



Contraceptive Utilization Patterns Among Students in a Selected University in Kenya

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ABSTRACT

Contraceptive utilization patterns among students in higher learning institutions is a paramount area of study because it has been understudied. Young women in higher learning institutions are likely to have unintended pregnancies and are also likely to contract sexually transmitted diseases due to risky sexual behaviours observed in this population. This study sought to assess the utilization patterns of contraceptives among students in a selected University in Kenya. The study employed a cross-sectional design and data was collected using of self-administered structured questionnaire. The study population were all the students of the University of Kabianga, and stratified random sampling was applied to obtain a sample of 360 participants from the study population of 8000 students. Data were analysed using SPSS version 29 through descriptive statistics, Chi-square tests, and binary logistic regression. The study revealed that awareness of contraceptives was nearly universal among the study participants. The male condoms were the most frequently used method (53.3%), followed by implants (11.7%) and birth control pills (11.1%). Other methods, such as injectable and emergency contraceptives, were used by 10.9% and 10.3% of the respondents, respectively. Intrauterine devices (IUDs) were the least utilized contraceptives, with only 2.5% usage. Despite experiencing some side effects, including abnormal menstrual patterns (27.8%), headaches (18.3%), and mood swings (17.8%), most students continued using contraceptives. Notably, 9.6% of users reported experiencing no side effects. There were no statistically significant associations between contraceptive use and the socio-demographic variables examined. Across all academic years, usage ranged narrowed from 83.8% to 84.8%, with no significant differences ($p = 0.996$). Other variables such as parity ($p = 0.918$), abortion history ($p = 1.000$), residence ($p = 1.000$), ethnicity ($p = 1.000$), and religion ($p = 0.954$) also showed no significant influence. This study established that contraceptive utilization among university students was high, with male condoms being the most preferred method. The study concluded that while contraceptive use was high, greater attention should be given to addressing barriers such as side effects, misinformation, and access to long-acting methods. The study recommended enhancing comprehensive access, awareness, and acceptability of Long-Acting and Clinical-Based Contraceptive methods among students, Strengthening Comprehensive Support Systems for managing contraceptive side effects so as to improve continuity and satisfaction, Sustaining and enhancing comprehensive, inclusive, and student-centred contraceptives and education.

Key Words: Family planning, Reported side effects, Contraceptives, Contraception, Contraception Utilization, Adolescents and Youths, Higher learning Institutions.

1. Introduction

Family planning (FP), as defined by the World Health Organization (WHO), is a voluntary and informed decision by an individual or couple on the number of children to have and when to have them (WHO, 2020). There is an increasing global need for contraceptives throughout women of reproductive age. According to United Nations report (UN, 2022), out of the 1.9 billion women of reproductive age (15-49 years) living in the world in 2019, 1.1 billion have a need for family planning or they are current users of contraceptives while 842 million use modern methods of contraception and 80 million use traditional methods or have an unmet need for family planning. The UN report also revealed that 190 million women would wish to avoid pregnancy though they do not use any contraceptive method (UN, 2022). Over the years the proportion of women who have required family planning and have obtained satisfactory results with the use of modern methods (Sustainable Development Goals indicator 3.7.1) has improved by 3.9% from 73.7% in 2000 to 77.6% in 2023 (WHO, 2024). The improvement of maternal and child health (MCH) services is an important part of the Sustainable Development Goals (SDGs). Maternal and Child Health (MCH) is still an important issue globally as the SDGs have not yet been achieved in most countries (Phiri et al., 2021).

Young women in higher learning institutions are likely to experience unintended pregnancy due to risky sexual behaviors in tertiary institutions which is characterized by lack of condom and/or contraceptive use (Phiri et al., 2021). This subpopulation tends to encounter early sexual debut which is a risk in their health, which subsequently cause them to contract infections such as sexually transmitted diseases (STIs) including HIV/AIDS; young girls may also end up with unintended pregnancies (Nzopotam et al., 2022). Additionally, similar problems are also reported among the youth from higher learning institutions where there is high prevalence of STIs and HIV/AIDS (Kassie et al., 2019). Pregnant young women in an academic environment are prone to

