions aimed at improving access to a variety of contraceptive methods, including long-acting and short-term options, should be prioritized. Moreover, addressing the complications associated with contraceptive utilization requires the strengthening of healthcare systems and the provision of comprehensive reproductive healthcare services. Future research could explore the factors influencing contraceptive decision-making among undergraduate students and evaluate the effectiveness of interventions aimed at promoting safe reproductive health practices.

## Conclusion

The findings of this research shed light on the prevalence of contraceptive utilization, awareness levels, methods preferred, and challenges faced among B.Ed. first-year students in Kailali District, Nepal. The study revealed a high level of awareness regarding contraceptive methods, with a significant majority of respondents indicating familiarity with various contraceptive options. However, despite this widespread awareness, the actual utilization of contraceptives was found to be comparatively lower, with only 43% of respondents reporting current usage. The study also unveiled a diverse range of contraceptive preferences among the study population, with both long-acting reversible contraception (LARC) methods and short-term methods being utilized. This indicates the importance of offering a variety of contraceptive options to cater to individual preferences and needs. However, alongside these findings, the research identified a number of challenges and complications associated with contraceptive utilization, including unwanted pregnancies, unsafe abortions, and even severe health consequences such as sterility and death.

These findings underscore the urgent need for comprehensive reproductive health education and services tailored to the specific needs of young adults, particularly within the college setting. Efforts should focus not only on increasing awareness of contraceptive methods but also on addressing barriers to access, dispelling myths and misconceptions, and promoting responsible contraceptive practices. Furthermore, the study highlights the importance of integrating reproductive health education into the curriculum of educational institutions, providing students with the necessary knowledge and skills to make informed decisions about their sexual and reproductive health. Collaborative efforts between educational institutions, healthcare providers, and community organizations are essential to ensure comprehensive reproductive health services are accessible to all individuals.

In conclusion, this research emphasizes the significance of promoting contraceptive awareness and access among young adults in Nepal to empower them to make informed choices regarding their reproductive health. By addressing the challenges identified and implementing targeted interventions, one can work towards creating a future where all individuals have the resources and support they need to achieve optimal sexual and reproductive well-being.

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