# Mothers' Reasons for Antenatal Care Registrations in Multiple Centres in the Same Pregnancy

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#### Abstract:

**Objective:** To determine why women would register for antenatal care in more than one centre in the same pregnancy.

**Methodology:** This was a descriptive cross sectional study conducted at the University of Port-Harcourt Teaching Hospital, Port- Harcourt (UPTH), South-South Nigeria, between June and September, 2014. It consisted of a set of structured, pretested questionnaires that were administered to consecutive antenatal attendees at the centre.

Results: Two hundred and thirty one (231) respondents were enrolled for this study. The mean of antenatal care attendance (ANC) at the University of Port – Harcourt Teaching Hospital was 4.69 ±2.62, and a median of 5.0. One hundred and three (44.6%) of respondents registered in both conventional health institutions and unorthodox antenatal care centres besides UPTH. Eighty (34.6%) of respondents registered solely in conventional health facilities besides UPTH without patronising unorthodox care. Put together, 24 (10.4%) respondents had unorthodox antenatal care registrations among the study population i.e. in Churches, Traditional Birth attendants and in Maternity homes. The most common reason adduced for a second antenatal registration was incessant strike actions by Health workers. - 46 (17.3%) of respondents and 36 (13.6%) said the distance from place of residence to the Teaching hospital was too far.

**Conclusion:** To improve and strengthen antenatal care in sub-Saharan Africa and indirectly reduce maternal mortality and morbidity, care providers need to correct the negative perception they have created before antenatal patients. At the same time, Care providers need to launch aggressive education programmes that will enlighten mothers on factors militating against antenatal care and its benefits when properly executed.

**Key Words:** Antenatal care, Multiple antenatal registrations, Maternal mortality and morbidity, Care providers.

## I. Introduction

The concept of prophylactic care in pregnancy was introduced into Medicine at the end of the nineteen century in Europe. <sup>1</sup> The rational for antenatal care is that it is essential to screen a predominantly healthy population of pregnant women to detect early signs of, or risk factors for disease, followed by timely interventions. <sup>1</sup>

Each year about 20 million women experience pregnancy complications (some permanently), a further eight million women lives may be threatened while about 500,000 women would die as a result of causes related to pregnancy and childbirth. More than 99% percent of all these fatalities and morbidities occur in sub-Saharan Africa. <sup>3,4,5,6</sup> While antenatal care has largely reduced maternal mortality in the developed world, this has not been the case in the developing countries (3,4, 5, 6) Of all the health indices monitored by the WHO, maternal mortality is the one that shows the largest discrepancy between the developed and developing countries. <sup>1,4</sup>

In Nigeria, it is estimated that approximately 59,000 of maternal deaths take place annually as a result of pregnancy, delivery and post delivery complications [WHO, UNICEF, UNFPA, 2007] despite the available antenatal health care services. <sup>7</sup> A Nigerian woman is 500 times more likely to die in childbirth than her European counterpart. <sup>7,8</sup> Nigeria's maternal and perinatal mortalities and morbidities are some of the highest in the world, in spite of measures taking to reduce this scourge. <sup>9</sup> The situation is as such in Nigeria because the benefits of antenatal care are not fully realisable. There is widespread poverty, social inequality, ignorance, illiteracy, inadequate and inaccessible health care services <sup>10,11,12</sup>

In recent Nigeria demographic health survey, about three-fifths of mothers (61%) have antenatal care and 38 % of deliveries were attended to by skilled providers. <sup>9</sup> Only 36 % of pregnant women delivered in heath facilities. <sup>9</sup> There is thus a wide discrepancy between those who have antenatal care and those who turned up in health facilities for delivery. The antenatal indices in Nigeria have not improved as fast as it should have been.

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The blame for this dismal performance rests both on the antenatal population and also on health care providers. While some of the determinants of health care facilities utilisation amongst the antenatal population like widespread poverty, social inequality, ignorance, illiteracy <sup>8</sup>, can only be corrected over time, the health seeking behaviour of the antenatal patients also play a major role in the events that leads to maternal morbidity and mortality. <sup>13</sup>

By definition, in this study multiple antenatal registrations means a pregnant woman has voluntarily registered for antenatal care in more than one health institution or in other unorthodox places like the Traditional Birth Attendant's place, Nursery homes and Churches. Women who were referred from one health Institution to another by definition are not regarded as having registered in multiple centres and they were excluded from the study.

