



IMPACT OF WOMEN'S SOCIO-ECONOMIC CHARACTERISTICS ON THEIR KNOWLEDGE OF CONTRACEPTIVES: A CROSS-SECTIONAL STUDY

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ABSTRACT

Appropriate use of contraceptives in family planning has proved to be a very cost effective exercise that has reduced the number of maternal deaths by 40% over the past 20 years, and appreciably improved infant survival rates. The uptake of family planning services and the type of contraceptive adopted by couples are influenced by several factors including knowledge of the meaning of family planning and knowledge of family planning methods. In this paper we report a study of the impact of women's socio-economic characteristics on their knowledge of contraceptives. A pre-validated questionnaire was used to carry out a cross-sectional survey of women of child bearing age at antenatal clinics in major hospitals in Enugu metropolis Nigeria on year 2017. The hospitals were chosen by multistage randomized sampling. Data analysis was carried out using Epi info and SPSS version 20 computer softwares. Significance of any differences was determined at $p \leq 0.05$. Two hundred and sixteen completed questionnaires were obtained from three busy hospital antenatal clinics. All respondents were between the ages of 18 years and 45 years. Among the respondents 85.2% were urban residents and over 90% of them were literate. As much as 80% had a good knowledge of what family planning meant and the methods. There was no association of knowledge of methods of family planning with age or marital status. There was an association between Knowledge of hormonal contraceptives with the level of education attained by the women. There was no association of knowledge of family planning methods with marital status, parity, past history of multiple births, or location of residence but there was an association between Knowledge of family planning methods with past history of caesarian section. Formal education of women improves their capacity to have correct knowledge of family planning services. As rational use of antifertility medicines and devices leads to improvements in maternal and infant health and survival, more efforts should be made to increase the access of women to education and to family planning services.

KEYWORDS: Contraceptives, family planning, socio-economic characteristics, knowledge.

INTRODUCTION

Increased use of contraceptives as tools for family planning in developing countries has cut the number of maternal deaths by 40% over the past 20 years, and appreciably improved infant survival rates.^[1] This trend needs to be further improved.^[2,3]

Historical perspective: Historically, man has for centuries practiced contraception both in animals and in human beings. For instance, centuries ago, for camels to make the long trips across the desert over periods of months, some form of birth control measures were used to prevent pregnancy in the female camels while in transit. A few pebbles inserted in the womb of a camel by their owners before embarking on such long trips, we were told, sufficed for that purpose.^[4] There were also several other earlier versions of what are now known as intrauterine devices.

For prevention of pregnancy in human beings, abstinence, coitus interruptus, and lactational amenorrhea have been familiar to man from ancient times. Furthermore, castration of males was an ancient method of irreversible contraception was. This repulsive practice of the past produced eunuchs who served as royal courtiers or servants in some ancient kingdoms.^[5]

Definitions and impact: Family planning denotes a deliberate spacing of childbirths in order to protect the health of the mother and to suit the circumstances of the family. It makes for good health and optimal development of offsprings. The phrase 'birth control' is similar but not synonymous with Family planning. Birth control carries a connotation of an exercise meant for population control but in practice, they mean the same thing in West Africa. Whereas contraceptives are tools to achieve family planning, not all family planning methods

utilize contraceptives. In family planning there are natural methods that require only behavioral techniques as well as artificial methods that employ artificial family planning devices or contraceptives. Modern contraceptives are pharmacologically active agents used to prevent the occurrence of pregnancy.

Cost effective intervention: Family planning, which frequently entails the use of modern contraceptive practices, has been shown to be a cost effective intervention that has decreased maternal mortality globally.^[1] Besides, in contemporary times, the arts and science of contraception have become very refined and some methods are known to have very high success rates.^[6] Before the second half of the 20th century, it was common for married women in southern Nigeria to have as much as eight to ten childbirths. Presently on the average, a Nigerian woman gives birth to less than 6 children in her life time. This suggests that couples are learning to break away from the traditional preference for larger family size and gaining the benefits of family planning.^[2]

Need for sustained optimal uptake of family planning services by married couples: Though the prevalence rates of use of modern family methods in Nigeria has appreciated the overall rates in sub-Saharan countries, with the highest rates of maternal death, have remained quite suboptimal compared to North American and European rates.^[7,8,9] The extent of utilization of contraceptives and other family planning options has been suboptimal.^[7,10] According to 2017 World Health Organization's estimates, 214 million women of reproductive age in developing regions who want to avoid pregnancy were not using a modern contraceptive method.¹⁰ This speaks to the need for increased access and utilization of family planning services.

