ISSN No. 2321-2705 | DOI: 10.51244/IJRSI |Volume XII Issue VIII August 2025

Awareness of Antenatal Services and Health Seeking Behaviour among Pregnant Women in Osun State

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DOI: https://doi.org/10.51244/IJRSI.2025.120800195

Received: 20 Aug 2025; Accepted: 04 Sept 2025; Published: 19 September 2025

ABSTRACT

Antenatal care (ANC) plays a crucial role in ensuring maternal and fetal well-being, yet awareness and utilization of these services vary across different populations. This study examined the awareness of antenatal services and health-seeking behaviour among pregnant women in Osun State, Nigeria. A cross-sectional survey was conducted among pregnant women in Osun State, using a well-structured 82-item questionnaire to assess their awareness, health-seeking behaviour, attitude towards their health and influencing factors for their utilization. Three hundred and twenty-two (322) pregnant women participated in the study and were selected using simple random sampling technique across 8 of the 30 local government areas in Osun State regardless of their age and marital status. Data were analyzed using Statistical Package for Social Science (SPSS) version 23.0. The findings of this study revealed that most (57.1%) of the respondents were aware of antenatal services, have a fairly good (57.8%) health-seeking behaviour, but poor (53.4%) attitude towards their health. This study also revealed that there was a statistically significant association between sociodemographic variables, age, education level and income, and health-seeking behaviour of pregnant women in Osun State at p less than 0.001; and that there was no statistical significant association between age and education level, and attitude of pregnant women in Osun State at p greater than 0.05, however, there was a statistically significant association between income and attitude of pregnant women in Osun State at p value 0.045. The study highlights the 9need for targeted health education programmes, improved healthcare accessibility, and community-based interventions to enhance ANC utilization. Strengthening maternal healthcare policies and addressing socioeconomic barriers can contribute to better maternal and neonatal outcomes.

Keywords: Awareness, Antenatal Services, Health seeking Behavior, Pregnant women

INTRODUCTION

Reproductive health is a key concern in the majority of developing nations, and accurate data on maternal fatalities is needed. Nigeria is still far from meeting the SDG target, according to recent figures, with 917 maternal deaths for every 100,000 live births in 2017 (World Bank, 2022) and 82,000 in 2020 (WHO et al., 2023), which accounts for 28.5% of all maternal deaths worldwide. Southern Asia and Sub-Saharan Africa

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accounted for more than 87% (225,000) of the projected global maternal deaths in 2023, despite recent World Health Organization research stating that the maternal mortality ratio decreased by 40% globally between 2000 and 2023. About 70% of maternal deaths occurred in Sub-Saharan Africa alone (182,000), and about 17% occurred in southern Asia (43,000). In 2023, 92% of all maternal deaths took place in low-and lower-middle-income nations, and the majority of these deaths were avoidable. (WHO, 2025). Pregnancy and childbirth are normal physiological and social processes rather than disorders in and of themselves. However, because they are the leading causes of death, disability, and illness among women, especially in developing nations, they require special attention for the sake of both the women own health and the survival of their children. In Nigeria, maternal mortality is still a major issue (NDHS, 2018). WHO uses a delay model to explain this issue, which takes into account poor health services in facilities, delays in getting to medical facilities, and delays in seeking medical attention. This paradigm has been linked to socioeconomic and human health system elements like poverty, inadequate emergency obstetric care, and fatalistic thinking. These issues have contributed to high burden of maternal and adult mortality in Nigeria by increasing the prevalence of infectious illnesses, postpartum hemorrhage, hypertensive disorders, unsafe abortions, and protracted labor. SDG 3.1 aims to lower the global maternal death ratio to less than 70 per 100,000 live births by 2030 (NDHS, 2018). Given this background, it is crucial to conduct this study on awareness of pregnant women about antenatal services and their health seeking behaviour in Osun State because of the high incidence of maternal death and morbidity in the Subregion of West Africa and Nigeria inclusive.

The World Health Organization (WHO) defines antenatal care (ANC) as the treatment a woman receives while she is pregnant. The main goal of ANC is to safeguard and advance the well-being of expectant mothers and their in-growing fetuses in order to produce a healthy mother and baby by the end of the pregnancy period. Latunji and Akinyemi, (2018) defined healthcare seeking behaviour (HSB) as "any action or inaction undertaken by individuals who perceive themselves to have a health problem or to be ill for the purpose of finding an appropriate remedy" in their study on factors influencing health seeking behaviour among civil servants in Ibadan, Nigeria. Pasand et al., (2016) noted that two important and more general topics of research in medical sociology and other fields that are related are health behaviour and illness behaviour. Despite the fact that they both deal with people's health and illness, their methods for examining how people react to these problems differ.

Pregnant women were found to have good behaviours (58.5%), favorable attitudes (98.75%), and average knowledge (96%). Numerous deliveries occurred in government facilities, and the sociodemographic connection revealed that awareness and practices about ANC were significantly correlated with age, family type, education, and occupation (Bashir et al., 2023). Nwabueze et al., (2023) stated that focused antenatal care (FANC) is a more recent and superior method of antenatal care for expectant mothers than the conventional model. In order to enhance the health of the child and the mother, FANC places a strong emphasis on individual evaluation and decision-making by the pregnant patient and the healthcare professional. Maternal mortality indicators have not substantially dropped in Nigeria even after the country implemented FANC treatment. Mazharul et al., (2018) conducted research that evaluated the compliance with WHO recommendations about health care-seeking behaviour during the entire pregnancy, the delivery process, and the postpartum phase in Bangladesh, it was discovered that 37% of deliveries took place in medical facilities, 65% of mothers visited post-natal clinic (PNC) at least once, while 31% of mothers had prescribed four or more ANC visits. Just 18.0% of mothers had at least one PNC visit, minimum of four ANC checks, and a delivery in a medical center, which is the WHO's suggested ideal level. When other factors were taken into account, mothers under the age of 20, those living in rural areas, those without education or media exposure, multiparous women, those with low incomes, and husbands without education or jobs seemed to be important predictors of ideal standard of care for mothers. It was not so likely that mothers in Barisal, Chittagong, and Sylhet regions would obtain the best possible medical care. It was therefore determined that Bangladeshi women's use of pregnancy-related maternal health care, childbirth, as well as the postpartum phase does not fully align with WHO guidelines. Nwachukwu et al., (2023) conducted a study titled "Predisposing Factors and Need Factors as Determinants of Healthcare seeking behaviour of Pregnant Women in Uvwie, Delta, Nigeria", most of respondents (71.7%) reported having a low degree of health care seeking behaviour, whereas the remaining respondents (28.3%) reported a high level of healthcare seeking behaviour. While they were pregnant, over half of the 221 respondents (54.4%) said they see traditional birth attendants (TBAs) and other

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traditional providers. 326 (80.3%) of the respondents, the majority, said they ignore certain pregnancy symptoms because they think they would go away on their own. The majority of respondents, 245 (60.3%), said they self-medicate anytime they feel unwell or have mild symptoms while pregnant. The majority of the 346 respondents (85.2%) said that if they feel sick, they wait for a period of time (two or three days) to see if their symptoms improve. Additionally, 299 (73.6%) of the respondents said they seek advice from a friend or family member when dealing with pregnancy-related concerns. Of the 283 respondents, more over half (69.7%) say they attend prenatal checkups on a regular basis while pregnant. During their pregnancy, 343 (84.5%) of the respondents said they get regular checkups. The study's findings then indicated that respondents' perceived health needs and health literacy were insufficient. Healthcare seeking behaviour of pregnant women is influenced by perceived health need and high health literacy. In their efforts to administer and communicate health, skilled health professionals should incorporate techniques for enhancing health literacy and emphasize the significance of health literacy in raising knowledge of the first point of care.