Multiple antenatal registrations in more than one heath facility are frequent occurrence in Nigeria. It is one of the major obstacles to health care delivery. <sup>13</sup> This practice, do not only divert the focus and attention of the would-be mother, in most cases, they end up registering in another health facility that is lower in status than where they registered previously. Worse still, a sizeable proportion of our antenatal population also patronise 'non-orthodox antenatal care centres' like the traditional birth attendant, Churches, maternity homes ran by quacks and some would even have a home delivery.

Another factor that has aggravated multiple antenatal registrations in Nigeria is the problem of inadequate health care delivery by care providers. The incessant strike actions by health care providers orchestrated by the supremacy between doctors on one hand and the other health workers on the other hand has created obstacles to health care delivery system in Nigeria.

The aim of this study is to evaluate factors influencing multiple antenatal registrations among booked antenatal patients, assess the effects on maternal and perinatal morbidity and mortality and make suggestions on how to improve on the quality of antenatal care in Nigeria.

# II. Methodology

## 2.1 Study Design

This was a descriptive cross sectional study conducted at the University of Port-Harcourt Teaching Hospital, Port-Harcourt (UPTH), Rivers State, South-South Nigeria, between June and September, 2014.

## 2.2 Study Area

Rivers state is a Southern state of Nigeria in the core of the Niger Delta.

# 2.3 Study Population

This consisted of all antenatal patients that consent to the study within the study period.

### 2.4 Sampling Method

Doctors were recruited into the study and antenatal attendees within the study period were met and told about the study and its importance individually. Patients who consented were enrolled immediately and structured questionnaires were self-administered to the patients. Of the 260 patients enrolled, 29 questionnaires were incompletely filled and rendered invalid. Hence, the respondent rate was 88.9% (231).

#### 2.5 Study Instrument

It consisted of a set of structured pretested questionnaires that were administered to consecutive antenatal attendees.

## 2.6 Data Analysis

The data was processed using SPSS windows version 20.

# III. Results

Two hundred and thirty one (231) respondents were enrolled for this study. The mean age of respondents was 31 years  $\pm$  17.104 and the median age was 30 years. The mean gestation age was 29.31weeks  $\pm$  7.152, median age 30 weeks. The mean of antenatal care visits at the University of Port – Harcourt Teaching Hospital was 4.69  $\pm$ 2.62, and a median of 5.0.

Six respondents (2.6%) were single, 221 (95.7%) were married: Parity- Primigravida 78 (33.8%), Para one 57 (24.7%), Para two 56 (24.2%): Religion –Pentecostal 115 (49.8%). Tribe - Ijaw 16 (7%), Ibo 122 (52.8%): Woman's educational level – secondary 47 (20.3%), Tertiary 176 (76.2%): Husband Education-Secondary 55 (23.8%), Tertiary 165 (71.4%): Woman's Occupation- Unemployed 55 (23.8%), Artisan 19 (8.2%): Husband's Occupation –Unemployed 12 (5.2%), Artisan/Trader 19 (8.2%).

There was no statistical significance between multiple antenatal registrations on one hand and: Parity  $X^2 = 1.000$ , Marital status  $X^2 = 0.430$ , Religion  $X^2 = 0.489$ , Tribe  $X^2 = 0.992$ , Woman's education  $X^2 = 1.000$ , Husband's education  $X^2 = 1.000$  at  $(P \le 0.05)$ . However there was statistical significance between multiple antenatal registrations and Husband's occupation  $X^2 = 0.00$  ( $Y \le 0.05$ ).

See table 1 for the demographic characteristics of respondents.

One hundred and twenty eight (55.4%) registered solely in UPTH: 103 (44.6%) of respondents registered in both conventional health institutions and unorthodox antenatal care centres. Eighty (34.6%) of respondents registered solely in conventional health facilities besides UPTH without patronising unorthodox care.

