Araştırma Makalesi – Research Paper

THE RELATIONSHIP BETWEEN THE PERCEIVED SOCIAL SUPPORT LEVELS AND LEVELS OF ADJUSTMENT TO THE INFERTILITY PROBLEM OF WOMEN WHO RECEIVED INFERTILITY TREATMENT

İNFERTİLİTE TEDAVİSİ GÖREN KADINLARDA ALGILANAN SOSYAL DESTEK DÜZEYLERİ İLE İNFERTİLİTE SORUNUNA UYUMLARI ARASINDAKİ İLİŞKİ

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Özet

Bu araştırma, infertilite tedavisi gören kadınların algılanan sosyal destek düzeyleri ve infertilite sorununa uyumlarını belirlemek amacıyla yapılmıştır. Tanımlayıcı ve ilişki belirleyici niteliktedir. Araştırma, İstanbul'da bir eğitim ve araştırma hastanesinin tüp bebek merkezinde tedavi görmekte olan 190 kadın ile yapılmıştır. Veriler, "Hasta Bilgi Formu", "Çok Boyutlu Algılanan Sosyal Destek Ölçeği" (ÇBASDÖ) ve Fertilite Uyum Ölçeği" ile toplanmıştır. Verilerin analizinde Mann Whitney U testi, Kruskall Wallis H testi ve pearson korelasyon analizi kullanılmıştır. Katılımcıların ÇBASDÖ toplam puan ortalaması 63.92±15.90, Fertilite Uyum Ölçeği toplam puan ortalaması 22.93±4,39 olarak bulunmuştur. Çalışma durumu, infertilite süresi, ekonomik düzey ve evlilik süresi ile ÇBASDÖ-toplam puan ortalaması arasında istatistiksel olarak anlamlı farklılık saptanmıştır (p<.05). Yaş ve aile tipi ile Fertilite Uyum Ölçeği-toplam puan ortalaması arasında istatistiksel olarak anlamlı farklılık saptanmıştır (p<.01). Eşin çalışma durumu, katılımcının eğitim düzeyi ve infertilite kaynağı ile hem ÇBASDÖ ve Fertilite Uyum Ölçeği'nin alt boyutları arasında hem de toplam puan ortalamaları arasında istatistiksel olarak anlamlı farklılık saptanmamıştır. ÇBASDÖ ile Fertilite Uyum Ölçeği arasında negatif yönde istatistiksel olarak anlamlı bir ilişki saptanmıştır. Katılımcıların çok boyutlu algılanan sosyal destek düzeyinin yüksek olduğu, fertilite uyumunun ise orta düzeyde olduğu belirlenmiştir. İnfertilite tedavisi gören kadınların çok boyutlu algılanan sosyal destek düzeyi arttıkça, fertilite uyumunun olumlu yönde etkilendiği saptanmıştır. İnfertilite sorununa uyum sağlamada, sosyal desteğin pozitif etkisi bulunmaktadır.

Anahtar Kelimeler: İnfertilite, algılanan sosyal destek, infertilite uyum

Abstract

The present study was conducted to determine the perceived social support levels of women who undergo infertility treatment and their adjustment to the infertility problem. The study had a descriptive and relational design, and was conducted with 190 women who were being treated at the IVF Unit of a training and research hospital in Istanbul. The data were collected with the "Patient Information Form", "Multidimensional Scale of Perceived Social Support" (MSPSS), and Fertility Adjustment Scale. The Mann Whitney U Test, Kruskal Wallis H Test, and Pearson Correlation Analysis were used in the analysis of the data. The mean total MSPSS score of the participants was found to be 63.92±15.90, and the mean total Fertility Adjustment Scale score was 22.93±4.39. A statistically significant difference was detected between employment status, infertility durations, economic levels, marriage durations, and MSPSS total scores (p<.05). Statistically significant differences were detected between age, family type, and mean total Fertility Adjustment Scale score (p<.01). No statistically significant differences were found between the employment status of the spouse, the educational level of the participant, the source of infertility, the sub-dimensions of MSPSS and Fertility Adjustment Scale, and the mean total scores. Statistically significant and negative correlations were detected between MSPSS and Fertility Adjustment Scale scores. It was found that the multidimensional perceived social support levels of the participants were high, and the fertility adjustment was at moderate levels. It was also determined that as the level of perceived multidimensional social support levels of women who underwent infertility treatment increased, fertility adjustment was affected positively. Social support had positive effects on adjustment to the infertility problem.

