

Comparing Postpartum Stressors and Social Support Level in Primiparous and Multiparous Women

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ARTICLE INFO

Article type:
Original article

Article History:
Received: 6 Aug 2013
Accepted: 2 Oct 2013

Key words:
Multiparous women
Postpartum period
Primiparous women
Social support
Stress
Stressor

ABSTRACT

Background & aim: Postpartum period is an exclusive period after birth which can act as a potential stressor and could be accompanied with psychological disorders. Social support could play an important role in maternal mental health. Considering various stressors and different levels of social support for women, this study aimed to compare postpartum stressors as well as social support level between primiparous and multiparous women.

Methods: This descriptive comparative study was conducted on 400 primiparous and multiparous mothers who referred to urban health centers, Mashhad, Iran in 2011. They had no history of medical or psychological problems and had healthy term neonates who were 8-25 days old. The sampling was carried out through a multistage cluster sampling. Data were collected using modified Hung questionnaire of postpartum stressors, Helen questionnaire of anxiety and Hopkins social support questionnaire. Data were analyzed using descriptive analytic statistics by SPSS version 11.

Results: The mean stress scores were 242.5 ± 157.1 in primiparous and 28.8 ± 179.8 in multiparous women. The main stressor of primiparous and multiparous women was neonate bathing and lower-back pain, respectively. The mean score of social support was 108.3 ± 8.25 in the primiparous and 102.0 ± 26.6 in multiparous women, which showed a significant difference between two groups ($P=0.000$).

Conclusion: Various care programs are essential to support primiparous and multiparous mothers from different stressors that they face in postpartum period. It is also recommended to provide more information regarding the social support for the families.

► Please cite this paper as:

Salari P, Nazari S, Mazlom SR, Ghanbari Hashem Abadi BA. Comparing Postpartum Stressors and Social Support Level in Primiparous and Multiparous Women. Journal of Midwifery and Reproductive Health. 2014;2(1):71-76.

Introduction

Postpartum period is an exclusive period (1), during which some alterations can act as potential stressors for mother. Introducing a new member to the family causes dynamic changes which may lead to physical and emotional distress (2). Most parents describe parenthood as an experience which could be either a satisfying period, or a time of susceptibility and criticism (1).

By child birth, mothers face new responsi-

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bilities which have not been experienced before (1, 3). Azizzadeh *et al* reported the most important stressors which include bathing of the child, changing the infant's clothes, taking care of the umbilical cord, mother's breast enlargement and postpartum hemorrhage (2). Leung suggested that fear of child's sickness is the top postpartum stressor for mothers (4). Postpartum stress could be accompanied with different complications, such as the decline in the daily activities of the mother (5), decrease in libido (sexual drive) (6, 7), sleep disorder, and compulsive Behavior (2).

The stressors of primiparous and multiparous women are different (8), since primiparous mothers face a lot of difficulties since they are inexperienced, and new to their responsibilities (9). The first child delivery asks for the relative attention and support of the mother (1). Hung has reported that the sudden disease of the child is the most significant stressor in Taiwan (10). Jean (showed that in Iowa, multiparous mothers' concerns are bearing a son, and having at least one child at home (11). In a study by Smith, carried out in Canada, the stressors of primiparous women were as follows: feeding the child, woman's exhaustion, breast pain, woman's irreversible body changes, lack of communication with friends and relatives due to the woman's emotional stress, and siblings' jealousy (12).

Hung and Helen showed that primiparous mothers experience higher levels of stress, compared with the multiparous ones (1, 13). In this regard, social support is considered one of the most effective factors (14), and plays an important role in the mental health of the mothers (15). Hung's study indicated that multiparous mothers receive less social support than their primiparous counterparts (1), which could be associated with their previous experience of delivery and pregnancy-related issues. These mothers, due to having a child (or children), face new changes in their lives. Studies show that women are dissatisfied with the support they receive from their spouses, during and after pregnancy (16, 17).

Studies of postpartum stressors have concentrated on primiparous women, and little attention has been paid to the problems of

multiparous women. Probably, the social support for primiparous and multiparous women is different in different cultures (17, 18).

Due to the insufficient research on this subject, the current study aimed to compare multiparous and primiparous women, regarding the postpartum stressors and social support.

