An investigation of postpartum mothers' readiness for hospital discharge and the affecting factors[1]

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Abstract

Introduction: Postpartum period which contains important changes in the woman's and newborn's life, WHO recommends monitoring the mother and newborn in health care system, encouraging breastfeeding, monitoring the newborn's development, and supporting and empowering parents about newborn care.

Purpose: The purpose of this study is to identify postpartum mothers' readiness for hospital discharge and the affecting factors.

Method and material: The study was conducted with 190 mothers who gave birth between May and July, 2014 in a Maternity and Children Hospital located in Mersin. The data were collected through the Identification Form developed by the researcher in line with the related literature and Readiness for Hospital Discharge Scale-Postpartum Mother Form (RHDS-PMF).

Results: Of all the participants, 84.7% were ready for discharge, 69.4% received information from midwives or nurses about their own care, and 68.7% received information about the baby's care. Mean scores for the participants' Readiness for Hospital Discharge Scale was found 50.47±12.16 for Personal State, 45.08±12.33 for Knowledge, 21.0±75.68 for Ability, 28.13± 8.91 for Expected Support and 144.76±30.15 for total score. The scores were found to be significantly higher for mothers who reported to be ready for discharge, who stated to have received information about their own care and the baby's care, who were multiparous, and who would receive support for their care and the baby's care after hospital discharge (p<0.05).

Conclusion: Majority of the participants in this study were found to be ready for hospital discharge and factors affecting readiness for hospital discharge were identifed as informing mothers about their care and the baby's care after delivery, mothers' being multiparous, and receiving support about their care and the baby's care after hospital discharge.

Keywords: Postpartum period; Mother; Newborn; Readiness; Discharge; Nursing

Introduction

Postpartum period is a transition period involving physical, emotional and social changes for the mother, father, newborn, and relatives (Ricci, 2009). For this period which contains important changes in the woman's and newborn's life, WHO recommends monitoring the mother and newborn in health care system, encouraging breastfeeding, monitoring the newborn's development, and supporting and empowering parents about newborn care (WHO, 2013).

The duration between giving birth and being discharged, rather than the time of being admitted to hospital, is taken into consideration in the early postpartum hospital discharge. Braveman et al. (1995) define early postpartum discharge as discharge before 12 to 24 hours following an uncomplicated normal delivery and 48 to 72 hours following caesarean section. In Turkey, there is no standard duration for hospital stay in the postpartum period. If there are no complications following the delivery, the approach is to discharge the mother and newborn as soon as possible (Koç and Eroğlu 2009). Gözüm and Kılıç (2005) report that hospital support in Turkey after normal vaginal delivery is 7.1± 7.0 hours on the average. A retrospective study conducted in Minesota (2003) indicates that 74% of babies of mothers who had vaginal delivery received mostly 2 days of hospital support (48 hours and less) and 30% of babies of mothers who had caesarian section received mostly 4 days of hospital support (96 hours and less) (Madlon-Kay, DeFor, Egerter, 2003). Early discharge education has shortened the duration allocated to care, training and consultancy to postpartum mothers and their families at hospital. The mother is supposed to adapt physiological and psychological changes and be able to gain knowledge and skills to look after herself and her baby when she goes home (Sis Çelik et al. 2014).

Due to limited sources, hospital care is quite expensive particularly in most countries with low and medium income. Therefore, early discharge is planned after uncomplicated term deliveries so that crowded maternal units can be relieved and the cost can be lowered (Nardin, Mignini, 2009). The related literature defines readiness for hospital discharge as readiness to go home. (Korttila 1991). Readiness is a state that should be evaluated with the patient, family members, and health personnel and performed by health personnel (Chung 1995; Weiss et al. 2006).

Factors affecting readiness for hospital discharge are reported in the literature as trainings about hospital discharge given in hospital, the mother's feeling ready to go home, education level, working or not, income level, and number of deliveries (Sis Çelik et al 2014; Dağ et al.. 2013; Weis et al. 2004).

