Perceived Social Support among Family in Pregnant Women

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Abstract

Introduction

Emotional distress in women during pregnancy has been shown to increase the risk of adverse outcomes for women and newborns. This study aimed to investigate the relationship between perceived social support from family in pregnant women and pregnancy-related factors.

Materials and Methods

The study included 358 postpartum women in the second half of the year 2014 in Fatemiyeh Hospital in Shahroud, North East of Iran. The data collection instruments included Perceived Social Support - Family Scale (PSS-Fa).

Results

Eleven (1.3%) women had poor family support, 100 women (27.9%) had moderate family support and 247 women (69%) had good family support. There was a significant relationship between mother's scores of family support and her age and education, so that mothers with high school diploma and higher education had scores which were significantly higher than the others($P<0.05$). Also, women whose husbands were smoking or drug abuser had lower support scores. There was a significant relationship between social support and the number of pregnancies and pregnancy complications, so the mothers had more pregnancies, the social support was lower ($P<0.05$). Social support in unwanted pregnancies was significantly lower than the wanted pregnancies ($P<0.05$).

Conclusion

Family and social support is associated with pregnancy side effects and outcomes and the social support in high-risk women and unwanted pregnancies was lower.

Key Words: Family, Perceived, Pregnant women, Social support.

Introduction

Social support is a complex and multifaceted concept referring to the voluntary action from one person toward another, which leads to a positive response (1) and this voluntary action comes from different sources, such as family, friends, community or spouse (2) and it appears in various forms of physical and emotional (sympathy, love, care), verbal, financial aid or assistance to the patient's self-assessment (3). Social support and its relationship with pregnancy health have been studied variously (4). For example, social support and healthy behaviors during pregnancy (2, 5, 6) quality of life (7), depression (8), during labor and delivery (9), in young and vulnerable women (10) are among the topics investigated in previous research. Sometimes ethnic differences have been found to relate with the social support provided for mothers. For example, it has been found that U.S. white women receive more social and network support than African American and Latin American women, or Latin American women receive more of their social support from their husbands and mothers, while African Americans are more likely to receive support from relatives (11), or even the gender of the baby has been found influencing (12). Given the increasing importance and influence of social support on promoting the health of mothers and newborns (9) and on prevention of many diseases (13) and an increase in life expectancy (14) and decrease in postpartum depression and better results in pregnancy outcomes (15, 16), perceived support from family and especially the role of the husband as the head of the family is important. In the International Conference on Development, the importance of men involvement in reproductive health programs in developing countries which have higher rates of maternal mortality and pregnancy complications has been demonstrated (17). The importance of spousal support during pregnancy has been studied in different ways, including health behaviors during pregnancy (6, 18), pregnancy outcomes in adolescents (19), unwanted pregnancies (20), stressful factors during pregnancy (21), abortion (22) and social factors and barriers associated with it (23). But a few studies have examined the association between pregnancy outcomes and spousal support. The improvement of maternal health is one of the eight goals set at the Millennium Summit to encourage development in countries around the world (24) and reducing the maternal mortality is a goal is to increase the quality of health care in every country (25) and this is while maternal death is only the tip of the iceberg and its complications which are often ignored are more maternal factors (26). So lack of attention to the supportive role of husband will lead to increased pregnancy complications(27-32), so the quality of care and social support for pregnant women determines the quality of pregnancy, delivery and maternal and infants health (33). Scale of Perceived Social Support also focus on the persons cognitive assessment of her environment and on her certainty that the necessary support will be available when required (34). The role of social support as a resource against stress and psychological and physical symptoms is well-proven. Social support is a multidimensional construct that includes the range of social network, emotional support, instrumental support, quality of social support and mutual assistance from others (34); however, there is contradictory information in this regard (5). So, this study was to determine the relationship between mothers support provided by the family and factors related to pregnancy. It is hoped that this study will be an important step in identifying the factors and gaps and help to improve the quality

of maternal health and the results can be of practical use to managers and officials.

Materials and Methods

This descriptive-analytic study was conducted on 358 women who delivered in the second half of 2014 in Fatemiyeh Hospital in Shahroud, North East of Iran. After obtaining permission from the Research Council of Shahroud University of Medical Sciences, the researchers referred to the post-partum ward and after explaining the objectives of the study and obtaining verbal consent from the mothers, sampling was done.

