

Accessibility and Utilization of Contraceptives and its Associated Factors among Students of Tertiary Institutions in Nigeria

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ABSTRACT

Introduction: The use of modern contraceptives among young citizens has been documented to be effective in reducing STIs, unwanted pregnancies, as well as teenage pregnancy. Therefore, it has become necessary to determine utilization patterns of contraceptive services among young individuals as it is very critical for planning to meet the reproductive needs of young persons.

Methods: A descriptive cross-sectional research design was adopted for the study. The study was conducted using 404 undergraduates from two tertiary institutions. Simple random sampling was utilized in the study. Structured self-administered questionnaire was used for data collection. Data were analyzed using descriptive and inferential statistics of chi-square test at $p < 0.05$.

Results: About 53.5% are between 18–22 years with a mean age of 22.62 ± 2.948 ; 51.5% are males, 88.6% still single. About 51.9% do not have access to contraceptives, and 66.83% are not utilizing contraceptives. Side effect of the drugs, lack of access to modern contraceptives, lack of money to access it and lack of appropriate knowledge of the one to use are major factors for non-utilization. Gender was not significantly associated with utilization of contraceptives ($p = 0.204$). A statistically significant association was observed between religion of the respondents and utilization of contraceptives ($p = 0.013$), and between accessibility of contraceptives and their utilization ($p < 0.001$).

Conclusion: There is poor accessibility and utilization of modern contraceptives among young people. Individual's religion and accessibility could influence utilization.

Keywords: Abortion, contraceptives, undergraduates, unplanned pregnancy.

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1. INTRODUCTION

The role that contemporary contraceptive methods play in lowering STDs, unintended pregnancies, and maternal morbidity and death rates across the globe has been repeatedly and thoroughly studied. Approximately 214 million women in poor nations who are of reproductive age and wish to avoid getting pregnant do not use a modern method of contraception, according to the World Health Organisation (WHO) [1]. 52 million unintended pregnancies, 70 million maternal deaths, and 36 million abortions are predicted to be avoided if these women receive contraception [2].

The number of unintended pregnancies among college students worldwide is rising every year, even though these students have a high awareness and understanding of both emergency contraception and regular modern contraceptives [3]. Numerous interconnected variables, from personal to institutional setbacks, are linked to the low use of contraception in tertiary institutions. This ultimately leads to high rates of unintended pregnancies, which are thought to have been a factor in between 8 and 30 million pregnancies globally each year [4]. Numerous interconnected variables, from personal to institutional setbacks, are linked to the low use of contraception in tertiary institutions. This ultimately leads to high rates of unintended pregnancies, which are thought to have been a factor

in between 8 and 30 million pregnancies globally each year [5].

Currently, more than 200 million women, especially young people in underdeveloped nations, wish to avoid getting pregnant but are not utilizing any contemporary form of contraception. The United Nations states that to get the intended reduction in fertility by 2025, the prevalence of contraception must be 66%–75% in affluent nations and 67% in developing nations. Nevertheless, only 43% of women of reproductive age in developing nations currently use modern contraception [6]. Almost everywhere in the globe, married or cohabiting women in the reproductive age range of 15 to 49 use contraceptives primarily [1]. In 2017, 63% of women globally used contraception; in Europe, Latin America, the Caribbean, and North America, the percentage of women using contraception exceeded 70%, while in Middle and Western Africa, it was less than 25% [7].

Therefore, it is evident that determining the utilization patterns of contraceptive services among these young individuals is very critical to the improvement of services and further planning on meeting the reproductive needs of youth. Therefore, this study aims to assess the accessibility and utilization of contraceptives and associated factors among students of tertiary institutions in Ibadan.

2. METHODS

2.1. Design

This research is a descriptive cross-sectional study aimed at assessing the utilization of contraceptives among students of tertiary education institutions in Ibadan.

