The correlation between social support during the postpartum period and the level of readiness for hospital discharge

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ABSTRACT

This is a descriptive study, aimed at determining the correlation between social support in the postpartum period and the level of readiness for hospital discharge. **Methods:** The study was conducted with 291 women during their stay in the postpartum unit of a public hospital in eastern Turkey. The participants to be included in the study sample were selected using random sampling. The study data were collected using an individual introduction form RHDS-NMF, and the MSPSS.The researchers used the chi square test, the test for the significance of the difference between two means (t test), and the Pearson's Correlation Analysis to complete the statistical analyses. **Results:** In the study, the RHDS-NMF total mean score of the participating women was 140.37 ± 25.81, and their total score on the MSPSS was 66.65 ± 14.28. The study also found that 93.9% of the women felt ready to go home, and the MSPSS mean score of those who felt ready was higher than those who did not ($p<0.05$). **Conclusion:** The women's readiness for hospital discharge was affected by their perceived social support, and the level of their readiness would increase when the level of social support provided to them increased as well.

Keywords: Hospital discharge, Multidimensional Scale of Perceived Social Support (MSPSS), postpartum period, Readiness for Hospital Discharge Scale-New Mother Form (RHDS-NMF), social support

Introduction

The postpartum period affects all members of the family, and it is usually a time of stress. During this period, the woman is expected to adapt to the changes she has undergone, and acquire the knowledge and skills that are required to take care of her infant[1,2]. However, early discharge from the hospital shortens the period during which she can receive care and support, and consultancy to be provided to the new mother and her family[3].The concept of early discharge after birth has emerged with the acceptance that birth is not a disease or medical problem, and the widespread demand by women for early discharge. It is a common belief that the mother and newborn should be discharged from the hospital as early as possible to protect them from hospital infections [6, 7] If there are

no complications, mothers are discharged 12-24 hours after vaginal birth, and 3 or five days after caesarian section [1-8].The Turkish Ministry of Health recommends that women are discharged from the hospital 24 hours after giving birth [9].In Turkey, studies have shown that the postpartum discharge period ranges from 7 to 24 hours [8,10,.19]After hospital discharge, the woman has the primary responsibility of caring for herself and her infant. Thus, determining women's readiness for hospital discharge, and analyzing the factors affecting readiness, are important in helping women quickly develop the ability to handle their responsibilities. Social support is strong resources that help solve problems, prevent sociological and psychological problems, and helps individuals cope with the difficulties they are facing during treatment. It also has a positive effect on women's adaptation to the role of mother [11-3]. Studies have shown that women have a great need for social support during the postpartum period [14, 15]. Yet, there is no examination of the correlations between social support and hospital discharge in the

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relevant literature. For this reason, this study aimed to identify the correlation between social support in the postpartum period, and the level of readiness for hospital discharge.

Materials and Method

This is a descriptive study. The study was conducted with women who gave birth vaginally; the study was completed in the postpartum unit of a public hospital in Malatya, Turkey, between June 2016 and September 2016. The sample of the study included 291 women with a 5% margin of error, two-way significance level, 95% confidence interval, and 0.89 power of representation. The participants to be included in the study sample were selected using random sampling. The women that were included in the study had their first vaginal birth, did not have any health problems, and whose infants were healthy. The women had given birth at least four hours prior to being included in the study. In the hospital where the study was conducted, the women that gave birth vaginally were discharged within 6 to 10 hours on average.

