



DETERMINANTS OF FAMILY PLANNING UPTAKE AMONG NURSING MOTHERS ATTENDING IMMUNIZATION CLINICS IN BENIN CITY, EDO STATE

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ABSTRACT

Background: Family planning uptake is low (15%) and is a serious public health challenge in Nigeria. This study assessed family planning uptake among nursing mothers in Benin City, Edo State with a view to improving its uptake.

Materials and Method: A descriptive cross-sectional study design was utilized to administer pretested structured questionnaires to 220 nursing mothers attending selected immunization clinics in a health facility in Benin City, Edo State. Data collected was sorted for completeness, coded and analyzed using IBM SPSS version 21.0 statistical software with statistical significance set at $p < 0.050$.

Results: The mean (SD) age of respondents studied was 30.0 (3.5) years. One hundred and sixty (72.7%), 35 (15.9%) and 25 (11.4%) of respondents studied had poor, fair and good knowledge of family planning respectively. Although, the intention to use family planning

208 (94.5%) and unmet need 214 (97.3%) for family planning uptake was high their current family planning uptake 30 (13.6%) was low. Male condom and contraceptive pills use accounted for 14 (46.7%) and 11 (36.7%) respectively with least 1 (0.5%) being Intrauterine cervical devices (IUD). Marital status ($p = 0.014$) and male partner support ($p < 0.001$) for family planning were identified as significant factors influencing family planning uptake among nursing mothers studied.

Conclusion: This study identified a high intention to use contraception for family planning but a high unmet need among respondents studied. There is need to step sensitization campaigns on need to improve family planning uptake among nursing mothers in our communities.

Keywords: Determinants, Edo State, Family planning, Immunization clinics, nursing mothers.





INTRODUCTION

Family planning services play vital role in the choice, timing and spacing of births. Family planning uptake remains a serious public health challenge in Nigeria, and this is compounded by her rapidly growing large population size, high unmet need for family planning and low uptake of family planning methods.¹⁻³ Nigeria currently ranks as the most populous black nation globally with over 65% of its entire population living below poverty line, high level of corruption, poor governance, weak health system with deteriorating health indices.⁴⁻⁵

Nigeria maternal mortality rate is estimated at 560 deaths per 100,000 live births accounting for 1 in 9 maternal deaths globally⁶ Furthermore, Infant and under-5 mortality rate as at 2013 was 69 and 128 deaths per 1,000 live births, respectively accounting for almost 10% of the global average.^{1,6} The implication of this is that one in every 15 Nigerian children die before their first birthday, and one in every eight do not survive to their fifth birthday.⁶ Although knowledge of contraception is widespread in Nigeria with 85 percent of women report knowing about a contraceptive method.⁶ The level of uptake of family planning in Nigeria has remained relatively low (15%) over the past 15 years preceding the 2013 Nigeria Demographic and Health Survey (NDHS) compared to 2008 NDHS report. Ten percent of married women report using a modern method, with injectable remaining the most popular contraceptive method used (3 percent) among them.^{1,6-7}

Private sector facilities such as chemists, supermarkets, pharmacy, private health facilities remains the major source of

contraceptive commodities to majority of persons using one form of contraceptive or the other; report reveal that 60 and 40 percent of modern contraceptive methods users obtain them from private and public facilities respectively.⁶⁻⁷ The non-inclusion of family planning intervention and commodity into the National Health Insurance Scheme (NHIS) to a large extent may limit access to family planning services and commodities with corresponding loss in benefit to population control in Nigeria. A critical appraisal on the NHIS program reveals that less than 10% of the Nigerian Population are captured in the scheme raisings further concerns to other plausible reasons for the low contraceptive uptake in Nigeria.⁶

