

KNOWLEDGE AND PRACTICE OF CONTRACEPTION AMONG PREGNANT WOMEN

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Abstract

Keywords:

Knowledge, Practice, contraception, Pregnant women.

Objective: This study explored the knowledge, attitude and prevalence of use of contraceptives

Design: A descriptive cross-sectional study

Setting: Antenatal Clinic

Subjects: Pregnant women aged 16 to 44 years

Results: Contraceptive use was poor (29%) despite high level of awareness (96%). The most widely known contraceptive methods were Injectables (91%), Pills (91%) and Intrauterine device (48%). Contraceptive methods used include: Injectable contraceptives (50%), oral contraceptive pills (38%), intrauterine device (6%) and implants (6%) while none of the respondents reported the use of barrier method. Common reasons for not using contraceptives include lack of spousal consent (34%) and belief that contraception is unacceptable religiously (19%) and culturally (18%) and desire for a male child (14%). A significant relationship was observed between formal education and contraceptive use.

Conclusion: Contraceptive use was low among pregnant women despite high level of awareness. Motivation of couples through media and health personnel should be accorded priority.

Introduction

The world population is the total number of living humans on Earth. The world population is estimated at over 7 billion^{1,2} According to a separate estimate by the United Nations Population Fund, it reached this milestone on October 31, 2011.^{3,4,5} The world population has experienced continuous growth since the end of the Great Famine and the Black Death in 1350, when it stood at around 370 million.⁶ This rapid population growth may be constraining development in different parts of the world. Many authors raised the alarm that a stage would reach in the world when food supply would not match its population growth.^{7,8,9,10} While most of the developed countries have managed to overcome this, the issue of population growth and consequent food shortage in developing countries is overwhelming.^{11,12}

Nigeria is the most populous country in Africa with a current population of over 150 million and a growth rate of approximately 2.4 percent per annum.¹³ Its rapid population growth poses more strain on its resources. This rapid growth leads to overpopulation which may worsen poverty among families and communities thereby contributing to high morbidity and mortality. Nigeria is already facing a population explosion with the resultant effect that food production cannot match the growing population¹⁴. This increase in population has been attributed to many factors which include low contraceptive use, high fertility rate accompanied by steady declines in death rates, and high but declining mortality rate.

Contraception is a way of thinking and living that is adopted on the basis of knowledge, attitude, and decision making by individuals and couples in order to promote the health and welfare of family group thus contributing effectively to the socioeconomic development of the country¹⁵. Family planning services are widely available in many hospitals but

the fertility rate remains high. In industrialized countries, virtually all married women resort to contraception at some time in their reproductive period. In contrast, the proportion reporting such use in developing countries is extremely low.^{16,17} Studies in Nigeria reported a low contraceptive use compared to many other countries and inconsistent usage among those that are well aware of its benefits.^{18,19} The same studies revealed that lack of adequate information and ignorance are key factors militating against family planning practice in Nigeria.^{18,19} The socio-economic characteristics of women, notably educational levels have been argued to explain differences in reproductive behaviour and contraceptive choices.^{20,21,22} The perceptions and the behaviour related to reproduction have also been said to be strongly determined by prevailing cultural and religious values²³. Acquiring knowledge about fertility control is an important step towards gaining access to and providing a suitable contraceptive method in a timely and effective manner²⁴.

The Demographic and Health Survey of 2008 revealed that 72% of all women know at least one method of contraceptive. However, only 29% of all women reported ever using a method of contraception at some time, 24% used at least a modern method and 13% used at least a traditional method. The overall contraceptive use prevalence among all women in Nigeria was 15%. This is an indication that prevalence of use is low.²⁵ This study therefore sets out to describe contraceptive use among pregnant women with a view to identifying its possible determinant and deterrents.

The appropriate use of contraceptives have the advantage of reducing the high fertility rate, improving the general reproductive health of the woman, reducing the number of unplanned pregnancies and its attendant effects, conserving resources, and it is an important measure against maternal and childhood morbidity and mortality. The overall result of contraceptive use is responsible parenthood, controlling population and improving quality of life of people. There is a need to study the factors that are responsible for the low usage of contraceptive services despite its wide availability in many health care facilities in Nigeria. Identifying such factors will help policy makers and healthcare personnel to direct energies at such factors with a view to solving them.

This study aims at determine the knowledge and attitude of contraceptive use among pregnant women receiving Antenatal Care (ANC) at Muhammad Abdullahi Wase Specialist Hospital (MAWSH) Kano.

Methods

This was a cross-sectional study. Approval for the study was obtained from ethical committee of the Health Management Board Kano. Informed consent from the clients was sought and obtained.

