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FACTORS AFFECTING ATTENDANCE OF THE ANTENATAL AND POST- NATAL CARE SERVICES AMONG WOMEN OF REPRODUCTIVE AGE IN SOUTHWESTERN NIGERIA

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Abstract

Background: Antenatal care (ANC), is sought by expectant mothers in order to protect both their unborn child's health and their own pregnancy. Early detection of problems in pregnancy leads to timely referrals for women in high-risk categories or with complications ANC may decrease newborn mortality by detecting pregnancies at high risk; Availability, affordability and easy access to health facilities where antenatal care is offered increase utilization of antenatal care. Cultural beliefs and practices about pregnancy will have influence on antenatal care use, in that it may lead to mothers attending antenatal care late or not even attending at all
Objective: This study aims to assess factors affecting attendance of women of reproductive age at the antenatal and post- natal care services in southwestern Nigeria.
Methodology: The study was cross sectional study design. Questionnaires were administered using multistage sampling techniques among selected adults between the age range of 15 to 49 years. Data were collected using self-administered structured questionnaire, and analyzed using Statistical Package for Social Sciences version 21 and presented using appropriate tables. Level of significance set at $P<0.05$.
Result: Majority of respondents are aged 25-34 years 55.4%, 55.8% utilize government clinics for maternal health services, making it the most utilized type of health facility, 83.7% reported receiving medical care after delivery, while 12.7% did not, socio demographic of the participants based on age, religion and education shows a significant association with utilization of ANC and post- natal care services, 88.6% consistently take their babies for immunization, underscoring high overall compliance with the immunization schedule.
Conclusion: The study found that respondents have good knowledge and attitude towards antenatal care services, but education and socio-demographic factors need to be considered to improve awareness. Innovative prevention programs for women and pregnant women are needed to motivate high-risk individuals to adopt a healthy lifestyle, undergo routine medical check-ups, and participate in adequate antenatal care utilization.

Keywords: Awareness, Utilization, Practice, Antenatal care and Delivery

Background

Antenatal care (ANC), is sought by expectant mothers in order to protect both their unborn child's health and their own pregnancy (Fagbamigbe & Idemudia, 2015b). The use of assisted non-natal care (ANC), a vital component of safe parenting, differs greatly between the country's main urban areas and rural areas, ANC may decrease newborn mortality by detecting pregnancies at high risk. In contrast, the latest recommendations from the World Health

Organization indicate that there is an extra hidden benefit to suggesting antenatal care (ANC) to a woman (McNellan et al., 2019): she is less inclined to stop receiving treatment for her pregnancy and reproductive health. By establishing this paradigm, ANC provides a basic basis for comprehending the continuity of health among mothers, neonates, and children (Mathewos Oridanigo & Kassa, 2022).

Mother morbidity, the leading cause of maternal death that affects more than 50 million women globally, may be decreased by encouraging mothers to give birth in a medical facility or with the help of skilled delivery attendants (Dahab & Sakellariou, 2020) Nigeria exhibits a high prevalence of maternal and neonatal mortality, ranking among the highest globally. Furthermore, there exist significant societal inequalities in the accessibility to maternity and newborn care (MNCH) treatment. Furthermore, Nigerian families display a variety of situations in relation to catastrophic health expenses (Mao et al., 2023).

The most important factor affecting the mother's and the child's health outcomes is having access to excellent prenatal, postnatal, and neonatal care. It is alarming that there are significant health inequalities for women in poor countries (Grand-Guillaume-Perrenoud et al., 2022). Even though the government has launched many projects since independence to improve the health of mothers and children among health care facilities in Nigeria (Mao et al., 2023), the main causes of high maternal death rate are the underuse of contemporary healthcare facilities and a lack of access to high-quality healthcare (Fantaye et al., 2019). Other prevalent causes include social stratification, unfavorable health attitudes, early marriages, poor education, high rates of female illiteracy, high rates of low-quality service costs, and individual characteristics. Malnutrition is especially widespread in rural and tribal populations. Recipients of these services are still not making wise use of them.