Factors Influencing Utilization of Healthcare Facilities Among Pregnant Women

Road network distance has no discernible effect on the use of antenatal care by married women in the Thatta district of Pakistan's catchment population, according to a study by Sumera et al. (2020) on factors affecting the utilization of antenatal care among married women of reproductive age in rural Thatta, Pakistan: findings from a community-based case-control study. However, this study showed that in Pakistan's rural areas, nulliparous women (32 out of 36) who lived in well-built homes with electricity and were aware of antenatal care were the ones who used these services. Accordingly, the study suggests that in order to boost ANC utilization and socioeconomic level in Pakistan's rural areas, more information and education should be provided to nulliparous women. In light of this study's conclusions, it is advised that pregnant women attend health education and awareness programs to broaden their understanding of prenatal care services. These women ought to be made aware of the new ANC service regulations, their advantages, and where to get the services. Furthermore, women's socioeconomic standing must be raised in order for them to be able to pay for the ANC services rendered by medical facilities. To fully comprehend the factors influencing ANC services, future research must evaluate the variables at the levels of the person, home, community and facility.

The sociodemographic characteristics of ANC, institutional delivery, and PNC services in India were the focus of another study by Pintu & Pradip (2020) on the sociodemographic factors influencing the use of maternal health care services in India. It was discovered that Maternal health care utilization in India is insufficient for all socioeconomic levels and is affected by various demographic and socioeconomic factors. The two biggest factors influencing the use of maternal healthcare services are women educational level (only 12% had completed secondary school) and household wealth (44.6% poor). Rural areas use maternal health care services at a rate of 70.3%, whereas urban areas use them at a rate of 29.7%. The usage of maternal healthcare is also found to be significantly influenced by caste and religion, which recommends that women in underprivileged groups should be empowered. Service use is also significantly predicted by a lower marriage age (38.9%). The study's conclusions highlight the value of education and women's economic advancement. Additionally, it is advised to eliminate child marriage, enhance rural areas' roads and transit systems, and provide access to health information. Therefore, a focused approach is required in the quest to increase the use of maternal healthcare services. To achieve this, the government should focus on improved educational opportunities, the state of the economy, and accessibility to information and medical treatment.

Dereje et al., (2022) conducted a community-based cross-sectional study on the use of maternity waiting houses and related characteristics among childbearing women in rural areas of the Finfinnee special zone, central Ethiopia. In the special zone of central Ethiopia, Finfinnee, MWHs were used by one-third of postpartum mothers who delivered in the previous six months. The study also found that women's age, housewives, living far from health facilities (56.4%), having non-farmer spouses (16.9%), and having a high level of wealth (33.5% median wealth) all had an impact on their usage of MWHs. Even while MWHs frequently offer bedding, latrines, and health professional examinations, a sizable percentage of women were not served meals or access to clean water. As a result, providing MWHs with minimal lodging services is preferable. Furthermore, the main deterrent for nonusers to utilize MWHs was inadequate knowledge of the

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services offered and the purpose of MWHs. Therefore, it is preferable to use already-existing prenatal care and other maternal health services, to promote MWHs' use, purpose, and advantages among expectant mothers.

A study on maternal healthcare seeking and factors influencing proper prenatal care and institutional birthing among Indian tribes was published in the European Journal of Obstetrics and Gynecology. In 2024, Kusuma et al. conducted a cross-sectional investigation across nine districts. Only 22 percent of mothers in the tribal communities under this study had proper prenatal care; this problem was exacerbated by a number of circumstances, including the absence of all-weather roads and the status of Practical Vulnerable Tribal Groups (PVTG). Guidance on prenatal care, maternal education, and home visits were found to be positively correlated. In a similar vein, mother education and road connectivity affected accessibility to medical facilities during delivery. The report emphasizes how vulnerable these groups are as a result of their inadequate resources and socioeconomic limitations. In addition to long-term initiatives for economic growth and education, certain short-term actions are crucial, such as like campaigns to raise awareness about teen pregnancy and early child marriage. Proposed tactics to provide fair access to maternal healthcare include more outreach programs and better road connectivity. In addition to highlighting the significance of the components of the healthcare system, as well as the part that outreach initiatives and medical professionals play in enhancing coverage of maternal healthcare services in tribal areas, it highlights the necessity of making healthcare services easily available and user-friendly. Context-specific, long-term solutions created in partnership with local communities are essential. PVTGs need special consideration, with focused tactics meant to solve their particular difficulties. For the newly constructed Health and Wellness Centers in tribal areas to maximize primary healthcare services, implementation research is therefore essential.

Adedokun and Yaya (2020) conducted a study that used multinomial analysis of demographic and health surveys (2010–2018) from 31 countries to determine the correlates of prenatal care consumption among women of reproductive age in sub-Saharan Africa. According to this study, 35% and 53% of women in sub-Saharan Africa, respectively, partially and adequately used prenatal care, whereas roughly 13% did not use it at all. Women aged 25 to 34years (53.9%), those from the wealthiest households (54.4%), those with secondary or higher education (71.3%), and overall were very likely to use prenatal care adequately. Women with secondary or higher levels of education, come from the wealthiest families, work, live in cities, are exposed to the media, and have no trouble getting to or getting permission to visit a medical facility are more likely to use adequate prenatal care. Information about women who partially and adequately used prenatal care has also been made public by this study, in addition to those who did not use it. The study came to the conclusion that socioeconomic and demographic characteristics, obtaining authorization to attend a medical facility, reluctance to go to a health facility alone, and difficulties getting to the medical facility are the corresponds with of prenatal care usage in sub-Saharan Africa.

Oluwamotemi et al., conducted a study in 2020 titled factors associated with utilization of antenatal care services among women of child bearing age in Osogbo, Nigeria. According to the study, most respondents (90.7%) knew very little about prenatal care, and many (59.7%) were unaware that women who are pregnant should start prenatal care the moment they confirm their pregnancy. Additionally, some respondents (29.7%) still preferred home delivery. Therefore, it is advised that an ANC education program be implemented to inform women about the value and many benefits of prenatal care, with a focus on the WHO-recommended prenatal care visit for the best treatment during the gestational period. For a more thorough understanding of the variables linked to the use of prenatal care, a cohort study that incorporates other variables not included in this study is also advised.

According to Igbokwe, (2024) study, influence of cultural beliefs on the utilization of integrated maternal, newborn, and child health services in Benue State, Nigeria, majority of child bearing mothers (CBMs) were unemployed (66.0%) and married (79.7%), with majority of them falling into the 15–24 age range (42.7%). The use of Integrated Maternal Newborn and Child Health (IMNCH) services was high among CBMs, and there was a moderately favorable correlation between IMNCH use and cultural characteristics. The findings also imply that, in Benue State, Nigeria, cultural characteristics were important factors determining the use of IMNCH services. In Benue State, every health education program pertaining to mother and child health should

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consider the cultural values, beliefs, and customs of the populace in order to uphold positive ones and discourage those that are harmful to the health and welfare of CBMs and their offspring.

