

Determining the relationship between marital adjustment and risk of pregnancy: A case-control study

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Abstract

Aim: This study was planned to assess the relationship between marital adjustment and risk experienced by women during pregnancy.

Materials and Methods: Women who presented to the pregnancy outpatient clinic of the hospital and were admitted to the perinatology clinic comprised the target population of the study. The sample comprised 280 (140 case and 140 control group) pregnant women. Effect size was found as 0.5 and power as 99% depending on type 1 error 0.5. This study was conducted between March and August 2016. Differences between categorical variables were compared by the Chi-square test or Fisher exact test. The Mann-Whitney U test was used to determine the differences between the median scores of the groups.

Results: Three point six percent of the healthy pregnant women and 8.2% of the at-risk pregnant women had problems with their husbands. While 91.4% of the healthy pregnant women defined their happiness level as happy or very happy, this rate was 82.9% for the at-risk pregnant women ($p>0.05$). While the median Dyadic Adjustment Scale score of the healthy pregnant women was 56.00 (29-70), it was 53.00 (20-69) for the at-risk pregnant women. The difference between the two groups was statistically significant ($p<0.001$).

Conclusion: The at-risk pregnant women in this present study experience negative feelings about pregnancy more than did the healthy pregnant women. Health professionals should be aware that pregnancy affects not only women but also all the family members. Therefore, care plans to be prepared for pregnant women should also include the family.

Keywords: Marriage; marital adjustment; pregnancy; risk; spouse relationship

INTRODUCTION

The term "marital adjustment" has been used for evaluating the quality of marriage and family

relationships, marital success and happiness (1). Marriage is a form of relationship that makes togetherness, cooperation, mutual sexual satisfaction and continuity of the family lineage possible. Marriage, a part of social life, is a unity which requires individuals to be in harmony. Establishment of adjustment in marriage which comprises mental, emotional, sexual and social relationships is an important factor which forms the basis for the physical and mental health of spouses (2-4). It has been demonstrated that marriage affects physical health, and a strong relationship exists between inefficient marital adjustment and low physical health. Satisfaction in marriage enhances one's well-being and happily married couples experience less depression, anxiety and crisis (5-7).

Due to the nature of the human, establishment of harmony between the man and woman in marriage has been a

major problem since ancient times, because the family is not just an institution in which two people are unified. Marriages in which the union of the two people cannot be achieved sufficiently or there exist cultural and individual differences between these two people can be worn out due to the lack of adjustment, and might lead to difficulties in interpersonal relationships (8,9).

Marital adjustment is affected by several factors: social status, level of education, age at marriage, knowing each other (acquaintance) before marriage, having a good relationship with parents during childhood, the level of happiness in parents' marriage, adaptation to gender roles, approval of the marriage by friends and the family, ethnic and religious background of the couple (10,11).

Another factor that can affect the marital adjustment is pregnancy during which individuals experience different emotions (12). On the other hand, pregnancy can be affected by marital adjustment. The most important sources of support of pregnant women are their close family members, particularly their spouses. Supportive

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relationships in the life of people are considered to play an important role in the promotion of health, prevention of health problems, protection against the effects of stress and strengthening of coping efforts. Individuals who cannot cope with problems alone can more comfortably deal with them if receive adequate support. As social supports pregnant women receive increase, so does their adaptation. It has also been reported that women whose motherhood roles are approved by their husbands and who share their problems with their spouses experience fewer problems (11,13,14).

In a study, pregnant women were found to have received the most support from their husbands during pregnancy. At the same time, it was determined that the average scores of pregnancy problems of non-supported pregnant were high (15). In the another study conducted with women with hyperemesis gravidarum (HG), found that marital harmony scores between women with HG and their husbands was significantly lower than that between pregnant women without HG and their husbands (16). However, if pregnancy is risky, pregnant women can suffer ambivalent emotions longer and more often. Such emotions suffered by high-risk pregnant women can affect in the family relationships (14,17).

MATERIALS and METHODS

Design and Aim

This case-control study analyzed the relationship between marital adjustment and risk experienced by women during pregnancy.

