REASONS GIVEN BY PREGNANT WOMEN FOR LATE INITIATION OF ANTENATAL CARE IN THE NIGER DELTA, NIGERIA

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SUMMARY

Background: Many studies show that the vast majority of Nigerian women register for antenatal care late and that the determinants may differ from those found in developed countries.

Objective: To determine the reasons for late booking among women presenting at the antenatal clinic of a major tertiary hospital in the Niger Delta, Nigeria

Design: A cross sectional questionnaire based survey.

Setting: A large tertiary hospital in the Niger delta, Nigeria

Participants: Pregnant women registering for antenatal care after 14 weeks gestation.

Results: The majority of respondents were aged 20-39 years (97.1%), quarters were primigravidae and 25 % of the women belonged to the upper socioeconomic class. Seventy three point six percent booked in the second trimester and 26.4% in the third trimester. Of the women who had given birth before, 80% had booked late in at least one previous pregnancy. More than three-fifth of the women (65.6%) booked late due to ignorance or misconceptions of the purpose of, and right time to commence antenatal care.

Conclusion: The findings of this study suggest that most women book late because of a belief that there are no advantages in booking for antenatal care in the first three months of pregnancy. This seems to be because antenatal care is viewed primarily as curative rather than preventive in the study population. Research is needed to determine the best approaches for health education programmes to correct the misconceptions about antenatal care.

Key words: antenatal care, pregnancy, maternal, foetal outcome

INTRODUCTION

Early commencement of antenatal care by pregnant women as well as regular visits has the potential to affect maternal and foetal outcome positively.[1,2,3] In the United States of America and the United Kingdom, the recommended gestational age for booking is within the first twelve weeks of pregnancy.[4,5]

Many developing countries including Nigeria do not have national guidelines on antenatal care but commencement of antenatal care within the first 14 weeks of gestation is widely accepted as early and many previous workers have defined booking after the 14th week of pregnancy as late.[6,7,8,9] Commencement of focussed antenatal care before 14 weeks of gestation allows for early commencement of health education and counselling on expected physiological changes, the normal course and possible complications of pregnancy, labour and puerperium.[2,3]

Similarly, it aids early documentation of the woman's baseline physiological and laboratory parameters for subsequent comparison and early detection of anomalies with the progress of pregnancy.[2,3] It also provides opportunities for preventive health care services such as immunization against neonatal tetanus, prophylactic treatment of malaria through the use of intermittent presumptive treatment approach, and HIV counselling and testing.[2,3] Another advantage is the early detection of modifiable pre-existing medical conditions that may influence the course and outcome of pregnancy such as cervical incompetence, chronic hypertension and diabetes mellitus.[2,3]

Previous studies indicate that the vast majority of Nigerian women who utilize modern antenatal care book late, which is in sharp contrast with findings in most developed countries. Okunolola et al[7] and Adekanle and Isawumi[8] reported prevalences of late booking of 86% and 82.6% respectively from south western Nigeria. Ebeigbe and Igberase[9] similarly reported an incidence of 79.9% in the Niger Delta while the mean gestational age at booking ranged from 20.3-23.6 weeks. Similar findings have been reported from other countries in sub-Saharan Africa suggesting that this is a wide spread practice.[10,11] While studies from most developed countries have established that socially disadvantaged women such as teenagers ,unmarried women and women with lower level of education and lower socioeconomic class are more likely to book late for antenatal care, studies from sub-Saharan Africa suggest that these may not be the major determinants in Afri-

can women.[12,13] Previous studies from Nigeria are inconclusive. While some workers found no statistically significant effect of age, parity, level of education and socioeconomic class as well as incidence of previous obstetric complications between women who registered early and those who booked late, others have reported these as significant.[8,9,14] The aim of this study was to determine why women presenting at the booking clinic of a tertiary hospital in the Niger Delta, Nigeria register late.

METHODS

This was a cross sectional questionnaire based survey of randomly selected women presenting at the booking clinic of the Department of Obstetrics and Gynaecology, Central hospital Warri, Delta State. The Department of Obstetrics and Gynaecology, Central Hospital Warri is the largest obstetric unit in Delta state, one of the states in the Niger Delta region of Nigeria. It has seven Consultant Obstetricians and an annual delivery rate of 3300. Warri is one of the most populated cities in the Niger Delta, with an estimated population of about a million people. It is inhabited mainly by the indigenous tribes of the Niger delta including the Itsekiris, Urhobos, Ijaws and Isokos, settlers from other parts of Nigeria as well as foreigners working for the oil firms that operate in the city. The occupants consist mainly of traders, fishermen, farmers, civil servants and persons working for oil firms.