A pre-tested structured questionnaire was used to assess the knowledge, attitude and perception of women regarding the use of contraceptives between March to June, 2014.

All consented pregnant women were recruited for the study within the study period until the required sample size was attained. Doctors in the department administered the questioners.

Data obtained from the questionnaire were entered into personal computer and analyzed using SPSS version 17 statistical software. Comparison of categorical variables was done using Chi Square test while *P* - values of 0.05 or less was considered significant.

SAMPLE SIZE DETERMINATION:

The minimum sample size (n) was estimated using the formula

$$n = \frac{z^2 pq}{d^2} \quad 26$$

Where ;

z = Standard normal deviation at 95% confidence interval = 1.96

p = Prevalence of contraceptive use from previous study²⁷ = 13% = 13/100 = 0.13

q = Complementary probability = 1-*P* = 1-0.13 = 0.87

d = Absolute precision (margin of error) = (0.05).

Thus $n = (1.96)^2 \times 0.13 \times 0.87 / (0.05)^2 = 3.8416 \times 0.13 \times 0.87 / 0.0025 = 173$

The minimum sample size calculated is 173. To take care of possible data loss and to increase the precision a total sample size of 200 will be used for this study.

Results

Table I: Sociodemographic characteristics of the respondents

		Frequency	Percentage
1.	Age Group		
	16 – 20	44	22.11
	21 – 25	65	32.66
	26 – 30	52	26.13
	31 – 35	24	12.06
	36 – 40	10	5.03
	41 – 45	4	2.01
	Total	199	100
2.	Educational Status		
	Primary	8	4.02
	Secondary	131	65.83
	Tertiary	47	23.62
	None	13	6.53
	Total	199	100
3.	Occupation		
	Housewife	153	76.88
	Business	8	4.02
	Petty trader	3	1.51
	Civil servant	22	11.06
	Student	13	6.53
	Total	199	100
4.	Past Pregnancies		
	0 – 4	175	87.94
	5 – 9	22	11.06
	10 – 14	2	1.01
	TOTAL	199	100
5.	History of Miscarriage		
	Yes	13	6.53
	No	186	93.47
	Total	199	100
6.	Age at first Pregnancy		
	14 – 19	97	48.74
	20 – 25	94	47.24
	26 – 31	8	4.02
	Total	199	100

A total of 199 respondents out of the 200 completed the questionnaire giving an overall response rate of 99.5%. The overall mean age (\pm standard deviation SD) was 25.98 (\pm 5.95) with minimum age as 16 years and maximum of 44 years. Majority of the respondents (32.66%) were within 21-25 age group while only 2.01% were in the 41 - 45 age bracket (Table I).

Of the 199 women studied, 66% had secondary education, 24% had tertiary education, 6.53% had no formal education and only 4% had primary education (Table I).

Majority of the respondents (76.88%) were full time housewives with no occupation, 11.06% were civil servants, 6.53% were students, 4.02% were business women while 1.51% were petty traders (Table I).

Majority of the respondents (87.94%) had 0 – 4 pregnancies in the past, (11.06%) had 5– 9 pregnancies while only (1.01%) had 10 – 14 pregnancies in the past (Table I). One hundred and eighty six of the respondents (93%) have never had miscarriage, only 7% had miscarriage in the past (Table I). (48.74%) of the respondents had their first pregnancy within the age range 14 – 19 years, 47.24% had their first pregnancy within the age range 20 – 25, while only 4.02% had their own within the age range 26 – 31 (Table I).

Table II: Knowledge of contraception of the respondents

		Frequency	Percentage
1.	Source of information		
	Friend	41	20.60
	Healthcare staff	100	50.25
	Media	29	14.57
	Relatives	14	7.04
	School	7	3.52
	Total	191	100
2.	Benefits of contraception		
	Better family health	122	61.31
	No benefit	31	15.58
	Not sure	38	19.10
	Total	191	100
3.	Contraceptives known		
	Pills	182	91.46
	Intrauterine device	96	48.24
	Condoms	31	15.58
	Periodic abstinence	20	10.05
	Injectables	182	91.46
	Traditional methods	29	14.57
	Implants	80	40.20
	Sterilization	140	70.35

Almost all the respondents (96%) know about contraception, while very few of them (4%) have not heard of contraception (Table II). About half (50.25%) of the respondents' source of information is the healthcare staff, followed by friends (20.60%), then media (Radio/Television programmes) (14.57%), then relatives (7.04%) with the least been school (n=7, 3.52%). Majority of the respondents (n=122, 61.31%) think contraception leads to better family health, 15.58% think it has no benefits while 19.10% are not sure of its benefits (Table II). 29.15% of the respondents have had an unplanned pregnancy before while (66.83%) of them have never had an unplanned pregnancy (Table II).