Inclusion criteria included:

- being Iranian,
- aged between 18-45 years,
- lack of mental health problems,
- lack of underlying medical conditions,
- lack of experiencing severe stressful events for the past 9 months,
- having at least reading and writing literacy.

Exclusion criteria included:

- not having any of these criteria and

- a lack of desire to continue to participate in the study.

The independent variable is the perceived social support from family that affects pregnancy factors.

Data collection tools were two questionnaires. The first questionnaire was a demographic characteristics of women with pregnancy; the second questionnaire was perceived social support from the family. The reliability and validity in questionnaire were confirmed by Procidano et al.(35) and its Persian translation is available at www.ravansanji.ir.

Perceived Social Support - Family Scale (PSS-Fa) which has been translated by Sanaee, and colleagues and it has been used in Iran by Aslani et al. (36) and

Hamidi et al.(37). The questionnaire has been used in studies related to pregnancy issues (38-40). Inventory options are Yes, No, and I do not know. I do not know is always equal to zero; in questions 3,4,16,19 and 20, No is scored 1 and in the rest of the questions, Yes is scored 1.

The total score ranges between 0-20. A score of 0-7 indicates of poor support, of 7-14 indicates average support and of 14 - 20 indicates good support. High score means more social support from family.

In order to collect demographic data, a researcher-made questionnaire based on the objectives of the study was used. The questionnaire was completed based on information contained in the medical records of the patients and through interviewing them. Personal information included age, mother's education, husband's education, mother's employment status, economic status based on household assets, time of pregnancy, delivery, acceptance of pregnancy, baby birth weight and Apgar score, pregnancy complications, delivery complications, maternal BMI at the beginning of pregnancy, number of prenatal cares done, smoking and drug abuse by the mother or her husband.

The economic status of the participants was quantified using the principal component analysis based on household amenities and home appliances, and they were categorized into three groups of high, medium and low economic status groups. Also, in the beginning, it was stated objectives of the study and All participants were pleased to participate in this study.

Quantitative data were computed as means and standard deviations (SD) and qualitative data were presented as frequencies and percentages. The relationship between variables was assessed using t-test and chi-square test at 0.05 level of significance.

Results

In this study, 358 postpartum women were studied for their perceived support from family. The average age of the participating women was 27.65±5.08 years and their age range was between 18 and 41 years. The mean score of perceived social support from family by the mothers was 15 ± 3.7 and ranged between 5 and 20. 11 (3.1%) mothers had poor family support, 100 women (27.9%) had moderate family support and 247 women (69%) had good family support. Demographic data of mothers and their husbands are displayed in (Table.1).

As the data in this table indicate, 38.8% of mothers were overweight and obese. Most mothers were housewives (89.1%). The data also show that there were no significant relationships between perceived support from family with mothers BMI, family economic status and occupation of the mother, smoking and substance abuse by the mother, and husbands education (P>0.05).

But a significant relationship was found between mothers score of family support and her education, so that mothers with high school diplomas and higher education had scores which were significantly higher than the others (P<0.05).

Moreover, a significant relationship existed between perceived social support from the family and mothers age, so that women over 35 who showed poor family support (9.1%) were more than those in the 18-35 age group (2.7%). Also, women whose husbands were smoking or abuse drug had lower social support scores and a significant relationship was observed between perceived social support and smoked husbands (P<0.05).

Factors related to pregnancy and childbirth are shown in (Table.2). The table shows that the most common delivery method (65.9%) was cesarean delivery. In accepting the pregnancy, number of unwanted pregnancies was 20.1% and in 163 cases (45.5%) at least one pregnancy complications, including gestational diabetes, hypertension, preterm labor, anemia, urinary tract infection, twins, during pregnancy bleeding have been reported.

The reported pregnancy and delivery complications were as follows: diabetes 9.5% (n=34), pregnancy induced hypertension 12.8% (n= 46), preterm labor 3.4% (n= 12) , urinary tract infection 17% (n=61), twins 2.2% (n= 8), postpartum hemorrhage 10.1% (n= 36), instrumental delivery 1.1% (n= 4), rupture of grade 3 and 4 (0.8%, n=3), infant hospitalization 11.5% (n=41) and preterm delivery 1.7% (n=6).

