### Original Article

# Contraceptive-seeking Behavior of Women Attending Antenatal Care in a Developing Country: A Veritable Tool for Slowing Population Growth

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### ABSTRACT

**Background:** The use of modern contraceptives has been embraced by developed nations as a means of achieving controlled growth rate. Nigeria, Africa's most populous nation at 158 million with a growth rate of 2% is expected to grow to 730 million by the end of this century. There is need for regular assessment of the knowledge and practice of contraception among women of childbearing age. Aim: The aim of this study is to determine the contraceptive-seeking pattern among women attending antenatal care in an urban city in a developing country and the factors affecting usage. **Subjects and Methods:** This was a cross-sectional study of 430 antenatal women using structured self-administered questionnaires on randomly selected attendees who consented to participate. Results were analyzed using SPSS Version 16 (Chicago, IL, USA). **Results:** Although majority of the women 71.2% (306/430) wished to have between 1 and 4 children, only 20% (87/430) had on their own sought for advice on contraception from a health facility. The percentage of women who had a knowledge of contraception was 61.4% (264/430) with highest source of information from antenatal clinics. Among the women, 41.2% (177/430) have used contraceptions since getting married; 16.1% (69/430) used natural and withdrawal methods while only 25.1% (108/430) used modern contraceptives. Reasons for nonusage of some modern contraceptives given by 340 women include fear of side effect 53.2% (181/340), objection from partner 7.9% (27/340), conflict with religious beliefs 4.1% (14/340) while 34.4% (117/340) had no reason for not using contraceptive. **Conclusion:** Contraceptive-seeking is low. Programs aimed at encouraging women to deliver in health facilities should be intensified. Health workers should utilize every opportunity to educate on contraceptive choices.

KEY WORDS: Antenatal, contraception, population control Nigeria

### **INTRODUCTION**

Population studies, especially in Africa, show an exponential increase in populations of nations. Nigeria, Africa's most populous country at 158 million, with a growth rate of 2% is expected to grow to 730 million by the end of the century.<sup>[11]</sup> The high usage of modern contraceptives has contributed to the achievement of controlled population growth rate in countries such as Japan.<sup>[2,3]</sup> High usage of modern contraceptives has also been observed in Zimbabwe, with a modern contraceptive usage of 67%.<sup>[4]</sup> Unexpected or unplanned pregnancy poses a major public health challenge to women of reproductive age, especially in developing countries.<sup>[5,6]</sup> A significant proportion of maternal deaths in Nigeria is due to complications of unsafe abortions, and these

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abortions are responses to unwanted pregnancies. This could be prevented by effective contraceptive programming.<sup>[7,8]</sup> Contraception has thus been embraced worldwide as a means of controlling populations and improving maternal health; hence, the need to study the contraceptive-seeking behavior among women attending antenatal care and investigate contributory factors. The objectives of the study were t to determine the contraceptive-seeking pattern among the women in the study group.

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### SUBJECTS AND METHODS

This was a cross-sectional study of 430 women carried out in Aba, Southeast Nigeria, from December 2013 to February 2014. A minimum sample size calculated with a contraceptive prevalence rate (CPR) of 15% as reported by National Demographic Health Survey 2008,<sup>[9]</sup> confidence interval of 95%, and standard error of 5% was 235.

However, the researcher exceeded this sample size as a total of 540 responses were gotten and the 430 that were correctly filled were analyzed.

### Area of study

Aba is the most populated city in Abia State, Southeast Nigeria. According to the 2006 census, it has an estimated population of 423,852 people.<sup>[10]</sup> Residents are predominantly lbos and they are mainly traders, artisans, and civil servants. It has public and private health facilities. Participants were drawn from women attending antenatal care in both private and government-owned facilities. This was to avoid bias as different categories of women attend the antenatal clinics with some preferring private facilities. A total of seven health facilities were used (two government-owned and five private facilities). The facilities were selected by a stratified random sampling of facilities offering antenatal services.<sup>[11]</sup>

### **Ethics information**

Ethical approval was obtained from the Ethical Committee of the Federal University of Technology, Owerri.

### **Inclusion criteria**

All pregnant women who were attending antenatal during the study at each selected center were eligible to participate were included in the study.

