The Impact of Perceived Social Support from Family and Empowerment on Maternal Wellbeing in the Postpartum Period

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ABSTRACT

Background & aim: With the aim of improving maternal and neonatal health, the World Health Organization has placed emphasis on women's empowerment and well-being. This study aimed to investigate the impact of perceived social support from family and empowerment on maternal well-being after delivery.

Methods: This descriptive study was conducted on 358 mothers within 24-48 h after delivery. For the purpose of data collection, four questionnaires were employed to evaluate the participants' health status, perceived social support from family, empowerment, and well-being. The data were analyzed using structural equation modeling through Stata software at a significance level of 0.05.

Results: The mean scores of women's well-being, perceived social family support, and empowerment were 12.9±5.8, 15±3.7, and 70.3±13.5, respectively. The results showed that the score of perceived social support from family had a direct impact on mothers' well-being score. Moreover, there was a significant correlation (0.55) between empowerment and perceived social support from family in the postpartum period.

Conclusion: Regarding the direct relationship between empowerment and perceived social family support after delivery, it is recommended to enhance the well-being of mothers in the postpartum period and provide training for pregnant women and their families.

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Introduction

Social support refers to receiving voluntary assistance from other people, promoting a positive response (1). This kind of support can come from different sources, such as family, friends, or community (2) and can emerge in various forms of physical, emotional (sympathy, love, and care), verbal, and financial assistance (3). Social support and its relation with health during pregnancy have been studied in some research projects (4-6). In this regard, some studies have investigated the relationship between social support, prenatal health behaviors (2), and quality of life (7).

The quality of care and support received by pregnant women during pregnancy determines the quality of delivery and maternal/neonatal health (8). Perceived social support of a mother indicates her cognitive assessment of the environment and her certainty of the avail-ability of assistance when necessary. The importance of social support in coping with stress and mental/physical symptoms is well documented (9).

Empowerment of women is defined as the ability to make strategic life choices in contexts where they have been denied the chance to make decisions (10). This concept includes the process of change in which the person tends to make better decisions and thereby enjoy greater welfare (11). Concepts such as independence and power are classified under empowerment (11, 12).

The outcomes of women’s empowerment include the individual’s independence, better decision-making, the ability to affect the satisfactory results of life (11, 13), attainment of reproductive health, and improvement of well-being during pregnancy (14). Moreover, if women have more access to financial and intellectual resources,
they can improve their self-confidence, achieve independence, combat gender discrimination, and make autonomous decisions (11, 15).

In most countries, in order to empower women and eliminate gender inequalities, some measures have been taken (16). Health-related well-being refers to the individual's mental evaluation of his/her current health status (17, 18). During pregnancy, women undergo various biological, chemical, physiological, and anatomo-mical changes which modify their quality of life and well-being (19). These changes occur in physical, psychological, and social health domains and can be measured through quality of life assessments. In addition, they can be used by health policy planners in health care planning and management (20).

The postpartum period is a critical transitional period in the lives of new mothers, marked by several physiological, emotional, and psychosocial changes, which start soon after delivery and result in the occurrence of new situations and needs (21). Since the empowerment of pregnant women improves their health and reduces maternal mortality (22), obtaining knowledge about postpartum complications and care is of fundamental importance. However, to the best of our knowledge, no studies have examined this issue in Iran yet. Likewise, the World Health Organization has emphasized on the empowerment and well-being of women, as they can improve maternal and neonatal health (23).

Similarly, some studies suggest that pregnancy (24, 25) and postpartum problems (26) simultaneously impact females' quality of life and mental health. According to the literature, 40% of pregnant women experience physical health problems during pregnancy and after childbirth, and 15% of them suffer from long-term complications in their lifetime (27). Nevertheless, very little information is available on the impact of women's empowerment and perceived support from family on postpartum well-being, which is compromised in this sensitive and important period. Therefore, this study aimed to investigate the effect of perceived family support and women's postpartum empowerment on the well-being of mothers.

