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ORIGINAL ARTICLE

Willingness to Adopt a Modern Contraceptive Method among Pregnant Women attending Antenatal Care in Primary Health Centres of Rivers State, Nigeria Corresponding Author

Osaro BO[1], *Edet CK*[1], *Ben-Osaro NV*[2], *Wegbom AI*[3].

[1] Department of Community Medicine, Faculty of Clinical Sciences, College of Medical Sciences, Rivers State University, Port Harcourt Nigeria.
[2] Department of Adult Education and Community Development, Faculty of Education, Rivers State University, Port Harcourt, Nigeria
[3] Department of Public Health Sciences, Faculty of Basic Medical Sciences College of Medical Sciences, Rivers State University, Port Harcourt, Nigeria

Keywords

Willingness;

Adopt;

Pregnant Women;

Modern Contraceptives;

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Rivers State

ABSTRACT

Background
Modern Contraceptives (MC) use in developing countries is inadequate due to the low involvement of women in decisions on reproduction. This study assessed the willingness to adopt MC methods postpartum by pregnant women attending antenatal care (ANC) in Primary Health Centres (PHCs) of Rivers State Nigeria.

Methodology
A descriptive cross-sectional study was conducted among 379 pregnant women attending ANC in PHCs within Rivers State Nigeria. Participants provided information on socio-demographics, reproductive history, awareness and knowledge of MC, partner communication on MC, and willingness to adopt MC postpartum. Data were analyzed using IBM Statistical Package for the Social Sciences version 23. The chi-square test for associations and multivariate logistic regression analysis for predictors of willingness to adopt MC postpartum were computed ($P \leq 0.05$).

Results
Most of the participants (n = 257; 67.8%) were aged 25 – 34 years, married (n = 370; 97.6%) with good knowledge of MC (n = 316; 86.3%). Tubal ligation was the most known MC method followed by condoms and implants. The most desired MC method was injectables (n = 111, 45.3%) while 245 (64.6%) participants were willing to adopt a method postpartum. Prior thought of adopting MC (AOR 24.628; 95%CI = 11.139 – 54.452) and having one living child (AOR = 0.201; 95%CI = 0.045-0.905) were predictors of willingness to use MC postpartum.

Conclusion
Willingness to adopt MC postpartum was high among women attending ANC in PHCs in Rivers State Nigeria. Reinforcement of MC desires of these women by health workers is recommended.

Correspondence to:
Dr. Benjamin Osarolaka Osaro
Department of Community Medicine, Faculty of Clinical Sciences,
College of Medical Sciences, Rivers State University, Port Harcourt Nigeria.
Email: benjamin.osaro@ust.edu.ng

Introduction

Although awareness about the use of modern contraceptives (MC) for the delay or spacing of pregnancy has risen appreciably across several populations in developing countries, its use among women of reproductive age is still very poor, especially among women in rural areas.[1] Several efforts to increase awareness and knowledge of MC have been undertaken by governments and Non-Governmental Organizations (NGOs) in Nigeria to

improve modern contraceptive use. For instance, the Nigerian Urban Reproductive Health Initiative (NURHI) funded by the Bill and Melinda Gates Foundation; National Reproductive Health Commodity Security Strategic Plans and Nigeria Family Planning Blueprint (Scale-Up Plan) whose main strategic targets were to ensure the availability of MC products to improve utilization. [2-4] Despite these efforts, MC prevalence is still low in low- and medium-income countries (LMICs). For instance, MC prevalence of 32.2% was reported among Indian women attending an urban health centre;[5] 44.8% among Saudi women attending Primary Care Centres;[6] 55.7% among rural women in Nunu Kumba District in Ethiopia [7] and 63.5% among women living in the Mbouda health district, Cameroon.[8] In Nigeria MC prevalence is 12.0% (NDHS, 2019).[1] Other studies have reported prevalence which varies from 17.0% to 43.8% across the various regions in Nigeria and different populations.[9-11] Even though supply-side barriers to the use of MC have improved in Nigeria through the integration of family planning services into primary healthcare services and by ensuring the availability of MC products,[12] demand-side barriers still exist and play a dominant role in the adoption and use of family planning services as reported in studies carried out among women and men of reproductive age groups.[5,7,12]