The study population consisted of pregnant women presenting at the booking clinic of the department of Obstetrics and Gynaecology between 8 am and 12 pm on Wednesdays from 1st January –July 31st 2007. Ethical approval for the study was obtained from the Hospital ethics committee while verbal consent was obtained from the women after the objectives of the study had been explained to them. All women who presented for booking after 14 weeks of gestation and met our inclusion criteria were approached to participate in the study. Women included in the study were those who were sure of their last menstrual periods or had had an early ultrasound scan within the first three months of pregnancy for dating.

Women whose cycles had been irregular prior to conception or who had been on hormonal methods of contraception within three months of conception or breastfeeding mothers who had not resumed their menses prior to conception were excluded from the study. Four hundred and ninety four pregnant women met the inclusion criteria out of which 372(75.3%) agreed to participate in the study. Three hundred and seventy two questionnaires were filled, out of which 348 had complete information and were analysed.

The questionnaire which had been pretested consisted of three parts. The first requested for information on the bio data: age, parity, marital status and setting, level of education and husband's occupation. In the second part, the women were asked about their previous obstetric history using open ended questions: "How many times have you delivered before?", "How many of them did you register in a hospital?", "When on the average did you register for antenatal care in your previous pregnancies? (Space provided for five pregnancies)".In the third part, questions were asked about the current pregnancy using both closed and open ended questions: "When did you register for antenatal care in this pregnancy?", "Why should women register for antenatal care?", "Why did you not register earlier(options given with space provided for others)", "When do you think is the best time for women to register for antenatal care?", "When do you think women are likely to have problems in pregnancy requiring treatment by a Doctor?"

Women who could read and write filled the questionnaires themselves while the rest were assisted by the authors and medical officers who had been trained in the administration of the questionnaires. It took about 5-10 minutes to fill the questionnaires. The right of each patient to participate or opt out of the study was respected. The data obtained was fed into a computer and analysed using the Instate statistical package. Social class definition followed the recommendations of Olusanya et al using the woman's level of education andhusband'soccupation[15].

RESULTS

Three hundred and seventy two women participated in the study while 348 questionnaires had complete information and were analysed in this study. Table 1 shows the biosocial variables of the study population and shows that the vast majority were aged 20-39 years (97.1%). A quarter of the study population were primigravidae and 25 % of the women belonged to the upper class. Most of the women were married (95.1%) and in a monogamous setting (88.5%).

The timing of booking showed that 73.6% (256) booked in the second trimester and 26.4% in the third trimester. However, in answer to the question on the best time for women to book for antenatal care , about three quarter (73.3%) felt the first three months of pregnancy was the best time to book for antenatal care, while 22.4% chose the second trimester and 4.3% the third trimester. Of the 256 multiparous women, 205(80%) had booked at least one previous pregnancy late.

Table 1 Biosocial variables in the study population

Variables	Percentage (Number)
Age	
<20	1.2(4)
20-29	49.1(171)
30-39	48.0(167)
>39	1.7(6)
Parity	
0	25.0(87)
1	26.4(92)
2	20.7(72)
3	13.5)47
4	6.3(22)
>4	8.1(28)
Social Class	
1	25.0(87)
2	31.6(110)
3	27.9(97)
4	12.4(43)
5	3.2(11)
Marital Status	
Married	95.2(331)
Single	4.6(16)
Separated	0.3(1)
Marital Setting	
Monogamous	88.5(308)
Polygamous	6.6(23)

Table 2 shows the numerous reasons given by the women for registering late. The reasons given for registering late for antenatal care by the study population may be grouped into four classes. The first class (a) included women who registered late due to financial constraints and these constituted 10.1% of the study population. A second group (b, c) were women who registered late because they wanted to delay making the pregnancy public or were afraid of perceived enemies who may harm the pregnancy, these contributed 9.2%. The vast majority fell into the third group whose reasons portrayed ignorance of the purpose of antenatal care or misconceptions of the purpose and timing of antenatal care (d,e,f,g,h i) .

The fourth group (j) were women who seemed to appreciate the value of antenatal care and had registered earlier in a maternity home or a Private clinic but wanted to be seen in an obstetrician driven unit, these contributed 15.2% of the study population.

Table 3 shows the women's perceptions of when a pregnant women is likely to have problems requiring treatment by a doctor. A third of the women mentioned the first three months of pregnancy while close to a third stated that this could happen anytime during pregnancy. Another interesting finding of this study was that nearly a tenth of the study population registered late because they wanted to delay making the pregnancy public or were afraid of perceived enemies who may harm the pregnancy.

