Original Article

Knowledge and Practice of Contraception among Pregnant Women Attending The Antenatal Clinic in Lagos University Teaching Hospital

[1]OLAMIJULO JA, [2]OLORUNFEMI G

[1]Department of Obstetrics & Gynaecology, College of Medicine, University of Lagos.
[2]Department of Obstetrics & Gynaecology, Lagos University Teaching Hospital (LUTH), Lagos.

ABSTRACT

BACKGROUND: Preconception, prenatal and postnatal care forms a continuum. Family planning is one of the important aspects of the spectrum. Contraceptive options are available but the uptake has been poor. Ante natal clinic attendees represent a major target population for well designed /appropriate post partum contraceptive counseling and care.

OBJECTIVES: The study examined the socio-demographic data of antenatal clinic attendees at the Lagos University Teaching Hospital (LUTH), their knowledge about contraceptive methods, previous contraceptive practice and anticipated pattern of post partum contraceptive uptake.

METHOD: A Semi-structured questionnaire was administered to 151 pregnant women attending the antenatal clinic in LUTH to collect data on their socio-demographic characteristics, knowledge of family planning methods, pre-pregnancy contraceptive use and their anticipated post-partum contraceptive choices.

RESULTS: The mean age of the women was 29.9 years and the mean Parity was 1.1. Majority (90.7%) of the women were married. Ten women (6.6%) felt that they had poor knowledge about contraception while the rest had fair to excellent knowledge. The prevalence of contraceptive use before current pregnancy was 57.6% and the male condom was the method used in 56 cases (64.4%). Their major (54%) source of contraceptive commodity was the chemist/ pharmacy. Sixty (69%) women stopped using contraceptive because they wanted to get pregnant. Sixty-eight (45.0%) women planned to use contraceptives after delivery and the male condom (55.9%) was the most preferred method of post-partum contraception. There is no statistical association between age, religion, parity and educational attainment and desire for post-partum contraception.

CONCLUSION: Antenatal women in LUTH appeared quite knowledgeable about contraception but majority had no plan for contraceptive use post delivery. Information dissemination about benefits of child spacing and provision of incentives for easy uptake of post partum contraception would help to correct this imbalance.

KEY WORDS: Antenatal Clinic, contraceptive, Family planning, Postpartum, Lagos, Nigeria.

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INTRODUCTION

Family planning services and supplies currently prevent 187 million unintended pregnancies each year including 60 million unplanned births and 105 million abortions[1]. The contraceptive and non-contraceptive benefits of Family planning services cannot be over emphasized. In Mali and Zimbabwe it was found that family planning was perceived by women to reduce fear of unplanned pregnancy and afford women the freedom to enjoy sexual relationships fully[2]. It also relieves women of the physical and financial stress of caring for a large family size. Family planning allows some women to pursue higher education by delaying pregnancy and subsequently gain some measure of economic security[2]. Malcolm Potts placed the importance of contraception in perspective when he said: 'Everything we can do to give women control over their bodies and their fertility enhances their health and also changes the world for the better[3].

Provision of quality family planning Services are an important means of reducing the incidence of unwanted pregnancy and unsafe abortion which ultimately improves maternal and child health[4-7]. Roughly 1 in 5 pregnancies each year in Nigeria are unplanned and about half of unintended pregnancies resulted in illegal abortion[6.] According to the World Health organization, and other international sources, Nigeria's maternal mortality ratio is estimated to be 800 per 100,000 live births with unsafe abortion contributing 22.5-40% of the figure[8,9]. These deaths are largely preventable. Also, the fertility rate of 6 children per woman in Nigeria is unacceptably high[10].The Country's population growth rate of 2.8% per year means a doubling in size in twenty five years[6.] This geometric population explosion potentially has severe negative impact on the socio-economic well being of Nigerians. For the country's Gross Domestic product (GDP) to improve, the fertility rate and the population growth rate amongst other factors must be reduced[6].

