

## The Relation between Social Support and Marital Satisfaction & Couples' Depression after the Birth of the First Child

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### ABSTRACT

**Background:** Child Birth can play a major role in parents' mental status and though it is considered as cherished event, it can dramatically jeopardize mental state of parents. Thus, we conducted this paper in order to study the relation between social support and marital satisfaction and couples' depression after the birth of the first child.

**Methods:** Statistical population was consisted of 75 couples (parents). They were assessed via Edinburgh Postnatal Depression scale, marital satisfaction (ENRICH) and Multidimensional Scale of Perceived Social Support.

**Results:** Regression analysis showed that there was a significant and inverse relationship between social support and depression among men and women after childbirth. Furthermore, there was a significant relationship between marital satisfaction and depression among men and women after childbirth. In addition, social support and marital satisfaction can be explained by the predictive role of depression in men after childbirth. But only social support can be predictive for explaining depression in women after childbirth.

**Conclusion:** Thus, inadequate social support and low marital satisfaction can put couples at risk of postpartum depression.

**Keywords:** *Post Partum Depression, Marital Satisfaction, Depression, Social Support*

In pregnancy and postnatal period mother and her family demand a lot of attention and support. Parents tend to cope with the newborn situation accordingly and they adapt themselves to its economic and social impact. This period can be so challenging that it may trigger various mental disorders and target many individuals from all social and cultural classes(1). Eighty percent of women who give birth to a child experience "slight depression or baby blues", which may be accompanied with sudden mood swings. These mood swings may disappear after a short period in most cases and if these mood swings do not disappear or even make progress in a woman,

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then the condition may develop into postpartum depression which is considered as a serious and detrimental condition and must be treated urgently. This type of depression interferes with mother's daily activities. In case the condition is left untreated, the symptoms exacerbate and persist for a long period (1year)(2). Postpartum Depression (PPD) is considered as one of the major depressive disorders which appears within four weeks from childbirth according to Diagnostic and statistical manual of mental Disorder (DSM-IV) and within six weeks from childbirth according to International Classification of Disease(3). Postpartum depression may affect any woman of any age, economic situation and racial background. This type of depression tend to have more impact on women with low income (4).

When the expression "depression after childbirth" is heard, women who have recently given birth to a child are generally thought of as the sole target of this condition, while this type of depression can inflict men too(5). Studies have shown that 1 in 10 fathers suffer from postpartum depression. The expression "Postpartum Depression" is not yet well established and used for men's depression after childbirth. This condition for men is usually expressed by phrases such as: paternal depression after childbirth, men's mental disorder after wife's childbirth and etc.(6). Three point three percent of men experience clinical or general depression annually. Much effort has been made to estimate the depression rate of fathers after childbirth(7). According to a meta-analysis based on 43 studies on 16 countries, the depression rate in men after childbirth stands at 10.4% (8). 3 in 10 men experience depression within 6 weeks from childbirth. Researchers estimated that 10% of men suffer from paternal depression after childbirth(9). The etiology of postpartum depression is not yet known but several studies have identified several factors causing depression, which are: pre-natal stressors, mental stressors, demographic characteristics, socio-economic and socio-cultural factors, lack of perceived social support(10,11,12,13,14). Inadequate perceived social support is a determining factor in postpartum depression in men and women. Perceived social support includes support received from different sources such as family members, colleagues, friends, neighbors, professional people and organizations(15).

While women can rely on their spouse's support(16), men also need social support and emotional support from their spouse(17). Fathers with less perceived social support exhibit more mental disorders(1, 18). In contrast, fathers with adequate perceived social support are not only less prone to postpartum depression, but also can prevent such depression in their wife(19). Regarding men who have become a father recently, in addition to wife's mood, which plays an important role in father's depression, many other factors are involved. These fathers are not familiar with childbearing and child-caring issues, which may put them in a bottleneck. In such conditions, fathers tend to seek support from the most obvious source, which are their wives. Nonetheless, when this primary source of support is herself depressed and needs support, then she is not available to provide enough support. Such conditions coupled with marital

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dissatisfaction and several financial limitations and problems, can cause much severe stress, which ultimately leads to severed postpartum depression symptoms(20).