There has been a marginal improvement in relation to unmet need for family planning; which presently stands at 16 percent, a 4 percent improvement among married women from the 2008 estimate following the 2008 NDHS report.⁶⁻⁷ Reducing discontinuations of contraceptive use is critical in bridging this gap.⁶⁻⁷ Unmet need for family planning remains a huge problem, despite known benefits of family planning, according to the United Nations, globally more than 120 million women aged 15 to 49 who are in intimate relationships have an unmet need for family planning.⁸⁻¹⁰

The postpartum period provides a critical opportunity for counselling women on the importance of family planning and helps improve choice for adoption of modern family planning (FP) methods. This period is often associated with a woman's frequent encounter with the health system and beneficial to promote optimal spacing of births through postpartum family planning



(PPFP).^{8-9,11} Research has shown that pregnancies occurring within a year of the mother's previous births expose the mother and the baby at a high risk of morbidity and mortality compared with those with longer intervals.^{8-9,11} To avoid adverse outcomes to mother and child associated with closely spaced births, medical guidelines recommend the uptake of a family planning method by six weeks postpartum.¹² The benefit of family planning is enormous; it leads to reduction in the risk of miscarriage, low birth weight, preterm birth, anaemia, and premature rupture of membrane.¹² Family planning has economic benefits for both families and society, by slowing population growth, improve women earning potential and families are able to devote more resources to each child, resulting in poverty reduction.¹³

Furthermore, at the individual-level, the health benefits to women and infants include prevention of pregnancy related health risks and deaths in women, reductions in infant mortality and the rate of unsafe abortions, the prevention of the transmission of HIV/AIDS from mother-to-child (PMTCT), and prevention of sexual transmission of HIV and sexually transmitted infections (STI) between partners among others.^{11,13}

Despite the risk of maternal morbidity, disability and mortality being extremely high at birth and in the immediate postnatal care (PNC) period especially in developing countries,¹⁴ postpartum care remains the most neglected phase of obstetric services, as a lot of health care providers across sub-Saharan Africa only continue to emphasize sixth week postnatal check-up while being silent on the other PNC services.¹⁵⁻¹⁶ It has

been reported that the benefit of postpartum family planning (PPFP) in reducing maternal mortality is enormous, as it can prevent about 30% and 10% of maternal and child mortalities respectively.¹⁷ The level of uptake of postpartum family planning has been very low in several countries, data from Demographic and Health Surveys (DHS) in 27 countries suggest that less than 35% of women who wish to avoid pregnancy during the postpartum period use any form of modern contraception.¹⁷

This study therefore assessed family planning uptake and determinants among nursing mothers in Benin City, Edo State with a view to improving its uptake.

MATERIALS AND METHOD

The study was carried out in University of Benin Teaching Hospital (UBTH), Benin City, Edo State, Nigeria. University of Benin Teaching Hospital (UBTH) is a tertiary health facility located in the Egor Local Government Area of Edo State, established in 1973, over the years UBTH has expanded her facility and services tremendously with an over 800 in-patient bed capacity.¹⁸ A descriptive cross-sectional study design was utilized for this study involving nursing mothers attending immunization clinics in UBTH that gave informed consent to participate in the study. The study spanned for 10 months between September 2015 and June 2016. Estimated sample size of 220 was calculated using Cochran's formula for simple proportion¹⁹ based on prevalence of postpartum family planning usage of 13% from a previous study³. Data was collected using pretested structured questionnaires, with information relating to socio-demographic characteristics of respondents, their



knowledge and uptake of family planning and factors influencing uptake.

Data collected was sorted for completeness, coded and analyzed using IBM SPSS version 21.0 Statistical software. Knowledge of family planning was assessed using a total of 22 questions. A point score of 1 was given for correct responses, and 0 for incorrect responses making a total of 22 point scores. The total knowledge score obtained was converted to percentage. A total score equals of 75.0% and above was classified as good knowledge, while a score of 50.0 to 74.9% was classified as fair knowledge and a score less than 50.0% was classified as poor knowledge. Quantitative variables which are normally distributed were expressed as frequencies, percentages, means and standard deviation. The results obtained were analyzed and presented in the form of statements, frequency tables, bar charts and pie charts. Level of significance was set at 95% confidence interval and $p < 0.050$.