Mothers need consultancy and training in order to perform motherhood duties, their own care, and the newborn care (Arslan and Uzun, 2008). Postpartum period is a period when both the mother and newborn and the family need nursing care in order to meet their needs (Güneri 2005). However, if access to home care services in the postpartum period is insufficient, too, the mother and family have to deal with the potential problems by themselves after early hospital discharge, which increases psychological and social problems related with the mother and the baby. These factors make it important to nursing care readiness for hospital discharge (Chung 1995; Weiss et al. 2006).

Purpose

That's why, the purpose of this study is to identify postpartum mothers' readiness for hospital discharge and the affecting factors.

Method and material

The place and time of study

This study was conducted as a cross sectional one between May and July, 2014. Target population was women who gave birth in Ministry of Health, Maternity and Children hospitals in Mersin.

Population and sample selection

The participants were 190 women who gave birth between the aforementioned days. Volunteer women (and their babies) who had no health problems and who spoke Turkish were involved in the study. Sample size was identified through power analysis conducted in G-Power 3.1.7. Confidence interval was 95%, margin of error was 5%, and effect size was 0.27 (effect size

was calculated based on the means and standard deviations reported in the study by Altuntuğ et al). When the power of the study was taken 80%, sample size was identified as 190.

Data colection

The data were applied to women who were placed in the postpartum service of the maternity hospital and who were given postpartum discharge decision. The data were collected using a face-to-face interview technique.

The data were collected through the "Identification Form" developed by the researcher in line with the related literature and "Readiness for Hospital Discharge Scale–New Mother Form (RHD-NMF)".

Identification Form

The Identification Form consisted of questions about postpartum women's socio demographic features, obstetric history, and hospital discharge training received.

Readiness for Hospital Discharge Scale–New Mother Form (RHD-NMF)

RHD-NMF was developed with a view to identifying readiness for early postpartum discharge. Validity and reliability of the scale was performed by Weiss et al. (2006) and Weiss and Placentine (2006). The scale has four sub-dimensions and 23 items. The 1st item in the scale is related with the mother's feeling ready for the early hospital discharge planned and the response includes "Yes/No"; this item is not scored. Items from 2 to 23 are scored between 0 and 10 as Likert type. The original scale is composed of four sub-dimensions called Personal State, Knowledge, Ability, and Expected support. Akın and Şahingeri (2010) adapted the scale into Turkish and it consisted of four sub-dimensions called 1. Care skills (7th to 12th, 14th and 19th items: 8 items, 2. Expected Support (20th to 23rd items: 4 items), 3. Strength and Coping capacity (2nd to 5th, 17th, and 18th items: 6 items), and 4. Stress Management and Knowledge about Access to Assistance (6th and 13th to 16th items: 5 items) (3rd and 6th items are scored reversely). Scores obtained from the scale range between 0 and 220. Higher scores indicate readiness for hospital discharge while lower scores indicate the opposite. Akın and Şahingeri (2010) found Cronbach alpha value of the scale as 0.89; it was found 0.89 in this study, too.

Research ethics

Before the study was conducted, permissions were obtained from the institutions where the study was conducted, from the participants, and from the owner of the scale.

Evaluation of data

The data were analyzed using means, standard deviations, numbers, percentage calculations, One-Way Anova, and student t test.

Results

Findings of this study, which aimed to identify readiness for hospital discharge after birth and the affecting factors, are presented in tables below.

Table 1: Demographic and Obstetric Features of the Postpartum Women

Demographic and Obstetric Features	Number (n:190)	Percentage (%)
Age Group		
18 to19 years old	10	5.3
20 to 35 years old	156	82.1
36 and over	24	12.6
Education Level		
Illiterate	32	16.8
Primary School	83	43.7
Secondary School	34	17.9
High school and University	41	21.6
Income level		
Income more than expenses	26	13.7
Income equal to expenses	97	51.1
Income less than expenses	67	35.3
Family Type		
Nuclear Family	143	75.3
Extended Family	47	24.7
Number of Living Children		
1	54	28.4
2 and more	136	71.6
Type of Delivery		
Normal delivery	83	43.7
Cesarian section	107	56.3
Total	190	100.0

Average age of the mothers participating in the study was found 28.4±5.9 (min:18, max:45). Of all the mothers, 82% were in the 20 to 25 years old adult group, 16.8% were illiterate, 43.7% graduated from primary school, 51.1% had income equal to expenses and education at university level, and 75.3% lived in a nuclear family. 71.6% of the mothers participating in the study had 2 and more children alive and 56.3% had cesarean section (see Table 1).

