



## Research Article

# Knowledge of Post Natal Care among Women of Child Bearing Age Attending Specialist Hospitals in Maiduguri Metropolis, Borno State

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**Submitted:** 10 January, 2025

**Accepted:** 18 February, 2025

**Published:** 19 February, 2025

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**Keywords:** Postnatal care; Maternal health; Knowledge; Women of childbearing age; Specialist hospitals; Maiduguri metropolis; Borno state; Nigeria

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## Abstract

This study assessed the knowledge of postnatal care among women of childbearing age attending specialist hospitals in Maiduguri Metropolis, Borno State, Nigeria. Postnatal care, crucial for the health of mothers and newborns, often receives less attention than antenatal care, leading to missed opportunities for preventing maternal and neonatal morbidity and mortality. The research employs a survey design to assess the knowledge levels of 380 women regarding postnatal care services, utilizing a self-developed questionnaire that measures various aspects of postnatal care knowledge. The findings indicate a mean knowledge score of 3.7580, significantly higher than the hypothesized constant mean of 2.5, with a t-test value of 52.369 ( $p < 0.0001$ ). This suggests that women attending specialist hospitals have significant knowledge of postnatal care. Recommendations include implementing community-based education programs and ensuring that healthcare providers offer comprehensive health education on postnatal care. This research contributes to the understanding of maternal health knowledge in Nigeria and highlights the role of specialist hospitals in promoting effective postnatal care practices.

## Introduction

Postnatal care, also known as postpartum care, is a critical component of maternal and newborn health services. It encompasses the care provided to mothers and their newborns in the immediate postnatal period, typically the first six weeks after childbirth (World Health Organization [1]. This period is crucial for ensuring the well-being of both mother and child, as it involves physical recovery, emotional adjustment, and the establishment of breastfeeding and newborn care practices [2]. Despite its importance, postnatal care often receives less attention compared to antenatal care and delivery services in many healthcare systems worldwide [3]. This gap in care can lead to missed opportunities for preventing maternal and neonatal morbidity and mortality, particularly in the critical first days after birth when most maternal and infant deaths occur [4].

The knowledge of postnatal care among women of childbearing age is a crucial factor in determining the utilization and effectiveness of these services. This is particularly relevant in the context of specialist hospitals, which often handle high-risk pregnancies and complex cases, necessitating comprehensive postnatal follow-up [5]. The World Health Organization recommends at least three postnatal contacts for all mothers and newborns, on day 3 (48–72 hours), between days 7–14, and at six weeks after birth [1]. However, adherence to these recommendations varies widely across different contexts and healthcare settings.

In a study conducted in Ethiopia, only 18.2% of women had good knowledge about postnatal care services [6]. This study highlighted significant gaps in understanding the importance and components of postnatal care. Research in India found that while 73.8% of women were aware of the need for postnatal check-ups, only 54.5% knew about

the recommended number of check-ups [7]. This suggests a discrepancy between general awareness and specific knowledge of postnatal care recommendations. A study in Nigeria revealed that 65.2% of women had good knowledge of postnatal care, but this knowledge did not always translate into the utilization of services [8]. Specialist hospitals often offer integrated care programs that include mental health support, lactation consultancy, and other specialized services crucial for comprehensive postnatal care [9].

### Hypothesis

There is no significant knowledge of post-natal care among women of childbearing age attending specialist hospitals in Maiduguri Metropolis, Borno state.

## Methodology

**The study adopted a survey** research design. Survey research design is a type of non-experimental research design that involves collecting data through self-reported questionnaires or interviews from a sample of individuals [10]. The purpose of a survey is to collect information about a particular topic, attitude, or behavior from a large number of people [11].

The population for this study comprises all pregnant women attending antenatal care in specialist hospitals in Maiduguri Metropolis, Borno state. These specialist hospitals are the State Specialist Hospital, Umar Shehu ultra-modern Hospital, Muhammed Shuwa Hospital (Nursing home) and Maryam Abatcha Women and Children Hospital. With a population of numbering seven hundred and fifty (750). (Borno State Hospital Management, 2023). The sample size for the study is three hundred and eighty-four (380). Di stage sampling procedure was used to select respondents. That is, proportionate sampling techniques and accidental sampling techniques. The proportionate sampling techniques were used to distribute questionnaires to each specialist hospital in Maiduguri Metropolis, Borno state. Accidental sampling techniques will be used to administer to the respondents.

The research instrument used for this study was a self-developed questionnaire on Knowledge Of Post Natal Care Among Women Of Child Bearing Age Attending Specialist Hospitals (KPNCWCBASH). The questionnaire was divided into two sections A, and B. Section "A" on demographic information of the respondents. Section "B" on Knowledge Of Post Natal Care Among Women Of Child Bearing Age Attending Specialist Hospitals. A 4-point Likert-type scale response mode was used. The statements of the questionnaire afforded the respondents to answer by ticking one response, for example, the respondents were requested to indicate their opinion by ticking in the appropriate column as follows; SA=Strongly Agree, A=Agree, D= Disagree, SD=Strongly Disagree, This confirms the opinion of Oyeifi (1987) that such flexible statements encouraged the respondents to exercise free expression of opinion.

