

## Mordern Contracepti0n by Nursing Mothers in An Urban Community, Southern Nigeria.

Emmanuel Okwudili Oranu \*, Noble Dumbari Mbooh

Department of Obstetrics and Gynaecology, University of Port Harcourt Teaching Hospital, Port Harcourt, Nigeria.

Corresponding author: Oranu Emmanuel. emmanuel.oranu@uniport.edu.ng, meetemma24@gmail.com

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### Abstract

**Background:** Short inter-pregnancy interval could result from early resumption of sexual intercourse post partum. This is associated with negative maternal and infant health outcome. Contraception usage is one of the interventions that prevent unplanned pregnancy. The aim of this study was to determine the awareness and uptake of modern contraception among nursing mothers at the University of Port Harcourt Teaching Hospital.

**Method:** The study was carried out at the post natal and immunization clinics of the University of Port Harcourt Teaching Hospital. A pretested self-administered questionnaire was used to obtain the data from nursing mothers. The data analysis was done with Statistical Package for Social Sciences (SPSS) version 25. The data was presented in frequency and proportions.

**Results:** The result shows that 99.4% of respondents were aware of contraception and 98.8% had knowledge of the benefits of contraception, while only 34 (21.0%) of them were using modern contraception. Ninety-six (75.0%) opted not using any contraception. Ninety four (94.4%) of the respondents had post-partum contraception discussed with them during the ante-natal period.

**Conclusions:** Most of the nursing mothers in this study were aware of postpartum contraception, but usage was low. This is more so for immediate postpartum contraception. Couple-centred counselling and discussion on postpartum sexuality, pregnancy risks, and contraception will improve individual knowledge and informed choices about post-partum contraception.

**Keywords:** awareness, uptake, modern contraception, nursing mothers, post-partum.

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### I. Introduction

Women may resume sexual intercourse anytime during the postpartum period [1]. Repeat pregnancies after a short inter-pregnancy interval are common and are associated with negative maternal and infant health outcomes [2]. The health of mothers and children remain a subject of global concern[3]. While 40% of sexually active women are at risk of pregnancy during the first six months postpartum, this risk increases to 79% among women 6–11 months postpartum, and then to 89% among women 12–23 months postpartum [4]. Contraception usage is one of the interventions to improve maternal health[5].

Contraceptive use has increased in many parts of the world, especially in Asia and Latin America, but continues to be low in sub-Saharan Africa [6]. Target 7 of the Sustainable Development Goal 3 aimed to ensure universal access to sexual and reproductive health-care services including family planning, information and education. <sup>7</sup> According to the World Health Organisation, 214 million women of reproductive age in developing countries who want to avoid pregnancy are not using a modern contraceptive method. <sup>6</sup> Ndayizigiye, et al, reported that despite the awareness, there was a low (2.6%) uptake of contraceptives among women of reproductive age in a facility-based survey in 39 health clinics in two rural districts of Burundi[8]. However, Jalang et al, reported that more than three quarters (86.3%) of nursing women at the immunisation clinic in Kenya, used contraceptives within 1 year of delivery[9].

Expectant mothers have points of contact within the health care system that can provide opportunities to integrate Post-Partum Family Planning with Maternal, Newborn and Child Health (MNCH) interventions during the 12-month period after childbirth[10]. The antenatal and postpartum periods present a unique opportunity to discuss contraceptive options, many of which can be safely initiated immediately after childbirth[11]. Postpartum contraception focuses on the prevention of unintended and closely spaced pregnancies through the first 12 months following childbirth[10]. Studies show that roughly 95% of women who are 0 to 12 months postpartum want to avoid pregnancy in the next 24 months, but 70% of them are not using contraception[12].

Women who have recently given birth are amongst those with the highest unmet need for contraception[12]. Unintended pregnancy and short inter-pregnancy intervals (of less than 1 year) can increase the risk of obstetric and neonatal complications[3]. Despite the benefits of family planning, contraceptives are underutilized in many parts of the developing world[13]. In resource-limited, rural locations in Africa, where access to information is scarce, availability of modern family planning methods alone will likely not ensure uptake, especially when access is limited to clinical settings[8].

