



## ARAŞTIRMA / RESEARCH

### Marital satisfaction and influencing factors in infertile couples

İnfertil çiftlerde evlilik doyumu ve evlilik doyumunu etkileyen faktörler

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#### Abstract

**Purpose:** Previous researches suggest that determining the factors affecting the marital satisfaction would help the treatment team in achieving goals in the infertility treatment process. This study aims to examine marital satisfaction in infertile couples together with the sociodemographic, marital, and social support characteristics affecting the marital satisfaction.

**Materials and Methods:** This study was conducted with 138 married couples receiving treatment for infertility in a public hospital located in the capital of Turkey.

**Results:** According to the findings of the study, 86.2% of men and 82.6% of women have serious problems with marital satisfaction. Marital satisfaction scores of men are significantly lower than women. It is manifested that marital satisfaction increases as the couples get older; it decreases as the education level and monthly income amount of the couples increase and also it is lower among women living in extended families.

**Conclusion:** Conducting future interventions by taking these factors into account shall help the treatment.

**Keywords:** Infertility, couples, marital satisfaction, social support

#### Öz

**Amaç:** İnfertilite tedavisi sürecindeki hedeflere ulaşmada evlilik doyumunu etkileyen faktörlerin belirlenmesinin tedavi ekibine yardımcı olacağı bildirilmiştir. Bu çalışmada, infertilite tedavisi gören çiftlerin evlilik doyumlarının ve bunu etkileyen sosyodemografik, evlilik ve sosyal destek özelliklerinin incelenmesi amaçlanmıştır.

**Gereç ve Yöntem:** Bu çalışma, Türkiye'nin başkentinde, bir devlet hastanesinde infertilite nedeniyle tedavi gören 138 evli çift ile yapılmıştır.

**Bulgular:** Araştırma bulgularına göre, erkeklerin %86,2'sinin, kadınların ise %82,6'sının evlilik doyumuyla ilgili çok ciddi problemleri olduğu saptanmıştır. Erkeklerin evlilik doyumu puanları kadınlara göre anlamlı olarak daha düşüktür. Çiftlerin yaşı arttıkça evlilik doyumunun arttığı; öğrenim düzeyi ve gelir düzeyi yükseldikçe evlilik doyumunun azaldığı, geniş ailede yaşayan kadınların evlilik doyumunun düşük olduğu belirlenmiştir.

**Sonuç:** Yapılacak girişimlerde, evlilik doyumu ile ilişkili olduğu saptanan bu faktörlerin dikkate alınması tedaviye yardımcı olabilir.

**Anahtar kelimeler:** İnfertilite, çiftler, evlilik doyumu, sosyal destek

## INTRODUCTION

Infertility is a disease of the reproductive system defined by the failure to achieve a clinical pregnancy after 12 months or more of regular unprotected sexual intercourse<sup>1</sup>. It is a serious stress factor that the pregnancy does not occur even though it is desired.<sup>2,3,4,5</sup> Infertility, which is accepted as a biopsychosocial condition<sup>3</sup>, leads to psychological,

social and economic problems<sup>6,7</sup>. In traditional societies, women's role in family and society is identical to reproduction and child care. This may result in blameworthiness and shame in couples, especially in women who cannot have a child<sup>8,9</sup>. In other words, couples experience the blameworthiness of not being able to realize a social role with the influence of the culture they live in<sup>10</sup>. As in many communities, having a child is a key factor for gaining social status in Turkish society. Infertility leads to

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social isolation and stigmatization in many cultures. Since couples have difficulties in coping with this situation, the marital relationship may be damaged after infertility diagnosis<sup>11</sup>. Studies show that the negative effects of infertility (i.e., depression, blameworthiness, social pressure) are experienced more strongly by women compared to men<sup>12-18</sup>. Social and cultural values and the belief that fertility is a duty of women contribute to this situation.