stressors associated with unintended pregnancy and academic demands of tertiary institutions (Cifci et al., 2024). However, there is scarce information about the stress and coping among young people in higher learning institutions who get pregnant during the course of their studies and choose to keep the pregnancy (Cifci et al., 2024). However, the study findings showed that pregnancy and early motherhood was an experience that was accompanied by lots of stress especially from fear of parents' reactions, academic pressure, financial constraints, relationship problems with male partners and experiences of social stigma (Toweka et al., 2021). In another study (Salihu et al., 2021), participants used emotion-focused and problem-focused coping strategies to deal with the stressors confronting them during and after their pregnancy. One of the targets in goal 3 of the United Nations Sustainable Development Goals is to ensure universal access to sexual and Reproductive Health (RH) services, including contraception information and education and the integration of reproductive health (RH) into national strategies and programs (Shu et al., 2019). A study on contraception and abortion among migrant women in Changzhou (China) found a significant association between the use of modern contraceptive methods and various factors, including education level, knowledge of contraceptive methods, and the number of known methods (Zong et al., 2021). The study further found that young women who were sexually active and did not desire more children were more likely to use modern contraceptives. The study also highlighted that perceptions of peer contraceptive use can influence current contraceptive use, with young people who believe their peers use contraceptives being more likely to use condoms or other modern methods.

2. Review Of Literature

Globally, every day approximately 1000 women die from preventable causes related to pregnancy and childbirth (Bearak et al., 2020). Risky sexual behaviours are predominant among young adults, particularly university students, increasing their risk of contracting sexually transmitted infections (STIs) and unplanned pregnancies (Mahoto et al., 2025). Low utilization of contraception has also been linked to limited capacity of the health care system within which family planning services are required to be offered (Mahoto et al., 2025). Furthermore, personal factors such as risk perception, fear of side effects and lack of support from male partners, health service limitations and insufficient knowledge needed to make informed choices are major causes of low contraceptive uptake (Mahoto et al., 2025). Recent studies have highlighted evolving trends in contraceptive use among university students both globally and within sub-Saharan Africa. For instance, a 2023 study in South Africa found that although awareness of modern contraceptives among students was nearly universal, actual utilization remained uneven due to misconceptions and fear of side effects (Mokoena & Themba, 2023). Similarly, research in Ethiopia indicated that religious and cultural beliefs continued to strongly influence students' contraceptive decisions, even within urban university settings (Tadesse et al., 2024). These findings are consistent with earlier research in Kenya, which noted that while access to family planning services has improved, societal stigma around premarital sexual activity still limits open discussion and utilization among young adults (Odhiambo et al., 2022). Many different contraceptive options are available to prevent unplanned pregnancy, including both temporary (reversible) and permanent methods. The different types of contraception include oral contraceptive pills, vaginal rings, implants, injectable, patches, intra-uterine devices, condoms, lactational amenorrhea method, withdrawal methods, sterilization (bilateral tubal ligation and Vasectomy) and fertility awareness-based methods. There are three types of oral contraceptive pills namely; combined estrogen-progesterone, progesterone-only, and continuous or extended-use pills (Med Lett Drugs, 2021). Combined oral contraceptive pill is the most commonly utilized form of contraception with approximately 25% of women aged 15 to 44 currently using contraception report using the pill as their method of preference (Med Lett Drugs, 2021). Since its introduction in 1992, the injectable contraceptive has become one of the most popular methods of contraception worldwide, particularly in sub-Saharan Africa where it is used by more than 35.7 percent of all contraceptive users (Bertrand et al., 2020). Estimated 42 million women of reproductive age group currently use injectable contraceptive, which is the fourth most prevalent contraceptive worldwide and is administered through an intramuscular injection of 150mg of medroxyprogesterone acetate (Bairagya et al., 2021). The implant is a small, rod-shaped contraceptive (birth control) inserted under the skin of the upper part of a woman's arm (Moray et al., 2021). The implant contains a hormone called progestin and it works by preventing the egg's release from the ovary (Bairagya et al., 2021). Subdermal progestin-releasing contraceptive implants, is one of the most effective and reversible methods of contraception available today (Rocca et al., 2021). A vaginal ring is a small, flexible ring inserted inside the vagina as a form of birth control and it releases the hormones (estrogen and progestin) through the vaginal lining to prevent pregnancy. Regarding usage, the ring is worn for three weeks and then removed for one week. Condoms are barrier devices that are used during sexual activity to prevent pregnancy and transmission of sexually transmitted infections (STIs). They are typically worn on the penis (male condoms) or inserted into the vagina (female condoms), (Calhoun et al., 2022). They are safe and highly effective in preventing transmission of sexually transmitted infections, including HIV, and unplanned pregnancies (Kassie et al., 2019). Emergency contraception is a form of pregnancy prevention method used after unprotected intercourse and before implantation. It is not only a safe but effective post-coital contraceptive method that has been shown to reduce the risk of unplanned pregnancy after unprotected sexual intercourse within 72 hours of sexual intercourse (WHO, 2022). The current commonly used intrauterine devices (IUD) are small devices, often T-shaped devices containing either copper or levonorgestrel, which are inserted by the healthcare provider into the uterus. Intrauterine devices impregnated with progesterone, also known as an intrauterine system is a progestogen and is sold under the brand name Mirena among others, and it works by releasing a progestogenic hormonal agent such as levonorgestrel into the uterus (Hason et al., 2016). While substantial evidence indicates that contraceptive side effects are a major deterrent to consistent use, few studies in low and middle income countries have examined the impact of specific side effects on contraceptive behaviour. A cross-sectional survey examining the relationship between specific contraceptive side effects and method switching or discontinuation (Bradley et al., 2021), revealed a 30% overall increase in contraceptive use during the study period, with the use of modern contraceptive methods rising by 83%. Several studies have identified various factors influencing contraceptive use among college student. There was limited access to contraceptive services and healthcare facilities and this had become a barrier to contraceptive use among college students (Lee et al., 2021). Students who received comprehensive sexual education were more likely to use contraceptives compared to those who did not receive such education. Students who perceived themselves to be at a higher risk of unintended pregnancy were more likely to use contraceptives consistently. Students who were committed to their relationships were more likely to use hormonal contraceptives compared to those who were not in committed relationships (Davis et al., 2019).

