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Knowledge And Uptake of Modern Contraceptives Among Women Attending Antenatal Clinic in University College Hospital, Ibadan

Stephen Salufu

Department of Obstetrics and Gynaecology, University College Hospital, Ibadan, Nigeria.

Abstract

The rapid growth of the Nigeria population and its adverse effects on the economic and the wellbeing of its citizens call for the need to accept family planning. According the world population review, Nigeria population continues to grow than many other countries of similar size and its population is predicted to reach 264 million by 2030. This exponential population growth is as a result of the national growth rate of 3.2% and total fertility rate of 5.5 children. Closely associated with the increasing population growth, is the increasing maternal morbidity and mortality. Nearly 20% of the global maternal death occurred in Nigeria. In 2015, Nigeria's estimated maternal mortality ratio was over 800 maternal deaths per 100 000 live births, with approximately 58 000 maternal deaths during that period. In fact, a Nigerian woman faces a lifetime risk of maternal death of 1 in 22 compared to 1 in 4900 in most developed countries.

Keywords: family planning; population review; total fertility rate; maternal morbidity and mortality; maternal death

Introduction

The rapid growth of the Nigeria population and its adverse effects on the economic and the wellbeing of its citizens call for the need to accept family planning [1,2]. According the world population review, Nigeria population continues to grow than many other countries of similar size and its population is predicted to reach 264 million by 2030 [3]. This exponential population growth is as a result of the national growth rate of 3.2% and total fertility rate of 5.5 children [4]. Closely associated with the increasing population growth, is the increasing maternal morbidity and mortality [5]. Nearly 20% of the global maternal death occurred in Nigeria [2,6]. In 2015, Nigeria's estimated maternal mortality ratio was over 800 maternal deaths per 100 000 live births, with approximately 58 000 maternal deaths during that period. In fact, a Nigerian woman faces a lifetime risk of maternal death of 1 in 22 compared to 1 in 4900 in most developed countries [6]. This increasing population with resultant maternal mortality has been due to increase fertility rate and has become a concerned to the government and individuals on how to achieved reduction in the fertility rate which will invariably reduce the maternal mortality [5,7]. One of the most effective strategies for reducing maternal mortality is the availability and accessibility of various contraceptive methods [7]. Family planning has been shown to reduce as much as 25% of maternal mortality [8]. Despite this and other benefits of contraceptives the knowledge and usage of contraceptives have been found to be poor in various studies in Nigeria [8].

There are different forms of modern contraceptives and they include oral contraceptive pills (OCPs), barrier methods (condoms for males and females, diaphragm, cervical caps, etc), creams, jelly, injectable contraceptives, implants, intrauterine contraceptive devices (IUCDs), and as well as permanent surgical methods [5,9]. Knowledge of modern contraceptives is key in accessing and making informed decisions about family planning services [10]. Antenatal clinics usually provide a good opportunity for pregnant women to be educated about various tropical issues including hygiene, breastfeeding, family planning, and immunization and to correct cultural misconceptions which could act as hindrances to the acceptability of modern contraceptives [11]. Conducting this study at the antenatal clinic will help to identify the level of uptake, the factors affecting the acceptability of modern contraceptive methods among the patients receiving antenatal care in University College Hospital, Ibadan.

Method

Study design: The study was a cross-sectional, descriptive study involving consenting registered antenatal patients seeking care at UCH, Ibadan.
Study area: This study was carried out at the antenatal clinic at the university College Hospital, Ibadan. At

the moment, antenatal clinics are conducted on three days at the University College Hospital. The number of clients at each clinic session averages 100-150. The routine activities at the sessions include group health education, performance of vital signs by the nurses, and laboratory investigations (urinalysis and packed cell volume).

The University College Hospital, Ibadan is a tertiary hospital that serves as a referral centre for private and primary care facilities as well as secondary health care facilities. The hospital was initially commissioned in the year 1957 with a capacity of 500 beds; presently it has 1000 beds and 163 examination coaches. The maternity section has 130 beds.

Study population: All pregnant women assessing antenatal care at the University College Hospital, Ibadan.

Sampling technique: Convenience sampling technique.

