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SAMPLE SURVEY ON THE USE OF CONTRACEPTIVE DRUGS AMONG FEMALE STUDENTS IN AHMADU BELLO UNIVERSITY, ZARIA

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ABSTRACT

The use of contraceptive drugs is a vital component of reproductive health, especially among young women who are at a stage in life where they must make important decisions about their bodies, education, and future. Understanding the awareness, attitudes, and usage patterns of contraceptive drugs among this population is important because students in higher education often face increased exposure to new ideas, peer influences, and social pressures. A descriptive cross-sectional survey design was adopted, and data was collected through structured self-administered questionnaires distributed to 116 female students across different faculties. Chi-square (χ^2) tests was employed to examine associations between socio-demographic factors and contraceptive use. The results revealed that awareness of contraceptives was high (90.5%), but only 37.1% had ever used them and just 9.5% were current users. Prevention of pregnancy (53.5%) was the main reason for use, while fear of side effects (35%) and cultural/religious concerns (24%) were the primary reasons for non-use. Attitudinal responses showed that while most students acknowledged the role of contraceptives in preventing unwanted pregnancies (73.2%), a considerable number still associated them with immorality. Chi-square analysis further showed that marital status ($p = 0.001$) and awareness ($p = 0.019$) were significantly associated with contraceptive use, while age and academic level were not. The study concludes that although knowledge and awareness are widespread, actual usage remains low due to stigma, and cultural influences. It recommends intensifying reproductive health education, peer sensitization, and confidential access to contraceptives to bridge the gap between awareness and practice among female students.

Keywords: Contraceptive Drugs, Reproductive Health, Chi-Square Test, Cultural Influences

INTRODUCTION

The use of contraceptive drugs is a vital component of reproductive health, especially among young women who are at a stage in life where they must make important decisions about their bodies, education, and future. Contraceptives, when used correctly, not only help to prevent unintended pregnancies but also empower women to take charge of their reproductive health and plan their lives more effectively. For university students in particular, the availability, knowledge, and proper use of contraceptive methods play a key role in ensuring that their academic pursuits are not disrupted by unplanned pregnancies, unsafe abortions, or reproductive health complications.

This study focuses on female undergraduate students in Ahmadu Bello University, Zaria, one of the largest universities in Nigeria and West Africa. Understanding the awareness, attitudes, and usage patterns of contraceptive drugs among this population is important because students in higher education often face increased exposure to new ideas, peer influences, and social pressures. Despite being academically inclined and exposed to scientific knowledge, students are not immune to myths, misinformation, cultural and religious pressures, or social stigma that may hinder their willingness to use contraceptives.

Globally, research has shown that awareness of contraceptives is generally high, but usage rates often remain low due to a range of personal, social, and cultural barriers. In Nigeria, this contradiction is especially evident. While public health campaigns and policies have improved awareness, actual use is still hampered by factors such as fear of side effects, moral objections, gender norms, and limited access to youth-friendly reproductive health services. Among university students, the situation becomes even more complex: while they may have better access to information compared to non-students, they are also heavily influenced by peer expectations, religious teachings, and the fear of judgment from society.

In Ahmadu Bello University, Zaria, anecdotal evidence suggests that although many female students know about contraceptives, only a small proportion actually use them consistently. This situation creates an important knowledge–practice gap that deserves careful investigation. Why do students who are well-educated, exposed to health information, and preparing for professional careers still struggle to use contraceptives effectively? The present study aims to answer such questions by examining the levels of awareness, patterns of use, barriers, and attitudes toward contraceptives among female undergraduates of the institution. By shedding light on these issues, the study provides not only academic contributions but also practical guidance for policymakers, health workers, and university administrators who are working to improve reproductive health outcomes among young people.

Despite years of advocacy and increased awareness about modern contraceptives in Nigeria, the actual use of these drugs remains inconsistent and often inadequate. A growing number of young women in universities are aware of contraceptive methods, yet many still do not adopt them regularly or correctly. Several studies have shown that a gap exists between knowledge and practice: students may know about contraceptives but avoid using them because of misconceptions, fear of side effects, or cultural disapproval. In northern Nigeria, where Ahmadu Bello University is located, cultural and religious influences are particularly strong. Discussions about reproductive health are often considered taboo, especially among unmarried women. As a result, many female students either avoid contraceptives altogether or use them secretly, without proper guidance or

information. This situation increases the risk of unintended pregnancies, unsafe abortions, and disruptions to their education.