3. Framework and Methodology

Study site, design, and population

The study was conducted at the University of Kabianga, which is located in Kabianga, Belgut constituency, Kericho County in Kenya. It is located approximately 26KM from Kericho town and is about 6.2km off-road a junction called Kabianga Dairies. The university had an estimated population of 8000 students among which both genders were randomly distributed. The study employed a cross-sectional descriptive research design. The sample size was calculated using Cochran formula.

Data collection

Data was collected using a structured questionnaire with the help of a research assistant. Stratified random sampling was applied. The population was divided into distinct subgroups (strata) based on key characteristics such as School and Year of Study. The questionnaire was then administered consistently across all respondents, with close monitoring to ensure data quality. Finally, responses were compiled, cleaned, and analysed to draw conclusions while accounting for the stratified design.

Data Analysis

Data was coded, cleaned, and analysed using IBM SPSS Statistics version 29. The study variables that were categorical were summarized using the mode. The Chi-square (χ^2) test or Fisher's exact test was applied to compare frequencies between participants who utilized and those who did not utilize contraceptives as appropriate. Binary logistic regression was used to identify the factors that influenced contraceptive utilization. A p-value of less than 0.05 was considered statistically significant. Furthermore, Regression analysis was used to examine the relationship between one dependent variable and one or more independent variables.

Ethical Consideration

Ethical approval was obtained from the Institutional Research Ethics Committee (IREC) of Baraton University (ERC number UEAB/ISERC/01/12/2024). A research license was issued by the National Commission for Science, Technology and Innovation (NACOSTI) (License No NACOSTI/P/25/415699), and further authorization was granted by the University of Kabianga.

4. Results of the Study

4.1 Sociodemographic Characteristics of Respondents

The sociodemographic characteristics of the study participants is presented in Table 2. A total of 360 participants were recruited into the study. Among the study participants, 5 (1.2%) were aged 16–20 years, 229 (63.6%) were in the 21–24 age group, 86 (23.9%) were aged 25–29, and 40 (11.1%) were over 30 years old. The findings showed that participants in year one and year two were 68 (18.9%) for each, while year three and year four were 112 (31.1%) for each. Noteworthy, majority of the participants had no children, representing 306 (85.0%), while 54 (15.0%) reported having one child.

Furthermore, the study found that 166 (46.1%) respondents were in a relationship while 194 (53.9%) were not in a relationship. Moreover, 334 (92.8%) participants reported having never had an abortion, while 26 (7.2%) participants indicated that they had an abortion. In terms of school representation, the findings indicated that the school of Agricultural Sciences & Natural Resources, School of Business & Economics, School of Education, Arts & Social Sciences each had 90 (25.0%) participants while the School of Health Sciences and School of Science & Technology each had 45 (12.5%) participants. In this study, Christian participants were 306, (85.0%), Muslims were 18 (5.0%) while 36 (10.0%) participants had no religious affiliation. The findings further indicated that participants who resided within the campus and off-campus were 144 (40%) respectively, while 72 (20.0%) of the participants did not specify their residential areas. In this study, the most common ethnic group was Kalenjin, which had 72 (20.0%) participants, while Kisii and Kikuyu were 54(15.0%) participants respectively. The Maasai, Bukusu, Kamba, and Sudanese were 18 (5.0%) respectively while Luhya, Luo and other unspecified ethnic groups were 36 (10.0%) each respectively.

