

GESTATIONAL AGE AT FIRST ANTENATAL ATTENDANCE IN SAGAMU, WESTERN NIGERIA

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ABSTRACT

Objective: The importance of antenatal care (ANC) in reducing maternal and perinatal morbidity and mortality in developing countries cannot be over-emphasized. The time of first visit for ANC is very crucial as the number of visits and the interval between the last visit and delivery. This study was carried out to determine the gestational age at first antenatal attendance at our centre and find out factors that influence it, with the aim of making suggestions that will encourage early booking for ANC.

Subjects and Methods: A cross-sectional study was carried out amongst pregnant women that came to book for antenatal care at Olabisi Onabanjo University Teaching Hospital, Sagamu between January 2000 and December 2002.

Results: The mean gestational age at first antenatal attendance for the 2,084 pregnant women in the survey group was 21.4 ± 5.1 weeks. The gestational age at booking amongst the primigravidae and multiparous women was significantly higher than that of the grandmultiparous women (20.3 ± 5.2 weeks and 21.7 ± 5.8 weeks versus 16.5 ± 6.5 weeks; $p < 0.05$). The difference between the gestational age at first attendance for the literate subgroup (21.7 ± 4.2 weeks) and that for the illiterate subgroup (20.8 ± 4.5 weeks) was not significant ($p > 0.05$). In 72% of cases, there was no specific reason for choosing the time of antenatal booking.

Key words: Gestational, age, pregnant, women, Sagamu.

INTRODUCTION

Antenatal care has been known for quite a long time to be associated with marked reduction in maternal and perinatal morbidity and mortality especially in developing countries when it is done in the appropriate context¹. A pregnant woman is said to have been 'booked' if she attended at least four antenatal clinic (ANC) visits and received among other things tetanus immunization². Another definition is if the pregnant woman booked for ANC and has made a minimum of two antenatal visits that last not more than two weeks before delivery³. The time of first visit for antenatal care is very crucial as the number of visits and the interval between the last visit and delivery. There is dearth of information on the gestational age at which pregnant women book for antenatal care in Nigeria especially at our centre. Hence this prompted the study.

Pregnant women have unlimited access to antenatal care services at Olabisi Onabanjo University Teaching Hospital (OOUTH), Sagamu, though a tertiary centre. Hence there is no patient selectivity for maternity care.

The objective of this prospective study is to determine the gestational age at which pregnant women book for antenatal care and factors for choosing such a time.

Subjects and Methods

All pregnant women that came to booking antenatal clinic of OOUTH, Sagamu between January 2000 and December 2002 were interviewed and examined using a questionnaire after their consent had been obtained.

Criteria for inclusion were pregnant women who were sure of the date of their last menstrual period with compatible uterine size and those pregnant women that had abdominopelvic ultrasonography for dating either because of uncertain dates or presence of disparity between the gestational age and size of the uterus.

Mean gestational ages were compared where necessary by student 't' test. A p-value of less than 0.05 was considered statistically significant.

Results

Two thousand, three hundred and sixty pregnant women booked at the antenatal clinic of the hospital within the 3-year study period and 2,084 satisfied the inclusion criteria.

Majority (67.9%) of the pregnant women were within the age groups 25-29 years and 30-34 years, and teenagers constituted 5.7%. Thirty nine point one percent of the pregnant women were primigravidae, 59.3% multiparae and 1.6% grandmultiparae.

Virtually all the women were from Sagamu township with a few from nearby towns (usually by referral). Ninety percent had at least primary school education and as much as 43.0% had tertiary school education. Only 9.3% of the women had no formal education.

The mean gestational age at first antenatal attendance for all the pregnant women was 21.4 ± 5.1 weeks. Only 392 women (18.8%) booked at a gestational age of 14 weeks or less while 98 women (4.7%) had their first visit at 34 weeks or more. The mean gestational age for the literate subgroup was 21.7 ± 4.2 weeks while that of the illiterate subgroup was 20.8 ± 4.5 weeks ($p > 0.05$).