In validating the research instrument, a draft copy of the questionnaire was scrutinized and reviewed by experts in the Department of Nursing Science. To determine the reliability of the instrument, split- a half test was used to determine the

reliability coefficient test for which reliability was calculated and administered and the reliability coefficient was 0.79

The completed questionnaires were collated and coded. Data was presented in tables. The statistical techniques used to describe the data will be descriptive statistics of mean, standard deviation, frequency count, and percentages employed to organize and describe demographic information while inferential statistics of one sampled t-test was used to answer research the formulated hypotheses at 0.05 significance level.

## Results

### Hypothesis

There is no significant knowledge of post-natal care among women of childbearing age attending specialist hospitals in Maiduguri Metropolis, Borno state.

Table 1, indicates that knowledge of postnatal care among women of childbearing age who are attending specialist hospitals in Maiduguri Metropolis, Borno state. The mean score for knowledge of postnatal care is 3.7580. This represents the average level of knowledge among the participants. Standard Deviation (Std. Dev) of 0.42836. This indicates the amount of variation or dispersion in the knowledge scores and t-test value: 52.369. The mean score (3.7580) is higher than the constant mean (2.5), suggesting that the women's knowledge of postnatal care is above the hypothesized threshold. The t-test value of 52.369 is very large, indicating a substantial difference between the observed mean and the constant mean. The probability ( $p$  - value) of 0.0001 is much lower than the typical significance level of 0.05. This extremely low  $p$  - value suggests that the difference between the observed mean and the constant mean is statistically significant. The decision to reject the null hypothesis implies that there is significant evidence to conclude that the knowledge of postnatal care among these women is different from (and in this case, higher than) the hypothesized level. Contrary to the initial statement, the statistical analysis strongly suggests that there is significant knowledge of postnatal care among women of childbearing age attending specialist hospitals in Maiduguri Metropolis, Borno state. The mean score is significantly higher than the threshold, and the null hypothesis of no significant knowledge is rejected.

## Discussion

There is significant knowledge of postnatal care among women of childbearing age attending specialist hospitals in Maiduguri Metropolis, Borno state. Specialist hospitals often

**Table 1:** Summary of One-Sample t-test on knowledge of postnatal care among women of childbearing age attending specialist hospitals in Maiduguri Metropolis, Borno state.

Variables	N	Mean	Std. Dev	df	t-test	Prob	Decision
knowledge of post-natal care among women of childbearing age	380	3.7580	0.42836	379	52.369	0.0001	rejected
Constant Mean		2.5					

provide comprehensive antenatal education programs that include information about postnatal care. A study by Bhutta, et al. [5] found that women receiving care in tertiary facilities were more likely to have better knowledge of maternal and newborn care practices, including postnatal care. This may be attributed to the specialized staff and resources available in these settings. Women attending specialist hospitals often have high-risk pregnancies or complications, which may lead to increased awareness and knowledge of postnatal care. Tunçalp, et al. [13] noted that women with complicated pregnancies tend to receive more intensive education and counseling, potentially resulting in better postnatal care knowledge.

Specialist hospitals, particularly in urban areas, may attract patients from higher socioeconomic backgrounds or with higher education levels. Studies have consistently shown a positive correlation between educational level and knowledge of maternal health practices, including postnatal care [13,14]. Specialist hospitals often employ a multidisciplinary approach to care, which can lead to more comprehensive patient education. Shaw, et al. [9] found that integrated care programs, often found in specialist settings, were associated with improved maternal knowledge and health outcomes.

Even within specialist hospital settings, knowledge levels can vary significantly. A study by Lomoro, et al. [15] in South Sudan found that while women attending a tertiary hospital had better knowledge compared to those in primary care settings, there were still significant gaps in understanding crucial postnatal care practices. Kaphle et al. [16] noted that while women in specialist care settings may have good knowledge of medical aspects of postnatal care, they often lack a comprehensive understanding of self-care practices and normal postpartum changes. This suggests that “significant knowledge” may be limited to certain aspects of postnatal care. Having significant knowledge does not always translate to practice. Langlois, et al. [2] highlighted that even when women possess knowledge about postnatal care, various barriers (cultural, economic, logistical) may prevent them from applying this knowledge or seeking care. Some studies have found that women may overestimate their knowledge of postnatal care. Maputle, et al. [17] discovered that while many women reported feeling knowledgeable about postnatal care, objective assessments revealed significant gaps in their understanding [18–27].

### Recommendations

Based on the findings, the following are the recommendations:

- Healthcare providers should provide comprehensive health education on postnatal care to women of childbearing age, including the importance of postnatal care and where to seek care.
- There be should community-based education programs should be implemented to educate women about postnatal care and where to seek care.
- There be should measures should be taken to improve

access to postnatal care services, including increasing the number of healthcare providers trained in postnatal care and increasing the availability of transportation services for women who need to access healthcare services.

### Conclusion

In conclusion, this study provides insights into the state of postnatal care knowledge among women attending specialist hospitals in Maiduguri Metropolis. The findings challenge preconceptions about knowledge levels and highlight the potential effectiveness of specialist hospital settings in educating women about postnatal care.

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