Sample size determination

The sample size was estimated Cochran Formula:

$$N = \frac{Z\alpha^2 PQ}{d^2}$$

where N = the minimum sample size; Zα = the standard normal deviate corresponding to a side level of significance of 0.05; P = the proportion of respondent who will consider BTL as appropriate from Port-Harcourt study = 0.183 (Enyindal 2018); Q = 1-p; d = the desired level of precision = 0.05

N= 1.96² x 0.183 (1-0.183)/0.05² =230

This gave a minimum sample of size of 230 participants. Assuming a non-response rate of 20%, a sample size of 276 women was gotten. Ethical consideration: Ethical approval was obtained from the Institution Review Board (IRB) of the University of Ibadan/University College Hospital, Ibadan with IRB number UI/EC/23/0461. Data analysis: Self and Interviewer administered questionnaires were used to obtain data from the women. The questionnaires were pretested and validated. The data obtained was imputed on the data page of the statistical package for social sciences version 24, and the data was cleaned as appropriate. Analysis of data was by computer using the Statistical Package for Social Sciences (SPSS; SPSS- 24 for Windows Evaluation Version). Level of statistical significance was set at 95% confidence level.

Results

Out of 276 questionnaires for this study, 273 were properly filled by the respondents which give a response rate of 98.91%. A total number of two hundred and seventy-three respondents with a mean age of 31.41±4.73 years participated in this study. Majority (53.1%) of the respondents were within the age range of 31-40 years. Forty-one percent were within the age range of 21-30 years while only few (3.3%) were from forty-one years and above. Thirty-three percent of the respondents were professionals; 18% were civil servants while 16.5% were Artisan. Majority (91.4%) of the respondents had tertiary level of education. Almost (97.8%) of the respondents were married. Seventy-five percent of the respondents practice Christianity while (24.4%) practice Islamic religion. Eighty-one percent were from the Yoruba's ethnicity group. More than half (54.2%) have had 1 or 2 parous experiences.

Table 1: Socio demographic characteristics of the respondents

Variables	Frequency	Percent
Ages (in years)		
≤ 20	5	1.8
21-30	114	41.8
31-40	145	53.1
≥ 41	9	3.3
Occupation		
Civil servant	49	18.4
Professional	90	33.7
Artisan	44	16.5
Students	12	4.5
Trader	35	13.1
Business woman	29	10.9
Self employed	2	0.7
Housewife	4	1.5
Unemployed	2	0.7

Highest Level of Education		
Secondary	23	8.6
Tertiary	243	91.4
Marital status		
Single	7	2.2
Married	272	97.8
Religion		
Christianity	205	75.6
Islam	68	24.4
Ethnicity		
Yoruba	221	81.0
Igbo	26	9.5
Others	26	9.5
Parity		
0	109	40.0
1-2	148	54.2
>2	16	5.8

Table 2: Knowledge of contraception

Variables	Frequency	Percent
Knowledge of contraception		
Yes	224	82.4
No	49	17.6
Source of information about contraception		
Hospital staff	98	35.9
Friends/Relatives	60	22.0
Radio/Social media	54	19.8
All	10	3.7
Others	18	6.6
Not heard	33	12.1

82% of the participants have heard of contraception and this information was mainly from hospital staff, though, 12.1% of the respondents have never heard about any of the contraceptive methods.

Table 3: Factors influencing contraceptive choices

Variable	Frequency	Percent
Uptake of any form of contraception before		
Yes	119	43.8
No	154	56.3
Types of contraception previously used by the respondents		
Barrier (Condoms, diaphragm, etc)		
Injection	63	48.1
Implants	14	10.7
Intrauterine contraceptive device (IUD)	17	13.0
Others	6	4.6
	31	23.7
Reasons for the use of contraception		
Child spacing	46	34.8
To prevent unwanted pregnancy	76	57.6
To prevent sexually transmitted diseases (STD)	5	3.8
Others	5	3.8
Duration (in years) for the contraceptive used		
<1	58	46.4
1 – 3	48	38.4
3 – 5	14	11.2

> 5 years	5	4.0
Reasons for stopping contraception		
Wanted to get pregnant	89	71.2
Side effects	21	16.8
Others	15	12.0
Any side effect from the conceptive used		
Yes	35	26.9
No	95	73.1
Commonest side effects		
Irregular menses	17	37.8
Abnormal weight gain	9	20.0
Breast swelling/tenderness	2	4.4
Mood changes	3	6.7
Others	14	31.1

The contraceptive uptake was 43.8% with majority of those who had previously been on contraception preferring the barrier method of contraception. Prevention of unwanted pregnancy was the commonest reason for contraception and majority used them for less than a year. Side effects were not common among those who have previously used various contraceptives, with menstrual irregularity the most reported side effect.

Table 4: Attitude towards contraceptive uptake

Variables	Frequency	Percent
Needs partner's approval for contraceptive use		
Yes	107	82.9
No	22	17.1
Reasons for not using contraceptive in the past		
Limited knowledge about contraceptives	25	17.5
Partner's disapproval	14	9.8
Fear of side effects	59	41.3
Religious/cultural belief	10	7.0
Other reasons	35	24.5
May use contraceptives in the future		
Yes	113	57.4
No	84	42.6

Fear of side effects was the major barrier to contraceptive used in this study and 82% of the participants still required their husband approval before using contraceptive while 42.6% of those who have never used it will not consider using it in the future.

