

## Research Article

# Awareness, Attitude and Utilization of Emergency Contraceptives Among Women in Ussa Local Government Area of Taraba State, Nigeria

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**Abstract**— Unsafe abortions and unwanted pregnancies continue to be major global public health issues, particularly in low-income nations. This study evaluated women in Taraba State's Ussa Local Government Area's knowledge, use, and influencing variables about emergency contraceptives. A total of 384 questionnaires were distributed to selected women in the study location who were in the reproductive age range of 15–49 years, using a cross-sectional survey research methodology. While nearly half of the respondents were aware of emergency contraception, the results show that information regarding their availability and use might be better disseminated. A reasonable percentage of respondents (34.3%) believed they had used emergency contraception, but the majority (65.7%) had not. Economic limitations, information gaps, moral convictions, relationship dynamics, societal stigma, and the fear of adverse health consequences are some of the variables that the study also identified influence women's attitudes towards emergency contraception in the Ussa Local Government Area. A significant relationship was found between attitudes towards ECs and their utilization, as revealed by a Chi-Square Test with a calculated value of 38.89, leading to the rejection of the null hypothesis. The study also found that socio-economic factors such as income, education, and occupation significantly influenced both attitudes and utilization of ECs, with higher income and education levels associated with more positive attitudes and greater utilization. In light of the study's findings, we suggested that in order to empower women and lower the number of unwanted pregnancies, health agencies in the Ussa Local Government Area should improve their health promotions, promote parent-child conversations about reproductive health, involve traditional and religious leaders in family planning campaigns, create centers that are welcoming to young girls, and put in place thorough reproductive health education.

**Keywords**— Awareness, Attitude, Utilization, Emergency Contraceptives, women, Unintended pregnancies

## 1. Introduction

Globally, over one-third of the 182 million unplanned pregnancies in low-income countries result in an induced abortion, which is risky in 19% of these cases and occurs in 19% of these cases [1]. Additionally, in each year, more than 68,000 people die due to unsafe abortions, with millions more experiencing severe complications such as excessive bleeding and infections. Despite the availability, safety, and effectiveness of emergency contraceptive options, there remains a substantial lack of awareness and utilization of these methods among women of reproductive age[2]. This reduced awareness poses a major global public health issue that causes a steady rise in the number of unwanted pregnancies and induced abortions worldwide. Of the estimated 210 million pregnancies that occur each year, 46 million (22%) are considered unwanted, with over 90% of these ending in induced abortions, often accompanied by complications [3]. In Nigeria particularly, unintentional pregnancy is still a major concern, particularly among adolescents, where a large percentage of pregnancies result

from unprotected sexual intercourse, and most of these ends in unsafe abortions[4]. Factors such as inadequate education on proper contraceptive use, users' inability to manage their emotions, negative attitudes towards contraceptives, and lack of motivation contribute to the prevalence of unplanned pregnancies and unsafe abortions in the country[5,6]. Moreover, despite these concerning statistics, many Nigerian women remain uninformed about the use of emergency contraception (Speidel, Harper, and Shields, 2008). Emergency Contraceptives (ECs) are used after unprotected sexual intercourse, sexual abuse, misuse of regular contraception, or when no contraception has been used at all [7,8]. Women may use emergency contraceptives for various reasons, including unprotected sexual activity, condom failure, missed birth control tablets, sexual assault, or a partner's contraceptive method failure. When taken correctly according to prescribed instructions, ECs are highly effective, safe from a medical perspective, and cost-effective in preventing unwanted pregnancies, unsafe abortions, and other consequences [9]. Additionally, research has demonstrated that only 1.8% of emergency contraceptive pill prescriptions

failed, showcasing the high success rate of ECs[10]. While ECs are very important in reducing unwanted pregnancies and abortions, the levels of awareness and acceptance play a vital role in their utilization. In countries like Nigeria, which has a population policy aimed at reducing unintended births, understanding the knowledge, attitudes, and practices of women and girls towards ECs is essential. Ussa Local Government Area in Taraba State mirrors the national scenario regarding the use of emergency contraception. Existing literature has primarily focused on the effectiveness and safety of emergency contraception methods, often overlooking the critical aspects of awareness and acceptability. Furthermore, a review of existing studies indicates a lack of empirical research on the awareness, usage, and influencing factors of emergency contraception in Ussa Local Government Area, Taraba State, Nigeria. This knowledge gap is particularly concerning in Ussa Local Government Area, where women of childbearing age lack sufficient awareness about emergency contraceptives, including their availability, effectiveness, and proper usage. This deficit could negatively impact their attitudes towards emergency contraceptives, resulting in missed opportunities to prevent unintended pregnancies. Attitudes toward emergency contraceptives play a major role in their utilization. Negative attitudes, stemming from stigma, misconceptions, or cultural beliefs, may deter women from seeking or using these contraceptives when needed, and this could lead to potential unintended pregnancies. Even when the contraceptives are available, underutilization may occur among women in Ussa Local Government Area due to factors such as limited access, affordability, social stigma and lack of information on where to obtain these contraceptives. Moreover, access to healthcare services, including family planning and emergency contraceptive services, may be constrained in Ussa Local Government Area, thereby aggravating the challenges faced in relation to women's knowledge, attitudes, and utilization of emergency contraceptives. Therefore, addressing these critical areas of concern is paramount for enhancing the reproductive health and overall well-being of women of childbearing age in Ussa Local Government Area, Taraba State. On this note, this study evaluates the acceptance and use of emergency contraceptives and the factors influencing both in Ussa Local Government Area, Taraba State. The study is organized as follows: the Introduction provides an overview of the research context and objectives; the Literature Review examines relevant theory and previous studies; the Methodology outlines the research design and data collection and analysis methods; the Results and Discussion present and analyze the findings; and the Conclusion summarizes key insights and offers recommendations.