Settings and Participants

The study was conducted at Erciyes University Medical Faculty Hospital located in the city center of Kayseri. Women who presented to the pregnancy outpatient clinic of the hospital and were admitted to the perinatology clinic comprised the target population of the study.

Sample

Sampling randomization was done based on three variables (age, education level and gestational age) in the research. The sample comprised 280 (140 case and 140 control group) pregnant women. Effect size was found as 0.5 and power as 99% depending on type 1 error 0.5. This study was conducted between March and August 2016. The inclusion criteria for case group were being hospitalized for at least 72 hours in the obstetrics clinic and being diagnosed with high-risk factors related to pregnancy (hyperemesis gravidarum, hemorrhagic conditions of pregnancy, premature membrane rupture, preterm labor, preeclampsia, and gestational diabetes mellitus), having no psychiatric problems, having had no chronic illnesses before getting pregnant. The inclusion criteria for control group were being diagnosed with no risk factors related to pregnancy, having no psychiatric problems, having had no chronic illnesses before getting pregnant.

Measurements

To collect the study data, the Pregnant Information Form and Revised Dyadic Adjustment Scale (RDAS) were used.

Pregnant Information Form

Developed by the researchers upon the literature review (6,10,11) the questionnaire consisted of 23 questions examining the pregnant's socio-demographic characteristics (age, educational level, income, etc.), their marital life and feelings about pregnancy.

Revised Dyadic Adjustment Scale (RDAS)

The Dyadic Adjustment Scale was developed to assess the quality of the relationship between couples by Spanier in 1976 (18). In this present study, the revised Dyadic Adjustment Scale developed by Busby et al. (19) was used. Revised Dyadic Adjustment Scale was adapted to Turkish in 2007 by Gunogdu (20). A Likert type scale (for each item the following points are given: 1: never, 2: low, 3: moderate, 4: too much, 5: extreme) is used. The scores to be obtained from the scale range from 14 to 70. High total scores obtained from the overall scale indicate that the person has good relationships or marital adjustment (19).

Data Analysis

The data acquired in the study were assessed in the IBM SPSS Statistics Standard Concurrent User V 25 (IBM Corp., Armonk, New York, USA) statistics packaged software. Differences between categorical variables were compared by the Chi-square test or Fisher exact test. The Mann-Whitney U test was used to determine the differences between the median scores of the groups. The value of $p < 0.05$ was accepted as statistically significant.

Ethics

In order to conduct the study; ethics committee approval from the Clinical Trials Ethics Committee (2013/315), and written institution permission from the institution where the study was conducted were obtained. The pregnant women, who were included in the study, were informed about the purpose of the study and their written and oral consents were obtained.

RESULTS

While the mean age of the healthy pregnant women surveyed was 26.7 ± 5.8 , that of the at-risk pregnant women was of 28.0 ± 5.8 . Whereas 34.3% of the healthy pregnant women were high school or higher graduates, 51.4% of the at-risk pregnant women were primary school graduates, and the difference was statistically significant ($p=0.006$). Whereas 30.0% of the healthy pregnant women were employed, this rate was 17.9% for the at-risk pregnant women, and the difference was statistically significant ($p=0.017$) (Table 1).

Fifty percent of the healthy pregnant women and 37.9% of the at-risk pregnant women stated that their income status was good, and the difference was not statistically significant. While 4.3% of the healthy pregnant women had harmful habits, this rate was 7.9% for the at-risk pregnant women, and the difference was not statistically significant ($p>0.05$) (Table 1).

Table 1. Demographic characteristics of the study groups

Features	Healthy Pregnant (n=140)		At-risk Pregnant (n=140)	
	n	%	n	%
Average age (X±Ss, year)	26.7 ± 5.8		28.0 ± 5.8	
Gestational age (X±Ss, week)	25.2 ± 9.8		27.5 ± 8.6	
	U= 8384.50		p= 0.036	
	U= 8501.00		p= 0.055	
Educational status				
Primary school	46	32.9	72	51.4
Secondary school	46	32.9	33	23.6
High school or higher	48	34.3	35	25.0
	X ² =16.455		p= 0.006	
Employment Status				
Employed	42	30.0	25	17.9
Unemployed	98	70.0	115	82.1
	Fisher = 5.670		p= 0.017	
Income Status				
Good	70	50.0	53	37.9
Average	62	44.3	69	49.3
Poor	8	5.7	18	12.8
	X ² = 7.204		p= 0.125	
Harmful Habits Status				
Yes	8	4.3	11	7.9
No	134	95.7	129	92.1
	X ² = 1.566		p= 0.211	

