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Knowledge and Attitude to Maternal and Child Healthcare Services Delivery Among Postpartum Women in A Secondary Healthcare Facility in Anambra State, Nigeria

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Abstract:

Background: Maternal and child healthcare services are essential for reducing preventable deaths and promoting lifelong health for women and children. Knowledge and attitudes held by women towards these services are key determinants to their utilization and adoption of beneficial practices. This study is therefore aimed to assess the knowledge and attitude to maternal and child healthcare services delivery among postpartum women in a secondary healthcare facility in Anambra State, Nigeria.

Methods: A cross-sectional analytical study was carried out using a semi-structured interviewer-administered questionnaire to obtain data from 130 postpartum women utilizing maternal and child healthcare services in a general hospital in the state. Participants were enrolled using systematic sampling technique. Data were analyzed using SPSS version 25.0 and statistical significance was set at $p \leq 0.05$.

Results: The mean age of the respondents was 27.38 ± 4.80 years. Majority of the respondents were married (94.6%), christians (98.5%) and Igbos (96.9%). Eighty percent of the respondents generally had good level of knowledge of maternal and child heathcare services. The level of knowledge was highest for antenatal services (96.2%) and immunization services (94.2%). Ninety seven point six percent of the respondents generally exhibited positive attitude to maternal and child healthcare services. Positive attitude was highest for antenatal care and immunization (114; 87.7% and 112; 86.2% respectively) and lowest for postnatal care visits and family planning (94; 72.3% and 78; 60.0% respectively). Statistically significantly associated existed between knowledge of maternal and child heathcare services and the tribe and religion of the respondents ($P < 0.05$), and attitude to maternal and child heathcare services and the marital status of the respondents ($P < 0.00$).

Conclusion: The postpartum women were generally knowledgeable and had positive attitudes to maternal and child healthcare service delivery in the secondary healthcare facility. Enhancing knowledge and fostering positive attitudes through targeted education, community engagement, and provider training is therefore essential for maintaining and improving this knowledge and attitude

Keywords: Maternal healthcare, child healthcare, postpartum women, knowledge, attitude, Anambra State, Nigeria.

INTRODUCTION

Maternal and child healthcare services are the promotive, preventive, curative, and rehabilitative healthcare interventions that are designed to promote the physical, social and mental well-being of mothers throughout pregnancy, childbirth, and the postpartum period, as well as ensuring the survival and optimal development of children from birth through adolescence [1], [2]. Maternal healthcare services comprise antenatal, intrapartum, and postnatal care. Antenatal care begins in the first trimester of pregnancy and involves regular health check-ups to monitor maternal and foetal health and to detect complications early as well as to provide education on nutrition, danger signs in pregnancy and birth preparedness [3]. A minimum of eight antenatal care visits per pregnancy are recommended by the World Health Organization to improve maternal outcomes and reduce perinatal mortality [3]. The essentials of these visits include iron and folic acid supplementation, tetanus toxoid immunization, screening for infections such as

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Hepatitis B, Hepatitis C, Human immunodeficiency virus and syphilis as well as the management of disease conditions such as diabetes and hypertension. Intrapartum care ensures that childbirth is safe through skilled birth attendance by experienced midwives or physicians trained in emergency obstetric care [4]. It entails monitoring of labour, providing pain relief during labour, actively managing the third stage of labour so that postpartum haemorrhage can be prevented, and immediate care of the newborn [2]. Critical to the success of intrapartum care is access to emergency obstetric and newborn care facilities for managing life-threatening complications. Postnatal care is provided within the first six weeks following delivery and addresses maternal recovery and mental health as well as family planning and support for breastfeeding [5]. Ideally, it is recommended that postnatal care visits should occur within 24 hours of delivery, on day 3, and between days 7–14 days post-delivery, with a final visit at six weeks [5]. During these visits, monitoring for infections, screening for postpartum depression, and counselling on contraception and infant care are undertaken.

Child healthcare services begin immediately after birth and continue through infancy, childhood, and adolescence [1]. They comprise essential newborn care such as early initiation of breastfeeding, thermal protection, hygiene, and resuscitation when needed as well as the following of standardized schedules of immunization programs to protect the children against vaccine-preventable diseases [6], [2]. In addition, the integrated management of childhood illnesses strategy are incorporated to provide a holistic approach to maintaining child health by providing preventive and curative services for common childhood conditions such as diarrhea, pneumonia, malaria, and malnutrition as well as to provide nutritional counseling, growth monitoring, and vitamin A supplementation [7]. Adolescent healthcare services ensure a life-course approach to the well-being of adolescents by addressing reproductive health, mental health, and the prevention of risky behaviours [1].

Maternal and child health is critical to the overall well-being of the society as a significant proportion (over two-thirds) of the population is made up of women and children [8]. Ending preventable maternal and child deaths has therefore remained a top priority on the global agenda of the World Health Organization. Maternal and child healthcare services form a comprehensive, inter-connected framework essential for reducing preventable deaths and promoting lifelong health for women and children. Despite the progress recorded globally in strengthening maternal and child healthcare services delivery, disparities in service quality, accessibility, and utilization persist especially in many developing countries thereby contributing significantly to global maternal mortality [5], [9]. The World Health Organization reports that approximately 287,000 women died from pregnancy- and childbirth-related causes in 2020 and that the majority of these deaths occured in low- and middle-income countries [10]. These deaths could have been preventable through timely access to quality care. In Sub-Saharan Africa, the maternal mortality ratio is about 542 deaths per 100,000 live births [11]. In Nigeria, only about 43% deliver under skilled supervision and less than 40% of women complete the recommended postnatal visits [12].