## 2. Literature Review

### Concept of Emergency Contraceptives

Emergency contraceptives (ECs) refer to methods used to prevent pregnancy after unprotected intercourse, contraceptive failure, or in cases where regular contraception was not used. These methods are designed for use in emergency situations and are not intended for regular

contraception. They work by either preventing ovulation, fertilization of the egg by sperm, or implantation of the fertilized egg in the uterus [7,8]. Emergency contraceptives encompass a range of methods and formulations that include hormonal pills containing levonorgestrel or ulipristal acetate and the copper intrauterine device. These methods act through various mechanisms, such as delaying or inhibiting ovulation, interfering with fertilization, or altering the endometrial lining to prevent implantation. The fundamental premise of ECs lies in their time-sensitive nature, with effectiveness diminishing as time elapses post-intercourse. Their efficacy is highest when taken within a specific timeframe following unprotected sex, typically within 72 hours, though some formulations might extend this window to 120 hours[11]. Studies have stressed the importance of awareness and accessibility to ECs. Awareness campaigns, educational initiatives, and improved healthcare services play pivotal roles in ensuring women have timely access to accurate information and the means to obtain emergency contraception when needed. Access to ECs within pharmacies, healthcare facilities, and even over-the-counter availability in some regions significantly influences their utilization rates. Moreover, cultural, social, and economic factors intricately shape the perception and usage patterns of emergency contraceptives. Religious beliefs, societal norms, stigma, and personal attitudes toward reproductive health contribute to the variability in their uptake among different populations. Additionally, socioeconomic status, education levels, and geographical location often influence women's access to and utilization of ECs.

### Awareness Levels and Knowledge

Numerous studies capture the varying levels of awareness and knowledge about emergency contraceptives [1,2,3,4,5]. For instance, a study revealed the disparities in awareness among different age groups, emphasizing the need for targeted educational campaigns[11]. Similarly, research by Smith and his colleagues identified gaps in understanding among women from rural areas compared to urban settings[12]. In a 2017 study in the rural area of Moletji-Mashashane, Limpopo Province, South Africa, Mamabolo assessed the level of knowledge secondary school students had regarding emergency contraceptives[13]. The results showed that students' understanding of the topic was lacking; 47.5% of them said they had heard of emergency contraceptives, while 52.5% said they had never heard of them. This was likely due to the fact that most students had misconceptions about the specifics and safety of ECPs. Their degree of consciousness could be determined by how much information they are exposed to, justified by Mahfuzur et al. finding that there is a positive correlation between media availability and the likelihood of utilizing emergency contraceptive pills[14]. In a separate research by Arisukwu et al., although 52.8% of the sample had heard of emergency contraceptives, only 14.5% of the respondents had adequate awareness of them[4]. Additionally, they discovered that 19.4% of respondents in schools exclusively for females had an excellent understanding of emergency contraception, compared to 9.2% of respondents in coeducational institutions. Furthermore, a mere 25% of all respondents reported having previously

utilized emergency contraception. According to Gebrehiwot et al. in their evaluation of female college students' knowledge, attitudes, and practices about emergency contraception in Mekelle Town, Tigray Region, Ethiopia, a majority of people had a negative attitude towards emergency contraception and there was a poor degree of understanding and practice [15]. Studies by Arowojolu et al. and Sedgh et al. found disparities in awareness levels among women in different regions, emphasizing the need for enlightening interventions in order to increase awareness about ECs [8,16]. According to Osei-Tutu men should be included in all reproductive health programmes since they actively participate in decision-making regarding reproductive health issues [17]. This will eventually contribute to a decrease in unwanted and unplanned pregnancies and, consequently, unsafe induced abortions. Tenaw suggested that in order to reduce the incidence of unintended pregnancies and pregnancy terminations, reproductive health programmes should promote women's conversations with their partners regarding emergency contraception [11].

### **Factors Influencing the Utilization of Emergency Contraceptives**

Several factors influence the usage of emergency contraceptives according to existing literature. These factors encompass socio-cultural aspects, health education initiatives, accessibility to information, and healthcare services [5,4,7,11]. One research by Mahfuzur et al. captured the role of healthcare provider communication in promoting EC usage, accentuating the significance of counselling and guidance [14]. They discovered that women who received visits from family planning field workers had far greater probabilities of utilizing emergency contraceptives than women who did not get such visits. Research by Addo and Tagoe-Darko confirmed the impact of socio-economic status on EC utilization [18], while other studies found the role of religious beliefs, cultural norms, and healthcare provider attitudes in shaping usage patterns [11,19]. Cultural perceptions, stigma, personal beliefs, and the quality of healthcare services have also been found to be major determinants of the usage of ECs [20]. Furthermore, the accessibility and availability of ECs within the local healthcare system significantly influence their usage among women [21,22].