The contraceptive prevalence in Nigeria ranges between 5-15%.[6,7,11-15]. This value is extremely low when compared to what obtains in developed countries like Britain where contraceptive coverage among sexually active women is more than 90%.[4,5,16]. It is also known that a sizable number of married women in our environment would love to delay the next pregnancy and would want to have a small family size of 2-4 children. However, most of these women are not using any effective

Correspondence: Joseph Ayodeji Olamijulo, Department of Obstetrics & Gynaecology, College of Medicine, University of Lagos.

contraception[2,17]. Studies have shown a high level of awareness of contraceptive methods among Nigerian women (76%-95%) [1,7,14,15] but the unmet need for contraception in our environment ranges between 13.3%[11] and 87.5%[15]. Several misconceptions, fears and inadequate information are thought to be responsible for this trend[2, 17].

In September 1994, at the International Conference on population and Development (ICPD), held in Cairo, Egypt, it was agreed that Reproductive Health and Reproductive rights are indispensable to people's health and development[11] hence, achieving universal access to reproductive health information and services by the year 2015 was a major goal set at the conference. Family planning Counseling, information, education and services is thus a cardinal program of the ICPD[11].

Family planning counseling is ideally an integral part of antenatal clinic programs. The information provided during the antenatal classes could mould the decision for or against using contraception after delivery. Some studies have shown a positive association between contraceptive uptake and utilization of maternal and child health services[5, 12, 18, 19].

STUDY OBJECTIVES

The objective of this study is to evaluate the level of knowledge about contraception among pregnant women in LUTH, determine the prevalence of contraceptive use before the current pregnancy, their contraceptive preferences and factors that could affect uptake of post-partum contraception. This can aid the development of appropriate strategies to improve post-partum contraceptive uptake.

MATERIALS AND METHODS.

This is a cross-sectional study of pregnant women, examining their past and future utilization of family planning services. The study population consisted of 151 pregnant women attending the antenatal clinic of the Lagos University Teaching Hospital (LUTH) between 1 May and 30 June 2008, who consented to participate in the study. The minimum sampling size was determined to be 120.8 using the statistical formula of Fisher for calculating sample size[20]. LUTH is one of the two teaching hospitals in Lagos state, Nigeria, a cosmopolitan City/ State with an estimated population of 16 million people. The antenatal Clinics are held between the hours of 8am and 2pm, Mondays through to Fridays. Between the hours of 8am and 9am, the patients are given health talks on pregnancy related topics and family planning by a midwife or an obstetrician. The family planning Clinic is strategically located adjacent to the antenatal clinic and within the same building. A self-administered semi-structured questionnaire was given to 151 consenting pregnant women attending the antenatal clinic. The data collected included the women's socio-demographic data, knowledge about contraception, pre-pregnancy contraceptive use and anticipated post-pregnancy contraceptive uptake. Data was

entered and analyzed using the SPSS version 15. The results are presented using texts, frequency tables, percentages and cross tabulations. The chi-squared test was used to determine the significance of differences between variables.

RESULTS

Table 1 shows the socio-demographic characteristics of the respondents. The women studied were aged between 20 and 40 years with a mean age of 29.9 years. The modal age group was 30-34 years. Their parity ranged between 0 and 6; and the modal parity (34.4%) was Para 0. Majority (76.8%) of the respondents were Christians. Of the 116 Christians interviewed, 40 (34.5%) were Catholics, 36 (23.8%) were Pentecostal, 34 (22.5%) were protestants and 6 (4.0%) belonged to other denominations. There were 30 (19.9%) Muslim women in the study and 5 women were neither Christian nor Muslim. Majority (90.7%) of the respondents were married and only 14 (9.3%) were single. The Yorubas constituted 52.3 % of the study population followed by the Igbos (34.4%). Ten (6.6%) women were from Edo and only 1(0.6%) lady was

Table 1: Socio demographic characteristics of respondents.