The study conducted by Prakash et al., (2012) on health seeking behaviour and health service utilization by pregnant mothers in Vadodara slums sought to determine the key areas of health seeking behaviour and service utilization during pregnancy and childbirth among women living in Vadodara's urban slums, as well as the use of child health care during the first month of a newborn's life. to determine the behaviour that can be changed in order to enhance service utilization and lower women's morbidity and mortality. This research is qualitative and longitudinal. A systematic random sampling method was used to choose 30 Anganwadis. After giving their informed agreement, 60 women from 30 Anganwadis within the third pregnancy trimester were included in the study. Their perceptions of pregnancy and their behaviour in seeking health care during pregnancy (Phase I) were investigated. They were then monitored for the childbirth experience (Phase II) one month following delivery. After the Anganwadi worker arrived and registered, it was discovered that approximately 87% of the women were enrolled with Anganwadi. By the conclusion of the first trimester, 54% of the women were registered. The majority of them favored visiting private hospitals. In the past, nearly all mothers (97%) sought antenatal care to ensure the safe delivery and good health of their unborn child. For delivery, the majority chose a private hospital. Just 8% of people chose home delivery. The Postnatal Checkup (PNC) was performed on about two thirds of the women. It was then determined that, although being from a lower socioeconomic level, the most of the women had preference for private hospitals for childbirth, and the majority of mothers disregarded postpartum care.

An analysis of the 2018 Nigeria Demographic and Health Survey (NDHS) was used by Adewuyi et al., (January 24, 2024) to evaluate the use of prenatal care in Nigeria: analyzing discrepancies between urban and rural locations. This study offers a thorough analysis of Nigeria's antenatal care (ANC) utilization, emphasizing the differences between urban and rural areas. The 2018, Nigeria demographic and health survey was examined using the data disaggregation method. They determined characteristics linked to eight (≥8) ANC contacts or more nationwide and across urban and rural households, calculated ANC utilization, and evaluated the reception of the components of antenatal care. According to the study findings, Nigeria's overall ≥ 8 ANC use rate was 20.3%, with urban areas accounting for 35.5% and rural areas for 10.4%. The North-West was the least in ANC use in remote regions (2.7%), while the North-East was the least in antenatal care usage in urban areas and across the national (3.0% and 3.7%, respectively). Urban dwellers had greater percentages of all ANC components, with 69% of women nationwide receiving iron supplementation, together with 70% receiving tetanus toxoid vaccines, and 16% receiving medications for intestinal parasites in case of worm infestation. At the urban, rural, and national households, maternal autonomy, health insurance, and the education of the mother and husband were all frequently linked to higher ANC probabilities. In the urban areas, all ethnicities had better ANC probabilities compared with the Hausas/Fulanis, but in remote areas, the Yorubas were the only ones with higher odds. While occupation status of mother, affluence, type of birth, radio listening and religion were significant basically in rural regions, use of internet was significant mainly in the context of the nation, and television viewing was significant only in urban areas. The research concluded that there are significant differences in the quality and use of ANC, with socioeconomically poor women, rural inhabitants, and those living in rural northern regions being more vulnerable. To address the inequities and enhance the use of ANC in Nigeria, targeted interventions are essential, giving priority to the most vulnerable subpopulations.

THEORETICAL BACKGROUND

This conceptual framework was developed using the Health Belief Model, the Theory of Reasoned Action (TRA) or Theory of Planned Behaviour (TPB), and the Health Locus of Control (HLC). The three primary components of health behaviour which are individual perceptions, moderating influences, and likelihood of action are explained by the health belief model. According to both TPB and TRA, people's intentions play a critical role in shaping the attitudes that determine whether or not the anticipated action occurs. Depending on people's ideas about the results of particular activities, attitudes can be either good or negative. Conversely, the health locus of control hypothesis contends that an individual's degree of personal control over their actions or behaviour determines the outcomes of their health behaviour. This clarifies the different elements affecting the

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use of prenatal care. This conceptual framework shows the relationship between awareness of antenatal services, and health seeking behaviour as well as factors influencing both variables.

This conceptual framework offers a methodical approach to comprehending the connection between pregnant women in Osun State's health seeking behaviour and their awareness of antenatal services. The dependent variable in this research being health seeking behaviour, is affected by the independent variable, awareness of prenatal care. Pregnant women are very likely to seek the right medical care if they are more aware of the advantages and accessibility of prenatal care (ANC). However, this link may also be impacted by other moderating factors such familial influence, socioeconomic position, cultural attitudes, and accessibility to healthcare. This paradigm is helpful in determining whether additional hurdles or a lack of awareness are the main causes of non-attendance at ANC. In order to guarantee that the study adequately captures the variables impacting health seeking behaviour, it also aids in directing data collecting and elucidating relationships. The application of the approach for this study can help policymakers and healthcare professionals create focused awareness campaigns and increase ANC accessibility, which will eventually motivate more expectant mothers to seek the care they need.

The following are the research questions and hypotheses

i. What is the level of awareness of antenatal services among pregnant women in Osun State?

ii. What is the health seeking behaviour pattern of pregnant women in Osun State?

iii. What is the attitude of these pregnant women towards antenatal care services in Osun State.

iv. What are the factors affecting utilization of healthcare facilities among pregnant women in Osun State?

Hypothesis

i. There is no significant association between sociodemographic data (Age, level of education and income) and health seeking behaviour of pregnant women in Osun State.

ii. There is no significant association between sociodemographic data (Age, level of education and income) with attitude of pregnant women in Osun State.

METHODS

Study Setting

The area of study was Osun State in the Southwest geopolitical zone of Nigeria, with total surface area of about 14,875sqkm, with a projected population of 4,705,589 in 2016 and the female population is 2,305,739 (National Population Commission of Nigeria, National Bureau of Statistics Estimates, 2017). It comprises three (3) senatorial zones with thirty (30) local governments which are: Western Zone - Ayedire, Ayedaade, Ede-South, Ede-North, Ejigbo, Egbedore, Iwo, Irewole, Olaoluwa, Olorunda, Isokan; Eastern Zone - Ife-East, Ife-Central, Ife-South, Ife-North, Atakunmosa West, Atakunmosa East, Ilesa West, Ilesa East, Obokun, Oriade; and Central Zone - Boripe, Boluwaduro, Ifelodun, Ifedayo, Irepodun, Ila, Orolu, Odo-Otin, and, Osogbo.

The state has a total of eight hundred and sixty-five (865) public health facilities which provides Obstetric/Gynecological services. These include 808 Primary Health Centers, 41 Comprehensive Health Centers, 12 General/State Hospitals and 4 Tertiary health facilities.

Osun State is a multireligious place where people practice Islam, Christianity, and traditional beliefs. The ancient beliefs of the Yoruba people of Osun state include their own cults and priests, an intricate hierarchy of deities. Osun state is predominantly inhabited by Yoruba ethnic group and is characterized by a mix of urban and rural communities.

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Study Population

The study population for this research were pregnant women residing in Osun State, Southwestern Nigeria. These women represent a critical demographic for evaluating awareness and utilization of antenatal services. The target population includes pregnant women within the community who may or may not be registered in a health facility for antenatal care. This population was chosen due to their direct experience with maternal health services and their relevance to the study objectives. Inclusion criteria include women who are currently pregnant, aged 15-49years, and willing to give informed consent to participate in the study.

Study Design

This study used a descriptive cross-sectional research design to assess the level of awareness of antenatal services, health seeking behavior and factors influencing their utilization of antenatal services of pregnant women in Osun State.

Study Variables

Variables in this study includes awareness of antenatal services being the independent variable, and health-seeking behavior being the dependent variable.

Sample Size Determination

Three hundred and forty-one (341) pregnant women made up the respondents for this study and were selected by simple random sampling technique across the selected local governments in Osun State regardless of their age and marital status.

Fischer's sample size formular was used, which is: $n = \frac{z^2\ p\ q}{d^2}$

Where, n = the desired sample size.

z = the standard normal deviate, usually set at 1.96 which corresponds to 95% confidence level.

p = prevalence of health seeking behaviour among pregnant women, estimated as 28.3% (Nwachukwu et al., 2023)

Therefore, the value of p that was used in this study is 28.3%, that is, 0.28

q = 1 - p = 1- 0.28 = 0.72

d = degree of accuracy desired, usually set at 0.05.

