Prevalence and Determinants of Intention To Use Modern Contraceptive Methods Among Postpartum Women In Selected Secondary Health Care Facilities In Ibadan

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Abstract- **Background:** Women of reproductive age especially postpartum women are exposed to the risk of pregnancies. Contraceptive use during the postpartum period would reduce rates of maternal and infant mortality by preventing unplanned, unwanted pregnancies and by spacing new pregnancies at least two years after the previous birth.

Methodology: A cross sectional survey was conducted among 444 postpartum women at selected secondary health care facilities at Ibadan, Nigeria, to determine prevalence and identify determinants of intention to use modern contraceptive methods. The study adopted a multi-stage random sampling technique. A semi-structured questionnaire was used for data collection. Data were analyzed using descriptive statistics, Chi-square and logistic regression.

Results: Mean age of the postpartum women was 29.4 ± 5.1, 45.0% had tertiary education and 73.0% had ≤ 2 children. The proportion who reported the use of MCMs was 61.7%. The preferred MCMs used included male condom (52.3%), Intra uterine contraceptive device (11.7%), pill (11.0%), injectables (8.8%) and emergency contraception (8.8%). Reasons for non-use were fear of side effects (33.8%), desire to have more children (27.6%), husband's disapproval (22.9%), previous negative experience (6.2%) faith/religion's disapproval (5.2%) and friend's disapproval (4.3%). Determinants of intention to use MCMs included having tertiary education (OR= 2.1, 95% CI =1.1-4.3) and having at least three children (OR=3.0, 95% CI=1.1-5.0).

Conclusion: Prevalence of modern contraceptive use was high among postpartum women. Mother's educational level and number of children were the key determinants of intention to use modern contraceptive methods. Intervention programmes should focus primarily on postpartum women with lower education levels and fewer numbers of children

Index Terms- Modern contraceptive methods, Postpartum women, Contraceptive determinants, Contraceptive use.

I. INTRODUCTION

Postpartum period is a unique phase in the life of a woman and her new born; it is a time of transition, adjustment and adaptation to social and psychological changes (WHO, 2008). Postpartum period is very crucial as it is marked by psychological changes and stabilization of hormones (Rahmanpour et al, 2010). This period presents a rising risk of unwanted conception and often frustrated desire for contraceptive protection. It is the time when women are especially vulnerable to unplanned pregnancies (Conde-Agudelo, 2005, Depineres et al, 2005, Tsui et al, 2010). Postpartum contraception is an act of initiation and use of a contraceptive method after childbirth or abortion but, before fertility return (FHI, 2010). It has long been recognized as an important component of maternal health care; through birth spacing and prevention of high-risk and unwanted pregnancies (Levitt et al, 2004). It helps women who have recently delivered to avoid exposure to the risks of maternal death (Akinlo et al, 2013). Offering contraceptives to postpartum women can help protect their health and that of their newborns by prolonging the interval of the next pregnancy (WHO, 2011).

Contraception involves the act of intentional prevention of pregnancy using various methods. It has been in existence since ancient civilizations. Contraceptives are primarily meant for prevention of conception, which could be for spacing or delaying next pregnancy or stopping reproduction through the use of various devices, sexual practices, chemical drugs or surgical procedure (Dawn, 2009). Modern contraceptives include male condom, female condom (femidom), vaginal spermicides, diaphragm, oral contraceptive pills, injectables, hormonal implants, emergency contraceptives intra uterine contraceptive device (IUCD), tubal ligation and vasectomy (Reference).

Most postpartum women resumed sexual activity but fails to obtain contraceptives hence are exposed to pregnancies by 7-9 months after delivery (Ross et al, 2001) and many of the women do not use modern contraceptive until the return of menstruation. However, they become fecund before menstruation returns, and, thus, are at risk of unwanted pregnancy if sexual activity has resumed (Borda et al. 2010). Studies such as Rojnik et al (1995), Salway and Nurani (1998), Shaaban and Glasier (2008) carried out in some other countries outside Nigeria noted that mothers are reluctant to use modern contraceptive or are using unreliable methods associated with high failure rate such as withdrawal and natural methods.

The prevalence of modern contraceptive methods is still low in many sub-saharan African countries (Mojonk et al, 2010). In sub-Saharan Africa, the proportion of postpartum women who are exposed to the risk of pregnancy by having sexual intercourse while using no contraceptive method within two years after child birth is nearly 33%. If all such women used a modern method, unintended pregnancies in the developing world would plummet and the lives of many women and newborns would be saved each year (Singh et al, 2003). However, it is a proven fact that effective and consistent use of modern contraceptives enables couples to achieve desired birth intervals, fertility, ideal family size and consequently a decline in fertility (Kirk et al, 1998, Rafalimanana et al, 2000, Jain, 2001). Studies such as Orji et al (2002) and Ankomah et al (2011) have earlier noted that myths and misinformation relating to modern contraceptive, perceived side effects, lack of access to quality services, desire to have large family size, cultural factors and religion opposition to use of contraceptive methods as some of the determinants factors that may be responsible for the low adoption of modern contraceptive methods in Nigeria

