

AWARENESS, ACCESSIBILITY AND UTILIZATION OF CONTRACEPTIVES AMONG WOMEN OF CHILDBEARING AGE IN 3 SELECTED HOSPITALS IN ENUGU NORTH

Obiefuna Adaobi Genevieve¹, Nwagbo D.F.E², Chukwu Sunday Kyrian^{1, 3}, Chukwu Stella Nchekwubedi⁴ and Obeagu Emmanuel Ifeanyi^{5*}

¹Department of Internal Medicine, University of Nigeria Teaching Hospital, Ituku-Ozalla, Enugu, Enugu State, Nigeria.

²Department of Community Medicine, University of Nigeria, Enugu Campus, Enugu State, Nigeria.

³Alex Ekwueme Federal Teaching Hospital, Abakaliki, Ebonyi State, Nigeria.

⁴Department of Nursing Science, Ebonyi State University, Abakaliki, Ebonyi State, Nigeria.

⁵Department of Medical Laboratory Science, Imo State University, Owerri, Imo State, Nigeria.

*Corresponding Author: Obeagu Emmanuel Ifeanyi

Department of Medical Laboratory Science, Imo State University, Owerri, Imo State, Nigeria.

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ABSTRACT

The study was done to determine the level of awareness, accessibility and utilization of contraceptive among women of child bearing age (15-49years) at Enugu. A sample of 350 women of child bearing age (15-49years) will be used. The most common source of information about contraceptive methods was from health personnel 147 (43.1%), followed by family/friends 103 (30.3%), school 64 (18.8%), television/radio 14 (4%) while the least common source was from magazines 13 (3.8%). As regards awareness of forms of contraceptive methods, 327 (93.4%) were aware of emergency contraception, 320 (91.4%) were aware of use of male condom as contraceptives, 315 (90%) pills, 304 (86.9%) safe period, 300 (85.7%) withdrawal method, 269 (76.9%) injections, 268 (76.6%) IUCD, 158 (45.1%) vasectomy, 156 (44.6%) tubal ligation, diaphragm 97 (27.7%), female condom as the least method of contraceptive respondents were aware of, with 45 out of 350 respondents (12.8%). The study found that majority of the respondents were within the age group of 15-29, this represents n=174 (49.7%) of total number of 350 respondents, followed by 30-39 age group with n=141 (40.3%) of respondents. This study has shown that while there is good contraceptive awareness 97.4% in Enugu, Nigeria, this has not been matched by commensurate contraceptive prevalence but prospects for improvement exist. Majority of the respondents knew where to access their choice of contraception, with 69.4% citing the teaching hospital. Among the respondents 78.3% had used a form of contraceptive and 36.6% were currently using one form of contraceptive at the time the study was conducted. Male condom however was the most frequently used form of contraception, followed by pills which might be due to easy accessibility of these methods. The notable barrier to contraceptive use was fear of side effects with weight gain being the most frequent.

KEYWORDS: awareness, accessibility and utilization of contraceptives, women of childbearing age.

INTRODUCTION

Contraception is any deliberate art or practice undertaken to prevent conception. Contraceptives are devices, drugs or methods used to prevent conception. In an individual's reproductive life, a number of contraceptive methods may be used. The effectiveness of contraceptive methods is critically important for reducing the risk of unintended pregnancy. Effectiveness can be measured during "perfect use" when the method is used correctly and consistently as directed or during "typical use" which is how effective the method is during actual use, including inconsistent and incorrect use.^[1] The best way to reduce the risk of unintended or unwanted pregnancy among women of child bearing age is to use effective contraceptive methods appropriately and consistently.^[1]

The earliest IUCD dates back to the Greeks, it involved the insertion of a hollow lead tube which was filled with mutton fat through the cervix into the uterus. Aristotle and his wife used oil to fill up the uterine cavity and vagina epithelium thus reducing sperm motility.

