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## POSTPARTUM PERCEIVED STRESS IN PRIMIPARA WOMEN REFERRED TO HEALTH CENTERS OF URMIA

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### ABSTRACT

**Introduction:** Stress not only disrupts the health of mothers, but also reduces their self-esteem and reduces the satisfaction of the newborn, and disrupts the relationship between mother and child as well as reduces the adaptation of the mother's role. The present study was aimed to determine the postpartum perceived stress in women referred to health centers in Urmia in 2017.

**Methods:** This descriptive study was conducted on 330 women were selected in health centers of Urmia. Data collection tools were the demographic data form and Postnatal Perceived Stress Inventory (PNPSI). The questionnaire was distributed among the participants using convenience sampling. Data were analyzed using SPSS software (version 20), descriptive tests and t-test. P value less than 0.05 was considered significant.

**Results:** The results showed that total postpartum perceived stress score ( $100.16 \pm 15.88$ ) and in it's all subscales including fatigue ( $20.22 \pm 6.26$ ), relationship with baby ( $20.68 \pm 6.99$ ), relationship with body ( $18.80 \pm 4.91$ ), feeding the baby ( $12.04 \pm 5.5$ ), future plan ( $11.98 \pm 5.61$ ) and in relationship with partner ( $16.25 \pm 3.4$ ) was high.

**Conclusion:** Consultation with newly delivered women, husband and family during postpartum period reduces perceived stress. To reduce perceived stress, counseling based on family support is suggested.

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## INTRODUCTION

Postpartum stress, which affects 5-20% of young mothers, is a less-diagnosed disorder and may occur alone or with depression (1-4). In addition, delivery is considered as an important experience in the life span of all women, which may lead to significant physical and mental changes (3). Changes in this course include the association of women with their role as mother, social and psychological vulnerability, and physical changes, which may lead to apparent mental problems (5, 6).

Stress not only disrupts the health of mothers, but also reduces their self-esteem and reduces the satisfaction of the newborn, and disrupts the relationship between mother and child as well as reduces the adaptation of the mother's role (7). According to the study of Kiernan, women who have newborn, in the first days, although they have not yet recovered from complications of delivery, need to learn how to care the baby, so they are prone to feelings such as loneliness, anxiety, stress and depression due to rapid change in role, neonatal needs, fatigue, and loss of ability to fight the problems, as well as issues arising from the birth of the child necessitate emotional, behavioral and perceptual changes that may be stressful (8).

Common causes of stress in postnatal women are lactation problems, digestive problems, insomnia, responsibility for baby's care, genital infections, abnormal bleeding, sexual problems, kidney disease, aggravation of autoimmune disease, pain in episiotomy or cesarean section, backache, headache, weakness, fatigue, hormonal changes, lack of communication with friends and relatives and the lack of social support (9-16).

Family support is the most effective coping force for the successful and easy confrontation of individuals in times of conflict with stressful situations and facilitates the handling of problems for individuals (17-21). Family support from mothers will strengthen the ability of mothers to adapt and deal with new stressors in postpartum life (22, 23). Various studies have identified the spouse as the most important source of support for crises and stressful living conditions, which plays a full-color role during pregnancy and postpartum (24, 25).

Despite the probable occurrence of postpartum problems and the following stress and its impact on women's health and the significant role of family support in reducing perceived postpartum stress, there is no counseling or interventional program to improve the mental health of women in the health system to reduce

the stress of newly delivered women. Therefore, the present study was aimed to determine the postpartum perceived stress in women referred to health centers in Urmia in 2017.

## METHODS

The present study was a descriptive study. After obtaining the necessary permissions from the University's Ethics Committee and the Deputy Health Officer, the researcher referred to selected research health centers. Firstly, a list of all urban health centers of Urmia was prepared from the core health center of Urmia. Then, the urban health centers, according to the experts' opinion, were classified into three groups (high socioeconomic and cultural status, middle socioeconomic and cultural status and low socioeconomic and cultural status) and from each group three centers were randomly selected. The sample size was determined 132 based on a study conducted by Osman et al. in 2014 (25) with 95% confidence level and a power of 80%, which considering attrition of 20%, it was determined 330.