Fear of side effects of MC, misconceptions about a risk of infertility, religious and other cultural barriers still limit MC use.[7,11,12] Also of importance is the decision-making ability of women in a culturally male-dominated society where it is the husband or male partner that takes decisions on family matters including reproductive health issues.[13,14] In these societies women lack the ability to decide whether to adopt a method of MC or not. The 2018 NDHS reported that among married women who are not currently using MC, only 37.8% are able to make decisions on family planning.[1] The level of involvement of women in reproductive health decisions also shows rural-urban variations, with more urban women now getting involved in reproductive health discussions and decisions because of modernization, better education, and economic independence of women, unlike their rural counterparts who constitute the majority of the population.[13]

The decision to adopt MC methods is key to using any method of modern contraception.[13,15] Women who hold the power to make reproductive decisions are more likely to use MC.[13] The intention to carry out an action is influenced by the knowledge (of the threats and benefits of the intended action), personal attitudes (self-efficacy), and experiences (barriers).[15] This determines the performance of desired action (use of MC). Studies have reported that 33% of pastoralist women and 84.3% of women in the postpartum period in Northern Ethiopia had intentions to adopt MC methods in the future.[15,16] In the 2018 NDHS, 35.2% of women, who are married and not using contraception, had the intention to use MC in the future.1 However, in a study among ANC attendees of a tertiary health facility in Port Harcourt, it was reported that 76.0% had the intention to use any method of MC after delivery.[17] Other studies reported contraceptive intentions of 54.0% in a teaching hospital in Nigeria,[18] 56.5% among rural women in Rivers State,[19] 64.0% among women attending antenatal and post-natal clinics in a tertiary health facility in Jos Nigeria and 80.8% among women seeking abortion in Jos Nigeria.[20,21]

The initiation of sexual activity could result in unwanted pregnancies. Studies have reported that nursing mothers resume sexual activity as early as six weeks postpartum and the majority (95.0%) of these mothers would want to defer their next pregnancy by one year even when about 70.0% are not on any MC method.[17] In Rivers State Nigeria, the Primary Healthcare Centres (PHCs) provide antenatal care (ANC) services to pregnant women and also family planning services including MC to women of reproductive age. However, limited data exist on MC decisions among women receiving ANC at the primary care level in Rivers State. Therefore, this study assessed the willingness and intentions of pregnant women attending ANC in primary healthcare centres in Rivers State to adopt a method of MC and its associated factors.

Methodology

Study Area

This study was carried out in Rivers State, located in the Niger Delta region of Nigeria. There are twenty rural Local Government Areas (LGAs) and three urban LGAs in Rivers State with a projected population of 8,008,465 people. Women of reproductive age constitute about 22.0% of the population.[22] Primary healthcare services including maternal, child health and family planning services in Rivers State is provided at the 342 publicly owned Model Primary Health Centres and 147 privately owned health facilities in Rivers State.[22]

Study Design

This study is a descriptive cross-sectional study among pregnant women attending antenatal clinic in publicly owned Model Primary Health Centres in Rivers State, Nigeria.

Study Population
The study population includes all pregnant women attending antenatal care clinics in the publicly owned Model Primary Health Centres in Rivers State, Nigeria.

Inclusion Criteria
1. Pregnant women at 28 weeks of gestational age and above.
2. Pregnant women receiving antenatal care services in a Comprehensive Primary Healthcare Centre (type 3 PHC facility) in Rivers State.
3. Eligible participants who gave written informed consent to participate in the study.

Exclusion Criteria
1. Pregnant women below 28 weeks of gestation.
2. All un-booked pregnant women present on the day of data collection.
3. Pregnant women attending ANC in type 1 PHCs (Health posts) or type 2 PHCs (Health clinics) in Rivers State Nigeria.

Sample Size Calculation
The minimum sample was determined using the Leshlie-Kish formula for single-population studies.11

$$\text{Sample size (n)} = \frac{(z)2pq}{(d2)}$$

Where n = desired sample size, Z = level of statistical significance (1.96),
p = prevalence of MC among rural women of reproductive age in Rivers State10 = 36.8%
q = 1-p
d = margin of error or precision (0.05)

The minimum sample size determined was 357 however, this was increased to 380 after accommodating 5% non-response.