Table III: Practice of contraception among the respondents

		Frequency	Percentage
1.	Unplanned Pregnancy		
	Yes	58	28.64
	No	133	66.83
	Total	191	100
2.	Past Contraceptive use		
	Yes	57	28.64
	No	134	67.34
	Total	191	95.98
3.	Contraceptive use prior to index pregnancy		
	Yes	34	17.09
	No	157	78.89
	Total	191	95.98
3.	Duration of contraceptive use prior		
	0 – 1 (Years)	12	35.29
	2 – 3(Years)	13	38.24
	4 – 5 (Years)	9	26.47
	Total	34	100
4.	Method used		
	Pills	13	38
	Intrauterine device	2	6
	Condoms	0	0
	Periodic abstinence	0	0
	Injectables	17	50
	Traditional method	0	0
	Implant	2	6
	Total	34	100
5.	Reason for the choice of method used		
	Convenience	26	76.5
	Husband's choice	5	14.7
	Friend's experience	3	8.8
	Side effects	0	0
	Total	34	100
6.	Reason for not using contraceptives		
	Religiously wrong	23	18.7
	Lack of spousal consent	42	34
	desire for a male child	17	13.8
	Proximity to provider	9	7.4
	Fear of Side effects	10	8.2
	Culturally Unacceptable	22	17.9
	Total	123	100

Only 28.64% of the respondents used contraceptives in the past while majority (67.34%) have never used contraceptives (Table III). Less than half (17.09%) of the respondents used contraceptives prior to index pregnancy while majority (78.89%) of the respondents did not use contraceptives prior to index pregnancy (Table III). Among the 34 pregnant women that have used contraceptives prior to index pregnancy, 38.24% practiced contraception for 2 – 3 years, 35.29% practiced it for 1 year and 26.47% for 4 – 5 years (Table III). Half (50%) of the respondents used injectables prior to index pregnancy, 38% used pills and only 12% used implant and IUD (Table III). 76.5% of the respondents made their choice of contraceptives based on convenience, 14.7 % made their choice based on husbands convenience while only 8.8% made their choice based on friend's experience.

Almost half (46.23%) of the respondents claim they will use contraceptives after delivery, 38.69% of them are not going to use contraceptives, while 11.06% were not sure. Majority (18.09%) are going to use injectables after delivery, 9.55% prefer to use pills, 4.52% are going to use intrauterine device (IUD), 3.02% are going to use implant, while 2.51% don't know which method to use. There was statistically significant association between the level of education of pregnant women and use of contraceptives and between occupation of pregnant women and use of contraceptives.

Discussion

The age distribution of study population was relatively young with a mean age of 25.98 (+ 5.95) and a range of 16 to 44 years. Majority 32.66% were in the age range of 21-25 years. The relatively young age of most of the pregnant women is probably the reason for the low parity (0-4) encountered in most (88%) of them. This reason could also account for the relatively young age of pregnancy debut in almost half (49%) of the women. Approximately 92% were Hausa and up to 97% were Muslims reflecting the predominant tribe and religion in the area of study. All the respondents were married which is in keeping with the group under study i.e. pregnant women. The educational status was fair with only 10% having either Primary or no form of formal education. Majority of the respondents were full time housewives not gainfully employed which may be the reason for the low use of contraceptives because those working may have been influenced by work pressure to control family size.

There is generally a high level of contraceptives awareness in up to 96% of the study participants. Contraceptive pills and Injectable contraceptives have the highest level of awareness in 91% of the respondents while 48% knew about intrauterine device and 40% are familiar with implants. They also appear to be knowledgeable of the various benefits of contraception with about 61% aware of its family health benefits. This high level of awareness has been similarly reported by several studies in Nigeria.^{12, 19} This pattern is not unexpected giving the high level of campaigns and enlightenment that is on-going. It is also not surprising giving the level of education of the participants with as much as 90% having completed secondary and tertiary education. Unfortunately, most studies that showed good knowledge and awareness did not show a strong prevalence of use of contraception.^{28, 29, 30}

It is however still worthy of note that some contraceptive methods were very unpopular among the respondents. Only 15% are familiar with traditional methods of contraception while 10% have knowledge of the use of periodic abstinence. Knowledge of barrier methods appear to be influenced by the shy nature of the respondents as only 16% indicates their awareness of this methods. This is also in contrast to other studies in the western part of the country. In one study done in Ilorin,³¹ the methods mostly known by respondents were the condom (69.0%), the oral contraceptive pill (OCP, 38.8%), IUCD (29%), and periodic abstinence (32.9%), with most respondents being able to name at least one method of contraception.