### **Exclusion criteria**

Pregnant women who did not consent to participate in the study and pregnant women who were sick were excluded from the study.

### Data collection tool

Data were collected using structured self-administered questionnaires on antenatal attendees. The tool was developed by the researchers. The questionnaire was pretested in a facility that was not selected for the study and necessary adjustments made before administering on study participants.

Results were analyzed using SPSS version 16 (SPSS Inc, Chicago, IL, USA). Categorical variavles were analyse using the Chi-square test and *P* values less than 0.05 were considered as statistically significant.

### RESULTS

The study sample analysed included 430 antenatal attendees drawn from Aba and its environs.

### Sociodemographic characteristics of respondents

The mean age of respondents was 29.37 (4.85) years with their age range between 20 and 48 years. Majority of the respondents 62.5% (269/430) were between 20 and 30 years. Majority of them 96.7% (416/430) were married while 59.3% (255/430) had tertiary education. Among the women, 71.2% (306/430) wished to have between one and four children [Table 1].

### **Contraceptive-seeking behavior of respondents**

Although majority of women were educated and wished to have between one and four children, only 20% (87/430) had on their own sought for advice on contraception from a health facility while the other 80% (343/430) had not [Figure 1].

Table 1: Sociodemographic characteristics of respondents		
Variables	Frequency (%)	
Location		
Aba town	393 (91.4)	
Neighboring village	28 (6.5)	
Outskirt of Aba	9 (2.1)	
Age of respondents		
20-30	125 (62.5)	
31-40	70 (35.0)	
41-50	5 (2.5)	
Occupation		
Public servant	150 (34.9)	
Unemployed	112 (26.0)	
Traders	110 (25.6)	
Artisans	35 (8.1)	
Farmers	23 (5.4)	
Level of education		
Tertiary	255 (59.3)	
Secondary	150 (34.9)	
Primary	16 (3.7)	
No formal education	9 (2.1)	
Marital status		
Married	416 (96.7)	
Divorced	6 (1.4)	
Single	5 (1.2)	
Others	3 (0.7)	
Duration of marriage		
1-5	312 (71.2)	
6-10	74 (20.2)	
11-15	30 (7.1)	
16-20	8 (1.9)	
21-25	1 (0.2)	
Number of children		
None	143 (33.3)	
One	81 (18.8)	
Two	98 (22.8)	
Three	52 (12.1)	
Four	38 (8.8)	
Five	15 (3.5)	
Six	3 (1.0)	
Number of children I wish to have		
1-4	306 (71.2)	
≥5	124 (28.8)	

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### **Respondents' information about contraception**

Two hundred and sixty-four women 61.4% (264/430) had a knowledge of contraception with highest source of information from antenatal clinics. This was followed by information from friends while the least source was health seminar [Table 2].

### Pattern and source of contraception used by respondents

Among the respondents, 41.2% (177/430) have used contraception since getting married. The highest source of contraceptives used 57.6% (108/430) were from the chemist. Out of the 430 respondents, 16.1% (69/430) used natural and withdrawal methods while only 25.1% (108/430) used modern contraceptives [Table 3].

### Reasons for nonusage of modern contraceptives

Reasons given by the respondents for nonusage of some modern contraceptives included fear of side effects (which include fear of permanent infertility, delayed conception, and heavy menstrual flow) 53.2% (181/340), objection from partner 7.9% (27/340), conflict with religious beliefs 4.1% (14/340), objection from family member 0.29% (1/340) while 34.4% (117/340) had no reason for not using contraceptive [Figure 2].

Use of contraceptives by sociodemographic characteristics of respondents was analyzed [Table 4]. From the table, it could deduce that a statistically significant difference (P < 0.05) exists between age of respondents, educational level of respondents, duration of marriage, reasons for not using contraceptive, and the use of contraceptive. This implies that age of respondents, level of education, duration of marriage, and reasons for not using contraceptive affects the use of contraceptive.