Table 2. The Postpartum Women's Readiness for Hospital Discharge Scale–New Mother Form (RHD-NMF) Sub-dimensions and Total Mean Scores (n=190)

RHD-NMF Turkish Form Sub-dimensions	Min	Max	Mean	S.D.
Care Skills (8 items)	25.00	80.00	54.40	13.07
Expected Support (4 items)	0.00	40.00	28.13	8.91
Strength and Coping Capacity (6 items)	10.00	60.00	37.45	8.74
Stress Management and Knowledge about Access to Assistance (4 items)	8.00	40.00	24.77	6.84
RHD-NMF Total Score (22 items)	**71.00**	**217.00**	**144.75**	**30.15**

An analysis of postpartum women's readiness for hospital discharge sub-dimension and total score means indicate that the mean score was 54.40±13.07 for Care Skill, 28.13±8.91 for Expected Support, 37.45±8.74 for Strength And Coping Capacity, and 31.17± 8.29 for Stress

Management and Knowledge about Access to Assistance; and RHD-NMF total mean score was found 144.76±30.15 (see Table 2).

Table 3. RHD-NMF (Turkish) mean scores according to the Participants' stating their readiness and Receiving Training

Variables	N	%	RHD-NMF Mean	Std. Dev.	Statistics t and p value
Readiness to go home					
Ready	161	84.7	148.29	29.19	t=3.944
Not ready	29	15.3	125.17	28.25	**p=0.001**
Receiving information about her own care after hospital discharge					
Received	113	62.8	148.66	27.76	t=2.091
Did not receive	67	37.2	138.97	33.54	**p=0.049**
Receiving information about the baby's care after hospital discharge					
Received	114	63.7	148.67	28.82	t=2.092
Did not receive	65	36.3	138.88	32.25	**p=0.045**
Receiving support about her own care and the baby's care after hospital discharge					
Those who will	168	89.4	146.47	28.62	t=2.639
Those who will not	20	10.6	127.95	37.64	**p=0.009**
Para					
Primiparous	54	28.4	136.56	26.17	t=2.393
Multiparous	136	71.6	148.02	31.09	**p=0.018**

The 84.7% of participants reported to be ready for hospital discharge, 62.8% received information about her own care and 63.7% received information about the baby's care. 89.4 % stated they would receive support about their own care and the baby's care after hospital discharge, and 71.6% were multiparous.

The scores were found to be significantly higher in mothers who reported to be ready for discharge, who stated to have received information about their own care and their babies' care, who were multiparous, and who would receive support for their care and the baby's care after hospital discharge (p<0.05) (see Table 3).

RHD-NMF mean scores and variables such as age, education level, income level, having social security, receiving information about preparation for birth during pregnancy, becoming pregnant willingly, type of delivery, having a nuclear or extended family displayed statistically similar distribution (p>0.05).

Discussion

This study, which aims to identify postpartum mothers' readiness for hospital discharge and some of the affecting factors, first discusses whether mothers feel ready for hospital discharge while they are being discharged and then explores some factors affecting this situation.

According to RHD-NMF total mean scores, all the mothers participating in the study were ready for hospital discharge at a moderate level (144.76±30.15). In their study conducted with

mothers who had vaginal delivery, Dağ et al. (2013) found that RHD-NMF total scores were at moderate level (142.09±43.76). In a similar vein, Çelik Sis et al., in their study conducted with mothers who had cesarean section and vaginal delivery, found that RHD-NMF total mean scores were at moderate level (143.91±32.40). Similar results in the studies are considered to have resulted from the health care guides used in the current practice, planning discharge from hospital with the process beginning with admission to hospital, and similar mother and baby-centered health care services in the trainings provided.

