



MATERNAL KNOWLEDGE ASSESSMENT TOWARDS REGISTRATION IN PRIMARY HEALTH CARE CENTERS DURING PREGNANCY IN SAGBAMA LGA BAYELSA STATE, NIGERIA

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ABSTRACT

Aim/Objective: This study determines maternal attitudes towards antenatal registration in primary health care centers during pregnancy. **Materials and Methods;** A cross sectional approach and a simple random method was use in selecting the respondents (n=199) with the aid of questionnaire. **Results:** Observation from this study shows greater number of the respondents within the age of above 36yrs (34.19%) and 26-35yrs (37.19%) with a higher number of tertiary (52.26%) educational level backgrounds. Outcome from this study shows 89.95% of respondents having knowledge of registration compared with 10.05% of no knowledge during pregnancy. Their source of information was mainly from PHC centers (57.27%) and the media (23.62%) respectively. The centers registered was mainly PHC (49.25%) and hospitals (30.15%) while the participants awareness to antenatal care was (89.95%) as against (10.05%) with no awareness. More so 86.43% see antenatal care as important and 85.43% agreed that there are benefits from health seminars during pregnancy. Furthermore (87.94%) strongly agree that PHC registration during pregnancy improve safe delivery compare with (12.06%) that disagree. **Conclusion:** Most respondents in this study agree and have adequate knowledge about the benefit of early registration for antenatal care in PHC centers and hospitals as well during pregnancy. Therefore the government should build more health centers and hospitals that should be well equipped with modern facilities to promote good health and safe delivery among pregnant women in rural villages.

Keywords: Health care, Maternal, Pregnancy, Registration, Respondents.

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INTRODUCTION

The importance of early registration is crucial for timely initiation of ANC, which is linked to reduced maternal and infant mortality (Olamide *et al.*, 2025). Registration ensures access to essential services like screenings, vaccinations, nutritional support, and education about pregnancy, childbirth, and postpartum care (Gebremariam *et al.*, 2023). Timely registration and ANC can help prevent or manage complications like pre-eclampsia, gestational diabetes, and infections (Joseph *et al.*, 2024; Oluwole *et al.*, 2025). Registered women are likely to deliver in health facility with skilled personnel, leading to better outcomes for both mother and child (Aluko *et al.*, 2019). Pregnancy registration data provides valuable information for public health planning, resource allocation, and evaluating the effectiveness of maternal health programs (Ogaji *et al.*, 2017; Hala *et al.*, 2024).

The general health status of pregnant women depends largely on their registration in primary health care facilities and on the quality of the Antenatal Care services available to them. Antenatal care is a series of pregnancy related health care provided by a doctor or a health worker in a health facility or home (Abimbola & Misbahu, 2023; Hailemicheal, 2013).

While there has been progress in maternal health, significant disparities persist in antenatal care coverage, with some regions lagging behind, particularly in Sub-Saharan Africa and Southern Asia (Clement & Ekio, 2017; Bashir *et al.*, 2023). Socioeconomic factors, such as poverty, lack of education, and cultural beliefs, can influence a woman's decision to register her pregnancy. Studies indicate that women with unwanted pregnancies are more likely to avoid registration (Edie *et al.*, 2015; Baron *et al.*, 2016; Filippiet *et al.*, 2018). Maternal registration is closely linked to maternal mortality rates. Maternal deaths have declined, but progress is not fast enough, and vast inequalities exist, with more than half of maternal deaths occurring in fragile and humanitarian settings (Rajiv *et al.*, 2015; Mondal *et al.*, 2023).

Studies in northern Nigeria concerning maternal registration during pregnancy revealed that most pregnant women (85.3%) have poor attitude towards registration for antenatal care (Azuhet *et al.*, 2019; Drigo *et al.*, 2020). This attitude leads to complications of pregnancy and delivery such as low birth weight of new-born which pre-disposes them to several opportunistic infections, skin trauma and even hypothermia. Timely and frequent use of ANC enables delivery of essential services, including malaria treatment, immunizations, and health counseling (Ahuru *et al.*, 2021; Yankuzo, 2024). This information is used to monitor the quality of care and the risk of pregnancy.