With improved understanding of the need for women to prepare physically, mentally and even logistically for childbirth, antenatal care is recognized as a key maternal service in improving a wide range of health outcomes for women and children (Aliyu & Dahiru, 2017). Thus, the revised Focused Antenatal Care (FANC) model of World Health Organization (WHO) recommends at least 4 ANC visits for uncomplicated pregnancies with the first visit starting before 16 weeks of gestation. However, utilization of Antenatal Care (ANC) services are often limited or delayed in developing countries due to several reasons that have been reported previously (Fagbamigbe & Idemudia, 2015a). Availability, affordability and easy access to health facilities where antenatal care is offered increase utilization of antenatal care. Cultural beliefs and practices about pregnancy will have influence on antenatal care use, in that it may lead to mothers attending antenatal care late or not even attending at all(Mgata & Maluka, 2019). Other studies showed that women's ANC attendance is mediated by previous experiences and the quality of care at earlier antenatal care visits. Thus this study aims to assess factors affecting attendance of women of reproductive age at the antenatal and post- natal care services in southwestern Nigeria.

Methodology

The South West (often hyphenated to the South-West) is one of the six geopolitical zones of Nigeria representing both a geographic and political region of the country's southwest. It comprises six states Ekiti, Lagos, Ogun, Ondo, Osun, and Oyo. It makes up part of Yorubaland in Nigeria, with Kwara and parts of Kogi completing it.The zone stretches along the Atlantic

seaboard from the international border with Benin Republic in the west to the South South in the east with the North Central to the north. It is mostly a Yoruba-speaking area, although there are different dialects even within the same state.

In order to accomplish the objectives of this study cross sectional survey research design was adopted among consented pregnant or those with history of previous delivery before. Convenience sampling technique was used in collecting the data among all participants that meet up with the inclusion criteria. The study utilizes primary data which were collected through the use of questionnaire from respondents. A well-structured standardized questionnaire were administered to the respondents to gather information. All participants were informed about the study and provided consent, mostly verbal and signed. Statistical analysis was done using IBM SPSS version 25.0 software package, descriptive statistics, diagrams, crosstab, Chi-square are adopted for the analysis, $P<0.05$ was considered as significant

Results

The socio-demographic characteristics of the respondents in the study reveal a diverse group. The majority of respondents are aged 25-34 years (55.4%), with smaller proportions in the 15-24 years (16.3%) and 35 years and above (28.1%) age groups. Most of the respondents identify as Christian (75.6%), followed by Muslims (23.7%), and a very small number adhere to Traditional religion (0.7%). The predominant ethnic group is Yoruba (84.4%), with smaller representations from Igbo (13.4%) and Hausa (2.2%) communities. Regarding marital status, nearly all respondents are married (96.5%), with few being single (2.2%) or divorced (1.3%). Education levels are high, with the majority having tertiary education (61.5%), while a smaller portion has secondary (31.2%), primary (4%), or no formal education (3.3%). In terms of monthly income, over half of the respondents earn between 10,000 - 50,000 naira (57.1%), with others earning less than 10,000 naira (16.9%), between 50,000 - 100,000 naira (20.4%), or more than 100,000 naira (5.5%). The educational level of respondents' husbands is also high, with 70.1% having tertiary education, 25.1% secondary, and 4.8% primary education.

The data on the type of health facility visits for maternal health, as depicted in Figure 1, shows a clear preference among respondents. A significant majority of women (55.8%) choose to visit government clinics for maternal health services, making it the most utilized type of health facility. Private clinics are also commonly visited, with 40.9% of respondents opting for these services. In contrast, only a small fraction of women (1.5%) rely on traditional birth attendants, and even fewer (0.7%) seek maternal health services from non-governmental organizations (NGOs).

Table 1: Socio demographic characteristic of the respondents

Variable		Frequency	Percent
Age group	15-24 years	74	16.3
	25-34 years	252	55.4
	35 and above	128	28.1
Religion of respondent	Christian	344	75.6
	Islam	108	23.7
	Traditional	3	0.7