Instrument and Data Collection: The study data were collected by the researcher through personal interviews over five week days. The study data were collected using the individual introduction form, the Readiness for Hospital Discharge Scale-New Mother Form (RHDS-NMF), and the Multidimensional Scale of Perceived Social Support (MSPSS). The individual introduction form was created by the researcher based on the relevant literature. It included 11 questions regarding socio-demographic and obstetrical characteristics of the women, as observed during the postpartum period[14-19].It took approximately 10 minutes to fill out the data collection form.The Readiness for Hospital Discharge Scale-New Mother Form (RHDS-NMF) was created in order to determine the readiness for early discharge from the hospital after giving birth. The validity and reliability studies were conducted by Weiss et al. (2006)[20]. The scale was translated into Turkish by Akın and Şahingeri (2010)[16]. The scale consists of four subdimensions and 23 questions that evaluate readiness for hospital discharge, based on the mother's perceptions. The first question of the scale is about the mother's level of readiness for the planned hospital discharge; it provides two options (Yes and No), and the answer is not included in the scoring. The questions from 2 to 23 are each scored between 0 and 10 points. The subdimensions of the scale included questions about personal status, knowledge, ability and expected support. Questions 2-9 are about personal status and questions 3 and 6 are scored in an inverted manner.

Questions 10 to 16 are about knowledge, questions 17 to 19 are about ability, and questions 20 to 23 are about expected support. The minimum score on the scale is 0, and the maximum score is 220. The higher scores indicate that the individual is ready for being discharged from the hospital, while lower scores indicate that she is not ready. During the Turkish translation, the Cronbach's alpha coefficient of the scale was 0.70[14].In this study, the Cronbach's alpha value was 0.74. The validity and reliability studies of the Turkish translation of the Multidimensional Scale of Perceived Social Support (MSPSS) were conducted by Eker et al [21].In total, the scale included 12 questions. It is a 7-point Likert type scale (1=Strongly Disagree, 7=Strongly Agree), and it includes three subgroups (family, friends, and special support), all subgroups include four questions. In the scale, questions 3, 4, 8, and 11 measures the support from family; questions 6, 7, 9, and 12 measure support from friends, and questions 1, 2, 5, and 10 measure the support received from a special person. The minimum score from the subgroups of the scale is 4, and the maximum score is 28. When the total score on the scale is calculated together with the subscale scores, the minimum score is 12, and the maximum score is 84. The higher scores on the scale imply that the perceived social support is strong[21].During the Turkish translation, the Cronbach's alpha coefficient of the scale was 0.80[21]. In this study, the Cronbach's alpha value was 0.74.

Ethical Considerations: The researcher obtained the approval of İnönü University's Health Sciences Research and Publication Ethics Board. The institution where the study was conducted also provided its written consent.

Data Analysis: The data collected during the study were analyzed using SPSS for Windows (Statistical Package for Social Science for Windows, Version 10.0) software. For the statistical analysis, the study used the test for the significance of the difference between two means (t test), One-Way ANOVA, and Pearson's Correlation Analysis. The measurable data were presented together with means ($\overline{X}$) and standard deviation (SD). The statistical significance level was p<0.05.

Results

Table 1 presents the distribution of the participating women's socio-demographic characteristics according to their total mean score on the RHDS-NMF. Of the participants, 76.3% were aged between 20 and 34 years, and 31.3% had attended school for 5 to 8 years.

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A majority of the women had a moderate income level (55.3%). In addition, 40.2% of the women were employed, and 71.1% lived within a nuclear family (Table 1). There was a significant correlation between the participants' age group and their total mean score on the RHDS-NMF. This difference was observed between the women that were younger than 19 (130.11±25.1) and older than 35 (149.33±33.3) (p<0.05). There was a significant correlation between

the women's monthly income, and their total mean score on the RHDS-NMF. This difference was between the women that qualified their monthly income as good (149.53±26.60) and those who qualified it as poor (137.80±28.87) (p<0.05) (Table 1).

In the study, there was no statistically significant difference between the participants' educational level, employment status, and family type and RHDS-NMF (p>0.05) (Table 1).