The dynamics of contraceptive use among women in the postpartum period, i.e. one year period after the birth of the child, is of interest at the family planning programme level. The largest proportion of women with an unmet need for contraception is found among women in their first year after childbirth (Ross and Winfrey, 2001). In Nigeria, postpartum family planning services are not well integrated into existing health services and most health delivery services do not address women's need after birth. The use of modern contraceptive methods during postpartum period translates into the prevention of unwanted pregnancies and subsequent abortions. Studies have been carried out on the prevalence and determinants of modern contraceptive use in Nigeria but, there is dearth of information on the prevalence and determinants of modern contraceptive use among postpartum women in southwestern part of Nigeria. This study therefore examined the prevalence and determinants of modern contraceptive use among postpartum women in selected secondary health care facilities in Ibadan, Oyo State.

II. MATERIALS AND METHODS

This study was a descriptive cross-sectional study conducted among postpartum women in selected secondary health facilities in Ibadan. The city, located in the southwest region of Nigeria, is the capital and administrative headquarters of Oyo State the largest city in West Africa. According to the 2006 census, the state has a population of about 5,591,589 (NPC, 2009). Ibadan is made up of 11 Local Government Areas (LGAs), five of the LGAs are located within the metropolis, while six are in the outskirts of the city. There are several government and private health care facilities which include; one hundred and five (105) primary health care facilities, one hundred and eighty six (186) secondary care facilities and 2 tertiary health care facilities that provides health care services including family planning facilities in Ibadan.

The study sample consisted of 444 postpartum mothers that were recruited using a three-stage sampling technique. The first stage involved the random selecting of three LGAs out of the five LGAs in Ibadan metropolis using balloting procedure. The second stage was the random selection of one secondary health facility from each of the LGAs. The health facilities selected were Adeoyo hospital, Oni and Son memorial hospital and Eleta catholic hospital from Ibadan North, Ibadan South West and South East LGAs respectively. The third stage and the final stage was the purposive recruitment of eligible and consenting postpartum women who brought their infant aged nine to twelve months for immunization in the selected health facilities. Due to the nature of the study which involved the use of contraceptives, pregnant mothers were however excluded from the study. On the whole, the study was conducted from May to November, 2011.

A pretested interviewer-administered semi-structured questionnaire was used to collect data from the study participants. The questionnaire had no identifiers (i.e. no registration number, mark or any other means that could be used to identify the respondents) and was translated from the original English language to Yoruba language (the local language of the study area) and back-translated to English language by different experts that were versed in both languages.

The questionnaire included questions relating to socio-demographic characteristics, awareness of modern contraceptive methods, women's knowledge on MCMs, prevalence of MCMs and intention to use MCMs. Participants' knowledge was measured using a 10-point scale with scores <5 and ≥ 5 were categorized as poor and good respectively.

The protocol for the study was reviewed and approved by Oyo State Ethics Review Committee. Permission was sought from appropriate authorities including heads of health facilities and immunization clinics prior to collection of data. The postpartum women attending the immunization clinics were approached either before or after immunization exercise for their infant aged nine to twelve months was completed. After establishing rapport with the study participants, consent was sought from them using informed consent form. There was a disclosure of the nature of the study, voluntary nature of participation, benefits of the study and time needed for the interview. The study participants were interviewed with copies of the questionnaire that were available either in Yoruba or English language depending on respondents' preference and language best spoken or understood. All the interviews were conducted on one-on-one basis with participants with the help of three trained research assistants that were involved in the collection of data.

Data collected were cleaned, coded and entered into Statistical Package for Social Sciences (SPSS, version 16). Descriptive statistics, chi- square and logistic regression were used to analyse the data.

III. RESULTS

Respondents Socio-demographic Characteristics

Table 1 presents socio-demographic characteristics of the respondents. The mean age of respondents was 29.5 ± 5.1 with the majority (83.8%) being less than 35years. Most of all respondents (98.2%) were married; Yoruba (93.0%) and had at least secondary education (88.8%). Slightly above half (51.1%) of the respondents were Muslims and 48.2% were Christian. Almost half (48.6%) were self-employed while few (7.0%) were unemployed. Half of women spouses (50.2%) had at least tertiary education and 48.6% of respondent's spouses were self-employed. Majority (85.6%)

delivered their babies in the hospital and 73.7% had given birth to
at least two children.

