

Utilization of Antenatal and Maternity Health Care Services among Nursing Mothers Attending Child Welfare Services in Epe Local Government Area, Lagos State, Nigeria

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DOI: <https://doi.org/10.70382/hujhwsr.v7i3.028>

Keywords:

Utilization,
Antenatal Care,
Maternity Health,
Primary
Healthcare, Child
Welfare

Abstract

This study is to investigate the utilization of antenatal and maternity healthcare services among nursing mothers attending child welfare services in Epe Local Government Area of Lagos State, Nigeria. Three research questions and hypotheses were postulated for this study. Descriptive survey research design was adopted for the study. Multistage sampling was used to select primary health centre for the study. Simple Random sampling was used to select three primary health centres for the study in Epe Local Government, while the purposive sampling technique was used to select 150 nursing mothers for the study. The findings of the study revealed that there was significant utilization of antenatal care services among nursing

mothers attending child welfare services in Epe Local Government Area, Lagos State, there was significant utilization of maternity health care services among nursing mothers attending child welfare services in Epe Local Government Area, Lagos State and significant relationship existed between utilization of antenatal care, maternity health care services, maternal and child health care among nursing mothers attending child welfare services in Epe Local Government Area, Lagos State. The study recommends that Lagos State Government and healthcare providers should work to improve access to antenatal and maternity healthcare services, particularly in rural and disadvantaged areas.

Introduction

Antenatal care (ANC) is a critical component of maternal healthcare, which involves a series of interventions and services provided to pregnant women to ensure a healthy pregnancy, childbirth, and postpartum period (WHO, 2016). The primary goal of ANC is to identify and manage potential health risks, prevent complications, and promote healthy behaviours during pregnancy (Lassi et al., 2017). ANC services typically include routine check-ups, health education, and screening for potential complications, such as hypertension, diabetes, and anaemia (USAID, 2018). ANC services typically consist of a series of visits, with the frequency and content of these visits varying depending on the gestational age and individual needs of the woman (WHO, 2016). The recommended components of ANC include: identification of pregnancy-related risks and complications, health education and counselling, nutrition and lifestyle advice, screening for infections and diseases, blood tests and ultrasound examinations, and provision of iron and folic acid supplements (Lassi et al., 2017). Additionally, ANC provides an opportunity for healthcare providers to promote healthy behaviours, such as breastfeeding and family planning, and to identify and address any social or emotional support needs (USAID, 2018).

Despite the importance of ANC, many women, particularly in low- and middle-income countries, face barriers in accessing these services (Lassi et al., 2017). Common barriers include: lack of access to healthcare facilities, high cost of services, lack of transportation, cultural and social factors, and inadequate

healthcare provider training and resources (USAID, 2018). To address these barriers, healthcare systems must prioritize ANC services, improve access to healthcare facilities, and provide culturally sensitive and affordable care (Bhutta et al., 2017). Maternity healthcare services encompass a range of interventions and care provided to women during pregnancy, childbirth, and the postpartum period (WHO, 2018). The primary goal of maternity care is to ensure a safe and healthy pregnancy, childbirth, and postpartum experience for women and their newborns (Lancet, 2016). Maternity care includes antenatal care, intrapartum care, and postnatal care, and involves a multidisciplinary team of healthcare providers, including obstetricians, midwives, and nurses (USAID, 2019). Maternity care services typically include a range of components, including: antenatal care, which involves routine check-ups and health education during pregnancy; intrapartum care, which includes care during labour and delivery; and postnatal care, which involves care during the postpartum period (WHO, 2018). Additionally, maternity care services may include: family planning and reproductive health services; newborn care, including immunizations and nutrition counselling; and breastfeeding support and counselling (Lancet, 2016). Effective maternity care requires a coordinated approach, involving communication and collaboration among healthcare providers, women, and their families (USAID, 2019).

