A Comparative Study on Confidence in Newborn Care and Postpartum Fatigue of Puerperal Mothers

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Abstract. This descriptive survey research elucidates the confidence in newborn care and the postpartum fatigue of puerperal mothers in rooming-in and non-rooming-in groups and investigates relevant factors with intent to provide reference data needed to perform proper nursing intervention for the confidence in newborn care and the postnatal fatigue. A total of 159 subjects (43 in a rooming-in group vs. 116 in a non-rooming-in group) staying in a university hospital and a women’s hospital in Uijeongbu City within 48 hours after giving birth were selected. In short, based on the Revised Self Confidence Scale, comfort & safety, feeding, infant’s behavior, hygiene control, health & illness, and confidence in newborn care showed significant total scores. Based on the Fatigue Continuum Form, the physical, psychological, and neurosensory fatigue scores and the total fatigue score did not show any statistical significance in each area. The present findings can be applied as the reference data conducive to correcting the myth among puerperal mothers that rooming-in will increase the postnatal fatigue and supporting the benefits of rooming-in.

Keywords: Puerperal mothers, newborn care, postpartum (postnatal) fatigue, rooming-in, non-rooming-in

1 Introduction

As the major physical symptom of puerperal mothers during the postnatal period, fatigue hinders them from the functional recovery and successful adjustment to maternal roles [1].

Rooming-in lets puerperal mothers and babies come in close contact with each other during the postnatal period, facilitating the breast feeding, exerting positive effects on postpartum mother-newborn interactions, and thus is best for not only babies but
also puerperal mothers[2]. Despite such benefits, rooming-in is less widely used in Korea and most Asian countries than in Western countries because of the custom that restricts puerperal mothers’ physical activities in favor of a complete rest. Therefore, their preference for and satisfaction with rooming-in is low[3].

In this context, the present study inquired into the confidence in newborn care and postnatal fatigue of puerperal mothers in a rooming-in group versus a non-rooming-in group so as to provide reference data for postpartum nursing intervention as well as improve the awareness of postpartum rooming-in among puerperal mothers.

2 Method

This descriptive survey research investigated the confidence in newborn care and postpartum fatigue of puerperal mothers in rooming-in and non-rooming-in groups and explored relevant factors to provide reference data for improving the awareness of rooming-in and for postpartum nursing intervention.

Data was collected from puerperal mothers who gave birth in 2 general hospitals in Uijeongbu City Gyeonggido over a period of three months between July 1 to September 30, 2013. Based on the assumption that puerperal mothers’ postpartum fatigue would be highest in the course of physical recovery and psychological adjustment, data was collected within 48 hours postpartum. Respondents spent about 15 minutes on the questionnaire survey. The instrument used here was the one adapted by Park M.S. based on the 13 items of the Self Confidence Scale originally developed by Pharis[4][5]. To measure the postnatal fatigue of the subjects during the pregnancy, delivery and postpartum period, the Fatigue Continuum Form developed by Pugh and translated by Song J.E. was used[6][7]

Collected survey responses were statistically analyzed with SPSS WIN 18.0. The data were analyzed by using mean, SD, \( \chi^2 \)-test and independent sample t-test.

3 Results

3.1 Demographics

In total, 159 subjects consisting of 43 in the rooming-in group(27.1%), and 116 in the non-rooming-in group (72.9%) participated in the survey. As for demographics, age\((x^2=1.272, p=.736)\), education\((x^2=2.573, p=.429)\) and monthly income\((x^2=7.003, p=.072)\) did not show significant differences between the rooming-in and non-rooming-in groups, which finding supported the homogeneity of the two groups.

3.2 Obstetric and postpartum characteristics
As for the homogeneity test results regarding obstetric characteristics of puerperal mothers in rooming-in and non-rooming-in groups, pregnancy planning ($x^2 = .519, p = .473$), types of delivery ($x^2 = 2.573, p = .109$), and awareness of rooming-in ($x^2 = 1.206, p = .272$) showed no significant differences between the two groups.

3.3 Puerperal confidence in newborn care in rooming-in vs. non-rooming-in Groups

Table 1. Confidence in newborn care in rooming-in vs. non-rooming-in groups

<table>
<thead>
<tr>
<th></th>
<th>Rooming-in(N=43)</th>
<th>Non-rooming-in(N=116)</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>Mean</td>
<td>Mean</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total score</td>
<td>113.00</td>
<td>102.09</td>
<td>2.997</td>
<td>.003</td>
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<tr>
<td>Comfort &amp; safety</td>
<td>14.26</td>
<td>12.78</td>
<td>2.876</td>
<td>.005</td>
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<tr>
<td>Feeding</td>
<td>29.56</td>
<td>27.32</td>
<td>2.281</td>
<td>.024</td>
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<tr>
<td>Infant's behavior</td>
<td>18.93</td>
<td>17.34</td>
<td>2.395</td>
<td>.018</td>
</tr>
<tr>
<td>Hygiene control</td>
<td>11.77</td>
<td>10.34</td>
<td>2.978</td>
<td>.003</td>
</tr>
<tr>
<td>Bathing &amp; diapering</td>
<td>13.65</td>
<td>12.54</td>
<td>1.656</td>
<td>.100</td>
</tr>
<tr>
<td>Health &amp; illness</td>
<td>24.84</td>
<td>21.78</td>
<td>3.646</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

3.4 Postnatal fatigue in rooming-in vs. non-rooming-in groups

Table 2. Postnatal fatigue in rooming-in vs. non-rooming-in groups (N=159)

<table>
<thead>
<tr>
<th></th>
<th>Rooming-in(N=43)</th>
<th>Non-rooming-in(N=116)</th>
<th>$t$</th>
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</thead>
<tbody>
<tr>
<td>Mean</td>
<td>Mean</td>
<td>Mean</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total score</td>
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<td>92.77</td>
<td>1.897</td>
<td>.060</td>
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<tr>
<td>Physical fatigue</td>
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<td>Psychological fatigue</td>
<td>34.40</td>
<td>32.47</td>
<td>1.941</td>
<td>.054</td>
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<tr>
<td>Neurosensory fatigue</td>
<td>34.23</td>
<td>32.78</td>
<td>1.863</td>
<td>.064</td>
</tr>
</tbody>
</table>
4 Conclusion

Puerperal mothers' confidence in newborn care showed a significant difference between the rooming-in and non-rooming-in groups with the total mean scores being 113.00 and 102.09, respectively. Also, statistically significant inter-group differences were found in feeding, infant's behavior, hygiene control and health & illness (Table 1). No statistically significant inter-group difference was found in puerperal mothers’ postnatal fatigue (Table 2). This finding is in contrast to a previous report that breast-feeding puerperal mothers felt more physical fatigue than the bottle-feeding counterparts [8]. Yet, the present finding seems consistent with the report that the rooming-in group's fatigue scores were marginally higher, which implied that rooming-in was often less preferred due to the psychological burden over puerperal mothers' being with newborn babies when they had to take a sufficient rest, and due to the concern over physical fatigue resulting from sleep disturbance [7]. Hence, exploratory studies are needed to find out the types and extent of discomfort from the perspective of rooming-in puerperal mothers and to develop some measures for their discomfort.

References

5. Park, M. S.: ”A Comparison on the confidence of babycaring between rooming in group and non rooming in group,” Korea University, Seoul (1991)