In Nigeria, the early (traditional) method included prolonged lactation and return of a woman to her mother during the period of puerperium. The International Planned Parenthood (IPP) together with the pathfinder fund of Boston in 1964, helped inaugurate family planning council of Nigeria which is known as the Planned Parenthood Federation of Nigeria (PPFN). In this same year contraceptive methods were being used in various family planning clinics in Lagos and Ibadan. In

Africa, one in 26 women of reproductive age dies from a maternal cause, as opposed to one in 9,400 in Europe. Parallel disparities in fertility and in contraceptive use are found between poor and wealthy countries. The world's total fertility rate has dropped dramatically, from 5 children per woman in the early 1950s to 2.6 children per woman today, largely owing to more widespread use of modern contraceptives especially in the developing world.^[2] Furthermore, in 1960 only around 9% of married women in the developing world practiced any form of contraception; today this figure is 62%. Yet in less developed countries, modern contraceptive methods are used by only 43% of women of reproductive age overall. The gap between the rich and the poor in the use of contraception has persisted despite general global improvements in socioeconomic status and the expansion of family planning services.^[2] Family planning has been widely acknowledged to intensify maternal death reduction, which is recommended by the World Health Organization as one of the six essential health interventions needed to achieve safe motherhood.^[3]

Accordingly, it has been demonstrated that by reducing high-parity births, family planning lowers a country's Maternal Mortality Rate (MMR) by an estimated 450 points during the transition from low to high levels of contraceptive use.⁷ The unmet need for family planning (or "unmet need") is defined as the percentage of married or in-union women of reproductive age who want to stop or postpone child bearing but who report that they are not using any method of contraceptive to prevent pregnancy.^[3] Unmet need is an indicator that has a history of more than four decades in the international population field and broadens the policy and programme focus from contraceptive use alone to enabling all individuals to realize their fertility preferences.^[3]

The percentage of demand for family planning satisfied with modern methods is computed as contraceptive prevalence (modern methods) divided by total demand for family planning (the sum of contraceptive prevalence of any method) and unmet need for family planning.^[3]

AIM

To determine the level of awareness, accessibility and utilization of contraceptive among women of child bearing age (15-49 years).

MATERIALS AND METHODS

Study Area

The study was carried out in Enugu North in Enugu State, Nigeria.

Study Design

A cross-sectional descriptive survey was done.

Study Population

The target population, included women of child bearing age (15-49 years) who volunteered to take part in the

study in 3 selected hospitals in Enugu North. That is the patients who attended antenatal clinic in these hospitals and female workers who fell within the targeted age. Participants were selected irrespective of their marital status and educational level.

Selection Criteria

Inclusion criteria

1. Women of childbearing age 15-49 years.
2. Women of child bearing who were willing to participate in the study.
3. Women of child bearing age who were present during the time of data collection.

Exclusion criteria

1. Women who did not fall under the age group 15-49 years.
2. Women of child bearing age who declined participation in the study.
3. Women of childbearing age who have had premature menopause.

Sample Size

A sample of 350 women of child bearing age (15-49 years) will be used. Considering the population under study the increased chances of errors in the final result as seen in studies of whole populations was avoided. Extrapolation from this sample to the entire population under study helped curtail expenses and also ensured accurate results.

Sample size calculation: The sample was estimated using the Leslie Kish formula (1965) shown below:

$$N = \left\{ \frac{Z\alpha^2 pq}{d^2} \right\}$$

Where;

N = minimum sample size

Z α = standard normal deviate corresponding to the level of significance; 1.96 at α (type 1 error) = 5%

P = Contraceptive utilization prevalence from a previous study conducted in Western Nigeria; 69% = 0.69%

q = 1-P = (1-0.69) = 0.11

d = desired level of precision = 5% = 0.05 (maximum sampling error allowed)

$$N = \frac{(1.96)^2 \times 0.79 \times 0.21}{0.05^2} = 254.9$$

Approximated to 255

However, 350 respondents were recruited for the study in order to eliminate bias due to non response individuals and ensure proper representation.

Sampling Technique

This is a cross sectional descriptive study and it was done using a multi-stage sampling approach. The first stage; involved the selection of three health facilities that run antenatal care services in Enugu North using purposive sampling. These hospitals were ESUT, Enugu

State Teaching hospital, St Patrick's hospital and maternity and Poly Clinic.

Second stage: Women of child bearing age, who attend antenatal clinic in the selected health facilities, were chosen using systematic random sampling technique from the list of patients available during each visit.

