Perception of prenatal services by antenatal clinic attendees in a tertiary health facility in Nigeria

*Addah AO,[1]Obilahi-Abhulimen TJ[1], Omietimi JE[2]

[1]Department of Obstetrics & Gynaecology, College of Health Sciences, Niger Delta University, Amassoma, Nigeria. [2]Department of Obstetrics and Gynaecology, Federal Medical Centre, Yenagoa, Nigeria.
*Correspondence: Email: draddah@yahoo.com; GSM: +2348033417768

ABSTRACT

Background: *Antenatal patronage is very low in most sub-Saharan African countries, Nigeria inclusive. It has also been recognised that most women who registered for antenatal care in a particular health institution, do not go back to the same centre to deliver when in labour. Skilled attendant delivery is very low in Nigeria. While many reasons can be adduced for this health seeking behaviour, antenatal care satisfaction is one of them. We decided to study how satisfied are the antenatal subjects at the Federal Medical Centre, Yenagoa.*

Objective: *The objective of this study is to determine antenatal mothers' perception of prenatal services at the Federal Medical Centre, Yenagoa, Nigeria.*
Materials and Methods: *This was a descriptive cross-sectional observational study conducted at the Federal Medical Centre, Yenagoa, Nigeria between 1st of June 2015 and 30th of September, 2015. A pretested questionnaire was administered to 198 consecutive antenatal attendees at the centre by two Interns serving in the department of Obstetrics and Gynaecology.*
Results: *The mean number of antenatal visits was 4.2 ± 2.52 and the median was 4.0. One hundred and eighty-seven (94.5%) said the antenatal health talks were very educative, 103(52%) think the antenatal care visits should be made more frequent, 43 (21.7%) think they should reduce the frequency of visits, 183(92.4%) rated services at the centre from being good to excellent. One hundred and twenty-five (56.6%) respondents were generally dissatisfied with long waiting time to see doctors.*
Conclusion: *The majority of mothers were happy with services and interventions rendered at the institution, measures that have been known to improve women's health in pregnancy and also improve perinatal outcomes. However, a sizeable proportion of subjects were unhappy with long waiting time to see a doctor, an issue that had dogged obstetric practice in sub-Saharan Africa. This issue needs to be tackled by caregivers and stakeholders alike.*
Key Words: *Antenatal care services, Patients satisfaction, Antenatal visits, Perinatal mortality.*

Introduction

The end point of antenatal care is patients' satisfaction. Patients' satisfaction means at the end of pregnancy a healthy baby is delivered by a healthy mother.[1] It is only then that the joy of pregnancy is fulfilled. When this objective of antenatal care is poorly implemented, at the other end of the spectrum is maternal/perinatal morbidity and mortality which most often ushers in pains and sorrow to the individual patient and her family. Every opportunity of contact with the antenatal patients should be utilised judiciously in transmitting important messages related to pregnancy and childbirth to mothers.[2,3] Also, necessary interventions should be executed promptly as the need arises. The major objectives of antenatal care are to (i) promote and maintain the physical and mental health of the mother and baby; (ii) anticipate, detect and manage complications during pregnancy as they arise, whether medical, surgical, or obstetrical; (iii) develop birth

preparedness and complications readiness plan; (iv) help prepare mothers to breastfeed successfully and experience normal puerperium.[4]

Antenatal care has not been so successful in sub-Saharan Africa as in Europe in reducing maternal mortality and morbidity.[1,2] Nigeria, for instance, makes up about 1% of the world population but contributes 10% of global maternal mortality.[3,5] Patients' health seeking behaviour, care providers attitude towards quality care, the paucity of hospital infrastructure and epileptic power supply have all contributed to high maternal mortality in Nigeria.[3] One thing peculiar to the Nigerian situation and some countries in the West African sub-region is that antenatal patients have lost faith in public and private health systems and holds the orthodox caregiver in contempt.[6] This has driven antenatal patients to seek for alternate care which ranges from unorthodox health care systems including so- called nursing homes, traditional birth attendants, spiritual homes and churches.[7, 8]

Some of the reasons adduced for the negative perception of the quality of antenatal care services by pregnant women include:- incessant strike actions by heath workers (care providers are never there for them when in labour or other dire emergencies), prolonged waiting time at the antenatal clinics and Unprofessional conduct of service providers:- such as rudeness to clients.[7] The utilisation of antenatal care services by a client does not necessarily mean the client will eventually deliver in the facility at which she registered.[3,8,9] In a recent Nigeria demographic health survey, only 36 % of pregnant women eventually delivered in health facilities.[10] Adequate utilisation of antenatal health care services is associated with improved maternal and neonatal health outcomes.[5,11]

The purpose of this study is to identify aspects of antenatal care services at the Federal Medical Centre, Yenagoa that patients find unsatisfactory. Improving on such deficiencies may improve the percentage of Pregnant Nigerian women who utilise antenatal care services. This increased uptake will impact positively on pregnancy outcome.