Materials and Methods

This study utilized a comparative descriptive method. After a pilot study on 20 primiparous and 20 multiparous mothers, the sample size was determined by Compare Means, Two hundred primiparous, and 200 multiparous mothers were chosen by health centers were division into three floors, then each floor select for several clusters and cluster sampling was quota. The participants were selected from the referred patients, admitted to Mashhad health centers for their postpartum care. This study was approved by the ethics committee of Mashhad University of Medical Sciences. In order for the subjects to be included in the study, they were required to have full term singleton pregnancies, and be conceived during the first marriage. The subjects were Iranian Muslims, capable of reading and writing, with normal healthy neonates aged 8-28 days. Exclusion criteria were: obstetric complications, medical or psychological problems, history of major stress in recent 6 months, history of infertility, and stillbirth or fetal death.

Data collection tools included: questionnaires for the demographic data (16 questions); pregnancy and delivery (8 questions); neonatal data (16 questions); Hopkins social support questionnaire (44 questions), with a 5-point Likert scale and a score range of 0 - 170; and postpartum-stressor questionnaire which was designed using Hung postpartum stress scale (19, 20), and the postpartum stressors of Iranian society. These tools included two subscales of the neonate and mother's stressors. The women answered the questions based on the ruler designed below each question, and were graded from 0 to 10. The questionnaire consisted of 90 questions for primiparous (total score 900) and 93 questions for multiparous (total score 930).

Primiparous women answered 91 questions, with scores ranging from 0 to 910, and

multiparous women answered 94 questions, with the score range of 0 – 940. The validity of the demographic data, pregnancy and delivery data, and neonatal data questionnaires was confirmed using content validity; the validity of Hopkins social support questionnaire was affirmed by content and criterion validity ($r=0.93$). The internal consistency was calculated by Cronbach's alpha coefficient ($\alpha=0.95$), and the validity and reliability of postpartum stressor questionnaire were confirmed by

Table1 Frequency distribution of demographic characteristics in primiparous and multiparous women

characteristic	Primiparous women us mother	Multiparous women	Total	(P)
	N(%)	N(%)	N(%)	
Education				(< 0.0001)
Elementary	20(10.1)	50(20.0)	70(17.5)	
below highschool	35(17.6)	45(22.5)	80(20.1)	
Diploma	102(51.3)	81(40.5)	183 (45.9)	
Technician	21(10.6)	8(4.0)	29(7.3)	
Licentiate or higher	21(10.5)	16(8.0)	37(9.3)	
Income				(0.284) ^a
Less than enough	39(19.8)	46(23.1)	85(21.5)	
enough	158(80.2)	151(75.9)	309(78.0)	
More than enough	0(0)	2(1.0)	2(0.5)	
Abortion				(0.001)*
No abortions	185(92.5)	157(78.5)	342(85.5)	
With a history of abortion	12(6.0)	33(16.5)	45(11.3)	
More than one abortion	3(1.5)	10(5)	13(3.3)	
pregnancy				(P< 0.0001)*
Planned	163 (81.5)	128(65.0)	291(73.7)	
Unplanned	37(18.5)	69(35.0)	106(26.7)	
Type of delivery				(P < 0.0001*
Vaginal delivery	87(43.5)	108 (54.0)	195(48.8)	
Cesarean section	113(56.5)	92(46.0)	205(51.3)	
Maternal Satisfaction of the neonate sex				(P =0.021) *a
Yes	188(94.0)	174(87.4)	362(90.7)	
No	12(6.0)	4(2.0)	4(1.0)	
No matter	0 (0)	21(10.6)	33 (8.3)	
Method of infant feeding				(P=0.937)a
Breastfeed	190 (95.0)	183(94.5)	378(94.7)	
bottlefeed	2(1.0)	3(1.5)	5(1.3)	
Mixed	8(4.0)	8(4.0)	16(4.0)	

*Difference Significant

^a Fisher exact Chi-square

content validity and test-re test method ($r=0.9$).

The subjects signed the written consents, and answered the questions in two phases 15-20 Minutes, with an 8-28 day interval after the delivery, for their postpartum care.

When the mothers referred to health centers for second postpartum care or second child care (15 day after birth) after the introduction of researchers and The subjects signed the written consents answered the questions in two phases 15-20 Minutes Between the mother's questionnaire The mother was served with cake and juice

Data were analyzed by SPSS Version 11 software. The mean and standard deviation were calculated for quantitative variables. The groups were compared using independent t-test and Mann-Whitney test. The confidence interval was considered 95%, and the level of significance was regarded as 0.05.