Besides the roles that the society imposes on them, women and men may experience the infertility process differently because of their sexual characteristics<sup>19,9</sup>. The level of being affected by the infertility process of women and men may also vary according to the educational status. The high level of education of women living in city life increases the ability to share their problems in relational and social terms<sup>8,20</sup>. Many studies suggest that there is a relationship between the family characteristics of the infertile couples and the level of the impact of infertility process on them<sup>21,22</sup>. Infertility brings with it many problems such as unhappiness, stress, insomnia, sadness, loss of appetite, social stigmatization, avoidance of environments involving children, disturbance in family relationships, disruption of working life, etc.<sup>22</sup>. Infertility process may create pressure on couples living in societies especially in which the gender roles are dominant. Infertile couples may be exposed to pressures and negative discourses from the environment in the process. In particular, women living in extended families may face with pressures from the spouse's family and the environment. Oğuz suggests that regardless of who is infertile, women make a greater effort to solve the problem during the process and they are more likely to blame themselves by taking more responsibility, personalizing infertility and being stigmatized<sup>19</sup>. Karaca also stated that women living in extended families experience isolation and pressure directly<sup>23</sup>.

Financial status of the family is also among the factors affecting the infertility process. Özçelik et al. state that treatment of infertility made the treatment process more difficult emotionally for the spouses since it is a long-term, expensive treatment<sup>11</sup>.

Social support is very important in dealing with infertility and studies show the significant role of social support for couples in coping with the emotional and physical problems during the infertility process<sup>8,19,24-26,5</sup>.

The problems experienced during the infertility

process are suggested to be similar with those experienced in the loss of a loved one<sup>6</sup>. In addition, studies also show that infertility results in a decrease in self-esteem<sup>6,27</sup>.

It is reported that infertile individuals often feel a sense of inadequacy<sup>6</sup> and deprivation symptoms including anger, hopelessness, depression, sadness, denial, and opposition are common among these individuals<sup>4,28</sup>. The infertile spouse experiences guilt and considers separation or divorce because he/she is unable to give his/her spouse a child. However, harmonious spouses are able to cope with the problems by supporting each other<sup>22</sup>. In the study by Schmidt et al. it is mentioned that the support the spouses provide to each other has positive effects on the marital relationship, contributes to the closeness of the couple and strengthens the marriage. According to this study, sharing stress, mourning, and disappointments increases the harmony between couples and seems to contribute to the improvement of marital relationship<sup>29</sup>.

Engagement of men in the treatment process has a great importance for infertile women. Psychological, sexual and marital problems are more severe in women when men are away from these procedures. Stress is very strong for women who tend to take the responsibility for the treatment in an extreme manner. Therefore, the support of the spouse and the environment holds a much greater importance for women than men<sup>19</sup>.

Women are not supported by their spouses and their spouses' family struggle with both the difficulties in the treatment process and the problems arising from the pressure of the society and the environment<sup>30</sup>. Some studies show that men make an intensive effort to cope with infertility and need less social support<sup>31,32</sup>; while some studies show men tend to suppress the infertility process and ignore the problems. In this context, it is of great importance that spouses understand each other's feelings, empathize with each other, and talk about the problems openly within the framework of understanding and search for the ways to solve the problems together.

A recent literature review conducted by Samadaee-Gelehkolaee et al. in order to determine the factors affecting the marital satisfaction in infertile couples, 64 articles were evaluated and the factors affecting the marital satisfaction in infertile couples are classified under the headings of demographics, psychological health, life quality, economic, social,

and family support, and sexual function<sup>33</sup>. It is emphasized that taking these factors into account may play a significant role in the treatment process of couples and it is recommended to identify such factors is considered essential in their treatment protocol highly based on culture. There are only two studies about marital adjustment of infertile couples for Turkish culture<sup>34,35</sup>. Both of these studies have focused on psychiatric problems that occur during infertility treatment; however, there has been no study investigating the association between marital satisfaction as well as demographic information and marital and social support features of Turkish infertile couples. This study aims to investigate the marital satisfaction of infertile couples and affecting sociodemographic factors along with marital and social support characteristics. Understanding the psycho-social needs and problems of infertile couples in this process is important because of the fact that it will contribute to psychosocial training programs and services to be given to infertile couples.

