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Original Article

Contraceptive use among women of child bearing age in two Muslim communities in JOS-North, Plateau State, Nigeria

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ABSTRACT

With a fertility rate of 5.7 and population growth rate of 2.6; Nigeria is yet to achieve the fertility rate of 4 children per woman fifteen years after the 2000 set time. This study assessed contraceptive prevalence rate and birth interval practices among women of child bearing age; it examined the effects of culture, religion and knowledge on contraceptive uptake. A cross-sectional study conducted among 288 women at Angwan-Rogo and Angwan-Rimi Muslim communities of Jos-North, Plateau State, Nigeria. The study found a contraceptive prevalence rate of 33% among women 15-49 years with married women accounting for only 13% compared to single women. About 80% of participants were sexually active; only 28% used modern contraceptives in their last sexual intercourse while one-third (33%) ever had deliberate abortion. Over 70% of respondents have their first child at the age of 15-20 years; 55% of them have co-wives, about half of them have 1-4 children while about 30% have 5-12 children per woman. Early marriage and early motherhood has cultural and religious origin that can be influenced by education and awareness. This study found a low contraceptive uptake corresponding with high sexual activity, low birth interval, high parity and polygyny.

Key Words: Contraceptive use, Muslim communities, Women

INTRODUCTION

Achieving the reproductive health aspect of the Millennium Development Goals (MDGs) requires concerted commitment and active citizenship towards improving women's and children's health. Active citizenship implies that people would not only fight for their rights or keep the laws they would pledge their allegiance, patriotism and purposeful commitment to achieve a desired birth spacing and family size based on the socio-economic status of their country. While the developed countries have since accepted the concept of family planning and contraception practice as a method of controlling population growth [1], complexities arising from cultural, gender based and religious issues have been the bane of poor acceptance of modern contraception in the developing countries [2]. Williamson and colleagues (2009) conducted a systematic review of some qualitative studies on this subject; their findings revealed that knowledge, access, worries about fertility and social status were particularly believed to be strong determinants of contraceptive use among women [3].

Poor access to modern contraceptive methods has enormous consequences [3]; especially in Africa where cultural and gender roles ascribed to women devalues and negates their fundamental rights [4]. Such women are less able to refuse, negotiate or insist on condoms, since discrimination and consequent economic deprivation increases their vulnerability and dependence on men [5].

In the developing countries, the major objective of family planning is to educate and support people in making responsible voluntary decision about child bearing and methods of fertility regulations of their choices [6]. Emphasis is more on married women with particular interest on family size and spacing of children. However, significant proportion of all pregnancies are unintended especially among the adolescents; many of them unmarried and are not

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likely to access the clinics due to stereotypes and negative perception from members of the society. A study in South Africa found that about 75% of pregnancies in South Africa are unintended, with the highest proportion being among the adolescents [7]. In the developed countries such as the United States of America (USA), the major objective emphasizes on reducing the percentage of all pregnancies that are unintended among groups irrespective of social status [1]. This objective is a deliberate attempt to prompt the practice of emergency contraception as a modality to prevent unwanted pregnancies following unprotected sexual intercourse within a defined time period especially among unmarried adolescents.

Family planning was considered as 1 of 10 "achievement in public health" in the 20th century because of its impacts on the health of infants, children and women [1]. Such achievements are, however, skewed in favour of the developed countries despite some modest improvements in some few African countries like Egypt and Morocco [8, 9]. Nigeria, the most populous country in Africa, like many countries in Africa, has a low contraceptive prevalence rate (CPR) of 10% [10] compared with 62% in USA [1]. Consequently, the total fertility rate (5.7) and the annual population growth rate (2.6%) are above the global average of 2.6 and 1.3% respectively. Infant and under-5 mortality rates estimated at 99 and 191 deaths per 1000 live births respectively, far above figures for war ravaged Rwanda (97 and 160 deaths per 1000 live births respectively) and the global average; while maternal mortality ratios is estimated at 545 deaths per 100,000 live births [8,10, 1].

This study is an attempt to assess contraceptive prevalence rate among women of child bearing age and to determine the effects of culture, religion and knowledge on contraceptive uptake and to examine birth interval practices among these women.