Variety and benefits of rational use of antifertility agents and devices: Currently family planning options include: oral contraceptive pills, injectable contraceptives, implants, condom for males,^[11] female condom, diaphragms, spermicides, intra uterine devices or loop coil, periodic abstinence or safe period, and sterilization (bilateral tubal ligation or vasectomy).

The greatest benefits of the use of contraceptives is enhancement of the overall health, well-being and survival of women particularly those women who started childbearing at very young ages, those that have had a couple of pregnancies already, and those whose previous child deliveries were not adequately spaced out. Effective contraception also improves peri-natal outcomes and child survival, mainly by lengthening inter-pregnancy intervals.

Influencing factors use of contraception: The uptake of family planning services in hospitals and clinics and the type of contraceptives adopted by women and their spouses are influenced by several factors particularly

knowledge of the meaning of family planning, knowledge of family planning options and easy access to relevant clinical services. However, culturally entrenched preference for large families, ignorance, fear of the effects and reversibility of antifertility effects of a short term contraceptives and opposing faith-based tenets are constraints to utilization of family planning services.^[12]

A vital key to success in the use of family planning methods is therefore women's understanding of what family planning is all about and familiarity with the various available approved methods and their potential benefits.

As recent studies on the patterns and determinants of choice of contraceptive by south-eastern Nigerian women have been sparse,¹³ we embarked on this study to investigate the level of women's knowledge of family planning and family planning methods and the impact of their personal and socioeconomic characteristics on what they know about contraception in a southeastern Nigerian urban area.

METHODS

The study was a cross-sectional survey conducted in Enugu from April 2017 to July 2017 using pre-validated questionnaire. Enugu is a major town in southeastern Nigeria. The study was based in three key hospitals that had busy and well attended antenatal clinics chosen by multistage random sampling to include both public and private hospitals within the metropolis. The target population was women who attended antenatal clinics in the urban areas of the town. Research personnel obtained authorization from hospital officials in order to distribute the questionnaires to women who were in attendance at their antenatal clinics. Only the women who gave informed consent completed the questionnaire. There was no coercion to fill the questionnaires and no penalty for refusal to complete the questionnaire or for not filling it completely.

Data analysis was done using Epi info and SPSS version 20 computer softwares. Statistical differences were determined at $p \leq 0.05$.

RESULTS AND DISCUSSION

Two hundred and sixteen women completed the questionnaire. The respondents were predominantly aged 18 – 45 years. The majority of respondents (85.2 %) resided in the urban area and over 90 % of them were literate. The majority were married women (93.1%) while a fewer number were single mothers (6.0%). Grandmultiparous women who had had more than four pregnancies were significantly low among them (5.6% of respondents).

As shown in Table 2 the family planning methods known very well by the largest number of respondents were oral contraceptives, condoms for males, and periodic abstinence. The use of diaphragms and cervical caps were the least familiar methods to them.

In this study hormonal contraceptives and condoms for males are the most popular among women. Some other studies have shown that hormonal implants, intrauterine devices impregnated with antifertility hormonal agents (intra-uterine contraceptive devices), and sterilization are the most effective contraceptive methods available. Contraceptive pills, rings, patches, and injectable hormonal preparations, when used correctly, are also highly effective in producing contraception,^[6, 4] whereas the barrier and fertile-period based methods have much lower success rates.^[15,16]

Knowledge of what family planning is does not seem to be a problem among the women who participated in this study as 80 % of them could tell the meaning of family planning. Existing literature shows that there is positive association between women's educational level and utilization of modern contraceptives in sub-Saharan Africa.^[17,18]

On the other hand, ignorance begets misconceptions about family planning. Lack of knowledge of the approved options also leads to undue fear of adverse effects that limits the demand for contraceptives.^[7,19]

In general there was no association of knowledge of methods of family planning with age or marital status. But there was an association between Knowledge of hormonal contraceptives with the level of education attained by the women.