## MATERIALS AND METHODS

This descriptive and cross-sectional study was conducted with a total of 138 volunteer couples, married at least 1 year and resident in Ankara, the capital of Turkey, and who were getting treatment for primary and secondary infertility in a public hospital.

138 married couples participated in the study, consisting of husbands with an age range between 23-42 (M=30,72; SD=4,49) and wives with an age range between 18-40 (M=27,75; SD=5,48). Of the men in the study population 22.3% are graduates of primary school, 28.5% middle school, 23.9% high school and 25,3% university while the 2.8% of the women, are able to read and write, 29.7% of them graduates of primary school, 34% of them middle school, 20.9% of them high school and 12.6% of them university. More than half of the participants have urban families (71% male, 67.4% female) and migrated families (68.8% male, 75.4% female). It may be observed that 88.4% of men have a job whereas %75.4 of women do not work.

### Procedure

This study was conducted in accordance with the principles of the Declaration of Helsinki. The study protocol was approved by the Republic of Turkey Ministry of Health Turkey Public Hospitals Authority. Ethics approval was obtained from the

Ethics Committee of Zekai Tahir Burak Women's Health Education and Research Hospital. Written informed consents were obtained from participants after explaining the aim of the study.

In this study, relational screening model of general screening models was used. Socio-demographic characteristics (independent variable), marital status characteristics (independent variable), and social support conditions (independent variable) were considered as the factors affecting marital satisfaction. Accordingly, the relationship between these variables and the marital satisfaction of infertile couples (dependent variable) was examined.

In the determination of the individuals participating in the study, no classification was made in terms of socio-cultural, economic and educational level, and they were not considered to be included in a specific life cycle. The rationale behind this is to make it possible to evaluate the processes experienced by the individuals within a "framework of differences". In this manner, it was aimed to bring out the different experiences and to enrich the study.

A consent form prepared by the researchers was given to the participants in order to provide information regarding the goal of the study and the purpose for which the data is going to be used and stating that all participants took part in the study voluntarily. Within the scope of the study interviews were conducted in doctor's room, nurse room and the other rooms in the hospital which are suitable to make interview. Firstly, information about the goal and the scope of the study was provided to the volunteer participants. Then a pilot application was made with ten couples in order to check whether the questions in the interview form are understood clearly.. As a result of these interviews with ten couples, the questions which could not be easily understood were determined and necessary amendments were made. The interview forms of the pilot application were not included in the study.

In general, the following questions were investigated in this study:

1. Do the socio-demographic characteristics of the participants affect marital satisfaction?
2. Do the family characteristics of the participants affect marital satisfaction?
3. Do the social support types of participants influence marital satisfaction?

## Measures

Data in the study were collected by using the questionnaire prepared by the researchers and Golombok-Rust Inventory of Marital Satisfaction (GRIMS), which was developed by Rust, Bennun, Crowe and Golombok<sup>36</sup> and adopted to Turkish by Duyan and Çamur Duyan in 2014<sup>37</sup>.

## Questionnaire

Questionnaire consists of three main parts. The first part includes questions about socio-demographical characteristics of couples, such as age, education level, place of birth, immigration status and employment status. The second part includes questions about family characteristics of couples including the type of family, the length of marriage, marriage age and the way of marriage. The third part includes questions about the characteristics of social, financial, instrumental and assurance support.

## Golombok-Rust Inventory of Marital State (GRIMS)

Golombok-Rust Inventory of Marital State (GRIMS) was developed by Rust, Bennun, Crowe and Golombok in 1990<sup>36</sup> and the validity and reliability study was conducted by Duyan and Çamur Duyan in 2014<sup>37</sup>.

## Statistical analysis

In the evaluation of the research results,  $p < 0.05$  and lower values were considered statistically significant. In the evaluation of the data, t test and Pearson correlation were used and descriptive statistics were used to determine percentages and frequencies.