Materials and Methods

This descriptive, analytical, cross-sectional study was carried out on 358 women who had given birth at Fatemiyeh Hospital in Shahroud, Iran in the second half of 2015. After obtaining the necessary permission, the researcher (a midwife) referred to the postpartum ward within 24-48 h after delivery. After explaining the study objectives and obtaining written informed consent from the mothers, the social support, empowerment, and well-being questionnaires were completed.

The inclusion criteria were as follows: 1) Iranian nationality; 2) age range of 18-45 years; 3) lack of any known mental health problems; 4) lack of any underlying medical conditions; 5) no stressful events over the past nine months; and 6) minimum of reading and writing literacy. On the other hand, the exclusion criterion was unwillingness to continue participation in the study. The independent variables were perceived social support from family and empowerment.

For the purpose of data collection, four questionnaires were utilized. The first questionnaire entailed demographic characteristics and pregnancy information. The second questionnaire, including 20 questions, evaluated the perceived social support from family. The reliability and validity of the English and Persian versions of this questionnaire have been confirmed by Procidano (1983) and Sanaee et al., respectively (28).

The third questionnaire was Spreitzer's psychological empowerment scale which entails 19 questions and has been translated and validated in various countries. In a previous study, Abdollahi and Navebrahim used three dimensions of this scale (29). Later, this scale was translated into Persian and then utilized in other studies in Iran (30). Scores ranges of 19-38, 38-57, and > 57 indicate poor, moderate, and good empowerment, respectively. By examining the criterion validity, Borghei revealed a strong positive correlation between the total score and subscale scores of Kameda’s and Spreitzer’s empowerment scales (22).

The fourth questionnaire was the World Health Organization Well-Being Index, which has shown acceptable validity and reliability (31). This questionnaire has five items and is graded on a six-point Likert scale; scores below 13 indicate poor well-being, while scores above 13 indicate normal well-being. Economic situation was evaluated based on principal component analysis and household assets; it was divided into three groups of good, moderate, and poor.
Quantitative data were presented as mean and standard deviation, while qualitative data were presented as frequency and percentage. The relationship between variables was evaluated using t-test and chi-square test via SPSS version 18 at a significance level of less than 0.05. The relationship between health, social support, and empowerment as latent variables was also investigated, using structural equation modeling through Stata software (SEM).

By using SEM, the impact of variables on each other was evaluated in unidirectional and bidirectional forms. Additionally, this method was used to investigate the measurement accuracy of well-being, social support, and empowerment, as well as the relationship between the latent variables. This model also examined the effect of two latent variables of social support and female empowerment (independent variables) on the latent variable of well-being (dependent variable). Moreover, the relationship between social support and empowerment of women as independent variables was investigated in the model.

**Results**

This study examined postpartum women in terms of empowerment and perceived social support from family and measured the relationship of these variables with maternal well-being. Based on the findings, the mean age of mothers was 27.65±5.08 years (age range: 18-41 years). The results showed that the mean score of well-being was 12.9±5.8. In addition, 197 (55%) mothers were found to have normal well-being, whereas 161 (45%) cases showed poor well-being.

**Table 1.** The relationship between demographic variables and well-being of postpartum mothers based on chi-square test results

