Relationship Between Perceived Social Support And Complaints During Pregnancy And Their Effects On Quality Of Life

Alp Yilmaz F¹, Uzunçakmak T²

ABSTRACT

Objective: The current study aimed to determine the relationship perceived social support with pregnancy complaints and quality of life during pregnancy.

Methods: This cross-sectional study was conducted with 493 pregnant women from January 2018 to – January 2019. Study data was collected using a Descriptive Characteristics Form, Multidimensional Perceived Social Support Scale and Complaints During Pregnancy and Their Effects On Quality of Life Scale. Descriptive statistics, Kolmogorov-Smirnov test, independent-samples t-test, One-Way ANOVA were used in data assessment and Tukey's-b test and Pearson correlation analysis were used in post-hoc correlation analyses.

Results: A statistically significant negative correlation was detected between the effect of pregnancy complaints on quality of life total score and the perceived social support. Gestational week, planning status of pregnancy and social support were found to be statistically significant factors affecting the pregnancy complaints and quality of life.

Conclusions: Nurses may offer care, training and consultation services to increase the social support and quality of life of pregnant women.

Keywords: Pegnancy, Social Support, Quality Of Life

1.INTRODUCTION

Pregnancy is an important period for a woman and her family. This period causes significant anatomical, physiological and psychological changes in mother's organism (1). A number of complaints occur during pregnancy in association with these changes. Such changes, described as frequent pregnancy complaints, ranges broadly from nausea-vomiting and heartburn to leg cramps, hemorrhoids and respiratory distress (2). These signs and symptoms may differ depending on the trimester and the resulting complaints affect the daily activities and thus the quality of life of pregnant women (3). In studies, it was reported that pregnancy-induced physical symptoms, fatigue, mood swings and limitations resulted in decreased quality in every aspect of life (4-6). Therefore, intrauterine period is a high-priority period that requires an environment in which the physiological, psychological, emotional and spiritual needs of the fetus are met (7,8).

Social support is the support provided by family and friends. Social support system is an important source in preventing, solving and treating the sociological and psychological problems of individuals and helping them cope with difficult (9). Social support receive during pregnancy not only facilitates adaptation to pregnancy but also contributes positively to maternal and fetal health (10). Pregnant women receiving high levels of social support have a happier pregnancy period full of positive feelings (1).

Healthcare professionals must assume important responsibilities in promoting the quality of life and increasing adaptation to physical, psychological and social changes induced by pregnancy which is an important period in a woman's life (11). However, it is seen that no studies are available in the Turkish literature investigating the correlation of perceived social support with pregnancy complaints and quality of life. To this end, the study was conducted to reveal the correlation of perceived social support with pregnancy complaints and quality of life of

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¹ Assistant Prof. PhD, RN, Bozok University, Faculty of Health Sciences, Department of Nursing, Yozgat, Turkey, efigenden@gmail.com, orcid:0000-0001-6022-0978

² Assistant Prof. PhD, RN, Bozok University, Faculty of Health Sciences, Department of Nursing, Yozgat, Turkey, tugba.uzuncakmak@yobu.edu.tr, orcid:0000-0001-7614-7728



pregnant women and collect data for a more effective provision of services thereon.

2.METHOD

2.1.Study Design

The study design was descriptive.

2.2.Study Population and Sample

The study was conducted in the Yozgat city center. Study population consisted of pregnant women visiting the gynecology and obstetrics clinics of a research hospital. In previous studies, pregnancy complaints were reported in 20% of women. Based on this ratio, the sample size was calculated using a sample size formula from an unknown population (95% confidence, alpha=0.05 fault and n=t²pq/d², n= $(1.96)^2(0.20\ 0.80)/0.05^2$) and the number of pregnant women required for this study was calculated as 246. 493 pregnant women were included in the study.

2.3.Data Collection Tools

Data was collected using a descriptive characteristics form, Multidimensional Perceived Social Support Scale, Pregnancy Complaints and Effect on Quality of Life Scale.

Descriptive Characteristics Form is a 14-item form comprised of personal information such as age, education, profession of pregnant women and their husbands and obstetric characteristics such as gestational week, frequency of prenatal examinations.