The sustainable development goal (SDG) 3.1 and 3.2 target to lower maternal mortality ratio to a global average of approximately less than 70 deaths per 100,000 live births by the year 2030 and under-five mortality rate to 25 deaths per 1,000 live births by 2030 [13], [14]. Most maternal and child deaths result from preventable causes which could be averted through timely management by skilled healthcare professionals working in a supportive environment [10]. However, the knowledge and attitudes held by women towards maternal and child healthcare services delivery are key determinants of whether they will utilise recommended health services and adopt beneficial practices. A positive attitude coupled with adequate knowledge of preventive practices, danger signs, and availability of services can enhance adherence to prenatal/postnatal check-ups, nutrition guidelines, and immunizations thereby ultimately reducing morbidity and mortality [5]. Inadequate knowledge, on the other hand, can often lead to suboptimal practices, and persistent knowledge deficits in diverse settings will continue to impede progress. For instance, Studies in Nepal reveal that only 39% of postpartum women in rural and underserved areas demonstrated good knowledge of postnatal care and this resulted in practice rates as low as 43% for essential postpartum services [15]. Studies in Ghana also reveal suboptimal knowledge with women often perceiving postpartum care as primarily baby-focused, and reporting limited understanding of maternal danger signs and barriers such as negative

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provider attitudes hindering access [11]. Knowledge and attitude to immunization also vary widely among postpartum women. For instance, in Peru, even though 98.5% of pregnant and postpartum women believe that vaccines are important, only 30.4% of them demonstrated high levels of knowledge about specific maternal immunizations, and its uptake was heavily influenced by healthcare provider recommendations [16]. Similarly, a study in the United States showed that even though postpartum women's attitudes toward peripartum immunization are generally positive, they are usually constrained by incomplete knowledge of vaccine benefits and safety during pregnancy [17]. These findings therefore highlight how attitudes, when supported by knowledge and possibly trust in healthcare systems, can drive better compliance. Fostering positive attitudes and enhancing knowledge among postpartum women is therefore essential for improving maternal and child health care services delivery and promoting long-term health for women and children [10]. This study is therefore aimed to assess the knowledge and attitude to maternal and child healthcare services delivery among postpartum women in a secondary health facility in Anambra State, Nigeria.

METHODOLOGY

Study Area - The study was carried out in Nnobi General Hospital, Idemili South Local Government Area, Anambra State, Nigeria. Nnobi is a semi-urban community with a land mass of 93,615 m² and an estimated population of 70,000. It is predominantly inhabited by the Igbo ethnic group who are mainly Christians. The main occupation of the inhabitants includes farming, trading, civil service and artisans. The town is accessible by road and has basic social amenities such as schools, markets, and health facilities [18].

Nnobi General Hospital is a government-owned secondary healthcare facility under the supervision of the Anambra State Ministry of Health. The hospital provides comprehensive healthcare services including outpatient and inpatient care, surgical services, and emergency care. Its maternal and child healthcare services include antenatal care, skilled birth delivery, postnatal care, family planning, immunization, and child welfare clinics. The hospital serves as a referral centre for primary healthcare facilities within the local government area. It also caters to a large and diverse population of women of reproductive age, especially those accessing maternal and child healthcare services. The facility records an average monthly attendance of several hundred women for antenatal, delivery, and postnatal services [19].

Study Design - This was a cross-sectional analytical study.

Study Population – This was comprised of post-partum women who gave birth within six weeks to the study and presenting at the General Hospital, Nnobi to receive maternal and child healthcare services.

Inclusion Criteria - Women who gave birth within 6weeks to the study and presenting with their newborn babies at the hospital for maternal and child healthcare services.

Exclusion Criteria - Women who gave birth within 6weeks to the study and presenting with their newborn babies at the hospital for maternal and child healthcare services but have cognitive impairment.

Sample Size Determination - The sample size was calculated using the Cochran formula – $n = (Z^2 pq) / d^2$ [20].

Where

n = Minimum sample size

Z = Standard normal deviation at 95% confidence level = 1.96

P = Proportion of women with high level of knowledge of maternal and child healthcare services = 95.2% = 0.952 [21].

$n = (1.96^2 \times 0.952 \times 0.048) / 0.05^2 = 70.218$

Anticipating a non-response rate of 10%, n = 70.218/1 - 0.10 = 78.02 = 78.

To make up for the loss of precision due to the use of a non-simple random sampling design, a design effect of 1.5 was used to multiply the sample size as follows -

78 X 1.5 = 117

The sample size was then increased to 130 for ease of administration and to increase the precision of the study.

Sampling Technique - Stratified systematic sampling technique was used to enrol the respondents.

Step 1: The maternal and child health clinic was stratified into two - Postnatal clinic and child wellness clinic. Then, the sample size was divided

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equally into two to allocate 65 respondents to each of the clinics.