## RESULTS

Among participants, 86.2% of men and 82.6% of women scored 47 and above from GRIMS (see Table

1). Average GRIMS score for men is 58.95 (SD=10,92) whereas it is 57.31 (SD=11,12) for women and overall the marital satisfaction of men are significantly lower than women ( $t = 2,412$ ,  $p = 0,017$ ). As it can be seen in Table 2, there is a low but statistically significant correlation between the age and education level of the couples and marital satisfaction. As the age increases, the marital satisfaction also increases both for men ( $r = -0,215$ ;  $p < 0,05$ ) and women ( $r = -0,180$ ;  $p < 0,05$ ). However as the level of education gets higher, the marital satisfaction gets lower both for men ( $r = 0,245$ ;  $p < 0,01$ ) and women ( $r = 0,296$ ;  $p < 0,01$ ).

There is not a statistically significant correlation between place of birth, immigration status, employment status and the marital satisfaction of both sexes. 58% of the participants got married by dating, meanwhile 42% by matchmaking. 81.2% of couples belong to nuclear family whereas 18.8% come from extended families. Average marriage duration is 4,72 (SD= 3,81) (1-21) years and more than half of the participants (73,8%) are married for 1 to 5 years. The average marriage age of men within the scope of the study is 25,73 (SD= 3,81) (18-37) whereas it is 23,21 (SD= 4,89) (16-33) on average for women. Average monthly income of the couples participated is 1478,12 (approximately 500 \$) (SD= 810,19) (300-4000) TL; and 67.4% of the couples think the income they earn affords their expenses whereas 32.6% of them do not consider that the income is sufficient for the expenses. As it can be understood by Table 3, GRIMS scores of men living in nuclear family are higher than men living in extended family, nevertheless; there is not a statistically significant relationship between the marital satisfaction of these groups ( $t = 0,238$ ;  $p > 0,05$ ). On the other hand, GRIMS scores of women living in nuclear family are higher and their marital satisfaction is greater than women living in extended family ( $t = 1,996$ ;  $p < 0,05$ ).

**Table 1. Golombok-Rust Inventory of marital state scores of the couples**

GRIMS Scores	Husband*		Wife**	
	N	%	N	%
30-33 (Moderate)	2	1.4	2	1.4
34-37 (Poor)	3	2.2	6	4.3
38-41 (Bad)	6	4.3	3	2.2
42-46 (Serious problems)	8	5.8	13	9.4
47 and over (Very serious problems)	119	86.2	114	82.6
Total	138	100.0	138	100.0

\*Husband mean=58,95; SD=10,92 \*\*Wife mean=57,31; SD=11,12

**Table 2. Golombok-Rust Inventory of marital state scores of couples according to socio-demographic characteristics**

	Husband				Wife			
	n	M	SD	Statistics	n	M	SD	Statistics
Age	138	30.72	4.49	r = -0.215*		27.75	5.48	r = -0.180*
Education	138			r = 0.245**				r = 0.296**
Place of Birth								
Rural	40	60.52	10.74	t= 0.280	45	55.77	10.61	t= 0.261
Urban	98	58.30	10.97		93	58.05	11.34	
Immigration Experience in the Country								
Yes	95	58.25	11.45	t= 0.267	104	58.62	11.34	t= 0.544
No	43	60.48	9.57		34	59.94	9.57	
Work Status								
Working	122	58.89	11.04	t= 0.869	34	57.88	10.27	t= 0.732
Non-working	16	59.37	10.19		104	57.12	11.42	

