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ASSESMENT ON UTILISATION OF EMERGENCY CONTRACEPTIVE AMONG FEMALE STUDENTS OF AHMADU BELLO UNIVERSITY, ZARIA MAIN CAMPUS

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Abstract

Contraception refers to the prevention of conception through the use of various devices, sexual practices, chemicals, drugs, or surgical procedures. This study employed a descriptive cross-sectional survey to assess the utilisation of emergency contraceptives among female students of Ahmadu Bello University, Zaria main campus. A simple random sampling technique was used to select 135 female students for participation. Findings indicated that the majority of respondents (64.4%) were between the ages of 21 and 24 years, and most respondents (96%) reported using emergency contraceptives more than twice a year. Among the 135 respondents, almost all (96%) identified Lydia pills and Postinor 2 as emergency contraceptives, while a small proportion (3%) reported no knowledge of any emergency contraceptives, and 1% mentioned Depo Provera, Lydia pills, and Postinor 2. Regarding the timing of use after unprotected sex, 35.6% reported the best time as 12 to 24 hours, 33.3% as 24 to 48 hours, and 17.8% as 72 to 120 hours. Concerning recommendations, the majority (80%) indicated that they would recommend emergency contraceptives to friends and relatives. Additionally, 56.3% perceived emergency contraceptives as very effective, while 51.9% considered them safe for users. The aggregate mean utilisation was 3.56, substantially higher than the decision mean of 2.50. A one-sample t-test yielded a t-value of 23.69, exceeding the critical t-value of 1.656 at the 0.05 significance level, leading to the rejection of the null hypothesis and indicating that the utilisation of emergency contraceptive methods among the students is statistically significant. The findings highlight the need for health educators to strengthen awareness and education campaigns on emergency contraceptive use, utilising diverse communication channels such as banners, posters, peer group education, information, education and communication (IEC) materials, social media platforms, and newspapers, to enhance knowledge, reduce stigma and promote responsible utilisation among female students. Furthermore, pharmacies and drug stores should improve customer care services to reduce challenges and stigmatisation for students.

Keywords: Contraceptive, Methods, Female Students, and Utilisation.

Introduction

The use of emergency contraception offers the last chance and effective opportunity to avoid unintended pregnancies and induce- abortions after unprotected sex (Biu et al., 2025; Yusuf et al., 2026). Most women who had an unprotected sex use contraceptive methods to prevent unintended pregnancies. Emergency contraception when taken within 3 days after sexual intercourse can prevent about 95% of pregnancies. Any woman or girl of reproductive age may need emergency contraception to avoid an unwanted pregnancy. There are no absolute medical contraindications to the use of emergency contraception. There are no age limits for the use of emergency contraception. Eligibility criteria for general use of a copper IUD also apply for use of a copper IUD for emergency purposes. (Akorede et al., 2017; Dawson et al., 2023). Studies have shown that low contraceptive utilisation and early involvement in sexual activity are some of the causes of unintended pregnancies and their related problems in Africa (Dahiya et al., 2022). Global estimates revealed that 39% of all induced abortions from 2012-2019 were unsafe (Zhao et al., 2023). Nigeria estimated about 1, 231,650 pregnancies each year between 2013 and 2019 out of which 681,881 pregnancies were unintended and 256, 233 resulted in abortion (Kara, 2023). A study found the prevalence of unintended pregnancy among Nigerian women as 44% among literates than women with no formal education (Mishore, 2023). To avoid unintended pregnancies, the Nigerian government through the Ministry of Health and its agencies have been championing improved and friendly family planning services in Nigeria.

None the less, the knowledge of contraceptive methods is universal in Nigeria among sexually active women (women of child bearing age), are considerably low and inadequate (WHO, 2024). Side effects from the use of emergency contraceptive pills (ECPs) are generally similar to those of oral contraceptive pills, including nausea,

vomiting, slight irregular vaginal bleeding, and fatigue. Such side effects are uncommon, usually mild, and typically resolve without the need for additional medication. If vomiting occurs within two hours of taking a dose, the dose should be repeated. ECPs containing levonorgestrel (LNG) or ulipristal acetate (UPA) are preferable to combined oral contraceptives (COCs) because they are associated with less nausea and vomiting. Routine use of anti-emetics before taking ECPs is not recommended. Importantly, drugs used for emergency contraception do not harm future fertility, and there is no delay in the return to fertility following their use (Olubiyi et al., 2019; Akorede et al., 2022).