<table>
<thead>
<tr>
<th>Variables</th>
<th>Well-being</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Good (%)</td>
<td>Poor (%)</td>
</tr>
<tr>
<td><strong>Mother’s education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 8 yrs</td>
<td>36(53.7)</td>
<td>31(46.3)</td>
</tr>
<tr>
<td>9-12 yrs</td>
<td>104(52.8)</td>
<td>93(47.2)</td>
</tr>
<tr>
<td>&gt; 12 yrs</td>
<td>57(60.6)</td>
<td>37(39.4)</td>
</tr>
<tr>
<td><strong>Spouse’s education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 8 yrs</td>
<td>28(51.9)</td>
<td>26(48.1)</td>
</tr>
<tr>
<td>9-12 yrs</td>
<td>117(52.5)</td>
<td>106(47.5)</td>
</tr>
<tr>
<td>&gt; 12 yrs</td>
<td>52(64.2)</td>
<td>29(35.8)</td>
</tr>
<tr>
<td><strong>Economic situation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td>102(56.4)</td>
<td>79(43.6)</td>
</tr>
<tr>
<td>Moderate</td>
<td>47(53.4)</td>
<td>41(46.6)</td>
</tr>
<tr>
<td>Good</td>
<td>48(53.9)</td>
<td>41(46.1)</td>
</tr>
<tr>
<td><strong>Mother’s occupation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housewife</td>
<td>172(53.9)</td>
<td>147(46.1)</td>
</tr>
<tr>
<td>Employed</td>
<td>25(64.1)</td>
<td>14(34.9)</td>
</tr>
<tr>
<td><strong>Mother’s BMI</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thin</td>
<td>25(58.1)</td>
<td>18(41.9)</td>
</tr>
<tr>
<td>Normal</td>
<td>95(54.0)</td>
<td>81(46.0)</td>
</tr>
<tr>
<td>Overweight</td>
<td>42(56.0)</td>
<td>33(44.0)</td>
</tr>
<tr>
<td>Obese</td>
<td>35(54.7)</td>
<td>29(45.3)</td>
</tr>
<tr>
<td><strong>Spouse’s smoking (yes)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cigarette</td>
<td>14(31.1)</td>
<td>31(68.9)</td>
</tr>
<tr>
<td>Water pipe</td>
<td>14(50.0)</td>
<td>14(50.0)</td>
</tr>
<tr>
<td><strong>Substance abuse by the spouse (yes)</strong></td>
<td>2(15.4)</td>
<td>11(84.6)</td>
</tr>
<tr>
<td><strong>Mother’s age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-35 yrs</td>
<td>184(54.8)</td>
<td>52(45.2)</td>
</tr>
<tr>
<td>&gt; 35 yrs</td>
<td>13(59.1)</td>
<td>9(40.9)</td>
</tr>
</tbody>
</table>
The mean score of perceived social support from family was 15±3.7 (range: 5-20). It was shown that 11 (3.1%), 100 (27.9%), and 247 (69%) mothers had poor, moderate, and good family support, respectively. The mean score of mothers’ postpartum empowerment was found to be 70.3±13.5 (range: 19-143). As a result, 3 (0.8%) mothers showed poor empowerment, 51 (14.2%) mothers had moderate empowerment, and 304 (84.9%) mothers showed good empowerment.

Demographic characteristics, i.e., mother’s occupation and body mass index (BMI), family’s economic status, mother’s and spouse’s education level, and their smoking status, are presented in Table 1. As Table 1 indicates, 38.8% of the mothers were overweight and obese, and the majority (89.1%) were housewives.