Data Collection Technique

A structured pre-tested questionnaire, developed from a review from relevant literature and interviews of some women of childbearing age, was used for the collection of data. All questions were written in English language. There are 31 questions in each questionnaire, comprising both open and closed ended questions. The questions cover both personal data, and awareness, accessibility and utilization of contraception. The questionnaires were self-administered to the study participants. The questionnaire is divided into six sections (A-C) to obtain data on (a) the socio-demographic characteristics of the respondents, (b) contraception (knowledge, awareness of contraceptive and types of contraceptive method used by respondents, respondents' sources of obtaining contraceptive (accessibility) and their barriers to contraceptive use among (c) reproduction and fertility preferences.

The researchers supervised the field research activities. Three research assistants were recruited to administer the questionnaires to the study respondents. There was a two day training of the survey team. The training was aimed at explaining the study objectives and procedures and also the expected roles of each member of the survey team. They were also trained on proper administration of questionnaire and recording of obtained data. The research assistants were health professionals, recruited from my place of work.

Questionnaires were administered to the respondents between 9am to 4pm from Mondays and Wednesdays in the selected hospitals over a period of four months, under my supervision with the help of my research assistants. The questionnaires were retrieved the same day and

checked for completeness on collection from respondents. Incompletely filled questionnaires were returned for correct filling.

Data Analysis

The questionnaire was manually checked for errors and obtained data was cleaned, coded, and double entered into the computer. Data cleaning was done by carrying out the range and consistency checks. Data was analyzed using Statistical Package for Social Sciences (SPSS) windows version 21. The participant's socio-demographic data, level of awareness, accessibility and utilization of contraceptive methods will be represented using frequency table, charts, mean and standard deviation. The relationship between the variables will also be determined using the Chi-square test and P-value of < 0.05 will be used to define statistical significance at 95% confidence intervals.

Data Presentation

Descriptive statistics such as frequency, percentages, tables, and text were used. Bar chart was also used to give a pictorial idea of the figures that was gotten from the study.

Ethical Consideration

The tenets of the Helsinki declaration and the National code of Health research was adhered to. Ethical clearance was obtained from Ethics Committee of University of Nigeria Teaching Hospital (UNTH) Enugu, before commencement of the study. Verbal as well as written informed consent was obtained from the respondents prior to administration of questionnaire. Information obtained from the study respondents was treated as private and high level of confidentiality was ensured and maintained.

Participation in the study was solely on voluntary basis. Respondents' anonymity was protected by ensuring that individual identifiers were absent in the instruments or in the electronic data set. Respondents, questionnaires were identified with code numbers only and not names.

RESULTS

Table 1: Socio-demographic data.

Variables	Frequency N=350	Percentage (%)
Age group		
15-29	174	49.7
30-39	141	40.3
40-49	35	10.0
Mean Age 30.4 years (SD)=30.4±5.4		
Highest academic qualification		
Secondary education	74	21.1
Tertiary education	276	78.9
Marital status		
Single	91	26.0
Married	253	72.3
Divorced/separated	06	1.7

Occupation		
Civil servant	111	31.7
Public servant	76	21.7
Unemployed	70	20.0
Self employed	93	26.6

Source: Field Data, 2019

The socio-demographic characteristic of this study is presented in table one. With reference to the age distribution, majority of the respondents were within the age group of 15-29, this represents 49.7% (n=174) of total number of 350 respondents, followed by 30-39 age group with 40.3% (n=141) of respondents. The mean age was 30.4years with minimum age of 15 and maximum age 49 years. All the participants were Christians

(100%). 276 (78.9%) of respondents have tertiary education as highest academic qualification, while 74 (21.1%) have secondary education as their highest academic qualification. 253 (72.3%) are married while 91 (26.0%) were single and 6 (1.7%) divorced/separated. Among the respondents, 111 (31.7%) were civil servants, 93 (26.6%) self employed, 76 (21.7%) public servants and 70 (20.0%) unemployed.

Table 2: Awareness of contraceptives.