Multidimensional Perceived Social Support Scale was developed by Zimmet et al (1988). Its validity and reliability studies were performed and its construct validity was evaluated by Eker and Arkar (1995). The same authors reviewed the "Factor Structure, Validity and Reliability of Multidimensional Perceived Social Support Scale Revised Form" in 2001 and found that the internal consistency of scores from MSPSS and its subscales were acceptable (Cronbach's alpha coefficients= 0.80-0.95) (12).

Pregnancy Complaints and Effect on Quality of Life Scale was developed by Foxcroft et al. (2008) and subjected to Turkish validity and reliability testing by Özorhan (2016). It is a scale that measures the complaints during pregnancy and their effects on the quality of life. It consists of two sections and 42 items. In the first section, pregnancy-related complaints and their frequency in the past one month were assessed on a 4-point Likert type scale (never-0, rarely-1, sometimes-2, often-3). In the second section, the effect of complaints on daily activities were measured on a 3-point Likert type scale (not at all-0, slightly-1, highly-2). The scale does not have a cut-off point. As the score increases, the

quality of life decreases. Cronbach's alpha reliability coefficient is 0.91 (13).

2.4.Data Collection

The study was conducted from January 2018 to January 2019. Data was collected by surveyors given a one-hour training by the researchers. The surveyors informed the pregnant women on the study and obtained their informed consents. The pregnant women agreeing to participate in the study filled out the questionnaire forms. Data collection tools were applied in about 20-25 minutes.

2.5.Data Assessment

For data analysis, the SPSS 20.0 software (SPSS, Inc., Chicago, IL, USA) was used. For the analysis, Kolmogorov–Smirnov test, descriptive statistics, independent-samples t test, One-Way ANOVA were used. For post-hoc comparisons, because the intergroup variances were uniformly distributed, Tukey's-b test was used. Pearson correlation analysis was used to determine the correlation of perceived social support with pregnancy complaints and quality of life. The results were assessed at the significance level of p<0.05.

2.8. Ethical Considerations

The present study was conducted in accordance with the Declaration of Helsinki and the research protocol was approved by the Ethics Committee of the Bozok University of Yozgat (Protocol no. 04.01.2017/07). All participants of this study and signed informed consent before data collection

3.RESULTS

Sociodemographic Characteristics of Pregnant Women

It was found that the average age of pregnant women participating in the study was 28.26±5.39 and they were married for 5.87±5.19 years in average. 36.3% of them were high school graduates and 63.3% of them were housewives. Average age of pregnant women's husbands was 31.77±5.19 and 37.7% of them were university graduates. 80.7% of them had nuclear families.

Mean Scores of Pregnant Women from Pregnancy Complaints and Effect of Quality of Life Scale and Multidimensional Perceived Social Support Scale

Mean score from pregnancy complaints and quality of life scale was 31.12 ± 14.59 . In addition, mean scores from perceived social support scale ranged between 25 and 84 and the total mean score was 61.77 ± 15.06 (Table 1).



Table 1. Distribution of Mean Scores from Pregnancy Complaints and Effect of Quality of Life Scale and Multidimensional Perceived Social Support Scale (N=493)

Scale	MinMax.	□±SD
Pregnancy Complaints and Quality of Life Scale	5-66	31.12±14.59
Multidimensional Perceived Social Support Scale	25-84	61.77±15.06

Pregnancy Complaints and Quality of Life Scores of Pregnant Women According to Some Characteristics

The distribution of pregnancy complaints and their effect on quality of life mean scores according to some variables is given in Table 2. According to this table, pregnant women who were in $28\text{-}40^{\text{th}}$ gestational week, had an unplanned pregnancy and visited the clinic for examinations outside the regular check-ups had statistically significantly higher quality of life mean scores than other groups (p<0.05).