Tribe of respondent	Yoruba	384	84.4
	Igbo	61	13.4
	Hausa	10	2.2
Marital status of respondent	Single	10	2.2
	Married	439	96.5
	Divorced	6	1.3
	Total	455	100
Level of education of respondent	None	15	3.3
	Primary school	18	4
	Secondary school	142	31.2
	Tertiary	280	61.5
	Total	455	100
Monthly income of respondent	< 10,000 naira	77	16.9
	10,000 - 50,000 naira	260	57.1
	50,000 - 100,000	93	20.4
	>100,000	25	5.5
Husband educational level of respondent	Primary school	22	4.8
	Secondary school	114	25.1
	Tertiary	319	70.1
Type of Health Facility	Government Clinic	254	55.8
	Private Clinic	186	40.9
	Non-Governmenental Organisation	3	1.5
	Traditional Birth Attendant	7	0.7

Table 2 presents data on healthcare services received during pregnancy, highlighting emergency care and pregnancy outcomes. It shows that 13.2% of respondents reported receiving emergency care at primary clinics, while 9.2% did not. Additionally, 9.9% were taken to a secondary hospital for emergency care, while 13.2% were not. Regarding pregnancy outcomes, 12.1% had live births, 1.3% experienced stillbirths, 0.4% had premature births, and 1.5% underwent caesarean sections. The table also outlines reasons for not receiving emergency care. These include the absence of a skilled birth attendant (3.1%), unavailability of necessary drugs (3.7%), lack of medical supplies or equipment (5.1%), and lack of transportation to a secondary hospital (0.7%).

The length of pregnancies among the respondents is shown in Figure 4.3. Out of the total, 238 respondents (52.3%) reported a first trimester, 170 respondents (37.4%) reported a second trimester, and 44 respondents (9.7%) reported a third trimester.

Table 2: Health care service received during pregnancy

		Frequency	Percent
Primary clinic provide emergency care for these complications	Yes	60	13.2
	No	42	9.2
Taken to a secondary hospital for emergency care	Yes	45	9.9
	No	60	13.2
Pregnancy outcome	Live birth	55	12.1
	Stillbirths	6	1.3
	Premature birth	2	0.4
	Caesarean section	7	1.5
Primary reason you did not receive emergency care	No skilled birth attendant	14	3.1
	Necessary drugs unavailable	17	3.7
	Necessary medical supplies/ equipments unavailable	23	5.1
	No transport to secondary hospital	3	0.7
Duration of Pregnancies Among Respondents	First Trimester	238	52.3
	Second Trimester	170	37.4
	Third Trimester	44	9.7

Table 3 provides details on antenatal care received during pregnancy, illustrating the coverage of various health services. A vast majority of women (98.2%) reported being weighed during their pregnancy, while only 1.8% were not. Blood pressure measurements were taken for 96.3% of the respondents, with 3.3% not receiving this service. Urine tests were conducted for 95.4% of women, and 4.6% did not undergo the test. Blood tests were performed for 96.7% of the women, while 3.3% did not have one. Ultrasound scans were given to 95.4%, while 4.6% did not receive them. Regarding supplementation, 97.1% of women were given iron supplementation, and 96% received a tetanus toxoid (TT) injection. Malaria prophylaxis was provided to 94.7%, while 5.3% did not receive it. For malaria prevention, 84.2% received insecticide-treated bed nets (ITTN), while 15.8% did not. Lastly, complications during pregnancy were detected in 28.1% of the women, while 71.9% had no complications identified.

Table 3: Antenatal care received during pregnancy

Variable		Frequency	Percent
Weighed	Yes	447	98.2
	No	8	1.8
Blood Pressure Measured	Yes	438	96.3
	No	15	3.3
Urine Test	Yes	434	95.4
	No	21	4.6
Blood Test	Yes	440	96.7
	No	15	3.3
Ultrasound	Yes	434	95.4
	No	21	4.6
Are You Given Iron Supplementation	Yes	442	97.1
	No	13	2.9
Were given tetanus toxoid (TT) injection	Yes	437	96
	No	18	4
Were you given malaria treatment (prophylaxis)	Yes	431	94.7
	No	24	5.3
Were you given ITTN for malaria prevention	Yes	383	84.2
	No	72	15.8
Were any complications detected during your pregnancy	Yes	128	28.1
	No	327	71.9

Table 4 outlines various complications experienced during delivery and reasons for dissatisfaction with the healthcare services provided. A small number of respondents (1.1%) were dissatisfied due to unfriendly healthcare workers, and 1.8% mentioned long waiting periods. Another 0.2% expressed dissatisfaction with unfriendliness, carelessness, dishonesty, and lack of communication during their care. Regarding complications, 80.4% of women reported no complications during delivery, while 11.9% had a history of complications during pregnancy. Various forms of complications were also identified during delivery: 5.9% experienced prolonged labor, 3.1% had tears, and 0.9% faced issues with the baby's position in the womb. Excessive bleeding (0.9%) and high blood pressure (1.1%) were also reported. Less common complications included malaria, leg swelling, and cervix dilation issues, each affecting 0.2% of the respondents.