Evidence from studies supports the high effectiveness of ECPs. A meta-analysis of two studies showed that women who used ECPs containing UPA had a pregnancy rate of 1.2%, while studies on ECPs containing LNG reported pregnancy rates of 1.2% to 2.1%. Ideally, ECPs whether containing UPA, LNG, or COCs should be taken as early as possible after unprotected intercourse, within 120 hours. Notably, ECPs containing UPA are more effective than other ECPs when taken between 72 and 120 hours after unprotected intercourse (Gautam, 2021).

There are no medical restrictions on who can use ECPs, making them broadly accessible. However, some women may use ECPs repeatedly, either as a precaution or as their primary method of contraception. In such cases, additional counselling is required to discuss more regular and effective contraceptive options. Frequent or repeated use of ECPs may increase side effects, such as menstrual irregularities, particularly in women with medical eligibility criteria (MEC) categories 2, 3, or 4 for combined hormonal contraception or progestin-only contraceptives (POCs), although repeated use does not pose known long-term health risks (Harande et al., 2025; WHO, 2024). ECPs are less effective in women with obesity (BMI > 30 kg/m²), but there are no associated safety concerns, and obese women should not be denied access when needed.

Counselling on the use of ECPs should also include guidance on regular contraceptive options and instructions on correct use in cases of perceived method failure. All women and girls at risk of unintended pregnancy have the right to access emergency contraception, and these methods should be included in national family planning programs. Moreover, ECPs should be integrated into health care services for populations most at risk of unprotected sex, including post-sexual assault care and services for women and girls in emergency or humanitarian settings (WHO, 2024).

Despite the availability of ECPs, many undergraduate female students face barriers to access due to stigma. Female students at Ahmadu Bello University, Zaria**,** fall within a sexually active age group and therefore have high unmet family planning needs (GDHS, 2014). Few studies have examined the knowledge, attitude, and use of emergency contraception among female university students in Nigeria, highlighting the low awareness and utilisation of ECPs. It is against this backdrop that the current study seeks to assess the utilisation of emergency contraception among female students of Ahmadu Bello University, Zaria**.**

Purpose of the Study

The purpose of this study was to assess the utilisation of emergency contraceptive methods among female students of Ahmadu Bello University, Zaria.

Research Question

Do the female students of Ahmadu Bello University, Zaria main campus utilise emergency contraceptive methods?

Hypothesis

Utilisation of emergency contraception among female students of Ahmadu Bello University, Zaria main campus is not significant.

Methodology

For this study, a descriptive cross-sectional design was adopted to assess the utilisation of emergency contraception among female students of Ahmadu Bello University, Zaria main campus. This research design allowed data to be collected at a single point in time, thereby eliminating the need for follow-up and providing a snapshot of current behaviours and perceptions (Dessalegn & Ibrahim, 2024; Akorede et al., 2022). Descriptive cross-sectional surveys are particularly effective in examining ongoing processes, dominant activities, perceptions, and challenges within a population. As noted by Fraenkel and Wallen (2016) and Yusuf et al. (2025), this design enables researchers to ask respondents questions about the existence of problems at a given moment,

allowing findings from a representative sample to be generalised to the broader population. The approach is widely used in social sciences due to its efficiency in collecting data over a relatively short period, typically a few days to weeks (Hoque, 2022; Faleke et al., 2024).

The study population comprised 14,173 female students enrolled at Ahmadu Bello University, Zaria main campus. The target population consisted of 135 female students drawn from various faculties and departments. The sample size was determined using Yamane's formula (Yamane, 1967), which is expressed as (n = N / [1 + N(e)^2]), where (N) represents the population size (14,173) and (e) denotes the level of precision (0.05), with an allowance for a 5% non-response rate. This computation yielded a sample of 135 students. A simple random sampling technique was employed to select participants. The researcher obtained the complete list of female students from the university administration office, and using Microsoft Excel, 135 index numbers were randomly generated. The students corresponding to these numbers were included in the study sample, ensuring that every student had an equal chance of selection and minimising selection bias.