Keywords: Infertility, perceived social support, infertility adjustment

1. INTRODUCTION

Infertility is characterized by the absence of clinical pregnancy after 12 months of regular and unprotected sexual intercourse because of the disorder of the reproductive capacity of the person individually and/or with his partner (Zegers-Hochschild et al., 2017, pp. 393–406). Approximately 8-12% of couples face infertility problems. This rate varies according to societies and age groups (Fenkci, 2012, pp. 1-3); and nearly 40% of infertility cases originate from female, 40% male, and 20% occur because of both spouses or unexplained reasons (Kırca & Pasinlioğlu, 2013, pp. 162-178; Şahin & Bilgiç, 2017, pp. 141-146). Infertility has physical, biological, social, cultural, psychological, and economic aspects (Goker, Yanikkerem, Birge & Kuscu, 2018, pp. 195-203; Nuri Tural & Sis Çelik, 2019, pp. 91-104; Paraskevi, Antigoni & Kleanthi, 2021, pp. 60-64). The quality of life and marital harmony of individuals may be threatened because of infertility, and couples might move away from each other and their environment (Kırca & Pasinlioğlu, 2013, pp. 162-178). Infertility and the examination and treatment approaches strain the coping skills and social support resources of the individual and the couple, consume their physical and emotional energy, cause sexual dysfunction, depression, anxiety, and deteriorated relationship for the couple (Karlıdere et al., 2007, pp. 311-322).

Women are more anxious than men in terms of anxiety among infertile couples (Aldemir et al., 2015, pp. 328-336), infertile women have weaker adjustment levels to the infertility problem (Bilgiç, Özkan & Beji, 2016, pp. 51-61), women affected by infertility are more hopeless compared to men, and their couple adjustment is worse (Cetişli, Ören & Kaba, 2019, pp. 422-426), it is already known that women are more vulnerable to psychological outcomes of infertility (Iordachescu et al., 2021, pp. 98-104), and infertile women suffer from stress more than men (Chehreh et al., 2019, pp. 313–318). Infertility causes a significant psychological burden for couples, and the longer it lasts, the higher the distress levels (Iordachescu et al., 2021, pp. 98-104). Psychosocial factors such as increased stress levels because of infertility treatment, emotional disorders, problems between partners, lack of social support, or social exclusion might cause significantly decreased satisfaction in many areas of life in the context of infertility (Kiesswetter et al., 2020, pp. 130-141). The perceptions of women who suffer from infertility problems can affect their coping and psychological adjustment levels (Nouman & Zanbar, 2020, pp. 650-667); and not only couples, but also their families and many people around them are also affected by infertility (Üner & Sunal, 2018, pp. 1-15). Couples who have problems in having a child are under pressure by the family and society, they perceive this situation as an indication of low status, and they may feel defective, inadequate, and worthless (Ayaltı & Bayraktar 2017, pp. 1216-1232; Gazit & Amichai-Hamburger, 2020, pp. 1150-1173). As in the whole world, marriage in Turkish society, brings with it having children (Bayraktar, 2018, pp. 234-238). In Turkish society, having a child has dimensions such as economic, psychological and social value (Kılıç, Ejder Apay & Kızılkaya Beji, 2011, pp. 109-115). Infertile couples feel that they need to hide their infertility problem from their relatives and families for the fear of being excluded from society, which prevents the social support of

families and relatives who will support the couples (Kırca & Pasinlioğlu, 2013, pp. 162-178; Koçak & Duman, 2016, pp.7-13).

Perceived social support relates to infertility-related distress in couples undergoing assisted reproductive technology (ART) treatment (Kroemeke & Kubicka, 2018, pp. 1-12). Social support can be a protective factor against infertility problems (Cui et al., 2020, pp. 1-6). In the literature, there are studies showing that social support from the family contributes to the well-being of infertile women (Hasanpour et al., 2014, pp. 37–45), anxiety and depressive symptoms decrease as the social support perceived by infertile couples increases (Aldemir et al., 2015, pp. 328-336), and social support perceived from the family has positive impacts on marital adjustment (Bodur, Coşar & Erdem, 2013, pp. 51-62.), there is a negative relation between the social network size, number of friends and relatives, number of confidant friends and loneliness of infertile women (Kavlak & Saruhan, 2002, pp. 229–232). Social support undertakes important roles in solving the problems faced in the diagnosis and treatment process of infertility, as well as in protecting the physical and mental health of infertile women. The family and social environment of the couple are important sources of social support in this respect (Nuri Tural & Sis Çelik, 2019, pp. 91-104). No studies were detected in the literature reporting the relationship between social support and adjustment to the infertility problem. Investigation of this situation; it will enable nurses working in infertility clinics to evaluate women in this respect and to help them find solutions to the problems identified.