Moreover, most studies on contraceptive use in Nigeria have focused on students in health or social science faculties. Very little is known about the behaviour of students in other fields, such as those in natural or applied sciences, who may still face the same sociocultural pressures. This creates a research gap that the present study intends to fill by focusing on the wider female undergraduate population in Ahmadu Bello University, Zaria.

The problem, therefore, is not simply one of awareness but one of consistent practice. Why do some students choose to use contraceptives while others avoid them despite being aware of the benefits? What specific barriers; be they cultural, religious, psychological, or informational; stop students from adopting contraceptives? Understanding these questions is critical for designing reproductive health interventions that are effective and context-sensitive. Despite the growing awareness of modern contraceptive methods among young women in tertiary institutions, actual utilization remains inconsistent and often inadequate. Research has shown that while many female university students are aware of contraceptive options, they frequently lack in-depth knowledge about correct usage, possible side effects, and long-term health implications (Suleiman, Hassan, & Ibrahim, 2022). This knowledge–practice gap exposes them to unintended pregnancies and unsafe abortions.

In the Nigerian context, particularly in the northern regions, cultural and religious factors further complicate contraceptive use. Societal norms often discourage open discussions about reproductive health, especially among unmarried women (Aminu & Francis, 2022). Consequently, Stigma, fear of judgment, and misinformation prevent many students from accessing or consistently using contraceptive drugs (Oniso & Tawari, 2021). Moreover, most existing research has focused on students in health and social sciences, leaving a gap in knowledge regarding students in other faculties. Despite their scientific or academic training, students may still face similar sociocultural and psychological barriers affecting contraceptive behaviour (Muhammad, Yusuf, & Idris, 2018). It is, therefore, important to determine whether their academic background influences their reproductive health decisions or whether non-academic factors remain dominant.

Nigeria's National Population Policy (NPP), developed under the Ministry of Health, emphasises improving reproductive health to promote economic growth. However, evaluations after more than two decades have revealed limited progress in achieving its objectives (Adekunle & Otolorin, 2000). To expand access, the Nigerian government approved a task-sharing policy, allowing community health workers to administer injectable contraceptives, previously restricted to doctors, nurses, and midwives (Oshodi, 2012). Despite these policies, challenges remain in achieving significant improvements in contraceptive uptake, particularly among young women in universities. Beyond Nigeria, Reyna and Farley (2006) noted that young people are capable of weighing risks and benefits rationally, although they may still engage in risky behaviours even when aware of the consequences. Similarly, Thamlikitkul (2006) argued that knowledge alone is insufficient to change behaviour unless it is contextualized within social and cultural realities. Overall, these studies confirm that awareness levels are generally high, but actual usage remains constrained by multiple barriers.

Contraceptive drugs are medical methods used to prevent pregnancy and form part of broader family planning strategies. They include oral pills, injectable, implants, and emergency pills. In addition to pregnancy prevention, some methods help regulate menstruation or treat medical conditions.

Contraceptives can be categorized into:

i. Modern methods: e.g., pills, IUDs, implants, condoms, injectable, sterilization.
ii. Traditional methods: e.g., withdrawal, rhythm method, and herbal remedies.

While contraceptives improve reproductive health and reduce unintended pregnancies, no method is 100% effective except abstinence (Olugbenga-Bello, Abodunrin & Adeomi, 2011). Effectiveness also depends on correct and consistent use (Trussell & Raymond, 2012).

The ideal contraceptive, as described by Guillebaud (2004), should be effective, safe, affordable, reversible, accessible, and culturally acceptable. However, barriers such as misinformation, cost, and stigma continue to limit their adoption.

Historically, Nigerian societies valued large families, with procreation seen as a core function of marriage (Obinna, 2011). Traditional practices such as abstinence during breastfeeding and the use of herbal contraceptives were common for child spacing (Babalola, 2009). These herbal methods often relied on plants believed to disrupt fertility (Sofowora, 2006).

While modern contraceptives are now widely available, many Nigerians still use or trust traditional methods, often due to cultural acceptance and perceived safety (Adesina, 2013). Even today, cultural beliefs, religious doctrines, and gender dynamics strongly influence decisions around contraceptive use (Orji & Onwudiegwu, 2002; Izugbara & Modo, 2007).