Materials and Methods

This was a prospective descriptive cross-sectional, observational study conducted at the Department of Obstetrics and Gynaecology of the Federal Medical centre, Yenagoa, Southern Nigeria between 1st June 2015 and 30th September 2015. A set of twenty structured pre-test questionnaires were administered by two interns to subjects after obtaining their consent. The pre-test questionnaires were analysed and corrections made before they were eventually administered to 198 consecutive antenatal attendees. Subjects consent was sought and obtained before the questionnaires were administered.

The study was approved by the ethical committee of the institution. The subjects who refused to give their consent to participate in the study were excluded. Questionnaires that were incompletely filled were excluded from the study. The study was limited to registered antenatal subjects of the hospital.

The sample size was calculated using the formula for cross sectional study:

$$n = pq/(e/1.96)^2$$

Where: n = Sample size

P=Prevalence rate of 84.1% antenatal services satisfaction rating in a study in South West Nigeria was used to calculate the sample size.[12.]

Q=100-P

e = Margin of sampling error set at 95% confidence interval. P-value of < 0.05 was considered statistically significant.

Hence:

$n = 81.4 \times 18.6 / (5 / 1.96/)^2$

$= 1514.04 / (5/1.96)^2$

$= 1514.04/6.51$

$= 232.57$

Adjusting for an attrition or non-compliance rate of 15%

Sample size =268 subjects

A total of 268 self-administered questionnaires were distributed to subjects. Two hundred and forty-three (243) questionnaires were returned. From the returned list, 45 questionnaires were voided and removed from the analysis because of incomplete filling. Hence the response rate for this study was 73.9% (198 subjects). A total of 198 antenatal attendees were recruited for the study. The data collected were coded and entered into SPSS Version 20 for analysis.

Results

One hundred and ninety-eight (198) subjects were recruited for this study. The mean gestational age of respondents at booking was 23.33 weeks ± 3.08, the median was 23 weeks and the range was 7-30 weeks. The mean age of respondents was 28.09 ± 1.54 years; median of 28 years with a range of 17-40 years. The mean number of antenatal visits was 4.2 ± 2.52 and a median of 4.0 visits with a range of 1-10 visits.

The mean parity was 1.17 children/ woman, a median of 1 child/woman. One hundred and eighty-eight respondents (95%) were married, 127 (64.1%) were of the Pentecostal faith, Catholics 36 (18.2%); 83(41.9%). Eighty-six (43.4%) of respondents had secondary education, 94 (47.5 %) had tertiary education. Forty-eight respondents (24.2%) were unemployed, 53 (26.8%) were Civil servants. See Table 1 for demographic characteristics of respondents.

Sixty-five (32.8%) had delivered previously in this health facility (Federal medical Centre, Yenagoa). The number of times they have delivered ranges from 1-6 times. A total of 127 babies were delivered by these respondents with 5 perinatal deaths. The perinatal mortality was 40/1000 births. See Table 2 for previous deliveries at FMC.

Table 1. **Demographic characteristics of respondents**

Parity	Frequency	Percent
0	81	40.9
1	48	24.2
2	39	19.7
3	17	8.6
4	10	5.1
5	3	1.5
Total	198	100.0
Marital Status	Frequency	Percent
Divorced/Separated	6	3.0
Married	188	95
Widow	4	2.0
Total	198	100.0
Religion	Frequency	Percent
Catholic	36	18.2
Protestants	17	8.6
Pentecostal	127	64.1
Muslim	4	2.0
Others	14	7.1
Total	198	100.0
Educational Status	Frequency	Percent
No formal education	1	0.5
Primary Education	17	8.6
Secondary Education	86	43.4
Tertiary Education	94	47.5
Total	198	100.0
Occupation	Frequency	Percent
Unemployed	48	24.2
Artisan/Trader	30	15.2
Businesswoman	49	24.7
Civil Servant	53	26.8
Professional	18	9.1
Total	**198**	**100.0**

Table 2. Previous deliveries at FMC

Previous delivery	Frequency	Percent
One	45	22.7
Two	14	7.1
Three	4	2.0
Six	2	1.0
Nil	133	67.2
Total	198	100.0

Subjects reasons for registering for antenatal care-182 (91.9%) of respondents said for reassurance by doctors of their wellbeing and that of the baby.' Mother's perception of Antenatal heath talks- One hundred and eighty-seven (94.5%) said they were very educating and informative. See Table 3 for mother's reasons for registering for antenatal care and their perception of health talks

Table 3. Mothers' reasons for registration for antenatal care and perception on health talks

Reasons for registering	Frequency	Percent
To get away from home	2	1.0
Reassurance of your wellbeing and baby by doctors	182	91.9
To listen to antenatal health talk	14	7.1
Total	198	100.0

Mother's perception of antenatal educational health talks

Mothers perception	Frequency	Percent
Very educating and informative	187	94.5
They should devote more time to this health talks	7	3.5
They have not improved your understanding of pregnancy	4	2.0
Total	198	100.0

One hundred and three (52%) of respondents think the antenatal care visits should be made more frequent. Rating of antenatal care services by respondents- Forty-three (21.7%) said the services at the centre are excellent, 62 (31.3%) said services were very good, 78 (39.4% said the services were good and 11(5.6%) respondents were dissatisfied with the services at the centre. Respondents were generally dissatisfied with some services at the centre which include: Long waiting time to see doctors -125 (56.6%). See Table 4 for mothers' reasons for registration for antenatal care, the perception of health and what subjects think of antenatal visits and their dissatisfaction with services rendered at the centre.