Discussion

The mean age of the participants was 31.41±4.73 years with majority of them being married (97.8%), and 54.2% of has had previous parous experiences. 91.4% had tertiary level of education but only 33% of them were professionals, 18% civil servants, and 16.5% Artisans. Christianity was the commonest religion while most of the respondents were of the Yoruba tribe. The study shows that majority of them (82.4%) were aware of different modern contraceptives, which was collaborated by the studies of Ugoji DC et al and Egede JO et al in which 65.5% and 83.3% respectively where aware of various contraceptive methods [9,12,13]. Hospital staff provided the commonest source of information on modern contraceptives according to this study. This could the effectiveness of the various health educations that are usually given at every clinic visitation. Studies by Olugbenga-Bello et al and Adeyemi et al collaborated the fact that most information about family planning are from hospital staff, however, Egede et al and Monjok et al find that the commonest source of information about contraceptive was from friends [9,14,15]. It is disheartening to note that 17.6% of the respondents have never heard about modern contraceptives

despite the availability of the various sources of information about it. The need to continuously sensitize our patients and their partners about various contraceptive methods during antenatal and postnatal clinic visitations cannot be overemphasize as 42.6% of those who have never used any contraceptive method in this study do not intend to use them in the future [16].

The contraceptive uptake in this study was 43.8% which was higher than what was seen in the studies by Egede et al, Addah et al and Orji EO where the uptake was 28.3%, 12.3% and 18.8% respectively [9,17,18]. The reasons for the low contraceptive uptake in this study were fear of side effects, limited knowledge about various contraceptive options, partner's disapproval and religious/cultural belief. Egede et al find that the participants in their study claimed that their reasons for not using contraceptives are believe that are harmful, their husbands' disapproval, religious belief, lack of governmental support, the believe that contraceptives are abortifacients, and that contraceptives encourage promiscuity [9]. The major determinant of contraceptive uptake in this study was partner's approval; 82.9% of the women got approval from their partners before their contraceptive used and 9.8% of the 56.3% who have never used any form of contraception in the past was because of their partners' disapproval [19]. Several studies have reported that the main barriers to contraceptive used were desire for more children, religious prohibition, spousal disapproval, and the perceived side effects of modern contraceptives [9,19,20]. Barrier contraceptives (condoms, diaphragm, etc) were the commonest contraceptives used by the participants of this study (48.1%) which was similar with the findings of the studies by Egede et al and Allagoa et al [5,9,19]. The reason for the high use of barrier contraceptives may be due to their availability at patent medicine shops which is the commonest source of contraceptive products according to Egede et al [5,9]. Unlike in this study, intrauterine contraceptive device (IUCD) is the leading contraceptive of choice among the participants of various studies in different parts of Nigeria [21-24]. However, in Congo, in a study at by Izale et al, oral contraceptive pills (OCPs) and the injectables were the commonest contraceptive methods, but in Ghana, implants were the commonest contraceptive method in the study by Rominski [20-25].

Prevention of unwanted pregnancy was the commonest reason for contraception (57.6%) closely followed by birth spacing. The longest duration of contraceptive used was less than a year. In the study by Izale et al in Congo, birth spacing was the main reason for contraceptive used which agrees with the study by Chigbu et al [20-26]. Side effect was the second commonest reason for the stoppage of the usage of contraceptive even when only 26.9% of the participants have ever had side effect with irregular bleeding was the commonest.

Conclusion

The knowledge of contraceptives is important but may not amount to uptake as could be seen in this study that despite good knowledge of contraceptives, the uptake was poor. There is need to involve the partner in every stage of contraceptive counseling as partner's approval is an important determinant of contraceptive uptake in this study.

Recommendations

More forums need to be created to persuade families on the need to accept modern contraceptives. Factors affecting the uptake of contraceptives should be properly addressed in such forums.

Declarations

Authors Contributions

All authors conceptualized and designed the study; SS and BAA were involved in data collection; All authors were involved in statistical analysis. All authors were involved in the writing and revising of the manuscript for intellectual consent. All authors read, approved the final manuscript and agreed to be accountable for all aspects of the work.

Ethics Approval

Ethical approval was gotten from University of Ibadan/University College Hospital Ethics committee.

Informed Consent

Written informed consent was obtained from every participant of the study.

Declaration of Helsinki

The study was conducted according to the ethical principles of Helsinki Declaration

Availability of Data and Materials

Authors are available and ready to supply the data upon any requests through the corresponding author.

Funding or Financial Support

Conflict of Interest

No conflict of interest to declare.

Acknowledgements

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