Table 2 Reasons given by the study population for booking Late

Reason	Percentage (number)(n=348)
Financial constraints	
(a) Did not have money to register	10.1 (35)
Fear of possible consequences that may follow making the pregnancy public knowledge	
(b) Did not to make the pregnancy public yet	6.3 (22)
(c Did not want those who do not wish me well to know of the pregnancy earlier	2.9 (10)
Ignorance or misconceptions about antenatal care	
(d) Did not have any serious problems or expect to have in first three months	21.0 (73)
(e) Women do not usually have problems in early pregnancy that need a doctors intervention	5.21(18)
(f) Don't think thee is any benefit in booking in the first three months	8.1(28)
(g) Felt weak and sick most of the time and wanted to feel stronger before registering for antenatal care	5.2 (18)
(h) No reason, felt it was the right time to book	13.5 (47)
(i) Was seeing a nurse at home	12.6 (44)
Registered in another hospital earlier	
(j) Registered earlier in a private hospital of maternity home	15.2(53)

Table 3 Perceptions of when pregnant women are likely to require treatment by doctors (n=348)

variable	**percentage (number)**
When are pregnant women most likely to have problems in pregnancy requiring treatment by a Doctor?	
First three months of pregnancy	33.3 (116)
Second three months of pregnancy	5.5 (19)
Third three months of pregnancy	13.8 (48)
Anytime during pregnancy	32.5 (113)
During labour and delivery	14.4(50)
After delivery	0.6(2)

DISCUSSION

The results of this study show that about three quarter of the study population registered for antenatal care in the second trimester of pregnancy while a third did in the third trimester. This is in keeping with most previous studies in African women which show that the average timing was usually in the second trimester.[8,9,10,14] It was interesting to note that as much as about three quarter of the women felt that the first three months of pregnancy was the best time to register for antenatal care. This knowledge most likely came from health education programs during previous pregnancies, hospitals or the news media but the booking pattern suggests that most of the women were not convinced that there was any gain in registering for antenatal care early or had constraints hence the discordance between knowledge and practice in most of them.

This is further buttressed by the finding that as much as four-fifths of women who had delivered before had booked for antenatal care late previously. This clearly suggests that the antenatal health education programmes the women had been exposed to in previous pregnancies had been ineffective in modifying their behaviour. Adeyemi et al[14] found similarly that though most of the women in their study in South western Nigeria booked late, 57.3% felt women should book in the first trimester. They concluded that unless the socio-cultural and religious determinants of health seeking behaviour were modified, good health education may not easily translate to optimum utilisation of antenatal care.

The findings of this study suggest that the determinants of late booking for antenatal care are multifactorial. A major finding of this study was that for the majority of the subjects of this study, the reasons given hinged on misconceptions or ignorance of the purposes of, and therefore the right time to commence, antenatal care and not on physical or financial constraints. The attitudes seem governed by a perception that antenatal care is primarily to detect or treat serious diseases. This explains the belief that women did not need to book early since they do not have any problems in early pregnancy that need a doctor's intervention or the presumption that there is no benefit in booking in the first three months.

There seems to be an underlying belief that a woman can do without registering in early pregnancy since whatever symptoms women may have in early pregnancy are normal, mild or not serious enough to need a doctor's attention. Thus, antenatal care seems viewed by most of the women as curative rather than preventive which is in sharp contrast with the goals of antenatal care which are mainly preventive. This may explain why as much as 12% of the women were content with seeing a nurse at home, many of whom may be auxiliary nurses or even health assistants, until they felt their pregnancies were old enough to have problems that needed a doctor's attention. Similarly, it may explain, at least in part, the practice in about a sixth of the study population of registering in a private hospital or maternity home and registering in an obstetrician driven care in the second or third trimester of pregnancy.

It would be expected that in a low resource setting like Nigeria, financial constraints and distance from the health facility may play a major role in determining the timing of initiation of antenatal care but the findings of this study suggest that the women's understanding and perception of the need for antenatal care may play a more dominant role. Similarly, Gharoro and Igbafe[16] reported that ignorance was the underlying factor in late initiation of antenatal care in two-fifth of the women in their study among pregnant women in a Nigerian Teaching Hospital while 25% indicated financial constraints. However, their study was in a hospital where fees for antenatal care and delivery are much more expensive than in the setting for our study. Our findings differ with the reports from studies in most developed countries where the odds for late initiation of antenatal care have been reported as higher in women with social and financial disadvantages like teenage pregnancy, unemployment, single women and black women.[12,13,17]

Analysis of Socioeconomic class showed that a quarter of the women belonged to the upper social class. The social classification used in this study combined the woman's level of education and the husband's occupation. This was used because of the recognition that in developing countries, the woman's level of education is a major determinant of health seeking behaviour. This would explain why up to a quarter of the women belonged to the upper social class in a low resource setting like Nigeria.

This system differs significantly with most social classification guidelines based on the occupation or income of the head of the family used in most developed countries.[18]

The findings of this study suggest that most women book late because of a belief that there are no advantages in booking for antenatal care in the first three months of pregnancy. This seems to be because antenatal care is viewed primarily as curative rather than preventive in the study population. Community based health education programmes are needed to correct the misconceptions about antenatal care.

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