Besides registering for care in UPTH, 48 (19.7%) respondents registered solely with Private Hospitals/Clinics and an additional 2 (0.8) who registered with them also registered with other centres, 12 (5%) also registered solely with Government Health Centres while another 4 (1.7%) who registered in these health centres also registered in other centres. Put together, 24 (10.4%) respondents had unorthodox antenatal care registrations among the study population i.e. in Churches, Traditional Birth attendants and in Maternity homes.

See Tables 2 for pattern of multiple antenatal registrations in both orthodox and unorthodox centres.

Examination of respondents by non-health care personnel (quacks) among the study population - A total of 40 (17.3%) of respondents were examined by non-health care providers in the study.

See table 3 for pattern of unorthodox care providers who examined respondents.

The most common reason adduced for a second antenatal registration was incessant strike actions by Health workers - 46 (17.3%) of respondents and 36 (13.6%) said the distance from place of residence to the Teaching hospital was too far.

See table 4 for reasons adduced by respondents for registering in more than one centre for care.

One hundred and ninety nine respondents (86.2%) were satisfied with the antenatal care services they have received at the centre, while 17 (7.4%) have their reservations. In current pregnancy, 205 (88.7%) of respondents expressed a desire to deliver at the centre. Amongst respondents who have delivered previously, 23 (10.1%) have delivered outside a conventional health institution (unorthodox centres).

IV. Tables

Table 1: Demographic characteristics of respondents

Parity	Frequency	Percentage
Primigravida	78	33.8
para one	57	24.7
para two	56	24.2
para three	26	11.3
para four	10	4.3
para five and above	4	1,7
Total	231	100
Marital status	Frequency	Percentage
Single	6	2.6
Married	221	95.7
Separated/divorced	4	1.7
Total	231	100
Religion	Frequency	Percentage
Catholic faith	65	28.1
Protestant	33	14.3
Pentecostal	115	49.8
Others	18	7.8
Total	231	100.0
Tribe	Frequency	Percentage
Ijaw	16	7.0
Ibo	122	52.8
Yoruba	10	4.3
Hausa	2	0.8
Others	81	35.1
Total	231	100.0
Educational status	Frequency	Percentage
No formal education	2	0.9
Primary education	6	2.6
Secondary education	47	20.3
Tertiary education	176	76.2
Total	231	100.0
Husband's Educational status	Frequency	Percentage

No education		
Primary	3	1.3
Secondary	5	2.2
Tertiary	55	23.8
4.00	165	71.4
5.00	1	0.4
Total	2	0.9
	231	100.0
Husband's occupation	Frequency	Percentage
Unemployed	12	5.2
Artisan/trader	14	6.1
Businessman	74	32.0
civil servant	61	26.4
Professional	70	30.3
Total	231	100.0
Woman's occupation	Frequency	Percentage
Unemployed	55	23.8
Artisan	19	8.2
Businesswoman	61	26.4
Civil servant	62	26.8
Professional	34	14.7
Total	231	100.0

Table 2: Other antenatal registrations besides UPTH

Other Antenatal Registrations Centres	Frequency	Percentage	
BMH	7	3.0	
1,3,6	2	0.9	
1,6,7	1	0.4	
1,7	1	0.4	
1, 4	1	0.4	
General Hospitals	12	5.2	
Government Health centre	12	5.2	
3,4	1	0.4	
3,7	1	0.4	
Private clinic	48	20.8	
TBA	3	1.3	
Maternity home	8	3.5	
6,7	1	0.4	
Church	5	2.2	
None (Registered only in UBTH)	128	55.4	
Total			
	231	100.0	

# **Keys to Multiple antenatal registrations in Table 2**

- 1. BMH= Braithwaite Memorial Hospital (A tertiary Public Health Institution).
- 2. General Hospital (Secondary public health institution).
- 3. Government Health Centres (Public Primary Health Centres).4. Private Clinics
- 5. Traditional Birth Attendants place (TBA's)
- 6. Maternity Homes (ran by quack Nurses).
- 7. Churches.
- 8. None: Registered only in UBTH

Numeric figures are combinations of the above keys in Table 2.