Variables	Frequency N=350	Percentage (%)
I have come across the word 'contraception'	341	97.4
Source of information		
Family/Friends	103	30.3
School	64	18.8
Magazine	13	3.8
Television / Radio	14	04
Health personnel	147	43.1
Forms of contraception respondents are aware of		
Safe period	304	86.9
Withdrawal	300	85.7
Male condom	320	91.4
Female condom	45	12.8
Diaphragm	97	27.7
Pills	315	90.0
Implants	204	58.3
Injections	269	76.9
IUCD	268	76.6
Tubal Ligation	156	44.6
Vasectomy	158	45.1
Awareness of emergency contraception? (Eg. Postinor)	327	93.4

Source: Field Data, 2019

From Table 2; Surprisingly 341 (97.4%) of the participants was aware of the word 'contraception'. The most common source of information about contraceptive methods was from health personnel 147 (43.1%), followed by family/friends 103 (30.3%), school 64 (18.8%), television/radio 14 (4%) while the least common source was from magazines 13 (3.8%).

As regards awareness of forms of contraceptive methods, 327 (93.4%) were aware of emergency contraception, 320 (91.4%) were aware of use of male condom as contraceptives, 315 (90%) pills, 304 (86.9%) safe period, 300 (85.7%) withdrawal method, 269 (76.9%) injections, 268 (76.6%) IUCD, 158 (45.1%) vasectomy, 156 (44.6%) tubal ligation, diaphragm 97 (27.7%), female condom as the least method of contraceptive respondents were aware of, with 45 out of 350 respondents (12.8%).

Table 3: Perception of contraceptives.

Variables	Frequency N=350	Percentage (%)
The most effective contraceptive methods	341	97.4
None	05	1.5
Safe period	12	3.5
Withdrawal	13	3.8
Male condom	33	9.7
Female condom	04	1.2

Diaphragm	11	3.2
Pills	10	2.9
Implants	16	4.7
Injections	45	13.2
IUCD	53	15.5
Tubal Ligation	67	19.6
Vasectomy	72	21.1
Person responsible for contraception		
Both man and woman	339	96.9
Reasons for choosing a contraceptive method		
Contraceptive effectiveness	100	36.5
Safety of contraceptive method	70	25.5
Most convenient	61	22.3
Spousal choice	12	4.3
Easily accessible	31	11.3
Emergency contraception can substitute for regular contraception	42	12.0
Impact on the physical and mental health of a woman after abortion		
Slight impact	116	33.1
Serious Impact	211	60.3
Not sure	23	6.6
Contraception may cause medical complications	272	77.7

Source: Field Data, 2019

From table 3; About 155 out of 350 (44.3%) respondents indicated that the most effective contraceptive method was vasectomy, 72 (21.1%) tubal ligation, 67 (19.6%) IUCD, 53 (15.5%) use of male condom, 45 (13.5%) injections, 33 (9.7%) diaphragm, 16 (4.7%) implants, 13 (3.8%) withdrawal method, 12 (3.5%), 10 (2.9%) pills, safe period 5 (1.5%) indicated that none of the method is very effective, and female condom 4 (1.2%). Comparing their views to the ideal contraceptive effectiveness rating, implants are the most effective (0.05 pregnancies per women in a year), male sterilization (0.15 pregnancies per women in a year), Hormonal IUCD (0.2 pregnancies per women in a year), hysterectomy (0.5 pregnancies per women in a year) pregnancies per women in a year), injections (6 pregnancies per women in a year), pills (9 pregnancies per women in a year), diaphragm (12 pregnancies per women in a year), male condom (18 pregnancies per women in a year), female condom (21 pregnancies per women in a year), withdrawal (22 pregnancies per women in a year).^[4]

All the respondents 339 (96.9%) agreed that both man and woman should be responsible for contraception. Regarding reasons for choosing a contraceptive method, 180 (51.4%) of the respondents indicated that their reason for choosing a particular method of contraceptive is dependent on its effectiveness, 100 (36.5%) most convenient, 70 (25.5%) safety, 31 (11.3%) easily accessible method, and 12 (4.3%) was dependent on spousal choice. Surprisingly 42 out of the 350 respondents (12.0%), agree that emergency contraception can substitute for regular contraception. On the impact on the physical and mental health of a woman after abortion, 211 (60.3%) indicated that there is serious impact, 116 (33.1%) indicated slight impact while 23

(6.6%) were not sure. 272 (77.7%) felt that contraception may cause medical complications.