Studies have shown that, the puerperium presents an ideal and important opportunity to initiate effective contraception[114,15]. A study by Emiru et al showed that 11.1% of nursing mothers adopted modern contraception method within 2 months post- partum in Ethiopia[15] Though, many women who have recently given birth are highly motivated to initiate an effective contraceptive method, there seems to be limited data in this part of world. Hence this study seeks to determine awareness and uptake of contraception by nursing mothers at the immunisation and post natal clinics of the University of Port Harcourt Teaching Hospital. The result of the study will help in reviewing contraception policy and implementation of programme that will ultimately improve maternal health.

## II. Method And Material

It was a cross sectional descriptive study in nursing mothers attending the postnatal and immunisation clinics of the University of Port Harcourt Teaching Hospital; excluding those who did not give consent.

The University of Port Harcourt is a tertiary health care centre located in the state capital, Port Harcourt. It serves people of different race and socioeconomic strata due to the cosmopolitan nature of Port Harcourt. A pre tested self-administered questionnaire was used to obtain the data. Sample size was determined using Leshe-Kish formula:  $N = Z^2Pq/d.^2$  Where N = Sample size, Z = 95% Confidence Interval, d = is the margin of precision (5%), p= proportion of nursing mothers who adopted a modern contraception within 2 month post-partum in Ethiopia given at 11.1% from a study by Emiru et al.2020.  $100-p = q =$ Proportion of nursing mothers who have not adopted modern contraception.

Sample size (n) =  $1.96^2 \frac{(11.1(100-11.1))}{5^2}$ .  $150.54 = 151$  approximate. Plus 5% attrition

Total sample size (n) =  $8 + 151 = 159$  approximated (minimum sample size).

A pretested, validated self –administered questionnaire was served on the 162 respondents who were selected by simple random technique. Data collected was inputted into the Statistical Package for Social Sciences (SSPS) version 25, manufactured by IBM. Confidence interval was set at 95% and p value at 0.05 was taken as significant.

### Ethical consideration

Ethical clearance was obtained from the ethical committee of the University of Port Harcourt Teaching Hospital.

## III. Results

**Table 1: Social demographic characteristics of the respondents n=162**

Variable	Frequency(n)	Percent (%)
<b>Age group</b>		
20-24	10	6.2
25-29	46	28.4
30-34	65	40.1
>34	41	25.3
<b>Parity</b>		
None	6	3.7
1	68	42
2 or more	88	54.3
<b>Marital status</b>		
Married	154	95.1
Single	6	3.7
Widowed	1	0.6

Separated	1	0.6
<b>Religion</b>		
Pentecostal	95	58.6
Catholic	36	22.2
Orthodox	17	10.5
Others	11	6.8
Islam	3	1.9
<b>Employment</b>		
Self employed	59	36.4
Civil servant	56	34.6
Unemployed	37	22.8
Student	10	6.2

**Table 2: Awareness and uptake of contraception n=162**

<b>Variable</b>	<b>Frequency(n)</b>	<b>Percent (%)</b>
<b>Aware of contraception</b>		
Yes	161	99.4
No	1	0.6
<b>Knowledge of benefit of contraception</b>		
Yes	160	98.8
No	2	1.2
<b>On contraception usage</b>		
Yes	34	21
No	128	79
<b>Type of contraceptive uptake in use n=34</b>		
Barrier	15	44.1
Implant	9	26.5
BTL	5	14.7
POP	2	5.9
IUD	2	5.9
<b>Reasons for not using contraception n=128</b>		
Choice	96	75.0
Side effects	16	12.5
Desire fertility	16	12.5
<b>Intention of using contraceptive n=128</b>		
Yes	65	50.8
No	63	49.2
<b>Why don't you intend to use n=63</b>		

Dislike	26	41.4
Desire fertility	16	25.4
Choice	12	19.0
Side effects	9	14.2

The result shows that most of the respondents 161(99.4%) were aware of contraception, 160(98.8%) had knowledge of the benefits of contraception, while 34 (21.0%) were using contraception. Ninety four (94.4%) of respondent had post-partum contraception discussed during their ante-natal period.

