ACCEPTABILITY OF FOCUSED ANTENATAL CARE BY PREGNANT NIGERIAN WOMEN AND FACTORS INFLUENCING IT

Joseph A. Olamijulo[1], Ayodeji A. Oluwole[1], Ochuwa A. Babah[2], Monsurat B. Aderolu[2], Halima A. Okunola[2], Mojisola M. Sanusi[2]

[1]*College of Medicine, University of Lagos (CMUL)/ Department of Obstetrics and Gynaecology, Lagos University Teaching Hospital, Lagos, Nigeria*

[2]*Department of Obstetrics and Gynaecology, Lagos University Teaching Hospital, Lagos, Nigeria*

ABSTRACT

Context: In 2002, the World Health Organization (WHO) proposed "Focused Antenatal Care (FANC)"model for developing countries and it is aimed at addressing some of the challenges associated with the traditional model of antenatal care and to improve the quality of antenatal care services rendered. Despite its wide publicity, most teaching hospitals in Nigeria still practice the traditional ANC model, notwithstanding the high level of awareness of the tenet of FANC among resident doctors.

Objective: This study aimed at assessing the acceptability of this new model by Nigerian pregnant women.

Methodology: This was a questionnaire-based cross-sectional study conducted at the antenatal clinic at the Lagos University Teaching Hospital (LUTH). A total of 410 consenting pregnant women at varying gestational ages were recruited for this study. Data collected was analyzed using Epi Info statistical software.

Result: The mean age ± S.D. of the subjects was 31.2 ± 4.3 years, with over half of the patients living close to the hospital (56.4%). The mean gestational age ± S.D. at booking was 16.0 ± 6.3 weeks and 54.5% were high risk pregnancy. Over a third (35.1%) of the women had missed at least 1 – 3 visits. A greater proportion (56.1%) of the pregnant women studied preferred the new model, FANC, while 42.4% indicated preference for the traditional model. The main reason for preferring FANC is convenience (92.2% of respondents). The main reasons for rejecting FANC are that complications can arise in pregnancy at anytime (71.3%) and 4 visits were adjudged to be inadequate (43.7%). Factors influencing the acceptability of FANC by Nigerian pregnant women were age (p = 0.0000), tribe (p = 0.0487), proximity to the hospital (0.0088) and parity (p = 0.0006).

Conclusion: Many parturient are ready to accept FANC if given the opportunities. It should thus be offered to highly motivated women especially in urban cities in Nigeria where many educated women reside, but education on birth preparedness and complication readiness needs to be emphasized.

Key words: acceptability focused antenatal care, influencing factors.

INTRODUCTION

Survey data from sub-Saharan Africa indicate that women often only initiate antenatal care after the first trimester and do not achieve the recommended number of visits.[1] In addition to this, Ejigu T et al in a study found that almost half (47.7%) of pregnant

Correspondence: *Ochuwa A. Babah*
Department of Obstetrics and Gynaecology, Lagos University Teaching Hospital, Lagos, Nigeria
Postal address: P.O. Box 7065, Festac town, Lagos, Nigeria E-mail: ochuwab@yahoo.co.uk
Phone No: +2348023591137

women were dissatisfied with the antenatal care services as they missed opportunities to receive screening (like blood pressure and weight measurements) and preventive components of antenatal care such as iron and folic acid supplementation.[2] This might be due to the high patient load in the face of poor manpower in sub-Saharan Africa, hence making it difficult for our pregnant women to have quality time with their health personnel.

In 2002, the World Health Organization (WHO) proposed a new model of antenatal care, "Focused Antenatal Care (FANC)" for developing countries following recommendations by researchers in 2001, and it is aimed at addressing some of the challenges associated with the traditional model of antenatal care and to improve the quality of antenatal care services rendered. The focused antenatal care model provides individual goal-oriented antenatal care to women especially in developing countries like Nigeria which are densely populated with low manpower. It recommends only four (4) visits unlike the traditional model. Its major goals are targeted towards identifying pre-existing health conditions, early detection of complications arising in pregnancy, health promotion and disease prevention and planning for birth preparedness and complication readiness.