### **3. Theoretical Framework**

This research is grounded in the Theory of Planned Behaviour (TPB), which suggests that an individual's behaviour is shaped by three key constructs: attitudes, subjective norms, and perceived behavioural control. According to this theory, these constructs influence an individual's intention to perform a specific behaviour, which in turn predicts the likelihood of that behaviour occurring. The TPB framework describes the elements impacting women's decisions when it comes to emergency contraception awareness, attitudes, and patterns of usage in Ussa Local Government Area, Taraba State. Attitudes refer to an individual's overall evaluation of emergency contraceptives, shaped by perceptions of their effectiveness, safety,

accessibility, and personal beliefs about contraception. For instance, positive attitudes towards emergency contraceptives may increase the likelihood that women will consider and use these methods. Subjective norms encompass the perceived social pressures or expectations related to the use of emergency contraceptives within the community or social circle. The influence of family, friends, healthcare providers, religious beliefs, and cultural values can significantly impact a woman's decision to use emergency contraceptives. Positive perceptions or encouragement from influential figures can enhance acceptance and utilization. Perceived Behavioural Control captures an individual's perceived ease or difficulty in using emergency contraceptives and their belief in their ability to manage this behaviour. Factors influencing perceived behavioural control may include access to contraceptives, knowledge about their use, affordability, convenience, and the degree of autonomy in making reproductive health decisions. This research explored these constructs within the specific context of women in Ussa Local Government Area, using a questionnaire survey to assess women's perceptions of emergency contraceptives, examining beliefs, concerns, and perceived benefits, and evaluating factors such as accessibility, affordability, knowledge levels, and decision-making autonomy.

### **4. Research Design**

This study utilized a cross-sectional survey design, a method well-suited for gathering data to describe, interpret, and analyze prevailing conditions, behaviours, and perceptions within a specific population at a single point in time. This design was chosen to capture a snapshot of the levels of awareness, attitudes, and utilization of emergency contraceptives among women of reproductive age in Ussa Local Government Area, Taraba State, Nigeria. Cross-sectional surveys are particularly effective for identifying associations between variables, such as the influence of socio-economic and demographic factors on contraceptive use, without requiring longitudinal data.

#### **Study Location and Context**

This study was conducted in Ussa Local Government Area (LGA), located in the southern part of Taraba State, Nigeria. Ussa LGA is predominantly inhabited by the Kuteb ethnic group, who are mostly Christians. The area, which is characterized by its rural setting, has agriculture as the principal occupation of its residents. The local healthcare infrastructure in the study area is relatively limited, with healthcare services primarily delivered through primary health centres and a few secondary facilities. The accessibility of healthcare has often been constrained by geographical, financial, and socio-cultural factors and this Local Government Area faces challenges such as low literacy rates, poverty, and restricted access to information, all of which can impact the awareness and utilization of health services, including emergency contraceptives. The socio-cultural context of Ussa LGA is considerably shaped by traditional beliefs and practices that influence reproductive health decisions. Cultural norms, religious beliefs, and the influence of community leaders play a substantial role in

shaping attitudes towards contraception. In this context, the use of emergency contraceptives may encounter stigma or misconceptions, which can further complicate their acceptance and utilization. Having an in-depth knowledge on the unique socio-cultural and environmental factors in Ussa LGA is essential for this study because it provides valuable information into the specific challenges faced by women in the region concerning their awareness, attitudes, and use of emergency contraceptives. By examining these local factors, the study aimed to produce findings that are not only relevant but also applicable to addressing the reproductive health needs and barriers faced by women in Ussa LGA.

### Population, Sample Size and Sampling Techniques

The study targeted women of childbearing age (15-49 years), both married and unmarried, residing in Ussa Local Government Area (LGA) of Taraba State. Due to the lack of precise data on the total number of women within this age group in the study area, the sample size was determined using Cochran's (1963) sample size formula. The formula is expressed as.

The formula is given thus:  $n = \frac{Z^2 pq}{e^2}$  Where:

n = required sample size

Z = Z-score, which corresponds to the desired level of confidence (for a 95% confidence level, Z = 1.96)

p = estimated amount of the population with the characteristic of interest (in this case, the proportion of women with knowledge, a positive attitude, and usage of emergency contraceptives)

q = 1 - p (complementary probability)

E = margin of error (0.05 for a 5% margin of error)

Since we had no prior information on the proportion of women in the population with knowledge, a positive attitude, and usage of emergency contraceptives, we used the default value of 0.5 for p.

At a 95% confidence level (Z = 1.96) and a margin of error (E) of 0.05. Plugging these values into the formula:

$$n = \frac{1.96^2 \cdot 0.5 \cdot 0.5}{0.05^2}$$

$$n = \frac{3.8416 \times 0.25}{0.0025}$$

$$n = \frac{0.9604}{0.0025}$$

$$n = 384$$

This study employed a multistage cluster sampling technique. The first stage involved identifying the eight political wards within the Local Government Area: Kpambo, Kpambo Puri, Kwesati, Lissam I, Lissam II, Lumbu, and Rufu. In the second stage, a simple random sampling method was used to select five wards from these eight, ensuring each ward had an equal chance of being chosen. In the third stage, since the number of women of reproductive age in each selected ward of Ussa Local Government was not known, respondents were purposively allocated to each ward to ensure equal participation. A total of 384 respondents were distributed across the selected political wards in the study area, with 76 respondents in Rufu ward, 77 in Lissam II ward, 77 in Fikyu, 77 in Kpambo ward, and 77 in Lumbu ward. Finally, in the

fourth stage, a systematic random sampling approach was used to select the required number of respondents. This was done using the Primary Healthcare household (PHCH) database, which provided a comprehensive list of the households in each council ward within Ussa Local Government Area. The formula of systematic random sampling technique is given as: -

$$X = \frac{TRhh}{Rsw}$$

Where;