MATERIALS AND METHODS

Study Setting: The study was conducted at two small communities, Angwan-Rogo and Angwan-Rimi areas of Jos-North, the capital of Plateau State in North Central Nigeria. According to the National Population Commission of Nigeria (NPC) 2006 census report [11], the state has an estimated population of 3,206,531 while its capital, Jos-North has a population of 437,217 with females representing 49.5% of the population. The settlement pattern in Jos-North is considerably polarized along the two major religious groups (Christians and Muslims). Angwan-Rogo and Angwan-Rimi communities were formerly secular settlements enclaving the western boundary of the University of Jos, Jos, Nigeria; recently, following the incessant crises in Jos, these settlements have, out of necessity reshuffled into a predominantly Hausa-Fulani Muslim settlement.

The communities are congested without good road network; the drainage and sanitary conditions are poor; the Angwan-Rimi area of the study setting is partly hilly with crowded houses reaching the hill-foot to the hill-top. Both communities have a police station and a primary health care centre.

Study Design and Data Collection: The study employed cross-sectional descriptive designs. Cluster sampling techniques were used to approach the participants within the two Muslim settlements. The research was conducted from 12-19th July 2013, during the Muslim fasting period. Structured questionnaires were administered by two trained women of child bearing age to volunteered respondents drawn from ten (10) *tafsir* groups: five groups per community. The questionnaires include questions on demographics, knowledge, attitudes, fertility, unmet needs and contraceptive practices among women of reproductive age. The questionnaire was randomly pre-tested among women of child bearing age; a Hausa teacher assisted with the translation of the questionnaire into Hausa while a consultant reproductive health practitioner evaluated the content validity.

Ethical clearance: The ethical clearance for this research was obtained from the Ethics and Research Committee of the Faculty of Pharmaceutical Sciences, University of Jos, Jos, Plateau State, Nigeria.

Data Analysis: Data was entred into Microsoft Excel and analyzed with SPSS version 16. The X^2 analysis was adopted for categorical variables at P-value < 0.05; variables that were significant at univariate level were tested for multivariate analysis at the same p-value. Descriptive statistics were presented as tables and frequencies.

RESULT

The research was conducted at two Muslim communities. One-third of the study population was within the age range of 15-21 years while the age group 22-35 represented 40% of the participants. Majority of respondents (72.2%) were married and half the respondents completed secondary school while only 16% attended tertiary institution. About 40% of participants were predominantly housewives without any form of formal economic activities while about 15% were civil servants. About three-quarters (74%) of

respondents were living on less than N10, 000 ($62.5) per month. Analysis of the monthly income of respondents based on the Nigeria national minimum wage of N18,000 ($112.5) per month revealed that about 90% of respondents were living below the national minimum wage while only 1.4% of the population earned more than N100,000 ($625) per month (Table 1).

One-fifth of the population have no children while about one-third of respondents (30%) have 9-25 children per household, about half the population have 1-8 children per household while one-quarter of the respondents have 1-4 children per household (Fig. 1). Furthermore, 23.3% of the women have no children while about half of the participants have 1-4 children and about 30% have 5-12 children per woman (Fig. 2).

Majority of participants (53.4%) have co-wives while less than half (44%) of respondents were either not married or were married without co-wives. About 32% of participants lived in a household of two wives; 17% in a household of four wives (Fig. 3). Considerable proportion of respondents (70%) was married at the age of 15-21 years (Fig. 4).

Over 70% of respondents have their first child at the age range of 15-21 while less than 20% have their first child at age 22-28 years. Twelve percent (12%) of participants with children have birth interval of 34-47 months between the last two siblings while 16% have child interval of 12 months and about 30% have interval of 13-19 months.

Contraceptive related awareness and knowledge was poor; only 40% of the study population knew that contraceptives prolong birth interval. About 80% of the participants were sexually active while 33% have had deliberate abortion (Fig. 5).