Table 1

Socio-Demographic Characteristics of the Participants (N = 360)

Characteristic		N	%
Age (Years)	Modal		
	49		13.65
Age Group (years)	16–20	5	1.2
	20–24	229	63.6
	25–29	86	23.9
	>30	40	11.1

Relationship Status	In a Relationship	166	46.1
	Not in a Relationship	194	53.9
Year of Study	Year One	68	18.9
	Year Two	68	18.9
	Year Three	112	31.1
	Year Four	112	31.1
Parity	0	306	85.0
	1	54	15.0
History of Abortion	No	334	92.8
	Yes	26	7.2
School/Faculty	Agricultural Sciences & Nat. Res.	90	25.0
	Business & Economics	90	25.0
	Education, Arts & Social Sciences	90	25.0
	Health Sciences	45	12.5
	Science & Technology	45	12.5
Religion	Christian	306	85.0
	Muslim	18	5.0
	None	36	10.0
Residence	Campus	144	40.0
	Out of Campus	144	40.0
	Unspecified	72	20.0
Ethnicity	Kalenjin	72	20.0
	Kisii	54	15.0
	Kikuyu	54	15.0
	Luhya	36	10.0
	Luo	36	10.0
	Maasai	18	5.0
	Bukusu	18	5.0
	Kamba	18	5.0
	Sudanes	18	5.0
	Others	36	10.0

4.2 Contraceptive Utilization Patterns

The contraceptive utilization patterns among the study participants is summarized in Table 3. In this study, the Male Condoms were the most utilized contraceptive method reported by 196 (54.3%) participants while Implants was utilized by 42 (11.7%) participants. Moreover, Birth control pills was utilized by 39 (10.7%) participants, Emergency contraceptive pills by 38 (10.6%) participants and Injectable contraceptives was utilized by 35 (9.6%) participants. The study further indicated that the intrauterine device (IUD) was the least used method, with 10 (2.7%) participants reporting its use, while Injectable Contraceptives and Emergency Contraceptives were utilized by 37 (10.3%) participants respectively. Intrauterine Devices were the least utilized contraceptive method with only 9 (2.5%) participants reporting its use.

Table 2

Distribution of Contraceptive Methods Used by Participants (N = 360)

Contraceptive Method	N	(%)
Condoms	196	54.3
Implants	42	11.7
Birth Control Pills	39	10.7
Emergency Pills	38	10.6
Injectable	35	9.6
IUDs	10	2.7
Total	360	100

4.4 Side Effects of Contraceptives among Respondents

The contraceptive side effects of the study participants is presented in Table 4. In this study, abnormal menstrual patterns were reported by 100 (27.8%) participants while Headache was reported by 66 (18.3%) participants. The study further indicated that Mood swings was reported by 64 (17.8%) respondents while 71(19.6%) participants experienced no side effects at all. Other contraceptive side effects in this study included weight changes and breast tenderness reported by 42 (11.7%) and 17(4.8%) participants respectively, and were the least reported side effect.

Table 3*Side Effects of Contraceptive Use Among Participants (N = 360)*

Side Effect	N	Percentage
Abnormal menstrual patterns	100	27.8
Headaches	66	18.3
Mood swings	64	17.8
None	71	19.6
Weight changes	42	11.7
Breast tenderness	17	4.8
Total	360	100.0

4.5 Factors affecting contraceptive utilization

A bi-variate analysis on factors affecting contraceptive utilization is presented in Table 5. The study found out that contraceptive utilization was high and consistent, with 84.7% (n = 305) of participants reporting use, and only 15.3% (n = 55) not using any method. There were no statistically significant associations between contraceptive use and the socio-demographic variables examined. For instance, among participants aged 16–24 years, 213 (85.9%) used contraceptives, compared to 84.0% of those aged 25–29 and 88.9% of those over 30, with a chi-square p-value of 0.836. Similarly, contraceptive use was 84.9% among those in a relationship and 84.5% among those not in a relationship (p = 1.000). Across all academic years, usage ranged narrowly from 83.8% to 84.8%, with no significant differences (p = 0.996). Other variables such as parity (p = 0.918), abortion history (p = 1.000), residence (p = 1.000), ethnicity (p = 1.000), and religion (p = 0.954) also showed no significant influence.

