Sources of Information, Discontinuation, and the Relationship Between Sociodemographic /Obstetric Factors, and Indications for Postpartum Contraception at A Tertiary Hospital in Rivers State, Nigeria.

Background: Over the years, the unmet need for contraception has been a cardinal indicator for monitoring the progress of family planning programs [1] and recently appears more critical to family planning programs [2]. Survey reports have revealed a high proportion of women who ordinarily wanted to stop or delay childbearing but are not on any form of contraception [3]. The postpartum period, defined clinically as 6 weeks or 42 days after birth (and extended to 12 months after delivery by WHO), is an important time to initiate contraception as women are assessing health care, and have increased motivation to avoid pregnancy[4]. The sources of information on methods of postpartum contraception can affect the use of such methods by clients. Incorrect information on postpartum contraception can lead to reduced uptake and a high rate of discontinuation of such contraceptive methods. One can discontinue a method of contraception based on misconceptions about the method. A study carried out by Bankole and colleagues among female students revealed that the inability to receive accurate and reliable information was one of the major challenges faced by clients in seeking information on contraception.[5]

Previous studies have revealed poor knowledge of return to fertility after childbirth with most women, especially in sub-Saharan Africa, attributing it to the resumption of menstruation [6-10]. As such, they are prone to unintended and/or unwanted pregnancies due to the non-use of postpartum contraception. Over 80% of unwanted pregnancies occur worldwide, resulting in abortion and its attendant consequences [11]. In low- and middle-income countries(LMICs), 49% of pregnancies among women of reproductive age have been reported to be unintended [12, 13]. Unwanted and/ or unintended pregnancies as well as closely spaced births are public health challenges, [14] as they are associated with increased maternal, neonatal, and child morbidities and mortalities respectively [8, 15]. Additionally, studies have revealed that postpartum women can ovulate and get pregnant without resumption of menses [16, 17]; and the mean time to first ovulation following childbirth has been reported to vary from 45 to 95 days in a systematic review of studies on the time to return of fertility [14, 18]. Earlier ovulation on days 25 and 27 after delivery has been reported [18, 19]. Understanding the sources of information and the reasons for discontinuation will help in strengthening planning and strategies to address the unmet need for postpartum contraception. The study aimed to determine the sources of information, reasons for discontinuation, and the association between sociodemographic/obstetrics factors, and the indications for contraception.

MATERIALS AND METHODS

A cross-sectional study was conducted involving the review of family planning records of postpartum women at the RSUTH from 1st January 2018 to 31st December 2022. Cases of the permanent method of contraception (BTL) performed in the hospital were collated from the labour ward, post-natal, and theatre records in addition to family planning clinic records. The total number of deliveries during the review period was obtained from the labour ward and theatre registers. Descriptive and inferential statistics were derived using International Business Machine (IBM) Statistical Product and Service Solutions formerly, known as Statistical Package for Social Sciences (SPSS), version 25.0 (Armonk, NY). Tests of association were caried out using Pearson Chi-square test and Fisher's exact test where applicable at a statistical significance level of $p < 0.05$.

RESULTS & DISCUSSIONS

Table 1 shows the sociodemographic and obstetric characteristics of the users of postpartum contraception. The mean (SD) age of the clients was 34.5 ±5.2, (95% CI: 34.5,34.9). The majority of the participants were Christians 600(98.5%), multipara 469(77.0%), had tertiary-level education 360(59.1%), and resided in the urban area 519 (85.2%).

Table 1. Sociodemographic and obstetric characteristics of the study participants

Variables	Number (N=609)	Percentage
Age group (years)		
<20	2	0.3
20-24	22	3.6
25-29	61	10.0
30-34	221	36.3
35-39	206	33.8
40-44	81	13.3
45-49	16	2.6
Mean age	SD*	95%CI+
34.51	5.20	34.51,34.92
Educational status		
Non-formal	2	0.3
Primary	41	6.8
Secondary	206	33.8
Tertiary	360	59.1
Parity		
0 (Nullipara)	2	0.3
1 (Primipara)	43	7.1
2-4(Multipara)	469	77.0
≥ 5(Grand-multipara)	95	15.6
Area of Residence		
Rural	90	14.8
Urban	519	85.2
Religion		
Christianity	600	98.5
Islam	9	1.5

*Standard deviation +95% Confidence Interval

Most of the of the participants 483 (79.3%) got information about postpartum contraception from the hospital while 109(17.9%) from family/friends (Figure 1).