Despite the simplicity and goal oriented nature of FANC and in the face of low manpower, the package is not being widely practiced in Nigeria, even though it is accepted by the health care workers. In a study by Amosu AM et al, 66% of the health care providers accepted that focused antenatal care is not enforced by their health care facility as a result of lack of policy concerning the practice of focused antenatal care.[3]

In some countries where FANC is been practiced such as Burkina Faso, Uganda, Tanzania and Ekiti state in Nigeria, it was observed that FANC had not fully translated into quality services, as certain practices stipulated by the FANC guidelines were omitted.[4,5] Some of the reasons attributed to these were absenteeism of health personnels or shortage of manpower, lack of training, lack of resources such as drug shortages and proper FANC cards which serve as working guidelines, informal rules and routines.[5,6] However, in Ethiopia, more than half of respondents (60.4%) were satisfied with the FANC service that they received and the predictors of the level of satisfaction were identified to be the type of health centre, education status of mother, monthly income of the family, type of pregnancy and stillbirth.[7] With the FANC model, the maternal mortality ratio (MMR) was estimated to be 206 per 100,000 live births in Malawi, while the perinatal mortality rate (PMR) was 19 per 1,000 live births.[8]

Despite its wide publicity, most teaching hospitals in Nigeria still practice the traditional ANC model, notwithstanding the level of awareness (80%) of the tenet of FANC among resident doctors.[9] Awareness of birth preparedness and complication readiness by parturients as a goal-oriented intervention during ANC is low, as this is never discussed in most antenatal clinic sessions.[9] This study thus aimed at ascertaining the acceptability of FANC by pregnant Nigerian women and to identify factors influencing their choice.

METHODOLOGY

Design: A cross-sectional study.

Setting: Conducted at the antenatal clinics of the Lagos University Teaching Hospital (LUTH), Surulere, Lagos, Nigeria. The hospital till date practices the traditional antenatal care (ANC) model.

Study population: Four hundred and ten (410) consenting pregnant women at varying gestational ages were recruited.

Data collection: Health talk was given on the

tenets of focused antenatal care (FANC). Consenting pregnant women at varying gestational ages were recruited. Information which included socio-demographic data, antenatal history and survey on opinions regarding FANC were obtained using the study proforma. The section on antenatal history was completed by the researchers by extracting information from the patients' case notes while the patients were asked to fill the last segment of the proforma on opinions regarding FANC without any influence of the health personnel.

Data management: The data obtained was analyzed using the Epi Info statistical software, version 3.5.1.

RESULTS

Socio-demographic characteristics of study population: The mean age ± S.D. of the subjects was 31.2 ± 4.3 years (range 21 – 44 years). They were predominantly married women (98.5%) and of low parity 0 – 2 (91.7%) with tertiary level of education (86.8%). Majority were of Yoruba and Igbo tribes (47.3% and 37.1% respectively). Over half of the patients live close to the hospital (56.4%).

Antenatal history of subjects: The mean gestational age ± S.D. at recruitment was 26.3 ± 8.5 weeks (range 7 – 41 weeks). The mean gestational age ± S.D. at booking was 16.0 ± 6.3 weeks (range 5 – 38 weeks). Of the women, 54.5% were categorized as having high risk pregnancy. The average number of visits ± S.D. was 4.2 ± 3.1 (range 1 – 15 visits). The proportion of women who missed ANC comprised 35.1% of the study population and the average number of visits missed per subject ± S.D. was 1.5 ± 0.6 (range 1 – 3 visits). The commonest reason for missing ANC visits in LUTH was strike (65.3%). Other reasons were patient being away on a trip (5.56%), illness (4.17%) or not being granted permission at work (4.17%), while a few others felt the visits were too monotonous (1.39%), *table II.*

Preference for the new mode (Focused Antenatal care): A greater proportion (56.1%) of the pregnant women studied preferred the new model, FANC, while 42.4% indicated preference for the traditional model. The main reason for preferring the new model is convenience (92.2% of respondents). The main reasons for rejecting FANC are that complications can arise in pregnancy at anytime (71.3%) and 4 visits were adjudged to be inadequate (43.7%), *tables IIIa, IIIb and IIIc.*

Factors affecting acceptability of Focused Antenatal Care: Factors influencing the acceptability of FANC by Nigerian pregnant women were age ($p = 0.0000$), tribe ($p = 0.0487$), proximity to the hospital (0.0088) and parity ($p = 0.0006$). It was observed in this study that a greater proportion of women aged 35 and below tends to prefer FANC. The Hausas and Yorubas also tend to accept the new model more. A slightly greater proportion of patients living far from LUTH prefer the new mode. A greater proportion of women of lower parity (0 – 2) and the grandmultiparous tend to prefer FANC.