In various literature, a relationship between marital satisfaction and postpartum depression and parental stress is reported(21, 22). Couples' quality of life is affected by childbirth as the child is seriously taken into consideration in addition to previous goals and concerns; thus, a shared sympathy, support and attention is demanded for heartening one another for the existing concerns and worries(23).

Hence, the authors of current paper deemed it appropriate to study the relation between perceived social support, marital satisfaction and men and women's postpartum depression level. This paper attempt to answer the questions on the predicting role of women's depression level, social support and marital satisfaction in men's postpartum depression level as well as the predicting role of men's depression level, social support and marital status in women's postpartum depression level.

### **METHODS**

The current study is a correlational study. The population of the study consisted of couples, whose first child's age was between 3 to 6 months. Although postpartum depression appears within 4 weeks after childbirth(3), to distinguish between this type of depression and baby blues and as the climax of this type of depression is reported to appear within 3 to 6 months after the childbirth(24), the participants of the study were chosen from parents whose first child had been born between 3 and 6 month before and had referred to child care centers in five regions of Tehran - north, south, east, west and center. The population under study constituted 150 people (75 couples/parents), who were selected via availability sampling method. Some inclusion criteria were taken into consideration for the participant's involvement in the study: 1- the parents had a child between 3 to 6 months old; 2- they had referred to child care centers for routine checkups after the birth of the 1<sup>st</sup> child; 3- the participants were couples (father, mother and the child); 4- the parents were literate; 5- the participants consented to taking part in this study. Some criteria were also taken into consideration for exclusion of individuals from the population of the study: 1- parent who were referring to a conseilour or psychiatrist; 2- according to their own statement, they had a mental disease record; 3- regarding their child's disease, they had referred to medical centers. As one of the exclusion criteria was child's disease, and as the patient's child was present for vaccination in most of the medical centers, hence childcare centers were selected for this study as they were visited for many childcare checkups. The tools required for data gathering and measuring the variables included the multidimensional scale of perceived social support (MSPSS), marital satisfaction (ENRICH), and Edinburgh postnatal depression scale (EPDS).

**Multidimensional scale of perceived social support (MSPSS):** This scale is a tool comprised of 12 statements designed for evaluation of perceived social support from 3 sources: family,

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friends, and major people in life. A high score in this scale indicates a high level of perceived social support. Researchers evaluated the internal consistency through Cronbach's Alpha of 0.93 for three subscales of family, friends and important people to stand at 0.91, 0.89, and 0.91 respectively(25).

**Marital Satisfaction (ENRICH):** The ENRICH marital satisfaction questionnaire is composed of 10 sub-scales, which include personality traits, marital relationship, ability to resolve issues, financial management, free time, sexual relationship, child caring, family and friends, equality roles, and spouses' religious orientation. The questions are 5-choice questions whose potential answers range from 1 to 5 in tone. According to Olson's report(26), the validity of the test for the above subscales are 0.73, 0.68, 0.75, 0.74, 0.76, 0.48, 0.77, 0.72, 0.71, and 0.42 respectively. The retest validity of the questionnaire was 0.86 after 4 weeks.

**Edinburgh Postnatal Depression Scale (EPDS):** This scale measures the postpartum depression in women exclusively and was published for the first time in 1987. This scale is comprised of 10 self-report multiple-choice questions, which focus on mental aspects of depression and it is concerned with individual's feelings within the past weeks. Using this scale requires no special knowledge and has been employed for women for more than two decades. Evidences regarding using this scale for men's postpartum depression, dates back to 1990. The test takes 5 minutes to answer the questions. The Edinburgh test as a test with a limited number of questions and with pretest-posttest consistency coefficient of 0.98 and Cronbach's alpha coefficient of 0.76 has proved to be an efficient method for evaluation of postpartum depression(27).

