

Relationship of the prenatal psychosocial profile with postpartum maternal duties and newborn care[†]

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SUMMARY

OBJECTIVE: This study aimed to determine the relationship of the prenatal psychosocial profile with postpartum maternity duties and newborn care.

METHODS: This descriptive and correlational study was conducted on 154 pregnant women.

RESULTS: It was determined that pregnant women had low-stress levels, high social support from their husbands and other people, and moderate self-esteem. Participants relying on power in coping with maternity duties in the postpartum period and satisfaction with maternity and newborn care were found to be high.

CONCLUSION: Adaptation to the postpartum period facilitates the transition to maternity and increases satisfaction with newborn care.

KEYWORDS: Psychological stress. Social support. Self concept. Newborn. Postpartum period. Prenatal care.

INTRODUCTION

Prenatal psychosocial health is related to health behaviors, maternal health, and birth outcomes¹. The woman's feeling of a new living being in her body and the reaction of the family and social environment to pregnancy form the basis of psychosocial reactions because psychosocial behaviors have the potential to directly or indirectly affect the outcome of pregnancy². Women who perceive themselves as positive during pregnancy have been determined to have healthier pregnancies and better birth outcomes¹. Stress experienced during pregnancy, inadequate social support, and low self-esteem are known to have adverse effects on pregnancy outcomes².

It is crucial for parents to adapt to the postpartum period to get used to both the transition process to maternity and the participation of a new individual in the family³. This process may be a transition period during which it is easy for many families to adapt and which increases communication within the family, or it may also be a period during which they may have difficulty in the care of their infants, besides their own needs, and feel inadequate⁴. It is determined that receiving education on pregnancy, postpartum, and newborn care process eases women's adaptation to pregnancy and maternity⁵ and increases their self-confidence levels to cope with maternal duties⁶.

In the interviews conducted by health care personnel to meet the psychosocial needs of the mother in the postpartum period, they should talk and evaluate the woman's adaptation to the new role, her birth experience, and changes that occur with the participation of a newborn in the family. In fact, relatives who will contribute to family members in the postpartum period should be informed about how they should provide support and about the progress of the process^{7,8}.

METHODS

Aim and type of the study

This descriptive and correlational study was planned to determine the relationship of the prenatal psychosocial profile (PPP) with postpartum maternal duties and newborn care.

Research questions

- What are the stress, social support (spouse and other people), and self-esteem levels of pregnant women?
- Does the PPP affect the level of coping with postpartum maternal duties?

Does PPP affect satisfaction in postpartum motherhood and newborn care?

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Population and sample of the study

The study was conducted in a family health center in Istanbul between June 2017 and March 2018. The sampling formula with the known population was used to determine the sample size of the study, and the number of pregnant women to be included was calculated. A total of 154 pregnant women, who did not have any chronic- or pregnancy-related diseases, who were able to understand, comprehend, and answer the questions, and who accepted to participate in the study, were included in the study. This article complies with the Strengthening the Reporting of Observational Studies in Epidemiology guideline.

Data collection tools used in the study

The researcher developed a descriptive information form as a result of the literature review, and it consists of 25 questions, which include sociodemographic and obstetric characteristics. PPP, which was developed by Curry et al.⁹ in the United States, is a Likert-type assessment tool consisting of four subscales (i.e., stress, social support from partner, social support from other people, and self-esteem) and a total of 44 items, which evaluate women's perceived stress during pregnancy, the social support they receive from their partners and environment, and their self-esteem. The validity and reliability studies of the scale in Turkish version were conducted by Günaydin and Zengin (2019). Cronbach's α value in the stress subscale was found to be 0.78 in the study by Curry et al.⁹, and it was found to be 0.75 in the Turkish version. In their study, Curry et al.⁹ found that Cronbach's α values for the social support from partner and social support from other people subscales were found to be 0.93 and 0.95, respectively. In the Turkish version of the assessment tool, Cronbach's α values for the social support from partner and social support from other people subscales were found to be 0.94 and 0.96, respectively. Cronbach's α value for self-esteem subscale was found to be 0.89 in the study by Curry et al.⁹ and 0.80 in the Turkish version.