DISCUSSION

Statement of the principle findings: Most Nigerian women book for antenatal care in the second trimester. The mean gestational age at booking from this study was found to be 16 weeks. As found in earlier studies this might be as a result of uncertainty about pregnancy outcome in the first trimester and maternal perception of showing off pregnancy.[1,10] Most of the women studied had a high risk pregnancy (54.5%). This is not surprising as LUTH is a referral centre which deals with cases at tertiary level of health care.

One-third of women missed at least 1 – 3 visits during antenatal care, the commonest reason being health workers' strike which is quite common in this part of the world due to the poor remuneration of doctors and nurses. Other reasons were patients'

travel, illness or not being granted permission at work. A few women felt the visits with the traditional model, which LUTH still practices till date, is monotonous.

Comparison of the findings with those of other studies: Contrary to findings in rural setting in Nigeria where a greater proportion of women prefer the old model,[11,12] a greater proportion of women in urban Lagos do not mind the focused antenatal care model, FANC (56.1%). Most of the pregnant women studied attained tertiary level of education and it was observed in this study that a greater proportion of those with secondary and tertiary level of education tend to accept FANC when compared with those with primary level of education, although this was not statistically significant and may be limited by the small sample size of the sub-groups studied in terms of level of education, as only 2 of the women studied attained primary level of education. It goes further to say that the finding by Umeora OUJ et al[11] in a rural setting is not unusual as most of our women in rural settings often have little or no education.

We can thus infer from this study and others that level of education might play a role in acceptability of FANC even though we did not find a statistically significant association between level of education and acceptability of FANC in this study. Further research may be necessary using larger samples and from mixed populations (rural and urban settings).

Secondly, the hustle and bustle in Lagos with the poor traffic situation in most places may also explain why most of these women (92.2%) linked their acceptability of the new model to convenience. More over a reasonable proportion of women studied live far from LUTH (43.7%). Two (2) of the women (0.9%) studied considered FANC a crowd-control strategy. This is not an unusual observation as this is the norm in most government-owned health institutions in Nigeria as pregnant women despite their busy schedule sit for long hours, and spending nearly the whole day in a bid to make their antenatal visits. Those who do not mind the traditional model prefer this because of fear of complications arising in pregnancy and the belief that four (4) visits only will not give room for close surveillance.

Implications for clinicians: A reasonable proportion of the women in Lagos have tertiary level of education based on the findings from this study and thus should be given a chance to have FANC in view of the stress of living in Lagos, coupled with the limited manpower available in most of our health care facility. All that needs to be done is to provide the necessary materials and manpower and ensure that the women are properly counseled on birth preparedness and complication readiness, as this is lacking in most hospitals in Nigeria,[9] including LUTH.

CONCLUSION

Focused antenatal care (FANC) is a new model which many parturients are ready to accept if given the opportunities. For fear of complications which some women dread, it should be offered to highly motivated women especially in urban cities in Nigeria where many educated women reside, but education on birth preparedness and complication readiness needs to be emphasized.

Conflict of interest: The author hereby declares that there is no competing interest.

TABLE I: SOCIODEMOGRAPHIC CHARACTERISTICS OF STUDY POPULATION

SOCIODEMOGRAPHIC CHARACTERISTIC	FREQUENCY	PERCENT
Age (years)		
21 - 25	32	7.8%
26 - 30	166	40.5%
31 - 35	156	38.0%
36 - 40	44	10.7%
41 - 45	12	2.9%
Total	410	100.0%
Tribe		
Hausa	8	2.0%
Igbo	152	37.1%
Others	56	13.7%
Yoruba	194	47.3%
Total	410	100.0%
Marital status		
Married	404	98.5%
Single	6	1.5%
Total	410	100.0%
Level of education		
Primary	2	0.5%
Secondary	52	12.7%
Tertiary	356	86.8%
Total	410	100%
Proximity to the hospital		
Far	98	23.9%
Near	44	10.7%
Not so far	179	43.7%
Very far	81	19.8%
Within	8	2.0%
Total	410	100.0%
Parity		
0	195	47.6%
1	119	29.0%
2	62	15.1%
3	22	5.4%
4	10	2.4%
5	2	0.5%
Total	410	100.0%