Step 2: Systematic sampling technique was used to enrol the post-partum women presenting at the postnatal and child wellness clinics each clinic day into the study until the sample size was attained.

Study Instrument - Semi-structured interviewer-administered questionnaire adopted from previous studies [9], [22], [23] were used for this study to collect information on the socio-demographic characteristics of the respondents, their levels of knowledge and attitude to maternal and child healthcare services as well as the factors influencing these.

Data collection method - The semi-structured questionnaires were administered to the postpartum women by the trained research assistants using face-to-face interviews. Prior to the administration of the questionnaire, each participant gave verbal informed consent. The questionnaire took about twenty minutes to be administered and data collection was carried out within eight weeks. The principal researcher was present for in-process monitoring of data collection as much as possible to ensure quality control.

Data Management –

Measurement of Variables - The main outcome and dependent variables for this study were knowledge and attitude to maternal and child healthcare services delivery while the independent variables were the factors that influence these. The level of knowledge was assessed using binary (Yes/No) and multiple selection questions. Each correct response was awarded one point while each incorrect response was awarded 0 point giving a highest score of 17 points and a lowest score of 0 point. The scores were then converted to percentages. Respondents scoring less than 50% were deemed as having poor knowledge, those scoring 50-69% were deemed as having fair knowledge while those scoring greater than or equal to 70% were deemed as having good Knowledge. Attitude was assessed using by ten questions on a Likert scale of 0 - 4 for strongly disagree to strongly agree, giving a highest score of 40 and a lowest score of 0. The scores were then converted to percentages. Respondents scoring less than 50% were deemed as having negative attitude while those scoring more than or equal to 50% were deemed as having positive attitude.

Statistical Analysis - Data analysis was carried using with International Business Machines-Statistical Package for Social Sciences (IBM-SPSS) version 25.0 [24]. Frequency distribution of all the relevant variables was developed. Relevant means and proportions were calculated. Associations between variables were tested using Chi-Square or Fishers Exact tests as appropriate. Level of statistical significance was set at p-value ≤ 0.05 for all inferential statistics and standard deviations.

Ethical Considerations – Ethical clearance for the study was obtained from Nnamdi Azikiwe University Teaching Hospital Ethics Committee (Ref: NAUTH/CS/66/VOL.17/VER.3/057/2025/66). Permission to carry out the study was obtained from the Chief Medical Director of General Hospital, Nnobi. Verbal informed consents were obtained freely and without coercion from all the respondents prior to the administration of the questionnaire. In addition, the respondents were assured of the confidentiality of the information obtained and that they are free to opt out of the study at any time without any repercussion.

RESULTS

A total of 130 questionnaires were administered to the respondents. All the questionnaires were retrieved, giving a response rate of 100%.

Table 1: Socio-demographic characteristics of respondents

Variable	Frequency (n= 130)	Percentage (%)
Age (years)		
≤24	37	28.5
25-29	50	38.5
30-34	30	23.1
≥35	13	10.0
Mean age	**27.38 ± 4.80 years.**	
Marital status		
Married	123	94.6
Single	7	5.4
Religion		

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Christianity	128	98.5
Traditional religion	1	0.8
Judaism	1	0.8
Ethnicity		
Igbo	126	96.9
Efik	1	0.8
Fon (Cotonou)	1	0.8
Hausa	1	0.8
Yoruba	1	0.8
Educational status		
No formal Education	0	0.0
Primary	1	0.77
Secondary	104	80.0
Tertiary	26	20.0
Educational status of husband		
No formal education	0	0.0
Primary	0	0.0
Secondary	84	64.6
Tertiary	46	35.4
Occupation		
Artisan	43	33.1
Civil Servant	21	16.2
Farmer	2	1.5
Housewife	16	12.3
Trader	48	36.9

Table 1 shows that the mean age of the respondents was 27.38 ± 4.80 years. Majority of the respondents were married (94.6%), Christians (98.5%), and Igbos (96.9%). The highest level of educational attainment for most of the respondents (80.0%) and their husbands (64.6%) was secondary school level. Most of the respondents were traders (36.9%) followed by artisans (43%).

Table 2: Knowledge Maternal and Child Healthcare Services among the Respondents (Multiple Responses)

Variables	Frequency	Percentage (%)
Antenatal services	126	96.92
Skilled delivery services	117	90.00
Postnatal services	103	79.23
Family planning services	101	77.69
Immunization services for newborns	123	94.62
Growth monitoring and nutritional counseling	106	81.54

Table 2 shows that the level of knowledge of the services rendered in the maternal and child healthcare services was generally high though it was highest for antenatal services (96.2%) and immunization services (94.2%).

Table 3: Knowledge of the Benefits of Maternal and Child Heathcare Services among the Respondents (Multiple Responses)

Variable	Frequency	Percentage (%)
Reduces risk of maternal and newborn complications	124	95.38
Skilled personnel available to manage complications	112	86.15

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Monitoring mother and baby's health after delivery	116	89.23
Family Planning Counseling	103	79.23
Immunization for the baby	120	92.31
Breastfeeding support	115	88.46

Table 3 shows that the knowledge of the respondents on the benefits of maternal and child heathcare services were generally high but was highest for reduction of risk of maternal and newborn complications (95.38%) and immunization for the baby (92.31%).