Demographic characteristic of postpartum women (N=444)

Demographic characteristics	Frequency N=444	Percentage %
Age group (in year) of postpartum women*		
<25	64	14.4
25-29	170	38.3
30-34	138	31.1
≥35	72	16.2
Marital status		
Unmarried	8	1.8
Married	436	98.2
Duration of marriage(in year)		
1-3	206	46.4
4-6	116	26.1
7-9	44	9.90
≥10	78	17.6
Religion		
Christianity	217	48.9
Islam	227	51.1
; Women's work status		
Formal sector job	103	23.2
Self employed	216	48.6
Apprentice	94	21.2
Unemployed	31	7.0
Women's education		
Primary	50	11.2
Secondary	194	43.7
Tertiary	186	41.9
Post tertiary	14	3.2
Spouse's level of education		
Primary	11	2.5
Secondary	211	47.5
Tertiary	188	42.3
Post tertiary	34	7.7
Spouse's work status		
Formal sector jobs	165	37.5
Self employed	187	42.5
Apprentice	67	15.2
Unemployed	21	4.8
No of living Children		
First	190	42.7
Second	137	30.8
Third	65	14.6
≥Fourth	52	11.8

*Mean age 29.4±5.1

Knowledge relating to modern contraceptives

Participants had a mean knowledge score of 5.1 ± 2.4. Overall, the proportions of respondents with good and poor knowledge of modern contraceptives were 57.7% and 42.3% respectively (see figure 1). Fifty four percent of the respondents knew at least one MCM. Table 2 presented respondents' knowledge relating to types of MCMs. Male condom (50.8%) topped the list of the MCMs mentioned by the respondents. Some other MCMs that the respondents knew were oral contraceptive pill (23.7%) and injectables (10.6%). Diaphragm (0.2%) and female sterilization (0.8%) were the least mentioned MCMs by the respondents.
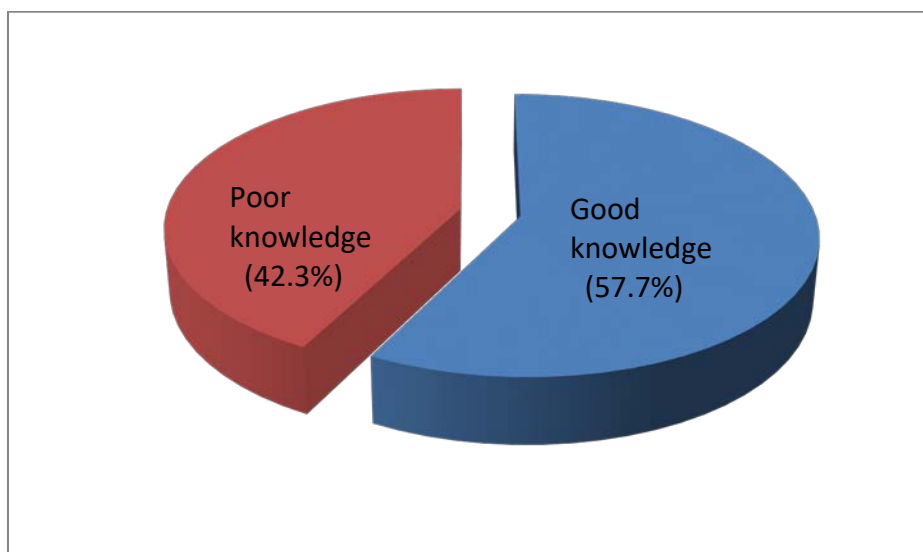
Figure 1: Level of knowledge on MCMs

Table 2: Respondents' knowledge relating to types of modern contraceptive methods

Types of modern Contraceptives methods	Frequency N=444	Percentage (%)
Male condom	320	50.7
Oral contraceptive pill	150	23.7
Injectables	67	10.6
IUCD	55	8.7
Emergency contraception Implants	23	3.6
Female sterilization	9	1.4
Female condom	5	0.8
Diaphragm	2	0.3
	1	0.2

Prevalence and pattern of contraceptive use

   More than half (61.7%) were currently using modern contraceptive methods, 10.8% were using traditional methods while 27.5% were currently not using any methods (See table 3 for detailed information).

Table 3: Prevalence of Contraceptive Use within 12 Months of Postpartum

Current contraception methods	Frequency (N=444)	Percentage (%)
Currently using modern contraceptive methods	273	61.7
Using traditional method	48	10.8
Not using any method	123	27.5