At the first step, questionnaires related to perceived social support, marital satisfaction and Edinburgh Depression were given to the parents and after gathering the data; they were encoded by SPSS software and were analyzed. To analyze the research data, descriptive statistics including central indices (mean) and dispersion indices (standard deviation) were employed due to normal distribution in samples. To evaluate the determining role of independent variables in formation of dependent variables, linear regression and independent-sample T test were utilized. Before using regression analysis, the distribution of data was evaluated by assessing the multicollinearity by means of Tolerance criterion and outliers and the data were eligible for using this information criterion. It was then specified that the tolerance criterion coefficient stood between 0.742 and 0.899 for predicting postpartum depression, which in fact indicates nonlinearity and also suggests the stability of the regression model. This also suggests that the VIF value for each variable in relation with postpartum depression in women and men stands in a range of 1.11 to 1.34 respectively. Multivariate regression analysis was utilized to evaluate the depression level in men, considering the predicting role of women's depression, social support and marital satisfaction.

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Parent's postpartum depression was considered as the dependent variable and social support and marital satisfaction were considered as independent variable in this study.

### RESULTS

One hundred fifty individuals (75 parents), who had referred to child caring centers in Tehran were invited to participate in this research. According to the data obtained, the female participants' age ranged from 20 to 44 years old (females' mean age: 29.88 years old) and male participants' age ranged from 20 to 49 years old (males' mean age: 33.60 years old). The educational status of participants was: diploma (Fathers: 26.7%; Mothers: 16%); associate (Fathers: 8%; Mothers: 10.7%); BSc. (Fathers: 44%; Mothers: 53.3%); MSc. (Fathers: 10.7%; Mothers: 10.7%); Ph.D. (Fathers: 10.7%; Mothers: 9.3%)

**Table-No1. Regression analysis results of predication of women's postpartum depression level, social support and marital satisfaction on men's postpartum depression**

Criterion Variable	Beta	t	Significance Level	Adjusted R <sup>2</sup>
Women's Depression Level	0.051	-0.605	0.547	<b>0.490</b>
Social Support	-0.263	-2.841	<b>0.006</b>	
Marital Satisfaction	-0.549	-5.905	<b>&lt;0.001</b>	

According to Table No-1, the effectiveness coefficient of women's depression level, social support and marital satisfaction with regard to their significance level show that social support, marital satisfaction plays a predicting role in justification of women's postpartum depression.

**Table No-2. Regression analysis results of predication of men's postpartum depression level, social support and marital satisfaction on women's postpartum depression**

Criterion Variable	Beta	t	Significance Level	Adjusted R <sup>2</sup>
Men's depression level	-0.018	-0.146	0.884	<b>0.151</b>
Social Support	-0.368	-3.255	<b>0.002</b>	
Marital Satisfaction	-0.154	-1.237	0.220	

As shown in Table-2, the effectiveness coefficient of men's depression level, social support and marital satisfaction with regard to their significance level show that social support plays a predicting role in justification of men's postpartum depression.