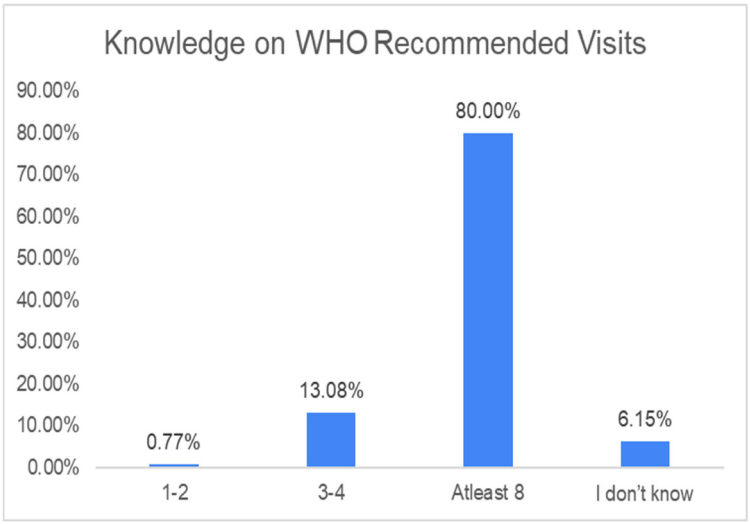

Figure 1: Knowledge of the WHO Recommended Number of ANC Visits by the Respondents

Figure 1 shows that most of the respondents (80.00%) know the recommended number of antenatal care visits to the hospital to be at least 8.

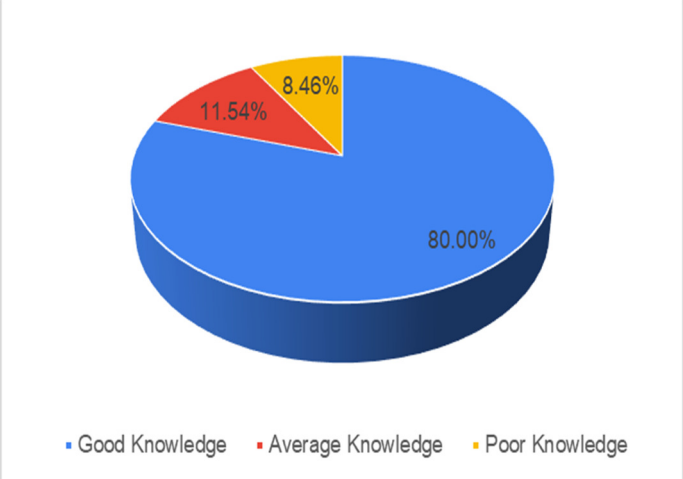

Figure 2: General Level of Knowledge of Maternal and Child healthcare Services among the Respondents

Figure 2 shows that most of the respondents (80.00%) had good general level of knowledge of maternal and child heathcare services.

Table 4a: Attitude to Maternal and Child Heathcare Services among the Respondents

Variable	Strongly agree (n, %)	Agree (n, %)	Neutral (n, %)	Disagree (n, %)	Strongly disagree

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					(n, %)
Believes that healthcare facility provides quality MCH services	106 (81.5)	21 (16.2)	2 (1.5)	1 (0.8)	0 (0.0)
Believes that attending antenatal care is important	114 (87.7)	16 (12.3)	0 (0.0)	0 (0.0)	0 (0.0)
Believes in the affordability and Accessibility of MCH services	95 (73.1)	26 (20.0)	6 (4.6)	3 (2.3)	0 (0.0)
Believes in the necessity of delivery at a health facility rather than at home	105 (80.8)	23 (17.7)	1 (0.8)	0 (0.0)	1 (0.8)
Believes that postnatal care visits is necessary for both mother and baby	94 (72.3)	25 (19.2)	9 (6.9)		1 (0.8)
Believes that immunization is important in preventing diseases in newborns	112 (86.2)	18 (13.8)	0 (0.0)		0 (0.0)
Believes that breastfeeding within the first hour after birth is beneficial to the baby	100 (76.9)	29 (22.3)	1 (0.8)	0 (0.0)	0 (0.0)
Believes that regular monitoring of baby's weight and growth is important.	95 (73.1)	33 (25.4)	2 (1.5)	0 (0.0)	0 (0.0)
Believes that family planning helps improve maternal and child health	78 (60.0)	31(23.8)	15 (11.5)	3 (2.3)	1 (0.8)
Believes that healthcare providers were respectful in their approach to healthcare delivery	102 (78.5)	24 (18.5)	3 (2.3)	0 (0.0)	1 (0.8)

Table 4a shows that most of the respondents had positive attitude to maternal and child healthcare services with majority of them strongly agreeing that attending antenatal care is important and that new born immunization is important for preventing diseases (114; 87.7% and 112; 86.2% respectively). Only 94 (72.3%) of the respondents strongly agreed that postnatal care visits are necessary for both the mother and baby while only 78 (60.0%) strongly agreed that family planning helps to improve maternal and child health.