As shown on Figure 2, male condom had the highest proportion (52.3%), among the modern contraceptive methods used by the respondents, followed by (11.7%), intra uterine contraceptive device (11.7%) and oral contraceptive pill (11.0%). Diaphragm (0.4%), followed by female condom (0.7%) and implants (3.7%) were the least used modern contraceptive methods. Other types of modern contraceptive methods currently being used by respondents were emergency contraceptives (8.8%) and injectables (8.8%).
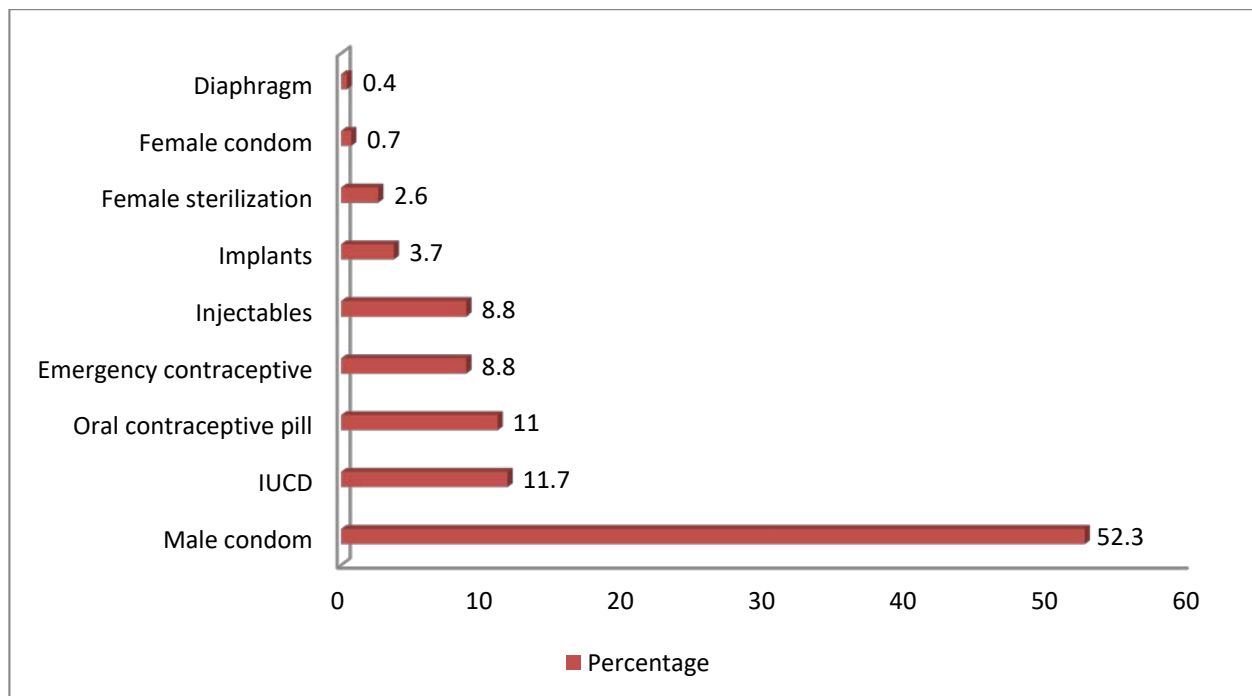

Figure 2: MCMs currently being used by women at 12 months post delivery

The use of MCMs among respondents' with poor knowledge and good knowledge relating to MCMs are highlighted in Figure 2. there was a marked difference in the practice of modern contraceptive method between respondent with poor and good knowledge on MCMs. Seventy six percent of those with good knowledge were practicing modern contraceptive methods compared with 43% of those with poor knowledge that were practicing the use of MCMs. Overall, knowledge of MCMs was significantly related with use of MCMs.
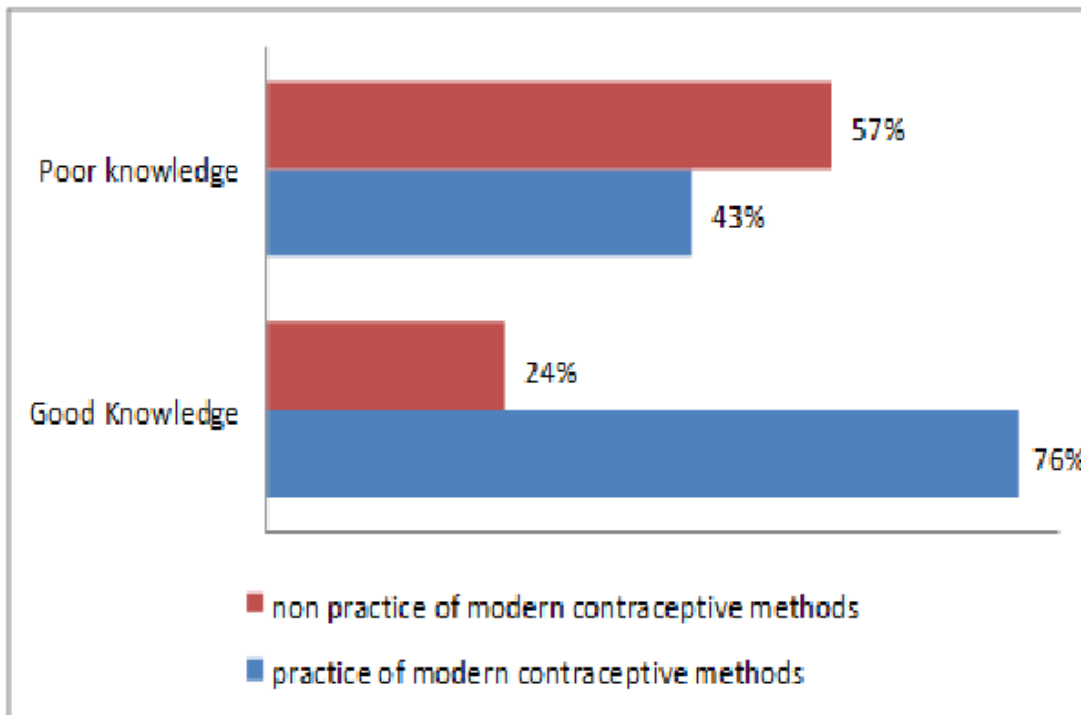
Figure 2: Use of MCMs between respondents' with poor knowledge and those with good knowledge