Results

The two groups were significantly different regarding their age and duration of marriage ($P=0.000$). Primiparous women, aged 24.2 ± 4.2 years, were compared with multiparous

mothers, aged 30.3±4.9 years. Duration of marriage in primiparous and multiparous women was 3.1±1.5, and 10.9±4.7 years, respectively. The mean number of pregnancies for multiparous women was 2.4±0.7. Almost all variables (work, method of baby's feeding, income) were similar and matched in the two groups, except for their education level, type of delivery, planning for pregnancy ($P=0.000$), history of abortion ($P=0.001$), and mother's satisfaction with neonate's gender ($P=0.021$) (Table 1).

Table2 The rank of stressors and their mean scores in the primiparous and multiparous women

stressors	Primiparous women	Multiparous women	Z(p)
	M±SD(Rank)	M±SD(Rank)	
Child bathing	5.6±4.3(1)	4.21±4.1(7)	2.9(0.003)
Flabby flesh of belly	5.0±3.9(2)	4.12±3.9(11)	2.1(0.035)
Low back pain	4.9±4.1(3)	5.21±4.0(1)	21.1(0.263)
Sterea and cloasma	4.8±4.2(4)	3.42±3.8(22)	2.9(0.003)
Fear of pregnancy due to sexual activity	4.7±4.3(5)	4.11±4.2(10)	1.8(0.060)
Training and growth of child in the future	4.77±4.2(6)	4.66±4.1(3)	3.0(0.758)
Suture opening of episiotomy or perineal tears	4.54±4.8(7)	3.20±3.9(30)	1.8(0.064)
Pain and inflammation of episiotomy or perineal tears	4.50±4.4(8)	3.20±3.8(31)	175(0.117)
Neonate Jaundice	4.46±4.2(9)	4.16±4.1(9)	0.5(0.580)
Fissure of breast	4.42±4.1(10)	3.08±3.7(35)	3.0(0.002)
Infections of episiotomy or perineal tears	4.40±4.4(11)	3.21±3.9(29)	1.5(0.124)
Fatigue	4.5±3.9(12)	4.1±3.7(8)	0.5(0.615)
Movement of child during sleep	4.35±3.6(13)	2.97±3.2(36)	3.9(< 0.0001)
Fear of pregnancy in breast-feeding period	4.34±4.2(14)	4.1±4.2(14)	0.8(0.391)
Pain and inflammation of sutures in cesarean delivery	4.21±3.9(15)	4.8±3.9(2)	1.0(0.292)
Desire to crying	4.18±4.1(16)	3.68±4.0(21)	0.9(0.351)
Wetting clothes due to milk drainage	4.13±3.9(17)	3.16±3.6(33)	2.2(0.022)
Caring of a sick child	4.09±4.2(18)	3.76±4.1(19)	0.6(0.509)
Having another children*	-	4.61±3.7(4)	-
Not having enough time for playing with another children*	-	4.31±3.5(5)	-
Bleeding after childbirth	4.29±3.9(24)	4.21±3.9(6)	1.5(0.124)

* Only for Multiparous

Table3 Mean score of stress and social support in the primiparous and multiparous women

Variable	Primiparous women	Multiparous women	Total	Z(p)
	M(SD)	M(SD)	M(SD)	
stress	242.5(157.1)	223.8(135.7)	233.1(146.9)	0.9(0.351)
Social support	108.3(8.25)	96.0(24.7)	102.2(26.0)	4.8(< 0.0001)

fissures of the nipple ($P=0.002$), and child's movements during sleep ($P=0.000$) (Table 2).

The highest score of stress and social support (242.2 and 108.3, respectively) was found in the primiparous women. A t-test of social support variable in the two groups showed a significant difference ($P=0.000$) (Table 3).

Discussion

The first stressor for primiparous women was child bathing. Hung reported the child's sudden ailment as the first stressor for mothers in Taiwan (10). Helen stated that, regarding the child, the eyes, respiration, mood and crying

Stressors were different in the two groups; the first stressor for the primiparous women was child bathing, which was the 7th stressor among multiparous women. The first stressor for multiparous women was the pain in lower-back, which was ranked 3rd for the primiparous mothers. Based on Mann-Whitney test results, a significant difference was observed between the stressors of the two groups in terms of child bathing (0.003), striae or chloasma ($P=0.003$),

were matters of concern in the 1st week, while in the 6th week, only crying of the neonate was considered unsettling. In the 1st week, mothers were worried about their perineal edema, fatigue and nervousness; though in the 6th week, their relationship with their spouse and the child was the source of concern (21). The findings of Hung and Helen were related to children's disease and their physical problems, while the present study discusses child caring. This inconsistency may be the result of primiparous women unawareness of neonatal care. Mothers feel stressed due to the smallness of neonates' body, the possibility of baby

slipping out of hand, and water getting into his ears or nose, and other neonatal problems.