The Postpartum Period Descriptive Questionnaire form developed by the researcher as a result of the literature review consists of 13 questions.

The Postpartum Self-Evaluation Questionnaire (PSEQ), which was developed by Lederman and Weingarten in 1981 to evaluate the adaptation of women in the postpartum period to maternity, is a four-point Likert-type scale with seven subscales and a total of 82 items. The validity and reliability studies of the scale in our country were carried out by Tasci and Mete¹⁰. In the study, the subscales relying on power in coping with maternal duties and satisfaction with maternity and newborn care were used.

The way followed in the collection of the study data

The stages of collecting the study data are presented in Figure 1.

Data analysis

Statistical Package for Social Science (SPSS), version 22, was used for statistical analysis while evaluating the findings obtained in the study. Descriptive statistical methods (i.e., mean and standard deviation) and *t*-test were used for data evaluation.

Ethics

To use the PSEQ, written permission was obtained from the person adapting the scale, Istanbul Public Health Directorate (approval date: February 20, 2017; approval number: 64222187-060.99), and Istanbul University Cerrahpaşa Clinical Research Ethics Committee (approval date: December 06, 2019; approval number: A-01). In accordance with the Declaration of Helsinki, written and verbal information about the study and nature of the study was provided to the participants, and their written consent was obtained.

RESULTS

The mean age of the pregnant women participating in the study was 28.73 ± 5.22 (min: 18, max: 41) years, and the mean age of their spouses was 32.52 ± 5.26 (min: 22, max: 50) years. It was found that the majority of both the women (58.4%) and their spouses (63%) had an education level of over 8 years, and more than half (60.4%) of the pregnant women did not work.

According to the scores received by the participants from the PPP subscales, it was determined that their stress levels were low (16.16 ± 4.24), social support received from their partners was high (55.32 ± 12.07), social support received from their environment was high (53.52 ± 12.40), and their self-esteem was moderate (23.93 ± 2.78) (Table 1).

The participants were determined to score 19.61 ± 5.30 from the PSEQ subscale of "relying on power in coping with maternal duties" and 15.82 ± 3.31 from the subscale of "satisfaction with maternity and newborn care." The results showed that postpartum adaptation was high (Table 1).

When the mean scores of the PPP subscales were compared according to the women's age, no significant difference was determined between the groups in terms of the mean scores of all four dimensions (Table 2).

The mean scores of the PPP subscales were compared according to the participants' education duration and employment status, while a difference was not determined between the