Government involvement in family planning became more structured with the introduction of the National Population Policy in 1988 (Smith, 2003). Since then, policies and donor-supported programs have aimed to exp and access, yet contraceptive prevalence remains low compared to awareness levels.

The aim of this study is to assess the awareness, usage, and factors influencing the use of contraceptive drugs among female students in Ahmadu Bello University, Zaria.

The specific objectives are to:

i. To understand how female students at Ahmadu Bello University, Zaria use contraceptives.
ii. To explore the main reasons why students choose to use or not use contraceptives.
iii. To assess the knowledge of contraceptives of the students.
iv. To understand whether personal characteristics can influence the contraceptive use of the students
v. To study the attitude and beliefs of students about contraceptive.

MATERIALS AND METHODS

Research Design

The study adopted a descriptive cross-sectional survey design. This design was chosen because it allows the collection of data from respondents at a single point in time, thereby providing a snapshot of their knowledge, attitudes, and practices regarding contraceptive drug use. The descriptive nature of the study ensures that the focus remains on exploring patterns, awareness, and relationships rather than establishing causal links. A survey approach was particularly appropriate since it enables the researcher to collect first-hand information directly from the target population in a structured and systematic manner.

Study Population
The study population consisted of all female undergraduate students of Ahmadu Bello University (ABU), Zaria. Female undergraduates were selected because they represent a group that is both academically diverse and demographically relevant to the research topic. They are at a critical stage of youth development and are likely to be confronted with decisions related to reproductive health, including the use or non-use of contraceptive drugs.

Sampling Procedure
The study employed a probability sampling technique to ensure that every female student had a fair chance of being included in the study. A total of 116 students were selected as the sample size. This figure was deemed sufficient to provide reliable information while also being manageable for data collection and analysis. Respondents were drawn across all levels (100–500) and departments within the university to guarantee representation and diversity in experiences and perspectives.

Sampling Distribution
The study acknowledges that the sample size, though large (n = 1,116), represents only a fraction of the overall female undergraduate population in ABU, Zaria. For this reason, the focus of the analysis was largely descriptive, highlighting patterns, frequencies, and associations as they appear in the sample. However, where necessary, inferential statistics such as Chi-square tests were employed to examine associations between categorical variables, such as between marital status and contraceptive drug use. This approach provided both descriptive insights and statistical rigor, while recognising the limitations of generalising findings to the entire population.

Method of Data Collection
Data collection was carried out using a structured self-administered questionnaire. This tool was chosen because it is efficient, cost-effective, and enables respondents to provide honest responses in privacy, thus reducing the risk of social desirability bias.
The questionnaire was divided into four sections:

i. **Section A:** Socio-demographic information (age, marital status, level of study, department, religion).
ii. **Section B:** Awareness and knowledge of contraceptive drugs (e.g., whether respondents have heard of contraceptives, sources of information).
iii. **Section C:** Patterns and frequency of contraceptive drug use (e.g., ever used, currently using, frequency, and type of contraceptive drugs used).
iv. **Section D:** Attitudes and barriers toward contraceptive use (using Likert-scale questions to assess perceptions, beliefs, and challenges).

The questionnaire included closed-ended questions for ease of analysis and Likert-scale items to capture respondents' opinions in a more nuanced way.

Validation of Research Instrument
To ensure the validity and reliability of the questionnaire:
i. The instrument was reviewed by academic supervisors and reproductive health experts for content accuracy, relevance, and appropriateness.
ii. A pilot study (pre-test) was conducted with five female students from a faculty outside the target population. This allowed the researcher to identify unclear or ambiguous items.
iii. Feedback from the pilot study was used to revise and refine the questionnaire to enhance clarity, reliability, and consistency.

The Chi-square statistic is calculated using the following formula:

$$\chi^2 = \sum \frac{(O_{ij}-E_{ij})^2}{E_{ij}} \quad (1)$$

Where O_{ij} = the observed frequency in the i^{th} row and j^{th} column, E_{ij} = the expected frequency in the i^{th} row and j^{th} column, and $\sum$ = summation over all rows and columns of the contingency table.
The null hypothesis stated that there is no significant association between awareness of contraceptives and usage among female students.