Table 4: Complication Experienced During Delivery

Reason for Dissatisfaction	**Frequency**	**Percent**
Health care workers are unfriendly	1	1.10
Long waiting periods	8	1.80
Not straightforward, unfriendliness, carelessness, dishonest, not carrying me along	1	0.20
Prevalence of Complication Experienced During Delivery		
No complication	366	80.40
History of complication during pregnancy	54	11.90
Different Forms of Complication Experienced During Delivery		
Prolonged labour	27	5.90
Tears	14	3.10
Baby in wrong position in the womb	4	0.90
Excessive bleeding	4	0.90
High blood pressure	5	1.10
Malaria	1	0.20
Leg swelling	1	0.20
Cervix didn't dilate	1	0.20

Table 5 presents data on health services received by women after delivery. A majority of women (83.7%) reported receiving medical care after delivery, while 12.7% did not. Of those who received care, 37.4% received it within a week, 42% within two weeks, 3.5% between two weeks and one month, and 2.4% after one month. In terms of postnatal visits, 32.5% had 1-2 clinic visits, while 54.3% had more than two visits. Physical examinations were conducted for 60.9% of the women, while 35.2% did not receive one. Counseling on breastfeeding was provided to 62.2%, but 35.2% did not receive such counseling. Contraceptives were given to 48.1%, while 49.5% did not receive them. Blood tests for anemia were conducted for 43.1% of women, and 50.8% received nutritional supplements. Information on warning signs of potential health problems after delivery was provided to 46.2%, while 51.4% did not receive this information.

Table 5: Health service received after delivery

Variable		**Frequency**	**Percent**
Did you receive medical care after delivery	Yes	381	83.7
	No	58	12.7
If yes, how soon after delivery	A week	170	37.4
	2 weeks	191	42

	Two weeks to one month	16	3.5
	One month	11	2.4
How many times did you visit the clinic after delivery	1-2 visits	148	32.5
	More than 2 visits	247	54.3
Physical examination	Yes	277	60.9
	No	160	35.2
Counseling on breastfeeding	Yes	283	62.2
	No	160	35.2
Contraceptives	Yes	219	48.1
	No	225	49.5
Blood test for anemia	Yes	196	43.1
	No	248	54.5
Nutritional supplements	Yes	231	50.8
	No	212	46.6
Information on warning signs of problems	Yes	210	46.2
	No	234	51.4

Table 6 highlights respondents' knowledge of danger signs associated with newborns, demonstrating a strong awareness of critical health indicators. Most respondents (82.9%) recognized weak or no crying as a warning sign, and 82% were aware that no breathing or difficult breathing is a cause for concern. Fast breathing (over 60 breaths per minute) was identified as dangerous by 77.8% of the respondents. Jaundice, indicated by yellow skin, was the most recognized danger sign, with 85.5% of respondents acknowledging it. Blue skin color, a sign of oxygen deficiency, was known by 73.6%. Additionally, 78.5% of respondents recognized hypothermia (cold/shivering) as a danger sign. Poor sucking, another critical indicator, was identified by 82.9%. Fever was recognized as a danger sign by 82%, and 75.4% were aware that fits or jerky movements were abnormal. Lastly, red swollen eyes were recognized by 77.1% as a sign of potential problems.