**Table 3: Partner’s view on contraception n=162**

Variable	Frequency(n)	Percent (%)
<b>Discussed with husband</b>		
Yes	132	81.5
No	30	18.5
<b>Husband supportive n=132</b>		
Yes	93	70.5
No	39	29.5

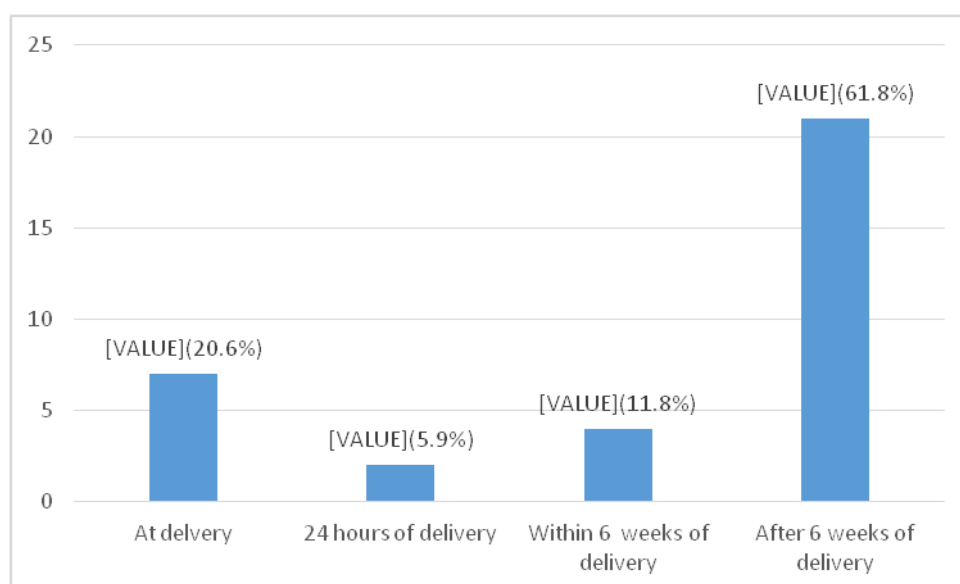


Figure 1: Onset of contraception initiation.

Figure 1 shows that 61.8% of the thirty four (34) respondent using contraception started it after 6 weeks post-partum.

**Table 4: Relationship between social demographic characteristics and awareness of Contraception n=162**

Variable	Awareness of contraception		X <sup>2</sup> (P-Value)
	Yes (%)	No (%)	
<b>Age</b>			
<24	10(6.2)	0(0.0)	2.663(1.000)
25-29	46(28.6)	0(0.0)	
30-34	64(39.8)	1(100.0)	
>34	41(25.5)	0(0.)	
<b>Parity</b>			
None	6(3.7)	0(0.0)	2.847(0.457)
One	67(41.6)	1(100.0)	
Two or more	88(54.7)	0(0.0)	
<b>Education</b>			
Primary	2(1.2)	0(0.0)	0.175(1.000)
Secondary	22(13.7)	0(0.0)	

Tertiary	137(85.1)	1(100.0)	
<b>Marital status</b>			
Single	6(3.7)	0(0.0)	0.052(1.000)
Married	153(95.0)	1(100.0)	
Widowed	1(0.6)	0(0.0)	
Separated	1(0.6)	0(0.)	
<b>Religion</b>			
Islam	3(1.9)	0(0.0)	4.712(1.000)
Catholic	36(22.4)	0(0.0)	
Orthodox	17(10.6)	0(0.0)	
Pentecostal	94(58.4)	1(100.0)	
Others	11(6.8)	0(0.0)	
<b>Employment</b>			
Employed	56(34.8)	0(0.0)	2.859(1.000)
Self-employed	58(36.0)	1(100.0)	
Unemployed	37(23.0)	0(0.0)	
Student	10(6.2)	0(0.0)	

$P \leq 0.05$  (statistically significant)

Table 4 shows that there was no significant relationship between social demographic characteristics and awareness of contraception.