2.2. Setting

This study was carried out in two major tertiary institutions (the University of Ibadan and The Polytechnic) in Ibadan. Ibadan is the third largest city after Lagos and Kano. It has a total land area of 3,080 km², with a latitude of 73,878 (723'16.00"N), a longitude of 38,964 (353'4 7.00"E) and an altitude of 248 m. It has a population of about 3,565,810 people [8].

2.3. Target Population

The target population consists of undergraduate students of the University of Ibadan and The Polytechnic Ibadan.

2.4. Study Population

The study population consists of undergraduate students of the five randomly selected faculties from the two institutions.

2.5. Sample Size

The sample size was computed as 404 using Fisher's formula [9].

2.6. Sampling Procedure

The simple random technique was used to select faculties whereby each faculty had an equal and fair probability of being chosen. Out of the randomly selected faculties,

the simple random sampling technique was also employed to select departments from each of the randomly selected faculties.

Each department is already in strata of levels (Year of study in the University and Ordinary National diploma 1 & 2, Higher National Diploma 1 & 2), and this gave room for reliability by ensuring that each respective subclass was adequately represented.

2.7. Instrument for Data Collection

A self-constructed questionnaire with 54 items was developed to obtain data for the study. The validity of the instrument was determined by presenting it to the study supervisor, who examined its content and ensured that the questions could elicit the information required to meet the study objectives. A pilot study was also conducted among students of the University of Ibadan using 10% of the sample size. Cronbach's alpha coefficient was used to measure the internal consistency of the instrument to ensure its reliability. It is a single measurement point reliability test. Cronbach's alpha coefficient value of 0.782 was obtained, showing that the instrument is reliable.

2.8. Procedure for Data Collection

A total number of students from 5 faculties were selected for the study using the systematic sampling method. This was done by sharing the questionnaires in each class, and the selection of respondents followed a predetermined interval (k). Every "kth" person was selected to fill out the questionnaires in each class. After giving a brief introduction about the study and its purpose, consent was sought from the school management and the students. The questionnaires were then administered to the respondents, and clarifications were made where necessary. The questionnaire was filled out within 5 minutes.

2.9. Ethical Considerations

Before commencing the data collection, a summary of the study protocol was submitted to the UI/UCH Health Ethical Review Committee. Consent was obtained from respondents before data collection. Privacy, confidentiality and anonymity of respondents were ensured as presented on the informed consent form. The scientific objectivity of the study was maintained with honesty and impartiality.

2.10. Method of Data Analysis

The data collected was analyzed using SPSS v25. Descriptive statistics, including figures and tables, were used to present results, and inferential statistics was used to determine significant relationships between variables. The results were based on the data obtained from the students.

3. RESULTS

A total of 404 undergraduates from the University of Ibadan and Polytechnic Ibadan were recruited for the study. Copies of the questionnaire were used to elicit information from respondents. 404 copies of the questionnaire were distributed, and all were correctly filled out, retrieved and used for the analysis.

3.1. Socio-Demographic Data

In Table I, more than half (53.5%) are between 18–22 years with a mean age of 22.62 ± 2.948 , and a modal age of 22 years. One-third (31.7%) of them are from faculty of science, 45.79% of them are in 200 level, 51.5% of them are males, majority (67.0%) are Christians, 88.6% of them are single, and majority (80.2%) are from Yoruba ethnic group.

3.2. Accessibility to Contraceptives

Table II revealed that 21.5% of the respondents engage in sexual activities often, 33.7% use contraceptives, only 8.9% received contraceptives from private hospitals, 31.7% received contraceptives from pharmacy, 7.4 received contraceptives from government hospitals, and 9.7% received contraceptives from PHC. More than half (59.2%) are aware that youth-friendly centres exist, 57.4% indicated that a youth-friendly centre exists on their campus, 24.0% access family planning services on their campus, 32.2% find it very easy to obtain information on contraceptives on their campus, 34.4% can access family planning services at any time, 31.4% use any method of contraceptive they want, and 35.6% finds contraceptive cheap to buy.