Maternity care is critical for reducing maternal and neonatal mortality and morbidity (Lancet, 2016). Studies have consistently shown that women who receive maternity care are more likely to have a healthy pregnancy, childbirth, and postpartum experience (Bhutta et al., 2017). Maternity care has also been shown to reduce the risk of complications, such as postpartum haemorrhage and puerperal sepsis, and improve newborn outcomes, including reduced risk of neonatal mortality and morbidity (Ogunbamowo, 2016). Despite the importance of maternity care, many women, particularly in low- and middle-income countries, face barriers in accessing these services (Lancet, 2016). Common barriers include: lack of access to healthcare facilities; high cost of services; lack of transportation; cultural and social factors; and inadequate healthcare provider training and resources (USAID, 2019). To address these barriers, healthcare systems must prioritize maternity care services, improve access to healthcare facilities, and provide culturally sensitive and affordable care (Bhutta et al., 2017).

Child welfare services refer to welfare services provided to children, including health education, nutrition counselling, immunizations, and treatment of childhood illness (Lamminen, et al, 2020). It refers to programs and initiatives designed to promote the safety, well-being, and healthy development of children, particularly those who are vulnerable or at risk due to abuse, neglect, poverty, disability, or other adverse circumstances. These services encompass a broad range of interventions, including prevention, early intervention, foster care, adoption, kinship care, and permanency planning. Child welfare services aim to ensure the safety and well-being of children, especially those who face increased vulnerability due to various adversities such as abuse, neglect, poverty, and disability (Child Welfare Information Gateway, 2021). According to the National Conference of State Legislatures (2018), these services include a wide array of interventions ranging from prevention efforts focused on supporting families and reducing risks of maltreatment, to more intensive interventions like out-of-home placements and family reunification (National Conference of State Legislatures, 2018).

Prevention programs represent an integral component of child welfare services, focusing on enhancing parenting skills, increasing awareness about child development, and connecting families to necessary resources (Child Welfare Information Gateway, 2021). For instance, home visiting programs offer targeted support to parents, enabling them to develop nurturing relationships with their children, enhance their parenting skills, and connect to needed community resources (Ahinkorah, et al., 2021). Home visiting programs have demonstrated significant impacts on child development outcomes, parenting behaviours, and family functioning (Ahinkorah, et al., 2021). Early intervention represents another critical aspect of child welfare services, involving prompt identification and response to concerns regarding child safety and well-being (Child Welfare Information Gateway, 2021). Such interventions often involve comprehensive assessment, case management, and provision of supportive services tailored to address individual needs (National Conference of State Legislatures, 2018). Research suggests that timely and appropriate early intervention can help mitigate long-term negative consequences associated with child maltreatment (Brown, et al., 2020).

Out-of-home placement constitutes one of the most intrusive child welfare interventions, typically implemented when children cannot safely remain in their homes (Child Welfare Information Gateway, 2021). Foster care serves as

the primary form of out-of-home placement, entailing temporary care arrangements with trained caregivers licensed or approved by relevant authorities (Ogunbamowo, Oladipupo, Ashon and Aliah, 2022). Fostering Connections to Success and Increasing Adoptions Act of 2008 has contributed significantly to modernizing federal foster care policy, expanding supports for relative guardianship, and emphasizing education stability for youth in foster care (Child Welfare Information Gateway, 2021). Kinship care involves placing children with relatives or close friends rather than unrelated foster care providers, offering numerous benefits related to maintaining connections and preserving cultural identity (Ogunbamowo, & Iloh-Obed, 2020). The utilization of antenatal and maternity healthcare services is influenced by various factors, including socio-demographic characteristics, access to healthcare facilities, and cultural and social factors. However, there is a dearth of information on the utilization of antenatal and maternity healthcare services among mothers attending child welfare services in Nigeria. This study aims to investigate the utilization of antenatal and maternity healthcare services among mothers attending child welfare services in a rural area of Nigeria, with a view to identifying the factors that influence utilization and informing interventions to improve maternal and child health outcomes. This study therefore, investigate the utilization of antenatal and maternity healthcare services among mothers attending child welfare services in Epe Local Government Area, Lagos State.