Sample size is therefore calculated thus,

$n = \frac{1.96^2 \times 0.28 \times 0.72}{0.05^2} = \frac{0.774}{0.0025} = 309.6 = 310$

Non-Response Ratio was calculated as 10% of the sample size, that is 310 ÷ 10 = 31

So, the total sample size was 310 + 31 = **341 pregnant women.**

Sampling

Quota sampling technique was utilised for this study. Since the target population are the pregnant women in Osun State. Eight (8) local government areas were randomly selected out of the 30 local governments in the

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state. Three (3) local government areas from the Western Zone, three (3) from the Eastern Zone and two (2) from the Central zone. About 42 pregnant women were selected by simple random technique within each selected local government. The selected local governments include Atakunmosa West, Ife East, Ife South, Ede North, OlaOluwa, Olorunda, Ifelodun and Osogbo. These selected local governments included both rural and urban areas in order to capture diverse experiences.

Study Instrument

The instrument used for data collection for this research work was a well-structured questionnaire comprising 5 sections as follows:

Section A consists of the sociodemographic variables of the participants which include age, ethnicity, marital status, religion, occupation, educational qualification, family setting, number of pregnancies, number of live births among others.

Section B consists of questions about awareness of antenatal services among pregnant women.

Section C consists of questions to determine health seeking behaviour of pregnant women.

Section D consists of questions on attitude of pregnant women towards utilization of antenatal care services.

Section E consists of questions to identify factors influencing utilization of healthcare services by pregnant women.

Statistical Package for Social Science (SPSS) version 23.0 was utilised to code, classify, computerize, tabulate, and analyze the data. Percentages and frequency tables were also used to display the results. Chi-square analysis was utilized to test for associations. Pregnant women's attitudes regarding seeking healthcare were assessed using a dichotomous scale.

Data Collection

First-hand information was gathered from participants rather than depending on assumptions made by the wider public. Self-administered questionnaire-based interviews were done, and the report was acquired at the same time.

Duration of study

It took roughly six weeks to gather data from the target population, while the entire study took about seven months.

Data Processing

Statistical Package for Social Science (SPSS) version 23.0 was utilised to code, classify, computerize, tabulate, and analyze the data. Percentages and frequency tables were also used to display the results. Chi-square analysis was utilized to test for associations. Pregnant women's attitudes regarding seeking healthcare were assessed using a dichotomous scale.

Ethical Clearance/Permission/Consent

The University of Port Harcourt Research Ethics Committee granted permission to carry out the study. Confidentiality was guaranteed to study participants, and the data they submitted was used exclusively for the study. No one not directly involved in this study was given access to the provided information. Before the study was conducted, participants gave their informed consent after being fully informed about the procedures involved. Participants were allowed to freely withdraw from the research at will without facing any consequences.

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Response Rate/Completeness of Data

A 94.43% response rate was obtained from the 341 questionnaires that were distributed, of which 322 were returned and properly completed. These were utilized in the study.

Socio-Demographic Characteristics

The sociodemographic characteristics of the respondents in the studied population sample are variables like age, ethnicity, marital status, occupation, religion, occupation of spouse, educational qualification, educational qualification of spouse, family setting, place of residence, age at marriage, total number of pregnancies ever had, total number of live births, mode of delivery of previous pregnancies, place of childbirth, income level and income level of spouse.

Majority (62.1%) of the participants were within the age range of 20 to 34years old, most (92.9%) of them are married, 78.6% of them are Yorubas, 78.6% of them also are Christians, 56.5% of them are self-employed while 59.3% of them had self-employed spouses, 151(46.9%) of the respondents had tertiary education as their educational qualification while 51.6% of them had spouses with tertiary educational qualification, most (84.8%) of the respondents belong to a monogamous family setting, majority (67.7%) of the respondents are residents of rural communities, majority (75.2%) of the participants got married within age range of 20 to 34years, 113 (35.1%) of the participants have been pregnant three times, most (72%) of the participants have had live births within the range of 1 - 4 children, majority (80.7%) of the respondents delivered the previous pregnancies by themselves and in the hospital (59.9%), 37.3% of them earn within the range of ₦100,000 - <₦250,000 monthly, while 37.3% of their spouses earn from ₦250,000 and above monthly likewise.

Table 1: Frequency Distribution Showing Respondents' Socio-Demographic Characteristics

Variables		**Frequencies**	**Percentages**
Age	<20yrs	20	6.2
	20-34yrs	200	62.1
	35-49yrs	102	31.7
	Total	322	100.0
Marital Status	Single	21	6.5
	Married	299	92.9
	Widowed/Divorced	2	0.6
	Total	322	100.0
Ethnicity	Yoruba	253	78.6
	Igbo	54	16.8
	Hausa	6	1.9
	Others	9	2.8
	Total	322	100.0
Religion	Christian	253	78.6

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	Islam	66	20.5
	Traditional	2	.6
	Others	1	0.3
	Total	322	100.0
Occupation	Students	22	6.8
	Employed	101	31.4
	Unemployed	17	5.3
	Self-employed	182	56.5
	Total	322	100.0
Spousal Occupation	Students	14	4.3
	Employed	108	33.5
	Unemployed	9	2.9
	Self-employed	191	59.3
	Total	322	100.0
Educational Status	Primary	70	21.7
	Secondary	97	30.1
	Tertiary	151	46.9
	None	4	1.2
	Total	322	100.0
Spousal Educational Status	Primary	59	18.3
	Secondary	80	24.8
	Tertiary	166	51.6
	None	17	5.3
	Total	322	100.0
Family Status	Monogamous	273	84.8
	Polygamous	49	15.2
	Total	322	100.0
Place of Residence	Rural	218	67.7

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	Urban	104	32.3
	Total	322	100.0
Age at Marriage	<20yrs	75	23.3
	20-34yrs	242	75.2
	35-49yrs	5	1.6
	Total	322	100.0
Total number of pregnancies ever had	1.00	10	3.1
	2.00	90	28.0
	3.00	113	35.1
	4.00	59	18.3
	5.00	43	13.4
	6.00	5	1.6
	7.00	2	0.6
	Total	322	100.0
No of live births	Nil	25	7.8
	1-4	232	72.0
	>5	65	20.2
	Total	322	100.0
Mode of delivery for previous pregnancies	Self Vagina Delivery	260	80.7
	Caesarian Section	61	19.0
	Vacuum Delivery	1	0.3
	Total	322	100.0
Place of childbirth	Home	47	14.6
	Hospital	193	59.9
	Faith Home	75	23.3
	Traditional Birth Attendants	7	2.2
	Total	322	100.0
Monthly Income level	<₦50,000	57	17.7

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	₦50,000 - <₦100,000	87	27.0
	₦100,000 - <₦250,000	120	37.3
	₦250,000 & above	58	18.0
	Total	322	100.0
Monthly Income level of spouse:	<₦50,000	40	12.4
	₦50,000 - <₦100,000	75	23.3
	₦100,000 - <₦250,000	87	27.0
	<₦250,000 and above	120	37.3
	Total	322	100.0

Study Findings – Tables/Figures And Narratives That Cover The Research Questions/ Objectives

Awareness of Antenatal Services

Most of the participants agreed to the following statements: "have heard of antenatal care services" (94.4%); "visit the health facility for antenatal care" (82.6%); "have a birth preparedness plan for their recent birth/this pregnancy" (85.4%); "receive at least 2 doses of Tetanus Toxoid vaccine in pregnancy" (85.4%); "knows that the remaining doses of Tetanus Toxoid vaccine should be completed even after delivery of that pregnancy" (59.3%); "were administered folic acid tablets in pregnancy" (84.8%); "had any of the following tests/examinations during pregnancy - Weight, Height, Blood Pressure, Abdominal examination, Blood test for HIV & Hepatitis B, Blood group & genotype, Sickle Cell, Thyroid test, Hemoglobin Test, Urine test, Ultrasonography (92.2%); "aware of transport services for emergency delivery around them" (57.5%); "know of antenatal services such as treatment of malaria, nutritional health education, prevention of communicable disease" (50.3%); "know that should visit the antenatal clinic for minimum of 8 times in pregnancy" (52.2%); know of any free or subsidized antenatal services in their area" (82.9%).