\*p&lt;.05 \*\*p&lt;.01

**Table 3. Golombok-Rust Inventory of marital state scores and family characteristics of couples**

	Husband					Wife				
	n	%	M	sd	Statistics	n	%	M	Sd	Statistics
Family type										
Nuclear	112	81.2	58.41	11.33	t= 1.184	112	81.2	56.41	11.14	t= 1.996*
Extended	26	18.8	61.23	8.76		26	18.8	61.19	10.36	
Marriage duration	138		4.72	3.81	r = -0.083	138		4.72	3.81	r = -0.152
Marriage age	138		25.73	3.81	r = -0.136	138		23.21	4.89	r = -0.033
Marriage manner										
Dating	80	58.0	58.63	12.06	t= 0.695	80	58.0	57.76	12.05	t=0.578
Matchmaking	58	42.0	59.37	9.2		58	42.0	56.68	9.76	
Monthly income	138		1478.12	810.19	r = 0.258**	138		1478.12	810.19	r = 0.220**
Sufficiency of income for expenses										
Yes	93	67.4	59.42	11.30	0.726	93	67.4	57.91	11.34	t=0.914
No	45	32.6	57.98	10.15		45	32.6	56.07	10.68	

\*p&lt;.05.\*\*p&lt;.01

When the relationship between the marriage duration of male and female participants and their GRIMS scores are considered, it is seen that as the marriage duration increases the marital satisfaction also increases in comparison however, there is not a statistically significant relationship neither for men ( $r=0,083$ ;  $p>0,05$ ) nor for women ( $r=-0,152$ ;  $p>0,05$ ). The marriage age for men and women is also similar in this manner; as the marriage age increases, the marital satisfaction also increases in comparison, however there is not a statistically significant difference between the GRIMS scores. For men who got married by dating and for women who got married by matchmaking, the marital

satisfaction is greater in comparison. Nonetheless, no statistically significant difference has been found between the GRIMS scores of these two groups.

Regarding the income of the individual and GRIMS score, as the income of the family gets higher, the marital satisfaction decreases both for men ( $r = 0,258$ ) and women ( $r = 0,220$ ). When the relationship between the sufficiency of income for the expenses and GRIMS scores are considered, it is seen that there is no statistically significant relation.

As it can be seen in Table 4, women have more social support resources than men. Regarding the social, informational, financial, instrumental and assurance

support of couples; it is observed that the participating couples have a close person to whom they may tell their problems –social support – (77.5 % for men and 85.5% for women), from whom they may get advice –informational support- (71 % for men and 79,7 % for women), from whom they may receive financial support (37,7% for men and 44,2 % of women), who may do things that need to be done instead of the individual when necessary-instrumental support- (36,2 % of men and 41,3 % of

women) and who may provide cheer and joy when the individual goes through difficult times –assuring support- (76,8% for men and 79,7% of women).

In addition to this, when the relationship between each social support type and GRIMS score averages, it is found that for both men and women, those who have social support and those who do not have social support do not manifest a statistically significant difference in their marital satisfaction ( $p>0,05$ ).

**Table 4. Golombok-Rust Inventory of marital state scores and social support types of couples**

	Husband					Wife				
	n	%	M	Sd	Statistics	n	%	M	Sd	Statistics
Social support										
No	31	22.5	55.87	10.61	t= -0.797	20	14.5	55.15	13.20	t= -0.940
Yes	107	77.5	59.84	10.89		118	85.5	57.68	10.75	
Informational support										
No	40	29.0	58.29	10.50	t= -0.837	28	20.3	55.03	13.41	t= -0.215
Yes	98	71.0	60.03	11.59		110	79.7	57.89	10.45	
Financial support										
No	86	62.3	58.29	10.50	t=-0.911	77	55.8	57.81	10.94	t=0.6
Yes	52	37.7	60.03	11.59		61	44.2	56.67	11.39	
Instrumental support										
No	88	63.8	54.42	10.89	t=-0.754	81	58.7	57.00	11.20	t=-0.391
Yes	50	36.2	59.88	11.00		57	41.3	57.75	11.09	
Assuring support										
No	32	23.2	56.93	10.46	t=-1.191	28	20.3	57.14	8.89	t=-0.9
Yes	106	76.8	59.55	11.02		110	79.7	57.35	11.65	

\* $p<.05$ .\*\* $p<.01$

## DISCUSSION

Infertility is a biopsychological condition having psychological, cultural, religious, social and medical aspects. It has been stated that determining the factors affecting marital satisfaction would help the treatment team in achieving the goals in the infertility treatment process. The aim of this study, which was made from this perspective, is to determine the sociodemographic, marriage and social support characteristics affecting the marital satisfaction of infertile couples within Turkish cultural structure.