About 33% ever used contraceptives while only about 28% attested to using contraceptives in their last sexual intercourse. Majority of women (70%) practicing contraception were using injectable contraceptives while 28% were using oral pills and those on barrier method represented less than 2%. Majority of participants (52%) accessed contraceptives from hospitals, 27% from pharmacies and 3% from primary health care centres. About 90% of participants believed that single women should not be allowed to use contraceptives, 83% claimed contraceptives are harmful to women while 33% have the misconception that contraceptives promote promiscuity. The major reasons meditating against contraceptive use was side effects (61.8%), fear of failure was identified among 44.8% of respondents while the desire for more children accounted for 36.1% and husband disapproval was identified among 30.6% respondents.

Correlates of contraceptive use: This study has shown association between modern contraceptive use and educational status; participants with tertiary education were more likely to use modern contraceptives, *p*-value 0.013. Association between modern contraceptive use and parity was statistically significant; respondents with lower parity (1-4 children per woman) were more likely to practice modern contraception *p*-value 0.002. The middle income classes in the study were more favourably disposed to using modern contraceptives *p*-value 0.009, while marital status was found to be significantly associated with modern contraceptive use with higher prevalence among single women (*p*-value 0.006). Single women were more likely to use modern contraceptives during their last sexual intercourse *p*-value 0.004. Multivariate analysis revealed that only educational status of respondents was statistically associated with modern contraceptive use *p*-value 0.036 (Table 2).

DISCUSSION

This study revealed several issues of great public health concern. First, modern contraceptive prevalence was low; 32.6% across the study population with married women accounting for only 12.5% in the light of high fertility rate. Second, the recent incessant socio-political impasse has polarized Jos-North on the basis of religion. The study sites are predominantly Muslim communities situated in Jos-North which is dominated by Christians. Arguably, these communities stand the risk of socio-economic deprivation from the mainstream politics and development capable of pushing them away from public health intervention activities.

The study found a contraceptive prevalence of 12.5% among married women aged 15-49 above the national average of 10% [10]. However, when the entire women population aged 15-49 is considered, the contraceptive prevalence is 32.6%; far below the 62% recorded in the U.S.[1] and 41% in Bangladesh [12]. About three-quarters (75%) of respondents got married at the age range of 15-21 years, while 70% of them have their first child within the same age range. Teenage marriage and early motherhood are common features of women's powerlessness; according to Rahman and Kabir (2005) teenage marriage increases fertility because adolescents entre early in marital life and are in conflicting situation having no power over

contraceptive decisions [12]. Girl-child marriage is an expression of men's dominance over women. This dominance is a creation of the family, consolidated by the society, and maintained by the institutions of culture and religion [4, 13]. Some cultures have remained and become a symbol of identity of its group [14]; teenage marriage has been institutionalized among the Hausa-Fulani of Northern Nigeria [15] and the Ndokwa people of Delta State, Nigeria [13]. This paper supports the logical thinking of Ityavyar, (2004) and Utulu, (2009) who opined that: since society is dynamic and the family is the creator of cultural norm and values, it can also evolve a social reconstruction that promotes gender equity, which in turn enables women to make informed choices that promote their reproductive health [4, 14].

Fifty three percent (53%) of respondents have co-wives far above the national average of 33% and above the North-East region of the country where polygyny is highest, 43% [10]. This study revealed some critical realities that predict increase fertility rate in these study settings: First, considerable proportion of respondents was of the low socio-economic class engraved by some value and belief systems that inadvertently promotes early marriage, polygyny and larger family size. Second, this study highlighted a high level of sexual activity in the light of low contraceptive prevalence. About 80% of respondents were sexually active; one-third has history of abortion, which is consistent with similar studies conducted in Nigeria [16, 17, 18, 19] while only 28% used contraceptives during their last sexual intercourse, far below the 69% reported among UK adolescents [20] thus increasing women's vulnerability to unplanned pregnancies and abortions. Induced abortion often times is as a result of unprotected sex and the fear of unwanted pregnancy [21] with a devastating impact on women's reproductive health.