Table 2 – Pregnancy complaints and quality of life mean scores of pregnant women according to some characteristics

Characteristic	n	%	Mean ± SD	t/F	p
Age (years)		70	Mean = 5D	U/ I	Р
18-26	192	38.9	54.96±19.43	2.843	0.241
27-35	254	51.5	56.14±19.51	2.013	0.211
36-43	47	9.5	59.21±20.16		
Duration of Marriage (years)	.,	,,,,	07.21=20.10		
1-14	344	69.8	30.17±13.81	-0.818	0.414
15-28	149	30.2	31.97±13.57	0.010	0
Education Status			0 2 3 7 2 2 3 7		
Primary school	63	12.8	31.76±14.53		
Middle school	113	22.9	30.34±13.07	1.499	0.683
High school	179	36.3	30.60±14.46		
University	138	28.0	29.31±13.18		
Occupation					
Housewife	312	63.3	30.20 ± 14.12	1.545	0.462
Public sector	115	23.3	29.86 ± 13.54		
Private sector	66	13.4	31.77 ± 12.69		
Family type					
Nuclear family	398	80.7	30.09 ± 13.91	-0.702	0.483
Extended family	95	19.3	31.32±13.28		
Gestational week					
1-13 weeks	86	17.4	27.88 ± 13.21	11.953	0.003
14-27 weeks	192	38.9	28.78 ± 13.24		
28-40 weeks	215	43.6	32.69±14.17		
Planning status of pregnancy					
Planned	333	67.5	29.73 ± 13.84	-1.310	0.19
Unplanned	160	32.5	31.58±13.63		
Knowing the fetal gender					
Known	412	83.6	30.77 ± 13.65	-1.692	0.091
Not known	81	16.4	28.11±14.35		
Frequency of Examinations					
Once a week	66	13.4	33.34 ± 13.89	5.519	0.063
Twice a week	161	32.7	30.63±15.56		
Once a month	266	54.0	29.40±12.49		
Visiting the hospital					
outside the regular pregnancy check-ups					
Visiting	116	23.5	32.46 ± 12.47	-2.146	0.032
Not visiting	377	76.5	29.67±14.12		



Table 3. Correlation Between Pregnancy Complaints and Effect of Quality of Life and Multidimensional Perceived Social Support

Variables	Multidimensional Perceived Social Support		
	R	p	
Pregnancy Complaints and	-0,16**	p<0.05	
Quality of Life			

Pearson's correlation analysis revealed a negative correlation between pregnancy complaints and quality of life and multidimensional perceived social support (r^2 : -0.16, p<0.05) (Table 3).

Table 4 - Pregnancy Complaints and Factors Affecting the Quality of Life

Variables	B (95% CI)	SE	β	t	р
Constant	20.759	6.402		3.243	<.001
Gestational week	2.255	1.024	0.121	2.201	0.028
Planning status of pregnancy	3.676	1.429	0.125	2.572	0.010
Examination outside the regular					
check-ups	-1.717	1.449	-0.053	-1.185	0.237
Social support	0.103	0.038	0.134	2.726	<.001

R = 0.22, Adi.R2 = 0.37, F(4,127) = 757,842, p = < 0.001

Adj.R2: Adjusted R square; B: Partial regression coefficient; β: Standard partial regression coefficient; 95% CI: 95% confidence interval.

Regression analysis regarding the pregnancy complaints and the factors affecting the quality of life is presented in Table 3. The explanatory ratio of linear regression analysis conducted by using the Enter method is 37%. Pregnancy complaints and their effect on quality of life were explained by variables such as gestational week, examinations outside the regular check-ups and social support. While gestational week, planning status of pregnancy and social support were significant while the examinations outside the regular check-ups were not significant for the model.

4.DISCUSSION

Pregnancy is one of the unique times in a woman's life. During pregnancy, the woman undergoes significant physical and mental changes, her life is deeply affected and the mother's quality of life decreases (14). The findings of this study conducted to detect the pregnancy complaints and quality of life and their correlation with perceived social support are discussed herein.

Firstly, the pregnant women obtained a mean score of 31.12±14.59 from the Pregnancy Complaints and Effects on Quality of Life Scale. In studies investigating the effect of pregnancy complaints on the quality of life in different cities of Turkey, Derya et al. (2018) reported a mean score of 74.1±2.7 and Demir (2019) reported a mean score of 50.24±21.78. [15,16].It was found that this scale had not been used in studies abroad. An evaluation of results demonstrates that the

effect of pregnancy complaints on quality of life varies. Such variation may be due to the difference in study groups, study designs, measurement tools or cultural characteristics. As the scores obtained from this scale decrease, the quality of life increases. The better quality of life of pregnant women in this study compared to the pregnant women living in other cities indicates that they can cope with complaints more effectively, which is a pleasing result.