Lower-back pain was ranked the highest stressor for multiparous women. Jean showed that the concerns of multiparous mothers, in Iowa, are related to bearing a son and having at least another child at home (11). In the present study, emotional problems and lack of time for playing with other children were ranked 4th and 6th. This was similar to Jean's findings, though the satisfaction resulting from the neonate's gender was in the 93rd place, which was different from Jean's study.

In the present study, the women believed that a child is godsend, and parents' discontent is a sign of ingratitude, and provokes God's wrath, therefore even if mothers are displeased with the gender of their neonates, they avoid expressing it.

The first stressor for multiparous women was lower back pain which could be due to their age, overload of house chores, and lack of relatives' support, compared with primiparous women. Besides, inappropriate physical activities and lack of an exercise schedule could increase this problem.

In our study, a comparison of the stressors for primiparous and multiparous women indicated a difference among them. The first stressor of primiparous women was related to child bathing, which was ranked 7th in multiparous mothers. The first stressor of multiparous mothers was lower back pain, which ranked 2nd in primiparous mothers.

Hung reported that the sudden disease of children was the first stressor for primiparous women, which took 5th place among multiparous mothers in our study (1). Smith listed the stressors of primiparous women as feeding, fatigue, breast pain, returning to pre-pregnancy body shape, and limitations in communication with acquaintances. He reported the stressors of multiparous women as fatigue, emotional stress, siblings' jealousy, and previous delivery experiences (12). The present study showed different stressors for primiparous and multiparous women, which were similar to Hung and Smith; however the type of stressor in the two groups was different from other studies. It could be due to cultural differences, different measuring scales and various times of assessing the stressors.

Based on these findings, postpartum stress score of primiparous women was higher than multiparous women, though not statistically different. Helen pointed out that the rate of primiparous women concern was higher than multiparous women (13). She also reported that multiparous women experience less stress because of their higher self-confidence (22). Hung described the significant stress scores of primiparous women in comparison with multiparous women (1).

The findings of the present study are similar to Helen and Hung, which compared the two groups.

Since primiparous women experience child delivery for the first time, they feel more stressed than multiparous women. All studies showed that some countries probably provide some instructions based on primiparous stressors; therefore women would be more efficient in later deliveries, due to their first experience.

As to the results, primiparous women got higher scores of social support than multiparous ones. Chang showed that women with higher parity received less social support (18). In this regard, Hung reported that primiparous women receive significantly-higher social support than multiparous women. He described primiparous women as being more socially supported than multiparous women; however, it was only significant in the 5th week (23). In a study by Abedian in Iran, it was indicated that the mean of postpartum social support in week 6, in primiparous women, was significantly higher than multiparous women (24). The result of the present study is similar to Chang and Hung.

This study is also similar to Hung, regarding the higher social support of primiparous women; however, the significant difference in the 5th week, is probably due to the analysis of multiple groups (one group per week), and comparison of the results.

In Iranian society, traditional families support the woman from the first moments of labor and help her with neonatal care. In the first weeks, woman receives strong support from their relatives, though it reduces as time passes by. Primiparous women received more support than multiparous mothers since they were at the center of attention in the family;

while very little attention was paid to multiparous woman, or were even ignored due to their past experiences.

Limitations

Personality differences, and altered settings for answering the questionnaires-home or clinic-were the current study limitations.

Conclusion

As to the findings, postpartum stressors are different for primiparous and multiparous women and the level of stress and also social support for primiparous women was higher. Therefore, it seems that primiparous women need instructions for neonatal care skills, and the families of multiparous women need advice on increasing their support.

Conflict of Interest

No conflict of interest exists.

Acknowledgments

The authors would like to thank Dr. Hung for sending a copy of postpartum stress questionnaire. We also express our gratitude to the Research Chancellery of Mashhad University of Medical Sciences for the financial support. This article is part of a master thesis author, with the research code: 900218.

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