The present study was conducted to determine the relations between the perceived social support levels of women who received infertility treatment and their adjustment to the infertility problem.

2. METHODS

The present study has a cross-sectional design, and the study population consisted of women who were receiving IVF treatment at Zeynep Kamil Gynecology and Pediatrics Training and Research Hospital IVF Center. A power analysis was made in the G-power 3.1.5 program to determine the sampling size, and it was aimed to include a total of 200 participants in the sampling based on a sample error of 0.05 at 95% confidence interval to reflect the result of One-Way Analysis of Variance with an effect size of 0.25 and a power of 80% (Faul, Erdfelder, Lang & Buchner, 2007, pp. 175-191). However, the study was completed with 190 participants after a loss of 5% in the sampling. For this reason, the power of the study was found to be 75%.

The infertile women who were treated at the center between October 2018 and April 2019 and who agreed to participate in the study voluntarily were included in the present study.

2.1. Instruments

Patient Information Form: A demographic questionnaire was administered to all women to collect information about gender, age, educational level, and marital status.

Multidimensional Scale of Perceived Social Support (MSPSS): The Multidimensional Scale of Perceived Social Support (MSPSS) was originally developed by

Zimet et al. in the United States in 1988 (Eker, Arkar & Yaldız, 2001, pp. 17-25; Zimet et al. 1988, pp. 30-41). The factor structure, validity, and reliability of the revised form of the scale were analyzed in our country by Eker, Arkar, and Yaldız (2021, pp. 17-25). The MSPSS is a 12-item scale, and includes 3 groups about the source of support, each of which consisting of 4 items (Eker, Arkar & Yaldız, 2001, pp. 17-25), which are family (items 3, 4, 8, 11), friend (items 6, 7, 9, 12), and a special person (items 1, 2, 5, 10). Each item was rated by using a 7-point scale (Absolutely no=1, Absolutely yes=7). The subscale score was obtained by adding the scores of the four items in each subscale in the study, and the total score of the scale was obtained by adding all the subscale scores. High scores indicate high perceived social support. In the Cronbach's Alpha Method that was used to measure the internal consistency, values were found to be between 0.80 and 0.95, and the scale and subscales had acceptable internal consistency levels in all three samplings (Eker & Arkar, 1995, pp. 45-55; Eker, Arkar & Yaldız, 2001, pp. 17-25).

Fertility Adjustment Scale: The Fertility Adjustment Scale was developed by Glover et al. in 1999 to standardize the psychological adjustment measurement in infertility. In the Fertility Adjustment Scale, adjustment is considered as a heterogeneous concept including cognitive, behavioral, and emotional aspects. The Fertility Adjustment Scale can be a useful tool to evaluate the effects of the treatment process on the psychosocial adjustment of individuals and their psychological requirements. The Fertility Adjustment Scale may be considered as a proper clinical tool to determine the psychological needs of couples and to discuss their adjustment to fertility problems. The Fertility Adjustment Scale is a 10-item Likert-type scale that has a four-point rating of 1 (This does not suit me at all) and 4 (This suits me completely). The minimum scale score is 10, and the maximum score is 40. The items were balanced to avoid that they affected the answers in terms of positive and negative statements. Positive items were scored reversely. The total score is obtained by scoring the individual items. High scale scores are considered to be an indicator of poor adjustment. The reliability coefficient was determined to be α.85 in the original form of the scale. Arslan and Okumuş (2016) reported that the Turkish scale had a two-factor structure, the subscale of "being stuck with having a child" had 0.80 and the "accepting a life without children" sub-dimension had 0.71 Cronbach alpha coefficient, and the total Cronbach Alpha Coefficient was 0.81. The sub-dimension of "being stuck with having a child" was evaluated with items 2, 3, 5, 6, and 9, and the "accepting a life without children" sub-dimension was evaluated with items 1, 4, 7, 8, and 10. Items 1, 4, 7, 8, and 10 were reverse-numbered. It was reported that the scale is a reliable and valid tool to evaluate the adjustment levels of infertile women before and during infertility treatments (Arslan & Okumuş, 2016, pp. 224-31).

2.2. Data analysis

The statistical analyzes of the study data were made by using the "SPSS" (Statistical Package for Social Sciences) for Windows 22.0 program. Numbers percentiles, and conformity to normal distribution tests were used in the analysis of the data. The Mann Whitney U Test was used in paired groups, and the Kruskal Wallis H Test was used for independent variables

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that had more than two independent variables. The Pearson Correlation Analysis was used to examine the relations between the multidimensional scale of perceived social support and the fertility adjustment scale. A p value less than 0.05 was taken to be statistically significant in all statistical analyses.