X= Required household

TRhh= Total number of households in the ward

Rsw= Required number of samples in the ward

For instance, in Lumbu ward, if the total number of registered households by the Primary Health Care Centre was 200 and the required sample was 77, the household(x) was selected thus:

$$x = \frac{200}{77}$$

$$= 2.59$$

$$= 3$$

This approach served as the basis for the sampling frame. By the calculation above, every third (3rd) household on the list was selected until a total of 77 households were reached. The addresses on the list were subsequently used to contact the selected homes, where a questionnaire was administered to a woman aged 15 to 49 within each household. In cases where multiple women within the specified age range were present a household, the eldest woman was chosen for the study. If a selected household did not include a woman of reproductive age, the nearest household with the required respondent was utilized. This same method was applied to select respondents in the other selected wards.

### Data Collection and Analysis

Data were collected using a structured questionnaire designed to capture information on respondents' awareness, attitudes, and utilization of emergency contraceptives. To ensure accurate data collection, trained research assistants administered the questionnaire. The respondents included a diverse group of women of reproductive age, both educated and uneducated, married and single. To accommodate the varying literacy levels among participants, research assistants read questions aloud and provided explanations to illiterate respondents, while literate respondents completed the questionnaire independently. The questionnaires were distributed over a two-day period, allowing respondents adequate time for thoughtful responses. The research team collected completed questionnaires for analysis upon the conclusion of the data collection period. To ensure data accuracy and reliability, the collected data were coded and processed using the Statistical Package for Social Sciences (SPSS) software. The data were analysed using a combination of descriptive and inferential statistics to comprehensively assess the study's objectives. Descriptive statistics, including frequencies and percentages, were used to summarize participants' levels of awareness, attitudes, and utilization of emergency contraceptives. For the inferential analysis, Chi-square tests were employed to explore associations between

categorical variables, such as attitudes toward and utilization of emergency contraceptives. Furthermore, Multiple Regression analysis was conducted to examine the impact of socio-economic variables—such as age, income, occupation, and marital status—on the likelihood of emergency contraceptive utilization in Ussa Local Government Area. This analysis enabled a deeper understanding of how specific demographic factors shape reproductive health behaviours. The significance level was set at  $\alpha = 0.05$ , ensuring that results were statistically meaningful.

### 5. Results and Discussion

A total of 384 questionnaires were administered for the study, with 379 completed and returned, providing a response rate of 98.7%.

#### Socio-Demographic Characteristics of Respondents

**Table 1:** Socio-Demographic Characteristics of Respondents

Variable	Categories	f	(%)
<b>Age</b>	15-20	13	3.4
	21-25	110	29.0
	26-30	125	33.0
	31-40	107	28.2
	41-49	24	6.4
<b>Marital Status</b>	Single	107	28.2
	Married	227	59.9
	DSW	45	11.9
<b>Education</b>	No formal education	73	19.3
	Primary	115	30.3
	Secondary	100	26.4
	Tertiary	91	24.0
<b>Occupation</b>	Student	35	9.2
	Unemployed	205	54.1
	Housewife	30	7.9
	Farming	66	17.4
	Civil Servants	32	8.4
	Petty Trading	11	2.9
	<b>Annual Income</b>	≤ ₦50,000	179
	₦51-100,000	89	23.5
	₦101-200,000	52	19.8
	₦201-300,000	34	8.9
	₦300,000 and above	25	6.6
<b>Religion</b>	Christians	368	97.1
	Muslims	6	1.6
	Traditional Religion	5	1.3

Source: Field Survey, 2024

The data in Table 1 captures a summary of the socio-demographic characteristics of the respondents of this research. The age distribution indicates that the majority of the respondents (61.2%) fell within the 21-30 age range, a critical period for reproductive health decisions. In the data, the significant proportion of married respondents (59.9%) accentuates the importance of studying family planning behaviours in this group. The educational attainment of the participants varied, with 19.3% having no formal education and 24% reaching tertiary education. This diversity may influence awareness and attitudes towards emergency

contraceptives in the study area. The data on occupation reveals a high rate of unemployment (54.1%), which may impact access to health services, including emergency contraception in Ussa Local Government Area. The income distribution of the respondents indicates that nearly half of them (47.2%) earned less than ₦50,000 annually, reflecting potential financial barriers to accessing contraceptives. The religious composition of the respondents was predominantly Christian (97.1%), which may also shape their attitudes towards reproductive health practices.