**Table 5: Relationship between social demographic characteristics and use of Contraception**

Variable	Use of contraception		$\chi^2$ (P-Value)
	Yes (%)	No (%)	
<b>Age</b>			
19-24	1(2.9)	9(7.0)	0.839(0.861)
25-29	11(32.4)	35(27.3)	
30-34	13(38.2)	52(40.6)	
>34	9(26.5)	32(25.0)	
<b>Parity</b>			
None	0(0.0)	6(4.7)	2.298(0.292)
One	12(35.3)	56(43.8)	
Two or more	22(64.7)	66(1.6)	
<b>Education</b>			
Primary	1(2.9)	1(0.8)	2.054(0.338)
Secondary	3(8.8)	19(14.8)	
Tertiary	30(88.2)	108(84.4)	
<b>Marital status</b>			
Single	0(0.0)	6(4.7)	4.539(0.171)
Married	33(97.1)	121(94.5)	
Widowed	1(2.9)	0(0.0)	
Separated	0(0.)	1(0.8)	
<b>Religion</b>			
Islam	1(2.9)	2(1.6)	1.620(0.806)
Catholic	8(23.5)	28(21.9)	
Orthodox	4(11.8)	13(10.2)	
Pentecostal	20(58.8)	75(58.6)	
Others	1(2.9)	10(7.8)	
<b>Employment</b>			
Employed	12(35.3)	14(34.4)	2.953(0.407)
Self-employed	16(47.1)	43(33.6)	
Unemployed	5(14.7)	32(25.0)	
Student	1(2.9)	9(7.0)	

$P \leq 0.05$  (statistically significant)

Table 5 shows that there was no significant relationship between social demographic characteristics and the use of contraception.

#### **IV. Discussion**

The adoption of modern postpartum contraceptives impacts not only on the reduction in the number of unplanned pregnancies couples have, but also an improvement on the well being of the mother and the child[10,16]. Almost all the respondents (99.4%) were aware of contraception and also knew the benefits. This is similar to a study in Edo State, where all the respondents were aware of contraception[17]. This could be as a result of the multiple contacts between the nursing mothers and health care providers from ante-natal clinics to immunisation clinics where health talk on family planning were given. It then means that the various chains of maternal health care service delivery systems of family planning, postnatal and immunization clinics are impacting on their corporate social responsibility of adequate counselling to the mothers on post partum contraception.

Studies have shown that the need for contraceptives varies during a woman's reproductive life, but the demand and need is highest during the postpartum period[9,17,18]. However, this study shows that despite the high awareness, only 21% of respondents had started using contraception at the time of the interview. This is similar to a study in Ibadan which was 20.7%, but higher than 11.1% in Ethiopia[15] and 13% in Benin- Edo State[17]. It was noted that the commonest contraceptive method used was the barrier method (noted for its high failure rate). This is similar to studies in Benin and Ibadan which reported that male condom was the most common post-partum contraceptive method[1,17]. This popularity of male condom might be due to its apparent advantages of being cheap and have lesser side effects, readily available and general acceptability. Implant is equally gaining acceptance as it was the second most commonly used contraceptive method in this survey. This is against an earlier study in Port Harcourt, where implant uptake was the fourth accounting for 9.4%[19]. This study is also contrary to another in Jos, where the commonest contraception was pills, followed by injectable[20].

Seventy five (75%) percent of the respondent did not use modern contraception either by choice or had no reason. This apparently shows the dare need for extended counselling on the need to use contraception. Ujah reported that desire for further childbearing and no reason were the commonest factors responsible for non - initiation of post-partum contraception[20]. It could also be that the women may consider their reasons too private to be discussed with anyone[16]. The group of women who desired more children was appreciable and this can be explained by the prevailing mind set of people living in sub-Saharan Africa about child-bearing which includes the desire for a large family size, desire for a specific number of children of a particular gender and a sense of fulfilment in larger family size[16]. Some other reasons for non-use of contraception include lack of sexual intercourse or infrequent sexual intercourse which was seen in women interviewed in Nepal and Bangladesh[16]. These were not given by the respondents in his study. The inability to volunteer such information may stem from the fact that discussions about sex in considered private in this part of the globe. Other studies also supported that low uptake of contraception may be partly due to postpartum abstinence and amenorrhea[5,15]. The dislike and no reason to use contraception even when provided constitute 66.4% of the 63 respondents who did not intend using contraception. This explained the need for adequate counselling, because women who had high levels of myths and misconceptions about family planning have difficulty in using contraception[20].