Table 6: Knowledge of the respondents on danger and signs associated with newborn

		Frequency	**Percent**
Baby won't cry/weak cry	Yes	377	82.9
	No	76	16.7
No breathing/ difficult breathing	Yes	373	82
	No	80	17.6
Difficult fast breathing (>60 breaths/minutes)	Yes	354	77.8
	No	98	21.5
Yellow skin colour (Jaundice)	Yes	389	85.5

	No	64	14.1
Blue skin colour	Yes	335	73.6
	No	118	25.9
Baby is very cold/ shivering (hypothermia)	Yes	357	78.5
	No	95	20.9
Unable to suck/ poor sucking	Yes	377	82.9
	No	76	16.7
Fever	Yes	373	82
	No	80	17.6
Fits/ abnormal/ jerky movements	Yes	343	75.4
	No	109	24
Red swollen eyes	Yes	351	77.1
	No	100	22

Table 7 shows the association between socio-demographic factors and the utilization of government clinics for antenatal care (ANC). Younger women (15-24 years) had the highest utilization (49%), while older age groups (25-34 years and 35+) had lower rates (35.9% and 39.1% respectively), with this difference being statistically significant ($\chi^2 = 6.065$, $p = 0.048$). Religion also played a significant role, with Christians (48.3%) using government facilities more than Muslims (36.1%) and traditionalists (0%) ($\chi^2 = 7.374$, $p = 0.025$). Although tribe did not have a significant effect, Yorubas (44.3%) had slightly lower usage than Igbos (52.5%) ($\chi^2 = 2.362$, $p = 0.307$). Marital status showed higher utilization among single women (70%) compared to married (44.2%) and divorced (66.7%) women, though this was not statistically significant ($\chi^2 = 3.778$, $p = 0.151$). Education level had a significant impact, with women who had no formal education showing the lowest utilization (20%) and those with tertiary education the highest (47.5%) ($\chi^2 = 8.300$, $p = 0.040$). While utilization varied across income levels, peaking at 51.6% for women earning 50,000-100,000 naira, income did not significantly affect clinic use ($\chi^2 = 3.327$, $p = 0.344$).

Table 7: Association between socio demographic and Utilization ANC and post- natal care services

Variable		**Use government hospital**		**Total (%)**	**(χ^2)**	**df**	**P-value**
		Yes (%)	**No (%)**				
Age categories index child	15-24 years	150 (49.0%)	156 (51.0%)	306 (100.0%)	6.065	2	0.048
	25-34 years	37 (35.9%)	66 (64.1%)	103(100.0%)			
	35 and above	18 (39.1%)	28 (60.9%)	46(100.0%)			
Religion	Christian	166 (48.3%)	178 (51.7%)	344(100.0%)	7.374	2	0.025

	Islam	39 (36.1%)	69 (63.9%)	108(100.0%)			
	Traditional	0 (0.0%)	3 (100.0%)	3(100.0%)			
Tribe	Yoruba	170 (44.3%)	214 (55.7%)	384(100.0%)	2.362	2	0.307
	Igbo	32 (52.5%)	29 (47.5%)	61(100.0%)			
	Hausa	3 (30.0%)	7 (70.0%)	10(100.0%)			
Marital status of respondent	Single	7 (70.0%)	3 (30.0%)	10(100.0%)	3.778	2	0.151
	Married	194 (44.2%)	245 (55.8%)	439(100.0%)			
	Divorced	4 (66.7%)	2 (33.3%)	6(100.0%)			
Level of education	None	3 (20.0%)	12 (80.0%)	15(100.0%)	8.300	3	0.040
	Primary school	4 (22.2%)	14 (77.8%)	18(100.0%)			
	Secondary school	65 (45.8%)	77 (54.2%)	142(100.0%)			
	Tertiary	133 (47.5%)	147 (52.5%)	280(100.0%)			
Monthly income	< 10,000 naira	29 (37.7%)	48 (62.3%)	77(100.0%)	3.327	3	0.344
	10,000 - 50,000 naira	117 (45.0%)	143 (55.0%)	260(100.0%)			
	50,000 - 100,000	48 (51.6%)	45 (48.4%)	93(100.0%)			
	>100,000	11 (44.0%)	14 (56.0%)	25(100.0%)			

Table 8 provides insights into knowledge and compliance with the immunization schedule. A significant majority of respondents (88.4%) consistently bring their babies to welfare clinics, indicating strong adherence to regular visits. Despite this, only 5.1% have ever stopped their baby's immunization, and a similar percentage (5.3%) reported that their baby has missed a vaccine. Additionally, 8.1% expressed a desire to discontinue their baby's immunization, though this is relatively low compared to the 85.9% who have never stopped or missed a dose. The overwhelming majority (88.6%) consistently take their babies for immunization, underscoring high overall compliance with the immunization schedule