Data were collected using a well-structured questionnaire consisting of 11 items, divided into two sections: (i) participants' socio-demographic characteristics and (ii) utilisation of emergency contraceptive methods. The questionnaire employed close-ended items, which, although somewhat limiting, facilitated coding and data analysis. Care was taken to ensure that questions were precise, clear, and specific, enhancing both reliability and validity. The instrument utilised a researcher-developed, 4-point modified Likert scale, with a mean score of 2.50 serving as the threshold for interpreting responses. To establish face and content validity, three experts from the Department of Human Kinetics and Health Education reviewed the instrument. Their comments, corrections, and suggestions were incorporated into the final version of the questionnaire, which was subsequently used for data collection.

Informed consent was obtained from all participants before data collection. As an incentive, each respondent received an exercise book upon completion of the questionnaire. The reliability of the instrument was established using Cronbach's alpha, yielding a coefficient of 0.89, which indicates high internal consistency and confirms that the instrument is suitable for measuring the variables of interest.

For data analysis, descriptive statistics including frequencies and percentages were used to summarise respondents' demographic characteristics. Mean scores and standard deviations (SD) were employed to address the research questions, with a mean score of 2.50 or higher considered positive and scores below 2.50 regarded as negative. Additionally, inferential statistics using a one-sample t-test was conducted at a 0.05 significance level to test the study hypotheses and determine whether they should be accepted or rejected.

Presentation of Results

Classification of the Respondent's Demographic Characteristics (N = 135)

Variable	Options	Frequency	Percentage
Age group	17 – 20 years	21	16
	21 – 24 years	64	47
	25 – 28 years	37	27
	28 years and above	13	10
Marital Status	Married	31	23
	Single	93	69
	Divorce	11	8
Faculty	Education	43	32
	Political science	27	20
	Engineering	13	10
	Arts	33	24
	College of medicine	19	14
Level of Study	100 level	9	6
	200 level	17	13
	300 level	67	50
	400 level	31	23
	500 level	11	8

Source (Field survey 2026)

Table 1 above shows the socio-demographic characteristics of respondents in this study. From the results, it showed that majority of the respondents (47%) are students between the ages of 21-24 years followed by 27% accounting for students between the ages of 25-28 and 16% for those less than 20 years. In addition, only 10% of the respondents were above 28 years. Furthermore, on the marital status of respondents, most of the respondents (69%) are single with about 23% of the respondents being in Married. The majority of the respondents are from the faculty of education, overall of the respondent are in 300 level.

Research Question: Do female students of Ahmadu Bello University, Zaria main campus utilise emergency contraceptive methods?

Table 2: Mean scores on utilisation of emergency contraception among female students of Ahmadu Bello University, Zaria main campus

SN	Utilisation	Mean	Std Dev
1	Do you know about emergency contraceptive methods	3.54	0.632
2	Do you use emergency contraceptive methods	3.58	0.583
3	Does emergency contraceptive method prevent pregnancy	3.60	0.549
4	Emergency contraceptive method are best taken within 12 to 24 hours after unprotected sex	3.58	0589
5	Emergency contraceptive method are best taken within 24 to 48 hours after unprotected sex	3.55	0.594
6	Emergency contraceptive method are best taken within 72 hours to 120 hours after unprotected sex	3.55	0.564
7	You used Postinor 2 emergency contraceptive method	3.54	0.616
7	You used Lydia pills emergency contraceptive method	3.49	0.668
9	You use emergency contraceptive method more than twice a year		
10	Emergency contraceptives are safe for users	3.63	0.508
11	Would you recommend emergency contraceptive method to a friend	3.60	0.549
	Aggregate mean	3.56	0.520

(Decision mean = 2.50)

Table 1 above revealed that the aggregate mean of 3.56 which is greater than Decision mean 2.5 indicated that the female students of Ahmadu Bello University, Zaria main campus utilises emergency contraceptives. Findings revealed that, more than half of the respondents (51.8%) were aware of pills as the only form of emergency contraceptive. They were of the view that, pills are readily available and do not cost as may compare to other contraceptives. were of the view that, emergency contraceptives is solely used to prevent pregnancy after unprotected sex during unsafe period. Regarding the maximum time emergency contraceptives can be taken after unprotected sex showed most of the study respondents (35.6%) indicated the best time to take emergency contraception after unprotected sex was between 12 to 24 hours. Some of the respondents (33.3%) said the maximum time to take emergency contraceptives was 24 to 48 hours after sex. A few others (17.8%) were of the view that, the maximum time to take emergency contraceptives after sex was 72 to 120 hours as shown above. depicts some common emergency contraceptives on the Nigerian market. Out of the responses (n= 135), majority of the respondents (96%) chose Lydia pills and Postinor 2 as emergency contraceptives. A small number of the respondents (3%) said they don't know any type of emergency contraceptives while a respondent (1 %) chose Depo Provera, Lydia pills and Postinor 2 as emergency contraceptives. This may be as a result of socio demographic patterns or the availability of emergency contraception services in the area.