Ethical approval was obtained from the Research Ethics Committee (REC), College of Medical sciences, University of Benin, Edo State. While informed consent was obtained from the respondent before participation and after full explanation of the study objectives. The respondents were informed that participation in the study was voluntary and that there were no penalties or loss of benefits for refusal to participate in the study or withdrawal from it. Health education on postpartum family planning and its benefits were given to the respondents after the study with the aim of improving on their pre-existing knowledge and future uptake.

RESULTS

The mean age of respondents studied was 30.0 (3.5) years. Most 187 (85.0%) of the respondents were between 25-34 years. Almost all of them 217 (98.6%) were Christians. Forty four (20.0%) of respondents studied in relation to ethnicity were of Benin extraction followed by Esan 32 (14.5%), Urhobo 31 (14.1%), Igbo 24 (10.9%) and Yoruba 17 (7.7%). Most of them 208 (94.1) were ever married while 13 (5.5%) were never married. One hundred and thirty nine (67.9%) had been married for ≤ 4 years. In relation to educational status 107 (48.8%) had secondary level of education. More than half of the respondents 113 (51.4%) were self-employed. The multiparous women constituted half 121 (55.0%) of respondents studied.

Table 1: Knowledge of Family Planning among Respondents

VARIABLES	FREQUENCY n = 220	PERCENT (%)
Awareness of family planning		
Yes	220	100.0
No	0	0.0
Source of information*		
Doctors and health workers	205	93.2
Media	72	32.7
School	47	21.4
Books	33	15.0
Friends	31	14.1
Religious places	8	3.6
Family members	4	1.8
Definition of family planning*		
Method couples can use in delaying pregnancy	98	44.5
Method of controlling family size	86	40.0
Method of preventing pregnancy	48	21.8
Method of terminating pregnancy	12	5.5
Method of preventing STI	6	2.7
Method of increasing sexual pleasure	6	2.7

*multiple responses



In relation to awareness and knowledge of family planning (see table I) all the respondents studied had heard of the term family planning 220(100.0%), with doctors and health workers 205 (93.2%) being the major source of information and the least being family members 4(1.8%). Majority of respondents agreed that family planning help couples delay pregnancy 98 (44.5%), have better control of family size 86 (40.0%) with least being to prevent STI 6 (2.7%).

Table 2: Knowledge of Family Planning Methods and Place to Source them

VARIABLE	FREQUENCY n = 220	PERCENT (%)
Knowledge of family planning methods *		
Pills	197	89.5
Male condom	191	86.8
Female condoms	105	47.7
Injectable	76	34.5
Implants	67	30.5
Diaphragm	63	28.6
Withdrawal method	62	28.2
Male sterilization	50	22.7
Lactation amenorrhoea	47	21.4
Rhythm method	37	16.8
Standard days method	36	16.4
IUD	36	16.4
Female sterilization	34	15.5
Emergency contraception	29	13.2
Which do you consider safest		
Male condom	135	61.4
Pills	82	37.3
Male sterilization	2	0.9
IUD	1	0.5
Do you know a place where you can obtain a method of family planning		
Yes	218	99.1

In relation to knowledge of family planning methods and where to source them (See Table 2) most of the respondents 197 (89.5%) knew pill as a method of family planning with the least being emergency

contraception 29 (13.2%). A greater proportion of respondents 135 (61.4%) considered male condom as the safest method of contraception with the least being intrauterine contraceptive devices 1 (0.5%). Majority 218(89.5%) of respondents studied knew where to get a family planning commodity.

In relation to knowledge of family planning 160 (72.7%), 35 (15.9%) and 25 (11.4%) of the respondents studied had poor, fair and good knowledge respectively of family planning.