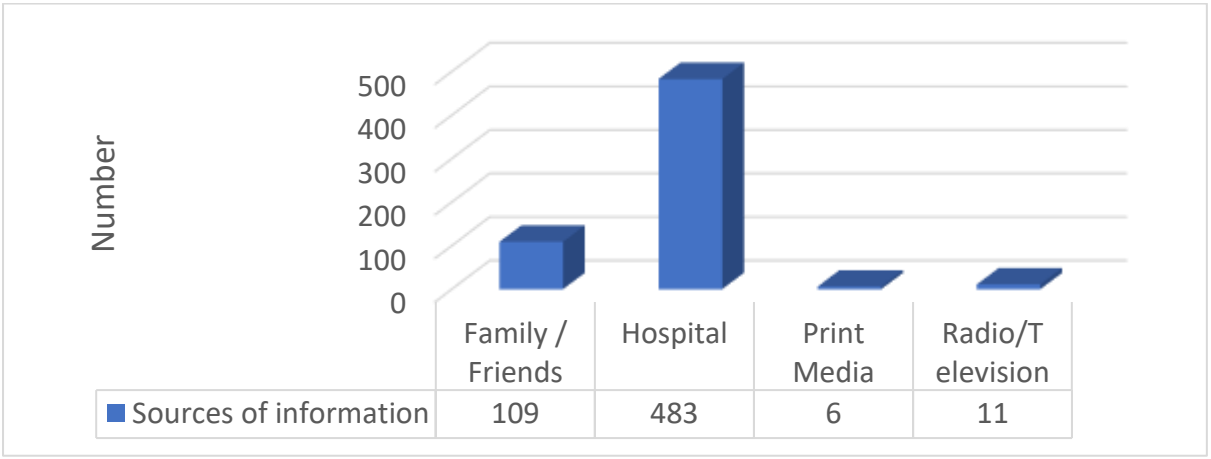

Figure 1. Sources of information on postpartum contraception

Thirty- nine (5.9%) women discontinued use of their chosen method of postpartum contraception for various reasons presented in Figure 2. Of the 39 that discontinued postpartum contraception 16 (41%) was due to heavy menstrual bleeding; followed by desire for conception 12 (31%) (Figure 2).

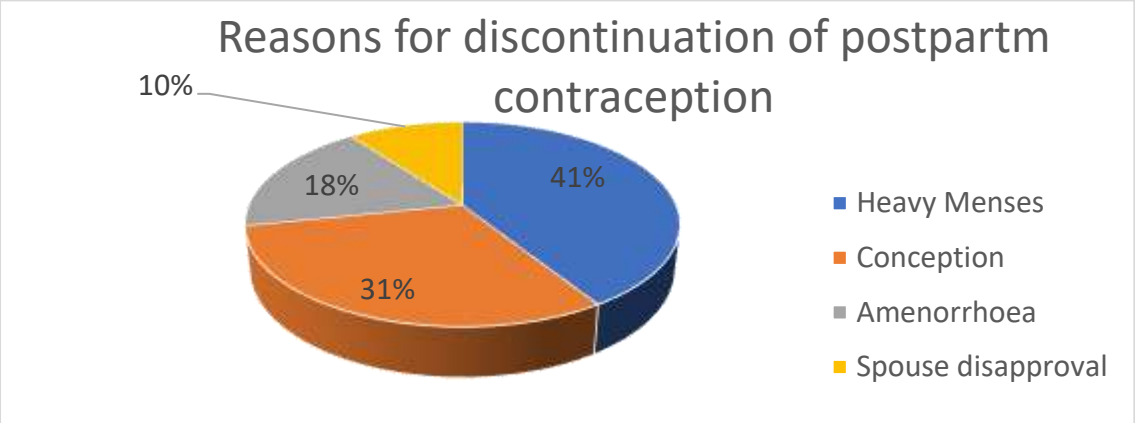

Figure 2. Reasons for discontinuation of Postpartum contraception

Table 2, shows the association between sociodemographic factors, sources of information and the indications for postpartum contraception. Age (p<0.001), parity (p=0.008), area of residence (p=0.040) and religion (p=0.019) were statistically significantly associated with the indications for PPC. Educational status did not show any evidence of association.