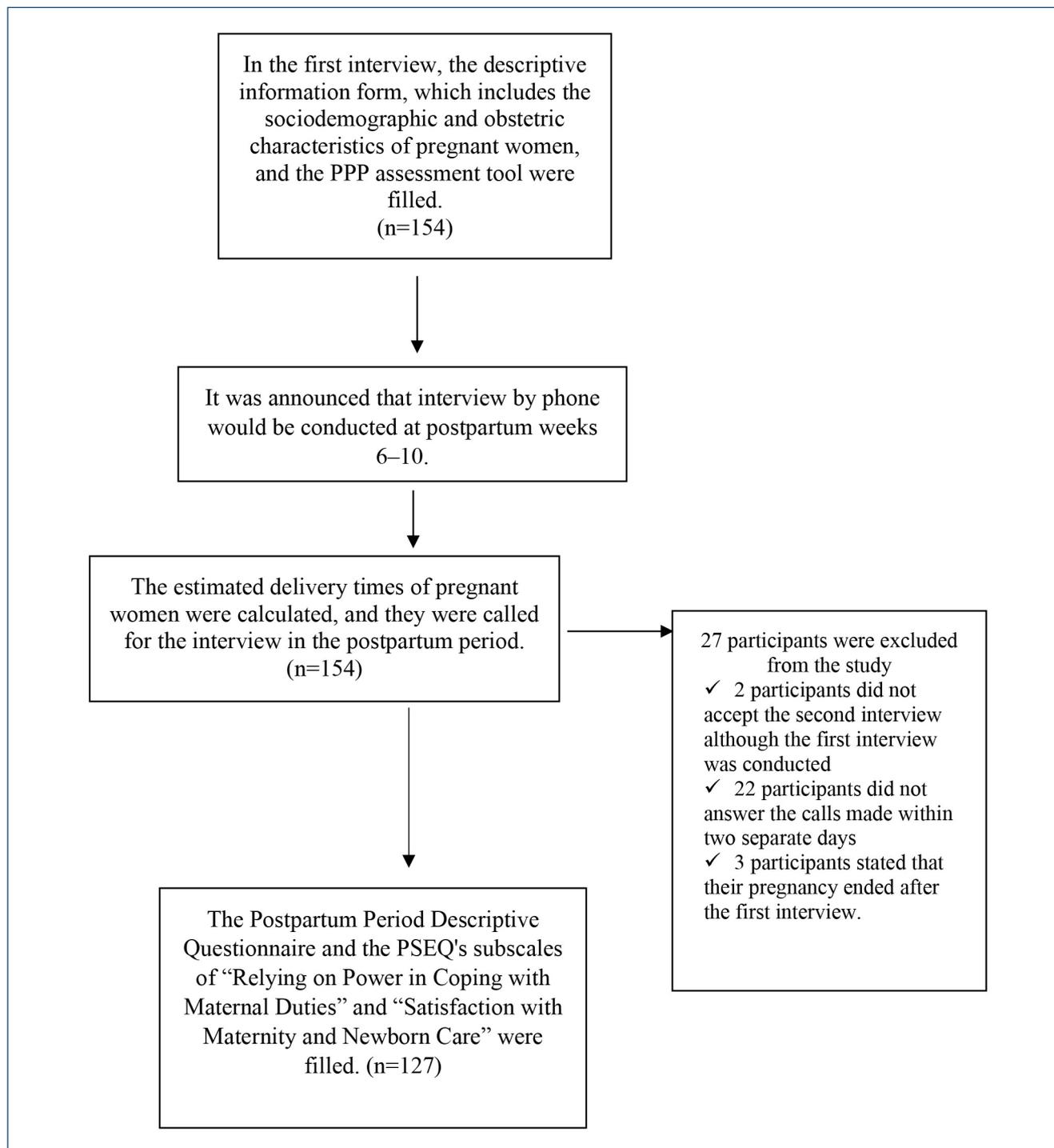


Figure 1. Stages of the collection of the study data.

groups in terms of the mean stress, social support from partner, and self-esteem scores. However, a significant difference was determined between the mean scores of the social support from other people subscale (Table 2). The mean score of the social support from other people subscale of the women who

worked and had the education of more than 8 years was found to be significantly lower than that of the women who did not work and had the education of 8 years and below (Table 2).

When the mean scores of the PPP subscales were compared according to the income level of the women, it was found that

Table 1. Mean scores that the participants received from the prenatal psychosocial profile and two subscales of the postpartum self-evaluation questionnaire.

	Mean	SD	Min.	Max.
PPP subscales (n=154)				
Stress	16.16	4.24	11	35
Social support from partner	55.32	12.07	12	60
Social support from other people	53.52	12.40	11	60
Self-esteem	23.93	2.78	16	33
PSEQ subscales (n=127)				
Relying on power in coping with maternal duties	19.61	5.30	14	45
Satisfaction with maternity and newborn care	15.82	3.31	13	32

the difference between the groups' mean scores in the self-esteem subscale was not significant and that it was significant in the stress, social support from partner, and social support from other people subscales (Table 2). The mean scores of the social support from partner and social support from other people subscales of the women with insufficient income were significantly lower than those of the women with a high-income level, and their mean scores in the stress subscale were significantly higher (Table 2).

When the mean scores of the PPP subscales were compared according to the women's status of receiving postpartum support, no significant difference was determined according to the groups' mean scores of the stress and self-esteem subscales (Table 2). The mean scores of the social support form partner

Table 2. Comparison of the prenatal psychosocial profile and subscale mean scores according to the characteristics of the participants.