Table 3: Intention to use and Family Planning Uptake among Respondents (n=220)

VARIABLES	FREQUENCY	PERCENT (%)
Have you been talked to about family planning		
Yes	216	98.2
No	4	1.8
Do you intend to use any family planning method		
Yes	208	94.5
No	12	5.5
Which family planning method do you prefer* (n = 208)		
Male condom	98	47.1
Pills	97	46.6
Implants	9	4.3
Female sterilization	3	1.4
IUD	1	0.5
Are you currently using any family planning method		
Yes	30	13.6
No	190	86.4
If yes, what method* (n=30)		
Male condom	14	46.7
pills	11	36.7
Lactational Amenorrhoea	3	10.0
Implants	1	3.3
IUD	1	3.3
If family planning is provided would you use		

*multiple response

Although, intention to use family planning 208 (94.5%) and unmet need 214(97.3%) for



family planning uptake was high among respondents studied, current family planning uptake 30 (13.6%) was low. Male condom and contraceptive pills use accounted for 14(46.7%) and 11(36.7%) respectively among respondents studied with Intrauterine cervical devices (IUD) usage 1(3.3%) being least (See Table 3)

Table 4: Factors Influencing Family Planning Uptake

VARIABLES	FAMILY PLANNING UPTAKE (n=220) Freq. (%)		χ^2	p
	No	Yes		
Age group (years)				
15-24			Fischer's Exact =1.523	0.449
25-34	13 (86.7)	2 (13.3)		
≥35	14 (77.8)	4 (22.2)		
Marital Status			8.468	0.004
Never Married	7 (58.3)	5(41.7)		
Ever Married	183 (88.0)	25 (12.0)		
Religion			0.059	0.971
Christianity	12 (14.0)	74 (86.0)		
Islam	16 (13.2)	105 (86.8)		
Educational Status			1.463	0.481
Primary	18 (78.3)	5 (21.7)		
Secondary	93(86.9)	14(13.1)		
Tertiary	79 (87.8)	11(12.2)		
Register ANC			0.001	0.972
No	13 (86.7)	2(13.3)		
Yes	177 (86.3)	28(13.7)		
Number of ANC Visits			1.002	0.317
≤4	2 (66.7)	1(33.3)		
>4	188(86.6)	29(13.4)		
Male Support			46.669	<0.001
No	107 (99.1)	1(0.9)		
Yes	34 (59.6)	23(40.4)		
Previous Miscarriage			0.479	0.489
No	150 (87.2)	22(12.8)		
Yes	40(83.3)	8(16.7)		
Previous TOP			1.422	0.233
No	154(85.1)	27(14.9)		
Yes	36(92.3)	3(7.7)		
Knowledge of FP			Fischer's Exact =1.522	0.500
Poor	140(87.5)	20(12.5)		
Fair	22(88.0)	3(12.0)		
Good	28(80.0)	7(20.0)		
Employment status			Fischer's Exact = 0.659	0.868
Unemployed	1(100.0)	0(0.0)		
Self-employed	97(85.8)	16(14.2)		
Employed	92(86.8)	14(13.2)		

Nb. TOP: Termination of Pregnancy; FP: Family Planning

In relation to factors influencing Family planning uptake (See Table 4) Marital status (p=0.014) and male partner support (p<0.001) were identified as significant factors influencing family planning uptake among nursing mothers studied.

DISCUSSION

The mean age of respondents studied was 30.0 (3.5) years, this is similar to findings from a study conducted in Ibadan²⁰⁻²¹ among women attending childhood immunization clinics were most of the mothers studied had mean age 29 (4.9) years. This is also in keeping with the age range for women of reproductive age NDHS 2013.^{1,6-7} In this study, most of the respondents were Christians, this is not unusual and is in keeping with findings from a study carried out in Benin city among woman attending immunization clinic were majority of respondents were Christians²² and also consistent with the location of the study and findings from the 2013 NDHS⁶ which identified Christianity as the predominant religion in this part of Nigeria. Furthermore, most of the respondents studied were married, this is in keeping with a study carried out among women attending immunization clinic in Makurdi where 152 (92%) of respondents were married.²³