Inclusion criteria were included primipara women during 1-6 weeks after delivery aged 20-35 years old, resident in Urmia, familiar with Persian, having no history of admission to psychiatric ward, having no history of psychotropic drugs and alcoholic beverages, lack of any systemic illnesses such as diabetes, cardiovascular disease, blood pressure, having no history of stressful incident in the last 6 months, score less than 23 from the general health questionnaire (GHQ) and hospitalization due to complications of childbirth in the department, neonatal anomalies, early delivery and unwanted pregnancy. Also, in this study, exclusion criteria were included the occurrence of any stressful incident such as family death and the diagnosis of mental illness and psychiatric disorders such as severe anxiety disorder and postpartum depression, dissatisfaction and lack of interest in cooperation in the study. From the designated centers, the number of samples was determined and selected. After referring to the relevant centers and coordinating with the authorities of those centers, the first meeting with primipara women was taken 3-4 days after delivery for the screening of the thyroid test, and in case of no referral, primipara was met during a phone call and in present visit after satisfaction was done in their home. The confidentiality of the responses were describe to obtain the trust and cooperation of primipara women to cooperate by consent.

The GHQ-28 questionnaire was used to screen the general health of women. . Of the 474 women who filled the GHQ-28 questionnaire, 330 women had scored less than 23 and were included to the study as well as 144 women had more than 23 scores that were excluded from the study. In this regard, in consideration of the criteria for entering the study, 330 primipara women entered the study. The questionnaire was completed in-person interview. Data collection tools were the demographic data form such as personal, social information such as age, level of education, type of housing, marriage duration, and clinical information that included the number of pregnancies, the history of abortion, the type of delivery, and the sex of the fetus and Postnatal Perceived Stress Inventory (PNPSI).

Postpartum perceived stress was measured by Razurel et al. in 2013 (26). The tool contained 27 questions for measuring the perceived stress of mothers based on the 5-point Likert scale of stress-free (score 1) to severe stress (score 5). Minimum score was 27 and maximum score was 135. The questionnaire has six subscales that include fatigue and home affairs (5 questions), relationship with baby (6 questions), feeding the baby (4 questions), and relationship with body (5 questions), future plans in life (3 questions) and questions about relationship with partner (4 questions). In this study, the validity of the perceived stress questionnaire was determined using content validity

method. So that, after translation, the questionnaire was distributed to ten experts along with its English version, and after considering corrective comments and suggestions in the final instrument, it was considered as a questionnaire to use in this study. In addition, Content Validity Index (CVR) and Content Validity (CVI) were calculated for this questionnaire. The content validity coefficient (CVR) was 76.37% and content validity index (CVI) was 82.33% for this tool, which was acceptable. Data were analyzed using SPSS software (version 20), descriptive tests and t-test. P value less than 0.05 was considered significant.

## RESULTS

The results of the study showed that the demographic characteristics of newly delivered women were homogeneous in terms of the mean age and number of children. Most women were in the age group of 20 - 24 years and 25 - 29 years. Most participants did not have a history of abortion. The education level of the women was diploma and more than diploma. The most economic situation of participants was fair. More than 70% of the participants were housewives. Mean  $\pm$  standard deviation of the marriage period was  $3.20 \pm 1.63$  years. Mean  $\pm$  standard deviation of social support received by the family was  $12.51 \pm 5.42$  (**Table 1**). Total number of perceived stress was  $100.16 \pm 15.88$  (**Table 2**).

**Table 1.** Demographic and gestational characteristics of participants.

Variable		Women		X <sup>2</sup>	P - value
		Frequen cy	Percent		
age (year)	20-24	185	55.5	X <sup>2</sup> =2	0.43
	25-29	88	23.8		
	30-34	57	20.7		
Abortion	Yes	56	14	X <sup>2</sup> =2	0.18
	No	274	86		
Satisfaction of fetal sex	Yes	302	87.8	X <sup>2</sup> =1.26	0.01
	No	28	12.2		
	Illiterate	46	15.2		
Education status	Under Diploma	110	29.9		
	Diploma and more	174	54.9		
Economic status	No money problem	68	17.7	X <sup>2</sup> =1.84	0.4
	fair	189	58.5		
	Not enough	73	23.8		
Business status	Employed	80	28	X <sup>2</sup> =2.57	0.12
	Housewife	250	72		
Husband's age	20-24	51	14.6	X <sup>2</sup> =0.5	0.97

	25-29	139	43.3		
	30-34	97	29.9		
	35-39	29	8.5		
	>40	14	3.7		
<b>Husband's education</b>	Illiterate	35	12.2	X <sup>2</sup> =2.5	0.29
	Under diploma	130	35.4		
	Diploma and more	165	52.4		
<b>Husband's job</b>	Free	125	40.2	X <sup>2</sup> =1.85	0.016
	Employed	100	27.4		
	Labour	66	21.3		
<b>Housing status</b>	Workless	39	11		
	Tenant	214	83	X <sup>2</sup> =0.5	0.4
	Owner	116	17		
<b>Marriage Duration(Mean± SD)</b>	3.20±1.63				0.91
<b>Family support(Mean± SD)</b>	12.90±5.46				0.56