Hypothesis Testing

H_0: Utilisation of emergency contraception among female students of Ahmadu Bello University, Zaria main campus is not significant.

Variable	Mean	Std Dev	t-calculated	df	t-critical	Decision
Utilisation of Emergency Contraceptives	3.56	0.520	23.69	134	1.656	Significant (Reject H_0)

The results in Table 2 reveal that the aggregate mean utilisation of emergency contraceptives among female students is 3.56, which is substantially higher than the decision mean of 2.50. The calculated t-value of 23.69 exceeds the critical t-value of 1.656 at the 0.05 significance level, leading to the rejection of the null hypothesis.

This indicates that the utilisation of emergency contraceptive methods among the students is statistically significant**.** However, the high mean score suggests that students are not only knowledgeable about emergency contraceptive methods but also actively use them. Additionally, the relatively low standard deviation (0.520) indicates that responses were consistent across the sample, reinforcing the reliability of the finding. The statistical significance confirms that the observed utilisation is meaningful and unlikely to have occurred by chance, reflecting a positive pattern of contraceptive behaviour among the students. These findings have important implications for sexual and reproductive health education, demonstrating that awareness and adoption of emergency contraceptive practices are effectively established within the university population.

Discussion of Findings

This study assessed the utilisation of emergency contraception among female students of Ahmadu Bello University, Zaria Main Campus. The analysis of the hypotheses indicated that **H_0,** the null hypothesis stating that the utilisation of emergency contraception among these students is not significant, was **rejected,** demonstrating that respondents generally utilise emergency contraception, recognising its effectiveness in preventing unintended pregnancy following unprotected sexual intercourse.

The majority of respondents were knowledgeable about emergency contraceptives. Regarding sources of information, most participants (50%) reported learning about emergency contraceptives from friends and relatives, while a smaller proportion (11%) cited media programs or advertisements. The study findings was not in line with a study that showed most commonly used contraceptive method as pills (56.4%) followed by depot Provera (23.1%) and condom (10.2%) (Rufa'i., 2023). This pattern may reflect limited health outreach programs or family planning services in the area. Notably, these findings contrast with a study conducted in a semi-urban settlement in Cameroon, where 41.8% of respondents reported obtaining knowledge of emergency contraceptives from health workers (Alsharif et al., 2023). To further highlight differences, a study among female university students in Uganda found that formal educational programs were the primary source of information, with over 70% citing classroom or institutional health education (Aryahebwa et al., 2023), indicating that reliance on informal networks is not universal and may vary across contexts.

Concerning the maximum time frame for taking emergency contraceptives after unprotected sex, 35.6% of respondents indicated that the ideal period is 12 to 24 hours, 33.3% reported 24 to 72 hours, and 17.8% believed the maximum period is 72 to 120 hours, as presented in the table above. These results demonstrate varying levels of awareness regarding the correct timing for emergency contraceptive use. In contrast, a study conducted among female university students in KwaZulu-Natal, South Africa, reported that only 29.5% of participants correctly identified 72 hours as the maximum effective period, indicating generally lower knowledge compared to the current study (Hoque & Ghuman, 2022).

Conclusion

In conclusion the finding from this study showed that the female students of Ahmadu Bello University, Zaria main campus utilises emergency contraceptives. Due to the female students' high response on utilisation. The study showed that a little over half of the respondents indicated emergency contraceptives were safe for its users.

Recommendation

i. Institutional health services such as college clinics and hospitals should provide friendly and professional reproductive health service to students especially females to minimize challenges associated with accessing emergency contraceptives.

ii. Attendants of drug stores/pharmacy shops should undergo periodic workshops on good customer care and family planning especially the pills to provide a good atmosphere for females to purchase the pills and also give the right education to their customers on emergency contraceptives

iii. Policy makers such as the ministry of health and the college management should make family planning a compulsory course for all first year students to impart the right professional knowledge that will inform attitude and utilisation of emergency contraceptives.

iv. Counselling for use of emergency contraceptive pills should include options for using regular contraception and advice on how to use methods correctly in case of perceived method failure.

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