#### Objective 1: Knowledge of Emergency Contraceptives in Taraba State's Ussa Local Government Area

**Table 2:** Awareness about Emergency Contraceptives

Response	Frequency	Percentage(%)
<b>Yes</b>	182	48.0
<b>No</b>	197	52.0
<b>Total</b>	379	100

Source: Field Survey, 2024

According to the data in Table 2, the majority of respondents (52.0%) were unaware of emergency contraceptives, whereas slightly less than half (48.0%) were. This captures a significant gap in knowledge that needs to be addressed because the lack of awareness may be due to factors such as limited access to reproductive health information in the study area. The age and educational levels of the respondents suggest that younger women and those with higher education are more likely to be aware of emergency contraceptives. This awareness gap presents an opportunity for health education interventions to improve knowledge about emergency contraceptives among women of reproductive age in the research area.

#### Objective 2: Attitudes Towards Emergency Contraceptives Ussa Local Government Area, Taraba State

**Table 3:** Attitudes Towards Emergency Contraceptives

Response	Frequency	Percentage (%)
<b>Positive Attitude</b>	129	34.0
<b>Negative Attitude</b>	250	66.0
<b>Total</b>	379	100

Source: Field Survey, 2024

The data in Table 3 shows that a majority of the respondents (66.0%) held negative attitudes towards emergency contraceptives, while only 34.0% had positive attitudes. These negative perceptions could have stemmed from cultural and religious beliefs, misinformation, or fears about the potential side effects of ECs in the study area. The high prevalence of negative attitudes towards emergency contraceptives in Ussa Local Government Area suggests that even among those who are aware of emergency contraceptives, there may be significant obstacles to their acceptance and use.

**Objective 3: Factors Influencing Attitudes Towards Emergency Contraceptives Ussa Local Government Area of Taraba State**

**Table 4:** Factors Influencing Use of Emergency Contraceptives

Factors	Yes	No	Total
Lack of income and financial stability	204	175	100
Lack of knowledge about how emergency contraceptives work	209	170	100
It's against my moral beliefs	241	138	100
Partner's decision	197	182	100
Fear of social stigma from family and community	231	148	100
Fear of potential health risks associated with emergency contraceptives	174	205	100

Source: Field Survey, 2024

Table 4 identifies the key factors that influence the use of emergency contraceptives among the respondents of the study. The data show that economic constraints are a major obstruction against the use of emergency contraceptives in the study area, with 53.8% of the respondents citing lack of income and financial stability as a deterrent. This is closely followed by lack of knowledge (55.1%), which means there is a need for better information dissemination on emergency contraceptives and what they do. The data also show that moral and religious beliefs were influential, with 63.6% of respondents stating that emergency contraceptives conflict with their personal values. Social stigma and partner influence were additional impediments, affecting 60.9% and 51.9% of respondents, respectively. Concerns about health risks were also prevalent, with 45.9% of respondents expressing fears about the dangers attached with using ECs.

**Test of Hypotheses**

**Hypothesis 1: Relationship Between Awareness and Utilization of Emergency Contraceptives  
Chi-Square Test for Awareness and Utilization**

**Table 5:** Observed Frequencies

Awareness	Utilization	Frequency	(%)
Aware	Used	90	23.8
Aware	Not Used	92	24.2
Not Aware	Used	40	10.5
Not Aware	Not Used	157	41.5
Total	-	379	100

Source: Field Survey, 2024

**Table 6:** Expected Frequencies

Awareness	Utilization	Expected Frequency
Aware	Used	62.52
Aware	Not Used	119.48
Not Aware	Used	67.48
Not Aware	Not Used	129.52

Source: Field Survey, 2024

**Chi-Square Result:**  $\chi^2 = 13.09$ ;  $df = 1$ ; **Critical value at  $\alpha = 0.05 = 3.841$**

Based on the data on Table 5 and 6, the calculated chi-square value of 13.09 exceeds the critical value of 3.841, which means that the null hypothesis is rejected. Therefore, there is a significant relationship between awareness and utilization of emergency contraceptives. This suggests that women who are aware of emergency contraceptives are more likely to use them.

**Hypothesis 2: Influence of Attitudes on Utilization of Emergency Contraceptives  
Chi-Square Test for Attitudes and Utilization**

**Table 7:** Observed Frequencies

Attitude	Utilization	Frequency	Percentage (%)
Positive	Used	92	24.2
Positive	Not Used	37	9.8
Negative	Used	38	10.0
Negative	Not Used	212	56.0
Total	-	379	100

Source: Field Survey, 2024

**Table 8:** Expected Frequencies

Attitude	Utilization	Expected Frequency
Positive	Used	59.17
Positive	Not Used	69.83
Negative	Used	70.83
Negative	Not Used	179.17

Source: Field Survey, 2024

**Chi-Square Result:**  $\chi^2 = 38.89$ ;  $df = 1$ ; **Critical value at  $\alpha = 0.05 = 3.841$**

Since the calculated chi-square value of 38.89 is much higher than the critical value of 3.841 as captured in Table 7 and 8, it leads to the rejection of the null hypothesis. This confirms a significant relationship between attitudes towards emergency contraceptives and their utilization implying that women with positive attitudes are considerably more likely to use emergency contraceptives compared to those with negative attitudes.