Purpose of the Study

The purpose of this study is to investigate the utilization of antenatal and maternity healthcare services among nursing mothers attending child welfare services in Epe Local Government Area of Lagos State.

Other purposes of the study are to:

1. Assess the utilization of antenatal services among nursing mothers attending child welfare services in Epe Local Government Area, Lagos State.
2. To examine utilization of maternity health care services among nursing mothers attending child welfare services in Epe Local Government Area, Lagos State.
3. Examine the relationship between the utilization of antenatal and maternity healthcare services and maternal and child health outcomes

among nursing mothers attending child welfare services in Epe Local Government Area, Lagos State.

Research Questions

The following research questions were answered for this study:

1. Will there be any significant difference in utilization of antenatal care services among nursing mothers attending child welfare services in Epe Local Government Area, Lagos State?
2. Will there be any significant difference in utilization of maternity healthcare services among nursing mothers attending child welfare services in Epe Local Government Area, Lagos State?
3. Will there be any significance relationship between the utilization of antenatal care and maternity healthcare services and maternal and child care among nursing mothers attending child welfare services in Epe Local Government Area, Lagos State?

Research Hypotheses

The following research hypotheses were formulated to guide this study:

1. There is no significant difference in utilization of antenatal care services among nursing mothers attending child welfare services in Epe Local Government Area, Lagos State.
2. There is no significant difference in utilization of maternity healthcare services among nursing mothers attending child welfare services in Epe Local Government Area, Lagos State.
3. There will be no significant relationship between the utilization of antenatal and maternity healthcare services, maternal and child health care among nursing mothers attending child welfare services in Epe Local Government Area, Lagos State.

Methodology

The descriptive survey research design was adopted for this study and the population of the study comprises all nursing mothers in Epe Local Government Area of Lagos State who are regular attendance of healthcare services during pregnancy and after child birth in Epe Local Government Area of Lagos State. The multistage sampling technique was adopted for this study. Simple Random sampling was used to select three primary health centres for the study in Epe

Local Government, while using the purposive sampling technique was used to select 150 nursing mothers for the study. The research instrument for the study was self-developed questionnaire titled “Antenatal and Maternity Health Questionnaire” (AMHQ). The questionnaire was divided into two sections: A and B. Section A contained demographic data of respondents, while section B contained items testing the stated hypotheses. The questionnaire adopted a four (4) point Likert modified scale ranging from Strongly Agree (SA), Agree (A), Strongly Disagree (SD) and Disagree (D). 4-1 for positive response answers and 1-4 good negative responses. The content, construct and face validity of the questionnaire was ascertained in the Department of Human Kinetics, Sports and Health Education, by panel of two experts including my researcher supervisor for content, construct and criterion related validity to ensure thoroughness which indicates that the instrument measured what it intended to measure in relation to research questions and hypotheses and test-retest method of reliability was adopted. This require the researcher to conduct the test-retest method by using 10 nursing mothers from Ibeju-Lekki Local Government Area who were not part of the study. The reliability of the instrument was tested using the Chronbach’s alpha technique of SPSS. The r-value of 0.79 was obtained. The research protocol was submitted to the head of the unit in Primary Health centre in Epe Local Government Area, for approval and oral permission was given by the Head of the unit. The researcher administered the questionnaire to the respondents personally with the help of three trained research assistants. A total number of one hundred and fifty (150) copies of the questionnaires was distributed to nursing mothers who cooperated and willing to volunteer information and same collected by the researcher at the spot with the help of research assistants and data collection lasted for four weeks in Epe Local Government Area, Lagos state.

Explanations were made where necessary for clarification and understanding of the instruments and efforts were made to ensure that the copies of the administered questionnaires were well completed before leaving the study area. The researcher monitored the process of data collection throughout. Daily review meetings were held at the beginning and end of each day with the researcher and research assistants.

Descriptive statistics of frequency count and percentages was used for demographic data while inferential statistic of Chi-Square (X^2) and Pearson Product Moment Correlation were used to analyse all stated hypotheses at 0.05

level of significant. Statistical package for Social Science (SPSS Software version 23) was used for analysing the data collected.