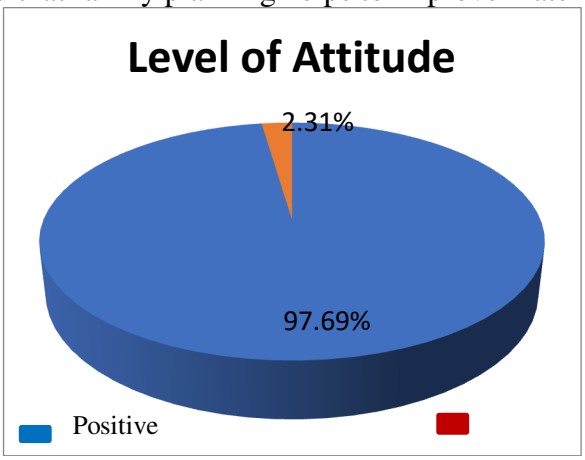

Figure 3: Attitude to maternal child health services

Figure 3 shows that attitude to maternal and child healthcare services delivery was generally high as 97.69% of the respondents exhibited positive attitude.

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Table 5: Association Between Knowledge of Maternal and Child Healthcare Services and the Sociodemographic Characteristics of the Respondents

Variable	Level of Knowledge (n = 130)			Test Statistic	p-value
	Good	Average	Poor		
Age (years)					
≤24	29	3	5	F = 4.0857	0.6651
25-29	41	7	2		
30-34	24	4	2		
≥35	10	1	2		
Marital Status					
Married	98	15	10	F = 0.3728	0.8300
Single	6	0	1		
Religion					
Christianity	104	13	11	F = 13.8037	0.0079*
ATR	0	1	0		
Judaism	0	1	0		
Tribe					
Igbo	102	15	9	F = 20.1935	0.0096*
Yoruba	0	0	1		
Hausa	1	0	0		
Efik	1	0	0		
Fon (Cotonou)	0	0	1		
Educational status					
No formal education	0	0	0	F = 1.7195	0.7872
Primary	1	0	0		
Secondary	79	13	11		
Tertiary	24	2	0		
Occupation					
Artisan	37	2	2	F = 16.0583	0.1886
Civil Servant	18	2	1		
Farmer	1	1	0		
Housewife	9	1	2		
Student	0	1	0		
Trader	36	8	6		
Unemployed	3	0	0		
Educational status of Husband (n = 123)					
No formal education	0	0	0	F = 4.0569	0.1315
Primary	0	0	0		
Secondary	57	12	8		
Tertiary	41	3	2		
Occupation of Husband (n = 123)					
Artisan	17	5	2	F = 4.4042	0.9273
Caterer	1	0	0		
Civil Servant	24	1	2		
Farmer	6	0	0		
Trader	49	9	6		
Unemployed	1	0	0		

* P-value is significant; ATR = African Traditional Religion; F = Fishers Exact Test

Table 5 shows that the level of knowledge of maternal and child heathcare services were statistically significantly associated with the tribe and religion of the respondents ($P < 0.05$).

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Table 6: Association Between Attitude to Maternal and Child Healthcare Services and the Sociodemographic Characteristics of the Respondents

Variable	Level of Attitude (n = 130)		Test Statistic (F)	p-value
	Good	Poor		
Age (years)				
≤24	36	1	1.8176	0.6111
25-29	50	0		
30-34	30	0		
≥35	13	0		
Marital Status				
Married	123	0	16.7615	0.0000*
Single	6	1		
Religion				
Christianity	127	1	0.0004	0.9998
ATR	1	0		
Judaism	1	0		
Tribe				
Igbo	125	1	0.0012	1.0000
Yoruba	1	0		
Hausa	1	0		
Efik	1	0		
Fon (Cotonou)	1	0		
Educational status				
No formal education	0	0	0.0565	0.9722
Primary	1	0		
Secondary	102	1		
Tertiary	26	0		

* P-value is significant; ATR = African Traditional Religion; F = Fishers Exact Test

Table 6 shows that the attitude to maternal and child heathcare services delivery was statistically significantly associated with the marital status of the respondents ($P < 0.00$).

DISCUSSIONS

This cross-sectional descriptive study was carried out to assess the knowledge and attitude to maternal and child healthcare services delivery in a secondary healthcare facility in Anambra State, Nigeria, as well as the factors that influence them. Nearly all the respondents in this study reported that they were aware of maternal and child healthcare services and a large proportion of them demonstrated a good understanding of the components and importance of maternal and child healthcare services. This finding is in keeping with that of other studies [25] - [28] and may indicate that there is a good awareness and sensitization campaign on maternal and child healthcare services in the region. It may also indicate that health education efforts in the community have a significant impact on the women. Knowledge is a key determinant of health-seeking behavior. A high level of knowledge is associated with increased utilization of healthcare services, early health intervention, and improved maternal and child health outcomes [28]. Overall, the respondents in this study generally exhibited good levels of knowledge of maternal and child healthcare services, particularly regarding antenatal care, skilled delivery, immunization, family planning, and nutrition counselling. However, there remains a noticeable gap in knowledge concerning postnatal care services and the recommended number of antenatal care visits by the WHO. The high level of knowledge found in this study could be attributed to the fact that the study was conducted in a general hospital, where women are regularly exposed to health education talks during antenatal and postnatal visits as buttressed by the finding in this study and elsewhere [25] where majority of the respondents mentioned that they acquired their knowledge of maternal and child healthcare services

