# AWARENESS AND UTILISATION OF POSTNATAL CARE SERVICES AMONG ANTENATAL CLINIC ATTENDEES AT AHMADU BELLO UNIVERSITY TEACHING HOSPITAL ZARIA

John Kingsley .C. Nwajagu, Nkeiruka Ameh, Adekunle .O. Oguntayo

Department of Obstetrics and Gynaecology, Ahmadu Bello University Teaching Hospital, Zaria, Nigeria.

# ABSTRACT

BACKGROUND: Postnatal period is the period from one hour to six weeks after the birth of an infant. It is a critical period for the woman, her new born and her family on a physiological, emotional and social level especially because 50-70% of all maternal deaths occur during this period.

AIM: To identify the determinants of women's utilization of postnatal clinic services (PNCs).

METHODS: A descriptive study on 188 eligible antenatal clinic attendees at the Obstetrics and Gynaecology Department of Ahmadu Bello University Teaching Hospital (ABUTH) Shika-Zaria from October to December 2013. Structured questionnaires were used for the study. Approval was obtained from the Ethical committee of the ABUTH, Shika-Zaria. TheSPSS version 16 was used for data analysis and the results was subjected to descriptive analysis.

RESULTS: The majority were Hausas. 39.9% had tertiary school education. Majority of them (42%) were multiparous women, 77.7% were aware of the postnatal services they should receive. Previous antenatal clinic (ANC) attendance was 95.1% and 74.4% attended PNC. Educational level affected PNC utilisation, tertiary education (60%), secondary (28%) and primary (5%). Employed respondents had more PNC attendance (84%) than the unemployed (25%).

CONCLUSION: The study shows that awareness, education, employment and antenatal clinic attendance are the promoting factors to utilisation of PNC services and the hindering factors to utilisation of PNCs include lack of awareness, distance and lack of transportation, poverty or lack of money.

KEYWORDS: Awareness, utilisation, Postnatal care services; awareness and utilisation

NigerJMed2017: 112-116 Ó 2017. Nigerian Journal of Medicine

# INTRODUCTION

Postnatal period also called Puerperium is defined by the WHO as the period from one hour to six weeks after birth of an infant. With regards to the timing of postnatal visits, WHO recommends visits within 6-12hours after birth, 3-6days, 6weeks, and at 6months (6-6-6-6model). It is a critical period for a woman, her new born and her family on a physiological, emotional and social level especially because fifty to seventy percent of all maternal deaths occur during this period<sup>1-2</sup>.

The world health organization (WHO) contends that the immediate cause of death is the absence, inadequacy or underutilization of healthcare system. A woman should not die in child birth because the vast majority of maternal deaths can be prevented or

Corresponding Author: Dr. John Kingsley C. Nwajugu Dept of Obstertrics and Gynaecology, Ahmadu Bello University Teaching Hospital E-mail: jayking5000@yahoo.com reduced if women had access to or visited maternal health services during pregnancy, child birth or the first month of delivery<sup>2-3</sup>.

Complications resulting from child birth are common in our setting include postpartum haemorrhage, eclampsia, puerperal emotional complications, breastfeeding challenges and maternal deaths. Other complications include puerperal sepsis, perineal pain, backaches, urinary incontinence, sexual problems, haemorrhoids and constipation. Long term complications include chronic pelvic pains, damage to the reproductive tract, infertility and genital prolapse<sup>34</sup>.

According to World Programme of Action, postnatal care is regarded as one of the most important maternal health care services for the prevention of impairments and disability resulting from child birth<sup>5</sup>. These services include physical examination, immunization, family planning, physiotherapy and health care education on child care, breast feeding, treatment, and counselling services. Many women do not receive these

essential healthcare services, yet they need them<sup>5-6</sup>

Findings from Demographic and Health Survey (DHS) 2008 data from 23 African countries, only 13% of all women receive postnatal care. This is in contrast to the developed countries where 90% of women make at least one postnatal visit<sup>7</sup>. More than half a million women die every year as a result of complications of pregnancy and child birth and two-thirds of these deaths occur in the postnatal period. Expectedly, most of these deaths (99%) occur in the developing countries especially in sub-Saharan Africa. Therefore, the postnatal period presents an ideal time to deliver interventions to reduce maternal deaths<sup>7</sup>.

A major challenge confronting the effectiveness of postnatal clinic care in Africa is that majority of the deliveries take place outside the formal health facility. In Nigeria, only 35% of all births occur in the health facilities<sup>8</sup>.