Table 2. Association between sociodemographic/Obstetric factors, sources of information and indications for postpartum contraception

Variables	**Indications for PPC**			**Total**	**X^2 /Fisher's Exact test (d.f) +**	**p-value (95%CI) ++**
Age group (years)	Birth spacing	Completed family size	Medical condition			
<20	2(100.0)	0	0	2(100)	38.245	P<0.001*
20-24	22(100.0)	0	0	22(100)	(12) #	(0.000,0.000)
25-29	54(88.5)	6(9.8)	1(1.6)	61(100)		
30-34	155(70.1)	64(29.0)	2(0.9)	221(100)		
35-39	128(62.1)	72(35.0)	6(2.9)	206(100)		
40-44	64(79.0)	14(17.3)	3(3.7)	81(100)		
45-49	13(81.3)	3(18.8)	0	16(100)		
Total	**438(71.9)**	**159(26.1)**	**12(2.0)**	**609(100)**		
Educational status						
Non-formal	0	2(100)	0	2(100)	8.261(6)	0.179
Primary	27(65.9)	12(29.3)	2(4.9)	41(100)		(0.171,0.187)
Secondary	147(71.4)	55(26.7)	4(1.9)	206(100)		
Tertiary	264(73.3)	90(25.0)	6(1.7)	360(100)		
Total	438(71.9)	159(26.1)	12(2.0)	609(100)		
Parity						

0 (Nullipara)	2(100)	0	0	2(100)	16.450	0.008*
1 (Primipara)	40(93.0)	3(7.0)	0	43(100)	(6) #	(0.006,0.009)
2-4(Multipara)	323(68.9)	134(28.6)	12(2.6)	469(100)		
≥ 5 (Grand-multipara)	73(76.8)	22(23.2)	0	95(100)		
Total	**438(71.9)**	**159(26.1)**	**12(2.0)**	**609(100)**		
Area of Residence						
Rural	74(82.2)	14(15.6)	2(2.2)	90(100)	6.097(2)	0.040*
Urban	364(70.1)	145(27.9)	10(1.9)	519(100)		(0.040,0.054)
Religion						
Christianity	435(72.5)	154(25.7)	11(1.8)	600(100)	8.799(2)	0.019*
Islam	3(33.3)	5(55.6)	1(11.1)	9(100)		(0.17,0.022)

**significant* +*degree of freedom* # *Fisher Exact test* X^2 *Chi-square test*

The commonest source of information on PPC was from health workers in the hospital followed by information disseminated by their families and friends, which was in keeping with previous studies [20, 21]. During the period of pregnancy, mothers receive different sessions of health talks including family planning in the antenatal clinic, and after delivery they also receive same in postnatal clinic and during their visits for their child(ren)'s immunization. However, our finding is in contrast to those of Idowu et al.,[22] in south western Nigeria where mass media was the most common source of information on postpartum family planning. Nevertheless, it is pertinent to use the different sources of information to create awareness and educate the public on the importance of postpartum family planning.

The most common reason given by women for discontinuation of postpartum contraception was bleeding side effects-heavy menstrual bleeding. This varies with previous studies[11, 23] where other side effects of the contraceptives were the most reported reason for discontinuation of the contraceptives. Adequate information a woman has about contraceptive methods will enhance continuation of such method. be helpful in addressing the concerns of women about any of the methods.

Conclusion: The source of information on PPC among postpartum women was mainly from the hospital and discontinuation was due to bleeding side effects (heavy menses). Sociodemographic /obstetric factors associated with PPC use were age, parity, area of residence, and religion. Improving PPC in healthcare facilities might depend on women's family planning intentions and sociodemographic characteristics. Adequate information about the different methods will help address the concerns of women about any of the methods. Contraceptive service providers and clinicians play a crucial role concerning dissemination of information about contraceptives. As such, it is recommended maximize every contact with women at the family planning clinic as well as antenatal and postnatal clinics to counsel them on the need for postpartum contraception. Moreso our findings will enhance adequate formulation of policies, effective programmes and strategies to improve the health of the populace.

Keywords: Postpartum contraception, Family planning, Unmet need, Rivers State, Nigeria

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