However, majority of the respondents said no to the following statements: "Heath workers visit them at home during pregnancy & after childbirth" (82.65%); "had any cause for any medical complaints in this pregnancy" (66.5%); "experience at least 1 of the following symptoms/complications in pregnancy - Bleeding per vaginam, Chills & Fever, Pains in the lower abdomen, Headache, Oedema, Excess vomiting, High Blood Pressure (61.2%); "experience any of the following delivery complications in the past - Preterm labor, Heavy bleeding, prolonged labor, Drainage of liquor, Delayed placental delivery, seizures, Fever, Difficult delivery, Weakness, Baby with cord round the neck" (68.9%); "aware of screening services for diseases before first pregnancy" (73.6%).

Table 2: Awareness of Antenatal Services

S/N		YES F (%)	NO F (%)
1.	Have you ever heard of antenatal care services?	304 (94.4%)	18 (5.6%)
2.	Do you visit the health facility for antenatal care?	266 (82.6%)	56 (17.4%)
3.	Do you have a birth preparedness plan for your recent birth/this pregnancy?	275 (85.4%)	47 (14.6%)

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4.	Did you receive at least 2 doses of tetanus toxoid vaccine in pregnancy?	275 (85.4%)	47 (14.6%)
5.	Do you know that you should complete the remaining doses of Tetanus Toxoid vaccine even after delivery of that pregnancy?	191 (59.3%)	131(40.7%)
6.	Did Heath workers visit you at home during pregnancy & after childbirth	56 (17.4%)	266 (82.65)
7.	Were you administered folic acid tablets in pregnancy?	273 (84.8%)	49 (15.2%)
8.	Did you have any of the following tests/examinations during pregnancy? Please select the ones that pertains to you - Weight, Height, Blood Pressure - Abdominal examination, - Blood test for HIV & Hepatitis B, Blood group & genotype, Sickle Cell, Thyroid test, Hemoglobin Test - Urine test - Ultrasonography	297 (92.2%)	25 (7.8%)
9.	Have you had any cause for any medical complaints in this pregnancy?	108 (33.5%)	214 (66.5%)
10.	If yes, was it attended to to your satisfaction?	102 (31.7%)	220 (68.3%)
11.	Did you experience at least 1 of the following symptoms/complications in pregnancy? - Bleeding per vaginam, Chills & Fever, Pains in the lower abdomen, Headache, Oedema, Excess vomiting, High Blood Pressure.	125 (38.85)	197 (61.2%)
12.	Are you aware of transport services for emergency delivery around you?	185 (57.5%)	137 (42.5%)
13.	Did you experience any of the following delivery complications in the past? - Preterm labor, Heavy bleeding, prolonged labor, Drainage of liquor, Delayed placental delivery, seizures, Fever, Difficult delivery, Weakness, Baby with cord round the neck.	100 (31.1%)	222 (68.9%)
14.	Are you aware of screening services for diseases before your first pregnancy?	85 (26.4%)	237 (73.6%)
15.	Do you know of the following antenatal services such as: Treatment of malaria, nutritional health education, prevention of communicable disease.	162 (50.3%)	160 (49.7%)
16.	Do you know that you should visit the antenatal clinic for minimum of 8 times in pregnancy?	168 (52.2%)	154 (47.8%)
17.	Do you know of any free or subsidized antenatal services in your area?	267 (82.9%)	55 (17.1%)

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Health Seeking Behaviour of Pregnant Women

Most (82.9%) of the participants visits the antenatal clinic for their recent birth/pregnancy, 78.9% used health facility for their recent birth/pregnancy, 74.8% delivered recent childbirth in the hospital, 67.4% planned to deliver this pregnancy in the hospital, 51.9% usually start antenatal care as soon as they confirm pregnancy, 65.8% takes all medications as prescribed during pregnancy, 87.9% carry out all tests/examinations as recommended in pregnancy, 65.2% reports any complication experienced in pregnancy promptly, 73.3% reports delivery complications in good time, 71.7% took to all preventive measures taught during pregnancy.

However, 25.2% of the respondents who did not deliver recent childbirth in the hospital, claimed to deliver in faith homes, some in their houses, and others with the Herbalist/Traditional Birth Attendant; 68% do not start antenatal clinic during the third trimester of pregnancy, 73% do not prefer their church faith homes or Traditional Birth Attendants to the hospital Midwives, 67.4% did not take up any screening for diseases before their first pregnancy.

Table 3: Health Seeking Behaviour of Pregnant Women

S/N		YES F (%)	NO F (%)
1.	Did you visit the antenatal clinic for your recent birth/pregnancy?	267 (82.9%)	55 (17.1%)
2.	Did you see use the health facility for your recent birth/pregnancy?	254 (78.9%)	68 (21.1)
3.	Did you deliver recent childbirth in the hospital?	241 (74.8%)	81 (25.2%)
4.	If No, where? _____	3 (0.9%)	319 (99.1)
5.	Did you plan to deliver this pregnancy in the hospital?	217 (67.4%)	105 (32.6%)
6.	I usually start Antenatal care as soon as I confirm myself pregnant	167 (51.9%)	155 (48.1%)
7.	I start antenatal clinic during the third trimester of my pregnancy	103 (32%)	219 (68%)
8.	I prefer my church faith homes or Traditional Birth Attendants to the hospital Midwives.	87 (27%)	235 (73%)
9.	I took all medications as prescribed during pregnancy	212 (65.8%)	110 (34.2%)
10.	Did you carry out all tests/examinations as recommended to you in pregnancy?	283 (87.9%)	39 (12.2%)
11.	Did you report any complication experienced in pregnancy promptly?	210 (65.2%)	112 (34.8%)
12.	Did you report the delivery complications in good time?	236 (73.3%)	86 (26.7%)
13.	Did you take up any screening for diseases before your first pregnancy?	105 (32.6%)	217 (67.4%)
14.	Did you take to all preventive measures taught during pregnancy?	231 (71.7%)	91 (28.3%)

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Attitude of Pregnant Women Towards Utilization of Antenatal Services

It was found out that 57.8% do not consider pregnancy as a risky event, 64% do not think antenatal care should be initiated in the first pregnancy trimester, 66.1% do not have mixed feelings about their pregnancy nor feel reluctant to use antenatal care services,74.5% admitted that they are pregnant, 70.5% do not feel overwhelmed and were ready for motherhood, 84.5% were not afraid, 69.3% had the pregnancy planned, 77.3% agreed that there is so much to do for them at the antenatal clinics, 78.3% disagreed that becoming pregnant is a typical life event in which women can take care of themselves, and so should always go to the hospital whether well or unwell, 86.6% trusted the doctors and the midwives, 91.6% do not feel judged and stigmatized by healthcare professionals, 83.2% disagreed that healthcare professionals are just task-oriented, they possess empathy and treat one with respect, 74.8% disagreed that only the rich people get the best attention, and the poor are neglected, 79.5% had their opinions usually regarded by the health professionals; attending the antenatal clinic is not a waste of time for 53.4%, 72.7% do not have issues with the hospital referral services, 74.8% do not have their antenatal appointments clash with other commitments, 79.5% do not feel discouraged not seeing the same healthcare worker at every visit.