Therefore, it is important that most PNC services be delivered close to or at home so that the majority of the women would benefit from these services. The need for home delivery of PNC services is even more compelling when one considers that in most parts of Africa, cultural, financial, and sometimes geographic barriers limit the ability of the women and their newborns to access early postnatal care.<sup>7,8</sup>

Even with the availability of these services, several factors may interact to promote or hinder the utilization of these services by the women. These include mother's age, educational status, income level, male involvement in reproductive health, place of delivery and attendance at antenatal care. The older women often have better reasoning capacity and this may positively influence their use of PNCs<sup>8-11</sup>. Education also plays a major role in determining attendance at the PNC<sup>1</sup>. It was reported that 54% of women with secondary education or higher are more likely to go for postnatal than 29% with primary or no education<sup>12-16</sup>. Employed women have better financial status and ability to access postnatal services since they are empowered to make decision on attendance of PNC<sup>8-16</sup>. A study in Nepal reported that male involvement in reproductive health decisions and practice especially during antenatal health education, increased postpartum care utilization<sup>9</sup>. Several studies have found strong associations between antenatal care attendance and utilization of PNC<sup>17-20</sup>. They reported that the level of antenatal care is indicative of the level of PNC women seek for themselves and their children. Lack of awareness of PNCs, distance and lack of transportation are important factors contributing to women's capability to make decisions about seeking heath care services and constrains their ability to exercise their reproductive right as well18-22. These authors contended that poor road network, long distance, poverty, or lack of money prevent a lot of women from accessing PNCs.<sup>8-21</sup>

AIM - This study was to identify the determinants of women's utilization of PNCs.

OBJECTIVES – the objectives were; to assess mothers' awareness about postnatal services, to determine factors that promote or hinder utilization of PNCs by mothers and to determine the sociodemographic factors of mothers who attend or do not attend PNC.

#### METHODOLOGY

This was a descriptive study carried out on antenatal clinic attendees at the Obstetrics and Gynaecology Department of Ahmadu Bello University Teaching Hospital (ABUTH) Shika-Zaria from October to December 2013.

#### **ETHICAL CLEARANCE**

Ethical approval was obtained from the Ethical committee of the ABUTH, Shika-Zaria

#### INCLUSION/EXCLUSION CRITERIA

All consented mothers who attended the antenatal clinic of ABUTH Zaria during the study period were included in the study. Non consenting mothers were excluded.

#### SAMPLE SIZE DETERMINATION

The sample size was determined using the Cochran formula:  $n = (Z^2)pq/d^2$ 

Where Z = Standard normal deviate for normal distribution and is taken as 99%, Confidence interval=1.96 from Z table, P = proportion or prevalence of those who areaware /utilise postnatal care(using 0.13 as prevalence rate from previous study). q =1-p=1-0.13=0.87, d =degree of precision which is taken as 0.05 (precision limit=0.05)

 $n = (Z^2 pq)/d^2 = 1.96^2 \times 0.13 \times 0.87/0.05^2 = 0.434485/0.0025$ =174

Taking a non-response rate of 10%, f=% of non-response.

N = n/1 - f = 174/0.9 = 193, approximately 200

A total of 200 questionnaires were administered for this study to be statistically significant.

DATA ANALYSIS - The findings were analysed using a computer software program SPSS version 16 and the results were displayed by means of tables, charts and pictograms. Relevant statistical test(s) were used to determine relationships between variables. A p-value of <0.05 will be considered statistically significant.

low utilization of PNCs. Lack of knowledge affect

#### RESULTS

A total of 200 questionnaires were administered but 191 were returned out of which 188 were analyzable and analyzed. This gave a non-response rate of 9.4%. The mean age was 29.1 years and the standard deviation 5.5 and variance 30.6.

Table 1 represents the socio-demographic data and revealed the socioeconomic levels of the respondents.

Table	1:	SOCIODEMOGRAPHIC
CHARAC	<b>FER</b> I	STICS OF RESPONDENTS

Characteristics	Frequency	Percentage (%)
Age group in years		
Below 19years	9	4.8
19-28	76	40.4
29-38	95	50.5
Above 38	8	4.3
Ethnicity		
Hausa	94	50.0
Igbo	18	9.6
Yoruba	16	8.5
Others	60	31.9
Religion		
Christianity	67	35.6
Islam	121	64.4
Marital status		
Married	185	98.4
Widow	2	1.1
Not indicated	1	0.5
Educational status		
Not indicated	1	0.5
None	2	1.1
Primary	7	3.7
Secondary	46	24.5
Tertiary	75	39.9
postgraduate	54	28.7
Arabic	3	1.6