Table 2. Frequency distribution and relationship between well-being and pregnancy/delivery variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Good (%)</th>
<th>Poor (%)</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery type</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vaginal</td>
<td>68(55.7)</td>
<td>54(44.3)</td>
<td>0.46</td>
</tr>
<tr>
<td>Cesarean section</td>
<td>129(54.7)</td>
<td>107(45.3)</td>
<td></td>
</tr>
<tr>
<td>Type of pregnancy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unwanted</td>
<td>30(41.7)</td>
<td>42(58.3)</td>
<td>0.05</td>
</tr>
<tr>
<td>Wanted</td>
<td>167(58.4)</td>
<td>119(41.6)</td>
<td></td>
</tr>
<tr>
<td>Pregnancy order</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First</td>
<td>69(57.0)</td>
<td>52(43.0)</td>
<td></td>
</tr>
<tr>
<td>Second</td>
<td>79(55.6)</td>
<td>63(44.4)</td>
<td>0.52</td>
</tr>
<tr>
<td>Third</td>
<td>20(46.7)</td>
<td>32(53.3)</td>
<td></td>
</tr>
<tr>
<td>Fourth and more</td>
<td>21(60.0)</td>
<td>14(40.0)</td>
<td></td>
</tr>
<tr>
<td>Number of prenatal care sessions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 10 times</td>
<td>90(55.2)</td>
<td>73(44.8)</td>
<td>0.517</td>
</tr>
<tr>
<td>&gt; 10 times</td>
<td>107(54.9)</td>
<td>88(45.1)</td>
<td></td>
</tr>
<tr>
<td>Baby’s birth weight</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤ 2500 g</td>
<td>10(55.6)</td>
<td>8(44.4)</td>
<td>0.518</td>
</tr>
<tr>
<td>&gt; 2500 g</td>
<td>187(55.0)</td>
<td>153(45.0)</td>
<td></td>
</tr>
<tr>
<td>Delivery complications (yes)</td>
<td>89(54.6)</td>
<td>74(45.4)</td>
<td>0.48</td>
</tr>
</tbody>
</table>

Figure 1. Schematic view of the impact of perceived social family support and empowerment on mothers’ well-being using Stata’s SEM (Stata12)
According to the findings, well-being had no significant relationship with the mother’s BMI, family’s economic status, and mother’s occupation. Also, well-being was shown to have no significant relationship with mother’s smoking/substance abuse or education level of mother and husband. However, maternal well-being and spouse’s smoking were demonstrated to have a significant relationship; in other words, husband’s smoking/substance abuse was associated with lower well-being of mothers.

According to Table 2, there was a borderline significant relationship between the acceptance of pregnancy, type of pregnancy (wanted or unwanted), and mother’s well-being in the postpartum period; therefore, women with unwanted pregnancies had lower well-being. However, no significant relationship was observed between the type of pregnancy, complications of pregnancy and delivery, birth weight, number of prenatal care sessions, and pregnancy order.

As can be seen in Figures 1 and 2, perceived social family support was found to have a direct impact on mother’s well-being. Moreover, there was a significant correlation (0.55) between postpartum empowerment and perceived support from family; however, postpartum empowerment did not affect mothers’ well-being and no relationship was observed between these two variables.

**Discussion**

The third objective of the Millennium Development Goals underscores the empowerment of women in political and economic development. Accordingly, women should have equal rights and access to resources in order to improve their basic living conditions (32). Many international agreements confirm the empowerment of women as an essential prerequisite for the promotion of reproductive health (33). Major life events, such as pregnancy, childbirth, and postpartum adjustment, are often associated with disempowerment, trauma, and emotional pain in women.

In the current study, mean score of empowerment was found to be relatively favorable. Furthermore, a significant relationship was observed between smoking/substance abuse by the spouse and well-being of women, which is consistent with the findings of Jenning. Male involvement efforts may benefit from empow-
women's participation in social and economic spheres, provided that antenatal participation does not undermine the preferences or autonomy of women (34).

According to our findings, maternal health was lower in unwanted pregnancies, and the relationship between well-being and pregnancy acceptance was borderline significant. In many studies, the psychological domain of quality of life is synonymous with mental health, mental welfare, and mental well-being (6, 35). In their study, Zahedi et al. reported a lower score of quality of life in unwanted pregnancies (36). Furthermore, a statistically significant association was found between unplanned pregnancy and well-being, which is similar to another study by Krolinger et al. (37).

In another research, Nikpour aimed to compare the quality of life of women after vaginal delivery and cesarean section. According to their findings, scores of physical health and quality of life were higher in the natural delivery group compared to cesarean section (38); however, this study found no significant relationship between well-being and mode of delivery.

A study in Iran was conducted to measure the quality of life two and four months after vaginal delivery and cesarean section. According to their results, there was no significant difference between the two groups (25, 39). Meanwhile, in another study, a significant difference in quality of life and well-being in favor of natural delivery was reported (38, 40, 41), whereas higher quality of life in cesarean section was reported in another research (42). On the other hand, in some studies, spousal support was found to increase the mother's quality of life (19); however, evidence is scarce in this regard (43).