Characteristics	Frequency (N=151)	Percent (%)
Age		
20 24	12	7.9
25 29	52	34.4
30 34	57	37.8
35 39	23	15.2
e 40	7	4.7
Total	151	100.0
Parity		
0	52	34.4
1	45	29.8
2	29	19.2
3	19	12.6
e 4	6	4.0
Total	151	100.0
Religion		
Christian	116	76.8
Islam	30	19.9
Others	5	3.3
Total	151	100.0
Marital Status		
Married	137	90.7
Single	14	9.3
Total	151	100.0
Education		
Primary	3	2.0
Secondary	32	21.2
Tertiary	**116**	**76.8**
Total	151	100
Ethnic Origin		
Yoruba	79	52.3
Igbo	52	34.4
Edo	10	6.6
Hausa/ Fulani	1	0.7
Not stated	9	6.0
Total	151	100

of the Hausa/Fulani ethnic extraction. Nine (6.0%) respondents did not state their ethnic group. Most (76.8%) of the women had post secondary education, 21.2% had secondary education and only 2.0% had primary education.

Table 2 showing the distribution of respondents according to age at sexual debut, first contraceptive use, first pregnancy and marriage.

AGE	AT SEXUAL DEBUT		AT CONTRACEPTIVE INITIATION		AT FIRST PREGNANCY		AT MARRIAGE	
	Number	%	Number	%	Number	%	Number	%
d20	42	27.8	18	20.7	11	7.3	5	3.6
20-24	66	43.7	40	46.0	57	37.7	28	20.4
25-29	32	19.9	23	26.4	65	43.1	66	48.2
30-34	11	7.3	4	4.6	15	9.9	36	26.3
35-39	0	-	2	2.3	3	2.0	2	1.5
Total	151	100.0	87	100.0	151	100	137	100.0

The mean age at sexual debut, first contraceptive use, first pregnancy and marriage was 21.9 years, 23.2 years, 25.1 years and 29.1 years respectively

Table 2 shows the distribution of the patients in relation to their age at sexual debut, contraceptive initiation, first pregnancy and marriage. The youngest age at sexual debut was 13 and the mean age was 21.97 years. The mean age at marriage was 29.1 years. The youngest age at first contraceptive use was 16 years and the modal age group was 20-24 years (46%). Clearly, many women started having sex before using contraceptives and before marriage putting them at risk of unwanted pregnancy. Sixty four (42.4%) women had had prior unplanned pregnancies and 35(54.7%) of them had induced abortion.

Table 3 showing respondents' perceived level of knowledge about family planning

PERCEIVED LEVEL OF KNOWLEDGE	NO OF WOMEN	PERCENTAGE
EXCELLENT	15	9.9
GOOD	74	49.0
FAIR	46	30.5
POOR	10	6.6
NOT STATED	6	4.0
TOTAL	151	100.0

Table 3 shows the level of knowledge about family planning as perceived by the women themselves. Majority of them (89.4%) felt they had fair to excellent knowledge of family planning methods and only 6.6% believed they had poor knowledge, while 4% did not state their level of knowledge. Their first source of information on family planning is as shown in Table 4. Twenty-nine (19.2%) of the women got information about family planning from the antenatal clinic. Only 11.3% received family planning information from formal education in school.

When asked about their intended family size, 21(12.6%) of the respondents wished to have more than 4 children, 56 (37.1%) wished to have a maximum of 4 children, 55 (36.4%) women wished to have a maximum of 3 children, and 8 (5.3%) wished to have 2 children. Eleven women did not indicate their preferred family size. Eighty-seven women used one or more contraceptive method(s) before the current pregnancy giving a prevalence of 57.6%. Sixty eight (45.0%) women desired to use a contraceptive method after delivery, 40 (26.5%) said they will not and 43 (28.5%) women were undecided. The types of family planning methods used prior to pregnancy and intended for use post partum are shown in Table 5. The most popular type of contraceptive before and after pregnancy was the male condom (64.4% and 55.9% respectively). One hundred and fourteen respondents (75.5%) believed that male condom could protect against Human immunodeficiency Virus (HIV). Most (59.8%) women procured contraceptive materials from the Chemist and pharmacy as is shown in Table 6. Effectiveness topped the list (50.3%) of the most important consideration when choosing a contraceptive method. Other considerations are shown in Table 7. Sixty of the 87 (69.0%) women that used contraceptives before the current pregnancy discontinued because they wanted to get pregnant. The other reasons for discontinuation are shown in Table 8.

Table 9 shows the socio-demographic characteristics of the women in relation to their decision on post-partum contraception. There is no statistical association between post partum contraceptive uptake and age, parity, religion and educational qualification ($p>0.05$).

