

Impact and Consumer Demand for Postnatal Care Centers on Women's Well Being: A Study in Northern Kerala

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Abstract

This study investigates the impact and consumer demand for postnatal care centers (PNCCs) on women's well-being in the Northern part of Kerala, India. Specifically, it examines the role of PNCCs in facilitating physical recovery, offering psychological support, and ensuring financial accessibility for postpartum women. Adopting a descriptive research design, primary data were collected from a sample of 70 postpartum women through structured questionnaires. Analytical tools such as Spearman's correlation and the Kruskal-Wallis test was employed to evaluate relationships among key variables. The results underscore the significant contribution of PNCCs to enhancing both physical health and emotional stability in the postpartum period. However, challenges related to affordability and accessibility persist, particularly among economically disadvantaged groups. The study concludes with recommendations to expand service reach, strengthen psychological support mechanisms, and introduce flexible payment models to enhance the overall effectiveness of PNCCs.

Keywords: Postnatal Care Centres (PNCCs); Maternal Health; Women's Well-being; Psychological Support; Physical Recovery; Healthcare Accessibility; Consumer Demand; Postpartum Care; Health Economics JEL Classification: I12, I15, J13, O15

1. INTRODUCTION

The postpartum period—often referred to as the "fourth trimester"—represents a critical yet frequently neglected phase in a woman's reproductive health journey. Characterized by substantial physiological adjustments and emotional transitions, this period demands comprehensive care to safeguard the well-being of both mother and infant. Postnatal care centres (PNCCs) have emerged as pivotal institutions that offer structured interventions, including physical rehabilitation, psychological counselling, and educational support for new mothers.

Historically, India has relied on traditional postpartum practices rooted in cultural customs, encompassing dietary protocols, massage therapies, and extended rest. However, increasing urbanization and the shift toward nuclear family structures have diminished access to these traditional forms of care. In response, PNCCs have evolved to integrate modern medical practices with selected traditional elements, aiming to bridge the gap in maternal postnatal support.

The Malabar Region of Northern Kerala presents a unique context for this investigation due to its interplay of cultural heritage and socio-economic transformation. The district has seen a marked rise in the demand

for PNCC services, reflecting a growing awareness of the need for professional postpartum care. This study, therefore, seeks to evaluate the effectiveness, accessibility, and affordability of PNCCs in the region, offering evidence-based insights into their role in advancing maternal health outcomes.

2. Need and Significance of the Study

Postnatal care constitutes a critical component of maternal healthcare, yet it remains one of the most underemphasized areas in both policy and practice. The postpartum period is characterized by extensive physiological recovery, hormonal changes, and emotional adjustments, necessitating comprehensive support systems for new mothers. In regions such as the Malabar Region of Kerala, India, the increasing demand for structured postnatal services underscores the urgency of evaluating the operational effectiveness and accessibility of Postnatal Care Centres (PNCCs).

The significance of this study lies in its potential to contribute to improved maternal health outcomes by assessing the extent to which PNCCs facilitate physical recovery, manage postnatal pain, and promote emotional resilience. Given the growing incidence of postpartum depression (PPD) and psychological distress among new mothers, this research further examines the psychological support services offered by PNCCs, including counselling and stress management—key components for mental health recovery.

The study also evaluates consumer demand and the affordability of PNCC services across socioeconomic strata. With healthcare expenditures on the rise, it is essential to assess whether these services are financially accessible to diverse demographic groups. Factors such as service quality, institutional reputation, and perceived cost-effectiveness are explored to better understand utilization patterns.

In addition, the research addresses systemic inequities in maternal healthcare access, particularly in rural and semi-urban settings where quality postnatal services are limited. By identifying barriers to affordability and accessibility, this study provides actionable insights for expanding PNCC services to underserved populations and fostering a more equitable healthcare environment.