Table 8: Knowledge and compliance to immunization schedule

Variable	Always (%)	Sometimes (%)	Rarely (%)	Never (%)
Do you bring your baby to the welfare clinics regularly	402 (88.4)	27 (5.9)	6 (1.3)	10 (2.2)
Have you ever stopped your baby's immunization before	23 (5.1)	15 (3.3)	15 (3.3)	391 (85.9)
Has your baby ever missed a vaccine before	24 (5.3)	16 (3.5)	29 (6.4)	375 (82.4)
Do you wish to discontinue your immunization for your baby	37 (8.1)	3 (0.7)	14 (3.1)	391 (85.9)
Do you take your babies for immunization at all	403 (88.6)	30 (6.6)	4 (0.9)	8 (1.8)

Discussion

The findings from this study based on healthcare services received during pregnancy, as presented in the table, reveals critical insights into the accessibility and quality of maternal health services. According to the findings, a significant portion of women reported that primary clinics do not provide emergency care for complications, with 60 (13.2%) affirming they do and 42 (9.2%) denying it. Furthermore, only 45 (9.9%) were taken to a secondary hospital for emergency care, while 60 (13.2%) were not. The outcomes of these pregnancies were concerning, with 55 (12.1%) resulting in live births, 6 (1.3%) in stillbirths, and 2 (0.4%) in premature births, alongside 7 (1.5%) requiring a Caesarean section. The primary reasons cited for not receiving emergency care included the absence of skilled birth attendants (14, 3.1%), unavailability of necessary drugs (17, 3.7%), lack of medical supplies (23, 5.1%), and transportation issues (3, 0.7%).These findings are consistent with the literature highlighting the barriers to effective maternal healthcare. Adedeji et al. (2023) emphasize that inadequate access to skilled birth attendants and emergency care significantly contributes to adverse pregnancy outcomes, such as stillbirths and maternal morbidity. Similarly, Amungulu et al. (2023) report that the lack of essential medical supplies and transportation challenges are prevalent in rural settings, impeding timely access to emergency care. Lateef et al. (2024) further corroborate these findings, noting that educational interventions aimed at increasing awareness of available healthcare services can lead to improved service utilization among pregnant women.

The data presented in the table regarding antenatal care received during pregnancy highlights the critical components of maternal healthcare services and their implications for maternal and fetal health. The findings indicate that a high percentage of women received essential antenatal services, with 98.2% being weighed, 96.3% having their blood pressure measured, and 95.4% undergoing urine tests. Additionally, 96.7% received blood tests, and 97.1% were given iron supplementation. However, despite these positive indicators, 28.1% of women reported that complications were detected during their pregnancies, suggesting that while routine care is being provided, there may be gaps in the detection and management of complications.Comparatively,

studies by Abuosi et al. (2024) and Acup et al. (2023) underscore the importance of comprehensive antenatal care in improving maternal health outcomes. Abuosi et al. (2024) found that regular monitoring and screening during antenatal visits significantly reduce the incidence of complications such as preeclampsia and gestational diabetes. Similarly, Acup et al. (2023) emphasized that the provision of iron supplementation and malaria prophylaxis is crucial in regions where these conditions are prevalent, aligning with the high rates of supplementation observed in the current study.In contrast, Alibhai et al. (2022) pointed out that despite high attendance rates at antenatal clinics, the actual utilization of services often falls short of expectations. Their research indicated that many women attend clinics primarily for monitoring rather than comprehensive care, which may explain the 28.1% complication rate reported. This discrepancy highlights the need for healthcare systems to not only encourage attendance but also ensure that women receive the full spectrum of care during their visits.