A literature review shows that there is no consensus on the correlation between gestational week and quality of life. It was reported in a number of studies that gestational week had no effect on quality of life (17,18). While some study findings demonstrated decreasing quality of life as the gestational week increased (16,19). In the present study, gestational week was detected to be one of the factors affecting the pregnancy complaints and the quality of life. As the gestational weeks progressed, the quality of life decreased. As the gestational week increased, the pregnant woman's load increased. Disturbances such as shift of the center of gravity, frequent need to urinate, difficulty in bending forward and back, edemas, muscle cramps in some pregnant women and factors such as fear of labor are thought to cause decreased quality of life as the gestational week increases.

When the pregnant woman and her husband want and plan a pregnancy, they are allowed to make plans and thus the pregnant woman feels more ready to be a mother. On the other hand, unwanted pregnancies negatively influence the



women's quality of life (20-22). In this study, it was found that the planning status of pregnancies was one of the factors affecting the pregnancy complaints and quality of life. In a study conducted by Gariepy et al. (2017), it was detected that those who had unwanted pregnancies had lower quality of life in terms of mental and physical health than those who had wanted pregnancies. (23). The difference in the quality of life depending on planning or not planning the pregnancy may be related with the difficulty in accepting the pregnancy and the physical and mental disturbances in unplanned pregnancies. It is thought that women who planned their pregnancies beforehand may be more prepared for pregnancy-related changes, which may have a positive effect on the quality of life.

Social support during pregnancy facilitates adaptation to pregnancy and coping with pregnancy-related problems (7,24). In this study, it was found that there was a negative correlation between perceived social support and quality of life during pregnancy and that social support was one of the factors affecting the quality of life. Although perceived social support has positive impact on pregnancy (25,26), no study is available in our country in which the effect of pregnancy complaints on quality of life and the perceived social support are investigated. It is considered that the findings of this study will guide the healthcare professionals in increasing the quality of health services offered to pregnant women and pave the way for future studies.

Limitations of Study

The results of this study only include the sample group with whom the study was conducted and thus cannot be generalized to the whole population.

6.CONCLUSION

A statistically significant negative correlation was detected between the effect of pregnancy complaints on quality of life total scores and perceived social support. Gestational week, planning status of pregnancy and social support were found to be significant factors that statistically affect the pregnancy complaints and quality of life.

Inquiring about the pregnancy complaints and including the social support sources into the future initiatives for eliminating / reducing pregnancy complaints by healthcare professionals as part of prenatal healthcare services will help to increase the quality of life of pregnant women.

REFERENCES

- [1] Murray SS, McKınney ES. Psyhosocial adaptations to pregnancy Foundations of
- maternal-newborn and Women"s Health Nursing. ABD: Elseiver Saunders;2014. P. 124-147.
- [2] Özçelik G, Karaçam Z. Common symptoms, health problems, risk factors, and relationships with their