The 84.7% of mothers participating in the study responded to the "Do you feel ready to go home?" question, the first question in the RHD-NMF, as "yes"; readiness of these mothers for hospital discharge was found to be significantly higher (p<0.05). The related literature indicates that mothers felt ready to go home with percentages ranging from 75,5% to 92.5%; and the mean scores of mothers who felt ready were found to be significantly higher than those who did not feel ready (Dağ et al.. 2013; Weiss et all, 2004; Altuntuğ et al.. 2013; Berstein et al.. 2002; Çelik Sis et al.. 2014). As seen in the studies conducted, the mother's readiness is an important criterion in evaluating readiness for hospital discharge.

One of the factors that affects readiness is the trainings provided to mothers by midwives and nurses about the mother's (62.8%) and the baby's care (63.7%); mean scores of mothers who received training were found to be significantly higher (p<0.005). Studies investigating readiness for hospital discharge indicate that readiness of mothers who received training was significantly higher, which is a parallel finding with our study (Weiss and Lokken 2009; Dağ et al.. 2013; Altuntuğ et al.. 2013; Berstein et al.. 2002; Çelik Sis et al.. 2014). Trainings to be given to mothers should involve providing continuance and sufficient information about the mother's and baby's care and information and skills for decreasing development of any complications (Barimani 2015). Informing parents about strategies regarding self-care and coping with stress is effective in gaining and strengthening health skills (Fahey and Shenassa 2013). Being informed about her own care and the baby's care relieves the mother's anxiety and increases her feelings of efficiency (Beger and Cook 1998). Results of this study which is in line with the related literature indicate the importance of informing women about postpartum period before delivery in terms of protecting and improving the health of the mother and the baby.

This study found that in comparison to mothers who would not receive support (127.95±37.64, readiness for hospital discharge mean scores were significantly higher (p<0,005) in mothers who stated that they would receive support of family members about their own care and the baby's care (89.4%)(146.47±28.62). Postpartum recovery continues even after discharge from hospital. Postpartum adaptation is reported to increase with the presence of family members who would support the physical care of the mother and the baby as well as the mother's psychological adaptation (Ricci, 2009). Providing activities that increase self-care with the support of family members contributes to the decrease in emotional change of state in the postpartum period.

This study also found that multiparous mothers were more ready for hospital discharge (148.02±31.09) than primiparous mothers (136.56±26.17) (p<0,005). Weiss et al. (2004) found that number of deliveries is one of the factors that affects readiness for hospital discharge. Dağ et al. (2013) found that multiparous mothers had higher readiness for hospital discharge. Mothers' being primiparous is reported to have negative effects on readiness for hospital discharge. Due to such reasons as mothers' difficulties in adaptations to the motherhood role they experience for the first time and insufficient knowledge and skills regarding their own care and the baby's care, one might think that they are not ready to go home and are under risk in terms of experiencing various health problems at home. This case indicates that these mothers are in the risk group in terms of not feeling ready to go home; and the process of discharge from hospital should be taken into consideration primarily.

The present study found that RHD-NMF mean scores and variables such as age, education level, income level, having social security, receiving information about preparation for birth during

pregnancy, becoming pregnant willingly, type of delivery, having a nuclear or extended family displayed statistically similar distribution (p>0.05).

However, the related literature indicates that readiness for hospital discharge is affected particularly by education and income level (Dağ et al. 2013; Sis Çelik et al. 2014; Weis et al. 2004; Tran 2001) and it is not affected by such variables as age and delivery type (Sis Çelik 2014). Knowing about the factors that affect readiness for hospital discharge in the postpartum period is important while planning home care services, especially in terms of providing the health services needed by the mothers in the risk group.

Conclusion and recommendations

According to the results of this study which aims to identify postpartum mothers' readiness for hospital discharge and the affecting factors, mothers' readiness for hospital discharge scores were slightly above average; and mothers who felt ready to go home, who received information about their own care and the baby's care, who were multiparous, and who would receive support for their care and their baby's care after hospital discharge were more ready for hospital discharge.

In line with the results of the study, while planning discharge from hospital, mothers' readiness should be questioned, particularly primiparous mothers who need more information should be informed about their care and their babies' care and this information should be given before delivery, family support should be provided after discharge from hospital, and mothers' state at that moment and risk factors should also be evaluated for discharge.

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