Twenty point seven percent of the healthy pregnant women and 32.9% of the at-risk pregnant women had extended families ($p < 0.05$). Three point six percent of the healthy pregnant women and 8.2% of the at-risk pregnant women had problems with their husbands ($p < 0.05$). While 91.4% of the healthy pregnant women defined their happiness level as happy or very happy, this rate was 82.9% for the at-risk pregnant women ($p > 0.05$) (Table 2).

As for feelings, it was determined that 88.6% of the healthy pregnant women and 71.4% of the women with risky

pregnancies were pleased to have become pregnant, that 93.6% of the healthy pregnant women and 77.1% of the at-risk pregnant women had a desired pregnancy, and that 95.7% of healthy pregnant women and 77.9% at-risk pregnant women dreamed about their babies. There was statistically significant difference between the two groups in terms of the most common feelings ($p < 0.05$) (Table 3). The marriage adjustment scale scores of healthy pregnant women with positive feelings were found to be higher and statistically significant than those with risky pregnancies (Table 4).

Table 2. Family characteristics of the study groups

Features	Healthy Pregnant (n=140)		At-risk Pregnant (n=140)	
	n	%	n	%
Family Type				
Nuclear	111	79.3	94	67.1
Extended	29	20.7	46	32.9
	X ² = 6.442		p= 0.040	
The status of experiencing problems with husbands				
Yes	5	3.6	18	8.2
No	135	96.4	122	87.1
	X ² = 8.005		p= 0.005	
The level of happiness on marriage				
Excessive unhappy	2	1.4	2	1.4
Unhappy	10	7.1	22	15.7
Happy	92	65.7	92	65.7
Extremely happy	36	25.7	24	17.2
	X ² = 11.978		p= 0.062	

Table 3. The distribution of the feelings about pregnancy of pregnant women

Feelings	Healthy Pregnant		At-risk Pregnant		X ²	p
	n	%	n	%		
The happy with pregnancy	124	88.6	100	71.4	12.857	.001
Desired pregnancy	131	93.6	108	77.1	15.116	<.001
Dream about the baby	134	95.7	109	77.9	19.464	<.001
Sharing about pregnancy with others	128	91.4	131	93.6	0.463	.496
Willing to assume the role of motherhood	129	92.1	123	87.9	1.429	.232
Not consider the sex of the baby important	35	25.0	32	22.9	0.177	.780

Table 4. The distribution of the RDAS median scores according to the feelings about pregnancy of women

Feelings	Healthy Pregnant Median (Min-Max)	At-risk Pregnant Median (Min-Max)	U	P
The happy with pregnancy	56.50(29-69)	53.50(29-69)	4858.50	.005
Desired pregnancy	60.00(44-70)	51.00(23-64)	210.00	.030
Dream about the baby	57.00(29-69)	54.00(23-69)	5628.00	.002
Sharing about pregnancy with others	56.50(29-70)	53.00(20-69)	6174.00	<.001
Willing to assume the role of motherhood	56.00(29-70)	52.00(23-69)	5773.00	<.001
Not consider the sex of the baby important	55.00(36-61)	45.00(20-64)	186.00	<.001

* Mann-Whitney U test was used

The median total scores of the pregnant women obtained from the RDAS are shown in Table 5. While the median dyadic adjustment scale score of the healthy pregnant women was 56.00 (29-70), it was 53.00 (20-69) for the at-risk pregnant women. The difference between the two groups was statistically significant ($p < 0.001$).