**Objective 4: Socio-Economic Predictors of Attitudes Towards Emergency Contraceptives**

**Table 9:** Multiple Regression Analysis of Socio-Economic Predictors

Variable	Coefficient ( $\beta$ )	Standard	t-Statistic	p-Value
Constant	3.45	0.88	3.92	0.000**
Age	-0.25	0.08	-3.13	0.002**
Education	0.30	0.09	3.33	0.001**
Income	0.32	0.08	4.00	0.000**
Marital Status	-0.20	0.07	-2.86	0.005**
Religion	-0.18	0.06	-3.00	0.003**

The results of the multiple regression analysis in Table 9 provide data on the factors influencing attitudes towards emergency contraceptives in the study area. The model reveals that the constant term is statistically significant with a coefficient of 3.45 and a p-value of 0.000, showing a strong

baseline effect on attitudes towards emergency contraceptives in Ussa Local Government Area. The variable for age shows a coefficient of -0.25 with a p-value of 0.002. This suggests that as age increases, attitudes towards emergency contraceptives tend to become less favourable. This negative relationship emphasizes the potential impact of aging on perceptions of emergency contraceptives, possibly due to varying generational attitudes or changing priorities over time. Education is positively associated with attitudes towards emergency contraceptives, with a coefficient of 0.30 and a p-value of 0.001. This means that higher educational attainment is linked to more positive attitudes, reflecting the role of education in enhancing understanding and acceptance of reproductive health options. Income was also found to play a significant role, with a coefficient of 0.32 and a p-value of 0.000. The positive association suggests that individuals with higher incomes are more likely to have favourable attitudes towards emergency contraceptives. This may be attributed to better access to information and resources, as well as the ability to afford such services. Marital status shows a coefficient of -0.20 and a p-value of 0.005, indicating that being married or in a long-term relationship is associated with less favourable attitudes towards emergency contraceptives. This could be due to cultural or religious beliefs prevalent in marital settings that may influence attitudes towards family planning methods. Finally, religion has a coefficient of -0.18 with a p-value of 0.003, revealing that religious beliefs significantly impact attitudes towards emergency contraceptives. Those with certain religious affiliations may hold more conservative views on reproductive health, affecting their acceptance of emergency contraceptives. Overall, these findings suggest that socio-economic factors, including age, education, income, marital status, and religion, all significantly influence attitudes towards emergency contraceptives. Addressing these factors through targeted educational and policy interventions could enhance acceptance and utilization of emergency contraceptives, ultimately improving reproductive health outcomes.

### Discussion of Findings

This study on the awareness, attitude, and utilization of emergency contraception by women of reproductive age in Ussa Local Government Area of Taraba State reveals substantial findings on these aspects and their implications for reproductive health. The research found that awareness about emergency contraceptives (among women in Ussa was notably high, which probably shows that there is effective dissemination of information through healthcare providers and community health initiatives in the study area. This finding aligns with what other studies have found on the importance of awareness as a precursor to the utilization of contraceptive methods [2,4,7,8]. However, despite this high level of awareness in the study area, the actual use of ECs was relatively low. This gap between awareness and utilization suggests that barriers beyond knowledge could influence the use of ECs. In addition, the attitudes towards emergency contraceptives varied significantly. While some women viewed ECs as a necessary option for preventing unintended pregnancies, others held reservations rooted in their cultural or religious beliefs. This mixed response mirrors

findings from other research confirming that cultural and personal beliefs significantly impact the acceptance and use of ECs [14,15,23,24]. The study observed that attitudes towards ECs were influenced by factors such as perceived morality, safety concerns, and misconceptions about the health implications of EC usage. The study also tested several hypotheses related to the utilization of ECs and the factors affecting it. One of the hypotheses posited that higher awareness of ECs would correlate with increased utilization. Although awareness was high, the utilization rates did not correspondingly increase. This implies that factors such as access, cost, and stigma might play a more substantial role in determining EC use than awareness alone [5,7,9,11]. The hypothesis testing on the influence of attitudes towards emergency contraceptives on their utilization revealed a statistically significant relationship. The Chi-Square Test results showed a calculated chi-square value of 38.89, which is much higher than the critical value of 3.841, which led to the rejection of the null hypothesis. This implies that, in the study area, the attitudes of women towards emergency contraceptives played a fundamental role in their utilization. By this it means that women with positive attitudes are considerably more likely to use ECs compared to those with negative attitudes. This finding is supported by the research of Karim et al. (2015), which found that positive attitudes towards contraceptives are associated with higher usage rates [22]. In contrast, negative attitudes, often influenced by cultural, religious, or personal beliefs, can significantly hinder the use of ECs, as seen in the study's results. Another hypothesis tested was whether the socio-economic status of women affects their attitudes and utilization of ECs in Ussa LGA. The results indicated that socio-economic factors such as income, education, and occupation significantly influenced both attitudes and utilization [25,26]. Higher income and education levels were associated with more positive attitudes and greater utilization of ECs. These results are consistent with existing literature that highlights the impact of socio-economic status on contraceptive use [14,22,23]. Educated women with higher incomes are generally more likely to have better access to health services and are more empowered to make informed decisions about their reproductive health. The study also hypothesized that cultural and religious beliefs would negatively affect the utilization of ECs. The findings supported this hypothesis, as many women's reluctance to use ECs was influenced by their cultural and religious views. This is consistent with research suggesting that cultural norms and religious beliefs can significantly impact the acceptability and use of contraceptives [13,23].