Reasons adduced by the respondents for not using modern contraceptive methods are presented on table 5. Fear of side effect topped the list of the reasons adduced for not using modern contraceptive methods with 12 months of delivery. Desire (27.6%), Husband disapproval (22.9%) and previous negative experience (6.2%) were also noted as reasons for not using modern contraceptive methods. Friends and colleagues disapproval (4.3%) was the least reason adduced by respondents for not using modern contraceptive methods, followed by religion opposition (4.3%) to use of modern contraceptive methods.

Table 5: Reasons for not using modern contraceptive methods within 12 months of delivery

Reasons for not using MCMs	Frequency (N=210)	Percentage (%)
Fear of side effect	71	33.8
Desire for more children	58	27.6
Husband disapproves	48	22.9
Previous negative experience with MCMs	13	6.2
Faith / Religion	11	5.2
Friends / colleague disapproves	9	4.3

The prevalence of use of MCMs by respondents' selected demographic characteristics are highlighted in table 8. The selected characteristics were age, duration of marriage, level of education, work status, birth order of infant child, place of delivery and resumption of menstruation. All the selected respondents' socio-demographic characteristics expected resumption of menstruation were not significantly associated with the prevalence of use of MCMs by respondents. The prevalence of use of MCMs among respondents aged less 25, 25- 29, 30 – 34 and 35 and above years were 64.1%, 62.4%, 59.4% and 62.5% respectively, indicating a no significant relationship. The prevalence of use of MCMs among respondents that have been married for 1-3, 4 – 6, 7-9, 10 and above years were 65.0%, 54.5%, 69.2% and 62.8% respectively, indicating a no significant relationship. With respect to respondents' level of education, the prevalence rates of use of MCMs were 58.0%, 62.2 and 62.2% among those who had primary, secondary and tertiary education respectively. The prevalence of use of MCMs among respondents who were formally employed, self-employed and apprentice/unemployed were 63.1%, 60.6% and 62.4%. With respect to infant child of the respondents, prevalence of use of MCMs were 64.2%, 56.9% and 63.2% among those whose infant child was first, second, and third and above child respectively. The prevalence of use of MCMs among respondents who had their infant child in mission, hospital and home were 71.4%, 61.6% and 51.7% respectively. Among those gave birth to their infant in hospital, mission and home. The prevalence of use of MCMs among respondents who had resumed menstruation and those who had not resumed their menstruation were 66.6% and 52.4% respectively.

More (70.8%) respondents who had good knowledge were using MCMs compared with fewer (29.2%) respondents with poor knowledge who were using MCMs. Overall, respondents level of knowledge was significantly related to current use of MCMs.

Table 8: Use of Modern Contraceptive Methods by selected socio-demographic characteristics

Demographic characteristics	Currently using MCMs		Total	X²	P value
	Yes (%)	No (%)			
Age (in years)					
<25	41 (64.1)	23(35.9)	64 (100)	0.51	0.92
25-29	106 (62.4)	62 (37.6)	170 (100)		
30-34	82(59.4)	56 (40.6)	138 (100)		
>35	45 (62.5)	27(37.5)	72 (100)		
Duration of marriage(in years)					
1-3	134 (65.0)	72 (35.0)	206 (100)	3.99	0.26
4-6	63 (54.5)	53 (45.7)	116 (100)		
7-9	27 (69.2)	14 (34.1)	44 (100)		
≥10	49 (62.8)	29 (37.2)	78 (100)		
Level of education					
Primary	29 (58.0)	21(42.0)	50 (100)	0.33	0.85
Secondary	120 (62.2)	73(37.8)	193 (100)		
Tertiary	25 (62.2)	76(37.8)	101 (100)		
Work status					
Formally employed	65 (63.1)	38 (36.9)	103(100)	0.21	0.89
Self employed ;8	131 (60.6)	85 (39.4)	216(100)		
Apprentice & unemployed	78 (62.4)	47 (37.8)	125(100)		
Birth order of infant child					
First	121 (64.2)	68 (35.8)	189(100)	1.94	0.38
Second	78 (56.9)	59 (43.1)	137(100)		
≥Third	74 (63.2)	43 (36.8)	117(100)		
Resumption of menstruation					
Yes	194 (66.6)	99 (33.4)	293 (100)	8.36	<0.01*
No	77 (52.4)	70 (47.6)	147 (100)		
Place of delivery					
Hospital	234 (61.6)	146 (38.4)	380 (100)	2.63	0.27
Mission	25 (71.4)	10 (26.6)	35 (100)		
Home	15 (51.7)	14 (48.3)	29 (100)		
Knowledge					
Good	194 (70.8)	62 (36.5)	256 (100)	50.65	<0.01*
Poor	80 (29.2)	108 (63.5)	188 (100)		

