

The relationship between perceived social support and depression in infertile women

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Abstract

Aim: The purpose of this study is to determine the effect of perceived social support on depression in infertile women.

Material and Methods: A cross sectional study. This research was conducted in September 2017 to April 2018 in the infertility center of a university hospital in eastern Turkey. During this period all women who applied to the university hospital's infertility center were included in this research. The sample size of the study was determined as 102 infertile women using the power analysis. Multidimensional Scale of Perceived Social Support (MSPSS) and Beck Depression Inventory (BDI) were used to collect the data.

Results: The mean total MSPSS score of infertile women participating in the study was 63.45 ± 14.35 and the mean depression score was 29.45 ± 14.35 . In the study, there was a negative correlation between the total score average of MSPSS and the average score of BDI ($p < 0.05$).

Conclusions: In the study, it was determined that the perceived social support by infertile women is high and the depression is low. As the perceived social support by infertile women increases, depression decreases. It may be advisable to provide counseling to nurses to increase their social support for infertile women and to reduce their psychosocial problems.

Keywords: Depression; Infertility; Women; Social Support.

INTRODUCTION

Infertility, is defined as despite regular and unprotected relationship within one year, pregnancy can not be achieved (1). Infertility affects 15% of couples in reproductive age (2). Worldwide, 1.5-2 million infertile couples were estimated in Turkey (3). Traditionally, in our society the most important role is of women for looking after children. For this reason, although the reason for infertility is male, the burden of this situation is entirely on the woman. This situation leads to psychological problems such as blindness, suicide thought, stigmatization in women compared to other women in other societies (2, 4). Therapy as well as the diagnosis of infertility affects the individual physically and psychologically. The uncertainties in the treatment of infertility, the cost of treatment and the prolonged duration of treatment, the negative consequences of treatment are affecting women psychologically (5). Infertile women are especially affected by psychological problems such as stress, anxiety, depression, and uselessness.

Depression is a common problem in infertile women.

Maroufizadeh et al. found that adverse outcome of treatment in infertile women increased specially depression (6). Schmidt et al. found the rate of depression was higher in infertile women than in other women (7). It is reported that despite even the causes of infertility are related to men, the practices performed were on women. Oltuluoglu et al. found that infertile women had higher levels of depression than men. The role of social support in eliminating depression in infertile women is great (8).

Social support in infertile women creates feelings of love, compassion, appreciation and acceptance by the couple and their social environment (9,10). The social support that women perceive in infertility provides for the woman to fulfill social roles, feel good emotionally, free from stigmatization, reduce the level of anxiety, stress and depression, and motivate positive direction (11).

The nurses' task is great in coping with the psychological problems of infertile women. Nurses, who are professional members, need to communicate with couples, identify problems and provide effective counseling to solve

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problems (12). Nurses should ensure that couples get through this process with less mental problems with effective problem-solving methods. Infertile women who feel well in the spiritual direction their chances of responding favorably to treatment are increasing (13).

Infertile couples are also interested in the psychiatric field. A study by Shu-Hsin found that the crisis-resolution program applied to infertile individuals reduced anxiety, social isolation, and spiritual and mental relaxation for those individuals (14).

The purpose of this study is to determine the relationship between perceived social support and depression in infertile women.

- In the research the answer to the following question was investigated
- Is there a relationship between perceived social support and depression in infertile women?

MATERIAL and METHODS

The research was carried out between September 2017-April 2018 Research was conducted in a university hospital infertility center of the east of Turkey. Women who applied to the infertility center of a university hospital constitute the sample size of this research. The population of the study consisted of 800 adult infertile women receiving treatment in the infertile clinic of a university hospital. As a result of the power analysis conducted to determine the sample of the study, the sample size was determined as 102 infertile women with significance level of 0.05, effect size of 0.08, and ability to represent population of 0.95. Criteria for inclusion in research; being literate, being open to communication and cooperation, having an infertility diagnosis, being in the process of infertility treatment, having no serious mental and physical illness. Descriptive Characteristics, Multidimensional Perceived Social Support Scale (MSPSS) and Beck Depression Inventory (BDI) were used to collect data. Descriptive Characteristics form; (age, education level, working status, education status of the partner, working status of the spouse, income status, previous treatment status, marriage duration) formed by the researcher according to the literature. Multidimensional Perceived Social Support Scale (MSPSS); Zimet et al. The validity and reliability of the scale developed by Eker and Arkar (15,16). Scale is a 7-point Likert-type scale consisting of 3 sub-dimensions (family, friends and private support) and 12 items. The lowest score that can be taken from the scale is 12, the highest score is 84, the lowest score that can be taken from the subscales of the scale is 4, and the highest score is 28. The high score on the scale indicates that perceived social support is high (15,16). The Cronbach alpha coefficient of the scale was 0.94. In this study, the Cronbach alpha was found to be 0.92. Beck Depression Inventory (BDI); Developed by Beck & friends in 1961. The validity-reliability for Turkey in 1989 was carried out by Hisli (17, 18). The Cronbach alpha coefficient of the scale was 0.75. In this study, alpha was found 0.80. The scale includes a total of 21 self-assessment scales. Provides quadrature likert type measurement. The scale range from

0 to 63. The depression level increases as the score on the scale increases. The data were collected by the researcher in face-to-face interviews with female patients at the infertility center of the hospital. During the collection of the data, the questions that women did not understand were explained and the questions were answered. In the analysis of the data, t test, Kruskal-Wallis, Mann Whitney-U, Pearson correlation analysis were used. Before start the research, Inonu University's permission was obtained from the scientific research ethics committee (2018 / 2-14). Before the data were collected, the purpose of investigating women was explained and the verbal approvals of the patients were taken.