3.3. Distribution of Respondents According to their Level of Accessibility to Contraceptives

Findings of this study revealed the distribution of the respondents according to their level of accessibility to

contraceptives. The score ranges from 0–12. The minimum obtained score was 0, while the maximum obtained score was 12 with mean of 3.56 ± 2.476 . Values above mean score were categorized as contraceptive being accessible to the respondents. More than half (51.9%) of the respondents do not have access to contraceptives.

3.4. Utilization of Contraceptives among Respondents

Table III shows that 62.6% are sexually active, 49.3% use a contraceptive, 23.8% are currently using different forms of contraceptive, 33.4% have used or currently using male condoms, 16.3% have used female condoms, 9.9% have used implants (Implanon or Jadelle), 7.7% have used or currently using Copper T, 20.8% have used or currently using pills, 10.9% have used or currently using depo or noristerat, 25.2% have used or currently using emergency pills (postinor), 37.1% have used or currently using withdrawal method, 30.4% have used or currently using calendar method, 20.5% have used or currently using sympto-thermal method, 22.8% have used or currently using standard day method while have used or currently using today method.

3.5. Distribution of Respondents by their Level of Utilization of Contraceptives

Findings of this study revealed the distribution of the respondents according to their level of utilization of contraceptives. The score ranges from 0–15. The minimum obtained score was 0, while the maximum obtained score was 15 with mean of 3.92 ± 3.497 . Values above mean score were categorized as good utilization. More than half (66.83%) of the respondents are not utilizing contraceptives.

3.6. Factors Affecting the Utilization of Contraceptives

In Table IV, major factors affecting contraception utilization are side effects of the drugs (80.0%), dislike by partner (87.9%), lack of access to contraceptives 79.7%, lack of money to obtain it 82.9%, far distance to where it can be obtained 81.7%, complexity of using it 79.5%, lack of availability of a chosen type 82.9%, delay in accessing it 88.6%, cultural and religious factors 87.1%, not certain of its efficiency and poor knowledge of the appropriate one to use 80.7%.

3.7. Hypothesis Testing

1. Hypothesis 1: Relationship between Religion and Utilization of Contraceptives

Pearson Chi-square test above revealed a statistical significant association between Religion of the respondents and utilization of contraceptives ($X^2 = 8.762^a$, $p = 0.013$). Therefore, the null hypothesis which states that there is no significant association between religion and utilization of contraceptives was rejected.

2. Hypothesis 2: Relationship between Sex and Utilization of Contraceptives

Pearson Chi-square test revealed that there was no significant association between gender and utilization of

TABLE I: SOCIO-DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS (N = 404)

Variables	N	%
Age group (22.62 ± 2.948)		
18–22 years	216	53.5
23–26 years	142	35.1
27–30 years	46	11.4
Faculties		
Faculty of Arts	72	17.8
Faculty of Science	128	31.7
Faculty of Education	56	13.9
Faculty of Engineering	44	10.9
FBCS	104	25.7
Gender		
Male	208	51.5
Female	197	48.5
Religion		
Islamic	133	33.0
Christianity	271	67.0
Marital status		
Single	358	88.6
Engaged	34	8.4
Married	12	3.0
Ethnicity		
Yoruba	324	80.2
Hausa	22	5.4
Igbo	58	14.4
Current level		
100	95	23.5
200	185	45.8
300	50	12.4
400	61	25.1
500	13	3.2

TABLE II: ACCESSIBILITY TO CONTRACEPTIVES

Variables	Yes F (%)	No F (%)
I engage in sexual activities often	87 (21.5)	317 (78.5)
I make use of contraceptives	136 (33.7)	268 (66.3)
I receive contraceptive from private hospitals	36 (8.9)	368 (91.1)
I receive contraceptive from pharmacy	128 (31.7)	276 (68.3)
I receive contraceptives from Government hospitals	30 (7.4)	374 (92.6)
I receive contraceptives from primary health centers	39 (9.7)	365 (90.3)
I am aware that youth-friendly centers exist	239 (59.2)	165 (40.8)
There is a youth-friendly centre on my campus	232 (57.4)	172 (42.6)
I can access family planning services on my campus	97 (24.0)	307 (76.0)
It is very easy to obtain information on contraceptives on my campus	130 (32.2)	274 (67.8)
I can access family planning services at any time	139 (34.4)	265 (65.6)
I can use any method of contraceptive I want	127 (31.4)	277 (68.6)
Contraceptives are very cheap to obtain	144 (35.6)	260 (64.4)