The results showed that 86.2% of men and 82.6% of women have serious problems with marital satisfaction. Marital satisfaction scores of men are significantly lower than women. It is manifested that marital satisfaction increases as the couples get older; it decreases as the education level and monthly income amount of the couples increase and also it is lower among women living in extended families.

Regardless of the cause of the infertility

(women/men or both factors); it is reported that it causes more marital and sexual dissatisfaction in women than in men, nevertheless, there is no difference between two sexes in case that the cause of infertility is unknown<sup>33,34</sup>. However, in some studies the dissatisfaction was attributed to men. It was stated that if the infertility factor is man, emotional responses get more negative since the infertile men suffer from more stress in their marital relationship<sup>33,35</sup>. While no difference between the sexes was found in the study by Tüzer et.al., in this study the marital satisfaction of men has been found to be significantly lower in comparison to women. Even though it is not statistically significant, it may be due to the fact that men receive less social support than women.

It is observed that the increase in marital satisfaction increases as the age of the women and men participating in the study increases. It is possible to think that as age increases, individuals' ability to cope with problems increases and they are less affected by social pressures from the external environment.

According to a study by Johnston et al. the level of depression and anxiety is related to increasing age. The study results show that the older women have better coping abilities<sup>38</sup>. In the research by Ünal et.al. conducted with 344 women it was seen that the level of being affected by infertility increased as the age increased. Aforementioned research does not manifest parallel results with the findings of this study<sup>39</sup>.

It is seen that the marital satisfaction is decreasing for both men and women as the education level gets higher. Some studies state that there is a significant relationship between the education level of couples and the level of being affected by infertility<sup>39,40,41</sup>. In a study Kurdek states that spouses feel themselves more independent as a result of their education level and this situation may increase the risk of divorce<sup>42</sup>. It is plausible to think that the increase in the level of education increases the sense of independence in both women and men, and thus both men and women become more individualized and withdraw the emotional support from each other in a challenging process like infertility. In addition, Faria et al. stated that education has been associated with deprivation and disappointment so that the people with higher training have less relaxation<sup>43</sup>. The study by Şen et al. could not found a significant difference between the level of education and couple harmony scale<sup>21</sup>.

When the distribution of the participants according to the place of birth is considered it is seen that 29% of men and 32.6% of women are born in rural areas. Although there is no statistically significant difference between the place of birth and marital satisfaction in both for men and women, the observed score averages suggest that the marital satisfaction of the men of urban origin and women of rural origin is higher in comparison. When the facts in our country such as generally the living area is physically small in rural areas, root family and relatives often come together and the gender roles are felt more strongly compared to urban life, it may be anticipated that the individuals born in rural areas are more likely to be affected by the social problems and may face with more environmental pressure in the infertility process. Nonetheless, taking into account that individuals of rural origin live in cities and have more shallow relations with root family and relatives compared to rural area life, it may be expected that the marital satisfaction in these individuals may be relatively high. Beji states that couples often face with

questions of root families and those around them such as “When are you going to have children?” and such questions create emotional problems; thus, affecting the marital relationship in a negative manner<sup>44</sup>.

Regarding the immigration experience, it is observed that 68.8% of men and 75.4% of women are seen to have immigrated. Even though there is no significant relationship between immigration experience and marital satisfaction, it is observed that both men and women who experienced immigration have higher marital satisfaction. It may be due to that in case of immigration from rural to urban areas, individuals withdraw from close family and relatives, and thus the social pressure that individuals feel may be reduced and this may result in enhanced marital satisfaction of the couple.