2.3. Ethical considerations

The ethics committee approval of the study was received from the Clinical Research Ethics Committee of Zeynep Kamil Gynecology and Pediatrics Training and Research Hospital (Decision No: 117, Date: 25.07.2018). The women participated in the study after they were informed about the procedure and their consent was obtained.

3. RESULTS

A total of 60% of the participants were above the age of 31, their and their spouse's educational status were mostly high school and above, 58.4% did not work in an income-generating job, the income levels of the majority of them were moderate, 81.6% lived in elementary families, 82.1% of them were married for 1-9 years, the majority of them did not have any health problems. When the source of infertility was evaluated, it was found that the cause was 26.8% in women, 20.5% in men, and 16.3% in both. It was also found that the majority of the participants received 1-3 infertility treatments, and 11.6% received 5 or more treatments (Table 1). The mean duration of infertility of the participants was found to be 4.47±3.38 years, the mean duration of infertility treatment was 3.07±2.69 years, and the mean number of treatments was 2.71±1.40.

Table-1: The Distribution of the Participants According to Individual and Socio-Demographic Characteristics

Variable	N=190	%
Age group		
18-24	19	10.0
25-30	57	30.0
31-45	114	60.0
Educational status		
Primary school	22	11.6
Secondary school	27	14.2
High school	75	39.5
University	66	34.7
Spouse's educational status		
Primary school	22	11.6
Secondary school	27	14.2
High school	75	39.5
University	66	34.7
Working status		
Working	79	41.6
Not working	111	58.4
Spouse's working status		
Working	181	95.3
Not working	9	4.7

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Economic level		
Good	35	18.4
Moderate	139	73.2
Poor	16	8.4
Family type		
Elementary family	155	81.6
Extended family	22	11.6
Restructured family	13	6.8
Marriage duration		
1-3 years	42	22.1
4-6 years	66	34.7
7-9 years	48	25.3
10-12 years	20	10.5
13 years and above	14	7.4
Health problems		
No	160	84.2
Yes	30	15.8
Infertility source		
Woman	51	26.8
Man	39	20.5
Both	31	16.3
Unknown	69	36.3
Number of treatment		
1	46	24.2
2	46	24.2
3	44	23.2
4	32	16.8
5 or more	22	11.6

When the mean scores of the study participants were evaluated according to the scales, it was found that the MSPSS family sub-dimension score was 24.08±5.36, the friend sub-dimension score was 21.07±6.69, the special person sub-dimension score was 18.76±7.54, and the total MSPSS score was 63.92±15.90. The score in the sub-dimension of being stuck with having a child was 11.56±3.39, the score in the sub-dimension of accepting a life without children was 13.62±2.57, and the total score was 22.93±4.39 (Table 2). As a result of the normality tests, it was found that the data were not normally distributed (p<.05).

Table-2: Mean Scores of Scales and Sub-Dimensions

Scales	N	Number of items	Minimum	Maximum	Mean	Standard deviation
Multidimensional Scale of Perceived Social Support						
Family	190	4	4	28	24.08	5.36
Friend	190	4	4	28	21.07	6.69
Special Person	190	4	4	28	18.76	7.54
Total	190	12	12	84	63.92	15.90
Fertility Adjustment Scale						
Being Stuck in Having a Child	190	5	5	20	11.56	3.39

Acceptance of a Life without Child	190	5	5	20	13.62	2.57
Total	190	10	10	40	22.93	4.39

The mean scores of the MSPSS friend subscale (p=.023) and the mean total scores (p=.041) of the working participants were higher than those of the non-working participants, and the mean scores of the MSPSS special human sub-dimension (p=.043) of the participants who had health problems were higher and statistically significant (p<.05). It was also found that the mean MSPSS family sub-dimension scores (p=.024), and mean special human sub-dimension scores (p=.019), and mean total (p=.022) scores of the participants who had infertility duration of fewer than 5 years were higher and statistically significant when compared to those with an infertility duration of more than 5 years (p<.05) (Table 3). It was also found that those who had infertility treatment for more than 5 years had a more inadequate adjustment in accepting a childless life sub-dimension of the Fertility Adjustment Scale compared to those who received treatment for less than 5 years (p=.009) (Table 3).