Results

Demographic Data

Table 1: Distribution of Respondents by Age and Education

| Age | Frequency | Percentage |
|------------------------|------------|--------------|
| 18-28 | 95 | 63.3 |
| 29-39 | 35 | 23.3 |
| 40-above | 20 | 13.3 |
| Total | 150 | 100.0 |
| Educational Background | | |
| SSCE | 43 | 28.7 |
| OND | 36 | 24.0 |
| B.Sc/B.Ed/B.A | 34 | 22.7 |
| Postgraduate | 13 | 8.7 |
| None | 8 | 5.3 |
| Others | 16 | 10.7 |
| Total | 150 | 100.0 |

Source: Field Survey, 2024

The table presents the demographic data of 150 participants, providing an overview of their age and educational background. In terms of age, the majority of participants (63.3%) fall within the 18-28 age range, indicating that the sample is predominantly comprised of young adults. The next largest age group is the 29-39 range, accounting for 23.3% of the participants, while those aged 40 and above make up the smallest proportion at 13.3%. Regarding educational background, the data reveals a diverse range of qualifications among the participants. The largest proportion (28.7%) holds a Senior Secondary School Certificate (SSCE), indicating that they have completed secondary education. The next largest groups hold Ordinary National Diploma (OND) and Bachelor's degree qualifications (B.Sc/B.Ed/B.A), accounting for 24% and 22.7% of the participants, respectively. A smaller proportion (8.7%) holds postgraduate qualifications, while 5.3% reported having no formal education. The remaining

10.7% fall under the "Others" category, which may include participants with vocational training or other types of certifications. Overall, the table suggests that the participants have a relatively high level of educational attainment, with the majority holding at least a secondary school certificate.

Testing Stated Hypotheses

Hypotheses One: There is no significant utilization of antenatal care services among nursing mothers attending child welfare services in Local Government Area, Lagos State.

Table 2: Chi-square results on Utilization of antenatal care services and Mothers attending child welfare services

| Variable | Mean | SD | N | Df | X ² -Cal | p-value | Remark | Decision |
|-------------------------|------|------|-----|----|---------------------|---------|-------------|----------|
| Utilization | | | | | | | | |
| | 3.64 | 0.66 | 150 | 12 | 143.639 | 21.026 | Significant | Rejected |
| Antenatal Care Services | | | | | | | | |

The Chi-square test result presented in the table 2 indicates a significant difference in utilization of antenatal care services among nursing mothers attending child welfare services in Local Government Area, Lagos State. The calculated chi-square value is 143.639 which is greater than the critical value of 21.026. hence the null hypothesis is hereby rejected which implies that there is significant difference in utilization of antenatal care services nursing mothers attending child welfare services in Local Government Area, Lagos State.

Hypotheses Two: There is no significant difference in utilization of maternity healthcare services among nursing mothers attending child welfare services in Epe Local Government Area, Lagos State.

Table 3: Chi-square results on Utilization of maternity healthcare services among nursing mothers attending child welfare services in Epe Local Area, Lagos State

| Variable | Mean | SD | N | Df | X ² -Cal | p-value | Remark | Decision |
|-------------------------|------|------|-----|----|---------------------|---------|-------------|----------|
| Utilization | | | | | | | | |
| | 3.23 | 0.68 | 150 | 12 | 87.51 | 21.026 | Significant | Rejected |
| Antenatal Care Services | | | | | | | | |

The Chi-square test result presented in the table 3 indicates a significant difference in utilization of maternity healthcare services. The calculated chi-square value is 87.51 which is greater than the critical value of 21.026. hence the null hypothesis is hereby rejected which implies that there is significant difference in utilization of maternity healthcare services among nursing mothers attending child welfare services in Epe Local Government Area, Lagos State.

Hypothesis Three: There will be no significant relationship between the utilization of antenatal and maternity healthcare services, maternal and child healthcare among nursing mothers attending child welfare child welfare services in Epe Local Government Area, Lagos State.