Table 4*Bivariate Analysis (Chi-Square Tests) on factors affecting contraceptive utilization*

Variable / Category	Yes n (%)	No n (%)	χ^2 p-value	OR (95% CI)	Wald p-value
Age in years			0.836		
16-24	213 (85.9%)	35 (14.1%)		Ref	
25-29	79 (84.0%)	15 (16.0%)		0.87 (0.45–1.67)	0.6666
>30	16 (88.9%)	2 (11.1%)		1.31 (0.29–5.97)	0.7231

Relationship Status			1.000		
In relationship	141 (84.9%)	25 (15.1%)		Ref	
Not in relationship	164 (84.5%)	30 (15.5%)		0.97 (0.54–1.73)	0.9155
Year of Study			0.996		
Year 1	57 (83.8%)	11 (16.2%)		Ref	
Year 2	57 (83.8%)	11 (16.2%)		1.00 (0.40–2.49)	1.0000
Year 3	95 (84.8%)	17 (15.2%)		1.08 (0.47–2.46)	0.8579
Year 4	95 (84.8%)	17 (15.2%)		1.08 (0.47–2.46)	0.8579
Parity			0.918		
0	260 (85.0%)	46 (15.0%)		Ref	
1	45 (83.3%)	9 (16.7%)		0.88 (0.40–1.93)	0.7584
History of Abortion			1.000		
No	283 (84.7%)	51 (15.3%)		Ref	
Yes	22 (84.6%)	4 (15.4%)		0.99 (0.33–3.00)	0.9875
Residence			1.000		
Campus	122 (84.7%)	22 (15.3%)		Ref	
Off-campus	122 (84.7%)	22 (15.3%)		1.00 (0.53–1.90)	1.0000
Unspecified	61 (84.7%)	11 (15.3%)		1.00 (0.46–2.20)	1.0000
Ethnicity			1.000		
Kalenjin	61 (84.7%)	11 (15.3%)		Ref	
Kisii	45 (83.3%)	9 (16.7%)		0.90 (0.34–2.36)	0.8328
Kikuyu	45 (83.3%)	9 (16.7%)		0.90 (0.34–2.36)	0.8328
Luhya	30 (83.3%)	6 (16.7%)		0.90 (0.30–2.67)	0.8518
Luo	30 (83.3%)	6 (16.7%)		0.90 (0.30–2.67)	0.8518
Maasai	15 (83.3%)	3 (16.7%)		0.90 (0.22–3.64)	0.8844
Bukusu	15 (83.3%)	3 (16.7%)		0.90 (0.22–3.64)	0.8844
Kamba	15 (83.3%)	3 (16.7%)		0.90 (0.22–3.64)	0.8844
Sudanese	15 (83.3%)	3 (16.7%)		0.90 (0.22–3.64)	0.8844
Others	30 (83.3%)	6 (16.7%)		0.90 (0.30–2.67)	0.8518
Religion			0.954		
Christian	260 (85.0%)	46 (15.0%)		Ref	
Muslim	15 (83.3%)	3 (16.7%)		0.88 (0.25–3.18)	0.8509
None	30 (83.3%)	6 (16.7%)		0.88 (0.35–2.24)	0.7963

5. Discussion

This study examined contraceptive utilization patterns among undergraduate university students focusing on the different types of contraceptives used by students, the side effects of these contraceptives and factors influencing choice of contraceptives among these populations. The age distribution of respondents in this study indicates a youthful population, with the majority (63.3%) falling within the 20 to 24 year age range. This age group represented

