

# KNOWLEDGE, DETERMINANTS AND USE OF MODERN CONTRACEPTIVES AMONG MARRIED WOMEN IN SABON GARI ZARIA-NORTHERN NIGERIA

Alhaji A Aliyu<sup>1</sup>, Tukur Dahiru<sup>1</sup>, Adegboyega M Oyefabi<sup>1</sup>  
and Awwal M Ladan<sup>2</sup>

## ABSTRACT

**Background:** Improving reproductive health of young women in least developed countries requires access to safe and effective contraceptive methods. We conducted a study on knowledge, determinants and use of modern contraceptives among married women in Sabon Gari, Zaria-Northern Nigeria.

The study aimed to assess contraceptive knowledge, sources of information, determinants and use of modern FP.

This was a cross sectional descriptive and health facility-based study. Respondents were selected consecutively from the out-patient clinic register of Comprehensive Health Centre and a structured questionnaire was used to collect data.

Only three hundred and nine (309) questionnaires were finally analyzed out of the 350 questionnaires administered. Mean age of respondents was 32.8±9.6 years. Majority (78 %) were Muslim, married and in monogamous union (72.2%). Knowledge of modern FP was almost universal 97.7% even though knowledge of 2 or more methods was 55.3%. Mean number of contraceptives known by respondents was 2. About 42.7% of respondents have ever used any contraceptive method. The Contraceptive Prevalence Rate (CPR) was 12.3 % and the preferred FP choice among respondents was the injectable contraceptives (5.2%). Sources of information on FP were Nurse 42.1% and relatives/ friends 19.7%. Significant determinants of FP current use among the respondents include age, education, religion and type of marriage.

FP use among study participants attending the centre is low despite good knowledge of modern contraception. Factors associated with contraceptive use should be used as advocacy tool by all tiers of Government to organize sustained publicity awareness campaigns in order to improve acceptability and usage.

**Introduction:** The persistence of high fertility in sub-Saharan Africa has been the subject of considerable debate in the past decade. Even though, the great majority of women want to control their own fertility, fertility rates ranged from 4.8 children per woman in Kenya, 5.2 in

Nigeria to 7.2 in Niger republic<sup>1,2</sup>. Nigeria is a country undergoing demographic transition with a population of over 140 million and a current growth rate of 2.8%<sup>3</sup>. It is also going through a process of rapid urbanization. Nigeria has a population policy adopted since 1988, but it is best on paper than in practice as current fertility pattern has shown. Nigeria's high birth rates particularly in the Northern part are likely to persist for decades to come despite efforts being made on family planning services. Most Nigerians have pronatalist attitudes and the age-old African custom that the number of children to be born by couples should be

---

**KEYWORDS:** • Knowledge, determinants, use of modern FP, Northern Nigeria.

Alhaji A Aliyu<sup>1</sup>, Tukur Dahiru<sup>1</sup>, Adegboyega M Oyefabi<sup>1</sup>  
and Awwal M Ladan<sup>2</sup>

<sup>1</sup>Departments of community medicine & <sup>2</sup>Nursing sciences,  
Ahmadu Bello University Zaria-Nigeria

\* Correspondence:

Alhaji A Aliyu,

Dept of community medicine, Ahmadu Bello University Zaria–  
Nigeria. E-mail: alhajimph@gmail.com +234 80 237 315 66

left to God to determine. Although, contraceptive methods and services are frequently geared toward women, men are the primary decision-makers on family size and their partners' use of family planning methods<sup>5-7</sup>. In addition spousal disagreements can serve as deterrent because women might fear initiating a difficult conversation about family planning. To date, contraception has not well been consolidated in Nigeria as shown by recent DHS data indicating that only 15% of sexually active Nigerian women currently practice effective contraception<sup>8</sup>. However, since International Conference on Population and Development (ICPD) 1994, most countries in the developing world have made remarkable progress in expanding reproductive health and family planning services accessible<sup>9</sup>.