RESULTS AND DISCUSSION

Demographic Characteristics of Respondents

Table 1: Age Distribution of Respondents

Marrital Status	Percentage
16-20	26
21-25	57.8
26-2030	14.7
Above 30	0.9

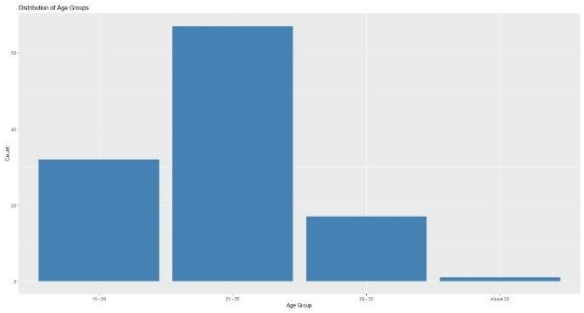

Figure 1: Age Distribution of Respondents

Interpretation:
More than half of the respondents (57.8%) fell within the 21–25 years age range. This shows that the study largely reflects the views of young adults who are at the heart of university life. Only a very small fraction (0.9%) were above 30 years, which is expected in a student population.

Table 2: Marital Status of Respondents

Marital Status	Percentage
Single	84.5
Married	14.7
Complicated	0.9

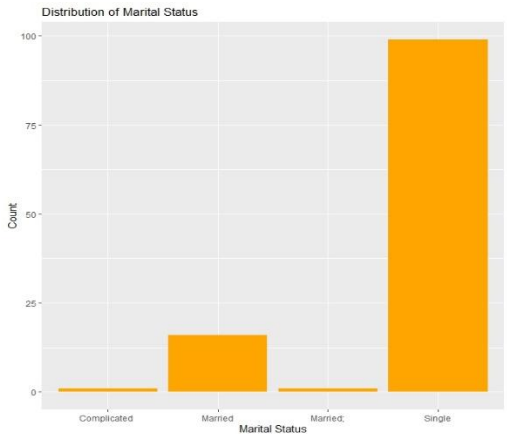

Figure 2: Marital Status of Respondents

Interpretation:
The majority of respondents were single (84.5%). A smaller group (14.7%) were married, while less than 1% reported that their marital status was "complicated." This distribution is consistent with what we would expect in a university setting, where most students are young and unmarried.

Table3: Level of Study

Level	Percentage (%)
100 Level	12.1
200 level	17.2
300 level	34.5
400 level	36.2

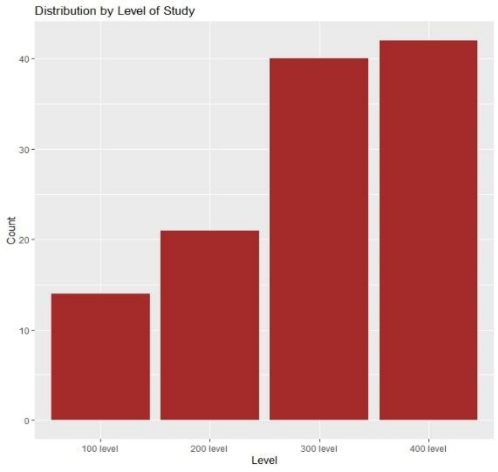

Figure 3: Level of Study of Respondents

Interpretation:
The analysis shows that participation was strongest among final-year students (36.2%) and third-year students (34.5%). This suggests that senior students were more responsive to the survey, while fewer respondents came from the 100 level (12.1%) and 200 level (17.2%). It may also reflect that senior students are more exposed to issues around reproductive health.

Table 4: Awareness and Knowledge

Response	Percentage
Yes	90.5
No	9.5

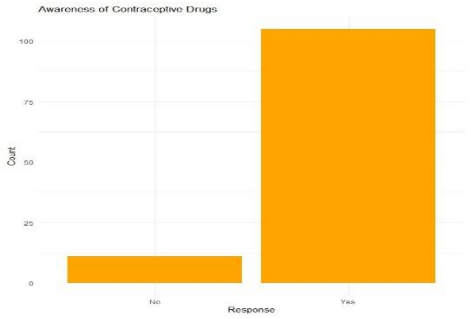

Figure.4: Awareness of Contraceptive Drugs

Interpretation:
The majority of students (90.5%) had heard of contraceptive drugs, reflecting a generally high level of awareness. However, when asked about knowledge of how contraceptives work, only about 74.1% responded positively, indicating that while awareness is widespread, actual understanding is less universal. This suggests some existing knowledge gaps.