Sampling Techniques
A multistage sampling technique was used to select participants for this study. Using a simple random sampling method, one urban and three rural LGAs in Rivers State were first selected and then five Model Primary Health Centres (MPHCs) in each LGA. A total of 95 participants were selected from all the five MPHCs in each LGA to make up the sample size of 380. These participants were selected by simple random sampling from a list of all pregnant women of gestational ages 28 weeks and above who are booked for ANC services in the health facility. However, for each health facility, a proportionate sample was taken based on the total number of pregnant women 28 weeks and above registered for ANC in the facility.

Data Collection
A pretested structured survey questionnaire was used to collect information on sociodemographic characteristics, reproductive history, awareness and knowledge of modern contraceptives, partner communication on MC, and willingness to adopt MC after delivery. Only women who met the inclusion criteria and gave written informed consent were interviewed in simple English language or Pidgin English commonly spoken and understood in the State.

Data Analysis
Data analysis was done using IBM Statistical Package for the Social Sciences Statistics (SPSS) version 23 and results were presented in frequency tables. The knowledge of MC was determined as the proportion of participants who have the awareness of MC and can correctly mention at least two methods of MC. Chi-square test was done to determine associations between the willingness to adopt MC (dependent variable) and the independent variables (age, sex, parity, knowledge of MC, prior thought of adopting MC, etc.). Logistic regression analysis was also carried out to determine the predictors of willingness to adopt MC. A bivariate logistic regression analysis was done on all the independent variables associated with willingness to adopt MC after delivery. Subsequently, all the variables that showed statistically significant association were entered into a multivariate logistics regression analysis to determine confounders. The level of statistical significance was set at $p \leq 0.05$.

Ethical approval
This was obtained from the Rivers State Ethics Review Committee and permission was sought from Rivers State Primary Health Care Management Board. Written informed consent was obtained from all the participants after an explanation of the research objectives and assurance of confidentiality of information stating also that participation is voluntary.

Results
A total of 379 pregnant women attending ANC at 28 – 40 weeks of gestation participated in the study giving a non-response rate of < 1%.

Table 1 shows that the mean age was 30.39 ± 4.6 years with most of the participants aged 25-34 years (n = 257; 67.8%), being married (n = 370; 97.6%), with tertiary education (n = 209; 55.1%) and being self-employed (n = 168; 44.3%).

Table 2 shows that more than three-quarters (n = 340; 89.7%) of the participants were in the third trimester of pregnancy. Nearly half of the participants were

nulliparous (n = 168; 43.5%) with no living child (n = 126; 46.3%). Almost three-quarters of the participants desired to have more children (n = 272; 71.8%) and most of the respondents desired 4 children (n = 108; 39.7%).

Table 3 shows that nearly all the participants had heard of MC (n = 366; 96.6%) and most (n = 261; 71.3%) heard from health workers, 316 (86.3%) had some knowledge of MC and most known method being tubal ligation (n = 318; 86.9%) followed by condoms (n = 209; 57.1%) and implants (n = 207; 56.6%).

Table 4 shows that the effectiveness of the method in preventing pregnancy was the most common consideration for choosing a specific type of MC method (n = 188;69.4%) followed by the ease of access (n = 38; 14.0%). The cost of the MC method was considered by only 9 (3.3%) participants.

Table 5 shows that participants who make decisions on family planning alone were only 29 (7.7%). A total of 209 (55.1%) participants discussed MC with their partners and 201 (53.0%) with their friends. Three-quarters of these respondents had the support of their partners (n = 157; 75.2%) and friends (n = 147; 73.1%). Approximately half (n = 205; 54.1%) of the participants will want to disclose their MC intentions to their partners.

Table 6 shows that 237 (62.7%) participants had previously thought about using MC and 153 (64.6%) of them discussed this thought with their partners. A total of 245 (64.6%) were willing to adopt MCs after delivery and the most preferred methods include injectables (n = 111; 45.3%) and condoms (n = 83; 33.9%). Twelve (9.0%) participants were yet to decide on the method to adopt. 'I am yet to have my desired number /sex of children' (n = 9; 6.7%) and 'I fear its side effects (n = 8; 6.0%) were the commonest reasons for the unwillingness of participants to adopt MC after delivery

Table 7 revealed a statistically significant association between willingness to use MC after delivery and desire to have more children ($X2 = 27.155$; $P < 0.0001$); the number of living children ($X2 = 16.191$; $P = 0.001$); thoughts about using MC after delivery ($X2 = 188.151$; $P < 0.0001$); participant's discussion about MC with their partner ($X2 = 47.477$; $P < 0.0001$); partner supporting the use of MC ($X2 = 11.775$; $P = 0.003$); participant discuss MC with friends ($X2 = 15.127$; $P < 0.0001$); parity ($X2 = 28.484$; $P < 0.0001$) and marital status ($X2 = 7.259$; $P = 0.007$).