RESULTS

It was determined that 55.8% of the infertile women participating in the survey were in the age group 34-41, 46.0% of them were secondary school graduates, 44.1% of them were middle income and did not work. It was determined that 78.4% of the women were working with their husbands, 52.9% of the husbands were in secondary education and 47.0% of them were married for 12 years and over.

According to the age group of the women participating in the study, the difference between the MSPSS subscale and total score mean was statistically significant ($p < 0.05$). The perceived social support was higher in the age group of 18-25 years. The difference between the marriage duration of women and MSPSS total point average is meaningful ($p < 0.05$). Women with longer marriages have lower perceived social support.

The difference between the BDI total score mean and the education level in infertile women in the study was statistically significant ($p < 0.05$). Women with higher levels of education have higher levels of depression. The difference between infertile women according to their working status and BDI total point average was statistically significant ($p < 0.05$). Non-working women have higher levels of depression. The difference between the income status of the infertile women and the BDI total point average was statistically significant ($p < 0.05$). Women with poor income status have higher levels of depression. The difference between the work status of the husbands of the women participating in the survey and the BDI total point average was statistically significant ($p < 0.05$). Women who do not work have higher levels of depression. The difference between the duration of marriage and the BDI total score in infertile women was statistically significant ($p < 0.05$). Women who are married for a long time have higher levels of depression (Table 1).

The mean multidimensional perceived social support scale total score of women participating in the study was determined as 63.45 ± 14.35 and the mean depression score was 29.45 ± 14.35 . According to the average of the scores, the perceived social support by the women was high and the depression levels were found to be moderate (Table 2). There was a statistically significant negative correlation between depression and social support perceived by women in the study ($p < 0.05$). As the perceived social support by infertile women increases, depression levels decrease (Table 3).

Table 1. Characteristics of infertile women and comparison of mean scores of BDI and MSPSS

Characteristics	n	%	Friend	Family	Significant Other	MSPSS Total Score	BDI Total Score
Age							
18-25	10	9.8	24.12±3.88	24.55±3.45	22.12±5.66	70.34±12.22	19.12±8.32
26-33	35	34.3	19.08±5.02	21.75±6.57	20.87±6.12	60.45±12.56	21.13±11.48
34-41	57	55.8	22.10±6.34	20.87±4.65	17.66±5.33	60.87±13.21	30.12±11.66
Test value			KW=4.952	KW=6.783	KW=0.386	KW=11.686	KW=10.488
p			0.000	0.000	0.000	0.000	0.897
Educational status							
Literate	11	10.7	17.12±5.22	19.32±5.99	19.66±7.99	56.48±9.70	20.45±9.23
Primary school	20	19.6	19.01±1.88	21.52±4.32	20.06±6.74	60.54±13.24	30.12±8.78
High school	47	46.0	20.39±3.46	23.22±7.66	20.43±4.61	63.21±14.05	30.54±9.54
University	24	23.5	21.43±4.33	25.12±6.77	24.11±6.23	70.08±16.42	31.24±9.59
Test value			KW=6.121	KW=5.132	KW=8.152	KW=10.586	KW=25.623
p			0.065	0.076	0.243	0.781	0.000
Working condition							
Yes	33	32.3	22.12±3.44	21.58±3.80	22.10±6.73	66.68±14.45	20.56±9.50
No	69	67.6	19.12±2.33	19.12±4.29	17.09±5.71	55.56±13.24	22.36±8.91
Test value			t=0.515	t=0.231	t=1.124	t=2.345	t=0.325
p			0.133	0.093	0.068	0.065	0.002
Income state							
Low	32	31.3	17.09±1.99	19.00±5.55	17.46±5.65	53.45±12.36	25.66±7.89
Moderate	45	44.1	21.15±7.28	21.32±4.41	19.65±5.98	62.30±15.23	20.12±10.32
High	25	24.5	20.50±6.92	24.75±2.55	20.69±5.41	65.24±15.34	19.08±12.38
Test value			KW=2.678	KW=5.023	KW=3.456	KW=9.876	KW=30.231
p			0.087	0.098	0.321	0.056	0.000
Educational status of husband							
Literate	6	5.8	17.53±5.71	19.45±5.72	17.45±5.02	54.38±16.84	20.12±14.23
Primary school	10	9.8	19.25±5.73	20.09±5.74	19.00±7.05	58.46±17.63	25.78±14.12
High school	54	52.9	22.83±6.21	23.21±3.44	19.12±5.13	65.38±15.40	28.76±13.09
University	32	31.3	21.73±6.78	22.12±5.64	20.27±6.09	64.78±13.21	32.14±12.03
Test value			KW=4.345	KW=0.265	KW=0.341	KW=1.926	KW=10.598
p			0.098	0.135	0.078	0.312	0.201
Working condition of husband							
Yes	80	78.4	22.35±7.18	24.55±4.38	20.87±4.13	67.49±12.36	30.98±10.32
No	22	21.5	19.00±5.07	20.61±6.84	19.05±6.21	59.47±13.01	35.12±9.06
Test value			MWU=156.000	MWU=3123.200	MWU=1651.000	MWU=2134.000	MWU=3079.000
p			0.057	0.058	0.065	0.078	0.000
Duration of marriage							
0-5 yıl	18	17.6	21.25±3.88	22.89±5.26	20.34±5.73	64.13±12.32	19.04±7.98
6-11 yıl	36	35.2	20.33±5.19	20.64±6.12	17.69±5.82	58.32±13.89	19.07±9.96
12 yıl ve üzeri	48	47.0	19.05±6.29	17.67±5.66	17.02±6.72	54.43±13.54	21.34±10.08
Test value			KW=2.780	KW=5.436	KW=0.670	KW=7.780	KW=20.400
p			0.054	0.062	0.064	0.001	0.000