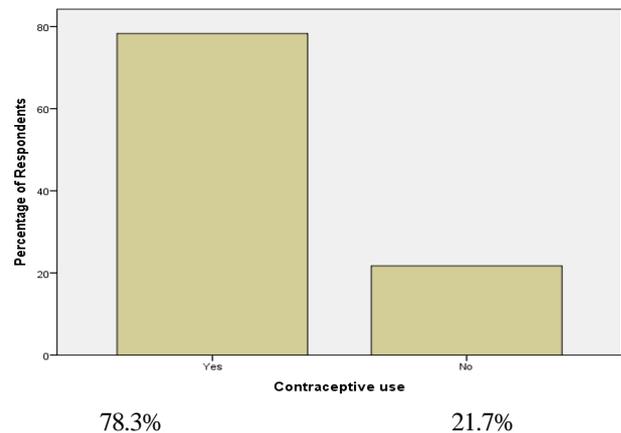


Figure 1: Utilization of contraceptive by respondents.
Source: Field Data, 2019

From Figure 3, Respondents that indicated that they have used contraceptives were n=274 (78.3%), while the remaining n= 76 (21.7%) had never used contraceptives.

Table 4: Utilization of contraceptives.

Variables	Frequency N=350	Percentage (%)
For non using respondents, reasons for not using contraception	76	21.7
Lack of access	12	15.8
Fear of side effects	12	15.8
Infrequent sexual intercourse	35	46.1
It is not necessary	17	22.4
For using respondents, type of contraceptive methods used		
Safe period	15	5.5
Withdrawal	30	10.9
Male condom	64	23.4
Female condom	2	0.57
Diaphragm	12	4.4
Pills	42	15.3
Implants	21	7.7
Injections	57	20.8
IUCD	31	11.3
For using respondents, reason for using contraceptives	274	78.3
Child spacing	214	78.1
Medical reasons	18	6.6
Completion of family size	42	15.3
I am currently using a form of contraceptive	128	46.7
If No, reasons for non use		
Currently pregnant	50	65.8
Concerns about side effects	18	23.7
Not expecting to have intercourse	08	10.5
I have had unintended pregnancy	95	27.1
Method of contraception used before this unintended pregnancy		
None	30	31.6
Safe period	26	27.4
Withdrawal	10	10.5
Male condom	22	23.2
Pills	7	7.3
How I took care of this unintended pregnancy		
Surgical abortion	12	12.6
Medical abortion	35	36.8
Carried Pregnancy to term	48	50.5
Respondents that have discontinued contraception	226	82.5
Reason for stopping contraceptive use		
Inter menstrual spotting	43	15.7
Nausea	06	5.8
Weight gain	100	36.5
Mood changes	16	5.8
Infrequent sex/ Husband away	61	22.3

Source: Field Data, 2019

From table 4; it was observed that 274 out of 350 respondents (78.3%) had used a form of contraception, while 76 out of 350 respondents (21.7%) had never used any form of contraceptive method. Reasons for none use included 35 out of 76 non users (46.1%) infrequent sexual intercourse, 17 (22.4%) unnecessary, 12 (15.8%) lack of access and 12 (15.8%) fear of side effects. For respondents who use contraceptives, male condoms was the most frequently used method 64 out of 274 respondents (23.4%), followed by pills 42 (15.3%) injections 57 (20.8%), IUCD 31 (14.3%), withdrawal 30

(10.9%), implants 21 (7.7%), safe period 15 (5.5%), diaphragm 12 (4.4%) and female condom 2 (0.57%).

Among respondents who use contraceptives reasons for use was 214 (78.1%) child spacing, 42 (15.3%) completion of family size, 18 (6.6%) for medical reasons. 128 out of 274 respondents (46.7%) who have used a form of contraceptive indicated that they were currently using a form of contraceptive. For the respondents who were not currently using any form of contraception reason for non use included; 50 (65.8%) indicated they were currently pregnant. 8 (10.5%) were

not expecting to have sexual intercourse, while 18 (23.7%) were concerned about side effects.