Family planning is one of the greatest public health achievements of the 20<sup>th</sup> century. Family planning refers to practices that help individuals or couples to avoid unwanted births, to bring about wanted births, to regulate the intervals between pregnancies, to control the time at which births occur in relation to the ages of the parents and to determine the number of children in the family<sup>10, 11</sup>. Availability of family planning services allows individuals to achieve desired birth spacing and family size and contributes to improved health outcomes for the infants, children, woman and families<sup>12</sup>. Family planning has been shown to have a lot of benefits because of its potential to reduce poverty and hunger and avert 32% of maternal deaths and nearly 10% of childhood deaths<sup>1,13-16</sup>.

The empowerment of women as reflected in their socio-economic and employment status, educational levels, household organization, the dynamics of their marital relations and their involvement in domestic decision-making is an

important factor that has resulted in the decline of fertility levels in developing countries. In Nigeria, generally, knowledge on family planning is high but use remains low. Most women's contraceptive knowledge and practice are influenced by socio-cultural norms such as male dominance and low social status<sup>16</sup>. This makes it extremely impossible for these women to take decisions concerning their own health in the absence of their spouses. Thus as part of measures to improve women's access to family planning services, this study was conducted to determine contraceptive knowledge, determinants, contraceptive prevalence and use of modern family planning. The findings will be useful in planning interventions to address the knowledge-practice gap and as an addendum to the growing body of literature in area of safe motherhood and reproductive health in northern Nigeria.

**Materials and Methods:** Study design: This was a cross-sectional descriptive study of women of reproductive age (15-49 years) attending outpatient clinic of the Comprehensive Health Centre, Sabon Gari under the Department of Community Medicine, Ahmadu Bello University Teaching Hospital Zaria-Nigeria that provides Family planning services. The centre provides general outpatient services, ante and postnatal care, immunization/child welfare clinic, school health service, FP services and community out reach programmes.

**Sample and sample size:** Respondents were selected consecutively from outpatient clinic register. At the end, a total of 350 respondents were selected from clients accessing FP services.

**Data collection:** pre-tested, structured, close ended and interviewer administered questionnaire was used to gather data. Data was collected from December 2013 to February 2014.

**Ethical clearance:** permission to conduct the research was obtained and approved by the Ethics committee of ABUTH. The cooperation and assistance of the Medical officer and Matron of the centre was also sort. Thereafter, respondents at the centre were briefed on the purpose of the study and that they had the right to either participate or withdraw from the study. They were assured of the confidentiality of the information obtained.

**Data analysis:** This was done using IBM SPSS version 20.0. Data were presented in tables along with the output of their analyses. Tests of associations were also done and the level of significance for all analyses was a probability value of 0.05. Contraceptive prevalence rate (CPR) was calculated by dividing number of women currently using modern contraceptives divided by the total number of women interviewed. Simple descriptive analysis was done to explore levels of awareness, knowledge on different types of contraceptives, determinants and use among respondents.

### **Results:**

Only 309 questionnaires were finally analyzed. Mean age of respondents was  $32.8 \pm 9.6$  yrs. Majority (78 %) were Muslim, 38.5% had secondary level education, married and in monogamous union (72.2%) with 60% having at least 2 children, Tables I and II. Knowledge of modern FP was almost universal 97.7 % even though knowledge of 2 or more methods was 55.3%, Table III. The sources of information on FP were respectively, Nurse 42.1%, relatives/friends 19.7% and radio 16.5 %, Doctor 11.3% and PHC worker 7.1% and the news paper was only 6.0%.