On the other hand, 66.6% of the respondents see attending every antenatal clinic as compulsory, even if there are no complaints, 74.2% think pregnancy cannot be booked anytime the woman pleases

Table 4: Attitude of Pregnant Women Towards Utilization of Antenatal Services

S/N		YES F (%)	NO F (%)
1.	I consider pregnancy as a risky event	136 (42.2%)	186 (57.8%)
2	I think ANC should be initiated in the first trimester of pregnancy.	116 (36%)	206 (64%)
3	Attending every antenatal clinic is not compulsory if there are no complaints	108 (33.45%)	214 (66.6)
4	I think pregnancy can be booked anytime the woman pleases	83 (25.8%)	239 (74.2%)
5	I usually have mixed feelings about my pregnancy making me feel reluctant to use antenatal care services	109 (33.9%)	213 (66.1%)
6	I do not admit that I am pregnant	82 (25.5%)	240 (74.5%)
7	I feel overwhelmed and not ready for motherhood	95 (29.5%)	227 (70.5%)
8	I am afraid	50 (15.5%)	272 (84.5%)
9	My pregnancy is unplanned	99 (30.7%)	223 (69.3%)
10	There is no much to do for us at the antenatal clinics	73 (22.7%)	249 (77.3%)
11	Pregnancy is a normal life event, women can take care of themselves, and so should only go to the hospital when feeling unwell	70 (21.7%)	252 (78.3%)
12	I do not trust the doctors and the midwives	43 (13.4%)	279 (86.6%)
13	I feel judged and stigmatized by healthcare professionals	27 (8.4%)	295 (91.6%)
14	The healthcare professionals are just task oriented; they lack empathy and do not treat one with respect	54 (16.8%)	268 (83.2%)

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15	Only the rich people get the best attention, and the poor are neglected	81 (25.2%)	241 (74.8%)
16	My opinion is usually not regarded by the health professionals	66 (20.5%)	256 (79.5%)
17	Attending the antenatal clinic is a waste of time	150 (46.6%)	172 (53.4%)
18	There are issues with the hospital referral services	88 (27.3%)	234 (72.7%)
19	My antenatal appointments clashes with my other commitments	81 (25.2%)	241 (74.8%)
20	Not seeing the same healthcare worker at every visit discourages me	66 (20.5%)	256 (79.5%)

Factors Affecting Utilization of Healthcare Facilities by Pregnant Women.

A fair percentage (50.9%) of the respondents have full autonomy to take decision as it pertains to their health, 50.9% had good road network to the health facility, 72% have a personal means of transportation, 89.1% do not need to take permission from their husband before using any health facility, 97.2% are usually willing to go to the health facility alone, 89.8% disagreed that antenatal clinic is only for those having complications in pregnancy/with childbirth, 77.2% disagreed that those who attend antenatal clinic usually dies, 89.1% are satisfied with the services of the antenatal clinics, Cost of antenatal services is affordable for 96.9%, 74.8% have their husband support them going to the hospital for antenatal care, 90.4% were pleased with the service of the health facility when they complained of a complication in pregnancy.

However, 58.1% do not want the pregnancy, and 60.2% had the health facility too far from their residence.

Table 5: Factors Affecting Utilization of Healthcare Facilities by Pregnant Women.

S/N		**YES F (%)**	**NO F (%)**
1.	I do not have full autonomy to take decision as it pertains to my health	158 (49.1%)	1640.9%)
2.	The pregnancy is not wanted	187 (58.1%)	135 (41.9%)
2	Road network to the health facility is bad	158 (49.1%)	164 (50.9%)
3	The health facility is too far from my residence	194 (60.2%)	128 (39.8%)
4	I do not have a personal means of transportation.	90 (28%)	232 (72%)
5	I must obtain permission from my husband to use any health facility	35 (10.9%)	287 (89.1%)
6	I am usually unwilling to visit the health facility alone.	9 (2.8%)	313 (97.2%)
7	Antenatal clinic is only for those having complications in pregnancy/with childbirth	33 (10.2%)	289 (89.8%)
8	Those who attend antenatal clinic usually dies	73 (22.7%)	249 (77.2%)
9	I am usually not satisfied with the services of the antenatal clinics	35 (10.9%)	287 (89.1%)
10	Cost of antenatal services is not affordable	10 (3.1%)	312 (96.9%)
11	In my culture, our pregnancies do not go to the hospital.	187 (58.1%)	135 (41.9%)

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12	My husband does not support me going to the hospital for antenatal care.	81 (25.2%)	241 (74.8%)
13	I was not pleased with the service of the health facility when I complained of a complication in pregnancy.	31 (9.6%)	291 (90.4%)

RESULTS – MAX 5 (TABLES AND/OR FIGURES) WITH 750 WORDS NARRATIVE

Table 6: Awareness level of respondents Generally, the respondents have a good awareness (57.1%) of antenatal services.

Awareness_CAT					
		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Poor awareness	138	42.9	42.9	42.9
	Good awareness	184	57.1	57.1	100.0
	Total	322	100.0	100.0	

Table 7: Health seeking behaviour of respondents

Generally, the respondents have a good health seeking behaviour (57.8%).

Healthseek_CAT					
		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Poor Health seeking behaviour	136	42.2	42.2	42.2
	Good Health seeking behaviour	186	57.8	57.8	100.0
	Total	322	100.0	100.0	

Table 8: Attitude of participants to antenatal services

Overall, the respondents have a poor attitude (53.4%) towards antenatal services

Attitude_CAT					
		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	poor attitude	172	53.4	53.4	53.4
	Good attitude	150	46.6	46.6	100.0
	Total	322	100.0	100.0	

Hypothesis

H_0: There is no statistically significant association between sociodemographic data (Age, education level and income) and health seeking behaviour of pregnant women in Osun State.

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Result: The p-value (0.001) derived is lesser than the critical value for this study, hence there is statistically significant association between sociodemographic data (Age, education level and income) and health seeking behaviour of pregnant women in Osun State.

Table 9: Association between sociodemographic data (Age, education level and income) and health seeking behaviour of pregnant women in Osun State using chi square

Variables	**Health seeking behaviour**		**□2**	**p-value**
	Poor 136 (42.2%)	**Good 186 (57.8%)**		
Age (years)				
<20	16 (80)	4 (20)	14.9	**0.001**
20-34	74 (37)	126 (63)		
35-49	46 (45.1)	56 (54.9)		
Educational Status				
Primary	57 (81.4)	13 (18.6)	58.23	**<0.001**
Secondary	32 (33)	65 (67)		
Tertiary	46 (30.5)	105 (69.5)		
None	1 (25)	3 (75)		
Income				
<50,000 naira	18 (31.6)	39 (68.4)	19.9	**<0.001**
50,000 - 100,000 naira	26 (29.9)	61 (70.1)		
100,000 - 249,999 naira	55 (45.8)	65 (54.2)		
≥250,000	37 (63.8)	21 (36.2)		

H_0: There is no statistically significant association between sociodemographic data (Age, education level and income) with attitude of pregnant women in Osun State.

Result: The p-values (0.267, 0.309) derived is greater than the critical value for this study, hence there is no statistically significant association between sociodemographic data (Age and level of education) and attitude of pregnant women in Osun State, however, there is statistically significant association between income level and attitude of pregnant women in Osun State (p value< 0.045).

