



Determination of Dyadic Adjustment and Exposure to Domestic Violence among Infertile Women

Nilufer Tugut^{1*}, Gulbahtiyar Demirel² and Meral Karatas³

¹Department of Nursing, Sivas Cumhuriyet University, Turkey

²Department of Midwifery, Sivas Cumhuriyet University, Turkey

³Cumhuriyet University, Healthcare Services Application and Research Hospital, Turkey

Abstract

Objective: The study aims to determine dyadic adjustment and exposure to domestic violence among infertile women.

Methods: The present study has a descriptive design. The sample of the study is composed of 98 infertile women admitted to the Obstetrics and Gynecology clinic. Study data were collected using the Sociodemographic Characteristics Questionnaire, Revised Dyadic Adjustment Scale (RDAS) and Domestic Violence Screening Form. The data were analyzed using the SPSS 14.0 software package. To analyze the data, arithmetic mean, standard deviation, percentage distributions, independent two-sample t-test and one-way analysis of variance test were used. The statistical significance level was set at 0.05.

Results: Of the participants, 34.7% had been subjected to domestic violence before they were diagnosed within fertility. Of these victims, 66% were subjected to psychological and verbal abuse and 13.6% to sexual violence. Of the participants, 44.9% were exposed to domestic violence after they were diagnosed with infertility. Of these victims, 54.5% were exposed to psychological/verbal abuse and 27.6% to sexual violence. The mean total score obtained from the RDAS by the participants was 42.66 ± 5.70 . The mean scores obtained by the participants subjected to violence were statistically significantly lower than were those of obtained by the participants not subjected to violence ($p < 0.05$).

Conclusion: The participants were found to have been exposed to a high level of violence after they were diagnosed with infertility, which negatively affected their dyadic adjustment.

Keywords: Dyadic Adjustment; Domestic violence; Infertility; Turkey

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*Correspondence:

Nilufer Tugut, Department of Nursing,
Sivas Cumhuriyet University, 58140

Sivas, Turkey, Tel: +90-346-219-12-60;

Fax: +90-346-219-12-61;

E-mail: nlfirtugut@gmail.com

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Introduction

The World Health Organization (WHO) defines infertility as the inability of a sexually active, non-contracepting couple to achieve pregnancy in one year [1,2]. In addition, infertility is defined as a psychologically threatening, emotionally stressful, economically expensive and generally physically painful and complex life crisis for both spouses [3]. The incidence of infertility ranges between 5% and 30% in the world and between 10% and 20% in Turkey [4].

Reproduction is one of the basic instincts of humans. Almost all married couples plan to have children. Infertile persons regard infertility as a severe defect and become isolated from their social circles over time due to their feelings of deficiency, which they perceive as something to be ashamed of [5]. Not only infertility but also examination and approaches used for infertility treatment lead to spouses to lose control over their reproductive functions. Therefore, this process places great strain on the coping skills and social support sources of an individual or a couple and exhausts their emotional energy, thereby leading to sexual dysfunctions, depression and anxiety, and deterioration in relations between spouses or partners [6]. However, the extent of the burden on the spouses is not the same; the infertile woman's quality of life is more affected than that of the infertile man [7,8]. All of these negative emotions experienced by infertile individuals lead to deteriorations in family dynamics [5].

Couples failing to achieve the continuity of the family line, one of the main functions of the institution of family experience negative conditions in intra-family relations, because the diagnosis of infertility can lead to a crisis in the couple's marriage, with which they have no previous

experience to cope. For couples, this crisis is a situation that must be tackled both individually and in terms of the marital relationship [9]. Families may react supportively or cold-heartedly, when they find out the couple is infertile [10,11]. Spouses feel like they have been forced to choose between maintaining their marriage and having children. The healthy spouse may even start to consider marrying someone else. In short, the marital relationship is now under the threat of collapsing and this threat leads people to face the possibility of a second loss [9]. Due to this feeling of loss, spouses suffer frustration, a sense of guilt, and make false or baseless allegations against each other, which put psychological strain on marital ties and increases domestic violence. In addition to infertility and domestic violence both of which threaten women's well-being, women are also faced with a number of psychological problems (depression, suicide, etc.) that further diminish their quality of life [12].

Healthcare professionals assume important roles in providing necessary support and information for individuals subjected to domestic violence after having been diagnosed with infertility. Nurses have an important role in providing such assistance due to their counseling and educational roles. Providing counseling and training is among the primary functions of nurses. Nurses should not ignore the impact of childlessness when they deal with infertile couples who present with therapeutic purposes, should be able to evaluate their relations and be able to identify risky situations in advance [13]. The present study aims to determine dyadic adjustment and exposure to domestic violence among infertile women.