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### DISCUSSION

The current study aimed to study the relation between social support and marital satisfaction and men and women's depression level after the birth of their first child. Data analysis using regression showed that social support and marital satisfaction could predict men's postpartum depression level (Table-No1). In order to justify the results, the following points can be stated: Most young fathers experience new demands and responsibilities upon transition to the parenthood phase(28). These stressors can have deteriorating and destructive impact on father's performance and their mental health and somehow they put fathers on a verge of depression(29). Available social support as well as improving individual's self-knowledge helps to decrease the tension and improve men's quality of life(30) and reduces their susceptibility against new stressors(31), men tend to emotionally rely on their spouses while women tend to internalize their concerns. Men's perception of marital satisfaction is related to their postpartum depression; while women's perception of satisfactory relationship with their spouses does not prevent their postpartum depression(32). In current study it was also specified that women's depression level does not have a predicting role in men's postpartum depression level. To justify this finding, the following points can be stated: although women's depression has a predicting role in men's postpartum depression, this does not prove to be true in all cases(33,34). With respect to the predicting role of men's depression level, social support and marital satisfaction for women's postpartum depression level, the analysis results of data using regression shows that only social support can predict women's postpartum depression (Table-No2). To justify this finding, the following points can be stated: The changes which are formed in responsibilities, relationships and social demands of a woman in the postnatal period can turn the period into a stressful one(35). Carrying our household affairs and satisfying other family members' needs is a vital and it needs precise approach (36). Thus, all these pressures and stresses can lead to postpartum depression, especially in women undergoing less social support(37). Furthermore, women's expectations from their spouse is higher during postpartum depression period; thus, men who themselves are under pressure and depressed may not be able to provide the required adequate support during the postpartum depression period for their wife. This inadequacy can ultimately increase the depression level in women(38). It was also specified in the current study that marital satisfaction does not have a predicting role in women's postpartum depression level.

#### **What is already known on this topic?**

Some researchers point out issues, which relate only to men's experience after the birth of the first child. They also state that men can experience postpartum depression independently from their spouse(39). Gotlib and Colleagues (1991), Buist and Colleagues(2003) obtained a similar result in their studies about relation between marital satisfaction and postpartum depression(40, 41). Bernard(1991) in addition stated that women's perception of a satisfactory relationship with their spouse does not necessarily prevent postpartum depression in women (42). Another finding of the current study was the non-predicting role of men's depression in women's postpartum depression level. Although many researchers have studied the role of various factors in women

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postpartum depression level(43), no literature review could be found on the predicting role of men's depression in women's depression.

### **WHAT THIS STUDY ADDS**

In conclusion, the results of the present study clarified that research on social support and marital satisfaction and men and women's postpartum depression reflect obvious bilateral principles. Recognition of the fundamental role of these factors impacting men and women's life who have become parents recently as well as the parent-child relationship can be a foundation for understanding the challenges, which will be faced by depressed parents. This awareness is necessary for any efficient intervention for helping parents to cope with their postpartum depression and reach peace in their family and social environment. As the current study had focused on an almost homogeneous population, therefore it would be better for further studies to focus on a more diverse population including individuals from different cultural backgrounds and from various regions so the findings can be generalized.

To justify this finding, it can be stated that as the mental aspects of men's depression and concern is not well-illustrated in diagnostic interviews or self-reporting tools, thus men's depression may remain hidden(Wilhelm et al., 1988). Men have less tendency to talk about their depression or other mental issues with their physicians(Paulson et al., 2010; Ramchandani et al., 2008).Therefore, as men's depression is diagnosed with much difficulty, its impact on women's depression level has been addressed less.

### **LIMITATIONS OF THIS STUDY**

Our study has some limitations. Research data related to depression, perceived social supports and marital satisfaction were collected using self-report, data-collection tools. Since EPDS is a screening test, results may not accurately reflect the prevalence of PPD. Furthermore, this study focused only on the impact of social support and marital satisfaction of men and women on depression after the birth of children; While other studies have pointed out other important risk factors such as unplanned pregnancy, gender of child, personality characteristics, History of mental illness, Adoptive family of men and women, frequency of pregnancy and childbirth that have an influence on mood status of parents.

### **Authors' contributions**

SSH and LP conceived and designed the evaluation and they conducted whole process of this study. MBM and MH collected and interpreted the clinical data and drafted the manuscript. JD participated in conducting statistical evaluation. All authors read and approved the final manuscript.

### **Acknowledgements**

We would like to thank all patients who participated in the study.

### **Declaration of interest**

None declared

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