Table 1 :The distribution of the participating women's socio-demographic characteristics according to their total mean score on the RHDS-NMF (N:291)

Socio-Demographic Characteristics	Number	%	RHDS-NMF Total	*Statistics Test
Age(years)				
≤ 19	36	12.2	130.11±25.17	F=4.807
20-34	225	76.3	140.82±24.32	p<0.05
≥ 35	30	10.2	149.33±33.36	
Educational level (years)				
≤ 4	82	28.2	143.12±28.81	F=0.749
5-8	91	31.3	138.87±20.64	p>0.05
≥ 9	118	40.5	140.00±27.21	
Spouse Education level (years)				
≤ 4	54	18.3	141.76±29.77	F=0.131
5-8	65	22.0	139.32±23.43	p>0.05
≥ 9	172	58.3	140.33±25.47	
The length of marriage(years)				
≤ 4	141	48.5	139.32±25.33	F=0.547
5-8	65	22.3	143.29±21.87	p>0.05
≥ 9	85	29.2	139.88±29.28	
Family income				
Good	51	17.5	149.53±26.60	F=4.007
Medium	161	55.3	138.73±23.40	p<0.05
Lower	79	27.1	137.80±28.87	
Working status				
Yes	117	40.2	137.65±24.78	t=1.478
No	174	59.8	142.20±26.40	p>0.05
Family type				
Nuclear family	207	71.1	140.98±26.00	t=0.627
Large family	84	28.9	138.88±25.43	p>0.05

* t: independent samples t test, F:One-Way Anova

Table 2 presents the obstetrical characteristics of the women in the study sample by the distribution of their total mean scores on the RHDS-NMF. Accordingly, 48.5% of the participating women had daughters, and 47.5% had been to check-up for five times at most during their pregnancy. Of them, 61.4% had no problems related to pregnancy, and 80.7% had had medical interference during their deliveries. In the study, there was no statistically significant correlation between the sex of participating women's infants, number of going to check-up during pregnancy, having problems during pregnancy, and interference in the delivery and the RHDS-NMF (p>0.05) (Table 2).

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Table 2:The distribution of the participating women's obstetric characteristics according to their total mean score on the RHDS-NMF (N:291)

Obstetric Characteristics	Number	%	RHDS-NMF $\overline{X} \pm SS$	∞ Statistics Test	
Gender of baby					
Female	142	48.5	141.28±23.99	t=0.587	
Male	149	51.5	139.50±27.48	p>0.05	
Number of visits in pregnancy					
0-5	140	47.5	138.58±24.11	F=1.209	
6-10	121	41.0	140.92±25.87	p>0.05	
≥ 11	30	11.5	146.50±32.40		
Occurent health problem in pregnancy					
Yes	114	38.6	138.53±27.55	t=-0.978	
No	177	61.4	141.56±24.64	p>0.05	
Interference in the delivery					
Yes	238	80.7	140.41±24.83	t=0.051	
No	53	19.3	140.21±30.09	p>0.05	

∞ t: independent samples t test, F:One-Way Anova

Table 3 presents the distribution of the mean scores of the participating women on the MSPSS according to their mean scores on the RHDS-NMF. Accordingly, the mean score on the personal status subdimension of the RHDS-NMF was 47.93±11.15 while it was 44.46±11.96 on the knowledge subdimension, 19.31±4.52 on the ability subdimension, and 28.66±6.82 on the expected support subdimension. Their total mean score on the RHDS-NMF was found to be 140.37±25.81. In the study, the total mean score on the MSPSS was 66.65±14.28 (Table 3).

The correlation between the subdimensions and total score of the RHDS-NMF and the total score of the MSPSS was analyzed using Pearson's Correlation analysis. There was a positive and very poor correlation between the ability subdimension of the RHDS-NMF and the total score on the MSPSS, while there was a positively poor correlation between the personal status and knowledge subdimensions and the total score on the MSPSS, and a positively moderate correlation between the expected support subdimension of the RHDS-NMF and the total score on the MSPSS (p<0.05). Thus, it may be determined from these results that an increase in social support will lead to an increase in total and subdimension mean scores on the RHDS-NMF as well.