Methods

Study design: This present descriptive study was conducted to determine dyadic adjustment and exposure to domestic violence among infertile women. The study was carried out at a tertiary healthcare center. The sample of the study is composed of 98 infertile women admitted to the Obstetrics and Gynecology clinic. Study data were collected using the Sociodemographic Characteristics Questionnaire, Revised Dyadic Adjustment Scale and Domestic Violence Screening Form.

Sociodemographic characteristics questionnaire: The questionnaire applied to infertile couples was developed by the authors by reviewing the pertinent literature. This questionnaire included items questioning the participants' socio-demographic characteristics such as age, sex, marital status, place of residence, education status, occupation/profession status and economic status, as well as their obstetric, marital and infertility-related history and effects of infertility on life.

Revised dyadic adjustment scale (RDAS): The scale was developed in order to assess the quality of the relationships between married couples or between unmarried couples living together and its validity and reliability study was conducted by Spanier. Busby et al. revised this scale in 1995 [14]. The validity and reliability study of the Turkish version of the scale was performed by Gundogdu [15], and its Cronbach's Alpha value was 0.80. The scale is composed of 14 easy-to-apply items which individuals may respond to themselves. Responses to these 14 items are rated on a 5-point Likert scale. The minimum and maximum possible scores to be obtained from the scale were 0 and 70 respectively. The higher the score obtained from the scale, the better the quality of the relationship.

Screening form on domestic violence against women: The form developed to determine women's exposure to domestic violence

within the past year by the General Directorate on the Status of Women affiliated to the Republic of Turkey Prime Ministry was adapted for infertile women by the researcher. The form includes 16 yes/no questions and the following 4 sub-scales: Verbal violence, physical violence, economic violence, and sexual violence. Any 'yes' answer shows that the individual has been subjected to violence.

Procedure: Before the implementation, the approval was obtained from the Non-Interventional Clinical Research Ethics Board of Cumhuriyet University. After the individuals meeting the study criteria (primary infertility, at least 6 months of infertility treatment, literacy, absence of any chronic or psychiatric diseases, voluntariness to take part in the study) were informed about the objective and content of the study, their written consent indicating that they agreed to participate in the study was obtained. To ensure the accuracy of the data collected, the participants were requested not to write any personally identifiable information on any questionnaire other than the consent form and that all the data to be obtained would be kept confidential. After those who gave their written consent were administered an envelope and the forms to be used in the study, were taken to another room and asked to complete the forms, place them into an envelope, seal the envelope and put the envelope into the box. They were told that it would probably take 10 min to 15 min to fill in the forms.

Statistical analysis: The data obtained through this procedure were analyzed using the SPSS 14.0 package. For the analysis, standard deviation, percentage, independent two-sample t-test, and one-way analysis of variance tests were used. The statistical significance level was set at 0.05.

Results

The mean age of the participating women was 30.97 ± 7.96 , the mean age of their spouses was 35.18 ± 8.31 , the mean duration of marriage was 7.91 ± 8.41 years, and 65.3% of the women had love marriages. A little over half of the participating women (59.2%) and 74.5% of their spouses had six or more years of education. While 87.8% of the infertile women were not employed, 87.55 of their husbands were employed. Of the participating women, 63.3% were living in urban areas, 67.3% had nuclear families, and 78.6% were in the middle-income class.

Table 1 presents the infertility history of the women. Of the causes of infertility, 34.7% were due to unknown cause, 32.7% were due to the female factor, 20.45 were due to the male factor, and 12.2% were due to both male and female factors. Of the participating women, 33.7% were identified to have been infertile for 3 to 5 years and were still under treatment.

Of the participants, 34.7% had been subjected to domestic violence before they were diagnosed with infertility. Of these victims, 66% were subjected to psychological and verbal abuse, 13.6% to sexual violence, 12.2% to physical violence and 8.2% to economic violence. Of the participants, 44.9% were exposed to domestic violence after they were diagnosed with infertility. Of these victims, 54.5% were exposed to psychological/verbal abuse and 27.65% to sexual violence, 10.8% to physical violence and 7.1% to economic violence (Table 2).

Table 3 shows the mean total score obtained from the revised dyadic adjustment scale by the participating women. The mean total score was 42.66 ± 5.70 . Comparison of the mean scores the participating women obtained from the RDAS in terms of socio-

Table 1: Distribution of history of infertility among women.

	Cause of		Duration of		Treatment infertility
	n (%)	infertility	n (%)	duration	n (%)
Factor of the female	32 (32.7)	1-2 years	27 (27.6)	1-2 years	27 (27.6)
Factor of the male	20 (20.4)	3-5 years	33 (33.7)	3-5 years	33 (33.7)
Factor of the female and male	12 (12.2)	6-10 years	18 (18.4)	6-10 years	18 (18.4)
Unexplained	34 (34.7)	≥ 11 years	20 (20.4)	≥ 11 years	20 (20.4)

Table 2: Exposure to domestic violence before and after diagnosed with infertility.