A high proportion of respondents studied had secondary level of education, this is similar to findings from studies conducted in Benin among women attending child welfare clinic in UBTH²⁴ and immunization clinics in Ibadan²⁰, where most of respondents studied had secondary level of education. This is also in line with the findings of the 2013 NDHS report⁶ which revealed high level of literacy among women in this part of the Country. This may be due to the fact that the study was



carried out in an urban area with greater presence of educational Institutions and opportunities. Educated mothers are more likely to be better informed and empowered and as such more likely to make better informed choices on their health and that of their children. A higher proportion of respondents were multiparous, this is in keeping with findings from a study done in Anambra state²⁵ and the 2013 NDHS report⁶. Almost three quarter of respondents studied had poor knowledge on family planning even though all the respondents were aware of it. This is in contrast to findings from a study done in Lagos²⁶ where a high proportion of the respondents had good knowledge on family planning. This may be because of prevailing cultural beliefs and misconceptions about family planning which may predispose to a large family size. It was however observed that the older respondents had better knowledge on family planning. This is keeping with findings from a study done in Ethiopia¹² where increasing age significantly improved knowledge on family planning. This may be due to increased maturity among this category of respondents who may likely take additional steps to increase knowledge by attending antenatal care; postnatal care clinics repeatedly during previous pregnancies and deliveries, and these reinforcing factors may be responsible for better knowledge of family planning. Furthermore, it was also observed that knowledge of family planning increased with level of education, this trend was similarly observed from the findings from a study done in India where most literate women had better knowledge of contraception than illiterate women.²⁷ This buttresses the importance of female education as a key factor to address population growth and to

encourage contraceptive use. Educating girls and young women is particularly important for their empowerment, health and the well-being of their families and respective communities. Education empowers women to become critical change agents and health behavior models.²⁸

Most of respondents studied had a high intention to use any of the available family planning methods with male condom being the most preferred family planning methods. This is in keeping with findings from a study conducted in Port-Harcourt where male condoms was the commonest form of contraceptive used among women.³ This may be because of its effectiveness in preventing sexually transmitted infections as a barrier method of contraceptive, ease of use and non-invasiveness in usage. It might also be because of the popularity of male condoms attributable to educational campaigns and social marketing strategies for condom use. It appears that the message promoting condom usage has debunked fears and it is yielding its desired dividends.²⁹ Emphasis must also be placed on the high failure rate associated with barrier methods in achieving contraceptions and the need for improved attention on long acting reversible contraceptives such as IUCDs, Implants etc.²⁸

This study revealed a gradual increase in family planning uptake with increasing level of education and male partner support. This is in keeping with findings from a study done in Port-Harcourt²⁹ where usage of contraception increased with educational status of respondents. Majority of the respondents had discussed their intention to use family planning methods with their partners; this development is very



encouraging indication better engagement of males in reproductive health matters of their partners. This in keeping with findings from a study conducted in Malawi³⁰ where majority of the respondents discussed family size and family planning methods with their male partners. Furthermore, this may be due to the fact that family size is considered a decision of the male who culturally are the major decision makers, financially and otherwise in our environment. On the contrary low male involvement and engagement may result in negative health outcomes such as reduced health service utilization and decision to seek care or health intervention early leading to uncontrolled family size and the attendant health and socio-economic implication on reproductive health, wellbeing and socio-economic development of the state. This has also been reported in Oshogbo Osun State where majority of the respondents were not in support of their wives using of contraceptives.³¹ Male partner support and engagement is very critical for successful implementation of any health intervention as identified in this study.

CONCLUSION

This study identified a high intention to use with high unmet need for family planning and low family planning uptake among respondents studied. Male partner support remains a strong factor in contraceptive acceptance among nursing mothers.

RECOMMENDATION

There is need to include health education sessions on family planning during antenatal, postnatal care and immunization clinics to help change behavior of women and their partners for improve family planning uptake

in our communities.

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