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primarily from healthcare professionals within the health facilities. This is especially so as majority of the respondents in this study were within the age group that is in their most active reproductive phase. This means that they were more likely to have benefited from previous exposure to antenatal education, family planning counselling, or prior childbirth experiences, which may all contribute to a higher level of health awareness and may positively influence their knowledge and attitude towards maternal and child healthcare services [29] – [31]. Furthermore, all the respondents in this study acquired some level of formal education and over half of them had completed secondary education. Educated women tend to be more informed about the importance of antenatal care, institutional delivery, postnatal care, and child immunization, and this may enhance utilization [32]. This is consistent with findings from a study by Odetola and colleague in Ibadan, Nigeria which showed that women with higher educational levels are more likely to utilize maternal and child healthcare services [33]. The high levels of knowledge obtained in this study suggests that the postpartum women are likely to engage in safe maternal practices and proper child care. However, this study was conducted in a hospital setting and may not fully capture the knowledge levels of women who do not attend hospitals or formal healthcare settings. Health policymakers should therefore ensure the maintenance and and expansion of maternal and child healthcare awareness programs through the channels that have been proven to be most effective and by exploring the additional use of mass and social media platforms to expand coverge.

Majority of the respondents in this study exhibited a positive attitude towards maternal and child healthcare services. This implies that most of the postpartum women will likely continue accessing antenatal, delivery and postnatal services, as well as adhere to medical advice and encourage others to do the same. This finding is similar to the findings from other studies where majority of the respondents had positive attitude towards maternal and child healthcare services [26], [30], [34]. Majority of the respondents in this study strongly agreed that attending antenatal care is important, and that newborn immunization is crucial in preventing diseases. This might be an indication of widespread awareness and appreciation for preventive maternal and child health strategies. The perception of quality of care in the healthcare facilities was also high and encouraging, and could imply that a level of trust in the health system exists which could foster sustained health-seeking behaviors among women and their families. This is evidenced by most of the respondents strongly agreeing on the necessity of delivering in a health facility rather than at home. This positive attitude supports institutional delivery uptake and could contribute significantly to the reduction of maternal and neonatal morbidity and mortality. Attitudes toward postnatal care were however comparatively less positive in this study as only about two thirds of the respondents strongly agreed that postnatal care visits are necessary for both mother and baby. This finding may indicate an under-appreciation of the role of postnatal care as crucial for detecting complications and ensuring overall maternal and newborn wellbeing in the post-delivery period. Similarly, about two thirds of respondents strongly agreed that initiating breastfeeding within the first hour is beneficial, and that monitoring baby's weight and growth is important. This suggests that there remains room for improving health education on early newborn care practices. Only about half of the respondents strongly believed in the role of family planning in improving maternal and child health. This may reflect persistent sociocultural and religious biases or misinformation surrounding family planning in the study area [35] and underscores the importance of integrating culturally-sensitive family planning education into routine maternal and child healthcare services.

Overall, the findings from this study revealed a predominantly positive attitude toward maternal and child health services among the respondents in this study and several factors could have contributed to this. First, the study was conducted in a hospital setting where women have direct contact with trained health personnel who provide education and support. This suggests that the health education and healthcare services are being well received and that the women are willing to engage with the healthcare system. If sustained, this positive attitude could contribute to increased uptake of essential services such as immunization and postnatal care and result in reduced maternal and infant mortality. Secondly, most of the respondents were literate and had good knowledge of maternal and child healthcare services. It is therefore likely that their attitude would be influenced by their level of understanding and previous positive experiences. Moreover, nearly all the respondents were married, a finding that is to

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be expected considering the prevailing conservative cultural and religious norms in the region, which discourage childbearing outside of marriage [35]. Marriage promotes greater social support systems for women [25], [36]. The majority of the respondents who are married in this study are therefore more likely to receive emotional, financial, and logistic support from their spouses. This would likely enhance their positive attitude to maternal and child healthcare services delivery. Positive attitudes often lead to improved maternal and neonatal outcomes, increased satisfaction with services, and better continuity of care [26], [30], [34]. Although the attitude in this study was overwhelmingly positive, further efforts should still be made to reach the minority who still harbor negative attitudes to maternal and child healthcare services.

CONCLUSIONS

The study revealed that postpartum women accessing care at the secondary healthcare facility demonstrated high levels of knowledge about maternal and child healthcare services which were attributed to exposure to antenatal health education, literacy, and effective awareness campaigns by health care workers. The study also revealed a generally positive attitude towards maternal and child healthcare services by the respondents which were influenced by their marital status, positive experiences in interactions with skilled health personnel, and the quality of healthcare received.