Meanwhile, 95 (27.1%) have had unintended pregnancies. Method of contraception used before these unintended pregnancy, were none (30) 31.6%, 26 (27.4%) safe period, withdrawal method 10 (10.5%), pills 7 (7.3%) and male condom 22 (23.2%). 48 out of 95 (50.5%) of these unintended pregnancies was carried to term, 35 out of 95 (36.8%) was medically aborted while

12 out of 95 (12.6%) was surgically aborted. Also 226 out of 274 respondents (82.5%) who have ever used contraception agreed that they have discontinued their choice of contraceptive method in the past. Reasons indicated by majority of the respondents for stopping contraceptive use included; weight gain 100 (36.5%), followed by infrequent sexual intercourse 61 (22.3%), then inter menstrual spotting 43 (15.7%) mood changes 16 (5.8%) and nausea 6 (5.8%).

Table 5: Contraceptive accessibility.

Contraceptive accessibility	Frequency N=350	Percentage (%)
Awareness of where to obtain a method of contraceptive	326	93.1
Places people go to access contraceptives		
Pharmacy store	13	4.1
Primary health care centers	57	17.4
Private hospitals	30	9.1
Teaching hospitals	226	69.4
I paid fees for my choice of contraceptive method	163	46.6
I was told by the provider, about the side effects of my choice of contraceptive method	129	36.9
I was told by the provider what to do if I experienced side effects following use of my choice of contraceptives	111	31.7

Source: Field Data, 2019

From table 5; It was noted that 326 out of 350 respondents (93.1%) knew where to obtain or access a contraceptive method. Respondents indicated teaching hospital 226 (69.4%), primary health care centre 57 (17.4%), private hospital 30 (9.1%) and pharmacy store 13 (4.1%) as places they can go to access contraceptives.

About 163 respondents (46.6%) had paid fees to obtain their choice of contraceptive method. Also 129 respondents (36.9%) were told by the contraceptive provider, about the side effects of their choice, while 111 (31.7%) were told by the provider what to do if they experienced side effects following the use of their choice of contraceptives.

Table 6: Relationship between socio demographic Characteristics and use of contraceptives.

Socio demographic characteristics	Use of Contraception		Chi Square	P value
	Use (%)	Non Use (%)		
Age Group				
15-29	128 (46.7)	46 (60.5)	12.178	0.02
30-39	123 (44.9)	18 (23.7)		
40-49	23 (8.4)	12 (15.8)		
Highest Academic Qualification				
Secondary Education	57 (21.2)	16 (21.1)	0.000	0.56
Tertiary Education	216 (78.8)	60 (78.9)		
Marital Status				
Single	59 (21.5)	32 (42.1)	14.130	0.00
Married	209 (76.3)	44 (57.9)		
Divorced/Separated	6 (2.2)	0 (0.0)		
Occupation				
Civil Servant	105 (38.3)	6 (7.9)	73.915	0.00
Public Servant	46 (16.8)	30 (39.5)		
Unemployed	36 (13.1)	34 (44.7)		
Self employed	87 (31.8)	6 (7.9)		

Source: Field data, 2019

Table 6 shows chi square analysis between demographic variables and contraceptive use. For the age distribution ($\chi^2 = 12.178$, $P = 0.02$), academic qualification ($\chi^2 = 0.00$, $P = 0.56$), marital status ($\chi^2 = 14.130$, $P = 0.00$) and occupation ($\chi^2 = 73.915$, $P = 0.00$).

There is a significant relationship between the socio demographic characteristics of the respondents and their use of contraception, since P-values are less than 0.05. However, there is no significant relationship between the respondents' academic qualification and their contraceptive use since the P-value is greater than 0.05.