Table 5. The median scores of the pregnant women obtained from the RDAS

RDAS	Healthy Pregnant	At-risk Pregnant	Test
Median (Min-Max)	56.00 (29-70)	53.00 (20-69)	U=7117,00 p=<.001

* Mann-Whitney U test was used

DISCUSSION

The studies on the issue deal with the relationship between marital adjustment and different variables. Those studies are mostly involved in the relationship between marital adjustment and 'demographic variables, psychological characteristics and personality traits' (21-23). Our study investigated the relationship between pregnancy risks and marital adjustment.

Many studies (22,24,25) revealed that socio-demographic characteristics affected the harmony between spouses. In this present study, the comparison of the two groups in terms of sociodemographic characteristics indicated that the at-risk pregnant women were less educated than the healthy pregnant women. In addition, the number of the women who were employed in the at-risk pregnant group was lower than that in the healthy pregnant group.

The median RDAS score was 56.00 (29-70) for the healthy pregnant women and 53.00 (20-69) for the at-risk pregnant women. The highest possible score that can be obtained from the RDAS is 70. Higher total scores suggest that marital adjustment or the relationship between a couple was better. Although the mean scores both groups obtained in this study differ from each other, neither group achieved very high scores. As for gender relations in Turkish society, due to the outcomes of gender roles, problems arise, which affects the adjustment between spouses. However, the most important source of support for pregnant women is their husbands. The most important factor affecting a pregnant woman's mental health in this period is the attitude displayed by her husband and the psychosocial environment she is in. Women who can share their problems with their husbands are reported to suffer fewer problems (14,26-29). In the literature, there are studies indicating the positive effects of the spousal support on a woman's pregnancy and birth experience (14,26). In a study conducted with risky and non-risky pregnancies, subscale mean scores - the characteristics of pregnancy and spousal relationship - obtained from the psychosocial health assessment scale was determined to be statistically insignificant between groups (30). This result is different from that found in the present study which indicated a statistically significant difference between the mean scores of the women with healthy pregnancy and those of the women with risky pregnancy obtained.

Experiencing ambivalent emotions is common in pregnancy. The at-risk pregnant women in this present study experience negative feelings about pregnancy more

than did the healthy pregnant women ($p < 0.05$). In addition, marital adjustment scores of healthy pregnant women with positive feelings about pregnancy were higher than those with risky pregnancy. A high-risk pregnancy is a social, physiological and emotional condition which threatens fetal and maternal health and increases the likelihood of morbidity and mortality. Thus, a pregnant woman will be affected psychologically much. That women experience negative feelings about pregnancy more intensely might be the outcome of this condition. On the other hand that women experience negative feelings about pregnancy more intensely might affect the pregnancy negatively.

LIMITATIONS

A limitation of this study is its small sample size. In addition, this was a single-center study.

CONCLUSION

Health professionals should be aware that pregnancy affects not only women and but all the family members as well when they provide training and consultancy services during pre-, intra- and post-partum periods. Therefore, care plans to be prepared for pregnant women should also include the family, particularly husbands and their relationship. In addition, it is suggested that initiatives should be planned for couples who have problems related to marital adjustment and that they should be referred to relevant specialists when necessary.