Table 4: Women's first source of information about contraception.

INFORMATION SOURCE	NO OF WOMEN	PERCENTAGE
ANTENATAL CLASSES	29	19.2
FRIENDS	23	15.2
SCHOOL	17	11.3
DOCTORS	15	9.9
BOOKS	12	7.9
RADIO/ TELEVISION	12	7.9
FAMILY MEMBERS	9	6.0
NEWSPAPER/ MAGAZINE	7	4.6
HUSBAND/ PARTNER	4	2.7
NURSES	3	2.0
INTERNET	1	0.7
NOT STATED	19	12.6
TOTAL	151	100.0

Table 5. Womens choice of contraceptives before and after pregnancy

CONTRACEPTIVE METHOD	USED BEFORE PREGNANCY (N=87)	%	WILL USE AFTER PREGNANCY (N=68)	%
Male condom	56	64.4	38	55.9
Contraceptive pill	16	18.4	10	14.7
IUCD	9	10.3	6	8.8
Injectable	3	3.4	2	2.9
Safe period	2	2.3	2	2.9
Spermicide	1	1.2	-	-
Implant	-	-	4	5.9
Any safe method	-	-	1	1.5
Not yet decided	-	-	5	7.4
Total	87	100.0	68	100.0

Table 6: Sources of family planning commodity.

Sources of commodity		
Chemist / Pharmacy	52	59.8
Private Hospital	9	10.3
Teaching Hospital	8	9.2
General Hospital	8	9.2
Health centre	5	5.8
Dedicated family planning centre	4	4.6
Not stated	1	1.1

Table 7: Most Important consideration when choosing a contraceptive method

Consideration	NUMBER	PERCENTAGE
Effectiveness	76	50.3
Awareness about complications	18	14.4
Intended benefits	10	6.6
Availability	6	4
Cost	5	3.3
No response	36	23.8
Total	151	100.0

TABLE 8 Reasons for discontinuation of contraceptive methods.

Reasons for discontinuation	Number of women. (N=87)	Percentage (%)
Wanted to be pregnant	60	69.0
Period problems	7	8.0
Weight gain	7	8.0
Concern about future fertility	4	4.6
Partner complained	3	3.5
Abdominal pain/cramps	2	2.3
Religious reasons	2	2.3
Spontaneous expulsion	2	2.3
Total	87	100.0

Table 9: Women's socio-demographic characteristics and their decision about post-partum contraceptive use.

	Will use		Will not use		Not decided		Total	%	p-value
Age	N=68	%	N=40	%	N=43	%	151		**0.38**
20-24	4	33.3	4	33.3	4	33.3	12	7.9	
25-29	26	50	13	25	13	25	52	34.4	
30-34	22	38.6	16	28.1	19	33.3	57	37.7	
35-39	13	56.5	4	17.4	6	26.1	23	15.2	
≥40	3	42.9	3	42.9	1	14.2	7	4.6	
Parity									
0	22	42.3	14	26.9	16	30.8	52	34.4	0.42
1	20	44.4	11	24.4	14	31.1	45	29.8	
2	14	48.3	10	34.5	5	17.2	29	19.2	
3	9	47.4	3	15.8	7	36.8	19	12.6	
≥4	3	50	2	33.3	1	16.7	6	4.0	
Education									
Primary	1	33.3	1	33.3	1	33.3	3	2.0	0.49
Secondary	14	43.8	8	25	10	31.2	32	21.2	
Tertiary	53	45.7	31	26.7	32	27.6	116	76.8	
Religion									
Christianity	53	45.7	31	26.7	32	27.6	116	76.8	0.24
Islam	13	43.3	8	26.7	9	30	30	19.9	
Others	2	40	1	20	2	40	5	3.3	

DISCUSSION

The contraceptive prevalence of 57.6% found in this study is higher than what was previously reported in Nigeria[15, 21-23.] However, the figure is still lower than values from the developed regions of the world [1,4 5.] The relatively high contraceptive prevalence in the study may be related to the socio demographic parameters of the women studied. They were young, educated, mostly Yorubas, predominantly Christians and attending the antenatal clinic of a foremost Teaching Hospital. Majority were also married. Contraceptive use have been shown to be high among women with these characteristics[7, 14, 15, 23-25]