Occupation		
Not indicated	15	8.0
Health worker	13	6.9
Professional	33	17.6
Artisan	4	2.1
Trader	19	10.1
Unemployed	39	20.7
Civil servants	44	23.4
Others	21	11.2
Parity		
Multi para	79	42
Primipara	63	33.5
Nullipara	24	12.8
Grandmultiparous	22	11.7
Number of living children		
Not indicated	11	5.9
1	79	42
2	35	18.6
3	27	14.4
>=4	36	19.1

One hundred and fifty-eight (84%) were aware of postnatal care and 146(77.7%) were aware of the nature postnatal clinic services they should receive. The most common source of knowledge was from nurses 100(53.4%) followed by doctor 32(17.0%). This information is displayed in tables 2, 3 and 4 respectively

Table 2: AWARENESS OF POSTNATAL CARE

		Frequency	Percent
Valid	NOT INDICATED	13	6.9
	YES	158	84.0
	NO	17	9.0
	Total	188	100.0

## Table 3: AWARENESS OF THE NATURE OF POSTNATAL SER VICES

		Frequency	Percent
Valid	NOT INDICATED	19	10.1
	YES	146	77.7
	NO	23	12.2
	Total	188	100.0

Table 4: SOURCE OF INFORMATION ABOUT THESE SERVICES

		Frequency	Percent
Valid	NOT INDICATED	37	19.7
	DOCTOR	32	17.0
	MIDWIFE	18	9.6
	NURSE	82	43.6
	Total	169	89.9
Missing	System	19	10.1
Total		188	100.0

Out of the 164 parous women, one hundred and fiftysix (95.1%) had previous antenatal clinic attendance and 122 (74.4%) of them attended postnatal clinic.

Only sixteen (9.8%) of the parous women had reasons for not attending PNC, including, attending to other family matters 7(4.3%), unawareness 6(3.7%), and 5(3.0%) did not think it was necessary to go for PNC.

Fourteen (8.5%) reported rough examination 8(4.8%), shouting at them 4(2.4%) and, not teaching them well 2(1.2%) as reasons that prevented them from attending PNC.

Most of them 95(57.9) rated the PNCs they received as very good; 61(37.1%) as good and 1(0.6%) as very bad.

72% of those 29yrs and above utilized PNCs while 51% of those below 29yr (51%) (p < 0.01).

60% of women with tertiary education attended PNCs as against those with secondary (28%) and primary (5%) (p=0.02).

Respondents who are employed had more PNC attendance (84%) than the unemployed (25%). And those who attended ANC (71%) had more PNC attendance than those who didn't (60%).

#### DISCUSSION

Postnatal period also called puerperium is a critical period. The world health organization (WHO) contends that the immediate cause of death is the absence, inadequacy or underutilization of healthcare system postnatal care inclusive. A woman should not die in child birth because the vast majority of maternal deaths can be prevented or reduced if women had access to or visited maternal health services during pregnancy, child birth or the first month of delivery<sup>1-3</sup>.

In this study, 156 (95.1%) of the respondents attended postnatal clinic. This is higher than 13% quoted by the Demographic and Health survey data from 23 African countries but similar to 90% of women in the developed nations. The increased attendance could be attributed to high awareness (84%), the site of the study, the educational study of the group (more enlightened women attend ANC in teaching hospital) and that the study is a more recent one. This calls for intensification of efforts in creating awareness regarding the benefits of PNCs to even remote parts of the community.

This study demonstrated significant association between utilisation of postnatal care services and increasing age (p < 0.01). It was noted that the older women (29yrs and above) utilized PNCs (72%) more than those below 29yr (51%) which is similar to the study by Dhakal et al in Nepal 65% and 43% respectively and Chakraborty et al in Bangladesh 70% and 54% respectively<sup>9,11</sup>. This is possibly because with time and experience most of the older mothers appreciate the importance of PNC.

There was also an association between educational status and postnatal careutilisation (p =0.02) where women with tertiary (60%) attended PNCs more than those with secondary (28%) and primary (5%). This is similar to findings in Nepal 54% of those with secondary school education or higher than 29% of those with primary or no education<sup>9</sup>.

Respondents who are employed had more PNC attendance (84%) than unemployed (25%). And ANC attendance (71%) had more PNC attendance than non-attendance (60%). This is in consonance to the work carried out by others<sup>8,10,12-14</sup>. This shows the importance of education and women empowerment in women's health seeking behaviour especially PNCs. There was however no significant association (p = 0.2) between employment and utilisation of postnatal care services.