ANC clinics provide resources to improve nutrition and health knowledge and promote preventive health practices. Antenatal care is a critical strategy in reducing maternal mortality as it facilitates the identification and mitigation of risk factors early in pregnancy (Yogi *et al.*, 2024; Resty & Lydia, 2024). Registration is the key entry point of a pregnant woman to receive broad range of health education and preventive services that are useful to improving mother and her pregnancy's health. This information is used to monitor the quality of care and the risk of pregnancy (Abimbola & Misbahu, 2023). In conclusion, while many pregnant women recognize the importance of ANC and utilize PHCs, various factors influence their attitudes and decisions regarding registration and service utilization. Addressing issues related to quality of care, accessibility, and socio-cultural factors is crucial to improve maternal health outcomes and ensure women have positive experiences with PHC services (Olamide *et al.*, 2025).

MATERIALS AND METHODS

Study design

A descriptive study design was used for this study

Study area: Anibeze, Sagbama, Tumgbo, Tumgbabiri, Adagbabiri, and kenan communities.

Study population

The population of the study consisted of all pregnant women and those that have giving birth in Sagbama LGA concerning maternal registration during pregnancy in primary health care centers. Only those who consent were part of this study.

Sample size

Previous prevalence response rate of 13.1 % (Ogundele *et al.*, 2023). Using Temogna formula (2013), $n = pq / (e/1.96)^2$. Where n = sample not known, p = percentage proportion of regular respondents to primary

health care during pregnancy, e = merging of sampling error tolerated at 95% degree, confident interval set at 5% or 0.05, $q = 100-p$

$$n = 13.6 \times 100 - p/(5/1.96)^2.$$

$$n = 13.6 \times 86.4/6.51$$

$$= 180.497 \text{ participants.}$$

However, non-respondent adjustment of 10% will give $10/100 \times 180.497 = 18.0497$.

Sample size = $180.497 + 18.0497 = 198.546$. Approximate participants = 199.

Source of data: primary

Instrument for data collection

Structured questionnaire and the source of data from respondents comprised of three (3) sections. Section A: Contains items on the socio-demographics, Section B: knowledge of pregnant mothers towards registration at primary health centres, while Section C: comprised of Practice of pregnant mothers towards registration at primary health centres.

Data Collection

Data was collected using self-administered questionnaire to 202 pregnant and non-pregnant mothers in Sagbama LGA. In addition, two research assistants with basic knowledge on maternal registration during pregnancy were recruited to give assistance in the collection and collation of data from respondents.

Data Analysis: Data were analyzed using SPSS version 24.0 and are presented in tables and expressed in frequency and percentage.

Ethical Consideration

Ethical approval to conduct this study was obtained from the College Health Sciences Ethics and Research Committee. Written and signed consent was gotten from the officer in charge of primary health centres visited and permission was obtained from each study participant before administering questionnaire.

RESULTS

This chapter contain the results obtain from this study and they are presented in tables and charts.

Table 1; Basic Characteristics of the Respondent

Variables (Age. Yrs)	Frequency(n)	Percentage (%)
≤18	10	5.43
18-25	37	18.59
26-35	74	37.19
≥36	78	39.19
Total	199	100
Marital Status of Study Population		
Single	43	21.60
Married	113	56.79
Divorce	17	8.54
Cohabiting	26	13.07
Total	199	100
\ Occupation of Respondents		
Civil servant	65	32.66
House wife	34	17.09
Business	79	39.69
Others	21	10.56
Total	199	100
Educational level of Respondents		
Primary	19	9.55
Secondary	66	33.17

Tertiary	104	52.26
None	10	5.02
Total	199	100

2025 Field survey

Table above describes socio-demographic characteristics of the entire population study in Ahoada west LGA in River state, Nigeria.

Table 2; Parity of Respondents

Variable	Frequency (n)	Percentage (%)
1-2	62	31.16
3-4	49	24.62
>5	88	44.22
Total	199	100

Source; Field survey (2025)

Table 2 above describe the number of times the respondents have given birth to fetus of 24 weeks and above in respective to live or stillbirth

Table 3; Knowledge of Registration during Pregnancy

Variables	Frequency(n)	Percentage (%)
Yes	179	89.95
No	20	10.05
Total	199	100
Source of Information about Registration		
PHC	108	57.27
TBAs	6	3.01
Husband	18	9.05
Media	47	23.62
Friends	20	10.05
Total	199	100
Centre Registered During Pregnancy for Antenatal		
PHC	98	49.25
Hospital	60	30.15
TBAs	31	15.57
None	10	5.03
Total	199	100
Respondents Awareness to Antenatal Care		
Response	Frequency(n)	Percentage (%)
Yes	179	89.95
No	20	10.05
Total	199	100