*significant at p value <0.05

Intention relating to use of MCMs within 12 months of delivery

Table 6 shows respondents' intention relating to use of MCMs within 12 months of delivery. Only 38.3% of the respondents had the intention to use MCMs. The preferred MCMs that respondents intended to use within 12 months of delivery are highlighted on table 7. The most preferred MCMs were injectables (43.5%) and Intra Uterine Contraceptive Device (26.1%)**.**

Table 6: Intention to use MCMs within 12 months of delivery

Do you intend to use MCM within 12 months of delivery	Frequency	Percentage
Yes	59	38.3
No	95	61.7
Total	**154**	**100**

Table 7: The preferred intended postpartum modern contraceptive methods
*No responses were excluded

*Preferred intended postpartum contraceptive choice	Frequency (n=23)	Percentage (%)
Injectables	10	43.5
IUCD	6	26.1
Male condom	4	17.4
Oral contraceptive pill	3	13.0

Cross-tabulation of intention to use MCMs by respondents' selected demographic characteristics are highlighted in table 10. The selected characteristics were age, duration of marriage, level of education, religion, work status, number of living children, place of birth of infant child and spouse's work status. Duration of marriage, level of education and number of living children were significantly related with respondents' intention to use MCMs on bivariate analysis with involves the use of chi-square. Proportions of respondents who had the intention to use MCMs among those aged less 25, 25- 29, 30 – 34 and 35 and above years were 36.8%, 44.1%, 30.6% and 40.7% respectively. More (46.5%) adherents of Islamic faith had the intention to use MCMs compared with fewer (31.1%) Christians who had the intention to use MCMs. Proportions of respondents who had the intention to use MCMs among those who were formally employed, self-employed and apprentice/unemployed were 30.0%, 43.3% and 33.3% respectively. With respect to spouse's work status, proportions of respondents who intended to use MCMs were 32.7%, 41.5%, 40.6% among those whose spouse were formally employed or had formal employment, self-employed and apprentice/unemployed respectively. More (46.2%) respondents who had their infant child delivered at their home had the intention of using MCMs compared with those who had their infant child delivered in hospital (37.6%) and mission homes (37.5%). With respect to respondents' duration of marriage, proportion of those who had the intention of using MCMs were 35.5%, 27.1%, 69.2% and 48.3% among those who had been in marriage for 1-3, 4-6, 7-9 and 10 and above years respectively. Almost half (46.2) of the respondent who did not have tertiary education compared to fewer (27.0%) who had tertiary education had the intention of using MCMs. A less proportion (31.5%) of respondents with number of living children less than three had the intention of using MCMs compared with 54.3% of respondents with three children and above who had the intention of using MCMs.

Table 9: Intention to Use MCMs by selected socio-demographic characteristics

Demographic characteristics	Intention to use MCMs		Total	X²	P value
	Yes (%)	No (%)			
Age of respondent(yrs)					
<25	7(36.8)	12(63.2)	19(100)	2.14	0.54
25-29	26(44.1)	33(55.9)	59(100)		
30-34	15(30.6)	34(69.4)	49(100)		
>35	11(40.7)	16(59.3)	27(100)		
Duration of marriage(yrs)					
1-3	22(35.5)	40(64.5)	62(100)	9.26	**0.03***
4-6	13(27.1)	35(72.9)	48(100)		
7-9	9(69.2)	4(30.8)	13(100)		
≥10	14(48.3)	15(51.7)	29(100)		
Religion					
Christianity	26(31.3)	57(68.7)	83(100)	3.72	0.05
Islam	33(46.5)	38(53.8)	71(100)		
Level of Education					
Primary & secondary	42(46.2)	49(53.8)	91(100)	5.78	0.02*
Tertiary	17(27.0)	46(73.0)	53(100)		
Work status					
Formally employed	9(30.0)	21(70.0)	30(100)	2.55	0.28
Self employed	35(44.3)	44(55.7)	79(100)		
Apprentice & unemployed	15(33.3)	30(66.7)	45(100)		
Number of living children					
≤2	34(31.5)	74(68.5)	108(100)	7.14	0.01*
≥3	25(54.3)	21(45.7)	46 (100)		
Place of delivery					
Hospital	50(37.6)	83(62.4)	133(100)	0.37	0.83
Mission	3(37.5)	5(62.5)	8(100)		
Home	6(46.2)	7(53.8)	13(100)		
Spouse level of education					
Primary & Secondary	32(43.8)	41(56.2)	73(100)	1.79	0.18
Tertiary & post tertiary	27(33.8)	53(66.2)	81(100)		
Spouse work status					
Formally employed	18(32.7)	37(67.3)	55(100)	2.46	0.48
Self employed	27(41.5)	38(58.5)	65(100)		
Apprentice & unemployed	13(40.6)	19(59.4)	32(100)		

*significant at < 0.05

The cross-tabulation of some identified factors with intention to use MCMs are highlighted in table 10.