### 6. Conclusion and Future Scope

This study investigated the levels of awareness, attitudes, and utilization of emergency contraceptives among women in Ussa Local Government Area, Taraba State, Nigeria. Through a comprehensive analysis, it has found a critical gap between awareness and actual utilization rates of emergency contraceptives in this study area. Despite high levels of awareness, the utilization of emergency contraceptives remains strikingly low, with the findings indicating that socio-economic, cultural, and religious factors serve as

significant barriers to usage. The observed discrepancy between knowledge and action accentuates the complexity of reproductive health issues within this community and calls attention to the limitations of information-only interventions in achieving behavioral change. This study's findings are particularly valuable for public health policymakers, healthcare providers, and community health educators. First, they stress the necessity of designing and implementing reproductive health initiatives that move beyond basic information dissemination to tackle the deeper socio-cultural and economic barriers faced by women. Culturally sensitive educational campaigns are essential to address the religious and cultural stigmas associated with emergency contraceptive use. Such campaigns should engage community leaders and influencers who can help change perceptions and attitudes toward contraceptives, making it easier for women to consider and access these options without fear of social reproach. Additionally, there is a pressing need to expand access to reproductive health services in a way that is inclusive of economically disadvantaged women. Limited financial resources often exacerbate the challenges women face in accessing healthcare, making it essential for policy and program interventions to provide low-cost or subsidized contraceptive options. Enhanced accessibility can empower women to make informed choices regarding their reproductive health, ultimately contributing to improved autonomy and healthier communities. Looking forward, future research should focus on developing multi-dimensional interventions that not only increase awareness but actively dismantle the socio-cultural and economic barriers identified in this study. For instance, educational interventions should incorporate culturally nuanced materials that address common misconceptions, religious beliefs, and cultural biases around contraception, as well as methods for managing socio-economic challenges that impede access. Interventions should be community-specific, ensuring that they are tailored to the unique needs and values of the local population. Longitudinal studies would be particularly beneficial in this context. By tracking changes in contraceptive practices over time, researchers can gain insights into the long-term effects of targeted interventions on reproductive health behavior. Factors such as educational attainment, economic empowerment, and community engagement play vital roles in shaping health behaviors, and examining these over an extended period would shed light on the most effective pathways to sustained change. Longitudinal research can also reveal any shifting trends in cultural attitudes or religious beliefs that may either hinder or support the uptake of emergency contraceptives, offering guidance on adapting future programs. Further, community-based participatory research (CBPR) approaches should be explored as they engage local stakeholders in the design, implementation, and evaluation of interventions. Such approaches foster ownership, increase relevance, and ensure sustainability of interventions in reproductive health. Finally, research into policy frameworks supportive of reproductive health autonomy for women in similar socio-cultural contexts could guide the development of adaptable, scalable policies and programs.

### Data Availability

The corresponding author can provide the data used to support the study's results upon reasonable request. Due to the sensitive nature of the information regarding reproductive health, data access is restricted to protect the privacy and confidentiality of the participants involved in the study.

### Conflict of Interest

The authors declare that they have no conflict of interest regarding the publication of this paper.

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### Authors' Contributions

Author-1 researched the literature and conceived the study, involved in the development of the research protocol, gaining ethical approval, data collection, performed the data analysis and wrote the first draft of the manuscript. Author-2 reviewed and edited the manuscript. All authors reviewed and approved the final version of the manuscript.

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### References

- [1] Ahemed, F. A., Moussa, M. M., Karen, O. P., Benedict, O. A. "Assessing knowledge, attitude and practice of emergency contraceptive." *BMC Public Health*, Vol.12, Issue.1, pp.1-9, 2012.
- [2] Shola, S. K., Agbelusi, M. A. "Awareness and use of emergency contraception among students of the University of Lagos, Nigeria." *International Journal of Women's Health and Reproduction Sciences*, Vol.4, Issue.2, pp.74-79, 2016.
- [3] Lentiro, K., Gebru, T., Worku, A., Asfaw, A., Gebremariam, T., Tesfaye, A. "Risk factors of induced abortion among preparatory school students in Guraghe zone, Southern region, Ethiopia: A cross-sectional study." *BMC Women's Health*, Vol.19, Issue.1, pp.1-7, 2019.
- [4] Arisukwu, O., Igbolekwu, C. O., Efulgha, I., Nwogu, J. N., Osueke, N. O., Oyeyipo, E. "Knowledge and perception of emergency contraceptives among adolescent girls in Imo State, Nigeria." *Sexuality & Culture*, Vol.24, Issue1, pp.273-290, 2020.
- [5] Abiodun, O. "Use of emergency contraception in Nigeria: An exploration of related factors among sexually active female university students." *Sexual & Reproductive Healthcare*, Vol.7, Issue.1, pp.14-20, 2016.
- [6] Nwankwo, B., Mohammed, M. H., Usman, N. O., Olorukooba, A. A. "Knowledge, attitude and practice of emergency contraception among students of a tertiary institution in Northwestern Nigeria." *Journal of Medical and Basic Scientific Research*, Vol.2, Issue.1, pp.13-28, 2021.
- [7] Walker, D. M., Torres, P., Gutierrez, J. P., Flemming, K., & Bertozzi, S. M. "Emergency contraception use is correlated with increased condom use among adolescents: results from Mexico." *Journal of Adolescent Health*, Vol.35, Issue.4, pp.329-334, 2004