Table 3: The distribution of the mean scores of the participating women on the MSPSS according to their mean scores on the RHDS-NMF (N:291)

RHDS-NMF Subdimension	MSPSS $\overline{X} \pm SS$	*Statistics Test
Personal status	47.93±11.15	r=0.396 p<0.001
Knowledge	44.46±11.96	r=0.389 p<0.001
Ability	19.31±4.52	r=0.219 p<0.001
Expected support	28.66±6.82	r=0.606 p<0.001
HTHÖ-YDAF total	140.37±25.81	r=0.530 p<0.001
Total	66.65±14.28	

*r: Pearson correlation analizi

Table 4 presents a comparison of the MSPSS total scores based on the women's readiness for hospital discharge. In the study, 93.9% of the participants felt ready for hospital discharge, while 4.7% did not. Of the women that felt ready to go home, the MSPSS mean score was 67.13±13.41, and it was 57.07±24.99 for those who did not feel ready. It was also found that the difference between the two mean scores was statistically significant (p<0.05).

Table 4 : Comparison of the MSPSS total scores based on the women's readiness for hospital discharge (N:291)

Be ready to go home	Number	%	$\overline{X} \pm SS$	İstatistiksel Analiz[α]
Yes	277	93.9	67.13±13.41	-2.589
No	14	6.1	57.07±24.99	p<0.05

α t: independent samples t test

Discussion

The study discussed the correlation between postpartum support and the level of readiness for being discharged from the hospital. Age was a factor that affected readiness for hospital discharge, and older women were better prepared for leaving the hospital (p<0.05). Çelik et al. (2014) did not determine a significant correlation between age and readiness for hospital discharge[19]. However, Weiss et al. (2004) found that older mothers were better prepared for hospital discharge. The researcher believes that the difference between this study and that of Çelik et al. (2014) is caused by the fact that this study was conducted only with women that had a vaginal birth, while Çelik et al. (2014) worked with women that gave birth vaginally and with those that gave birth by caesarian section. Individuals gain more life experience as they age, and this has a positive effect on their sense of being in control. This feeling of confidence helps women take an active role in their infants' care as well as their own, and makes them feel ready for being discharged from the hospital. Monthly income also influences the women's preparedness for hospital discharge. It was shown that women who made better use of their monthly income were better prepared for leaving the hospital. Dağ et al. (2013) determined that the mothers whose income was higher than their expenses were better prepared for hospital discharge[18]. According to Weiss et al. (2004), income level was an effective factor in getting ready to leaving the hospital. Çelik et al. (2014) also found that women became much readier for hospital discharge as their monthly incomes increased[19].Although there are many factors affecting readiness for hospital discharge, need fulfillment is related to economic status, and it is an important factor in reducing women's anxiety. The findings of this study support the aforementioned studies. During the postpartum period, women have the need for an extensive social

support[1,2,13-15].It is important to respond to this need in order to have the woman feel good in physical, mental, and social terms[28,29]. The relevant literature indicates that adequate social support during the postpartum period helps reduce depression and anxiety, increases the mother's self-confidence and satisfaction[22-26] and has a positive effect on motherhood[28,29].In this study, there was a positively significant correlation between the total mean score and subdimensions of the RHDS-NMF and the MSPSS mean scores (p<0.05, Table 3). It was also found that the MSPSS mean scores of the women that felt ready for hospital discharge were higher than those who did not (p<0.05, Table 4). The researcher believes that women have a high level of self-confidence as long as they are provided with strong social support; this also makes them ready for hospital discharge. The studies in the relevant literature demonstrate that the need for social support in the postpartum period is high[14-15], and the social support women receive has positive effects on their health in a variety of dimensions[4,23--27]In this study, there was no significant correlation between women's education period, employment status, and family type and RHDS-NMF. A number of studies in the relevant literature found significant correlations between readiness for hospital discharge and education (Çelik et al., 2014; 2014, Weiss et al, 2004) and employment status (Çelik et al. 2014). It is probable that this difference between the findings of this study and the studies mentioned above was caused by the difference between sample sizes[19] and cultural differences[4].

Conclusıon

The social support system is a strong resource in helping individuals solve and prevent sociological and psychological problems. Social support also helps

individuals cope with the difficulties they face during the treatment. This study has demonstrated that the increase in women's perceived social support has a positive effect on their readiness for hospital discharge. For this reason, the social support provided to women is an important issue, and it needs to be studied carefully.

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