Mean number of contraceptives known by respondents was 2. About 42.7% of married women have ever used any

contraceptive method, Table IV. In this study Contraceptive Prevalence Rate (CPR) was 12.3 % and the preferred FP choice among respondents was the injectable contraceptives (5.2%). The determinants of FP current use among respondents are shown in Table V. These were age, education, occupation, religion, type of marriage (monogamous or polygamous), tribe, and parity. Thus 39 out of 46 of those aged 20-24 did not use contraceptives compared with 18 out of 45 of those aged 35-39 years ( $p = 0.001$ ). Also, 49 out of 56 of those who had no formal education and 32 out of 53 of those with primary education did not use contraceptives compared with 18 out of 71 of those with tertiary education ( $p=0.0001$ ). In the same vein, 139 out of 228 who are Muslim did not use contraceptives compared with 24 out of 67 of those who are Christian (0.001). Respondents who had formal employment (civil servants, teachers) had higher contraceptive use than non-formal employment and the unemployed ( $p=0.0001$ ). A third of those in polygamous union were more likely to use FP than half of those in monogamy (0.016). Those of Hausa tribe had higher proportion of non-contraceptive use compared with Yoruba and Ibo ( $p=0.001$ ) while multi-parous were more likely to use contraception ( $p=0.002$ ). Reasons for non-use of FP are shown in Table VI.

**Discussion:** Despite the current marginal increase in contraceptive use, Nigeria, Africa's most populous nation is known to have a low contraceptive prevalence rate and a high total fertility (5.5).<sup>18</sup> In this study, mean age of respondents was  $32.8 \pm 9.6$  years which is consistent with the report of earlier studies.<sup>2, 19, 20</sup> Age is an important factor to contraceptive behaviour and use. Younger women who are yet to complete their families will not want to use contraceptives, while older women who have completed their family will be willing to accept and use

contraceptive methods, this is consistent with previous studies.<sup>21,22</sup> Major source of information on FP was from health care provider (Nurse, Doctor, Primary health worker, all put together). This might be due to availability of lots of educational materials on FP in the Health facilities. Quite disturbing is the fact that this source has not translated to use of FP by clients. This might be related to the issue of content of information on contraceptives and contraceptive usage by the health care providers. Thus, there is need for health care providers in the study area to expand the scope (content) of information FP in order to improve acceptance and use. This contrasts with the findings from previous studies in Nigeria<sup>3, 11</sup> where respondents got their information through friends or family. Unfortunately, caution is required as information obtained through friends or family may be either incomplete or wrong.

Thirty eight and twenty three percent respectively had secondary and tertiary education. This is much higher than the 32% (secondary) and lower than 56.3% (tertiary) education reported by Aliyu and Duze et al.<sup>2,23</sup> Generally, studies have shown that women's level of education tends to affect fertility levels at all ages.<sup>24,25</sup> Education empower the women to seek for health information including FP and also to better look after the family welfare. Knowledge of modern FP was almost universal (97.7%) even though knowledge of 2 or more methods was 55.3%. This is lower than the 72% reported by NDHS 2008.<sup>26</sup> The average number of contraceptives known was 2 which is lower than the 3.5 reported in Nigeria. This is not surprising as the 3.5 represents the average national value since there are wide regional variations in the country. In this study, Contraceptive Prevalence Rate (CPR) was 12.3% is lower than the national average of 16.0%<sup>18</sup> but higher than the 11.1% reported in a previous study by Oye-Adeniran et al.<sup>27</sup> This might be due to the cosmopolitan nature of the study area. The preferred FP method was injectable contraceptives, this is consistent with earlier

studies.<sup>13, 28</sup> Using background demographics of the respondents, age, educational status, occupation, religion, type of marriage, tribe and parity were found to be important significant determinants of ever use of FP. This has been confirmed by various studies.<sup>3, 29, 30</sup> A Nigerian study also reported that couple's educational attainment, wealth and fertility intentions were associated with use of contraceptives.<sup>31</sup> Religion is believed to play a pivotal role in human society and to regulate individual behaviour including sexual and reproductive health behaviour, so is the impact of Islamic religion in conservative northern Nigeria as shown in this study which is consistent with previous study<sup>32</sup>.

Finally, for some respondents, fear of side effects was the reason for not using contraceptives. However, majority gave no reason for not using FP. It is possible that this group of women may represent those who are sitting on the 'window of in-decision' and with appropriate counselling and access to right interventions could buy-in and become advocates for the use of family planning services.