Interestingly, almost all the respondents (94.1%) were informed of post-partum contraception during the ante-natal clinic visits. This is similar to other study in Benin, where 93% were informed during antenatal clinic[17]. With the high awareness of contraception, but low usage, it means the mothers were possibly not adequately counselled to make informed decision on the acceptance of contraceptive use. Multiple antenatal contraceptive counselling sessions improve the uptake of modern postpartum contraception[21-23]. This should be encouraged, imbibed and strengthened so as to translate the high awareness of contraception into high usage.

Eighty one percent of the respondent had discussed contraception with their spouses and 70% of this number had their spouses support. This is a significant step in male involvement in female reproductive health. Male partner support for family planning has been identified as a significant factor influencing family planning uptake among nursing mothers[21].

There is the risk of becoming pregnant soon after birth and before the sixth week post-partum. Hence, women should use contraception for prevention of unintended and possibly unwanted pregnancy at this critical period. This study shows that only 8% of the respondent had started contraception before 6 weeks which progressed to 21 % after 6 weeks. This is worrisome because, this post-partum period is the most likely time for them to accept contraception. It means that if they 'escape' contraceptive uptake at this point, it is very unlikely they will key in much later, hence the need for the emphasis in the immediate post partum period in particular and the nursing period in general.

#### **V. Conclusion**

Most of the nursing mothers in this study area were aware of postpartum contraception, but usage was low. This is more true for immediate postpartum. Couple-centered counselling and discussion on postpartum

sexuality, pregnancy risks, and contraception will improve individual knowledge, informed choices and uptake of post-partum contraception.