Table 4: Correlation Between the Utilization of antenatal and maternity healthcare services, maternal and child healthcare among nursing mothers attending child welfare services in Epe Local Government Area, Lagos State.

| Variable | Mean | SD | N | Df | r-cal | p-value | Remark | Decision |
|--|-------|------|-----|-----|-------|---------|--------|--------------------------|
| Utilization of Antenatal and Maternity Healthcare services | 3.22 | 0.81 | | | | | | |
| | | | 150 | 148 | .575 | .05 | Sig. | Rejected Ho ₄ |
| Maternal and Child health care | 15.26 | 2.40 | | | | | | |

Table 4 shows that $r\text{-cal} = .575$, $p\text{-value} = .05$, indicating that there exist a positive, strong and significant relationship between utilization of antenatal and maternity healthcare services. ($r\text{-cal} = .575$; $df = 148$; $P = .05$). Therefore, the null hypothesis is rejected. It then means that a significant relationship existed between utilization of antenatal and maternity healthcare services, maternal and child healthcare among nursing mothers attending child welfare services in Epe Local Government Area, Lagos State.

Discussion

From the findings of hypothesis one which state that there is no significant difference in utilization of antenatal care services among nursing mothers attending child welfare services in Epe Local Government Area, Lagos State. The study found that the calculated chi-square value is 143.639 which is greater than the critical value of 21.026. hence the null hypothesis is hereby rejected which implies that there is significant difference in utilization of antenatal care services among nursing mothers attending child welfare services in Local Government Area, Lagos State. This finding is consistent with recent research that highlights the importance of antenatal care in improving maternal and child health outcomes (WHO, 2016). Antenatal care has been shown to be a critical factor in reducing maternal and neonatal mortality, as it enables early detection and management of pregnancy-related complications (Alkema et al., 2016). Furthermore, studies have demonstrated that regular antenatal care visits are associated with improved health outcomes for both mothers and child, including lower rates of low birth weight, preterm birth, and maternal mortality (Liu et al., 2017; Koblinsky et al., 2019). In Nigeria, where the study was conducted, antenatal care has been identified as a key strategy for reducing maternal and child mortality, with the country's National Health Policy emphasizing the importance of increasing access to antenatal care services (Federal Ministry of Health, 2016).

The significant difference in utilization of antenatal care services among nursing mothers in this study is also consistent with global trends, which show that the majority of women in low and middle-income countries, including Nigeria, receive some form of antenatal care during their pregnancy (UNICEF, 2020). However, it is worth noting that despite this positive trend, there is still a need to improve the quality and accessibility of antenatal care services, particularly in rural and disadvantaged areas (Oladapo et al., 2019). Overall, the finding of

significant utilization of antenatal care services among nursing mothers in this study is supported by recent research and highlights the importance of continued efforts to improve access to and quality of antenatal care services in Nigeria.

From the findings of hypothesis two which state that there is no significant difference in utilization of maternity healthcare services among nursing mothers attending child welfare services in Epe Local Government Area, Lagos State. It shows that the calculated chi-square value is 87.51 which is greater than the critical value of 21.026. hence the null hypothesis is hereby rejected which implies that there is significant difference in utilization of maternity healthcare services among nursing mothers attending child welfare services in Epe Local Government Area, Lagos State. This finding is corroborated with recent research that highlights the importance of maternity healthcare services in improving maternal and child health outcomes (WHO, 2016). Maternity healthcare services, including prenatal, delivery, and postnatal care, have been shown to be critical in reducing maternal and neonatal mortality, as well as improving birth outcomes (Alkema et al., 2016).

The significant difference in utilization of maternity healthcare services among nursing mothers in this study found that increasing access to maternity healthcare services can lead to improved maternal and child health outcomes, particularly in low- and middle-income countries (Campbell et al., 2016). In Nigeria, the National Health Policy emphasizes the importance of increasing access to maternity healthcare services, particularly in rural and disadvantaged areas (Federal Ministry of Health, 2016). Furthermore, research has shown that maternity healthcare services are essential for reducing maternal and neonatal mortality, as well as improving birth outcomes (Liu et al., 2017; Koblinsky et al., 2019). Overall, the finding of significant utilization of maternity healthcare services among nursing mothers in this study is supported by recent research and highlights the importance of continued efforts to improve access to and quality of maternity healthcare services in Nigeria.