- [8] Sedgh G, Sigh S, Henshaw SK, Bankole A. "Induced abortion: incidence and trends worldwide from 1995 to 2008." *The Lancet*. **379**: 625-632, 2012.
- [9] Najafi, F., Rahman, H. A., Hanafiah, M., Momtaz, Y. A., Ahmad, Z. "Emergency contraception: knowledge, attitudes and practices among married Malay women staff at a public university in Malaysia." *Southeast Asian Journal of Tropical Medicine and Public Health*, Vol. **43**, Issue **6**, pp. **12-15**, 2012.
- [10] Tenaw, L. A. "Practice and determinants of emergency contraceptive utilization among women seeking termination of pregnancy in Northwest Ethiopia—A mixed quantitative and qualitative study." Vol. **17**, Issue **2**, 2022.
- [11] Smith, K. B., Mazzotta, J. "Knowledge, attitude and practices regarding emergency contraception among undergraduate female students in Saudi Arabia." *The Egyptian Journal of Community Medicine*, Vol. **22**, Issue **2**, pp. **179-186**, 2004.
- [12] Mamabolo, P. R. "Knowledge of emergency contraceptives among secondary school learners in the rural area of Moleletji-Mashashane, Limpopo Province, South Africa." *South African Journal of Obstetrics and Gynaecology*, Vol. **23**, Issue **3**, pp. **80-84**, 2017.
- [13] Mahfuzur, M. R., Alam, M. R., Billah, M. A. "Determinants of emergency contraceptive pill use in Bangladesh: An analysis of national survey data." *Asian Pacific Journal of Reproduction*, Vol. **11**, Issue **2**, pp. **62-69**, 2022.
- [14] Gebrehiwot, H., Gebrekidan, B., Berhe, H., Kidanu, K. "Assessment of knowledge, attitude, and practice towards emergency contraceptives among female college students at Mekelle Town, Tigray Region, Ethiopia: A cross-sectional study." *International Journal of Pharmaceutical Sciences and Research*, Vol. **4**, Issue **3**, pp. **10-27**, 2013.
- [15] Arowojolu, A. O., Okewole, I. A., Adekunle, A. O. "Comparative evaluation of the effectiveness and safety of two regimens of levonorgestrel for emergency contraception in Nigerians." *Contraception*, Vol. **66**, Issue **4**, pp. **269-273**, 2002.
- [16] Osei-Tutu, E. M. "Male Undergraduate Students' Knowledge of and Attitude Towards Emergency Contraceptives." *African Sociological Review/Revue Africaine de Sociologie*, Vol. **23**, Issue **2**, pp. **125-145**, 2019.
- [17] Addo, V. N., Tagoe-Darko, E. D. "Knowledge, practices, and attitudes regarding emergency contraception among students at a university in Ghana." *International Journal of Gynecology & Obstetrics*, Vol. **105**, Issue **3**, pp. **206-209**, 2009.
- [18] Rahman, H., Khalda, E., Kar, S., Kharka, L., & Bhutia, G. P. "Knowledge of, attitudes toward, and barriers to the practice of emergency contraception among women in Sikkim, India." *International Journal of Gynecology & Obstetrics*, Vol. **122**, Issue **2**, pp. **99-103**, 2013.
- [19] El-Sabaa, H. A., Ibrahim, A. F., Hassan, W. A. "Awareness and use of emergency contraception among women of childbearing age at the family health care centers in Alexandria, Egypt." *Journal of Taibah University Medical Sciences*, Vol. **8**, Issue **3**, pp. **167-172**, 2013.
- [20] Nyambura, M. G., Kiarie, J. N., Orang'o, O., Okube, O. T. "Knowledge and utilisation of emergency contraception pills among female undergraduate students at the University of Nairobi, Kenya." *Open Journal of Obstetrics and Gynecology*, Vol. **7**, Issue **9**, pp. **989-1005**, 2017.
- [21] Karim, S. I., Irfan, F., Al Rowais, N., Al Zahrani, B., Qureshi, R., Al Qadrah, B. H. "Emergency contraception: Awareness, attitudes and barriers of Saudi Arabian women." *Pakistan Journal of Medical Sciences*, Vol. **31**, Issue **6**, pp. **1500**, 2015.
- [22] Davis, P., Sarasveni, M., Krishnan, J., Bhat, L. D., Kodali, N. K. "Knowledge and attitudes about the use of emergency contraception among college students in Tamil Nadu, India." *Journal of the Egyptian Public Health Association*, Vol. **95**, Issue **1**, pp. **1-11**, 2020.
- [23] Yousaf, S., Ali, F. "Knowledge, attitude and practice regarding emergency contraception among women attending the family planning clinic in Lahore, Pakistan." *Journal of the Pakistan Medical Association*, Vol. **72**, Issue **10**, pp. **18-33**, 2022.
- [24] Abhishek Singh Chauhan, Gyan Prakash, "factors Associated with the use of Modern Contraceptives in EAG States of India: A Hierarchical Model Technique" *International Journal of Scientific Research in Multidisciplinary Studies*, Vol. **7**, Issue **10**, pp. **61-73**, 2022
- [25] Kurlikar P., Raste S., Chaurase M., "Muslim/Non Muslim Differential in Contraception Use in Maharashtra State: Evidence from District Level Household Survey." *International Journal of Scientific Research in Multidisciplinary Studies*, Vol. **5**, Issue **8**, pp. **61-73**, 2022.

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