Mir Mohammad Aliei and colleagues' study of quality of life in women with high-risk pregnancies and those with normal pregnancies showed a lower score for the former group (44), while in the present study, the relationship between well-being and complications related to pregnancy and delivery was not significant. Sadat and colleagues also reported no significant difference in the quality of life of women undergoing natural birth and cesarean section two and four months after delivery (39).

In a study by Abbas-Zadeh and colleagues, which aimed to assess the quality of life in pregnant women, there was a direct relationship between the quality of life scores and number of pregnancies, income status, and pregnancy acceptance (19). Likewise, in the present study, the relationship between the acceptance of pregnancy and well-being was borderline significant; however, no significant relationship was observed between economic status and parity. In the mentioned study, spousal support was associated with a higher quality of life.

In another study by Dotlic (2014), which aimed to investigate the effect of mother's BMI on the quality of life during pregnancy, obesity was reported to be a significant predisposing factor for various pregnancy complications, lowering the quality of life. In the mentioned study, scores of quality of life domains, including depression, fatigue, emotional support and acceptance of disease, were significantly lower (45), while in the present study, no significant association was found between BMI, well-being, and the perceived social support from family.

In this study, perceived social support from family had a direct impact on maternal well-being. This finding is consistent with the study by Stapleton, which focused on the welfare of mothers and babies after birth and revealed the potential role of spousal support in mental health interventions (46). This relationship was also confirmed in two other studies by Hamidi (47) and Abdollahzadeh Rafi (48). In addition, in the studies by Kalil et al. (49) and Stevenson, spousal support was reported to affect maternal well-being and reduce depression and anxiety more effectively (50).

Contrary to the majority of studies in this regard, Abedian and colleagues reported an increase in the rate of depression in the postpartum period despite higher social support (51). Moreover, perceived social support in the postpartum period influenced well-being, while no relationship was observed between empowerment and well-being.

However, since there is a direct relationship between postpartum empowerment and perceived social support from family, it is suggested that healthcare personnel attempt to reinforce these two variables in mothers through appropriate training and education. This helps mothers to cope with the stress of the postpartum period induced by the baby, family, and factors
related to pregnancy and childbirth. Moreover, a borderline significant relationship was observed between well-being and unwanted pregnancies, and since unwanted pregnancies are prone to complications and poor outcomes, spousal support is of paramount importance. This is due to the fact that in unwanted pregnancies, women are more likely to experience mental health problems, compared to wanted pregnancies.

Spousal support leads to positive pregnancy outcomes by increasing commitment to pregnancy. To increase the commitment of mothers to unwanted pregnancies, spouses must be more involved in the process of prenatal care (37). Shimamoto provides evidence of the disparate influence of women’s status and empowerment on the involvement of skilled birth attendant in different settings (52), which is consistent with the current study. In another study by Sipsma, the findings suggested that improving reproductive healthcare services requires the prevention of partner abuse and enhancing empowerment among women in Ghana and other low-income countries, particularly among those with no formal education (53).

The strength of this study was investigation of variables and postnatal health-related factors immediately after delivery. On the other hand, the limitation of this study was that the mothers did not have enough time to complete the questionnaires due to the feeding and care of infants.

Conclusion
Postpartum is the most critical period for every woman, which causes fluctuations in the well-being. Identifying the challenges and problems associated with pregnancy and childbirth and exploring the contribution of each factor to the well-being of mothers (e.g., increased family support and women’s empowerment) could be beneficial in this regard. This especially assists the managers, policymakers, and authorities to take effective measures to prevent complications, provide education and treatment, and improve optimal care skills. Moreover, it is an effective step toward promoting the health of mothers, babies, families, and society.

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Conflicts of interest
The authors declare no conflicts of interest.

References
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