Perceived quality and satisfaction of postnatal care among postpartum women in a tertiary care hospital: A cross-sectional study

Sushila Bishnoi, Keka Chatterjee, Sivapiya S, Aruna Aravindan, Sindhumol PK, Chanchal Arora and Usha Pandey

Abstract

Introduction: Postnatal period is a critical area but still it is the most neglected aspect. Client satisfaction is an important indicator for the quality of health care and understanding women’s view of the care provided is very crucial.

Material and Methods: A descriptive study using cross-sectional design was conducted among postpartum women on day 1-3 day after normal delivery, which aimed to assess the perceived quality and satisfaction of postnatal care provided in the maternity wards of a tertiary care hospital of Western Maharashtra.

Convenience sampling was used to assess the perceived quality and satisfaction of postnatal care. A self-structured questionnaire using Likert scale which comprised of three sections was used and a semi structured interview was conducted. The validity and reliability of the tool was tested. A total of 150 subjects were recruited in the study.

Results: Among the 150 participants, majority of the study participants 36.7% were of age 18-22 years and 46.7% were educated till high school participants 102 (68%) were homemaker while 68% were homemaker. Among all 51.3% were prim parous women 56% participants delivered male baby and most (91.3%) of the babies were of normal birth weight. The study revealed that 54% had high perceived quality of care and 21.3% were not satisfied with the postnatal care provided. There was a moderately positive correlation (r=+0.48, n=150; p<0.0001) between perceived quality and satisfaction of postnatal care scores. There was no significant association between perceived quality of postnatal care and sociodemographic variables except occupation (F(2,147); p=0.013); between satisfaction and sociodemographic variables except family income (F(3,146); p=0.041).

Conclusion: The findings concluded that care provider-related factors played a significant role towards maternal satisfaction levels. Individualised postnatal care must be provided. The study recommended the need for special training of nursing personnel to give importance to these identified salient areas and participation of nurses in policy making decisions and hospital designing.

Keywords: Postnatal care, postpartum, perceived quality of care, satisfaction

Introduction

Let the mother feel like a pampered queen as she deserves to be given good care. Postnatal period is a remarkable phase as it is meant to recuperate after childbirth where enormous physical and emotional changes return from the status of pregnancy to the non-pregnant state [1]. It is also termed as a fourth trimester as it is following the childbirth in which the body tissues, especially the pelvic organ revert back to the pre pregnant state both anatomically and physiologically [2]. Sustainable development goals can be achieved only by improving quality of care [3]. Quality of care is the result of women’s experience of that care. As this experience remains with the mother throughout her life, understanding a woman’s perspective and her needs during crucial period is very essential [4]. To monitor the quality of health care services client satisfaction is viewed as an essential component as understanding the client’s perspective is the central part of quality improvement [5].

Patient satisfaction is multidimensional concept which reflects patient’s expectation and perceptions compared to the actual care they receive [6]. When client satisfaction is compared to perceived quality, the satisfaction reflects the extent to which perception of service standards have been met while perception of quality record the patient rating about specific aspects of service as per their perspective [7].

WHO recommends Respectful Maternity Care for all the women which is a human right and it is now recognised as an essential element of strategies to improve the quality and
utilisation of maternity care and all women deserve RMC [8].

Problem statement
A study to assess the perceived quality and satisfaction of postnatal care among postpartum women regarding postnatal care provided in the maternity wards of the selected tertiary care hospital of Western Maharashtra

Objectives
- To assess the perceived quality of postnatal care among postpartum women
- To assess the satisfaction of postnatal care among the postpartum women
- To find the relationship between perceived quality and satisfaction of postnatal care among postpartum women
- To find the association between perceived quality of postnatal care with selected sociodemographic variables
- To find the association between satisfaction of postnatal care with selected sociodemographic variables

Inclusion criteria
a) Postpartum women underwent normal vaginal delivery in the selected hospital
b) Were with period of gestation more than 37 weeks
c) Age more than 18 years
d) Were willing to participate

e) Were able to read and write Hindi, English or Marathi

Exclusion criteria
a) Had a stillbirth or IUFD
b) Had complications during pregnancy, labour, or postnatal period
c) Had new-born having any complications
d) Were health care professionals

Ethical Aspects
Ethical committee approval obtained
Informed written consent taken
Followed ICMR ethical guidelines throughout the study

Methodology
In order to achieve the objectives the approach selected was quantitative and design used was a descriptive study. In this study sample comprised of 150 postpartum women of age more than 18 years of age at day 1 to day 3 after normal delivery in the selected hospital during the data collection period. The study sample fulfilled inclusion & exclusion criteria and were willing to participate in the study were selected by convenient sampling technique. The sample size was set at 150 for estimating proportion with absolute error of margin and no attrition was expected. The tool had three sections.