TABLE III: UTILIZATION OF CONTRACEPTIVES AMONG RESPONDENTS (N = 404)

Variables	Yes F (%)	No F (%)
Sexually active	253 (62.6)	151 (37.4)
Have used a contraceptive	199 (49.3)	205 (50.7)
Currently using different forms of contraceptive	96 (23.8)	308 (76.2)
I have used or currently using male condoms	135 (33.4)	269 (66.6)
I have used or currently using female condoms	66 (16.3)	338 (83.7)
I have used or currently using implants (Implanon or Jadelle)	40 (9.9)	364 (90.1)
I have used or currently using Intrauterine device (Copper T)	31 (7.7)	373 (92.3)
I have used or currently using pills	84 (20.8)	320 (79.2)
I have used or currently using injectables (depo or noristerat)	44 (10.9)	360 (89.1)
I have used or currently using emergency pills (postinor)	102 (25.2)	302 (74.8)
I have used or currently using withdrawal method	150 (37.1)	254 (62.9)
I have used or currently using calendar method	123 (30.4)	281 (69.6)
I have used or currently using sympto-thermal method	83 (20.5)	321 (79.5)
I have used or currently using standard day method	92 (22.8)	312 (77.2)
I have used or currently using today method	87 (21.5)	317 (78.5)

TABLE IV: FACTORS AFFECTING UTILIZATION OF CONTRACEPTIVES (N = 404)

Variables	Yes F (%)	No F (%)
I use contraceptives because I am not scared of side effects	81 (20.0)	323 (80.0)
I use contraceptives because my partner likes it	49 (12.1)	355 (87.9)
I use contraceptives because I have sex frequently	92 (22.8)	312 (77.2)
I use contraceptives because I know where to obtain	82 (20.3)	322 (79.7)
I use contraceptives because I have money to obtain contraceptives (they are too cheap)	69 (17.1)	335 (82.9)
I use contraceptives because contraceptives are effective	136 (33.7)	268 (66.3)
I use contraceptives because the center of purchase is not far	74 (18.3)	330 (81.7)
I use contraceptives because I feel at risk of pregnancy	142 (35.1)	262 (64.9)
I use contraceptives because contraceptives do not reduce sexual pleasure	73 (18.1)	331 (81.9)
I use contraceptives because I do not want others to know I am having sex	52 (12.9)	352 (87.1)
I use contraceptives because the health care providers do not have judgmental attitudes	69 (17.1)	335 (82.9)
I use contraceptives because contraceptives are not hard to use	83 (20.5)	321 (79.5)
I use contraceptives because the centers have the type I want	69 (17.1)	335 (82.9)
I do not use contraceptives because there is always a long queue	46 (11.4)	358 (88.6)
I use contraceptives because my culture and religion permits me	52 (12.9)	352 (87.1)
I use contraceptives because I know which one to choose	78 (19.3)	326 (80.7)
I use contraceptives because it is easier for me to obtain contraceptives because of my gender	71 (17.6)	333 (82.4)
I use contraceptives because the ones I tried worked out	81 (20.0)	323 (80.0)

contraceptives ($X^2 = 1.615^a$, $p = 0.204$). Therefore, the null hypothesis which states that there is no significant association between gender and utilization of contraceptives was not rejected.

3. Hypothesis 3: Relationship between Accessibility and Utilization of Contraceptives

Pearson Chi-square test above revealed a statistically significant association between accessibility of contraceptives

and its utilization ($X^2 = 20.975^a$, $p < 0.001$). Therefore, the null hypothesis which states that there is no significant association between accessibility and utilization of contraceptives was rejected.