Table-3: The Comparison of MSPSS and Fertility Adjustment Scale Mean Scores According to the Socio-Demographic Characteristics of the Participants

Variables		MSPSS-Family		MSPSS-Friend		MSPSS-Special person		MSPSS-Total		Fertility Adjustment Scale-Being Stuck in Having a Child		Fertility Adjustment Scale-Acceptance of a Life without Child		Fertility Adjustment Scale-Total	
	N	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Working status															
Working	79	24.44	4.62	22.47	5.86	19.63	7.26	66.54	14.57	11.50	3.58	13.27	2.50	22.62	4.67
Not working	111	23.84	5.85	20.08	7.09	18.14	7.72	62.06	16.61	11.60	3.25	13.87	2.60	23.16	4.19
p		.956		**.023***		.182		**.041***		.804		.064		.358	
Spouse's working status															
Working	181	23.96	5.46	20.97	6.68	18.74	7.53	63.67	15.95	11.55	3.42	13.59	2.56	22.97	4.47
Not working	9	26.67	1.87	23.22	6.98	19.22	8.47	69.11	14.84	11.66	2.78	14.22	2.90	22.33	2.60
p		.156		.215		.817		.279		.893		.745		.597	
Health problems															
No	160	24.04	5.44	20.95	6.56	18.31	7.60	63.31	15.84	11.46	3.35	13.49	2.56	23.20	4.31
Yes	30	24.33	5.07	21.73	7.45	21.17	6.91	67.23	16.15	12.06	3.57	14.33	2.52	21.53	4.64
p		.851		.257		**.043***		.126		.533		.144		.102	
Infertility duration (years)															
5 years	131	24.89	4.38	21.50	6.13	19.60	7.31	65.99	14.36	11.68	3.32	13.58	2.51	22.83	4.62

Variables	N	MSPSS-Family Mean	SD	MSPSS-Friend Mean	SD	MSPSS-Special person Mean	SD	MSPSS-Total Mean	SD	Being Stuck Mean	SD	Acceptance Mean	SD	Fertility Adj.-Total Mean	SD
More than 5 years	59	22.31	6.80	20.12	7.77	16.92	7.80	59.34	18.20	11.28	3.54	13.71	2.72	23.17	3.86
p		**.024***		.438		**.019***		**.022***		.387		.935		.627	
Infertility treatment duration (years)															
5 years	162	24.26	4.96	21.04	6.36	18.80	7.59	64.10	15.16	11.61	3.29	13.41	2.53	22.89	4.45
More than 5 years	28	23.11	7.33	21.25	8.54	18.57	7.44	62.93	19.97	11.28	3.97	14.85	2.50	23.21	4.11
p		.780		.292		.799		.777		.502		**.009***		.632	

N= Number. Mean= Arithmetic Mean. SD= Standard Deviation. Analyzed with the Mann Whitney U Test. *p value was taken as <.05.

Statistically significant differences were detected between the age group of the participants and the total mean score of the Fertility Adjustment Scale (p<.001) (Table 4).

Table-4: The Comparison of Mean Scores of MSPSS and Fertility Adjustment Scale According to the Socio-Demographic Characteristics of the Participants

Variables		Scales													
		MSPSS-Family		MSPSS-Friend		MSPSS-Special person		MSPSS-Total		Fertility Adjustment Scale-Being Stuck in Having a Child		Fertility Adjustment Scale-Acceptance of a Life without Child		Fertility Adjustment Scale-Total	
	N	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Age group															
18-24	19	26.37	3.04	22.05	5.78	20.63	6.36	69.05	12.73	13.00	3.41	12.21	2.65	25.79	4.13
25-30	57	23.26	6.26	19.65	7.39	17.88	7.31	60.79	16.45	12.47	3.39	13.64	2.51	23.82	4.43
31-45	114	24.12	5.11	21.62	6.41	18.89	7.83	64.64	15.92	10.86	3.22	13.85	2.53	22.02	4.15
p		.054		.261		.385		.079		**.002**		.061		**<.001****	
Educational status															
Primary school	35	22.86	6.30	18.91	7.85	17.80	7.28	59.57	17.23	11.71	3.26	13.25	2.54	23.49	3.89
Secondary school	35	24.89	5.17	20.14	6.84	19.60	6.04	64.63	14.21	12.25	3.64	13.25	3.09	24.31	4.10
High school	56	23.57	5.94	21.54	6.59	18.29	8.26	63.39	17.04	10.96	2.79	13.87	2.33	22.82	4.56
University	64	24.78	4.22	22.36	5.76	19.25	7.85	66.39	14.81	11.62	3.75	13.81	2.48	21.98	4.51
p		.312		.141		.725		.292		.368		.437		.071	
Spouse's educational status															
Primary school	22	22.64	7.34	16.77	7.92	16.82	7.66	56.23	18.50	11.54	3.31	13.86	2.39	22.82	3.16
Secondary school	27	23.81	6.39	19.30	6.84	18.85	7.57	61.96	18.04	12.44	3.55	12.66	2.55	23.70	4.35
High school	75	24.36	4.65	22.01	6.05	19.89	6.41	66.27	13.28	11.45	3.14	13.70	2.75	23.31	4.25
University	66	24.38	4.95	22.17	6.32	18.09	8.59	64.64	16.30	11.33	3.63	13.84	2.38	22.24	4.89