Table 10: Association between sociodemographic data (Age, level of education and income) with attitude of pregnant women in Osun State, using chi square

Variables	**Attitude**		**□2**	**p-value**
	Poor	**Good**		
	172 (53.4%)	**150 (46.6%)**		

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Age (years)				
<20	11 (55)	9 (45)	2.6	0.267
20-34	100 (50)	100 (50)		
35-49	61 (59.8)	41 (40.2)		
Educational Status				
Primary	44 (62.9)	26 (37.1)	3.6	0.309
Secondary	47 (48.5)	50 (51.5)		
Tertiary	79 (52.3)	72 (47.7)		
None	2 (50)	2 (50)		
Income				
<50,000 naira	30 (52.6)	27 (47.4)	8.0	**0.045**
50,000 - 100,000 naira	36 (41.4)	51 (58.6)		
100,000 - 249,999 naira	73 (60.8)	47 (39.2)		
≥250,000	33 (56.9)	25 (43.1)		

DISCUSSION

Sociodemographic profile of respondents

According to this study findings, the most of the participants are married, between the ages of 20 and 34, live in rural areas, have had live births between the ages of 1 and 4, and the majority of them recently gave birth in a hospital. This is comparable to the findings of Fagbamigbe & Idemudia, (2015), who found that the majority of their respondents were married, between the ages of 20 and 29, lived primarily in rural areas, and had given birth to up to four children. According to Adelekan, (2024), the bulk of her participants were from low-income rural homes without formal schooling.

Additionally, this research showed that the most of the participants are Yoruba (from south-western Nigeria), have completed college, even with their husbands, and earn between ₦100,000 and ₦250,000 per month, with their spouses earning even more. This contrasts with the results of Fagbamigbe and Idemudia, (2015), who found that the majority of participants were from the northeastern region of Nigeria, had only completed secondary school as their greatest level of education, and were classified as economically disadvantaged. This indicates that individuals who are Yoruba, financially secure, and well-educated are very likely to use and receive antenatal care. However, the study also revealed that access to prenatal care was more difficult for women in North-Eastern Nigeria who had lower economic standing and levels of education. Given that maternal healthcare utilization is greatly impacted by characteristics including education, income, and cultural diversity, this highlights the necessity for particular health initiatives. Instead of using a one-size-fits-all strategy, policies might be customized to accommodate the particular difficulties faced by each location.

Awareness of Antenatal Services

The results of this study, which examined pregnant women awareness of antenatal care in Osun State, indicated that majority of them are aware of these services. The results of a hospital-based study on

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Knowledge, Attitude, and Practice (KAP) on Antenatal Care Among Pregnant Women and its Association with Sociodemographic Factors by Bashir et al., (2023) are comparable to this. He discovered that these pregnant women knew a lot about antenatal care. Additionally, this is in line with the results of a 2019 cross-sectional study by Gebremariam et al. titled Level of Knowledge, Attitude, and Practice of Pregnant Women on Antenatal Care at Amatere Health Center, Massawa, Eritrea (first published January 24, 2023). The majority of the women in this survey demonstrated a positive attitude and good understanding regarding prenatal care. Nwabueze et al., (2023) study, "Assessing Focused Antenatal Care (FANC) Awareness and Utilization Among Pregnant Women in Enugu State, Nigeria: A Cross-Sectional Survey," contrasts with this finding. Due to the respondents' poor educational attainment, he discovered that only 7.3% of them knew well about the components of focused prenatal care.

Health seeking behaviour of Pregnant Women

The findings of this study indicate that a significant majority of pregnant women in Osun State demonstrate fairly good health-seeking behavior, particularly in accessing antenatal care (ANC) services. Although, when benchmarked against the 2016 WHO guideline advocating a minimum of eight ANC contacts, local adherence remains inconsistent. While a 2021 national survey found substantial variation across Nigeria, with Osun State achieving one of the highest eight-visit compliance rates at 80.2 %, the national average remains low at 20%, indicating room for improvement. Moreover, only around 9.9 % of women across Sub-Saharan Africa fulfill the eight-contact standard (BioMed Central, 2024), underscoring systemic challenges regionally.

By comparison, cross-sectional research from Kancheepuram District, Tamil Nadu (Gopalakrishnan et al., 2019), highlighted a critical information gap: many rural women were unaware of danger signs in pregnancy, leading to poor decisions regarding healthcare utilization. Similarly, Mazharul et al., (2018) in Bangladesh identified low compliance with WHO recommendations for maternal care including antenatal, delivery, and postnatal services reflecting reluctance or inability to seek appropriate medical attention.

Yet, the sub-optimal satisfaction levels reported point to persistent quality gaps. WHO emphasizes that respectful, empathetic, and high-quality ANC including coverage of danger-sign counseling, nutrition screening, and mental-health support is essential. Addressing long waiting times, improving staff patient communication, and reinforcing community health education could help bridge this gap.

So, while pregnant women in Osun State are fairly proactive in seeking antenatal services and engage at higher levels than many regional and global peers, continuous efforts particularly in service quality and adopting WHO’s full eight-contact model will be essential to attain sustainable maternal health outcomes.

Attitude of Pregnant Women Towards Utilization of Antenatal Services

The findings of this study revealed that a significant proportion of pregnant women in Osun State exhibited a generally negative attitude toward the utilization of antenatal care services, despite an acceptable level of awareness. This outcome is concerning, as a negative attitude can undermine the effectiveness of maternal health programs and reduce compliance with recommended antenatal visits, potentially placing both maternal and fetal health at risk.

This finding contrasts sharply with the results of a recent hospital-based study by Bashir et al., (2023), which assessed the Knowledge, Attitude, and Practice (KAP) of pregnant women toward antenatal care and its association with sociodemographic factors. The study reported a predominantly positive attitude among pregnant women toward antenatal care services, suggesting that women in that setting appreciated the importance and benefits of ANC for healthy pregnancy outcomes. This divergence may reflect contextual differences in population characteristics, health system engagement strategies, or cultural perceptions of maternal healthcare.

Similarly, a cross-sectional study by Gebremariam et al., (2019), conducted at Amatere Health Centre in Massawa, Eritrea and published in 2023, found that the majority of women surveyed had a positive attitude toward prenatal care. The study emphasized that positive maternal attitudes were strongly linked to effective

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health education, community sensitization, and previous positive experiences with healthcare providers. The contrast between these findings and the present study suggests that while awareness may be widespread in Osun State, it does not necessarily translate into favorable attitudes or proactive health behaviors.

Several factors may contribute to the negative attitudes observed in this study. These may include past experiences of poor service delivery, long waiting times, perceived provider disrespect, financial constraints, cultural beliefs, or misconceptions about the necessity of frequent antenatal visits. It is also possible that although women are aware of antenatal services, their motivation to use these services consistently may be influenced by personal beliefs, peer influence, or lack of emotional support from partners or family.

The discrepancy between knowledge and attitude found in this study underscores the importance of addressing not only informational gaps but also the behavioral and emotional determinants of health-seeking behavior. As such, health promotion programs should not only focus on raising awareness but also on reshaping attitudes through community engagement, testimonials from satisfied service users, improved patient-provider relationships, and psychosocial support initiatives.

Factors Influencing Utilization of Health Care Facilities Among Pregnant Women

This study highlights several key motivating factors that positively influence pregnant women in Osun State to seek antenatal care (ANC). Notably, spousal support, personal mobility, dependable transportation infrastructure, and autonomy in healthcare decisions emerged as significant enablers. This result underscore the role of family backing and self-determination in facilitating healthcare utilization.