4. DISCUSSION

There is low accessibility of contraceptives among the youths, which could jeopardize their reproductive health since the majority of them are sexually active while only a few are using contraceptives. In addition, poor awareness of youth-friendly centres was observed among the youths, as only a few of them knew that such centres existed in their institutions. Only a few were able to obtain information on contraceptives on their campus, showing poor access to contraceptive-related information. This condition can predispose youths who are sexually active to sexually transmitted infections and unplanned pregnancies, as noted by Troutman *et al.* [5]. The result of this study is in line with the findings by WHO [1], where it was observed that many women do not have access to modern forms of contraceptives. It was also noted that adolescents and youth often face difficulties in accessing contraceptive services. Similarly, a study by Bose *et al.* [10] opined that non-accessibility to modern contraceptives could predispose sexually active youths to sexually transmitted infections. Hence, a study by Dioubaté *et al.* [11] emphasized the need to tackle challenges faced by adolescents and youths in accessing modern contraceptives in order to preserve their reproductive health. Furthermore, the result of this study observed that large numbers of the respondents were not utilizing contraceptives. This is evident as only a few were able to use condoms, which is believed to be very common among youths. Poor use of injectables, implants and emergency pills was also observed. This predisposes the youths to a high risk of contracting HIV/AIDS and other STIs, which will increase the burden of healthcare. There is a need to emphasize protective measures during sex among the youths where abstinence cannot be observed. Few of them rely on the withdrawal method, which exposes an individual to direct contact with body secretions that possess an increased risk of contracting infections. The implication of this is that the chances of these youths being exposed to infection are very high. This is consistent with the findings made by the Nigeria Demographic and Health Survey, where consistently low utilization of modern contraceptives was observed. Similarly, Tsui *et al.* [12] observed low utilization of modern contraceptives in sub-Saharan Africa.

In addition, various factors have been implicated to be responsible for the non-utilization of modern contraceptives among students. The majority are afraid of the side effects of the drug, a large number of the respondents lacks access to modern contraceptives, the majority lack the money to access them, and most of them lack the appropriate knowledge of the one to use. Delay in accessing it, cultural and religious factors were also identified. Similarly, Dioubaté *et al.* [11] noted that socioeconomic status, gender, insufficient, inaccurate, or poor knowledge information about safe sex and contraceptive use are factors responsible for the non-utilization of contraceptives. In

addition, Yakubu and Salisu [13] reported that adolescents and youth often face difficulties in accessing contraceptive services. The challenges he identified include fear, embarrassment, lack of knowledge, and cost of services. A study by Cohen *et al.* [14] equally observed that lack of knowledge about the reproductive system, contraceptive options, and the cost and legality of use were major challenges faced by the youths in accessing contraception.

A statistically significant association was observed between the religion of the respondents and the utilization of contraceptives ($X^2 = 8.762$, $p = 0.013$). Therefore, the null hypothesis, which states that there is no significant association between religion and utilization of contraceptives, was rejected.

Pearson Chi-square test revealed that there was no significant association between gender and utilization of contraceptives ($X^2 = 1.615$, $p = 0.204$). Therefore, the null hypothesis, which states that there is no significant association between gender and utilization of contraceptives, was not rejected. Similarly, there was a statistically significant association between the accessibility of contraceptives and their utilization ($X^2 = 20.975$, $p < 0.001$). Therefore, the null hypothesis, which states that there is no significant association between accessibility and utilization of contraceptives, was rejected.

5. CONCLUSION

Many sexually active young people do not have access to contraceptives and, therefore, do not use contraceptives. Factors such as side effects of the drug, lack of access to modern contraceptives, lack of money to access it, and lack of appropriate knowledge of the one to use are responsible for non-utilization.

CONFLICT OF INTEREST

The authors declare that they do not have any conflict of interest.

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