Table 4. What subjects think of antenatal visits and dissatisfaction with ANC services (N=221 Multiple responses).

What subjects think of ANC visits; Dissatisfaction with ANC services

What you think of antenatal care visits	Frequency	Percent
They should reduce the number of visits	43	21.7
They should make them more frequent and regular	103	52.0
No of visits adequate	20	10.1
No comment	32	16.2
Total	**198**	**100.0**

Things you are not satisfied with at FMC (N=221) Multiple responses

Not satisfied with	Frequency	Percent
Doctors in a hurry	11	5
Waiting time is too long	125	56.6
You do not see one doctor consistently	34	15.4
Nurses are unfriendly	11	5
Prescription drugs are not available	0	0
Frequent strike actions by health workers	40	18
TOTAL	**221**	**100**

One hundred and eighty-seven respondents (94.4%) hope to deliver in the centre in the index pregnancy.

Discussion

The conventional antenatal care is widely practised in Nigeria as in the Federal Medical centre, Yenagoa, where this study was conducted.[3] The median gestational age at booking for antenatal care showed that half of the respondents booked for antenatal care late. These are similar to studies in Kano and Enugu in Nigeria.[13,14] Late bookings for antenatal care are associated with adverse foetal outcomes.[14] It is also a reflection that more frequent visits and advocacy are needed to thoroughly educate women on the health needs of pregnancy. The literacy level among the study group was high, as the majority had secondary and tertiary education, respectively. The respondent's confidence in this health institution may be in doubt as 1:3 of those who had delivered previously came back to register for care and delivery in the index pregnancy. The perinatal mortality rate of 40 deaths/1,000 births for the study group is almost agreeable with the national neonatal mortality rate of 37 deaths / 1,000 births.[10]

The overwhelming majority of the study group understood the foremost objective of antenatal care which is to promote and maintain the physical and mental health of the mother and baby.

The other aspects of antenatal care services tested in the study like education health talks were also overwhelmingly received by antenatal subjects. Improving the level of knowledge and understanding of pregnancy will enable pregnant women to take informed decisions at the time it matters. However, 1:3 of respondents were dissatisfied with the current schedule of traditional multiple antenatal visits, an issue that has plagued obstetric practice in sub-Saharan Africa. While there is genuineness in patients complaints about multiple traditional antenatal care visits regarding time wasted, some care providers in this region believes it is not yet appropriate to embrace focused antenatal care.[9] There are still gaps in the continued use of maternity care programmes in Nigeria:- ranging from patients' health seeking behaviour (which played out in this study where only a third of those who had delivered came back to register for care; about half of subjects registered for care late), care providers attitude to rendering quality service to the paucity of health infrastructures.[9,17,18] These deficiencies must be borne in mind while implementing antenatal care programmes. There is much delinquency on the part of patients that caregivers need to see them more often so that every point of contact should be utilised in educating mothers on the tenets of antenatal care.

Respondents were also dissatisfied with long waiting time to see a doctor at the Federal Medical Centre, Yenagoa: This is one of the reasons why focused antenatal individualised care was established. However, it must be explained that patients' turnout at antenatal clinics in some sub-Saharan African countries can be massive as compared with patients' one- on-one with care providers in Europe and America.[19] About 1:5 subjects were dissatisfied with incessant strike actions by health workers in Nigeria. This is a recent phenomenon in Nigeria where health workers are pitched against each other for supremacy and fighting for higher wages. This in-fighting has reduced the quality of obstetric care in Nigeria.

Few respondents were dissatisfied with doctors or nurses in the course of rendering service in the study. This result was comparable to studies in Nnewi and two from Sagamu[12,20,21] where the overwhelming majority of antenatal clients studied were satisfied with the attitudes of caregivers. It is one of the major reasons why antenatal mothers desert health institutions in the past when they have challenges in pregnancy or in labour. However, the results of our study and others cited showed an improved relationship between caregivers and antenatal clients. Generally, the overwhelming majority of subjects studied was

satisfied with the services at the institution. There was an overwhelming assurance by the majority of subjects in the study that they hope to deliver in the centre in the index pregnancy. This is a good approval rating for the institution and a departure from where only a few registered patients in Nigeria return to the institution where they registered to deliver.

Conclusion

Subjects in the study were generally satisfied with services they received at the centre, but their confidence in the health institution was low, as few came back to deliver after a previous pregnancy. A followup study is necessary why those who had delivered previously at the Federal Medical Centre, Yenagoa would not return to register for care in subsequent pregnancies. Apart from a paucity of infrastructures and personnel in health institutions in Nigeria, patients' health seeking behaviour is a major contributory factor to maternal morbidity and mortality and it needs to be further studied.

Conflict of interest

The authors declare no conflict of interest.

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