Fewer (19.6%) respondents who had the desire for more children expressed the intention to use MCMs compared with more (41.4%) respondents who had no desire for more children

who the intention to use MCMs. More (41.7%) respondents with previous negative experience had the intention to use MCMs compared with their counterparts (32.5%) who had no positive negative experience that had the intention to use MCMs. Less (11.4%) respondents whose husband disproves of to use MCMs had the intention to use it compared with more (43.6%) respondents whose husband did not disproves of to use MCMs that had the intention to use it. The proportion of respondents who had the intention to use MCMs was higher (34.1%) among those whose friends/colleagues did not disproves its use compared with 22.2% who had the intention to MCMs among those whose friends/colleagues disproves the use of MCMs. Fewer (18.2%) respondents who expressed fear of side effect of MCMs had the intention to use MCMs compared with a higher proportion (47.2%) of those who expressed no fear of side effect who had the intention to use MCMs. Overall, identified factors that were found to be significantly related with intention to use MCMs are respondents' desire to have more children, husband disapproval of use of MCMs and fear of side effect of use of MCMs (see table 10 for detailed information).

Table 10: Intention to use MCMs by identified psycho-social factors

Variables	Intention to MCMs		Total	X²	P value
	Yes (%)	No (%)			
Desire for more children					
Yes	10(19.6)	41(19.6)	51(100)	6.86	**0.01***
No	36(41.4)	51(58.6)	87(100)		
Faith/ religion disapproval					
Yes	2 (20.0)	8(80.0)	10 (100)	0.86	0.35
No	84(65.6)	44(34.4)	128(100)		
Previous negative experience					
Yes	5 (41.7)	7(58.3)	12 (100)	0.41	0.52
No	1 (32.5)	85(67.5)			
Husband disapproval to its use					
Yes					
No	5 (11.4)	39(88.6)	44 (100)	14.0	**0.00***
	41 (43.6)	53(56.4)			
Friend/colleague disapproval					
Yes	2 (22.2)	7(77.8)	9 (100)	0.54	0.47
No	44 (34.1)	85(65.9)			
Fear of side effect					
Yes	12 (18.2)	54(81.8)	66 (100)	13.1	**0.00***
No	34 (47.2)	38(52.8)			

* Significant at P<0.05

In other to document the characteristics or factors that could serve as predictors of respondents' intention to use intention to use MCMs, the variables that were significantly related to intention to use MCMs with bivariate analysis at the 5% level of significance were further subjected to multivariate logistic regression analysis (table 11). Respondents with desire for more children had significantly lower odds of having the intention of using MCMs (OR: 0.35, CI: 0.15– 0.79). Respondents who had the desire to for more children significantly less likely to have the intention of using MCMs (OR: 0.35, CI: 0.15– 0.79). Compared with respondents whose husband did not disapproves the use of MCMs, those whose husbands disapproves the use of MCMs were five times significantly less likely to the intention of using MCMs (OR: 0.19, CI: 0.15– 0.79). Among the postpartum mothers, those who had did not have up to three children were significantly three times more likely to have the intention to use MCMs compared to their counterparts who had three or more children (OR: 3.02, CI: 1.16– 4.90).

Table 11: Predictors of intention to use MCMs within 12 months post delivery

Variables	Odd ratio (OR)%	95% CI	P value
Desire for more children			
Yes	0.35	0.15-0.86	**0.02***

No	1		
Fear of side effect			
Yes	0.35	0.15-0.79	**0.01***
No	1		
Husband disapproval			
Yes	0.19	0.15-0.79	**0.00***
No	1		
Level of education			
Primary & secondary	2.12	0.10-0.57	**0.03***
Tertiary & post tertiary	1		
Number of living children			
≤2	3.02	1.16-4.90	**0.02***
≥3	1		

* Significance at P<0.05

IV. DISCUSSION

The mean age of the respondent was 29.4 ± 5.1 years and majority of the respondents were within the age bracket of 25-29 years. This is consistent with the peak reproductive age of female Nigerians as identified by the 2008 National Demographic Health Survey (NPC, 2008). The mean duration of marriage was 5.13 ± 4.4 years. A previous study carried out in Lagos revealed a mean duration of marriage years of 5.0 ± 3.9 years among women in Lagos (Adegbola et al, 2010). This finding implies that the target population constitutes of women who were young in marriage. Majority of the respondents were married and living with their spouses, which is a primary indicator of regular exposure to sexual intercourse and thereby increases the risk of conception in the postpartum period.

Although more than half of the respondents had good knowledge of MCMs, a large number of respondents still had poor knowledge of MCMs. A striking result was also that almost half of the respondents could not mention at least one form of contraceptive method. These findings justifies the need for provision of family planning educational programmes involving issues relating to MCMs for postpartum women as part of post-delivery care.