**Conclusion:** Overall, the study revealed that important knowledge-gap exists with respect to FP and use with majority of clients having no reason for non-use. These reflect opportunities and a paradigm shift for holistic interventions on FP services. A framework may be developed that can be useful in health messages targeted at addressing the needs of prospective clients in order to promote usage. In addition, factors associated with contraceptive use should be used by all tiers of Government as an advocacy tool to organize sustained publicity awareness campaigns in order to improve acceptability and usage of FP services.

#### **Conflict of interest: nil**

[The paper was presented at the 20<sup>th</sup> IEA World Congress of Epidemiology, 17<sup>th</sup> – 21<sup>st</sup> August, 2014, Anchorage-Alaska, USA]

**Table 1A: Socio-demographic features of the respondents ( n= 309)**

<b>Age group ( mean =32.76 + 9.6)</b>	<b>Frequency</b>	<b>%</b>
15-19	2	0.6
20-24	50	16.2
25-29	65	21.0
30-34	81	26.2
35-39	45	14.6
40-44	30	9.7
>=45	36	11.6
<b>Total</b>	<b>309</b>	<b>100</b>
<b>Religion</b>		
Islam	241	78
Christianity	68	22
<b>Total</b>	<b>309</b>	<b>100</b>
<b>Educational status</b>		
No formal education	63	20.4
Primary	55	17.8
Secondary	119	38.5
Tertiary	72	23.3
<b>Total</b>	<b>309</b>	<b>100</b>

**Table 1B: Socio-demographic features of the respondents**

<b>Occupation</b>		
Trading	123	39.7
Civil servants	51	16.5
Artisan	11	3.6
Students	7	2.3
Unemployed	117	37.9
<b>Total</b>	<b>309</b>	<b>100</b>
<b>Family setting</b>		
Monogamous	223	72.2
Polygamous	86	27.8
<b>Total</b>	<b>309</b>	<b>100</b>
<b>Tribe</b>		
Hausa	162	52.4
Yoruba	72	23.3
Igbo	16	5.2
Others	59	19.1
<b>Total</b>	<b>309</b>	<b>100</b>

**Table II: The Parity of the respondents n= 309**

No of girls from all marriage	Frequency	%
1	123	39.8
>= 2	186	60.2
Total	309	100
No of boys from all marriage		
None	39	12.6
1	79	25.6
>=2	191	61.8
Total	309	100

**Table III: Knowledge of the Family planning Methods by the respondents**

FP methods	Frequency	%
<b>Modern method</b>	<b>525</b>	<b>169</b>
COC	171	5.3
Condom	72	23.3
Injectables	216	69.9
IUCD	57	18.4
Surgery	2	0.6
LAM	7	2.3
<b>Traditional method</b>	<b>20</b>	<b>6.5</b>
Abstinence	3	1.0
Calendar Method	2	0.6
Withdrawal	10	3.2
Local medicine	5	1.6
<b>Awareness of FP method</b>	<b>Frequency</b>	<b>%</b>
<b>Heard of FP</b>	<b>302</b>	<b>97.7</b>
<b>Have not heard of FP</b>	<b>7</b>	<b>2.3</b>
<b>Knows &gt;=2 Modern methods</b>	<b>171</b>	<b>55.3</b>
<b>Sources of information</b>		
Nurse	130	42.1
Relatives/friends	61	19.7
Radio	51	16.5
Doctor	35	11.3
PHC workers	22	7.1
Newspaper	2	0.64
No response	8	2.6

**Table IV: Ever use of the family planning methods by the respondents**

Ever use FP	Freq	%
Any method	132	42.7
Modern methods	109	35.3
COC	16	5.2
Condom	18	5.8
Injectables	63	20.4
IUCD	12	3.9
Lactational amenorrhea	<b>2</b>	<b>0.6</b>
<b>Traditional methods</b>	<b>23</b>	<b>7.4</b>
Abstinence	2	0.6
Withdrawal	4	1.3
Local medicine	13	4.2
Calendar methods	2	0.6