	N														
p		.884		.006**		.444		.179		.595		.191		.345	
Economic status															
Good	35	23.37	6.72	22.31	7.99	18.06	8.62	63.74	20.85	11.20	3.71	13.62	2.47	23.37	4.87
Moderate	139	24.30	4.92	21.37	5.96	19.44	7.06	65.11	13.91	11.59	3.28	13.49	2.42	22.68	4.30
Poor	16	23.88	6.00	15.75	7.66	14.44	8.08	54.06	17.48	12.06	3.69	14.75	3.71	24.19	4.09
p		.866		.003**		.053		.036*		.676		.255		.342	
Family type															
Elementary family	155	23.99	5.30	20.94	6.78	18.72	7.75	63.65	15.95	11.50	3.36	13.69	2.55	22.80	4.39
Extended family	22	23.91	6.02	20.82	6.62	18.50	6.96	63.23	16.43	12.36	3.72	13.18	2.70	25.45	3.54
Restructured family	13	25.62	5.28	23.08	5.88	19.69	6.42	68.38	15.04	10.84	3.05	13.53	2.69	20.31	3.92
p		.323		.562		.913		.437		.456		.810		.001**	
Marriage duration															
1-3 years	42	25.95	3.69	21.83	6.27	20.55	5.90	68.33	12.21	11.57	3.47	13.42	3.26	23.31	4.65
4-6 years	66	25.18	4.27	22.61	5.78	19.36	8.30	67.15	14.94	12.22	3.31	13.68	2.24	22.56	4.68
7-9 years	48	22.02	6.36	19.38	7.32	17.79	7.57	59.19	17.51	11.45	3.14	13.75	2.41	22.96	4.32
10-12 years	20	24.00	5.11	20.80	6.51	18.00	7.91	62.80	16.72	10.65	3.78	13.85	2.05	23.85	3.20
13 years and above	14	20.57	7.37	17.79	8.31	15.00	6.63	53.36	15.97	10.07	3.36	13.21	3.09	22.21	4.19
p		.001**		.046*		.089		.004**		.151		.774		.751	
Infertility source															
Woman	51	24.10	6.07	20.71	7.36	19.35	7.95	64.16	17.99	11.47	3.64	14.01	3.23	23.20	4.77
Man	39	24.28	5.27	20.85	6.70	16.46	7.93	61.59	15.98	11.97	3.26	13.41	2.64	22.95	4.45
Both	31	22.71	5.97	21.48	6.15	18.61	5.95	62.81	14.05	11.48	3.88	13.96	2.42	21.65	4.41
Unknown	69	24.59	4.54	21.29	6.54	19.70	7.55	65.58	15.13	11.43	3.07	13.30	1.98	23.32	4.04
p		.327		.988		.158		.504		.819		.515		.384	
Number of treatment															
1	46	24.74	4.57	20.59	6.34	19.67	6.66	65.00	13.32	10.67	3.17	12.97	2.86	23.07	4.15
2	46	24.80	5.92	21.46	7.06	20.04	7.28	66.30	16.68	12.28	3.55	13.63	2.79	23.17	4.68
3	44	23.30	5.57	20.84	6.73	16.59	7.94	60.73	16.21	11.27	3.32	14.02	1.89	22.18	4.62
4	32	24.72	4.20	22.16	5.94	19.53	8.06	66.41	15.58	10.75	2.79	12.90	2.42	23.38	4.19
5 or more	22	21.91	6.40	20.18	7.87	17.41	7.82	59.50	18.40	13.68	3.45	15.22	2.11	23.05	4.29
p		.083		.843		.183		.168		.007**		.004**		.762	
N=number. Mean= arithmetic mean. SD= standard deviation. Analyzed with the Kruskal Wallis H test. p value was taken as *<.05 and **<.01.															