Characteristics	PPP and its subscales			
	Stress Mean±SD	Social support from partner Mean±SD	Social support from other people Mean±SD	Self-esteem Mean±SD
Age groups				
29 years and below (n=70)	14.71±3.85	57.08±11.22	53.87±11.08	24.04±2.92
Above 29 years (n=84)	15.38±4.15	53.85±12.61	53.23±13.46	23.84±2.68
Test value (t)	-1.025	1.662	0.320	0.437
p-value	0.307	0.095	0.749	0.663
Education time (years)				
8 years and below (n=64)	14.84±3.27	55.60±11.80	56.25±11.51	23.54±3.21
Above 8 years (n=90)	15.24±4.48	55.12±12.32	51.58±12.73	24.21±2.41
Test value (t)	0.641	0.246	2.331	-1.395
p-value	0.523	0.806	0.021	0.166
Employment status				
Employed (n=61)	15.54±3.91	55.16±11.86	50.49±14.07	24.44±2.61
Unemployed (n=93)	14.77±4.07	55.63±12.27	55.51±10.79	23.60±2.85
Test value (t)	1.159	-0.133	-2.368	1.844
p-value	0.248	0.894	0.020	0.067
Income level				
Insufficient income (n=38)	16.60±4.09	50.36±15.38	49.18±13.77	23.57±3.02
Sufficient income (n=116)	14.57±3.88	56.94±10.34	57.94±11.63	24.05±2.70
Test value (t)	2.757	-2.461	-2.529	-0.907
p-value	0.007	0.017	0.012	0.366
Status of receiving support in the postpartum period				
Yes (n=142)	16.09±4.26	56.46±11.21	54.33±11.96	23.95±2.71
No (n=12)	17.08±4.12	41.83±15.11	43.91±13.65	23.75±3.69
Test value (t)	-1.137	3.274	2.859	0.239
p-value	0.257	0.007	0.005	0.812

Bold values indicate significance.

and social support from other people subscales of the women who could receive support in the postpartum period were determined to be significantly higher than those of the women who could not receive support in the postpartum period (Table 2).

When the mean scores of two subscales of the PSEQ were compared according to the women's age, education time, employment, and economic status, no significant difference was determined between subscales' mean scores (Table 3).

DISCUSSION

It is known that some sociodemographic variables, such as age, low income, and low education level, pose a risk to health and form a basis for psychological and physical problems¹¹. It is

Table 3. Comparison of the mean scores of two subscales of the postpartum self-evaluation questionnaire according to the descriptive characteristics of the participants.

Characteristics	PSEQ and its subscales	
	Relying on power in coping with maternal duties Mean±SD	Satisfaction with maternity and newborn care Mean±SD
Age groups		
29 years and below (n=55)	19.85±5.89	15.40±2.83
Above 29 years (n=72)	19.43±4.84	16.15±3.62
Test value (t)	0.445	-1.271
p-value	0.657	0.206
Education time (years)		
8 years and below (n=47)	19.27±4.66	15.44±2.42
Above 8 years (n=80)	19.22±5.79	16.05±3.73
Test value (t)	-0.548	-0.990
p-value	0.584	0.324
Employment status		
Employed (n=53)	19.39±5.27	15.98±3.87
Unemployed (n=74)	19.77±5.35	15.71±2.86
Test value (t)	-0.391	0.443
p-value	0.697	0.659
Income level		
Insufficient income (n=32)	19.96±5.55	15.90±3.36
Sufficient income (n=95)	19.49±5.24	15.80±3.31
Test value (t)	0.936	0.156
p-value	0.664	0.876

known that psychosocial health improves as the education levels of pregnant women increase¹². In the present study, while no relationship was found between the education level and stress, social support from partner, and self-esteem, pregnant women with a low education level were found to feel more social support from their environment. In the literature, there are studies which support the results of the present study and which do not detect any relationship between the education level and stress¹³. Furthermore, in contrast to the results of the present study, there are also studies indicating that the social support perception^{11,14} and self-esteem scores of people with a high educational level are high¹⁴. This difference is due to the population on whom the study was conducted and the measurement tools are different.