	Before Diagnose n (%)	After Diagnose n (%)
Exposure to violence		
Exposed	34 (34.7)	44 (44.9)
Not Exposed	64 (65.3)	54 (55.1)
Type of violence		
Emotional/verbal violence	65 (66.0)	60 (54.5)
Sexual violence	3 (13.6)	30 (27.6)
Physical violence	12 (12.2)	12 (10.8)
Economic violence	8 (8.2)	8 (7.1)

*With more than once response, n is multiplied

demographics given in Table 3 revealed that there was a statistically significant difference between the scores for the variables such as the place of residence, family type, employment status, spouse's employment status ($p > 0.05$). However, the difference between the RDAS scores in terms of the cause and duration of infertility and the treatment duration was not statistically significant ($p > 0.05$).

While the mean score the women having been subjected to domestic spousal violence obtained from the RDAS was 42.11 ± 6.51 , the mean score obtained by the women not having been subjected to

such violence was 43.11 ± 4.97 . The comparison of the mean RDAS scores revealed that the women having been subjected to violence obtained lower scores than did the women not having been subjected to domestic spousal violence, and the difference was statistically significant ($p < 0.05$). The analysis of the mean RDAS scores in terms of what types of violence the participants were subjected to, the women having been subjected to one type of violence (emotional/verbal) achieved the highest mean score (45.00 ± 6.65), whereas the women having been subjected four types of violence (emotional/verbal, physical, sexual and economic) achieved the lowest mean score (37.00 ± 4.24). However, the difference was not statistically significant ($p > 0.05$) (Table 4).

Discussion

Although, the inability to have children does have a biopsychosocial impact on both sexes, women are affected more than men are [4]. The diagnosis of infertility creates a negative effect specifically on marital relationships as it does on a number of social relationships of an individual. The fact that infertile couples must engage in sexual intercourse specifically during the fertile window of the menstrual cycle leads to the deterioration of naturalness of sexual intercourse. Couples feel sexually repressed because they think that their sexuality is under observation, and this causes sexuality

Table 3: The comparison of the mean scores the participating women obtained from the RDAS in terms of some of their socio-demographic and infertility characteristics.

Characteristics	X ± SD	Characteristics	X ± SD
Age (years)	18-29 42.84 ± 5.16	Partner's age (years)	18-29 43.04 ± 6.46
≥ 30	42.50 ± 5.83	≥ 30	42.54 ± 5.48
t/p or F/p	t=0.300/0.76		t=0.368/0.71
Years of marriage		Place of residence	
1-5 years	42.94 ± 5.51	City	43.51 ± 5.44
6-11 years	42.82 ± 6.12	Town	42.30 ± 5.00
≥ 12 years	41.63 ± 5.94	Village	39.23 ± 7.07
t/p or F/p	F=0.384/0.68		F=3.233/0.04
Level of education		Manner of marriage	
≤ 5 years	41.70 ± 6.42	Blind date	42.09 ± 5.93
≥ 6 years	43.32 ± 5.10	Companionate	43.73 ± 5.16
t/p or F/p	t=1.390/0.16		t=1.363/0.17
Family type		Occupation	
Nuclear family	44.01 ± 4.81	Employed	46.33 ± 4.51
Extended family	40.20 ± 6.43	Unemployed	42.15 ± 5.68
t/p or F/p	t=3.229/0.00		t=2.438/0.01
Partner's level		Occupation of partner	
≤ 5 years	40.84 ± 5.76	Employed	43.19 ± 5.51
≤ 6 years	43.28 ± 5.58	Unemployed	38.83 ± 5.81
t/p or F/p	t=1.875/0.06		t=2.552/0.01

Income status		Treatment duration	
Low	38.33 ± 6.69	1-2 years	43.00 ± 4.84
Medium	42.92 ± 5.24	3-5 years	45.07 ± 5.46
Higher	46.22 ± 5.403	6-10 years	42.75 ± 6.77
t/p or F/p	F=5.808/0.04		F=0.775/0.61
Cause of infertility		Duration of infertility	
Factor of the female	42.43 ± 6.23	1-2 years	43.11 ± 4.93
Factor of the male	44.25 ± 3.64	3-5 years	43.30 ± 6.04
Factor of the female and male	41.58 ± 7.20	6-10 years	41.88 ± 6.27
Unexplained	42.32 ± 5.70	≥ 11 years	41.70 ± 5.79
t/p or F/p	F=0.709/0.64		F=0.486/0.69

Table 4: The mean RDAS scores in terms of exposure to violence after diagnosis of infertility.