Demographic evaluation of our findings and other similar but recent studies from Nigeria [22, 10] showed that achieving the total fertility rate of 4 is still a mirage 15 years after the 2000 set time. Worst still, the Nigerian Population Policy (NPP) inadvertently promotes "gender-divide'', a situation where women's fertility is restricted to 4 while the men are at liberty to have as many children as possible. This scenario is demonstrated in our findings where about 68% of married women with children admitted living in a household of 5 to over 25 children: one-quarter of this population live in a household of 9-16; 10% in household of 17-25 while about 3% of them live in a household of over 25 children. Furthermore, 71% of women with children have short birth interval of less than 33 months while only 10% of them practice birth spacing of 34 months and above; this is quite low and indicative of eminent reproductive, demographic and child health issues. A study in Southern Ethiopia [23] found that 40% of respondents had optimum and long birth interval compared to 10% recorded in our findings.

While this study population shares similar socio-economic characteristics with a study conducted in some rural communities in South-Western Nigeria [2]; modern contraceptive prevalence rate (CPR) of 66.3% was achieved in the South-Western region compared to 33% in our study. Furthermore, both univariate and multivariate analysis from our findings revealed that education influences contraceptive uptake *p*-value 0.013, 0.036 respectively; while, religion *p*-value 0.001 and family size *p*-value 0.001 were the major determinants of modern contraceptive use in the study conducted in the South-West. It is important to stress that while both studies have similar educational characteristics, the level of awareness and knowledge on contraceptives among the South-West women was comparatively higher than our findings. Awareness and knowledge is an aspect of education that is disseminated through public advocacy, enlightenment campaigns, radio and television jingles. Without fertility regulation, women rights are just words; a woman who cannot control her fertility lacks power to make independent marital decision, she cannot control her education neither is she likely to get or maintain gainful employment [21].

Our findings indicated that 40% of respondents declared that contraceptive use is against their culture while 44% declined uptake because their religion forbids it. Ninety one percent (91%) has the misconception that single women should not have access to contraceptives; one-third opined that contraceptives promote promiscuity while 83% believed contraceptives are harmful to women. Barriers to contraceptive uptake in the developing world include lack of awareness, cultural factors, fear of side effects and potential risks [22]. Increasing modern contraceptive use among women requires concerted effort towards eliminating the coercive and domineering roles of men; countering the negative perception, misconception, inaccurate beliefs and cultural norm around fertility at the community level [3].

CONCLUSION

This study found a low contraceptive prevalence which corresponds with high sexual activity, low birth interval, high levels of parity and polygyny among women of child-bearing age in two cultural and religious adherent Muslim communities.

Table 1: Demographic characteristics of respondents (N = 288)

Variable	Frequency	Percentage
Age (in year category)		
15 – 21	85	29.5
22 – 28	73	25.3
29 – 35	42	14.6
36 – 42	40	13.9
43 – 49	24	8.3
>49	24	8.3
Marital Status		
Married	208	72.2
Single	61	21.2
Separated	6	2.1
Divorces	5	1.7
Widowed	8	2.8
Education Level		
I cannot read nor write	37	12.8
Primary	63	21.9
Secondary	141	49.0
Tertiary	47	16.3
Religion		
Islam	287	99.7
Traditional	1	0.3
Occupation		
Housewife	105	36.5
Civil servant	42	14.6
Self-employed	64	22.2
Private sector	38	13.2
Others	39	13.5
Income per month (N)		
<10,000 (<$62.5)	213	74.0
10,000-18,000 ($62.5- $112.5)	42	14.6
18,000–50,000 ($112.5-$312.5)	18	6.2
51,000 – 100,000 ($318.8-$625)	10	3.5
>100,000 ($625)	4	1.4

Table 2: Associations with Modern Contraceptive Use

Variables	Univariate *p*-value	Multivariate *P*-value
Marital status and modern contraceptive use	0.006*	0.458
Husband aware I use modern contraceptives	0.000*	0.094
Modern contraceptives against my culture	0.000*	0.157
Contraceptive use and educational status	0.013*	0.036*
Contraceptive use and income status	0.009*	0.501
Contraceptive use and number of children/woman	0.002*	0.071