Table 5: Usage of Contraceptives

Reason	Yes (%)	No (%)
Do you know how contraceptive drugs work?	74.1	25.9
Have you ever used any contraceptive drug?	37.1	62.9
Are you currently using any contraceptive drug?	9.5	90.5

Interpretation:
Although awareness and knowledge are relatively high, only 37.1% of respondents had ever used contraceptives. An even smaller percentage (9.5%) reported current usage. This reveals a notable gap between knowledge and actual practice.

Table 6: Top Reasons for Using Contraceptives

Reason	Frequency
Prevent Pregnancy	53.3
Medical reasons	21.6
Regulate menstruation	14.7
None	10.2

Table 7: Top Reasons for Non-Use

Reason	Frequency
Fear of side effects	35
Religious/Cultural reasons	24
Lack of information	21
Not sexually active	18

Interpretation:
The primary reason for contraceptive use among respondents was to prevent unwanted pregnancies (53.5%). On the other hand, the strongest barriers to use were fear of side effects (35%) and religious or cultural beliefs (24%). These findings suggest that while the perceived benefit of preventing pregnancy motivates some, personal and cultural concerns discourage others.

Attitudes toward Contraceptives

i. ***Contraceptives Encourage Immorality:*** About 32.8% of respondents agreed with this statement, and another 17.2% strongly agreed, suggesting that roughly half of the students hold the belief that contraceptives may promote immoral behavior. Meanwhile, 27.5% (17.2% disagree + 10.3% strongly disagree) rejected the statement, while 22.4% remained neutral. This shows that moral perceptions around contraceptives remain a divisive issue.

ii. ***Contraceptives are Safe to use:*** A combined 44.8% (33.6% agree + 11.2% strongly agree) considered contraceptives safe, while only 14.7% disagreed or strongly disagreed. Interestingly, 40.5% chose neutral, suggesting a high level of uncertainty about contraceptive safety among respondents. This indicates that while many students perceive contraceptives as safe, a substantial group lacks confidence or clear knowledge.

iii. ***I Would Recommend Contraceptives to a friend:*** Nearly 42.2% (28.4% agree + 13.8% strongly agree) reported they would recommend contraceptives, while 20.7% (13.8% disagree + 6.9% strongly disagree) said they would not. However, the largest

group (35.3%) was neutral. This reflects a mixed attitude—while some are willing to advocate for contraceptive use, others remain hesitant, possibly due to cultural or social concerns.

iv. ***Contraceptives help Prevent Unwanted Pregnancies:*** This item received the strongest positive response, with 73.2% (49.1% agree + 24.1% strongly agree) affirming the role of contraceptives in preventing unwanted pregnancies. Only 5.1% disagreed or strongly disagreed, while 21.6% were neutral. This suggests that despite moral or cultural debates, the effectiveness of contraceptives in preventing pregnancy is widely acknowledged.

v. ***I feel Comfortable Discussing Contraceptive use:*** Responses were more divided here: only 43.1% (25.9% agree + 17.2% strongly agree) said they were comfortable, while 24.1% (15.5% disagree + 8.6% strongly disagree) admitted discomfort. A large proportion (32.8%) stayed neutral. This indicates that while some students can discuss contraceptives openly, many still face social stigma or personal discomfort.

Table 8: Contraceptive Used By Age Distribution

Age distribution	No (%)
16 - 20	77.4
21 – 25	59.7
26 – 30	52.9
Above 30	100.0

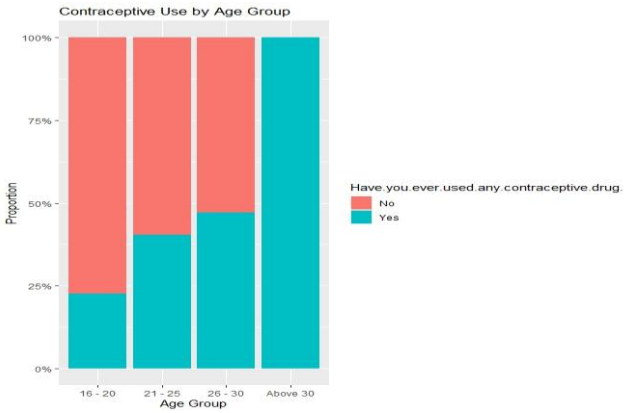

Figure 5: Contraceptive Use by Age Distribution

Interpretation:

The analysis shows that younger respondents (16–20 years) reported the lowest use of contraceptives, with over three-quarters (77.4%) stating they had not used any. Usage improved slightly in the 21–25 and 26–30 categories, though more than half in these age brackets also reported non-use. Interestingly, all respondents above 30 years indicated non-use, though this group was very small in number.