In this study the commonest source of information on contraception remains the healthcare staff including doctors, nurses and other paramedics. Other sources in order of frequency are friends (21%), media (15%), relatives (7%) and school (4%). The reason for the poor contribution of schools to dissemination of contraceptive information may not be unrelated to the fact that knowledge on contraception, still sensitive issue in this environment, is still not incorporated as part of the secondary schools curriculum and represent a point of intervention. Unlike in other studies where the media was the predominant source of information³², more than half of the respondents knew about contraception through health personnel, which is similar to the finding of a study done in Pakistan on the awareness and pattern of utilizing family planning services among women attending urban health care centre.³³ This is a pointer to the importance of enhanced health care services, though the media would still need to do much more work on public enlightenment about contraception. Also, an appreciable number (21%) heard about contraceptives from friends, and

7% from relatives, and this underscores the need for peer educators in ensuring correct and adequate information about contraceptives/family planning.

Most of the respondents were not disposed towards contraception with more than half having a negative attitude towards contraception and only 29% had a positive attitude towards contraception. 21% of the respondents felt contraception is not beneficial, 12% believed that God has planned their family hence no need for contraception, 9% had desire for many children, 5% felt it is against their culture and 5% avoided contraceptives due to their side effects. In addition more than half of the women are either sure they will not use contraceptives in the future (46%) or Uncertain of their future use (11%). This form of negative attitude may be responsible for the reason why most of the women (61%) feel that contraception is not of any benefit to them.

Contraceptive use and choices vary widely in Nigeria according to type of health facility, geopolitical zone, and within urban or rural settings. Various factors, related to both supply and demand, account for these variations and contribute to the low levels of contraceptive use and choices in Nigeria. The prevalence of contraceptive use among the respondents was 29%. This rate is lower than figures from the southern part of the country carried out amongst pregnant women attending ANC at Lagos University Teaching Hospital which reported a prevalence of up to 57%.⁹⁷ The reason for this marked difference is possibly because of the religious and cultural beliefs between the two groups because the rate of contraceptive awareness was similar between the two studies (96% in this study and 94% in the Lagos study). National figures in the last decade was placed at an average of 10%.⁹⁸

Among the factors responsible for the choice of contraceptives that were evaluated in this study it appears that most (76.5%) women use contraceptives based on convenience as a matter of personal. Men that permit their wives to use contraceptives have less to do with the choice of methods and only 14.7% appear to influence the choice of methods. Friends personal experience even accounts for less (8.8 %).

The most popular contraceptive method used was injectables which about 50% of the respondents used. In terms of use it is followed by pills in 38%, implant 6% and Intrauterine devices 6%. None of the respondents used barrier methods which is the most popular in other studies. This goes further to show that its use is still regarded as sensitive information in the northern part of the country and this may be the reason why many of the respondents were not willing to part with the information on its use.

This study showed that the major factors preventing the use of contraceptives are lack of spousal consent (34%), Religious (18.7%) and cultural beliefs (17.9%) and the desire to have a male child (13.8%). Fear of side effects (8.2%) and lack of accessibility (7.4%) to family planning services are minor mitigating factors.

Chi square test was used to test for association between educational status of pregnant women and use of contraceptives and there was statistically significant association with those with at least secondary education having much higher use of contraceptives than those without secondary education. There was statistically significant association between occupational status of the pregnant women studied and use of contraceptives. There was no statistically significant association between religion of the pregnant women studied and use of contraceptives as the P- value was greater than 0.05. This is in contrast to a previous study in which the relationship between religion and family planning was documented and religion has been recognized as a very important determinant of contraceptive usage¹².

Conclusion and Recommendation

Conclusion

From this study it can be concluded that there was a high level of awareness on contraceptives but a relatively low level of use. The major factor preventing contraceptive use was lack of spousal consent followed by misconceived religious and cultural beliefs. The commonest method of choice in this study was Injectables while the use of barrier method was not reported. Spouses and friends that support the use of contraceptives in this study do not contribute to the choice of method and majority of the women select the method of their choice.

Recommendations

1. Based on the results of this study, there appears to be very low level of contraceptive use despite the high level of awareness of the various methods. It is therefore recommended that health care workers should adopt a more proactive approach to educating women on the benefits of contraceptive use.
2. Health education methods should specifically target issues identified in this study as the likely reasons for the low contraceptive use. These include lack of awareness of the benefits of contraception, misconceived religious and cultural beliefs, desire for a male child and fear of side effects. In addition Family Planning services needs to be made more accessible to those desiring such services.
3. Electronic media, health personnel and government's organizations can play a positive role to provide knowledge and overcome the knowledge/practice gap.
4. Pregnant women should be educated on the use of contraception during the antenatal clinic visits as it has been recognize as a major point of contact between the healthy population and health care services.

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