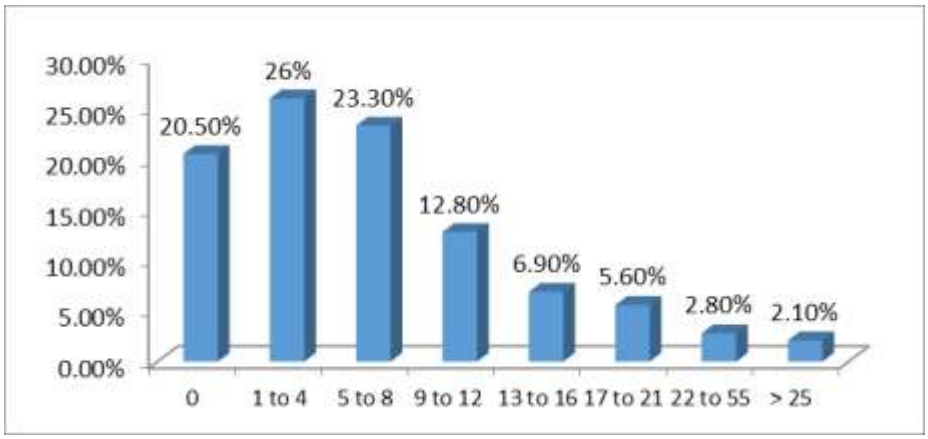

Fig. 1: Number of children per household.

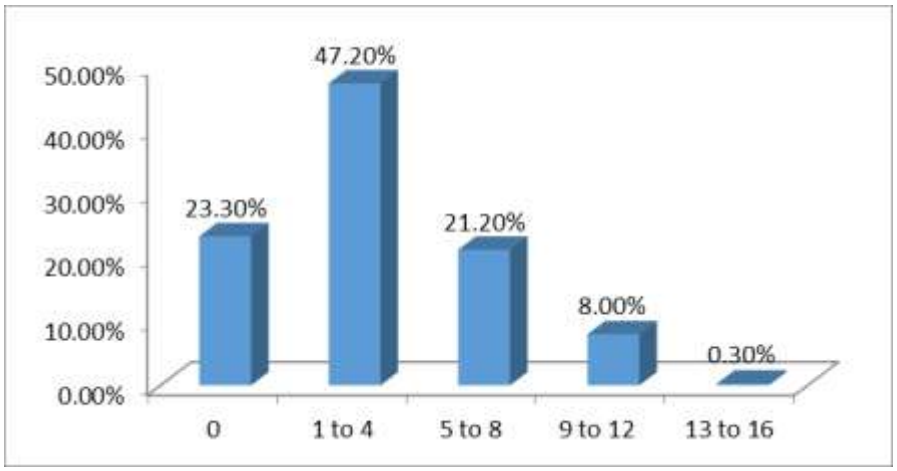

Fig. 2: Distribution of number of children per woman.

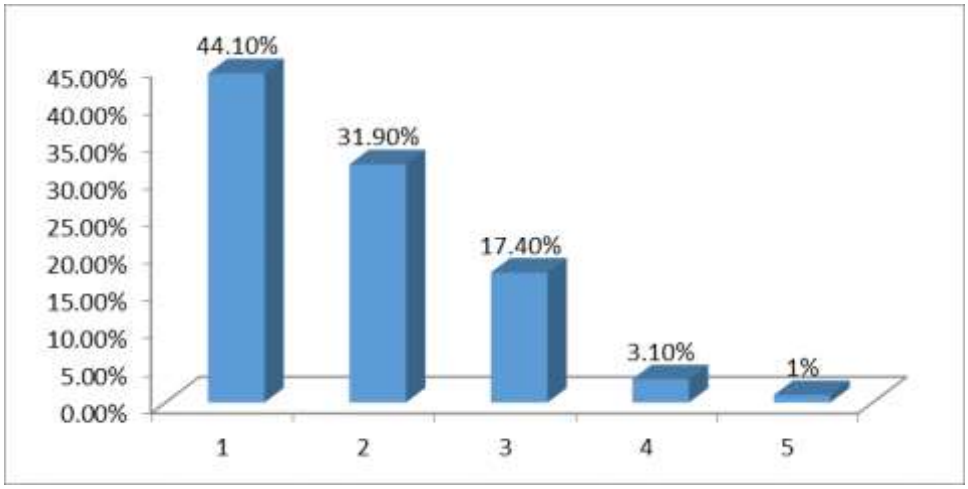

Fig. 3: Distribution of number of co-wives.