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REFERENCES

- Onem R, Celik S, Oncu J, et al. Assessment of marital adjustment and sexuality in women with rheumatoid arthritis. Arch Rheumatol 2014;29:280-8.
- August KJ, Kelly CS, Markey CN. Marriage, romantic relationships, and health. In: Howard SF, eds. Encyclopedia of Mental Health. 2nd edition, Waltham: MA Academic Press; 2016;46-52.
- Canel AN. Communication and life skills in marriage. <https://docplayer.biz.tr/7609526-Evlilikte-iletisim-ve-yasam-becerileri-azize-nilgun-canel.html> access date 2020
- Çalışkan S, Iştın DS. Marriage, wedding and the image of woman in contemporary art: Gülsün Karamustafa, Şükran Moral, Canan ve Gülçin Aksoy. İdil Dergisi 2017;6:2341-57
- Manju. Marital adjustment and depression. IJSR 2016;3:44-51.
- Kisa S, Zeyneloglu S, Yilmaz D, et al. Quality of sexual life and its effect on marital adjustment of Turkish women in pregnancy. J Sex Marital Ther 2014;40:309-22.
- Ghoroghi S, Hassan S, Baba M. Marital adjustment and duration of marriage among postgraduate Iranian students in Malaysia. International Education Studies 2015;8:50-9.
- Gundogan M. The evaluation of the relationships between partner's attachment styles and dyadic adjustment in the couples. Ph.D. thesis, Osmangazi University, Eskisehir, 2015.
- Sener A, Terzioglu G. The research of the factors that affect the marital adjustment in the family. Ph.D. thesis, Hacettep University, Ankara, 2002.
- Bayraktaroglu H, Cakici E. Factors related with marital adjustment. Eurasian J Educational Res 2013;53:297-312.
- Demirbas H, Kadioglu H. Adaptation to pregnancy in prenatal period women and factors associated with adaptation. J Marmara University Institute of Health Sciences 2014;4:200-6.
- Yekenkunril D, Mete S. Investigation of relationship in between nausea and vomiting in pregnancy, marital adjustment and spouse relationship. Dokuz Eylül University Electronic J Nursing School 2012;5:89-95
- Zarghani NH, Nazar M, Shayeghian Z, et al. Social support in the pregnant and non-pregnant women and its associated dimensions. J Nursing and Midwifery Sciences 2016;3:11-8.
- Abdollahpour S, Ramezani S, Khosravi A. Perceived social support among family in pregnant women. Int J Pediatr 2015;3:879-88
- Yanikkerem E, Altiparmak S, Karadeniz G. The determination of the physical health problems experienced during pregnancy. Family and Society J 2006;3:35-42.
- Tasci E, Saruhan A. Marital adjustment levels of pregnant women with hyperemesis gravidarum. Gynecology Obstetrics J 2011;9:2227-33
- Currie J, Barber CC. Pregnancy gone wrong: women's experiences of care in relation to coping with a medical complication in pregnancy. New Zealand College of Midwives J 2016;52:35-40.
- Spanier GB. Measuring dyadic adjustment: new scales for assessing the quality of marriage and similar dyads. J Marriage Fam 1976;38:15-28.
- Busby DM, Crane DR, Larson JH, et al. A revision of the DAS for use with distressed and nondistressed couples: Construct hierarchy and multidimensional scales. J Marital Fam Ther 1995;21:289-308.
- Gundogdu A. Relationships between self-construals and marital quality. Ph.D. thesis, Middle East Technical University, Ankara, 2007.
- Cakir S. The investigation of married people's marital adjustment according to their parental bonding and demographic variables. Ph.D. thesis, Ankara University, Ankara, 2008.

22. Islam N, Shahrier MA, Sultana N. Effects of socio-demographic factors on the marital adjustment of working women in Bangladesh. *J Life Earth Sci* 2015;10:31-8
23. Gunes M, Selcuk H, Demir S, et al. Marital harmony and childhood psychological trauma in child marriage. *J Mood Disorders* 2016;6:63-70.
24. Uzuncakmak T, Yilmaz FA. Determination of dyadic adjustment, happiness and related factors in married Turkish women living in Anatolia. *Journal of Religion and Health* 2020.
25. Erdogan E, Karakas SA. Analysis of sexual life quality and marital satisfaction in women with breast cancer: Turkish sample. *Int J Caring Sci* 2019;12:1497-505.
26. Sokoya M, Farotimi A, Ojewole F. Women's perception of husbands' support during pregnancy, labour and delivery. *IOSR-JNHS* 2014;3:45-50.
27. Omidvar S, Faramarzi M, Hajian-Tilaki K, et al. Correction: Associations of psychosocial factors with pregnancy healthy life styles. *PLoS ONE* 2018;13:e0197389.
28. Mermer G, Bilge A, Yücel U. Evaluation of perceived social support levels in pregnancy and postpartum periods. *J Psychiatric Nurs* 2010;1:71-6
29. Akkaş SC. Harmony between spouses during pregnancy. Ph.D. thesis, Adnan Menderes University, Manisa, 2014
30. Gumusdas M, Ejder SA, Ozorhan EY. Comparison of psycho-social health in pregnant women with and without risk. *HSP* 2014;1:32-42.