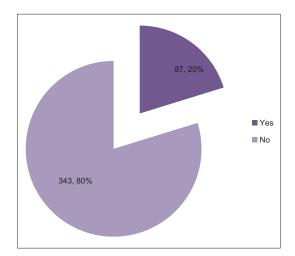


Figure 1: Contraceptive-seeking behavior of respondents

### DISCUSSION

In this study, contraceptive-seeking behavior is poor despite knowledge of 61.4% and desire for less number of children. This level of knowledge is, however, lower than that observed in similar studies by Abasiatttai et al. (87.6%), Umoh and Abah (96.3%).<sup>[12,13]</sup> Although <50% of the respondents had ever used a form of contraception, only about a quarter (25%) had used modern contraceptives since getting married. Usage (25.1%) is relatively low and far from levels achieved in developed countries and African countries such as Zimbabwe. Such nations like Japan have modern contraceptive prevalence as high as 69.3%, Canada 72% while Zimbabwe has modern CPR of 67%.<sup>[2,4,14]</sup> The low rate of contraceptive use in Nigeria results in high fertility rates, particularly in the rural areas and the northern part of the country.<sup>[15]</sup> This high fertility rate accounts for Nigeria's high maternal, infant, and neonatal

Table 2: Respondents information about contraception		
Variable	Frequency (%)	
Had any form of teaching on contraception		
Yes	264 (61.4)	
No	166 (38.6)	
If yes, what's the source of information (multiple response)		
Antenatal	136 (29.6)	
Friend	102 (22.2)	
Health workers	98 (21.3)	
Radio/TV	88 (19.1)	
Health seminar	36 (7.8)	

### Table 3: Pattern and source of contraception used by respondents

Variable	Frequency (%)
Used contraceptive since having children?	
No	253 (58.8)
Yes	177 (41.2)
If yes, place of purchase of contraceptive	
Government hospital/clinic	34 (31.1)
Private hospital	12 (11.3)
Chemist	62 (57.6)
Type of contraceptive used since having children	
Natural	24 (13.5)
Withdrawal	45 (25.4)
Norplant	2 (1.1)
Injectable	4 (2.3)
Oral pills	16 (9.0)
Diaphragm	1 (0.5)
Condom	49 (27.7)
Intrauterine contraceptive device	36 (20.3)

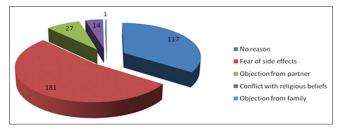


Figure 2: Reasons for nonusage of some modern contraception

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Table 4: Use of contracept	tive by socio	odemograp	hic	
characteristics of respondents				
Variable	Used contr	Used contraceptive (%)		
	Yes	No		
Age of respondents				
20-30	80 (45.2)	202 (79.8)	<0.001*	
31-40	89 (50.3)	46 (18.2)		
41-50	8 (4.5)	5 (2.0)		
Occupation				
Public servant	67 (37.9)	83 (32.8)	0.22	
Unemployed	42 (23.7)	70 (27.7)		
Traders	50 (28.2)	60 (23.7)		
Artisans	9 (5.1)	26 (10.3)		
Farmers	9 (5.1)	14 (5.5)		
Level of education				
Tertiary	79 (55.2)	172 (61.4)	<0.03*	
Secondary	61 (42.6)	86 (20.7)		
Primary	1(0.7)	15 (5.4)		
No formal education	2 (1.4)	7 (2.5)		
Duration of marriage				
1-5	97 (55.1)	215 (86.3)	<0.001*	
6-10	49 (27.8)	25 (10.0)		
11-15	22 (12.5)	8 (3.2)		
16-20	8 (4.5)	1 (0.4)		
Number of children				
1-4	127 (73.0)	179 (71.9)	0.80	
≥5	47 (27.0)	70 (28.1)		
Reasons for nonusage of contraceptive	( , ,	. ,		
Fear of side effect	71 (51.1)	110 (54.7)	0.02*	
Objection from spouse	5 (3.6)	22 (10.9)		
Conflict with religious beliefs	2 (1.4)	12 (6.0)		
Objection from family member	0	1 (0.5)		
No reason	61 (43.9)	56 (27.9)		