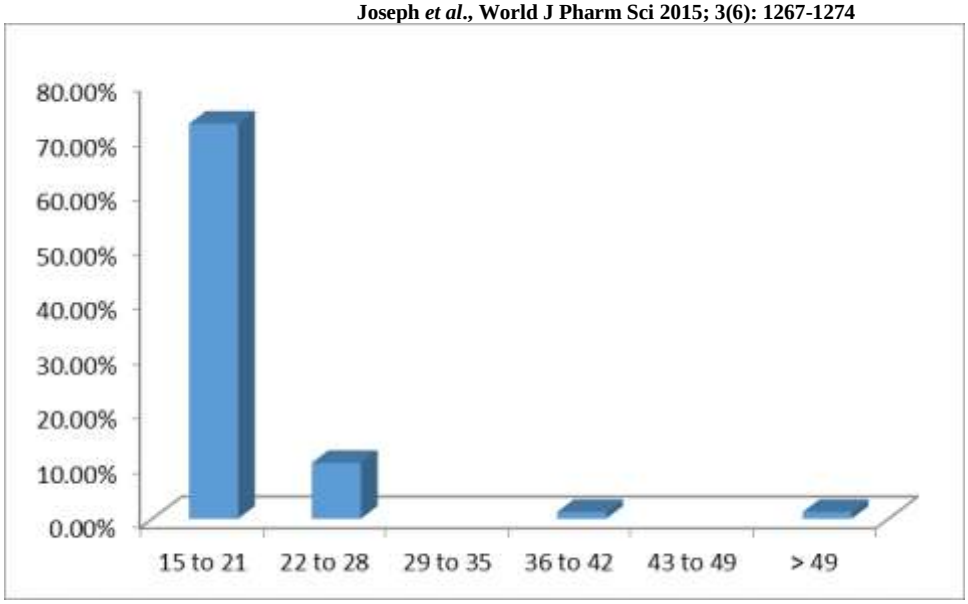

Fig. 4: distribution of women's age at first marriage.

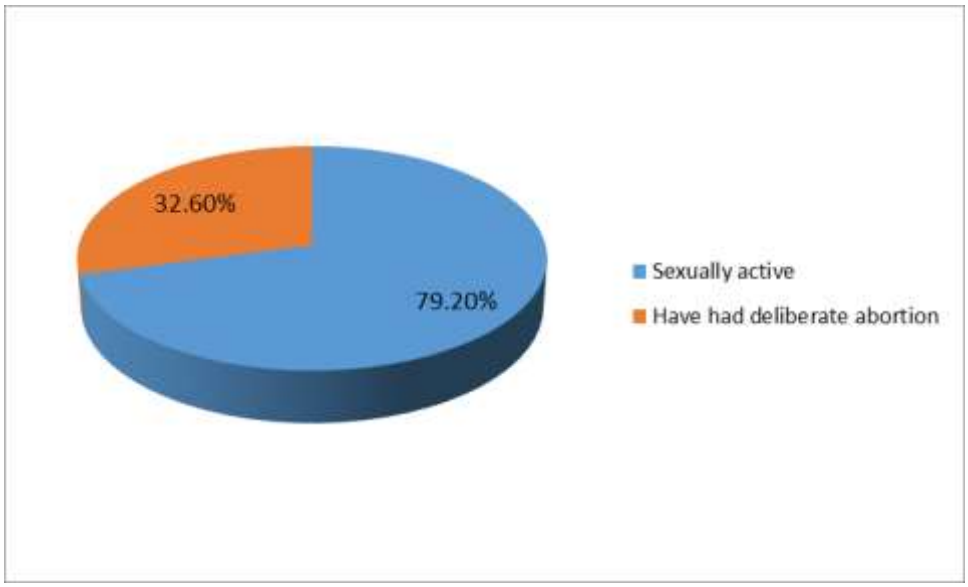

Fig. 5: Activities indicating needs for contraceptives

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