**Table 2.** Comparison of mean score of each perceived stress dimension in participants.

Variable	Score Range	Mean± SD
<b>Fatigue</b>	5-25	20.22±6.26
<b>relationship with baby</b>	6-30	20.68±6.99
<b>relationship with body</b>	5-25	18.80±4.91
<b>Feeding the baby</b>	4-20	12.04±5.50
<b>Future plan</b>	3-15	11.98±5.61
<b>Relationship with partner</b>	4-20	16.25±3.40
<b>Perceived stress total</b>	27-135	100.16±15.88

## DISCUSSION

The purpose of this study was to determine the perceived stress in newly delivered women. In order to confirm the results of this study, the results of studies by Hung et al. showed that lack of social support can disrupt maternal role and lead to stressful and unpredictable experiences after discharging (3). Therefore, primipara women need support from the family and others due to significant changes in physical and psychosocial changes in postpartum period and adaptation to these changes (27).

Regarding fatigue and home affairs, postpartum women who have just delivered due to rapid changes in roles, responsibilities for taking care of the baby, lack of sleep, having little time for themselves, and difficulty in

doing things, have emotions such as fatigue, loneliness, stress and postpartum depression that Kiernan et al. and Bozoky et al. also confirmed these subjects (28, 29). Kermani et al. and Corwin et al. showed that fatigue and perceived stress were associated with postpartum depression symptoms and was the best predictor of a woman with postpartum depression symptoms (30, 31). In this regard, the results of Campbell (1986), Gardner (1991), Milligan et al. (1996) and Pugh (1993) showed that postpartum fatigue can be detected as postpartum depression (32). Therefore, attention to fatigue is a fundamental aspect in the postpartum period. Masoudnia in his study showed that the lack of social support had a direct effect on the semiotics of depression in postpartum women (33).

Another dimension of perceived stress is the relationship with the baby, Hung et al. and Honey have shown that the relationship with the baby can cause stress and concern in the mother. They also reported in their studies that stress after contacting with newborn could cause anxiety and postpartum depression in the mother (34, 35). The study of Leigh and Milgrom showed that stress from parenting predicts postpartum depression (36). The study of Davis et al. showed that lack of adequate information and knowledge about care of baby causes mothers' concerns in the postpartum period (37).

Regarding the feeding of baby, it should be noted that breastfeeding is a stressful and challenging process during postpartum. In confirmation of the present study, the study of Osman et al. showed that stress are one of the determinants of adverse outcomes of the postpartum period, including lactation-related

behaviors (38). As well as the study of Ahn et al., lactating women exposed to stress in postpartum period were very prone to stop breastfeeding (39).

Regarding the relationship to body, pain and fatigue due to delivery, pain and episiotomy-related wounds on sexual relations, pain and tenderness of the breasts, low milk secretion (40, 41), sleep deprivation, hormonal changes, hemorrhoids, constipation, headache, back pain, urinary incontinence, physical exhaustion and changes are some issues which cause stress in primipara women (42). In confirmation of the results of this study, the study of Groer et al. showed that episiotomy-related discomfort, negative feelings about body appearance and hormonal changes may result in sexual disorders (43). In this regard, the study of Hung et al. showed that all mothers need adaptation to physical changes and support from their husbands and relatives to have lower stress (44).

Regarding the relationship with the partner, vaginal discharge and vaginal bleeding, perinatal discomfort, hemorrhoids, burning and pain of breast, and decreased vaginal lubrication due to lactation, night-time sleep disorders, fear of waking the child, reducing appetite, are all contributing to lower motivation for communication with the partner and sexual activity (27, 45). The results of Zonuzi et al. showed that fear of the onset of the relationship, lack of repair of sutures, childhood fatigue, sleep deprivation and awakening of the night, relaxation, anxiety, fear and change in mental imagination of the major psychological changes were stressful in the postpartum period (46). The study of Forster et al. showed that studying the problems of postpartum marital sexual relationships and timely education and counseling can reduce stress and establish appropriate sexual relations between couples (47).

Regarding the future plans, during 4-6 weeks after delivery, mothers may have an inadequate view of planning for future plans and achieving their goals, or have no specific planning to complete their goals, and therefore have concerns. Therefore, the need for counseling and training in planning and achieving their goals and in realizing their role as parents (48). In the confirmation of this study, Diane et al. showed that planning during pregnancy and postpartum is a key factor in enabling women to maintain their participation in work or other activities. Therefore, postpartum planning is essential for child care, family life, or other activities (49).

## CONCLUSION

The results of this study showed that newly delivered women have more perceived stress. It is suggested that by creating interactive interventions in the form of educational and counseling services in postpartum care systems, newly delivered women should be supported and encouraged by their husband and family in order to reduce stress and concern.

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