Table 2. Lowest and highest scores of BDI and MSPSS and mean scores

	Min-Max	X±SD
Friend	4-28	20.55±5.16
Family	4-28	22.34±5.84
Significant Other	4-28	19.68±3.87
MSPSS Total Score	12-84	63.45±14.35
BDI Total Score	0-63	29.45±14.35

Table 3. Determination of the relationship between the mean scores of MSPSS and BDI

MSPSS	BDI Total Score	
Friend	r	-0.132**
	p	0.000
Family	r	-0.156**
	p	0.000
Significant Other	r	-0.202**
	p	0.000
MSPSS Total Score	r	-0.221**
	p	0.000

DISCUSSION

The findings of the research conducted to determine the relationship between depression and perceived social support by infertile women have been discussed in the light of the literature.

The difference between the social support subscale and the mean of the total points perceived by the age group of the women participating in the research is statistically significant. The perceived social support was higher in the age group of 18-25 years. Erdem and Apay found that infertile women have less perceived social support as their age increases (19). Increased risk of not being able to conceive with infertile women leads to worry in women. This situation can cause infertile women to perceive social support. The difference between the marriage duration of women and their perceived social support average total point is significant. Women with longer marriages have lower perceived social support. Erdem and Apay found that infertile women with shorter marriages periods had higher social support (19). Eren found that the social support perceived by married infertile women is higher (20). The results of the research are parallel to the literature. In the first years of marriage, families want the couples to have a lot of children, and for this reason they can support the couple more.

The difference in the mean score of depression according to education level in infertile women in the study was statistically significant. Women with higher levels of education have higher levels of depression. Orji et al. found that depression rises as the level of education increases in infertile women's work (21). The increase in the level of education ensures that women have more knowledge of

infertility. Increased knowledge levels of women are more likely to be affected by the negativity, leading to higher levels of depression. The difference between the depression total scores according to working status in infertile women was statistically significant. Non-working women have higher levels of depression. Erdem and Apay determined that depressed levels of working infertile women were lower (19). As working women deal with different things during the day and communicate with different people, they are relieved from the spiritual side and reduce depression. The difference between the incomes of infertile women and the total score of depression was statistically significant. Women with poor income status have higher levels of depression. Because infertile treatment is so expensive, financial difficulties can increase the level of depression in women. The difference between the working status of the husbands of the women who participated in the research and the depression total score average was statistically significant. The difference between the duration of marriage and depression total score in infertile women is statistically significant. Women who are married for a long time have higher levels of depression. Women who have long marriages are less and less likely to become pregnant. The infertile women are feeling helpless and increasing levels of depression.

In the study, it was determined that perceived social support by infertile women is high and depression levels are moderate. Ramazenzadeh et al. found low levels of depression in infertile women (22). Matsubayashi et al. found that the perceived social support by infertile women is high (23). The results of the research are parallel to the literature.

There was a statistically significant negative correlation between depression and perceived social support by women in the study. As the social support perceived by infertile women increases, depression levels decrease. Erdem and Apay find that depression decreases as the social support of infertile women increases (19). Karlıdere et al. found that the perceived social support in infertile women reduced the psychological symptoms (24). The results of the research are similar to the literature.

LIMITATION OF STUDY

The results of the research can only be generalized to this group.

CONCLUSION

Infertility is a condition that affects couples in reproductive age adversely from the psychological, physiological and social aspects. As a result of the research, it was determined that the perceived social support by infertile women is high and the depression level is moderate. As the perceived social support by infertile women increases, the depression decreases. Advising nurses about the stress levels and psychosocial problems of infertile women and appropriate interventions may allow women to overcome this process more healthily and increase treatment success.

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