While working life provides women with a higher quality of life and a higher level of welfare, it may cause more problems with pregnancy¹². In the literature, there are studies determining that there is no relationship between stress¹³ and social support and employment status¹¹. In the current study, working women were found to receive less social support from their environment than nonworking women. This situation suggests that working pregnant women should be supported.

This study determined that women with low income were more stressful than those with sufficient income. In contrast to the present study, Yehia et al.¹⁴ and Curry et al.⁹ determined that women with a low income had lower stress levels than others. In the study by Akin¹³, no relationship was found between income level and stress experienced during pregnancy. Different study results are observed in the literature. However, the current study data could be interpreted as low-income women experience more stress due to unfavorable living conditions caused by economic conditions. Furthermore, as a result of the present study, it was revealed that women with low income received higher social support from their partners and the environment. Unlike the result of the present study, Mermer et al.¹¹ did not find a relationship between income level and social support. Different sample characteristics may have led to differences in the results obtained.

Social support meets the person's needs, such as showing interest to someone and feeling affection, respect, and intimacy to someone, and also positively affects his/her physical and mental health¹². The present study determined that the mean scores of the social support from partner and social support from other people subscales of the women, who could receive support in the postpartum period, were higher. In the studies in the literature, the stress level and depressive symptoms were found to decrease as social support increased, and the mother–infant attachment was also found to be better in

the postpartum period^{15,16}. The social support that women receive from their partners and environment during pregnancy is observed to affect both the pregnancy and the postpartum period positively. Empowering women about support during pregnancy and the postpartum period should not be ignored¹⁷.

Women with good adaptation to the maternal role during pregnancy are more likely to rely on power in coping with postpartum maternal duties^{3,17}. Factors, such as education level, occupation, income level, and social security, which determine the sociological status of women, are very significant factors affecting the maternal role of women¹⁸. In this study, it was found that the score obtained from the subscale relying on power in coping with maternal duties did not change according to the age, education time, employment, and economic status of the women. In the studies, it was determined that mothers, who had high income^{5,18} and education levels, who were at an advanced age, and who worked^{5,18}, had better adaptation to the maternal role. In order to facilitate adaptation to the process of transition to maternity, it is vital that health care providers know this process. Thus, during the follow-up period, both the transition process of pregnant women to maternity will be facilitated⁸.

Mothers need counselling services for their own care and the care of their newborns in the postpartum period⁶. In this study, women's satisfaction with maternity and newborn care was observed not to change with their age, education time, employment, and economic status. However, detecting and preventing the problems in the early postpartum period are essential in terms of contributing to the health of both the mother and the newborn⁴.

In the postpartum period, the woman is in the process of adaptation to the maternal role. During this period starting from pregnancy, the woman learns maternal behaviors and accepts maternal identity. It is stated that women who exhibit

a positive attitude have higher satisfaction with the maternal role. Moreover, education and counselling service provided during pregnancy and the postpartum period are important in terms of facilitating the woman's transition to the maternal role and ensuring that she is able to cope with difficulties related to newborn care. The studies demonstrated that satisfaction of such women with maternity and newborn care was higher³.

CONCLUSION

When an evaluation was made in terms of the PPP subscales, it was found that the stress levels of pregnant women were low, social support received from their partners and other people was high, and their self-esteem was moderate. When an evaluation was made in terms of the postpartum PSEQ subscales, it was found that the participants relying on power in coping with maternal duties and satisfaction with maternity and newborn care were high.

Limitations

Since the results of this study represent a particular sample group, they cannot be generalized to all pregnant women. The fact that the data were collected in a certain period of time is one of the limitations of the study. Since the expressions in the scales are based on individual statements, the margin of error should be considered.

AUTHORS' CONTRIBUTIONS

SG: conceptualization, methodology, data collection, writing—original draft, and writing—review and editing. **NZ:** conceptualization, methodology, writing—original draft, and writing—review and editing.

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