\*P<0.05

mortalities.<sup>[15]</sup> The implication is that contraceptive use remains a critical public health issue in Nigeria.<sup>[16]</sup> It has been reported that only 9% of women in the Northern part of Nigeria, use modern contraceptive methods.<sup>[15]</sup> The CPR in Nigeria has increased from 6% in 1990-13% in 2003 to 15% in 2013 with 10% of women using modern methods and 5% traditional methods.<sup>[17]</sup> We, however, observed a modern contraceptive usage of 25.1% and 41% for both modern and traditional methods. This can be attributed to the fact that women who attend antenatal clinics likely have access to more information on contraception as these devices are readily available at antenatal clinics In addition, 59.3% of the women had tertiary education. This result is in keeping with results obtained from similar studies among antenatal patients. A study in Lagos found a CPR of 57.6% among antenatal patients in Lagos University Teaching Hospital while another study in Jos found CPR of 44% among antenatal patients in Jos University Teaching Hospital (JUTH).<sup>[18,19]</sup>

This study revealed that mothers' sources of information on contraception include antenatal clinic, friends, health workers, radio/TV, and health seminars. Various studies in Nigeria have indicated that the main sources of information on contraception in descending order of frequency, include friends/siblings, radio/television/newspapers/magazines, workshops/seminars, and health workers.<sup>[20,21]</sup> Recent observations in some centers and communities indicate that staff in health centers are becoming an important source of information, especially in southern Nigeria. This is probably because of the increased level of awareness among women and mothers in Southern parts of Nigeria.<sup>[22]</sup> This was also the finding of a study in Ethiopia among married women in Amhara region.<sup>[23]</sup> The results from this study revealed that the highest source of information on contraception among the study group was from antenatal clinic reflecting the improvement in the contribution of health workers in disseminating information on use of contraceptives.

Findings from this study revealed the different contraceptive methods mothers knew and the ones they have used in time past which included natural, withdrawal, condom, norplant, injectable, IUCD, and sterilization among others. Among the respondents, the most commonly used contraceptive was the condom. This was also the finding among antenatal patients in JUTH.<sup>[19]</sup>

Results of this study showed the condom as the highest method known and used (49%) by respondents. According to the 2013 Demographic and Health Survey,<sup>[17]</sup> the condom is reported to be one of the main contraceptive methods known of and used by Nigerian women of reproductive age. The extensive marketing of condoms in response to the human immunodeficiency virus epidemic, with the active involvement of both government and nongovernmental organizations, has been responsible for this increased awareness and subsequent increase in condom use.<sup>[17]</sup>

The IUCD was the second highest (20.3%) modern contraceptive used by respondents in this study group reflecting its level of acceptability. This corroborates with the findings of studies in Uyo and Lagos.<sup>[24-26]</sup>

For respondents who have used contraception in this study, the highest source was the chemist A study among young women in Nigeria documented similar findings.<sup>[21]</sup>

Studies in Ghana and Kenya have also shown that these commodities are obtained mainly from the private sector.<sup>[27,28]</sup> In contrast, in countries such as Zimbabwe and Tanzania, where there is strong government involvement in the provision of family planning services, the majority of users obtain oral contraceptives and condoms from the public sector.<sup>[29,30]</sup>

Fear of side effect was the reason given by the majority of mothers (53.2%) for the nonusage of contraceptives while several mothers had no cogent reason for not using contraceptives. These fears include fear of permanent infertility, delayed conception, and heavy menstrual flow. Other reasons were objection from partner, conflict with religious beliefs, and objection from family members. This is consistent with findings from other studies.<sup>[19,21,26]</sup>

### Limitation

Findings from this study are basically those of pregnant women. It is possible that the findings may be different in nonpregnant women.

### CONCLUSION

This study has shown that there is a high level of contraceptive knowledge and awareness among respondents in the study area, but this awareness has not translated into increased contraceptive use. Antenatal clinics are a ready source for acquisition of information on contraception. Programs aimed at encouraging women to deliver in health facilities should be intensified as most of these facilities provide contraceptives. Health workers should utilize all opportunities to educate women on contraception. The main factors affecting usage are fear of side effects. Adequate counseling on modern contraception and national programs aimed at promoting effective usage of contraception will go a long way in addressing these fears and uncontrolled population growth as well as reduce maternal deaths.

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### **Conflicts of interest**

There are no conflicts of interest.

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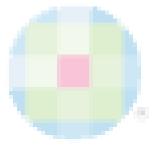
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