**Table V: Determinants of the current use of FP (n=295)**

Determinants	No contraceptio n	Use contraception	chi	p-value
<b>Age</b>				
15-19	2	1	24.754	0.001( Fisher exact)
20-24	39	7		
25-29	34	26		
30-34	36	43		
35-39	18	27		
40-44	15	15		
≥45	19	13		
<b>Religion</b>				
Is lam	139	89	13.242	0.001
Christianity	24	43		
<b>Education</b>				
No formal education	49	7	49.798	0.0001
Primary	32	21		
Secondary	64	51		
Tertiary	18	53		
<b>Occupation</b>				
	<b>Frequency</b>	<b>Percentage</b>		
Civil servant	3	13	36.603	0.0001
Trader	55	63		
Teacher	13	21		
Artisan	8	1		
Student	3	4		
Unemployed	81	30		
<b>Family setting</b>				

Monogamy	108	105	6.416	0.016
Polygamy	55	27		
<b>Tribe</b>				
Hausa	106	50	30.34	0.001
Yoruba	23	45		
Ibo	3	12		
Others	31	25		
<b>Parity</b>				
Multi-gravida ( n=309)	144	130	11.345	0.002
Primi-gravida	19	2		

Table VI. Reasons for not using FP by respondents

Reasons	Frequency	%
Bleeding	2	0.76
Irregular menses	2	0.76
Desire for more children	3	1.15
Not convenient	8	3.05
Previous side effects	6	2.30
No reason	2	0.76
No response	239	91.22
<b>Total</b>	<b>262</b>	<b>100</b>

### References

- John Cleland, Stan Bernstein, Alex E zeh, Anibal Faundes, Anna Glasier and Jolene Innis. Family Planning: the unfinished agenda. The lancet November, 2006:Vol. 368:1810-1827
- Aliyu, AA, Shehu, AU, Sambo, MN and Sabitu, K. Contraceptive knowledge, attitudes and practice among married women in Samaru community, Zaria-Nigeria. East African Journal of Public Health December 2010; Vol.7: No. 4: 354-357
- Omo-Aghoja, LO, Omo-Aghoja, VW, Aghoja, CO. Factors associated with the knowledge, practice and perceptions of contraception in rural southern Nigeria. Ghana Medical Journal September 2009; Vol. 43:No. 3:115-121
- Singh P. Population policy in Nigeria. In: Introductory text on Demography, 2<sup>nd</sup> edition Dabco investments limited Zaria-Nigeria, 2002: 154-159
- Idda Mosha, Ruerd Ruben and Deodatus Kakako. Family planning decisions, perceptions and gender dynamics among couples in Mwanza, Tanzania. A qualitative study. BMC Public health 2013;13:523
- Oyediran, K, Isiujo-Abanihe U. Husband-wife communication and couples fertility desires among Yoruba of Nigeria. African Population Studies 2002;17:61-80
- Soldan V. How family planning ideas are spread within social groups in rural Malawi. Stud Fam plan 2004;35:275-290
- National Population Commission (NPC), Federal republic of Nigeria and OCR Macro, Nigeria Demographic and Health Survey 2008, Calverton, MD, USA: NPC and Macro. 2009
- Ross J, Stover J. Family Planning programme- Effort Index 1999 cycle. Int Fam Plann Perspect 2001; 27: 119-29
- Park K. Family Planning. In: Park's textbook of Preventive and Social Medicine, 18<sup>th</sup> edition. Jabdpur, India: M/s Bannarsidas Bhanot publishers; 2009:358-9
- Agbo, HA, Ogbonna, C and Okeahialam, BN. Factors related to the uptake of contraceptive in a rural community in plateau state-Nigeria: A cross sectional community study. Journ of Med in the Tropics, July-Dec 2013;15: 2: 107-112