The mean age at sexual debut was found to be 21.97 years. This is higher than figures of 15-17 years previously reported by Ladipo et al[26] as the average for Nigeria. However, the mean age at initiation of contraception and at marriage was 23.2 and 29.1years respectively. In other words, the women started having sex on average 7 years before marriage and 3 years before starting contraception. The women were thus exposed to the risk of unwanted pregnancy over these many years. Family planning advocacy and intervention strategies should be directed at this group of sexually active young unmarried girls who had been hitherto neglected. The contraceptive prevalence among the women before their current pregnancy (57.6%) and anticipated use post partum (45.0%) showed an apparent drop. Majority of our respondents were nulliparous and some might have been using contraception before marriage. Thus after getting married and having their first delivery, they may no longer see the need for using contraception until after completing their family size. Many of the women wished to have 3 to 4 children similar to the findings from another study in Calabar[17]. There is a need to educate the women about the role of family planning in child spacing which has been shown to impact positively on maternal and child health[27,28]

This study found no association between age, parity, religion and educational attainment and the desire for post partum contraception. Oye-Adeniran et al similarly showed that there was no statistical difference in contraceptive uptake rate between Christians and muslims[14.] However, other studies have shown strong negative impact of religion on contraceptive use. Islam and Catholicism have been known to discourage the use of modern contraceptive methods [23-25]. Nonetheless, efforts should be made to educate religious leaders on the benefits of family planning services to improve uptake.

Majority of the respondents are literate with most of them having post secondary education. This may not be a true representation of the literacy level amongst pregnant women in Nigeria[12]. The literacy level is high in this study possibly because LUTH is an urban tertiary institution and would attract more of the literate and enlightened women. The uneducated and poor are more likely to utilize the services of Traditional birth Attendants, Faith based maternity homes and Primary Healthcare facilities for their ante natal care[9,29]. However, only 1.3% of respondents cited formal school education as their first source of information about family planning. The continued failure to include sex education in secondary school curriculum represents a missed opportunity to provide essential reproductive health information at this crucial stage. This needs to be addressed urgently. The perceived level of knowledge about modern contraceptive methods amongst women in this study is relatively high possibly because of their higher educational attainment. Other studies have previously shown a positive correlation between the level of education and good reproductive health outcome among women[4, 7, 23, 24].

The role of health practitioners at creating awareness about family planning cannot be over emphasized. A good number of the women in this study got their information about contraception from antenatal classes, family planning clinics, doctors and nurses. It is therefore important that health personnel themselves should be well educated on modern contraceptive methods. They should be trained on how to counsel patients on family planning so that information being given to the patients is accurate. This would help to dispel myths and misconceptions about family planning. Health practitioners should be knowledgeable about family planning and contraceptive products and seize every opportunity to educate and counsel their clients.

The male condom was the most popular method of contraception among respondents in the study and most of the women believed that the condom could prevent HIV spread and other sexually transmitted infections. While the involvement of the male partner in contraception is desirable[30-32], this cannot always be guaranteed. Women need to be made aware of the availability of the female condom which is apparently less popular. The higher rate of condom use found in this study might also be related to its accessibility, affordability, effectiveness, health benefits and the avoidance of perceived health risks associated with other contraceptive methods[15, 23, 25.] Majority of our respondents obtained their contraceptive commodity from the chemist/pharmacy. Availability of other various family planning products over the counter and without prescription will simplify access and promote use.

CONCLUSION

The perceived level of knowledge about family planning among antenatal women studied was relatively high but contraceptive prevalence prior to current pregnancy was low. Similarly, the anticipated contraceptive uptake post

partum was also low. Information about family planning can be augmented by including sex education in the school curriculum. Information given at the antenatal classes should lay emphasis on child spacing and not just limiting family size. The ease of access that made the male condom popular can be extended to other contraceptive methods by making them available and affordable over the counter. Continued health education directed at religious leaders, political leaders and the general population will help to resolve prejudices and myths about contraception and increase uptake.

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