TABLE II: REASONS FOR MISSING ANTENATAL VISIT

REASON FOR MISSING VISIT	FREQUENCY	PERCENT
Busy	2	1.4%
Didn't feel like attending	2	1.4%
Distance	4	2.8%
Exam	2	1.4%
Illness	6	4.2%
No health problem	2	1.4%
No reason	8	5.6%
No time	2	1.4%
Rainfall	2	1.4%
Scan report not ready	2	1.4%
Stress	2	1.4%
Strike	94	65.3%
Visits too monotonous	2	1.4%
Work	6	4.2%
Travelled	8	5.6%

TABLE IIIA: PREFERENCE FOR THE NEW MODEL (FANC)

PREFERENCE FOR FANC?	Frequency	Percent
Yes	230	56.1%
No	174	42.4%
No response	6	1.5%
TOTAL	410	100.0%

TABLE IIIB: REASONS FOR PREFERRING THE NEW MODEL (FANC)

REASON	Frequency	Percent
Convenience	212	92.2%
Cost effective	26	11.3%
Less time wasting	4	1.7%
Close monitoring necessary	2	0.9%
Better services through attention	2	0.9%
Crowd control	2	0.9%
Stressless	2	0.9%

TABLE IIIC: REASONS FOR PREFERRING THE OLD MODEL (TRADITIONAL MODEL OF ANC)

REASON	Frequency	Percent
Four (4) visits inadequate	76	43.7%
Health talks inadequate	38	21.8%
Complications can arise in pregnancy at anytime	124	71.3%
Lack of familiarization with health care provider	46	26.4%
Better monitoring with old model	2	1.2%
Illiteracy and maternal mortality high in our environment and new model applies to highly informed patients	2	1.2%

TABLE IV: FACTORS AFFECTING ACCEPTABILITY OF FOCUSED ANTENATAL CARE (FANC)

FACTOR	PREFERENCE FOR FANC		TOTAL
	No	Yes	
Age (years)			
21 – 25	12 (37.5%)	20 (62.5%)	32 (100.0%)
26 – 30	63(38.4%)	101 (61.6%)	164 (100.0%)
31 – 35	71(45.5%)	85 (54.5%)	156 (100.0%)
36 – 40	23 (50.0%)	23 (50.0%)	46 (100.0%)
41 – 45	8 (66.7%)	4 (33.3%)	12 (100.0%)
Total	177 (43.2%)	233 (56.8%)	410 (100.0%)
$\chi^2 = 63.7801$, p = 0.0000			
Tribe			
Hausa	2 (25.0%)	6 (75.0%)	8 (100.0%)
Igbo	72 (48.0%)	78 (52.0%)	150 (100.0%)
Others	30 (53.6%)	26 (46.4%)	56 (100.0%)
Yoruba	73 (37.2%)	123 (62.8%)	196 (100.0%)
Total	177 (43.1%)	233 (56.9%)	410 (100.0%)
$\chi^2 = 7.8744$, p = 0.0487			
Level of education			
Primary	2 (100.0%)	0 (0.0%)	2 (100.0%)
Secondary	23 (45.0%)	28 (55.0%)	51 (100.0%)
Tertiary	155 (43.4%)	202 (56.6%)	357 (100.0%)
Total	180 (43.9%)	230 (56.1%)	410 (100.0%)
$\chi^2 = 2.5868$, p = 0.2743			
Parity			
0	91 (46.9%)	103 (53.1%)	194 (100.0%)
1	45 (37.5%)	75 (62.5%)	120 (100.0%)
2	20 (32.3%)	42 (67.7%)	62 (100.0%)
3	12 (54.5%)	10 (45.5%)	22 (100.0%)
4	10 (100.0%)	0 (0.0%)	10 (100.0%)
5	0 (0.0%)	2 (100.0%)	2 (100.0%)
Total	178 (43.4%)	232 (56.6%)	410 (100.0%)
$\chi^2 = 21.5646$, p = 0.0006			
Not so far	71 (39.7%)	108 (60.3%)	179 (100.0%)
Very far	37 (45.7%)	44 (54.3%)	81 (100.0%)
Within	0 (0.0%)	8 (100.0%)	8 (100.0%)
Total	175 (42.7%)	235 (57.3%)	410 (100.0%)
$\chi^2 = 13.5804$, p = 0.0088			

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