Table 8 shows that the prior thought of adopting MC by pregnant women and whether they have at least one living child predicted the willingness of mothers to adopt MC after delivery. Women who had thought of using MC were 25 times more willing to use MC after delivery compared to those who have not (AOR = 24.628; 95%CI = 11.139 –54.452). Similarly, women who have one child alive were 0.2 times less likely to be willing to adopt a method of MC after delivery compared to those who have 3 or more children alive (AOR = 0.201; 95%CI = 0.045-0.905).

Discussion

In 2012 sub-Saharan Africa contributed about 40% of the unwanted pregnancies reported worldwide.[15] These unintended pregnancies and their complications could have been averted by the use of cost-effective modern contraception which has been reportedly low in Nigeria and other low and medium-income countries.[5,6,10-12] Improving MC prevalence requires that couples and partners make the right decision to adopt MC methods given the efforts to ensure Reproductive Health Commodity Security (RHCS).[2] Nearly all the participants have the awareness of MC and of these, eight out of ten have knowledge of MC. Studies have also shown high awareness and knowledge of MC among women of reproductive age (WRA) in Nigeria and other developing countries even though its use is poor.[10,11]

The low prevalence of MC could arise from indecisions on modern contraception and the method to adopt. For instance, 9.0% of the participants in this study were undecided on the method of MC to adopt. This is higher than the 3.0% reported among women attending antenatal and postnatal care services in a teaching hospital in Nigeria[18] and 6.6% among rural women in Ethiopia.[7] Contraceptive decisions among WRA is better made during the antenatal periods when there is apparently no risk of pregnancy.[17] This study which looked at the willingness of pregnant women to adopt MCs after delivery found that 64.6% of the participants have decided and are willing to adopt a method of MC postpartum. The desired MC methods were mostly Injectables (45.3%) and condoms (33.9%). These methods were chosen because of their effectiveness in preventing pregnancy (69.4%) and ease of access to the method of contraception (14.0%). This finding is similarly reported among an obstetric cohort in Jos, Nigeria where 64.0% of the women had the intention to use postpartum MC.20 It is however higher compared to the 54.0% reported in another tertiary health facility in Nigeria18 and 56.5% among rural women in Rivers State Nigeria.19 Furthermore, another related study among ANC mothers in a tertiary health facility in Port Harcourt, found that 76.0% of the women were willing to adopt postpartum contraception.[17] Our finding is lower than this probably because it was conducted at the primary care

level where ANC service provision excludes women with high-risk pregnancies.

According to the theory of reasoned action and planned behaviour, one's personal experiences influence their intentions to carry out an expected behaviour.[15,23] For instance, among women who sought an abortion for unwanted pregnancies in Jos Nigeria, 80.8% had the intention to adopt MC after receiving abortion services.[21] Although this study did not assess previous experiences following unwanted pregnancies and pregnancy complications of the participants, it has been reported that the experience of stillbirth and abortion is significantly associated with the likelihood of being willing to use modern contraceptives.[15] In our study population, nulliparous women consisted of nearly half (43.5%) with almost three-quarters (71.8%) of them desiring to have more children. It is therefore likely that the experience in pregnancy of women in our study is better compared to those who attended ANC at the tertiary health facility. In other studies, conducted in Ethiopia, 33% - 84.3% of WRA were willing to adopt one method of MC in the future.[7,15,16.]

As regards decision-making on MC, 77% of the participants in this study took decisions jointly and only 7.7% alone. In rural communities in Cross River State, MC decisions are taken jointly by 66% of couples and 16.2% alone.11 Furthermore, 71.6% of women in North-West Nigeria discussed family planning issues with their husbands and in 82.9% of cases MC decisions were made jointly.[12]

The role of spousal or partner communication in modern contraceptive decisions and support in predicting the willingness and use of MC have been documented in other studies.[7,14] In households where the primary decision maker on health issues is the husband or male partner, women were found less likely to use modern contraception.[14] This study found that slightly more than half (55.1%) of the participants discuss MC issues with their spouses or partners and three-quarter (75.2%) of these respondents receive support for MC from their partners compared to 69.37% of ANC attendees in Southern Nigeria.1[5] The decision to adopt MC after delivery by participants in this study was found to be significantly associated with discussing MC with a partner (P <0.0001) or a friend (P < 0.0001). Women who had not discussed family planning with their spouses in the last 12 months were reported to be 0.5 times less likely to want MCs compared to those who did.[7]