RECOMMENDATIONS

1. The state government in collaboration with community stakeholders should develop targeted health education campaigns to improve awareness of postnatal care services and the importance of puerperal visits. Community outreaches and counselling sessions should also include detailed information on the postnatal period and its benefits for both mother and child.
2. Midwives, nurses and health promotion units should collaborate to place greater emphasis on educating pregnant women about the WHO-recommended number of antenatal visits during antenatal care registrations and follow-up sessions. Visual aids and simple infographics could be used to enhance recall and understanding, especially among the less formally educated clients.
3. The local government health departments, state ministries of health and non-governmental organizations along with the media agencies should strengthen the involvement of community health workers and local influencers to increase the awareness and acceptance of maternal and child healthcare services outside the health facilities, and utilize mass media, social media, and mobile health technologies to disseminate consistent maternal and child healthcare information to a wider audience.
4. The hospital management, quality assurance teams and maternal and childcare program directors should maintain the positive perception of provider attitude, and service delivery through regular staff training in respectful maternity care and patient-centered communication.

References

[1] World Health Organization, "Maternal, newborn, child and adolescent health and ageing," 2025. https://www.who.int/teams/maternal-newborn-child-adolescent-health-and-ageing

[2] O. Lincetto, S. Mothebesoane-Anoh, P. Gomez, and S. Munjanja, "Antenatal care," in *Opportunities for Africa's Newborns: Practical Data, Policy and Programmatic Support for Newborn Care in Africa*, Partnership for Maternal, Newborn and Child Health, pp. 53–62, 2006.

[3] World Health Organization, *WHO Recommendations on Antenatal Care for a Positive Pregnancy Experience*, 2016. https://www.who.int/publications/i/item/9789241549912

[4] World Health Organization, "Skilled birth attendance," 2025. https://www.who.int/reproductivehealth/skilled-birth-attendance

[5] World Health Organization, *WHO Recommendations on Maternal and Newborn Care for a Positive Postnatal Experience*, 2022. https://www.who.int/publications/i/item/9789240045989

[6] World Health Organization, "Immunization coverage," 2025. https://www.who.int/teams/immunization-vaccines-and-biologicals/essential-programme-on-immunization

[7] World Health Organization, "Integrated management of childhood illness," 2025. https://www.who.int/teams/maternal-newborn-

child-adolescent-health-and-ageing/child-health/integrated-management-of-childhood-illness

[8] A. Mesfin, *Maternal and Child Healthcare*, 2025. https://www.cartercenter.org/resources/pdfs/health/ephti/library/lecture_notes/health_science_students/ln_maternal_care_final.pdf

[9] D. T. Esan, A. A. Sokan-Adeaga, and N. O. Rasaq, "Assessment of satisfaction with delivery care among mothers in selected health care facilities in Ekiti State, Nigeria," *Journal of Public Health Research*, vol. 11, no. 4, p. 227990362211275, 2022.

[10] World Health Organization, "Maternal mortality," 2025. https://www.who.int/publications/i/item/9789240068759.

[11] Y. J. Adams, M. L. Maliang, E. E. Asmah, J. S. Agbenyo, and G. A. Chede, "Postpartum care needs assessment: Women's understanding of postpartum care, practices, barriers, and educational needs," *BMC Pregnancy and Childbirth*, vol. 23, no. 1, Article 502, 2023.

[12] National Population Commission (Nigeria) and ICF, *Nigeria Demographic and Health Survey 2023: Key Indicators Report*, 2023.

[13] World Health Organization, *Managing Maternal and Child Health Programmes: A Practical Guide*, 2023. https://apps.who.int/iris/bitstream/handle/10665/207028/9290611405_eng.pdf

[14] K. C. Sahoo, S. Negi, K. Patel, B. K. Mishra, S. K. Palo, and S. Pati, "Challenges in maternal and child health services delivery and access during pandemics or public health disasters in low- and middle-income countries: A systematic review," *Healthcare*, vol. 9, no. 7, p. 828, 2021.

[15] T. N. Yogi, R. Kafle, S. Uprety, R. Makaju, S. Shrestha, M. Gahatraj, A. Bhusal, S. Ghimire, H. B. K., S. Karki, B. Mishra, A. Kunwar, N. Khatiwada, S. Niraula, S. Uprety, S. Khanal, P. Shah, S. Mukhia, D. R. Chaudhary, and N. Malla, "Assessment of knowledge, attitude and practice towards maternal healthcare among mothers in Illam: A cross-sectional study from Nepal," *Annals of Medicine and Surgery*, vol. 86, no. 8, pp. 4422–4431, 2024.

[16] A. Guzman-Holst, V. Petrozzi, C. Velez, V. Gupta, T. J. Ochoa, and P. Juliao, "Knowledge, attitudes, and practices concerning maternal immunization among pregnant/postpartum women and health care professionals in Peru," *Infectious Diseases and Therapy*, vol. 12, no. 4, pp. 1151–1173, 2023.

[17] C. M. Healy, M. A. Rench, D. P. Montesinos, L. Swaim, M. Sangi-Haghpeykar, M. Healy, and C. J. Baker, "Knowledge and attitudes of postpartum women toward immunization during pregnancy and the peripartum period," *Human Vaccines & Immunotherapeutics*, vol. 9, no. 9, pp. 1926–1931, 2013.

[18] IgboPeople.org, *Biography – Nnobi: Idemili South Local Government Area*, 2025. https://biography.igbopeople.org/nnobi-idemili-south-local-government-area

[19] Anambra360 / Anambra State Health Data Hub, *Health data & performance dashboard*. Anambra Open Data Portal, 2025. https://anambra360.ng/health/

[20] M. O. Araoye, *Research Methodology With Statistics for Health and Social Sciences*, 2nd ed. Illorin: Nathadex Publications, 2008, pp. 115–122.