Regarding the employment status, it is seen that 88.4% of men and 24.6% of women work in any job. Infertility treatment process may also affect the couples financially. In this context, lack of economical satisfaction may disrupt the treatment process and therefore result in psychosocial problems in couples. Indeed, Yanikkerem et al. state that the economic satisfaction may trigger psychosocial problems of couples<sup>44</sup>.

The comparison of GRIMS scores of men and women participating in the study showed that there is no statistically significant difference between employment status and GRIMS scores. On the other hand, some studies show that the employment status and consequently increased income satisfaction improve marital satisfaction in couples and decreases worry and stress<sup>45,46</sup>.

Regarding the distribution of the family type of participating couples, it is seen that 81.2% of them live in a nuclear family. The comparison of marital satisfaction among men according to family type revealed that there is no significant difference between family type and marital satisfaction; whereas women living in nuclear family have higher marital satisfaction compared to women living in extended family and the score difference between the groups is statistically significant.

In this context, it is possible to think that the women living in extended families may experience more pressure from the root family and therefore get more affected regarding infertility. In the study by Karaca, it is shown that women experience pressure/isolation directly in case that they live with their spouses’

families or close to them<sup>23</sup>. A study by Şen et al. determined that the 43.9% of families of infertile women have a tendency to blame and 29.3% of them have a tendency to belittle<sup>21</sup>. Anxiety and a decrease in self-esteem have been observed in infertile women who had negative reactions from her husband or husband's family s<sup>30</sup>. When the results of the present study and previous studies are taken into account, it can be said that women in extended families face with more pressure from their spouses' families and environment in comparison to women living in nuclear families and this situation negatively affects marital satisfaction.

It has been found that there is not a significant relationship between the marriage duration and marital satisfaction for both men and women, however; as the marriage duration gets longer, the marital satisfaction also increases in comparison. A previous study shows that the longer marriage duration results in worry, sadness, hopelessness and stress in infertile couples<sup>47</sup>. Ünal et al. observed that as the marriage duration increases, couples are affected by the infertility in a greater extent. This contradicts our results, however; in a study it is stated that infertile couples who are married more than 9 years, it apparently results in maturity and strengthens the relationship of the couple<sup>39</sup>.

The distribution according to marriage age showed that approximately half of the participating men got married between ages 23-27; and 44,2 % of women got married in 18-22 age range and 7,2 % of women got married under age 18. It is observed that there is not a significant relationship between the marriage age of women and men and the marital satisfaction, however; as the marriage age increases the marital satisfaction also gets higher in comparison. It can be said that the problem-solving abilities improve with age and therefore higher age may contribute to the marital satisfaction in infertile couples. Indeed, a study by Erbay et al investigated age variable and Problem Solving Inventory score averages and showed that the participants in the 20-30 age range are less successful in problem solving compared to other ages<sup>48</sup>.

When GRIMS scores are compared according to marriage manner of men and women; it is shown that there is no statistically significant relationship between marriage manner and GRIMS scores, however; men who got married by dating and women who got married by matchmaking have higher marital satisfaction in comparison. In addition to this, in the

present study, it is observed that majority of the couples got married out of love therefore it is possible to say that the individuals were to a large extent able to make their own decisions within the traditional framework. A study by Ertop and Altay states that the marriage pattern has an effect on spouse harmony and couples who got married by dating have better harmony<sup>49</sup>.

The results indicate that the marital satisfaction decreases as the income increases. The fact that almost all of the men participants as well as the low percentage of women working may have an impact on this result. Akgül Gök suggests that financial wellness of a family may ease receiving service and therefore lighten the burden of women may contribute to the participation into social events and thus improving the psychological welfare of both men and women. However, it can be said that increased income may have negative effects on marital satisfaction when it is thought that money is managed by men in families with gender perspective and that women cannot adequately meet their psycho-social and cultural needs<sup>50</sup>.

There is not a significant relationship between the sufficiency of income and GRIMS scores. On the other hand, 67.4% of couples consider their income sufficient for the expenses while 32.6% of them consider the income insufficient to afford. Despite that the opinions regarding the sufficiency of income is a controversial and subjective subject, it is possible to take the fact that the income is adequate to fulfill expenses as a factor strengthening the psychological wellbeing of individuals.