Spousal approval and support for MC have also been shown to be significantly associated with the willingness to use MC among postpartum women in Ethiopia.[16] This report is consistent with our findings that partner support for MC use was associated with the willingness of pregnant women to adopt MC methods postpartum (P = 0.003). The implication of this finding therefore is that women of reproductive age who enjoy psychological encouragement and financial support from their husbands or male partners may have better self-efficacy to adopt and use cost-effective modern contraceptives. Thus, these households are more likely to achieve proper family planning and have fewer unwanted pregnancies and their complications, improved well-being for the couple and households and by extension contribute to realizing the goals of SDG.

In our study, willingness and desire to adopt MC was found to be significantly associated with the participant's desire to have more children (P < 0.0001), the number of living children (P = 0.001), prior thoughts of adopting MC (P < 0.0001), marital status (P = 0.007) and parity (P < 0.0001). However, when adjusted for confounders, only the prior thoughts of adopting MC and the number of living children predicted willingness to adopt a modern contraceptive method. Participants who had previous thoughts about using MC were 25 times more likely to use MC methods after delivery compared to those who did not (AOR = 24.628; 95%CI = 11.139 – 54.452).

According to the theory of reasoned action and planned behaviour, one's knowledge, personal attitudes and experiences influence their intentions to carry out an expected behaviour.1[5,23] This likelihood could possibly be due to previous pregnancy experiences and also previous discussions with spouses/partners and even friends, as it has been reported that the experience of stillbirth and abortion is significantly associated with the likelihood of being willing to use modern contraceptives.[15]

Pregnant women in this study had knowledge of MC, discuss MC issues with their friends and spouses/partners and also receive support from their spouses/partners on the adoption of Mcs.

Furthermore, participants who had one child were less likely to adopt a method of MC (AOR = 0.201;95%CI = 0.045 – 0.9O5) compared to those who have three or more children. This may be related to hereditary concerns of couples in a patriarchal society like Nigeria which is also struggling with a weak health system. This may explain the desire for more children and thus the less likelihood of adopting MC by couples who have one child compared to those who have more children. A study among married rural women in Nunu Kumba district of Oromia, Ethiopia similarly found that women who have 2-3 children were three times

more likely to be willing to adopt MC methods compared to those with one child or none.[7] The likelihood of willingness to use a method of MC among women whose spouses do not desire more children is four times more compared to those who still desire more children.[7] These couples may have completed the number of children they desire and hence are willing to adopt a method of MC.

Other studies have reported that age, level of education and religion of women were factors associated with willingness to adopt MCs[7,11,19] and that older women aged 30 years and above as well as those who are educated were twice more likely to adopt a MC.[6] This study however found no statistically significant association between these factors and the willingness to adopt a MC method and were also not predictors of willingness to use MC. This finding may suggest that age and level of education are confounders since older and educated women are also likely to have had good knowledge and experience on MC which could influence their decisions on contraception.

Conclusion

Nearly two-thirds of pregnant women attending ANC in primary health centres in Rivers State Nigeria were willing to adopt MC after delivery. The commonly desired methods were injectables and condoms. Although the decision on the use of MC is associated with marital status, prior thought of using MC, parity, discussing MC issues with partner or friend, partner's support for use of MC, the desire for more children and the number of living children, only the thought of using MC and the number of living children were predictors of willingness to adopt MC.

It is recommended that health workers providing ANC services motivate pregnant women attending ANC to reach decisions on MC during ANC visits and reinforce their desires for contraception after delivery. Furthermore, program managers should design family planning programs targeting male partners to increase their support for modern contraception.

Limitation of the study

The data collected relied on information given by participants which is subjective and could introduce information bias.

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Conflict of interest: Nil

Contributions of authors

1. BOO conceptualized and designed the study, supervised data collection and collation and also wrote the initial draft of the manuscript.
2. CKE developed the survey instrument, conducted data analysis and reviewed the final draft of the manuscript.
3. NVB conducted the literature search, reviewed the survey instrument for content validity, supervised data collection and collation and reviewed the final draft of the manuscript.
4. AIW conducted data analysis and interpretation of results.