2025 Field survey

This Table describe the frequency and percentage of respondents that has knowledge and the source of information including awareness about the importance of registration in primary health care centers

Table 4; Antenatal Care is Important

Response	Frequency(n)	Percentage (%)
Yes	172	86.43
No	27	13.57
Total	199	100
There are Benefits from Health Seminars		
Yes	170	85.43
No	29	14.57
Total	199	100
Are Health Talks Waste of time During Antenatal visit		

Yes	53	26.63
No	146	73.37
Total	199	100

Source; Field survey (2025)

Table 4 above shows participants response to the benefits and importance of antenatal care during pregnancy.

Table 5; Registration for Antenatal Care is good During Pregnancy

Response	Frequency(n)	Percentage (%)
Yes	177	88.94
No	22	11.06
Total	199	100
Registration of First Trimester Pregnancy is very Important		
Yes	167	83.92
No	32	16.08
Total	199	100
Registration in PHC Center is not a waste after first Pregnancy		
Yes	177	88.94
No	22	11.06
Total	199	100

Source; Field survey (2025)

Table 5 above shows the importance of early pregnancy registration for proper antenatal care.

Table 6; Registration in PHC center Improve safe Delivery

Response	Frequency(n)	Percentage (%)
Yes	175	87.94
No	24	12.06
Total	199	100
Compliance with PHC information Improve Safe Delivery after Registration		
Yes	171	85.93
No	28	14.07
Total	199	100

Source; Field survey (2025)

Table 6 above shows maternal attitudes toward registration in PHC centers and compliance with guide lines of information received during antenatal care to improve safe delivery among women in the study area.

DISCUSSION

The age of the study population ranges from 18yrs (5.03%) to above 36yrs (39.19%). Respondents within age 18-25yrs were 18.59% and 26-35yrs make up 37.19% in this study. Married couples were 56.79% compared with singles of 21.60% and those cohabiting (13.07%) while divorce was 8.54% among the participants.

Findings from this study show that business (39.69%) and civil servants (32.66%) were the major occupation of the respondents. Greater number of the respondent's educational status was tertiary (52.26%) and secondary (33.17%) while those with no educational background were 5.02% in this study. The peak parity status was 44.22% among women with above five different pregnancies and deliveries. Most of the respondents has knowledge that registration for antenatal care during pregnancy (89.95%) is of vital importance compared with a fewer number of 10.05% with no knowledge. The major source of information regarding the importance of registration was based on enlightenment from primary health care workers (54.27%) and the media (23.62%) respectively.

However the study reveal PHC (49.25%) and hospitals (30.15%) as the most preferred choice of registration for antenatal care during pregnancy compared with TBAs (15.57%) and none (5.03%) among the study population. Thus 89.95% was comfortable with antenatal care registration as against 10.05% that see antenatal as not convenient to them. Further findings from this study shows that 84.43% of

women among the participants agreed that attending and observing health seminars guidelines during pregnancy are preventive measures from diseases while 73.37% also agree that health talks are not waste of time during antenatal visit compared with 26.63% that say is time consuming and hence it is not of importance.

More outcome from this study shows that 83.92% of the respondents agree that early antenatal registration during the first trimester of pregnancy is not a waste of time compared with 16.08% that felt it is a waste. The first trimester of pregnancy is the period the embryo is most susceptible to teratogenic insult from whatever hazardous chemicals the mother must have been exposed to. A considerable number of the respondents (88.94%) also choose to register in primary health care centers after the first pregnancy and delivery because it will improve safe delivery while 11.06% chooses elsewhere and 12.06% has the feelings that it does not improve safe delivery. This study disagree with the findings of Ntoimo *et al.*, 2019 who observe that pregnant women do not choose PHC centers for antenatal registration during pregnancy. Finally 85.93% agreed that compliance with PHC guidelines after registration improve normal delivery.

CONCLUSION

Findings from this study shows majority of women in the study area of the state has adequate knowledge about early registration for antenatal care and do prefer primary health care centers for registration during pregnancy. The study also shows that most of the respondents agree to the fact that registration in PHC centers is not a waste but will thus improve safe delivery and prevent the occurrence of teratogenic insult and diseases to the unborn child during pregnancy.

Conflict of Interest; None declared by all authors.

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