Table 3: Examinations of respondents in Unorthodox health institutions by quacks

Examiners	Frequency	Percentage
TBA	9	3.9
Pastor	12	5.2
Church nurses	6	2.6
Auxiliary nurses	8	3.4
Ordinary church workers	5	2.2
None	191	82.7
Total	231	100.0

Table 4 - Reasons given for registering in multiple centres - (N265- Multiple Responses). Reasons for multiple registrations Frequency Percentage Residence too far from UPTH 36 13.6 UPTH nurses ate unfriendly 3 1.1 2 TBA for massage 0.8 Too long waiting times 5 1.9 Incessant strike by hospital workers 46 17.3 2.3 Cost of delivery 6 Additional ANC fee paid by place of work 3.0 13 Advice from husband, friends 4.9 Registered in church because of spiritual attention 3 1.3

7

1

135

265

2.6

0.3

50.9

100

## V. Discussion

To limit numbers of visit to UPTH

Registered only in UPTH and no reasons

Fear of caesarean section

Total

The study Population was highly educated as 76.2% had tertiary education. Interventions, when the need arises are easier to execute with educated subjects because of in-depth understanding of issues related to reproductive health. The mean antenatal care attendance (ANC) at the University of Port – Harcourt Teaching Hospital was  $4.69 \pm 2.62$ , and a median of 5.0. This means that on the average respondents have between 4 - 5 antenatal visits and 50% respondents had five antenatal visits and another 50% respondents have below five visits. However, these positive effects of antenatal visits can be eroded by the individual seeking multiple and substandard care in various centres.

A total of 44.6% respondents had multiple antenatal care registrations in this study. This was higher than the incidence of 14.93% by Gharoro and Okonkwo in Benin. While antenatal care registrations remain low in Nigeria, the health seeking behaviour of those who have walked in to health institutions to seek for care hampers the improvements on our National maternal mortality figures which currently stood at 545 deaths per 100,000 births. According to the recent demographic and health survey, 61 % of pregnant women had antenatal care, but only 36 % of them turned up for delivery in a health facility. Twenty-five (25%) of those registered are thus lost to multifaceted antenatal care including non-orthodox centres.

Among the study population, 10.4% of the respondents also patronized Non- orthodox centres for antenatal care. There is thus a multifaceted patronage of both the public, private and Non-Orthodox centres such as churches, Traditional Birth Attendants, Delivery homes. Though only1:10 respondents exhibits such health seeking-behaviour by patronising Non- Orthodox centres, they contribute substantially to maternal morbidity and mortality in the West African Sub-region. <sup>13</sup> Where facilities and appropriate interventions are available, it is estimated that 90% of such maternal deaths can be avoided.

A total of 17.3% respondents were examined by non-health care providers in the study, including Pastors, Church Nurses, Church workers and auxiliary nurses. Some researchers in the West African sub-region have asserted that this pattern of health seeking behaviour is due to the negative perception of care providers by antenatal attendees - doctors seeing them in a hurry, inadequate health care infrastructure, and hostility from care providers amongst other determinants of antenatal health care utilization. Among these problems are deep seated cultural beliefs that the pregnancy period is a trying moment where individuals can be attacked spiritually, thereby explaining their reasons for registering in Churches.

The most common reason adduced for multiple antenatal registration in this study was incessant strike actions by health workers in Nigeria (19.9% of respondents) and the distance from place of residence to the Teaching Hospital in case they are in labour especially at night. Viewed critically, both reasons stemmed from insecurity of what happens to them in labour in case they get to the hospital and the health facility is under lock and key or the centre is so far from place of residence that it cannot be accessed when in labour. However 85.3% of respondents were satisfied with the antenatal services at the University of Port - Harcourt Teaching Hospital and further 88.7% hope to deliver in this facility in the index pregnancy if care providers do not abandon them.

# VI. Conclusion

To improve and strengthen antenatal care in sub-Saharan Africa and indirectly reduce maternal mortality and morbidity, care providers need to correct the negative perception they have created before antenatal patients. At the same time, Care providers need to launch aggressive education programmes that will enlighten mothers on factors militating against antenatal care and its benefits when properly executed.

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