All the authors however read and approved the final manuscript.

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Table 1: Socio-demographic Characteristics of respondents and partners

Variable	Frequency (n = 379)	Percent
Age of respondent (yrs)		
15 - 24	41	10.8
25 - 34	257	67.8
35 – 44	81	21.4
Mean (SD)	30.39 (4.60)	
Marital status		
Married	370	97.6
Not married	9	2.4
Place of residence (n = 379)		
Urban	193	50.9
Rural	186	49.1
Religious denomination of respondents		
Catholic	80	21.1
Non-Catholic	299	78.9
Respondent's highest level of education		
≤ Primary	18	4.8
Secondary	152	40.1
Tertiary	209	55.1
Partner's highest level of education		
≤ Primary	10	2.6
Secondary	147	38.8
Tertiary	222	58.6
Respondent's occupation		
Farming	1	0.3
Fishing	1	0.3
Self employed	168	44.3
Trading	158	41.7
Public Servant	51	13.4
Partner's occupation		
Fishing	1	.3
Trading	56	14.8
Government employed	68	17.9
Unemployed	8	2.1
Private/Self employed	246	64.9

Table 2: Reproductive history of respondents

Variable	Frequency (n = 379)	Percent
Age of present pregnancy (wks)		
1st trimester (0 - 13)	4	1.1
2nd trimester (14 - 26)	35	9.2
3rd trimester (27 - 41)	340	89.7
Parity		
Nulliparous	165	43.5
Primiparous	86	22.7
Multiparous	117	30.9
Grand-multiparous	11	2.9
Desire to have more children		
Yes	272	71.8
No	107	28.2
Number of living children (n = 272)		
0	126	46.3
1	82	30.1
2	43	15.8
≥ 3	21	7.8
Number of children desired (n = 272)		
1	2	0.8
2	15	5.5
3	101	37.1
4	108	39.7
>4	46	16.9

Table 3: Awareness and knowledge of modern contraceptives by the respondents

Variable	Frequency (n = 379)	Percent
Ever heard of MC		
Yes	366	96.6
No	13	3.4
Sources of information (n = 366) *		
Health workers	261	71.3
Mass media (TV/Radio/Newspaper/social media)	159	43.4
Friends	104	28.4
Relatives	58	15.8
IEC materials	45	12.3
Sex partner	18	4.9
Town announcer	8	2.2
Others	10	2.7
Knowledge of MC (n = 366)		
Yes	316	86.3
No	50	13.7
Known methods*		
Tubal ligation	318	86.9
Condom	209	57.1
Implants	207	56.6
Daily pills	174	47.5
Injectables	170	46.4
IUCD/Coil	66	18.0
Emergency pills	40	10.9

*Multiple option

Table 4: Considerations for choice of MC methods by respondents who have ever used MC in the past*

Variable	Frequency **	Percent
Effectiveness in preventing pregnancy	188	69.4
Easy to get contraceptives	38	14.0
Prevents sexually transmitted diseases	31	11.4
Does not interfere with sexual pleasure	30	11.1
Cheap to buy	29	10.7
Has less side effect	24	8.9
Easy to use privately	14	5.2
There is no need to plan ahead	12	4.4
I have better knowledge of method	10	3.7
I get it for free	9	3.3

*n = 271 (table not shown) **multiple option

Table 5: Communications on MC method with partner or friends

Variable	Frequency (n = 379)	Percent
Decisions on MC is taken by		
Partner alone	58	15.3
Self alone	29	7.7
Both of us	292	77.0
Discuss MC with partner		
Yes	209	55.1
No	170	44.9
Partner supports using MC (n = 209)		
Yes	157	75.2
No	26	12.4
Not sure	26	12.4
Disclosure to partner if decided on MC		
Yes	205	54.1
No	174	45.9
Discuss MC with friends		
Yes	201	53.0
No	178	47
Friends support MC (n = 201)		
Yes	147	73.1
No	34	16.9
Not sure	20	10.0