Results showed the mothers perceived social support is significantly related with parity of pregnancy and with the increasing parity of pregnancies in mother, the support level becomes lower (P<0.05). There was a significant relationship between the social support and pregnancy complications, so that poor social support in women who have pregnancy complications was 5.5% and in mothers without pregnancy complications was 1%, which is a significant difference (P<0.05).

Significantly lower social support during the pregnancy was in unwanted pregnancies compared to the wanted ones (P<0.05).

Results showed there was no significant correlation between social support and the type of delivery, birth weight, number of prenatal cares and obstetric complications (P>0.05).

Table 1: Frequency distribution and the relationships between demographic variables among mothers with perceived social support from the family

Variables	Perceived social support from the family				P value
	Poor (%)	Moderate (%)	Good (%)	Total (%)	
Occupation					0.5
Housewife	10(3.1)	92(28.8)	217(68.0)	319(100.0)	
Employed	1(2.6)	8(25.5)	30(76.9)	39(100.0)	
Mothers education					0.002*
Less than 8 years	1(1.5)	23(34.3)	43(64.2)	67(100.0)	
Between 9- 12 years	8(4.1)	62(31.5)	127(64.4)	197(100.0)	
More than 12 years	2(2.1)	15(16.0)	77(81.9)	94(100.0)	
Husbands education					0.24
Less than 8 years	3(5.6)	14(25.9)	37(68.5)	54(100.0)	
Between 9- 12 years	6(2.7)	70(31.4)	147(65.9)	223(100.0)	
More than 12 years	2(2.5)	16(19.8)	63(77.7)	8	
Economic situation					0.93
Poor	7(3.8)	51(28.2)	123(68.0)	181(100.0)	
Moderate	2(2.3)	24(27.3)	62(70.4)	88(100.0)	
Good	2(2.2)	25(28.1)	62(69.7)	89(100.0)	
Mothers BMI					0.59
Thin (below 19.8)	2(4.7)	11(25.6)	30(69.7)	43(100.0)	
Normal (19.8-26)	5(2.8)	45(25.6)	126(71.6)	176(100.0)	
Overweight (26-29)	1(1.3)	21(28.0)	53(71.7)	75(100.0)	
Obese (over 29)	3(4.7)	23(35.9)	38(54.9)	64(100.0)	
Smoking husband (Yes)					0<0.001*
Cigarette	6(13.3)	18(40.0)	21(46.7)	45(100.0)	
Water pipe	0	10(35.7)	18(64.3)	28(100.0)	
Drug abuse by the husband (Yes)	2(14.2)	7(50.0)	5(35.7)	14(100.0)	0<0.001*
Mothers age					0.015*
18-35 years	9(2.7)	99(29.5)	228(67.8)	336(100.0)	
Over 35 years	2(9.1)	1(4.5)	19(86.4)	22(100.0)	
* Level of significance is 0.05.					

Table 2: Frequency distribution and the relationships between pregnancy and delivery variables and perceived social support from the family

Perceived social support from the family					
Variables	Poor (%)	Moderate (%)	Good (%)	Total (%)	P value
Pregnancy parity					
Gravid 1	0	35(28.9)	86(71.1)	121(100)	
Gravid 2 and 3	6(2.9)	58(28.7)	138(68.3)	202(100)	0.04*
Gravid 4 and more	5(14.3)	7(20.0)	23(65.7)	35(100)	
Delivery type					
Vaginal	6(4.9)	37(30.3)	79(64.8)	122(100)	
Caesarean	5(2.1)	63(26.7)	168(71.2)	236(100)	0.23
Pregnancy acceptance					
Unwanted	6(8.3)	25(34.7)	41(56.9)	72(100)	
Wanted	5(1.7)	75(26.2)	206(72.1)	286(100)	0.03*
Delivery complications					
Yes	5(5.1)	32(32.3)	62(62.6)	99(100)	
No	6(2.3)	68(26.4)	184(71.3)	258(100)	0.18
Pregnancy complications					
Yes	9(5.5)	44(27.0)	110(67.5)	163(100)	
No	2(1.0)	56(28.7)	137(70.3)	195(100)	0.049*
Prenatal care					
Less than 10 times	6(3.7)	54(33.1)	103(63.2)	163(100)	
More than 10 times	5(2.6)	46(23.6)	144(73.8)	195(100)	0.95
Baby birth weight					
Less than 2,500 g	0	8(44.4)	10(56.6)	18(100)	
More than 2,500 g	11(3.2)	92(27.1)	237(69.7)	340(100)	0.23