## CONCLUSION

This study concluded that awareness, education, employment and antenatal clinic attendance are the promoting factors to utilisation of postnatal care services and some of the hindering factors to utilization of PNCs include lack of awareness, lack of money or time and previous unpleasant experience. This is also similar to studies performed elsewhere.

## RECOMMENDATIONS

Efforts should be made, therefore, to achieve the Millennium Development Goals (MDGs), by the government, especially in eradication of hunger and poverty, achieving universal basic education, gender equality and women employment and improvement of maternal health as this will go a long way in improving the utilization of PNCs by mothers.

- 1. WHO (2004 b). Making pregnancy safer: why is this issue important? Accessed from www.who.milleniumgoalsformaternalhealth. htm on 2/12/12.
- World Health Organisation: Reproductive h e a l t h p u b l i c a t i o n s 1998.
  2008[http://www.who.int/reproductivehealth/publications/msm 98 3/msm 98 3 1. html].
- 3. http://www.biomedcentral.com/1471-2393/9/10-Accessed 2nd Dec,2012
- 4. SafeMotherhood (2002) safe motherhood: a matter of human rights and social justice. A c c e s s e d f r o m www.safemotherhood.org.htm on 2/12/12
- 5. United Nations (2002). World Programme of action concerning Disabled persons. Accessed from <u>www.un.org/</u> esa/socdev/ enable/diswpa01.htm on 7/12/12.
- 6. UNICEF: State of the world's children. New York. United Nations Children's Fund; 2006.
- 7. Nigeria Demographic and Health survey, National Population Commission and ICF Macro. Calvertom (Maryland) 2008
- 8. Joseph O. Ugboaja, NwosuO.Berthrand1, Anthony O.Igwegbe; Barriers to postnatal care and exclusive breastfeeding among urban women in southeastern Nigeria. Nigerian Medical Journal; 2013 54(1):45-50.
- 9. Dhakal S, Mullani M, Chapman G N, Simkhada PP; Utilisation of postnatal care among rural women in Nepal. BMC pregnancy and childbirth 2007: 7:19
- 10. El-Gilany AH, Hammad S. Utilisation of postnatal care in Al Hassa, Saudi Arabia. Middle East Journal of family medicine 2008:6(9):23-6.
- 11. Chakraborty N, Islam MA, Chowdhury RI, Bari W; Utilisation of postnatal care in Bangladesh: evidence from a longitudinal study. Health Soc. Care Community 2002:10(6) 492-502.
- 12. Dhaher E, Mikolajczyk RT, Maxwell AE, Kramer A. Factors associated with lack of postnatal care among Palestinian women: a cross-sectional study of three clinics in the West Bank. BMC pregnancy and child birth 2008:8:26.
- Abouzahr C. Improve Access to Quality Maternal Health services. Presentation at safe Motherhood consultation in Sri Lanka 1997:18-23.
- 14. Lawn J, Kerber K; Opportunity for Africa Newborns: practical data, policy and programmatic support for newborn care in

Africa.eds. PMNCH, Cape Town; 2006

- 15. Finger WR: Better postpartum care saves lives. Network 1997, 17: 18-21.
- 16. Cunningham F, Garry, Eds: William Obstetricc. 2002:21. New York: McGraw Hill.
- 17. Chama CM, El Nafaty AU, Idrisa A: Caesarean morbidity and mortality at Maiduguri, Nigeria, JobstetGynaecol 2000, 20: 45-48.
- 18. Waterstone M, wolfe C, Hooper R, Bewley S: postnatal morbidity after child birth and severe obstetric morbidity BJOG 2003 110:128-133.
- 19. Bryant AS, Haas JS, Mc Elrath TF, McCormick MC: predictors of compliance with the postpartum visit among women living in healthy start project areas. Matern Child Health J 2000 10: 511-516
- 20. Lagro M, Liche A, Mumba T, Ntebeka R, Van Roosmanlen J: postpartum care attendance at a rural district hospital in Zambia. Trop Doct 2006, 36 205-208.
- 21. Nabukera SK, Witte K, Muchunguzi C, Bajunirirde F, Batwala VK, Mulago EM, Farr C, Barry S, Salihu HM, Use of postpartum health services in rural Uganda: knowledge, attitude and barriers. J Community Health 2006 31: 84-93.
- 22. http://www.biomedcentral.com/1471-2393/8/26-Accessed 2nd Dec,2012