Table 6: Modern Contraceptive decisions of respondents

Variable	Frequency (n = 379)	Percent
Had previous thought of using MC		
Yes	237	62.5
No	142	37.5
Discuss MC with partner (n = 237)		
Yes	153	64.6
No	84	35.4
Willingness to use MC after delivery (n = 379)		
Yes	**245**	64.6
No	134	35.4
Desired MC method (n = 245)		
Injectables	111	45.3
Condom	83	33.9
Undecided on method	22	9.0
IUCD	13	5.3
Daily pills	8	3.3
Tubal ligation	7	2.8
Prevention tablets	1	0.4
Reasons for not willing to use a method (n = 134) *		
I am yet to get my desired no/sex of children	9	6.7
I fear its side effects	8	6.0
Religious opposition	4	3.0
The fear of infertility	4	3.0
I do not approve the use of MC	1	0.7
It is not easy to use	1	0.7
It is not effective in preventing pregnancy/STI	1	0.7

*Multiple options

Table 7: Factors associated with MC decisions of the respondents.

Variable	Contraceptive decision		X^2	P value
	Yes	No		
Trimester				
Not 3rd trimester	23	16	0.611	0.434
3rd trimester	222	118		
Ever used				
Yes	178	93	0.449	0.503
No	67	41		
Desire to have more children				
Yes	154	118	27.155	<0.0001*
No	91	16		
No of living children among those who desire more children				
0	65	61	16.191	0.001*
1	39	43		
2	33	10		
≥ 3	17	4		
No of children desired among those who desire more children				
1	2	0	2.663	0.616
2	7	8		
3	58	43		
4	63	45		
>4	24	22		
Partner's level of education				
Primary	6	5	0.255	0.880
Secondary	97	50		
Tertiary	142	80		
Respondent's level of education				
Primary	11	7		
Secondary	104	48	1.593	0.451
Tertiary	130	79		
Have knowledge of MC				
Yes	201	108	0.12	0.729
No	44	26		
Discussed desire for MC with partner				
Yes	146	33	42.491	<0.0001*
No	99	101		
Prior thought of using MC				
Yes	215	22	188.151	<0.0001*
No	30	112		
Decisions on MC				
Partner alone	41	17		
Self alone	14	15	4.35	0.114
Both of us	190	102		
Discuss MC with partner				
Yes	167	42	47.477	<0.0001*
No	78	92		
Partner supports using MC				
Yes	134	23	11.775	0.003*
No	16	10		
Not sure	17	9		
Discuss MC with friends				
Yes	148	53	15.127	<0.0001*
No	97	81		
Friends support using MC				
Yes	109	38		
No	24	10	0.202	0.904
Not sure	15	5		
Parity				
Nulliparity	96	69		
Primiparity	44	42	28.484	<0.0001*
Multiparity	94	23		
Grand-multiparity	11	0		
Age of respondents				
15 – 24	29	12		
25 – 34	161	98	2.219	0.330
35 – 44	55	24		
Marital status				
Married	243	127	7.259	0.007*
Not married	2	7		

*Statistically significant ($P < 0.05$)

Table 8: Predictors of willingness to adopt MC among respondents.

Variables	Decided to use MC		Crude OR (95% C.I)	P value	Adjusted OR (95% C.I)	P value
	Yes	No				
Prior thought of adopting MC						
Yes	215	22	36.485 (20.110 – 66.193)	<0.0001*	24.628 (11.139 – 54.452)	<0.0001*
No	30	112	1		1	
Discussed MC with partner						
Yes	167	42	4.690 (2.981 – 7.379)	<0.0001*	0.889 (0.373 – 2.122)	0.791
No	78	92	1		1	
Discussed MC with friend						
Yes	148	53	2.332 (1.516 – 3.587)	<0.0001*	1.262 (0.631 – 2.522)	0.511
No	97	81	1		1	
Marital status						
Married	243	127	6.697 (1.371 – 32.710)	0.019*	8.274 (0.568 – 120.439)	0.842
Not married	2	7	1		1	
No of living children				0.002*		0.097
0	75	68	0.251 (0.080 – 0.787)	0.018*	0.276 (0.065 – 1.185)	0.083
1	48	46	0.213 (0.066 – 0.689)	0.010*	0.201 (0.045 – 0.905)	0.037*
2	54	13	0.776 (0.212 – 2.846)	0.703	0.539 (0.104 – 2.803)	0.463
≥ 3	68	7	1		1	
Discussed desire to use MC with partner						
Yes	142	11	4.335 (2.709 – 6.937)	<0.0001*	1.316 (0.546 – 3.168)	0.541
No	73	11	1		1	

*Statistically significant ($P < 0.05$)

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