Based on the calculation of content validity index of each item by the experts, the tool was accepted, rejected and modified before final preparation of the tool. The internal consistency of the tool was assessed using split half method. The calculated value of Cronbach’s alpha was 0.868 and 0.910 which concluded that the tool had excellent internal consistency.

Pilot study was found feasible and study methods were adequate.

Results
Data was analyzed in the light of the objectives of the study

Table 1: Description of tool

<table>
<thead>
<tr>
<th>Section</th>
<th>Content</th>
<th>Item No</th>
<th>Scoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section A</td>
<td>Sociodemographic and obstetric characteristics</td>
<td>1-6</td>
<td>Individualised item score</td>
</tr>
<tr>
<td>Section B</td>
<td>Perceived quality of postnatal care</td>
<td>1-10</td>
<td>5 point rating scale min 10-max 50</td>
</tr>
<tr>
<td>Section C</td>
<td>Satisfaction towards postnatal care provide</td>
<td>1-15</td>
<td>3 point rating scale min 15-max 45</td>
</tr>
</tbody>
</table>

using descriptive statistical measures i.e. mean, frequency and percentage distribution to compute the socio-demographic variables. The Inferential statistical measures using Karl Pearson’s correlation coefficient to measure the relationship between perceived quality of postnatal care and satisfaction of postnatal care was computed. Association of perceived quality and satisfaction of postnatal care with the selected demographic variables was computed using statistical measure of Mann Whitney test and ANOVA test depending upon the number of groups.

Table 2: Distribution of subjects as per sociodemographic variables

<table>
<thead>
<tr>
<th>Sociodemographic variables</th>
<th>Parameters</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (Yrs)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 – 22</td>
<td>55</td>
<td></td>
<td>36.7</td>
</tr>
<tr>
<td>23 – 26</td>
<td>52</td>
<td></td>
<td>34.7</td>
</tr>
<tr>
<td>27 – 30</td>
<td>31</td>
<td></td>
<td>20.6</td>
</tr>
<tr>
<td>&gt;30</td>
<td>12</td>
<td></td>
<td>8.0</td>
</tr>
<tr>
<td>Educational qualification</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate &amp; above</td>
<td>34</td>
<td></td>
<td>22.7</td>
</tr>
<tr>
<td>Diploma</td>
<td>12</td>
<td></td>
<td>8.0</td>
</tr>
<tr>
<td>High school</td>
<td>70</td>
<td></td>
<td>46.7</td>
</tr>
<tr>
<td>Primary school</td>
<td>34</td>
<td></td>
<td>22.6</td>
</tr>
<tr>
<td>Type of family</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nuclear</td>
<td>48</td>
<td></td>
<td>32.0</td>
</tr>
<tr>
<td>Extended</td>
<td>7</td>
<td></td>
<td>4.7</td>
</tr>
<tr>
<td>Joint</td>
<td>95</td>
<td></td>
<td>63.3</td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private sector</td>
<td>30</td>
<td></td>
<td>20.0</td>
</tr>
<tr>
<td>Government sector</td>
<td>6</td>
<td></td>
<td>4.0</td>
</tr>
<tr>
<td>Home maker</td>
<td>102</td>
<td></td>
<td>68.0</td>
</tr>
<tr>
<td>Self employed</td>
<td>12</td>
<td></td>
<td>8.0</td>
</tr>
<tr>
<td>Family income (Rs)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤ 10000</td>
<td>23</td>
<td></td>
<td>15.3</td>
</tr>
</tbody>
</table>
The study revealed that majority 81 (54%) had high perceived quality of care, 68 (45.3%) had medium perceived quality of care whereas only 1 (0.7%) had low perceived quality of care.

**Table 3:** Distribution of the satisfaction of postnatal care among postpartum women in study group n=150

<table>
<thead>
<tr>
<th>Satisfaction score</th>
<th>Number</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 – 25 (Not satisfied)</td>
<td>32</td>
<td>21.3</td>
</tr>
<tr>
<td>26 – 35 (Satisfied)</td>
<td>82</td>
<td>54.7</td>
</tr>
<tr>
<td>36 – 45 (Highly satisfied)</td>
<td>36</td>
<td>24.0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The study concluded that 36 (24%) were highly satisfied and majority of the study participants *i.e.* 82 (54.7%) were satisfied with the care while 32 (21.3%) were not satisfied with the postnatal care.