From a policy and entrepreneurial perspective, the findings offer practical guidance for enhancing service delivery, developing inclusive pricing models, and promoting holistic maternal care. Ultimately, this study contributes to the discourse on strengthening postnatal care frameworks in India and provides evidence-based recommendations to inform both public health strategies and private sector innovations.

3. Objectives

- To identify the key factors influencing consumer demand for Postnatal Care Centres (PNCCs).
- To evaluate the affordability of PNCC services across various socioeconomic groups.
- To assess the role of PNCCs in promoting physical recovery among postpartum women.
- To measure the psychological and emotional support provided by PNCCs.

4. Hypotheses

- **H₀₁**: There is no significant association between family status and the factors influencing consumer demand for postnatal care centres.
- **H₀₂**: There is no significant difference in the affordability of postnatal care services among different socioeconomic groups.
- **H₀₃**: There is no significant relationship between the psychological and emotional support provided by PNCCs and the physical recovery of postpartum women.

5. Research Methodology

This study employs a descriptive research design to analyse the impact and consumer demand for postnatal care centres (PNCCs) on women's well-being in the Malabar Region of Kerala. A descriptive design is well-suited for capturing current trends, behavioural patterns, and user perceptions associated with PNCC utilization.

Primary data were gathered using structured questionnaires administered to a purposive sample of 70 postpartum women. The data collection focused on variables such as physical recovery, emotional well-being, financial accessibility, and service preference. Quantitative analysis was conducted using statistical tools including **Spearman's correlation** and the **Kruskal-Wallis test**, which enabled the identification of significant relationships and intergroup differences. This methodological framework offers a comprehensive assessment of the operational effectiveness, accessibility, and user satisfaction related to PNCCs.

6. Discussion of Findings

6.1 Factors Influencing the Decision to Use PNCC Services

The study examined various factors that influence women's decisions to utilize PNCC services. Table 1 presents the mean scores and corresponding ranks for each factor evaluated:

Table 1

Factors	Mean Score	Rank
Quality of service	20.33	1
Availability of Doctors/Nurses	20.27	2
Availability of Professional Staff	20.13	3
Cost	19.53	4
Reputation of the Centre	19.4	5
Location	19.1	6
Affordability to Income	17.73	7

The results suggest that service quality and the availability of qualified professionals are the most influential factors guiding consumers' decisions to choose PNCC services. In contrast, affordability relative to household income, though important, ranks lower, indicating that quality and access often take precedence over cost considerations.

6.2. Affordability of PNCC Services

The affordability of PNCC services was evaluated based on respondents' perceptions of cost manageability and financial burden. Findings indicate that most participants considered the services manageable within their household income, with higher-income groups reporting greater affordability. However, concerns were raised regarding limited flexible payment options and the perceived cost relative to service quality. These insights suggest that while affordability is not a major barrier for some, more inclusive pricing strategies—such as sliding scale fees or instalment plans—are needed to improve access

among lower-income groups and promote equitable maternal care.

Table 2

Statement	Mean Score	Rank
Cost is manageable for household income	19.6	1
No economic strain on household	19.33	2
More affordable for higher income groups	19.2	3
Value received reflects the cost	19.13	4
Flexible payment options	18.7	5
Reasonable cost for quality provided	17.87	6

The findings indicate that while respondents generally perceive PNCC services as financially manageable—particularly among higher-income groups—there is a noticeable decline in satisfaction regarding flexible payment options and perceived value for money, underscoring key areas for service enhancement.

Hypothesis 1: Association Between Family Status and Factors Influencing Demand for Postnatal Care Centres

To examine whether family structure influences the factors affecting consumer demand for Postnatal Care Centres (PNCCs), an independent samples **T-test** was conducted comparing respondents from joint and nuclear families. The results are presented in Table 3.