- ouality of life during the pregnancy. Ege University Faculty of Nursing Journal Dergisi. 2014; (3):1-1.
- [3] Dotlic J, Terzic M, Babic D, Vasiljevic N, Janosevic S, et al. The influence of body mass index on the perceived quality of life during pregnancy. Applied Research in Quality of Life. 2014;9:387-399.
- [4] Arabacıoğlu, C. Determination of quality of life and education needs in pregnant women. Master thesis. Istanbul: Istanbul Science University. 2012.
- [5] Haakstad AHL, Torset, B, Kari BØ. What is the effect of regular group exercise on maternal psychological outcomes and common pregnancy complaints? An assessor blinded RCT. Midwifery. 2016;32:81-86.
- [6] Çınar Ö, Sürmeli M, Özel A,Yavuz İE, Topçuoğlu A, et al . The relationship between physical activity and quality of life in pregnant women. Anadolu Clinic Journal of Medical Sciences. 2017;22(2):95-102.
- [7] Perry SE, Hockenberry MJ, Lowdermik DL, Wilson D.Maternal Child Nursing Care. 4nd ed. Mosby Elsevier.2010.
- [8] Ricci SS, Kyle T.Maternity and Pediatric Nursing. Wolters Kluwer Health.2009.
- [9] Şimşek HN, Demirci H, Bolsoy N.Social support systems and midwifery. Düzce University Journal of Health Sciences Institute. 2018;8(2):97-103.
- [10] Gül B, Riaz, MA, Batool N, Yasmin H, Riaz MV. Social support and health related quality of life among pregnant women. J Pak Med Assoc. 2018; 872-875.
- [11] Kızılkaya Beji N.Women's Health and Diseases, 1st Edition, Istanbul: Nobel Medical Kitabevleri Tic. Ltd.2015.
- [12] Eker D, Arkar H, Yaldız H.Factor structure, validity and reliability of the revised form of the Multidimensional Perceived Social Support Scale. Turkish Journal of Psychiatry. 2001;12 (1):17-25.
- [13] Özorhan YE. Validity and reliability study of the scale of complaints during pregnancy and its effect on quality of life. Health Sciences Institute, Department of Obstetrics, Gynecology and Diseases Nursing. PhD thesis, Erzurum: Atatürk University, 2016.
- [14] Lagadec N, Steinecker M, Kapassi A, Magnie AM, Chastang J et al.Factors influencing the quality of life of pregnant women: a systematic review. BMC Pregnancy and Childbirth.2018;18:455.
- [15] Aksoy Derya, Y, Özşahin, Z, Uçar, T, Erdemoğlu, Ç, Ünver, H. (2018). The relationship between impact of pregnancy complaints on the life quality of the pregnant women and their psychosocial health level. Turkish Journal of Family Medicine and Primary Care. 2018;12 (3):171-177.
- [16] Demir E. Determination of the Effects of the Sociodemographic Characteristics of Pregnant Women



- on Pregnancy Complaints and Quality of Life, Institute of Health Sciences, Department of Nursing. Master thesis, Erzincan: Erzincan Binali Yıldırım University.2019.
- [17] Patrícia Medeiros Falcão K, Pedrozo Campos Antunes T, do Nascimento Andrade Feitosa A, Victor EG, Nunes Alves de Sousa, M, et al. Association between hypertension and quality of life in pregnancy. Hypertension in Pregnancy. 2016; 35(3): 306-314.
- [18] Mazúchová L, Kelčíková, S, Dubovická, Z.Measuring women's quality of life during pregnancy. Kontakt.2017;20(1): 1-6.
- [19] Kolu P, Raitanen J, Luoto R. Physical activity and health-related quality of life during pregnancy 2105.:a secondary analysis of a cluster-randomised trial.Maternal and Child Health Journal. 2014;18(9): 2098-2105.
- [20] Ali A.Relationship between unwanted pregnancy and health-related quality of life in pregnant women. Journal of the College of Physicians and Surgeons Pakistan. 2016;26(6):507-512.
- [21] Zahedi M, Deris F. The quality of life in pregnant women in Farokhshahr city, 2012. Journal of Clinical Nursing and Midwifery.2014; 3(3): 63-69.

- [22] Zarei S, Mirghafourvand M, Mohammad-Alizadeh-Charandabi S, Effati-Daryani, F, Shiri-Sarand F.Predictors of quality of life in pregnant women visiting health centers of Tabriz, Iran. Journal of Midwifery and Reproductive Health. 2018;6(2):1223-1229.
- [23] Gariepy A, Lundsberg L S, Vilardo N, Stanwood N, Yonkers K. et al. Pregnancy context and women's health-related quality of life.Contraception.2017; 95:491-499.
- [24] Yıldırım A, Hacıhasanoğlu R, Karakurt P.The relationship between postpartum depression and social support and affecting factors. International Journal of Human Sciences. 2011;8(1):31.
- [25] Morikawa M, Okada T, Ando M, Aleksic B, Kunimoto S, et al. Relationship between social support during pregnancy and postpartum depressive state: a prospective cohort study. Sci Rep. 2015; 5(1):1–9.
- [26] Mirabzadeh A, Dolatian M, Forouzan AS, Sajjadi H, Majd HA. et al. Path analysis associations between perceived social support, stressful life events and other psychosocial risk factors during pregnancy and preterm delivery. Iran Red Crescent Med J.2015;15(6):507–514.