Women are observed to have higher social support compared to men. Taking into account the fact that women experience more psychological problems in the infertility process<sup>6,17,18</sup> and women tend to share their feelings with friends or relatives, a higher levels of social support is very likely for women. In addition, a common perception in our country such as "men shall be strong and shall not show his feelings, he shall live it within himself" may also limit the social support searching behavior of men. Oğuz also states that women express their feelings much more and that men tend to pretend there is no an important problem<sup>19</sup>. However, a study by Karaca revealed that on the contrary to general belief, women avoid talking about infertility within their social environment during the process, deny questions and advice and experience it as a secret problem. Generally, many studies show social



support, especially support from spouse, contributes positively to the marital status of the couples<sup>23</sup>. Indeed, Bodur et al. stated the perceived social support affects the marital harmony in a positive manner<sup>51</sup>. Also, most of the men participating in a study by Onat and Kızılkaya Beji declared that they would support their spouses during the treatment process. Again, according to the results of the study, harmonious couples stated they would support each other in every step of the treatment and all men except one declared their promised support in this manner: helping with the housework, emotional sharing and encouragement, helping with keeping track of the medication to take etc<sup>22</sup>. A study by Şen et al. determined that 43.2 % of women are supported by their family whereas 41.8% are supported by their spouses<sup>21</sup>. In addition, a study by Taşçı et al. showed 93.1 % of infertile women received support from their spouses<sup>13</sup>. Previous research showed that the social support the couple perceives contributes to the marital marriage in a positive manner<sup>52,51</sup>. In many studies it is observed that couples are receiving support from the environment which helps to improve the coping mechanisms and contributes to the marital satisfaction<sup>53,54</sup>. However, contrary to the literature, in the present study there has been no significant difference between the social support level of the couples and GRIMS scores. Keeping in mind that in traditional social structure, especially infertile women are more affected by the process and woman who lack support from especially her spouse and social support from in-laws experience the process more severely; it is clearly seen that more interventions are needed in this subject.

In our study investigating the sociodemographic, marital and social support characteristics affecting marital satisfaction in Turkish culture; age, gender, education level, family type and family income were found to be related to marital satisfaction. Considering there are infertile couples who cannot receive medical treatment due to various reasons (sociocultural and religious beliefs, long and expensive treatment, fear of medical interventions, adoption), it is a limitation of the present study that it merely includes couples receiving treatment. Contrary to the literature, the finding that there is no significant relationship between social support and marital satisfaction is an unexpected result and there is a need for further research.

According to our study, four out of five couples have poor marital satisfaction and appropriate

interventions are required. In the future interventions, early diagnosis of individuals with characteristics affecting marital satisfaction negatively (male sex, younger age, higher education level, higher monthly income, women living in extended families) and shaping the intervention accordingly may help the treatment by enhancing the harmony between spouses.

Especially in societies such as Turkey in which the gender roles dominantly affect the family life, infertility is a biopsychosocial condition which shall be treated with a team work and the team clearly should also include social service specialists. Social service specialists evaluate social structure and problems arising from it in order to perform applications in micro, mezzo and macro levels may enable to realize the early diagnosis of the psychosocial problems experienced by infertile couples and may contribute to the treatment process and well-being of the couple by conducting studies on individual, couple, family and society levels in order for the couples to cope with the process more successfully.

**Yazar Katkıları:** Çalışma konsepti/Tasarımı: SK, NY, VD; Veri toplama: SK, NY; Veri analizi ve yorumlama: VD, FAG; Yazı taslağı: FAG; İçeriğin eleştirel incelenmesi: VD, SÖ, SK; Son onay ve sorumluluk: SK, FAG, NY, SÖ, VD; Teknik ve malzeme desteği: -; Süpervizyon: VD, SÖ; Fon sağlama (mevcut ise): yok.

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