Table 3: T-test Results for Family Status and Consumer Demand Factors

Table 3

Family Status	N	Mean	T	Sig. (p-value)
Joint Family	33	4.1688	-0.37	0.737
Nuclear Family	37	4.2085	-0.38	

The analysis reveals no statistically significant difference between joint and nuclear families in relation to factors influencing PNCC demand, as indicated by a **p-value of 0.737**, which exceeds the conventional significance threshold of 0.05. Therefore, the **null hypothesis is retained**, suggesting that family structure does not have a significant impact on consumer demand for postnatal care services.

Hypothesis 2: Relationship Between Employment Status and Perceived Affordability of Postnatal Care Services

To evaluate whether employment status has a significant effect on the perceived affordability of postnatal

care services, a **Kruskal-Wallis H test** was conducted. This non-parametric test was selected due to the ordinal nature of the data and the presence of multiple independent groups. The results are presented in Table 4.

Table 4: Kruskal-Wallis Test Results for Employment Status and Affordability Perception Hypothesis 2: Affordability of Postnatal Care Services and Employment Status (Kruskal-Wallis test)

Table 4

Employment Status	N	Mean Rank	DOF	Sig. (p-value)
Full time employed	13	31.15	4	0.554
Part time employed	15	30.30		
Self employed	16	39.88		
Professional Services	17	36.47		
Unemployed	9	40.83		

The analysis indicates **no statistically significant difference** in perceptions of affordability among the various employment categories, as evidenced by a **p-value of 0.554**, which exceeds the standard significance level of 0.05. Consequently, the **null hypothesis is accepted**, implying that employment status does not significantly influence how individuals perceive the affordability of postnatal care services.

Hypothesis 3: Relationship Between Psychological and Emotional Support and Physical Recovery

To assess the association between psychological and emotional support and physical recovery in the postpartum period, a **Spearman’s rank-order correlation** was conducted. This non-parametric test was chosen to evaluate the strength and direction of the relationship between the two variables. The results are summarized in Table 5.

Table 5: Spearman’s Correlation Between Psychological Support and Physical Recovery

Table 5

Construct	Spearman’s correlation	N	Sig. (p-value)
Psychological and Emotional Support	1	70	0.000
Physical recovery	0.644	70	

The analysis reveals a **strong positive correlation** between psychological and emotional support and physical recovery ($\rho = 0.644$, $p = 0.000$), indicating a statistically significant relationship. As the p-value is well below the 0.05 threshold, the **null hypothesis is rejected**. This result confirms that psychological and emotional support play a critical role in facilitating improved physical recovery among postpartum women.

Conclusion

This study provides valuable insights into the impact and consumer demand for Postnatal Care Centres (PNCCs) in the Malabar Region of Kerala, with a focus on their role in promoting maternal well-being. The findings underscore that the **quality of service, availability of qualified staff, and accessibility** are the most influential factors driving the utilization of PNCCs. While affordability remains a concern for some respondents, it is comparatively less influential than service quality and professional expertise in shaping consumer decisions.

The results of hypothesis testing indicate that **family structure (joint or nuclear)** does not significantly affect consumer demand for PNCCs. Likewise, **employment status** does not appear to significantly influence perceptions of service affordability. However, a **strong positive correlation** was identified between psychological and emotional support and physical recovery, highlighting the crucial role of emotional well-being in enhancing physical health outcomes during the postpartum period.

These findings have important practical implications. They suggest that targeted efforts are needed to **expand PNCC services into rural and underserved areas**, where access remains limited. Additionally, implementing **flexible payment mechanisms** and **enhancing psychological counselling services** could improve both access and effectiveness. Furthermore, public health initiatives aimed at raising awareness of the benefits of postnatal care are essential for improving maternal and neonatal outcomes.

In conclusion, PNCCs represent a vital component of comprehensive maternal healthcare. With strategic improvements in service delivery, affordability, and awareness, these centres can substantially contribute to improving the **physical and emotional well-being** of postpartum women and advancing **maternal health equity** in regions like Malappuram and beyond.

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