**CONSENT:** All the respondents gave informed consent to participate in the study.

**COMPETING INTREST:** Authors declares that there was no competing interest among them.

### Reference

- [1]. Adedokun B, Abdus-Salam RA, Babawarun T, Morhason-Bello I, Ojengbede O. Resumption of Sexual Intercourse and Family Planning use Among Postpartum Women Attending Infant Welfare Clinics in Ibadan, Southwest Nigeria – A Cross-Sectional Study. *Niger J ClinPract.* 2020; 23: 1648-55.
- [2]. Brunson MR, Klein DA, Olsen CH, Weir LF, Roberts TA. Postpartum contraception: initiation and effectiveness in a large universal healthcare system. *AJOG*, 2017;1 :55-65.
- [3]. Allagoa DA, Nyengidiki TK. Knowledge, Attitude And Practice Of Contraception Amongst Antenatal Patients At The University Of Port Harcourt Teaching Hospital, Port Harcourt. *T N H J.* 2011; 11(3): 89-92.
- [4]. USAID Family Planning Needs during the First Two Years Postpartum in Nigeria. Retrieved, March, 3<sup>rd</sup>, 2020.
- [5]. Dasgupta ANZ., Zaba B, Crampin AC. Postpartum uptake of contraception in rural Northern Malawi: A prospective study. *Contraception* 2016.
- [6]. World Health Organization. Family Planning/Contraception Fact Sheet. 2018. <http://www.who.int/mediacentre/factsheets/fs351/en/>. Retrieved, March 2<sup>nd</sup>, 2020.
- [7]. United Nations. *Transforming Our World: The 2030 Agenda for Sustainable Development*
- [8]. Ndayizigiye M, Fawzi MC, Lively CT, Ware NC. Understanding low uptake of contraceptives in resource-limited settings: a mixed-methods study in rural Burundi. *BMC Health Services Research.* 2017.
- [9]. Jalang'o R, Thuita F, Barasa SO, Njoroge P. Determinants of contraceptive use among postpartum women in a county hospital in rural KENYA . *BMC Public Health* 2017 17:604
- [10]. World Health Organization. 2013. Programming strategies for postpartum family planning. [Google Scholar]
- [11]. Cooper M, Cameron S. Postpartum contraception. *The Obstetrician & Gynaecologist.* 2018; 20(3), 159-166.
- [12]. WHO. Postpartum family planning: essential for ensuring health of women and their babies World Contraception Day 2018.
- [13]. Tsui AO, Brown W, Li Q. Contraceptive Practice in sub-Saharan Africa. *Population and Development Review.* 2017; 43: 166-191.
- [14]. Lori JR, Chuey M, Munro-Kramer ML, Ofosu-Darkwah H, Adanu RMK. Increasing postpartum family planning uptake through group antenatal care: a longitudinal prospective cohort design. *Reprod Health.* 2018; 15:208.
- [15]. Emiru AA, Alene GD, Debelew GT. The role of maternal health care services as predictors of time to modern contraceptive use after childbirth in Northwest Ethiopia: Application of the shared frailty survival analysis. *PLoS ONE.* 2020; 15(2): e0228678.
- [16]. Mohammed-Durosinlorun A, Adze J, Bature S, Abubakar A, Mohammed C, Taingson M. Time interval to initiation of contraceptive methods following childbirth in a low-resource setting. *Niger J ClinPract.* 2017; 20:1537-43
- [17]. Obi AL, Onoriose BO. Determinants of family planning uptake among nursing mothers attending immunization clinics in Benin City, Edo State. 2019; 19(2): 52-61.
- [18]. Adedokun B, Abdus-Salam RA, Babawarun T, Morhason-Bello I, Ojengbede O. Resumption of Sexual Intercourse and Family Planning use Among Postpartum Women Attending Infant Welfare Clinics in Ibadan, Southwest Nigeria – A Cross-Sectional Study. *Niger J ClinPract.* 2020; 23: 1648-55.
- [19]. Oranu EO, Ojule JD. Implanon Implant Contraception at the University of Port Harcourt Teaching Hospital: A Periodic Review. *AJMAH.* 2018; 11(1): 1-6.
- [20]. Ujah OI, Ocheke AN, Mutahir JT, Okopi JA, Ujah IAO. Postpartum contraception: determinants of intention and methods of use among an obstetric cohort in a tertiary hospital in Jos, North Central Nigeria. *Int J ReprodContraceptObstet Gynecol.* 2017; 6:5213-8.
- [21]. Kaydor VK, Adeoye IA, Olowolafe TA, Adekunle AO. Barriers to acceptance of post-partum family planning among women in Montserrado County, Liberia. *Niger Postgrad Med J.* 2018; 25:143-8.
- [22]. Adanikin AI, Onwudiegwu U, Loto OM. Influence of multiple antenatal counselling sessions on modern contraceptive uptake in Nigeria. *The European Journal of Contraception and Reprod Health Care.* 2013; 18: 381–387.
- [23]. Hounton S, Winfrey W, Barros AJD, Askew I. Patterns and trends of postpartum family planning in Ethiopia, Malawi, and Nigeria: evidence of missed opportunities for integration. *Global Health Action.* 2015; 8:1, 29738.
- [24]. Akinlo A, Bisiriyu1 A, Esimai O. Use of maternal health care as a predictor of postpartum contraception in Nigeria. *African Population Studies.* 2014; 27 (2): 287-300.
- [25]. Tran NT, Seuc A, Tshikaya B, Mutuale M, Landoulsi S, Kini B, Nkolomonyi BM, Kyloka JN, Langwana F, Cuzin-Kihl A, Kiarie J, Gaffield ME, Yodi R, Kulimba DM. Effectiveness of post-partum family planning interventions on contraceptive use and method mix at 1 year after childbirth in Kinshasa, DR Congo (Yam Daabo): a single-blind, cluster-randomised controlled trial. *Lancet Glob Health.* 2020; 8: e399–41.
- [26]. Durowade KA, Omokanye LO, Elegbede OE, Adetokunbo S, Olomofe CO, Ajiboye AD, Adeniyi MA, Sanni TA. Barriers to Contraceptive Uptake among Women of Reproductive Age in a Semi-Urban Community of Ekiti State, Southwest Nigeria. *Ethiop J Health Sci.* 2017; 27(1):121-128.

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