There was no association of knowledge of methods of family planning with marital status, parity, past history of having had multiple birth, or location of residence but there was an association between Knowledge of family planning and the methods with past history of caesarian section.

CONCLUSION

Formal education of women improves their capacity to have correct knowledge of family planning services. As rational use of anti-fertility medicines and devices leads to improvements in maternal and infant health and survival,^[1,15,20] more efforts should be made to increase the access of women to education and to family planning services.

Table1: Socio- demographic Characteristics of respondents.

Characteristics	Frequencies (%)
Age (years)	
Less than 18	1 (0.5)
18-31	127 (58.8)
32-45	88 (40.7)
Total	216 (100.0)
Marital Status	
Married	201 (93.1)
Single mother	13 (6.0)
Widow	2 (0.9)
Total	216 (100.0)
Level education	
No formal	1 (0.5)
Primary education	9 (4.2)
Secondary education	67 (31.0)
College education	20 (9.3)
Polytechnic	47 (21.8)
University	72 (33.3)
Total	216 (100.0)
Place of residence	
Enugu Urban	184 (85.2)
Rural Area	32 (14.8)
Total	216 (100.0)
Ever Pregnant before	
Yes	171 (79.2)
No	45 (20.8)
Total	216 (100.0)
Position of the Current pregnancy	
First	63 (29.2)
Second	51 (23.6)
Third	47 (21.8)
Fourth	32 (14.8)
Fifth	12(5.6)
No response	11 (5.1)
Total	216 (100.0)

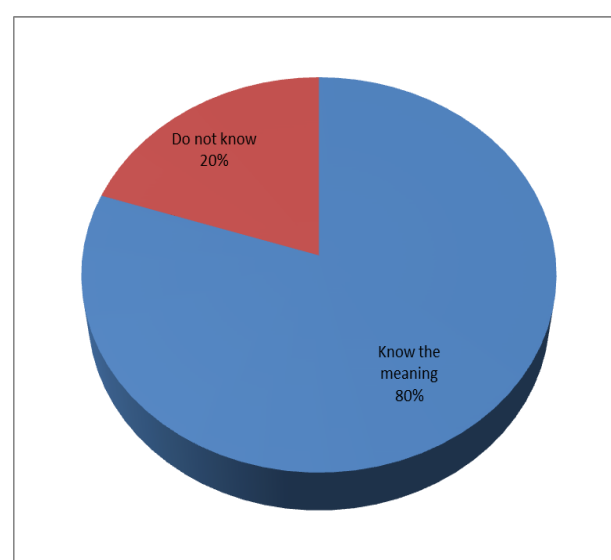


Figure 1: Percentage of women who could tell the meaning of Family Planning.

Table 2: Distribution of family planning methods known well.

Method of family planning	Know well	
	Frequencies	Percentage (%)
Oral contraceptives	106	49.1
Injectable contraceptives	81	37.5
Implants	45	20.8
Condom for males	124	57.4
Female condoms	51	23.6
Diaphragms or cervical caps	25	11.6
Spermicides	24	11.1
Loop coil or intra uterine device	29	13.4
Periodic abstinence or safe period	106	49.1
Sterilization	38	17.6

Table 3: Association of knowledge of Family planning methods with age of respondents.

Method of family planning	Know well			
	Age			Fisher's exact / Chi-square (P-value)
	<18	18-31	32-45	
Oral contraceptives	0(0.0)	54(50.9)	52(49.1)	6.68(0.035)
Injectable contraceptives	0(0.0)	41(50.6)	40(49.4)	4.45(0.108)
Implants	0(0.0)	20(44.4)	25(55.6)	5.317(0.07)
Condom for males	0(0.0)	66(53.2)	58(46.8)	5.486(0.064)
Female condoms	0(0.0)	25(49.0)	26(51.0)	3.113(0.211)
Diaphragms or cervical caps	0(0.0)	7(28.0)	18(72.0)	11.472(0.003)
Spermicides	0(0.0)	5(20.8)	19(79.2)	16.52(0.000)
Loop coil or intra uterine device	0(0.0)	7(24.1)	22(75.9)	17.14(0.000)
Periodic abstinence or safe period	0(0.0)	58(54.7)	48(45.3)	2.607(0.272)
Sterilization	0(0.0)	12(31.6)	26(68.4)	14.695(0.001)

Table 4: Association of knowledge of Family Planning Methods with Marital status.