Discussion

The mean gestational age at first antenatal attendance amongst the study group is 21.4 ± 5.1 weeks. This value is higher than the 18 weeks "observed" in pregnant women at Igbo-Ora, Nigeria⁴, lower than 28 weeks found amongst pregnant women in Durban, South-Africa⁵ but comparable to the "5th month" reported for Malaysian pregnant women⁶ and 23.5 weeks noted for pregnant women in Sokoto, Northern Nigeria³. Since one of the main objectives of antenatal care is prenatal diagnosis and management of fetal abnormalities, booking for antenatal care late in pregnancy would defeat this purpose. As a matter of fact, only 18.8% of the study group booked within the first trimester of gestation. This is slightly higher than Ekele's observation (7%) in Sokoto, Nigeria³. There is a genuine need to educate the public about the importance of early booking for antenatal care.

There was no statistical difference between the mean gestational age of the literate subgroup (21.7 ± 4.2 weeks) and that of the illiterate subgroup (20.8 ± 4.2 weeks) at the first antenatal attendance. That most of the respondents were urban women may be the overriding factor but more important is the fact that majority (95%) of the spouses of the illiterate women were literate. Perhaps as a result, the illiterate women had some informal education on health matters, hence influencing their time of booking. A typical effect of education on antenatal attendance was also observed in Zambia⁷.

Tribe was not an important factor in terms of time of first attendance for antenatal care amongst the pregnant women who were Yorubas, Igbos and Hausa-Fulanis.

However, women from other tribes like Igede, Isoko etc came to book for antenatal care at a later date. This could be deduced from the fact that most of these women and their spouses had no formal education (illiterate) and did not appreciate the importance of early booking for antenatal care.

Parity was a significant factor when grandmultiparae were compared with multiparae and primigravidae. The former women tended to book earlier in pregnancy than the latter (16.5 ± 6.5 versus 20.3 ± 5.2 and 21.7 ± 5.8 ; $p < 0.05$). This differs from findings of Ekele in Northern Nigeria³ and Baldo et al.⁸ in Saudi Arabia where older women were found not to be keen in attending antenatal clinics or attended late when they do because of previous successful pregnancy outcomes. The reason for early booking observed in the grandmultiparae could be adduced from the fact that majority of the women are urban dwellers and literate.

Majority (72%) of respondents could not give any specific reason for booking for antenatal care at the time they did. In 7% of cases, that was the time they could afford to pay the hospital fee for booking. But when the booking fee was two hundred and twenty five naira in 2000 and 2001, the mean gestational age was 21.0 weeks, which was not significantly different from 21.9 weeks obtained as mean gestational age in 2002 when the cost of booking for antenatal care was four hundred and twenty five naira, thus casting doubt on cost as a factor influencing time of booking. However, the almost 100% increase in hospital fee for booking for antenatal care caused a significant fall in the total number of women that had antenatal care from an average of 718 per year for 2000 and 2001 to 647 in 2002. This corroborates Attah's report that "In Nigeria, attendance at government antenatal clinics has been falling since 1985 when medical fees were introduced".

Nine percent of the pregnant women underwent relocation and this accounted for their booking late. Most of the women in this class had some form of antenatal care at their previous places of abode but had no medical report or referral letter to give relevant information. It is suggested that as a matter of policy, health service providers and carers should cultivate the right habit of a referral system where pregnant women who are relocating to new stations are given concise medical reports containing relevant information and preferably at no extra cost. For example, patients are the custodians of their case notes in some primary health care centres, hence they can relocate easily with same. The former suggestion is ideal as the latter would deprive the health centre of important source of health information.

Table 1: Mean gestational Age in relation to the Tribe and Parity of the antenatal women.

No.	Percentage	Gestational age (weeks)	
(i). Tribe			
a). Yoruba	1686	80.9	21.0 ± 5.9
b). Igbo	248	11.9	18.7 ± 3.0
c). Hausa-Fulani	83	4.0	18.6 ± 1.4
d). Others	67	3.2	26.0 ± 12.0
Total	2,084	100.0	21.4 ± 5.1
(ii). Parity			
a). Primigravidae	815	39.1	20.3 ± 5.2
b). Multiparae	1236	59.3	21.7 ± 5.8
c). Grandmultiparae	33	1.6	16.5 ± 6.5
Total	2,084	100.0	21.4 ± 5.1

Table 2: Reasons given for booking at the time they did.

Reason	No.	(%)
When affordable	146	(7)
Just relocated	188	(9)
"Quickening"	167	(8)
Miscellaneous	83	(4)
Non-specific	1,500	(72)
Total	2,084	(100)

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