Discussion

This study aimed to investigate the relationship between perceived social support from family and pregnancy-related factors in pregnant women. In this study significant relationships were observed between mothers education, smoking and substance abuse by the husband and acceptance of pregnancy, pregnancy complications, pregnancy order, with perceived social support from the family. The average age of mothers was 27.65±5.08 years and their age range was between 18-41 years. Most of the mothers were housewives and had high school education, and most pregnancies were wanted and the percentage of

mothers whose prenatal care were done was high, and these results about age, education, acceptance of pregnancy, occupation, number of cares are very close to Abedian et al. findings, who investigated the relationship between social support and postpartum depression in mothers with preeclampsia (41). In this study, the mean score of perceived social support from family was 15±3.7 and majority of mothers received good social support, whereas most mothers in the aforementioned study received moderate social support which can justify the suffering of preeclampsia in these mothers, and can indicate that in women who have less social support pregnancy complications are higher on these mothers; this relationship was significant in the present study as well.

In this study, most mothers had their second pregnancies, but in their study, more than half of the participants were primiparous. In the present study, unlike their study most deliveries were cesarean (41). In this study, no relationship was observed between mothers social support from the family and baby birth weight, but pregnancy complications and family support were significantly related. In another study with 109 women from Latin America which was conducted to assess the impact of ethnicity and culture on anxiety in pregnant women, and the role of social support, medical personnel support and spousal support in pregnancy complications such as low birth weight and preterm delivery were also investigated and it was found that for women in Latin America whose spousal support was low, babies' Apgar score and birth weight were low. In the culture with high social support, pregnancy complications were significantly lower (42). In other studies also mothers perceived social support from friends and family and their husbands led to the improvement of pregnancy outcomes (14),

and even the mothers support during labor and delivery led to better outcomes and reduced medical interventions (43). In the present study, a significant positive correlation was found between education level and perceived social support from family. In a study by Sadeghi Sahebzad, social support scores were significantly different in different economic classes (44) and in the Seyfzadeh et al. study, the relationship between socio-economic level and social support of older people was significant (45). Cohen and colleagues also found a significant relationship between increase in the family support and mothers education (23), but in the study by Tall and colleagues perceived social support questionnaire for diabetic patients was used. The questionnaire phrases were designed so that the knowledge about diabetes was more important than level of education (46).

In our study, the relationship between smoking and drug abuse and mothers perceived family support was significant, but in the Nyamukapa study there was no significant relationship between spousal support score and using alcohol and tobacco (6). In a study by Hamidi it was found that mental health is more than in a person who perceived from family (37) and others have shown that in pregnant women due to the influence of perceived support, an increase in mental health was followed by recovery and a positive impact on the health behaviors during pregnancy (47), and this shows the importance of the relationship between pregnancy complications and pregnancy acceptance with family support.

Kroelinger and colleagues also found a significant relationship between spousal support score and unwanted pregnancy (20), Meanwhile, in a large study that was done by Teitler and his colleagues in vulnerable families, it was found that financial support by the husband led to an increase in the rate of prenatal care (48),

and also in another study on the relationship between socioeconomic status and social support, a significant correlation was found and the highest mean score of social support was in the good economic class (44), whereas in our study perceived support from family showed no significant relationship between economic status and maternal health care.

Conclusion

Given the significant relationship between spousal support and pregnancy complications, it is recommended that an education program for husbands and families be designed so that they will collaborate and provide further support to help the prevention of pregnancy complications and the promotion of a healthy pregnancy. Especially women whose husbands are smoking and abuse substance should receive particular attention. With respect to the support the mothers received during the fourth and more pregnancies, and noting that pregnancy complications increased with mothers age, more attention to this vulnerable group is required. Moreover, due to the government policies on population growth and to avoid pregnancy complications in fourth and further pregnancies, training for increased family support for pregnant women seems necessary. One of the problems in unwanted pregnancies is the increase in pregnancy and delivery complications, and as our study showed that family support in these pregnancies reduce, it is recommended that providing required training for the families and increasing the support for mothers be included in prenatal care program.

Conflict of interest: None.

Acknowledgment

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