- 12) Centre for Disease Control and Prevention. Achievements in public health, 1900-1999. Family Planning. Morb Mort Wkly Report 1999;48: 1073-80
- 13) Yakasai, I, Yusuf, AM. Contraceptive choices amongst women in Kano-Nigeria: A five review. Journ of Med in the Tropics, July-Dec 2013;15:2:113-116
- 14) Lipton M. Population and poverty: how do they interact? In Livi-Bacci M, Santis G eds: Population and poverty in developing countries. Oxford: Clarendon press, 1998: 25-48
- 15) Black, RE, Morris, SS and Bryce J. Where and why are 10 million children dying each year? Lancet 2003;361: 2-10.
- 16) Moronkola, OA, Ojediran, MM and Amosu A. Reproductive health knowledge, beliefs and determinant of contraceptive use among women attending family planning clinics in Ibadan, Nigeria. African health sciences September, 2006: Vol. 6: No. 3: 155-159
- 17) Beekle, AT, McCabe, C. Awareness and determinants of Family Planning Practice in Jimma, Ethiopia. Int Nurs Review 2006;53:269-76
- 18) National Population Commission (NPC) [Nigeria] and ICF International. 2014, National Demographic and Health Survey 2013, Abuja, Nigeria and Rockville, Maryland, USA: NPC and ICF International.
- 19) Hardee K, Xie Z and Gu B. Family Planning and women's lives in rural China. Intern Fam Plann perspect 2003: 30 (2) : 68-76
- 20) Mannan HR. Factors in contraceptive method choice in Bangladesh: Goals, competence evaluation and access. Contraception 2002: 65 (5): 357-364
- 21) Aryeetey R, Kotoh AM and Hindiri MJ. Knowledge, perception and ever use of modern contraception among women in the Ga East District of Ghana. Afri Journ of Repr Health Dec 2010: 14 (4): 27-32
- 22) Olugbenga-Bello AI, Oboro VO, Araoye MO and Musa IO. Contraceptive practices among intercity Drivers in an Urban Settlement in north central Nigeria. Intern Journ of Trop Med 2009: 4:2: 55-58
- 23) Duze MC and Mohammed IZ. Male knowledge, attitudes and family planning practices in Northern Nigeria. AJRH, 2006: 10 (3): 53-65
- 24) UN Population Division. Women's education and fertility behavior. Recent evidence from Demographic and Health Survey, New York, UN; 1995: 113
- 25) Korra A. Attitudes towards family planning and reasons for non-use among women with unmet need for family planning in Ethiopia, 2002. A at <http://www.martinlibrary.blogspot.com/2012/attitudes-toward-family>. (cited 15th Dec, 2013)
- 26) National Population Commission (NPC) [Nigeria] and ICF Macro, 2009. National Demographic and Health Survey, 2008, Abuja, Nigeria: National Population Commission and ICF Macro, 63-86
- 27) Oye-Adeniran BA, Adewole IF, Odeyemi KA, Ekanem EE and Umoh AV. Contraceptive prevalence among young women in Nigeria. Journ of Obstetrics and Gyn, Feb 2005: 25 (2) : 182-185
- 28) Ameh N, Sule ST. Contraceptive choices among women in Zaria, Nigeria. Niger Journ of Clin Pract 2007: 10: 205-7
- 29) Sharma V, Mohan U, Das V and Awashi S. Socio-demographic determinants and knowledge, attitudes, practice: survey of family planning. Journ of Family Med and primary care 2012:1: 43-47
- 30) Giusti C, Vignoli D. Determinants of contraceptive use in Egypt. Statistical methods and Applications 2006:15:89-106
- 31) Latifat Ibisomi. Is Age Difference Between Partners Associated with Contraceptive Use Among Married Couples in Nigeria? International Perspectives in Sexual and Reproductive Health 2014:40:1: 39-45
- 32) Edewor AP. The influence of religion on contraception and fertility. Journ Religious studies 2005: 2: 92-98