Statistically significant differences were found between the spouse's educational status and MSPSS friend sub-dimension, economic status and MSPSS friend sub-dimension and total, family types and Fertility Adjustment Scale total, duration of marriage and MSPSS family and friend sub-dimensions and total score averages (p<.05) (Table 4).

Statistically significant differences were detected between the number of infertility treatments and the mean scores of the sub-dimensions of the Fertility Adjustment Scale, being

stuck with having a child (p=.007), and accepting a childless life sub-dimensions (p=.004) (Table 4).

As a result of the Pearson Correlation Analysis made to examine the relations between MSPSS and Fertility Adjustment Scale, a negative (.-149) and statistically significant relation was detected (p=.041) (Table 5). It was also found that as the MSPSS mean scores increased, the mean Fertility Adjustment Scale scores decreased.

Table-5: Relation Between MSPSS and Fertility Adjustment Scale

Scales	N	Number of items	Minimum	Maximum	Mean	Standard deviation	Sum of Squares and Cross-products	Covariance	r*	p**
MSPSS Total	190	12	61.65	66.24	63.92	15.90	47828.97	253.06	.-149	**.041**
Fertility Adjustment Scale Total	190	10	22.33	23.61	22.93	4.39	-1961.88	-10.38		

*r: Pearson correlation, **p<0.05

4. DISCUSSION

In the present study, which was conducted to determine the perceived social support levels of women who received infertility treatment and their adjustment to the infertility problems, it was found that the dimension that had the highest perceived social support levels of women was "family", followed by "friend" and "special person". Similarly, it was found in the literature that the highest social support was reported in the "family" dimension, and the lowest in the "private person" dimension (Erdem & Ejder Apay, 2014, pp. 303-314; Nuri Tural & Sis Çelik, 2019, pp. 91-104). The mean scores of the scale were compared with the scores that could be obtained from the total of the scale, and it was found that the mean scores of the scale were higher than the median value. It was also found that the social support perceived by the participants from family, friends, and special people was high. It was determined that our findings were compatible with the literature data (Nuri Tural & Sis Çelik, 2019, pp. 91-104). It can be argued that having support for infertility treatment is important for adjustment to this problem of women with this problem.

When the Fertility Adjustment Scale scores of the women who were included in the study were evaluated, it may be argued that the fertility adjustment was at a moderate level. Our findings were similar to those reported in the study of Arslan and Okumuş (2016, pp. 224-31). It was reported in the study that was conducted by Nuri Tural and Sis Çelik (2019, pp. 91-104) that infertile women were affected by infertility at a moderate level. In our study, the adjustment of the participants who received infertility treatment for more than five years to Acceptance of a Life without Child status was worse than those who received treatment for less

than five years. The study of Yılmaz, Yazıcı and Benli (2020) reported that the infertility distress levels increased as the duration of marriage, duration of the desire for a baby, and the duration of infertility treatment of women who applied to the infertility clinic increased (Yılmaz, Yazıcı & Benli, 2020, pp. 275-281). The difference between the working status of the women who were included in the study, the mean scores of the MSPSS friend sub-dimension, and the total scores were statistically significant (p <0.05). In the literature, statistically significant differences were reported between employment status, MSPSS family sub-dimension, and mean total scores (Erdem & Ejder Apay, 2014, pp. 303-314). It is considered that business life contributes to the development of positive social support perceptions.

It was found in the study that perceived social support from private people was higher in the women who had health problems and who were included in the study than those without health problems (p <0.05). In addition to infertility, there may be other health problems to be considered. In such a case, it is considered that there might be a need for more social support.

It was determined in the present study that the social support of the women whose infertility periods were longer than 5 years in the family and special person dimensions and in total were lower than those who were infertile for less than 5 years (p<0.05). It is considered that having an infertility problem for a short time can ensure that the desire and hope of having a child continues, and the perceived social support increases. There are studies in which statistically significant differences were reported between the duration of infertility and the total mean scores of MSPSS in the literature (Erdem & Ejder Apay, 2014, pp. 303-314). There were also some other studies in which statistically significant differences were reported between the duration of infertility and the mean scores of the MSPSS family sub-dimension (Nuri Tural & Sis Çelik, 2019, pp. 91-104). It is possible to argue that our study findings are compatible with the literature data, and the duration of infertility affects the perceived social support levels.

It was found in the study that the fertility adjustment levels of women differed according to age groups (p<0.05), and fertility adjustment increased with the increasing age. Unlike our results, there are studies in the literature that show that the level of being affected by infertility increased as the age group increased (Nuri Tural & Sis Çelik, 2019, pp. 91-104; Ünal, Kargın & Akyüz, 2010, pp. 481-486). Age is one of the main factors that affect fertility (Şahin and Bilgiç, 2017, pp. 141-146). It is considered that the difference in the findings may be because of the individual, socio-demographic, and infertility characteristics of the women in the sampling of the previous studies.