229 participants, and the modal age was 24 years. This finding reflects the typical age demographic of university students, particularly those in the later stages of their undergraduate studies. Comparatively, a similar study conducted at the University of Ibadan reported a slightly younger age distribution, with over half (53.5%) of the participants aged between 18–22 years and a modal age of 22 (Sawu et al., 2024). The variation between the two studies may be attributed to differences in academic structures, program durations, or recruitment patterns across institutions. In the current study, 46.1% of respondents reported being in a relationship, while a slight majority, 53.9%, were not. This relatively balanced distribution suggests a diverse range of relationship experiences among university students, which may influence their contraceptive behavior and reproductive health decision-making. These findings differ from those of a similar study (Boadu et al., 2023) where a significantly higher proportion of respondents (85.6%) were single, and only 14.1% were either married or cohabiting. The discrepancy between the two studies could be attributed to differences in study settings, sample demographics, or institutional cultures. For instance, the higher proportion of single students in Joseph et al.'s study (2020) might reflect a younger or more academically-focused student population, whereas the current study may have included older students or those more socially engaged. The study revealed that a significant majority of participants (85.0%) had no children, indicating that most were yet to experience parenthood, which aligns with the youthful, likely student-based nature of the population. This finding corresponds with Belay et al. (2020), who reported that 31.8% of sexually active female university students experienced unintended pregnancies, with over half (53.5%) of those having had two or more pregnancies. In the current study, a substantial majority of participants 334 (92.8%) reported never having had an abortion, while a small proportion, 26 (7.2%), indicated that they had undergone an abortion. This relatively low reported incidence of abortion may reflect a combination of factors, including effective contraceptive use among participants, personal or cultural values that discourage abortion, or underreporting due to stigma and fear of judgment, particularly in conservative or religious contexts. When compared with findings from a similar study conducted in Nigeria by Namukisa et al., (2023), a notable contrast emerges. The findings from the current study indicate that the male condom was the most widely used contraceptive method, with 54.3% of participants reporting its use. This high utilization underscores the condom's accessibility, affordability, and its added benefit of offering dual protection against both unintended pregnancies and sexually transmitted infections (STIs). Comparatively, data from the 2019 U.S. Youth Risk Behavior Survey (YRBS) also highlight condom use as a prevalent method among sexually active students, particularly at last sexual intercourse. However, the U.S. study further examined the use of condoms in combination with more effective contraceptive methods, revealing a more advanced approach to protection that may be less evident in the current study's findings. Injectable contraceptives were used by 9.6% of respondents, and intrauterine devices (IUDs) were the least used, at just 3.1%. These patterns closely mirror the findings of Simegn et al. (2020), suggesting a consistent preference among university students for methods that are non-invasive, reversible, and easy to access. The low uptake of long-term methods like IUDs could be due to factors such as fear of side effects, lack of awareness, or limited availability. In Nigeria, Salawu et al., (2024) reported a more diversified contraceptive landscape: male condoms (3.4%), female condoms (16.3%), implants (9.9%), Copper-T IUDs (7.7%), pills (20.8%), injectables (10.9%), emergency pills (25.2%), and significant use of traditional methods i.e. withdrawal (37.1%), calendar (30.4%), sympto-thermal (20.5%), and standard-day methods (22.8%). These data collectively reveal a consistent preference for barrier and short-acting hormonal methods across West African populations, whereas uptake of long-acting reversible contraception (LARC) especially IUDs remains low. The most commonly reported side effect was abnormal menstrual patterns, experienced by 100 (27.8%) students. A longitudinal survey conducted in Uganda on side effects of contraceptives (Zimmerman et al, 2021), reported more bleeding which increased the odds of discontinuation and switching of contraceptive types among users. Headaches were the second most reported side effect, affecting 66 (18.3%) participants while mood swings were experienced by 64 (17.8%) of the respondents. In a similar survey (Odwe et al., 2020), about 23% of hormonal and IUD contraceptive users reported experiencing side-effects at baseline survey which led to discontinuation of injectable and combined oral pills among users compared to IUD and implants users. Notably, the absence of statistically significant associations between socio-demographic factors and contraceptive use suggests a relatively homogeneous pattern of uptake across the student body. This finding differs slightly from previous research by Kilonzo and Wambua (2020), who found that age, academic level, and relationship status influenced contraceptive behavior in private university settings. One possible explanation for the difference could be that increased digital access to Sexual and Reproductive Health information and peer sensitization activities have created a more leveled knowledge base among public university students, reducing the influence of individual background characteristics.

6. Conclusion and Recommendation

To promote consistent and informed contraceptive use among university students, a comprehensive, inclusive, and multi-faceted strategy is recommended. This should focus on enhancing access to a wide range of contraceptive methods—including long-acting reversible contraceptives (LARCs) and clinical-based options—through affordable and youth-friendly campus health services staffed by trained personnel. Integrating reproductive health education into academic curricula, providing individualized counseling, and addressing misconceptions through targeted health education can empower students to make informed choices. Equally important is the establishment of robust support systems for managing side effects, including pre-use counseling, ongoing follow-up, and opportunities to switch methods when necessary. Peer-led campaigns and education modules can help normalize the use of diverse methods, reduce stigma, and encourage open conversations. Additionally, embedding reproductive health services into student support structures and implementing routine feedback mechanisms will ensure that services remain responsive, equitable, and effective for all students.

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