The most commonly mentioned MCMs among the respondents were male condom, pill and injectable in this study. The result corroborate with previous studies such as Augustine et al (2011) and NPC (2008) which revealed that male condom, oral contraceptive pills and injectable most commonly known modern contraceptive methods among women in Nigeria. Male condom and oral contraceptive pills being the most commonly mentioned in this study may not be unconnected with the fact that they are cheap, readily available and often frequent advertise on the media (Olugbenga-Bello et al, 2011). Efforts should be made to use educational interventions to raise awareness and knowledge of other available modern contraceptive methods among the target population.

The relatively high prevalence of MCMs noted in this study is similar to the findings reported by previous researchers (Bello et al, 2006). The Nigerian National Demographic Health Survey (NDHS) revealed that MCMs is higher in urban areas and among educated women in southwestern parts of Nigeria (NPC, 2003). The prevalence of MCMs observed in this study may not be unconnected to the high literacy rate among the respondents with about two-thirds having post-primary school education. There is need to encourage the use of highly effective contraceptive methods that can prevent unplanned pregnancies and ensure birth spacing using community-based family planning educational interventions.

Resumption of menstruation had significant association with the use of modern contraceptive methods among women in post-delivery stage. The result corroborate with the findings of Ndugwa and Cleland (2011) where menstrual resumption acts as a trigger for initiating contraceptive use with a peak of contraceptive initiation occurring shortly after the first month where resumption of menstruation is reported to significantly influence the use of MCMs. The dynamics of contraceptive use among women in postpartum period should be of interest to the family planning programme, since delay of use of MCMs until the return of menstruation might subject women to the risk of unwanted pregnancy. Commencement of sexual intercourse within postpartum periods without the use of effective contraceptives may herald a greater risk of unintended pregnancy. Some women may be fecund few weeks after delivery especially those that are not breastfeeding. So, a sexually active woman after delivery not using an effective contraceptive method increases her vulnerability to pregnancy in the month before her first menstruation (Anzaku et al, 2014).

Good knowledge was significant related with the use of MCMs among the respondents. Knowledge of MCMs no doubt as the potential to facilitate the use of MCMs as knowledge has to do with having facts, correct information and practical understanding about a subject matter that has been acquired through experience or education (Moronkola and Ojediran, 2006, Augustine, 2011). The finding highlights the need for health educational interventions focusing on promotion of knowledge relating to MCMs among the target population.

It is clear from the study that a majority of the respondents had no intention to use at least one form of MCMs within twelve months of delivery. This is in line with findings from previous studies such as Ogbonna et al (1999), Adegbola et al (2010) and Newman et al (2005) that reported low level of intention to use MCMs among postpartum women. There is need to emphasize the importance of use of MCMs during postpartum period with a view to improving utilization.

This study which revealed that the desire for more children was a significant predictor of intention to use MCMs is similar to findings of previous studies carried out in various countries (Techrani et al, 2001; Fikree et al, 2001) including Nigeria (Ogbonna et al, 2006). The 2008 Nigeria Demographic Health Survey observed that women do not begin to use contraception until they have had at least one child (NPC, 2009). Another significant predictor of use of MCMs is number of living children. Previous studies such as Ogbonna et al (2006), Techrani et al (2001 revealed that women who had more children than their ideal number of children and who did not want any more children are more likely to use contraceptives. Having at least two children was found to be predictor of intention to use modern contraceptive methods within one year of delivery. Number of living children a woman has influence on modern contraceptive use because there is a tendency that the desire for additional children may decrease as number of living children increases (Ogbonna et al, 2006; Oyedokun, 2007).

Husbands' disapproval to use of MCMs has shown to influence intention to use postpartum contraceptive methods. A similar study carried out in Nigeria had also documented husbands' approval as strong determinant of their contraceptive use (Oyedokun, 2007). Reasons for this may be the high regard given to men (husband) in determining number and when to have children among the study population which is typical of many African nations. This highlights that men are the primary decision-makers on issues relating to family planning and gives credence to the fact that husbands need to be involved in interventions focusing on promotion of use of MCMs. It has been demonstrated that involving husband in family planning counseling sessions can lead to joint decisions being made by couple and encourage women's use of contraception (Soliman, 1999).

The study observed that fear of adverse side effect of MCMs has strong influence on use and intention to use MCMs within 12 months post-delivery period. Similar trend has been documented in previous study (Teye, 2013; Oyedokun, 2007). Family planning education is necessary in order to effect changes in this behaviour.

V. CONCLUSION

In summary, this study revealed a high contraceptive prevalence but some factors were identified to be responsible for non-usage of MCMs among postpartum women includes husbands/ partners disapproval, desire to have more children, perceived fear of side effect, previous negative experience with contraceptive use, faith/religion and friends'/colleagues' disapproval of its use. Fear of using modern contraceptives might harm mother's or infant's health. These findings suggest that even when populations have access to services, it is important for health care providers to offer advice about available modern methods, to offset fear about negative side effects and enable fully informed choice.

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