[21] C. I. Okafor, U. C. Okechi, and H. P. Ezegbe, "Assessment of knowledge and practices on maternal and child health services among postpartum women in Lagos Metropolis," *Journal of Community Medicine and Primary Health Care*, vol. 33, no. 2, pp. 112–124, 2021.

[22] Y. A. M. Emejulu, P. O. Ezenduka, and C. U. Nwankwo, "Mothers' satisfaction towards maternal and child healthcare services rendered at Nnamdi Azikiwe University Teaching Hospital, Nnewi, Anambra State," *African Journal of Health, Nursing and Midwifery*, vol. 5, no. 2, pp. 69–81, 2022.

[23] F. M. Ndinohokwe, K. Paulina, and N. N. Filippine, "An assessment of women's satisfaction with maternity care during labour and birth in a referral hospital in Namibia," *Heliyon*, vol. 11, no. 4, p. e42644, 2025.

[24] International Business Machines (IBM), *IBM SPSS Statistics for Windows, Version 25.0* [Computer software]. Armonk, NY: IBM Corp., 2017.

[25] E. Girmaye, K. Mamo, B. Ejara, F. Wondimu, and M. Mossisa, "Assessment of knowledge,

ISSN: 3107-6513

attitude, and practice of skilled assistance seeking maternal healthcare services and associated factors among women in West Shoa Zone, Oromia Region, Ethiopia," *Nursing Research and Practice*, vol. 2021, p. 8888087, 2021.
[26] E. B. Adedire, O. Ajumobi, O. Bolu, P. Nguku, and I. Ajayi, "Maternal knowledge, attitude, and perception about childhood routine immunization program in Atakumosa-West Local Government Area, Osun State, Southwestern Nigeria," *Pan African Medical Journal*, vol. 40, no. 1, p. 8, 2021.
[27] A. Asif, Maternal Satisfaction and Recommendation of Perinatal Health Facility: A Cross-Sectional Study Measuring Perceptions of Mothers' Experiences of Maternity Care at Tertiary Care Hospitals in Nepal. Uppsala, Sweden: Uppsala Universitet, 2019, p. 44.
[28] V. Amoah, D. A. Opoku, N. K. Ayisi-Boateng, J. Osarfo, G. Apenteng, O. K. Amponsah, A. Ampofo, E. N. Darkwah, A. A. Osei, and R. Boateng, "Determinants of maternal satisfaction with the quality of childbirth services in a university hospital in Kumasi, Ghana: A cross-sectional study," *BioMed Research International*, vol. 2022, p. 9984113, 2022.
[29] G. T. Gebreslassie, H. H. Mekonen, G. T. Hailu, K. G. Kiros, B. Gebresilassie, G. G. Teklu, H. G. Wubayehu, A. D. G/her, M. T. Gebremedhin, and R. T. Ammaha, "Prevalence and associated factors of early postnatal care service use among mothers who had given birth within the last 12 months in Adigrat Town, Tigray, Northern Ethiopia, 2018," *International Journal of Women's Health*, vol. 12, pp. 869–879, 2020.
[30] H. Gebremariam, B. Tesfai, S. Tewelde, Y. Kiflemariam, and F. Kibreab, "Level of knowledge, attitude, and practice of pregnant women on antenatal care in Amatere Health Center, Massawa, Eritrea: A cross-sectional study," *Infectious Diseases in Obstetrics and Gynecology*, vol. 2023, p. 1912187, 2023.
[31] O. Olorunfemi and M. Itula, "Awareness and use of maternal and child health-care services among people of Dagbadna Karu Local Government of Nasarawa State," *Archives of Medicine and Health Sciences*, vol. 11, no. 1, pp. 14–18, 2023.
[32] G. D. Asres, "Satisfaction of maternal care among women delivered at Asrade Zewude Memorial Primary Hospital, Bure, West Gojjam, Amhara, Ethiopia: A cross-sectional study," *Journal of Public Health and Epidemiology*, vol. 10, no. 5, pp. 147–154, 2018.
[33] T. D. Odetola and E. O. Fakorede, "Assessment of perinatal care satisfaction amongst mothers attending postnatal care in Ibadan, Nigeria," *Annals of Global Health*, vol. 84, no. 1, p. 36, 2018.
[34] A. Kasem, N. M. Razeq, S. Abuhammad, and H. Alkhazali, "Mothers' knowledge and attitudes about newborn screening in Jordan," *Journal of Community Genetics*, vol. 13, no. 2, pp. 215–225, 2022.
[35] C. A. Alex-Ojei, C. O. Odimegwu, and L. F. C. Ntoimo, "A qualitative investigation into pregnancy experiences and maternal healthcare utilisation among adolescent mothers in Nigeria," *Reproductive Health*, vol. 20, p. 77, 2023.
[36] S. S. Hassen and M. E. Lelisho, "Determining factors associated with the prevalence of knowledge, attitude, and practice in seeking skilled maternal healthcare services among women in a remote area of Gesha District," *BMC Health Services Research*, vol. 22, no. 1, p. 1318, 2022.