DISCUSSION

The objectives of this study were to determine the level of awareness of contraceptive methods among women of reproductive age, to find out the availability of each contraceptive method and to detect the most utilized method and assess deterrents of contraceptive use and determine the perception of respondents regarding contraceptive use. According to the World Health Organization, over the past 25 years, considerable progress has been made in women's sexual and reproductive health, including increases in contraceptive use, spurred by the Millennium Development Goals (MDGs) and the 1994 International Conference on Population and Development (ICPD). Despite the positive global trends there are large differences among and within countries. Over 200 million women worldwide would like to avoid a pregnancy but are not using an effective method of contraception. Reasons for this vary from each country but are related to a lack of supplies, cultural and political barriers and poor quality of services.^[4,7]

With reference to the age distribution, majority of the respondents were within the age group of 15-29, this represents $n=174$ (49.7%) of total number of 350 respondents, followed by 30-39 age group with $n=141$ (40.3%) of respondents. The mean age was 30.4 years with minimum age of 15 and maximum age 49 years. All the participants were Christians 100%. A total of 276 (78.9%) of respondents have tertiary education as highest academic qualification, while 74 (21.1%) have secondary education as their highest academic qualification. 253 (72.3%) are married while 91 (26.0%) were single and 6 (1.7%) divorced/separated. Among the respondents, 111 (31.7%) were civil servants, 93 (26.6%) self employed, 76 (21.7%) public servants and 70 (20.0%) unemployed.

The level of awareness of contraceptives in this study was 97.4%. Majority of the participants have come across the word 'contraception'. This is similar to Elia's study done in 2015 which indicated that 95% of women of child bearing age were aware of contraceptives. However the finding in this study is slightly higher than 82.4% gotten from a study done in December 2016 in North-West Nigeria (Kebbi and Sokoto) on the

awareness, knowledge and perceptions regarding contraception among women of reproductive age⁵. This study revealed that the most common source of information about contraceptive methods was from health personnel 147 (43.1%), followed by family/friends 103 (30.3%), school 64 (18.8%), television/radio 14 (4%), while the least common source was from magazines 13 (3.8%). In this regard, this study is similar to Elia's study (2015) where 83 (30.4%), 61 (22.2%), 45 (16.5%) and 43 (15.8%) participants heard about contraceptives methods through health care workers, friends and relatives, television and radio, respectively. This high contraceptive awareness in this study is in conformity with reports from other studies across Nigeria.^[5] This higher awareness may also be due to high educational level of the respondents in this study, majority 21.1% of whom have at least secondary education and 78.9% being graduates.

Most studies in Nigeria have shown very low contraceptive prevalence that does not match the very high contraceptive awareness. These findings are a sharp contrast to those in United States of America where more than 99% of women will have used at least one form of contraceptive method at some point in time.

In this study regarding awareness of forms of contraceptive methods, 327 (93.4%) are aware of emergency contraception, 320 (91.4%) are aware of use of male condom as contraceptives, 315 (90%) pills, 304 (86.9%) safe period, 300 (85.7%) withdrawal method, 269 (76.9%) injections, 268 (76.6%) IUCD, 158 (45.1%) vasectomy, 156 (44.6%) tubal ligation and diaphragm as the least method of contraceptive respondents are aware of, with 97 out of 350 respondents (27.7%). The finding in this study is somewhat similar to the study done in North-West Nigeria in 2016, the most popular contraceptive method was male condom (86.8%) and the least common was vasectomy (26.6%). The reduced awareness of sterilization as a method of contraception may be due to low level of acceptance and practice due to cost, the need for surgery to which many women in our environment are averse to and the fact that it is a permanent method.

From this study, 274 out of 350 respondents (78.3%) have used a form of contraception, while 76 out of 350 respondents (21.7%) have never used any form of contraceptive method. This might partly be due to significant increase in level of awareness of contraception and its benefits and also because majority of the respondents have higher level of education. Reasons for none use in this study included, 35 out of 76 non users (46.1%) infrequent sexual intercourse, 17 (22.4%) felt it was unnecessary, 12 (15.8%) was due to lack of access and 12 (15.8%) fear of side effects while in the study by Elia (2015) Out of the 81 (27.9%) respondents, who had never used contraceptives, 28.9%, 24.7%, 16%, 9.6% and 6.2% of them attributed their non-use of contraceptives on multiple factors like, their

partners' refusal, inability to get pregnant, fear of side effects, cost, disparity with religious beliefs respectively.^[5] Additionally 16% of the participants perceived the use of these methods as unnecessary.

For respondents who use contraceptives in this study, male condoms was the most frequently used method 64 out of 274 respondents (23.4%), followed by pills 42 (15.3%), injections 57 (20.8%), IUCD 31 (14.3%), withdrawal 30 (10.9%), implants 21 (7.7%), safe period 15 (5.5%), diaphragm 12 (4.4%) and female condom 2 (0.57%). The use of withdrawal method by a proportionately large number of women in our study gives cause for concern considering its very high failure rate.