**Table 4:** Relationship between perceived quality and satisfaction of postnatal care among postpartum women in study group n=150

<table>
<thead>
<tr>
<th>Correlation</th>
<th>r Value</th>
<th>p Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived quality score and Satisfaction score</td>
<td>0.48</td>
<td>&lt;0.0001</td>
</tr>
</tbody>
</table>

The study revealed that majority 81 (54%) had high perceived quality of care, 68 (45.3%) had medium perceived quality of care whereas only 1 (0.7%) had low perceived quality of care.

Fig 1: Distribution of perceived quality of postnatal care among postpartum women in study group

Fig 2: Scatter plot diagram of relationship between the perceived quality and satisfaction of postnatal care

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~ 27 ~
Table 4 and Fig 2 indicates a moderately positive correlation between perceived quality and satisfaction of postnatal care scores.

- Study revealed that there was no significant association between perceived quality of postnatal care and sociodemographic variables except occupation ($F(2,147)$, $p=0.013$).
- Study found that there was no significant association between satisfaction and sociodemographic variables except family income ($F(3,146)$, $p=0.041$).

**Discussion**

The findings were in congruent with the findings of Olarinmoye A et al. (2010) [3] conducted in Nigeria among 289 mothers which showed that majority (77.5%) of the respondents perceived quality of care as high whereas a quarter (22.4%) of them perceived quality of care as poor. The findings were in line with the results of Alkasseh A et al. (2018) [10] which showed that among 200 postpartum mothers in Palestine rated the postnatal care they received as high. The overall Mean±SD scores for all domains of the scale were 3.93±0.66, from a maximum possible score of 5, which is above the neutral point of 3. However this result disapproved the findings of the previous study conducted in Sri Lanka by Wickramasinghe S et al. (2019) [11] among 1300 postnatal mothers, reported that 49.9% had low perceived quality score and 50.03% rated as high perceived quality.

The findings of this study conforms to the findings of previous study conducted in Nigeria among 280 women by Nnebue CC et al. (2020) [12], where 28.9% were highly satisfied, 33.9% were satisfied, 30.4% were fairly satisfied and only 6.8% were not satisfied with the quality of maternal health care services. In contrast to this a study conducted at Egypt by Jilan A and Hafiz S (2017) [13]. Among 100 postnatal mothers showed that less than half of the subjects were minimally satisfied and about one quarter were either moderately satisfied or satisfied to some extent, 5% of them were not satisfied at all and only 1% were fully satisfied by the postpartum care they received.

The study is in unison with the study conducted at UK by Mclean J and Laidlaw (2013) [14]. Among 71 first time mothers which revealed that there was a strong, positive correlation ($r=0.716$, $n=71$; $p<0.0005$) between mothers perception of care and level of satisfaction.

The study findings are congruent to the study conducted by Odotola T and Fakorede E (2018) [15]. Among 66 postpartum women in Nigeria which aimed to investigate the maternal satisfaction with perinatal care received in Nigeria. The study showed that an association exits between maternal satisfaction with the perceived quality of care. ($\chi^2=13.306$; $p=0.0001$). A study conducted by Olarinmoye E et al. (2009) [16] among 289 mothers at a teaching hospital of Nigeria revealed that there is a statistically significant relationship ($\chi^2=5.45$; $p=0.02$) between perceived quality and satisfaction of postnatal care which is in line with the present study.

**Limitations of the study**

1. The sampling technique used was non probability sampling which reduces the generalizability of the study.
2. The health care provider’s view remains unexplored and was not included in the study.
3. The Covid Pandemic affected the health services provided by the hospitals.
4. Study is limited to maternity unit of one tertiary care hospital only.
5. Recall bias is unavoidable

**Recommendations**

1. Continuous reinforcement for maternal and child health care workers to provide good quality postnatal care.
2. The bedside clinics and nursing rounds should be conducted on postnatal care to enhance the body of knowledge of the nurses.
3. Nurse led lactation clinic may be started to assist postpartum women in breastfeeding.
5. The administration must formulate policies and procedures to enhance the quality of postnatal care.
6. Participation of nurses in policy making decisions and hospital designing.
7. Appointment of a public relation officer to deal with the clients.
8. Periodic service evaluation would reveal the shortcomings and help the administration to tailor the care at par with the expectations of the postpartum women.

**Conclusion**

Postpartum is a time for physiological and psychological adjustment for both the mother and her baby so, the nursing care offered to them should be safe, positive and satisfying to the mother. Strategies for meeting postpartum health needs of women have to be based on multidisciplinary approaches. Postpartum women judge the quality of care received based on their satisfaction. Compared with previous studies this study adds value to the global body of research and strategies to improve the quality of postnatal care. The study highlighted the need to create a reciprocal understanding of what quality comprises to provide respectful maternity care and quality postnatal care. The domains of dissatisfaction identified need to be addressed by the health care professionals and policy makers to improve the satisfaction of postpartum women.

**References**