This suggests that contraceptive use is not very common across age groups, though young adults in their mid-20s tend to use contraceptives more than teenagers. The pattern may reflect differences in sexual activity, maturity, and openness to contraceptive use across different stages of life.

Table 9: Contraceptive Use by Marital Status

Marital Status	Yes (%)	No (%)
Single	30.6	69.4
Married	76.5	23.5
Complicated	0.0	100.0

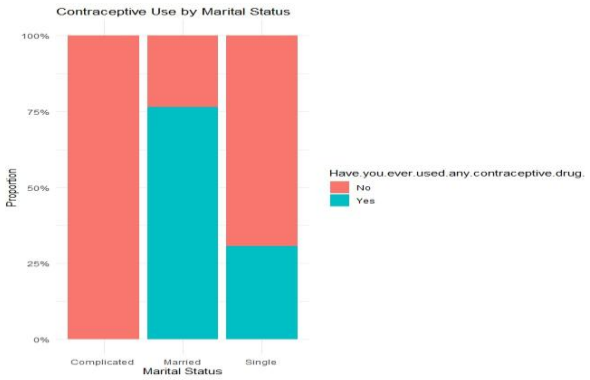

Figure 6: Contraceptive Use by Marital Status

Interpretation:
The results highlight a clear difference in contraceptive use by marital status. A majority of married students (76.5%) reported using contraceptives, compared to only 30.6% of single students. None of the respondents in the "complicated" category reported contraceptive use.
This finding suggests that marital status strongly influences contraceptive decisions. Married students are more likely to use contraceptives, probably due to a greater need for family planning, pregnancy spacing, or responsible sexual activity within marriage. On the other hand, single students, while aware of contraceptives, may be less consistent in their usage due to cultural restrictions, stigma, or lower perceived need.
The Chi-square test of independence was conducted to examine the relationship between socio-demographic factors and contraceptive drug use among female students. The results are summarized in Table 10.

Table 10: Chi-Square Test Results

Variable Pair	χ^2 (Chi-Square)	df	p-value	Decision at 5% Level
Age × Ever Used Contraceptive Drug	5.514	3	0.138	Not Significant
Marital Status × Ever Used Contraceptive Drug	13.654	2	0.001	Significant
Level of Study × Ever Used Contraceptive Drug	7.271	3	0.064	Not Significant
Awareness × Ever Used Contraceptive Drug	5.510	1	0.019	Significant

Interpretation of Results

i. ***Age and Contraceptive Use***: The result ($\chi^2 = 5.514$, p = 0.138) shows no significant association. This suggests that contraceptive use does not differ significantly across age groups.
ii. ***Marital Status and Contraceptive Use:*** The result ($\chi^2 = 13.654$, p = 0.001) is statistically significant. This implies that marital status has a strong influence on whether students have ever used contraceptive drugs.
iii. ***Level of Study and Contraceptive Use:*** The result ($\chi^2 = 7.271$, p = 0.064) is not significant at the 5% level, though marginal. This indicates that year of study does not strongly affect contraceptive use.
iv. ***Awareness and Contraceptive Use:*** The result ($\chi^2 = 5.510$, p = 0.019) indicates a significant association. Students who have heard of contraceptives are more likely to have ever used them.

CONCLUSION

The study concludes that although awareness of contraceptive drugs among female students is very high, this has not translated into widespread usage. A knowledge–practice gap exists, largely influenced by fear of side effects, religious and cultural barriers, and social stigma. Marital status was identified as a strong determinant of contraceptive use, with married students being more likely to use contraceptives than their single counterparts. Awareness also emerged as a significant driver of usage, reinforcing the importance of access to accurate information. Overall, while students generally recognize the benefits of contraceptives in preventing unwanted pregnancies, their actual usage remains low due to a combination of personal, cultural, and social barriers.

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