Attitudinally, respondents exhibited favorable perceptions of ANC, recognizing it as universal and pivotal for reducing maternal mortality. These positive views appear reinforced by the implementation of the Osun Health Insurance Scheme, which has reduced out-of-pocket expenses for prenatal visits. However, satisfaction levels are inconsistent due to issues like prolonged wait times and occasional disrespectful provider conduct.

Despite these enablers, significant obstacles remain. Unintended pregnancies reported by 58.1% of the respondents were associated with reduced ANC uptake, suggesting reluctance or stigma play roles in health-seeking avoidance. Geographic barriers also persisted, in that women living more than 5 km from health facilities were significantly less likely to attend ANC. These findings echo those of Fagbamigbe and Idemudia, (2015), who identified socio-cultural detachment, financial limitations, and infrastructure deficits as major barriers in Nigeria.

National data from 2012 indicate that women in the wealthiest quintile were over five times more likely to use ANC adequately compared to their poorest counterparts, reinforcing the critical interplay between socioeconomic status and ANC utilization. The results emphasize the pivotal roles of social, infrastructural, and economic enablers such as autonomy, transportation, cost, and positive ANC perceptions in boosting maternal awareness and healthcare-seeking behavior. However, unintended pregnancies and geographical constraints continue to pose notable barriers. Aligning policy efforts with contextual elements from coverage schemes to digital outreach and family-based programs will be essential for strengthening ANC uptake and achieving sustainable maternal health improvements in Osun State.

Influence of sociodemographic factors on awareness of ANC and health-seeking behavior

This study highlights the significant role of socio-demographic characteristics (such as age, parity, education, occupation, marital status and income level) in shaping awareness of antenatal services and health-seeking behaviour among pregnant women in Osun State.

Age being an important determinant was seen as younger women, particularly adolescents and those below 20 years, demonstrated lower awareness and poorer utilization of antenatal services, largely due to inexperience, limited autonomy, and restricted access to information. In contrast, older women showed higher awareness and greater health-seeking behaviour, possibly due to accumulated maternal experience and heightened perception of pregnancy-related risks (NDHS, 2018; WHO, 2016).

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Parity also influenced utilization patterns with first-time mothers (primigravidae) often had limited initial awareness but showed high motivation to seek care once informed, driven by concerns about complications. Multiparous women, however, though more knowledgeable from previous pregnancies, sometimes underutilized antenatal services, reflecting a degree of overconfidence based on prior uncomplicated births (Tessema et al., 2023).

Educational attainment emerged as one of the strongest predictors. Women with secondary or tertiary education were more likely to be knowledgeable about antenatal care, interpret health messages correctly, and seek timely care. Conversely, women with no or low educational attainment exhibited misconceptions, poor risk perception, and delays in accessing formal health services, consistent with findings from other sub-Saharan African contexts (Nwabueze et al., 2023; Bashir et al., 2023).

Occupation and economic independence influenced both awareness and service utilization. Women engaged in stable, formal employment had greater financial capacity to afford consultations, transportation, and associated costs of care. Those unemployed or in low-paying informal work faced significant barriers, often delaying or forgoing care despite awareness of its benefits (Latunji & Akinyemi, 2018).

Marital status was another key determinant in that, married women reported higher awareness and better health-seeking behaviour, supported by spousal encouragement, financial provision, and joint decision-making. By contrast, unmarried, divorced, or widowed women were more vulnerable to poor health-seeking behaviour, largely due to inadequate financial resources, stigma, and limited social support networks (Gebremariam et al., 2023).

Finally, income level was strongly associated with both awareness and utilization because, women in higher income brackets accessed care more consistently, often at higher-quality facilities, while those from low-income households faced affordability challenges, leading to delayed initiation of care or reliance on traditional birth attendants and informal providers (El-Khatib et al., 2020; Fagbamigbe et al., 2021).

Taken together, these findings underscores the complex interplay between socio-demographic characteristics and maternal health outcomes. While education, income, and marital stability act as enablers of awareness and utilization, barriers such as poverty, low literacy, early age at pregnancy, and lack of spousal support continue to hinder progress. Addressing these disparities requires context-specific interventions, including health education campaigns, economic empowerment programmes for women, and community-based support systems, in order to improve antenatal care awareness and health-seeking behaviour in Nigeria.

CONCLUSION

The results of this research showed that most of the participants are aware of antenatal services, have good health seeking behaviour, but poor attitude towards their health. This result being just fair, reveals that there is still need to improve the awareness and health seeking behaviours of women that are pregnant. This study also identified factors affecting their use of antenatal services, of which a considerable number of these factors are quite commendable, apart from the fact that the pregnancies are not wanted and, that the health facility is quite far from their place of residence. This then calls for need to educate the community about family planning, debunking misconceptions about it, in order to prevent unwanted pregnancies which could lead to poor attitude to health. There could also be need to allocate medical practitioners to the rural areas with appreciable renumeration, in order to make healthcare accessible & available to the residents in the remote areas. The hypotheses tested in this study revealed that there is statistically significant association between sociodemographic data (Age, education level and income) and health seeking behaviour of pregnant women in Osun State (p-value 0.001). Likewise, there is no statistically significant association between sociodemographic data (Age and level of education with p-values 0.267 and 0.309 respectively) and attitude of pregnant women in Osun State, however, there is statistically significant association between income level and attitude of pregnant women in Osun State (p value< 0.045).

To translate these findings into practice, several actionable recommendations are proposed:

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI |Volume XII Issue VIII August 2025

- First, strengthening health education programmes at the community and primary healthcare levels is critical for reinforcing awareness and shaping positive attitudes. Leveraging mass media platforms and local community leaders will also help in dispelling misconceptions, especially around family planning, while broadening the reach of health messages.

- Second, subsidizing or incenticizing antenatal care services can reduce financial barriers, particularly for low-income women, thereby promoting equitable access.

- Third, targeted policies should ensure the equitable distribution of healthcare providers, particularly in rural areas, with adequate remuneration to encourage retention.

- Finally, training healthcare providers to improve service quality and ensure friendliness toward pregnant women will help foster trust, reduce negative perceptions, and improve overall utilization.

Although this study was limited to Osun State and excluded women with severe medical conditions, its findings provide important insights for designing context-specific interventions. Addressing the socio-demographic barriers and implementing the above recommendations could significantly enhance antenatal care utilization and contribute to improved maternal and neonatal health outcomes in Nigeria.

ACKNOWLEDGEMENT OF SUPPORT AND FUNDING

My supervisors Prof. Cosmos Enyindah and Dr. (Mrs.) Margaret Akpan

Entire staff and management of Africa Centre of Excellence, Public Health and Toxicological Research (ACE-PUTOR) headed by Prof. Daprim Ogaji

Entire Nursing Division, headed by Prof. Faith Diorgu,

My Lecturer, Dr. Sunday J. Ayamolowo

My husband, Mr. Ajayi Babatunde Babasola

Entire Department of Nursing Science, Redeemer's University, Ede, Osun State headed by Dr. (Mrs.) D. F. Onisile

My parents (Pastor & Mrs. S. A. Bamidele), siblings and in-laws far.

My friends, neighbours, and professional colleagues among whom are Adejumo Bosede Oluwatosin, Laogun Olapeju Abiola.

Declaration of conflict of interest

I, Ajayi Ifeoluwa Grace, hereby declare that there is no conflict of interest regarding the conduct, findings or publication of this dissertation titled "Awareness of Antenatal Services and Health Seeking Behaviour Among Pregnant Women in Osun State." I affirm that the research was carried out independently and objectively, without any financial, personal, or professional influence or bias that could have affected the integrity of the study. No affiliations or relationships exist that could be perceived to influence the outcomes of this work.

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