Method of family planning	Know well			
	Marital status			Fisher's exact / Chi-square (P-value)
	M	SM	W	
Oral contraceptives	96(90.6)	9(8.5)	1(0.9)	2.25(0.324)
Injectable contraceptives	72(88.9)	9(11.1)	0(0.0)	7.02(0.030)
Implants	45(100.0)	0(0.0)	0(0.0)	4.242(0.120)
Condom for males	120(96.8)	4(3.2)	0(0.0)	6.901(0.032)
Female condoms	50(98.0)	1(2.0)	0(0.0)	2.623(0.269)
Diaphragms or cervical caps	25(100.0)	0(0.0)	0(0.0)	2.110(0.348)
Spermicides	24(100.0)	0(0.0)	0(0.0)	2.015(0.365)
Loop coil or intra uterine device	29(100.0)	0(0.0)	0(0.0)	2.500(0.287)
Periodic abstinence or safe period	97(91.5)	8(7.5)	1(0.9)	0.862(0.650)
Sterilization	32(84.2)	6(15.8)	0(0.0)	8.129(0.017)

Table 5: Test of Association between knowledge of the meaning of Family planning with the socio demographic characteristics.

Characteristics	Knowledge of family planning		Fisher's exact / Chi-square	P-value
	Yes	No		
Age (years)				
Less than 18	1 (0.6)	0 (0.0)	1.493	0.474
18-31	99 (56.9)	28 (66.7)		
32-45	74 (42.5)	14 (33.3)		
Total	174 (100)	42 (100)		
Marital Status				
Married	160 (92.0)	41 (97.6)	1.746	0.418
Single mother	12 (6.9)	1 (2.4)		
Widow	2 (1.1)	0 (0.0)		
Total	174 (100)	42 (100)		

Level education				
No formal	0 (0.0)	1 (2.4)		
Primary education	9 (5.2)	0 (0.0)		
Secondary education	41 (23.6)	26 (61.9)	29.615	
College education	17 (9.8)	3 (7.1)		0.000
Polytechnic	41 (23.6)	6 (14.3)		
University	66 (37.9)	6 (14.3)		
Total	174 (100.0)	42 (100.0)		
Place of residence				
Enugu Urban	148 (85.1)	36 (85.7)		
Rural Area	26 (14.9)	6 (14.3)	0.012	1.000
Total	174 (100)	42 (100)		
Ever Pregnant before				
Yes	1369 (78.2)	35 (83.3)		
No	38 (21.8)	7 (16.7)	0.549	0.531
Total	174 (100)	42 (100.0)		
Position of the Current pregnancy				
First	52 (31.5)	11 (27.5)		
Second	43 (26.13)	8 (20.0)		
Third	35 (21.2)	12 (30.0)	1.9711	0.0.741
Fourth	26 (15.8)	6 (15.0)		
Fifth	9 (5.5)	3 (7.5)		
Total	165 (100)	40 (100.0)		

Table 6: Association of Knowledge of Family planning methods and past history of multiple pregnancy or child birth by caesarian operation.

Characteristics	Knowledge of family planning		Fisher's exact / Chi-square	P-value
	Yes	No		
Past history of twins or multiple pregnancy				
Yes	251 (4.4)	3 (7.1)		
No	149 (85.6)	39 (92.9)	1.565	0.306
Total	174 (100)	42 (100.0)		
Past history of delivery by caesarian section				
Yes	39 (22.4)	16 (38.1)		
No	135 (77.6)	26 (61.9)	4.384	0.048
Total	174 (100)	42 (100)		

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