It was found that the education levels of the spouses of the women who were included in the study affected the perceived social support levels from friends (p<0.05), and the perceived social support levels increased as the education level increased. In the study that was conducted by Nuri Tural and Sis Çelik (2019, pp. 91-104), it was reported that the education level of the spouses of the women affected the perceived social support levels. It may be argued that the

education level might affect friendship relations and social circles, shaping perceived social support.

It was found in the study that the economic status of women affected friends and level of general perceived social support (p<0.05), and those who had poor economic status had lower perceived and general social support from friends. In their study, Nuri Tural and Sis Çelik (2019, pp. 91-104) reported that the income status of women affected the levels of the perceived social support from friends and family (p<0.05), and the perceived friend and family support of women who had higher income levels was higher. Considering that the women and their spouses who were included in the study had high education levels, this can generally ensure good and moderate economic status, and therefore, this may affect the perceived social support positively.

It was determined that the family type of the women who were included in the study affected their fertility adjustment. It was also found that women who had extended families had weaker fertility adjustment levels. In the study that was conducted by Nuri Tural and Sis Çelik (2019, pp. 91-104), no statistically significant differences were reported between family types and being affected by infertility levels. It is considered that the differences between the findings of these studies may be because of the characteristics of the participants and their family members.

It was found that the duration of marriage of the women who participated in the study also affected the level of perceived social support from family, friends, and in general (p<0.05), and the perceived social support levels were higher for women who had a short marriage period when compared to other women. There are studies in the literature reporting similar findings (Erdem & Ejder Apay, 2014, pp. 303-314; Nuri Tural & Sis Çelik, 2019, pp. 91-104). Couples may feel more support from their family and friends in the first years of marriage because of the expectations for having a child. In such a case, it is possible to argue that the level of perceived social support may also increase.

In the present study, it was found that the adjustment to being stuck in having a child was weaker in those who received 5 or more infertility treatments than those who received treatment once (p=.011), and the adjustment to accepting a life without children was weaker than those who received treatment 4 times (p=.011). It was also found that the number of infertility treatments is a factor that affects the adjustment to fertility.

In the present study, it was found that as the perceived social support levels of the women increased, their fertility adjustment levels were affected positively. There are various studies that were conducted with infertile women who showed that social support had positive effects on fertility adjustment, marital adjustment, self-efficacy, and many problems related to infertility. It was reported in the literature that as the perceived social support levels of women increased, the negative effects due to infertility decreased at significant levels (Nuri Tural &

Sis Çelik, 2019, pp. 91-104); the social support perceived from the family in infertile couples had positive effects on marriage adjustment, and as marriage adjustment increased, the levels of depression and anxiety decreased (Bodur, Coşar & Erdem, 2013, pp. 51-62); depression symptoms decreased as the perceived social support of women increased (Erdem & Ejder Apay, 2014, pp. 303-314); women's self-efficacy increased as fertility adjustment increased during infertility treatment process (Durgun Ozan & Duman, 2018, pp. 43-46); when more social support is provided, women experienced less psychological problems such as depression, anxiety, and stress (Khalid & Dawood, 2020, pp. 423-430); anxiety and depressive symptoms decreased as infertile couples perceived more social support (Aldemir et al., 2015, pp. 328-336). In the light of the findings of the present study and previous studies, it was understood that social support systems can contribute to individuals who have infertility problems both in adjustment to this problem and in coping with the negative effects of infertility.

5. CONCLUSION

In the present study, which was conducted to determine the perceived social support levels of women who undergo infertility treatment and their adjustment to the infertility problem, it was concluded that the perceived social support of the participants was at high levels, the level of fertility adjustment was at moderate levels, and there were negative but weak relations between perceived social support levels and fertility adjustment levels; and as perceived social support levels increased, fertility adjustment was affected positively. Also, some socio-demographic and infertility-related characteristics of women (e.g. employment status, health problems, infertility durations, infertility treatment periods, ages, spouse's education levels, economic levels, family types, marriage durations, and the number of infertility treatments affect the perceived social support and fertility adjustment levels. In the light of the results of the present study, it is recommended that nurses evaluate individuals who have infertility problems in terms of both social support and fertility adjustment. Also, nursing interventions must be planned to use the existing social support, strengthen social support systems, and adjust to the infertility problem.

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