From the findings of hypothesis three which state that there will be no significant relationship between the utilization of antenatal and maternity healthcare services, maternal and child healthcare among nursing mothers attending child welfare child welfare services in Epe Local Government Area, Lagos State. It shows that $r\text{-cal} = .575$, $p\text{-value} = .05$, indicating that there exist a positive, strong and significant relationship between utilization of antenatal and

maternity healthcare services. (r -cal= .575; df = 148; P = .05). Therefore, the null hypothesis is rejected. It then means that a significant relationship existed between utilization of antenatal and maternity healthcare services, maternal and child healthcare among nursing mothers attending child welfare services in Epe Local Government Area, Lagos State. This finding is consistent with recent research that highlights the importance of antenatal and maternity care in improving maternal and child health outcomes (WHO, 2016). The utilization of antenatal and maternity care has been shown to be a critical factor in reducing maternal and neonatal mortality, as well as improving birth outcomes (Alkema et al., 2016). The positive and strong relationship between the utilization of antenatal and maternity healthcare services and maternal and child healthcare in this study is also consistent with findings from other low- and middle-income countries, where access to antenatal and maternity care is a major determinant of maternal and child health outcomes (Liu et al., 2017).

Furthermore, research has shown that the utilization of antenatal and maternity care is associated with improved maternal and child health outcomes, including lower rates of maternal and neonatal mortality, and improved birth outcomes (Koblinsky et al., 2019). A systematic review of the literature found that antenatal care is associated with improved maternal and neonatal outcomes, including reduced risk of maternal and neonatal mortality (Kruk et al., 2018). Another study found that the utilization of maternity care is associated with improved maternal and child health outcomes, including lower rates of maternal and neonatal mortality, and improved birth outcomes (Campbell et al., 2016). The significant relationship between the utilization of antenatal and maternity healthcare services and maternal and child healthcare in this study highlights the importance of increasing access to and utilization of these services, particularly among vulnerable populations such as nursing mothers. This finding is consistent with the World Health Organization's recommendation that all pregnant women should receive antenatal care and maternity services to improve maternal and child health outcomes (WHO, 2016). Overall, the finding of a significant relationship between the utilization of antenatal and maternity healthcare services and maternal and child healthcare in this study supports the need for increased access to and utilization of these services, particularly among vulnerable populations.

Conclusion

Based on the findings of this study, it was concluded that:

1. There is significant utilization of antenatal care services nursing mothers attending child welfare services in Epe Local Government Area, Lagos State.
2. There is significant utilization of maternity healthcare services among nursing mothers attending child welfare services in Epe Local Government Area, Lagos State.
3. There is significant relationship between utilization of antenatal and maternity healthcare services, maternal and child healthcare among nursing mothers attending child welfare services in Epe Local Government Area, Lagos State.

Recommendations

Based on the findings and conclusions, it was recommended that:

1. The Lagos State Government and healthcare providers should work to improve access to antenatal and maternity healthcare services, particularly in rural and disadvantaged areas. This can be achieved by increasing the number of healthcare facilities, training more healthcare professionals, and providing affordable and quality care.
2. The Lagos State Government and healthcare providers should work to increase awareness and education about the importance of antenatal and maternity healthcare services among nursing mothers. This can be achieved through public health campaigns, community outreach programs, and education and counseling services.
3. The Lagos State Government and healthcare providers should work to improve the quality of antenatal and maternity healthcare services, ensuring that they meet international standards. This can be achieved by providing ongoing training and education for healthcare professionals, and implementing quality improvement initiatives.
4. Healthcare providers, such as doctors, nurses, and midwives should use current patterns of antenatal and maternity care utilization in the region. This knowledge can help them identify gaps in service delivery and develop strategies to improve the quality and accessibility of antenatal and maternity care services.

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