Exposure to violence after diagnosis of infertility	X ± SD	t/p or F/p
Exposed	42.11 ± 6.51	t=39.69/0.00
Not Exposed	43.11 ± 4.97	
No of types of violence experienced Exposure to 4 types (n:4)	37.00 ± 4.24	F=0.868/0.62
Exposure to 3 types (n=10)	40.42 ± 6.28	
Exposure to 2 types (n=14)	43.65 ± 6.44	
Exposure to 1 type (n=16)	45.00 ± 6.65	

to become "meaningless" for female spouses. Infertility leads to frustration, a sense of guilt, and unfair allegations between spouses, and creates sexual and marital problems [16,17]. In the present study, the dyadic adjustment score was strikingly low among the infertile women (42.66 ± 5.70). Dyadic adjustment was found to be high in certain studies conducted with infertile women [10,16,17], whereas in others, the dyadic adjustment scores of infertile women were reported to be low [16,18-20]. These differences are thought to stem from psycho-socio-demographic, economic and cultural etc. variables.

In the present study, dyadic adjustment was low among the infertile women who were living in villages or towns, had extended families, had a low level of income and were unemployed or whose husbands were unemployed. Akyuz et al. [21] obtained similar results. Contrary to these findings, Gulec et al. [19], Bodur et al. [22], Tascı et al. [23] and Repokari et al. [24] determined no significant differences between dyadic adjustments of the infertile women in terms of the socio-demographic variables. Furthermore, the present study did not find a significant correlation between dyadic adjustments of the participants and the cause, duration and duration of infertility treatment. In studies conducted on the effects of infertility on the dyadic adjustment of couples, different results were obtained with respect to the cause, duration, and treatment period of infertility [21-24]. These differences are considered to stem from the culture or sub-cultures, and the meaning attributed to the diagnosis of infertility by women. Infertile women's educational level, social status, economic status, characteristic alternative to motherhood, perception of gender, and the meaning they attribute to infertility have been reported to adversely affect the life of an individual [25,26].

In the present study, the dyadic adjustment scores of the participating women having been subjected to violence following the diagnosis of infertility were low. Violence might be an important factor leading to the deterioration of dyadic adjustment. Relevant studies in the literature report that infertile spouses experience

violence perpetrated by their spouses [27-29]. According to a study conducted in Nigeria, 41.6% of the infertile couples were exposed to domestic violence [28]. Aduloju et al. [28] determined that 31.2% of the infertile women were exposed to spousal violence. In Ardabilly et al. [29] study, 61.8% of the women were exposed to domestic violence. Of these cases, 33.8 were psychological violence, 14% were physical violence, and 8% sexual violence. Moghadam et al. [30] determined that 33.8% of the infertile women were subjected to psychological/verbal violence and 14% to physical violence. In Yıldızhan et al. [12] study, 33.6% of the women were exposed to domestic violence due to infertility, and 78% were exposed to violence at the initial stages following the diagnosis of infertility. Akyüz et al. [21] determined that the infertile women were exposed to violence in the marital environment to a greater degree. Specifically, psychological/verbal, sexual and economic violence are reported to be more common among infertile couples [30]. The results of these studies are in line with the results of the present study. The present study determined that approximately one-third (34.7%) of the participants experienced violence before the diagnosis of infertility. Of these women, 66% experienced psychological/verbal violence, and 13.6% experienced sexual violence. Almost half of the women (44.9%) were exposed to violence after they were diagnosed with infertility. While 54.5% of these women experienced psychological and verbal violence (54.5%), 27.6% of them experienced sexual violence. Although psychological and verbal violence seems to decrease following the diagnosis of infertility, sexual violence demonstrates a strikingly increasing trend in the same period. Similarly, Yıldızhan et al. [12] found that 29.2% of the infertile women had been exposed to sexual violence.

Conclusion

In conclusion, the diagnosis of infertility not only deteriorates marital relationships but also expose women to domestic violence. Following the diagnosis of infertility, sexual violence was determined to be on the increase, but the level of dyadic adjustment was low. The

fact that the most compelling challenge faced especially by women throughout their lives is infertility should not be overlooked and that infertile women are very much likely to be exposed to violence should not be forgotten. Because infertile women are being exposed to violence leads to various problems, it is essential that different disciplines should cooperate when dealing with these women. The nurse, occupying an important position in the multidisciplinary team, should provide counseling for those who have problems caused by infertility and violence.

Author Contributions

Concept: N.T, G.D, M.K; Design: N.T, G.D; Literature Search: N.T, G.D; Data Collection and Processing: N.T, G.D, M.K; Analysis or Interpretation: N.T, G.D; Writing: N.T, G.D.

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