antenatal care (ANC) received during pregnancy demonstrates a high level of service utilization among participants, with 98.2% being weighed, 96.3% having their blood pressure measured, and 95.4% undergoing urine tests. These figures reflect a strong adherence to key components of ANC, which are essential for monitoring maternal and fetal health. However, despite the high rates of routine checks, 28.1% of women reported complications during their pregnancies, indicating that the quality of care may not be consistent with the quantity of services received, the findings align with research by Alqifari (2024), who noted that while ANC attendance is crucial, the quality of care provided is a significant determinant of pregnancy outcomes. Alqifari's study highlighted that inadequate screening and follow-up for complications can lead to adverse outcomes, even when women attend ANC regularly. Similarly, Amponsah-Tabi et al. (2022) emphasized that although a high percentage of women receive basic ANC services, gaps remain in the comprehensive management of complications, which could explain the reported incidence of complications in the current study. Their findings suggest that improving the quality of ANC, particularly in rural settings, is essential for enhancing maternal health outcomes.Mandiwa and Namondwe (2024) further support this perspective by demonstrating that the integration of education about the importance of ANC services and the management of complications can significantly improve health outcomes. Their research indicates that women who are well-informed about the benefits of ANC are more likely to seek and utilize comprehensive care, which can mitigate risks associated with pregnancy complications.

The findings indicate that a significant proportion (83.7%) of women received medical care after delivery, with the majority (79.4%) seeking care within the first two weeks postpartum. However, a concerning 12.7% did not receive any postpartum care.Regarding the frequency of postpartum visits, 54.3% of women attended more than two visits, while 32.5% attended only 1-2 visits. The services provided during these visits included physical examinations (60.9%), breastfeeding counseling (62.2%), contraceptive provision (48.1%), blood tests for anemia (43.1%), nutritional supplements (50.8%), and information on warning signs of postpartum complications (46.2%).These findings align with the recommendations made by the World Health Organization (WHO) for postpartum care, which emphasize the importance of at least three postnatal visits within the first six weeks after birth (Dzinamarira et al., 2023). The WHO guidelines also stress the need for comprehensive care, including physical examinations, breastfeeding support, contraceptive counseling, and the management of postpartum complications (Pepper et al., 2024).However, the study also highlights gaps in postpartum care utilization, with a significant proportion of women not receiving essential services such as blood

tests for anemia and information on warning signs of postpartum complications. These gaps are consistent with findings from other studies in sub-Saharan Africa, which have identified barriers to postpartum care utilization, including lack of awareness, cultural beliefs, and limited access to healthcare facilities (Tuglo et al., 2022).

Majority of the participants were aware of critical danger signs such as jaundice (85.5%), weak or no crying (82.9%), and poor sucking (82.9%), aligning with findings from studies like Adedire et al. (2021), which emphasize that maternal education plays a significant role in newborn survival and health outcomes. Similarly, Gyaase et al. (2024) found that awareness of neonatal danger signs like fever (82%) and breathing difficulties (82%) are vital for early diagnosis and timely intervention. However, the knowledge of blue skin color, indicative of severe neonatal hypoxia, was lower at 73.6%, suggesting gaps in understanding more specific or less common signs, a trend also reported by Zhou et al. (2022), who noted variations in awareness levels across different healthcare facilities and regions.

In terms of immunization compliance, 88.4% of respondents reported regularly taking their babies to welfare clinics, a high compliance rate consistent with the findings from Adedire et al. (2021) and Gyaase et al. (2024), who observed similar high rates of immunization adherence due to increased awareness campaigns. Nonetheless, the small percentages of respondents who had missed vaccines (82.4%) or considered discontinuing immunizations (8.1%) reflect challenges similar to those documented in Zhou et al. (2022), where logistical challenges and misinformation were found to be barriers.

Conclusion

Majority of respondents demonstrated awareness of critical danger signs associated with newborns, gaps remain in recognizing less common signs, which could hinder timely interventions. The high compliance rates for immunization schedules are encouraging; however, the presence of missed vaccinations and intentions to discontinue immunizations indicate ongoing challenges that need to be addressed through targeted educational initiatives and improved access to healthcare services, this study emphasizes the importance of integrating educational programs aimed at enhancing maternal knowledge and improving the quality of healthcare services. By addressing the barriers to effective service utilization and ensuring that mothers are well-informed about both maternal and neonatal health, we can significantly improve health outcomes for mothers and their children. Future research should focus on identifying specific interventions that can bridge these gaps and promote a more holistic approach to maternal and child health care.

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