Among respondents who use contraceptives reasons for use was 214 (78.1%) child spacing, 42 (15.3%) completion of family size, 18 (6.6%) for medical reasons. About 128 out of 274 respondents (36.6%) who have used a form of contraceptive indicated that they were currently using a form of contraceptive. When compared to a community-based cross-sectional study was conducted in Ogbomoso Metropolis using multi-staged sampling. The study was published on the 27th of January 2018, less than half 169 (42.2%) were currently using contraceptives out of which most of them were using IUCD 71 (42.0%), followed by injections 46 (27.2%) then pills 29 (17.2%). The main reasons stated for use of contraceptive were child spacing (77.4%), medical reasons (19.4%) & completion of family size (3.2%).

In this study, for the respondents who were not currently using any form of contraception reason for non use included; not expecting to have sexual intercourse 103 (46.4%), concerns about side effects 68 (30.6%), while 50 (22.5%) indicated they were currently pregnant.

A community-based cross-sectional study was conducted in Ogbomoso Metropolis using multi-staged sampling. The study was published on the 27th of January 2018; revealed that 348 (93.3%) of respondents knew government hospitals to be a place where contraceptive methods could be obtained.^[6] While in this study, 326 out of 350 respondents (93.1%) knew where to obtain or access a contraceptive method. Respondents indicated teaching hospital 226 (69.4%), primary health care centre 57 (17.4%), private hospital 30 (9.1%) and pharmacy store 13 (4.1%) as places they can go to access contraceptives.

In United States, women have to pay 59.25 dollars each month for pills. Sale of oral contraceptive pills is prohibited over the counter. In Spain, the average cost of contraceptive is 2.91 dollars. Oral contraceptives are sold in pharmacies. Canada has most forms of contraception easily affordable and available under the Medicare system and pills are usually available for free. Brazil offers a year's supply of pills for only 2.36 dollars and

women can purchase it legally. Though one can only buy the emergency contraceptive pill with a prescription. Japanese Health Insurance doesn't cover the contraceptive pill and women have to pay around 25.67 dollars each month. Many doctors require women to take a blood test for fitness to take the pill and this costs 86 dollars. Contraception in India is available from 2.48 to 5.85 dollars and the most form of contraception is tubal ligation.^[7] There is high level of awareness about modern contraception in Ethiopia, but most people do not use any form. Birth control pills can be bought without prescription and is free in some cases.

The World Health Organization's primary mandate is to provide assistance to its member states in achieving the goal of the highest attainable standard of health for all, including sexual and reproductive health. Among other interventions, the provision of high-quality contraceptive information and services is essential for achieving this goal. In order to accelerate progress towards attainment of international development goals and targets in sexual and reproductive health and in particular to contribute to meeting unmet need for contraceptive information and services, the World Health Organization (WHO) developed a guideline that ensures; non-discrimination in provision of contraceptive information and services, availability, accessibility and acceptability of contraceptive information and services.^[8,9]

CONCLUSION

The study found that majority of the respondents were within the age group of 15-29, this represents n=174 (49.7%) of total number of 350 respondents, followed by 30-39 age group with n=141 (40.3%) of respondents. This study has shown that while there is good contraceptive awareness 97.4% in Enugu, Nigeria, this has not been matched by commensurate contraceptive prevalence but prospects for improvement exist. Majority of the respondents knew where to access their choice of contraception, with 69.4% citing the teaching hospital. Among the respondents 78.3% had used a form of contraceptive and 36.6% were currently using one form of contraceptive at the time the study was conducted. Male condom however was the most frequently used form of contraception, followed by pills which might be due to easy accessibility of these methods. The notable barrier to contraceptive use was fear of side effects with weight gain being the most frequent.

If Nigeria continues with the current trends in contraceptive use and fertility, the population will continue to grow exponentially in the next 10 to 20 years. There are already many contraception choices but no method is perfect and totally free of side effects. However, scientists are studying various new forms. Hence in the future there should be better options for couples who want to avoid pregnancy.

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