

Violence Exposure of Infertile Couples: A Systematic Review

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ABSTRACT

Objective: This study systematically evaluated the current literature on the types of violence perpetrated against infertile couples. Violence against infertile couples is quite common in societies. Literature on the types and levels of violence faced by couples is limited.

Materials and Methods: In this study, databases were scanned using 'infertilite ve şiddet', 'infertility and violence' keywords. Open access clinical trials that met the inclusion criteria and conducted between January 2015/March 2020 were reviewed. The databases included Scopus, Science Direct, Cochrane, the Wiley Online Library, the National Academic Network Information Center National Medical Database, Google Scholar, and Web of Science were looked at. In this systematic review, seventeen studies were chosen based on inclusion/exclusion criteria.

Results: Many of these studies (94.11%) were conducted with women. Thirteen studies examining types of violence toward infertile women found such women suffered from emotional (96.3%), verbal (84.9%), physical (68%), sexual (60%) and economic violence (77.4%). Marriage age, length of marriage, family structure, confirmation of infertility, length of infertility, number of infertility therapies received, alcohol/smoking use, education level, and employment status were described as factors influencing the incidence of violence in infertility.

Conclusion: The results of these studies indicated that infertile couples had higher rates of social pressure and domestic abuse. However, this study revealed that there is a lack of research on violence towards men in cases of infertile couples.

Keywords: Infertility violence, infertilite ve şiddet, intimate partner violence, domestic violence, nursing

INTRODUCTION

Violence is a public health issue around the world, regardless of geography, economy, or education level (1). The World Report on Violence Health (WRVH) defines violence as the intentional use of physical force or power against oneself, another person or a group or community with a high likelihood of resulting in injury, psychological harm, death or maldevelopment (2). The World Health Organization (WHO) emphasizes that there are three types of violence: self-directed violence, interpersonal violence, and social violence; categorizes violent acts as physical, sexual, psychological, deprivation or negligent (3).

Having a child or children is often an important goal for couples. Infertility causes people to experience feelings of failure, and exclusions due to personal, social, or religious reasons may cause a crisis in which women are subjected to violent

behaviours (3). Particularly in developing countries, infertility is changing from being a personal problem to an unpleasant social stigma with devastating consequences related to social relationships, expectations, and needs (2).

This study systematically evaluated the current literature on the incidence types of violence against infertile couples.

METHODS

Research design

This study was planned as a systematic review to determine the extent and types of violence to which infertile couples were exposed and the associated factors. This review was conducted in accordance with the Preferred Reporting Items for Systematic Review Meta-Analysis (PRISMA) guidelines (Figure 1) (4).

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Research Questions

- What are the related factors of violence against infertile individuals?
- What are the types of violence that infertile couples experience?

Data Sources Search Strategy

This review was conducted in accordance with the Preferred Reporting Items for Systematic Review Meta-Analysis (PRISMA) guidelines (4). Using the keywords 'infertility violence' or 'violence in infertile couples' or 'violence in infertility', two researchers worked independently to scan the following databases: *Pubmed*, *Scopus*, *Science Direct*, *Council of Higher Education (CoHE) Thesis Center*, *Cochrane*, *Wiley Online Library*, *National Academic Network Information Center (ULAKBIM)* *National Medical Database*, *Google Scholar*, and *Web of Science*. Open access clinical trials that met the inclusion criteria and took place from January 2015 to March 2020 were evaluated for compatibility in terms of title and abstract keywords. The research papers included in the review were obtained from open-access electronic databases. The study included (i) research papers that were (ii) written in Turkish or English, (iii) published between January 2015 March 2020, and (iv) with open access to the full text. Exclusion criteria for the study; (i) limited access to the article (ii) the article is a systematic review, review, validity-reliability study, or gray literature.

The systematic review included a total of seventeen articles that met the inclusion criteria and qualified for the review according to the subject (Figure 1). Two researchers (EC, EB) applied the systematic review criteria to select the research conducted for the data collection. A third researcher (MK) made the final evaluation of the systematic review. Disputes were resolved unanimously.

Two researchers (EC, EB) independently completed the quality assessment of the studies included in the review using a 15-item scoring list. Quality assessment is an evaluation tool that assesses in detail the quality of the material, method, and statistical analysis of the research. Each item is scored 1 (yes) 0 (no/indeterminate) (Table 1) (5).

RESULTS

Eight of the seventeen studies included in this systematic review were conducted in Turkey with three in Iran, two in Egypt India, one in Gambia, and one in Nigeria. Many of these studies (94.11%) were conducted by applying questionnaire scales to women (Table 1). Only one study conducted in Turkey included men (6). The sample size of the studies varied between 30-8,664. The ages of the women included in the study ranged from 15 (7) to 49 (8). The scale most often used was *Infertile Women's Exposure to Violence Determination Scale (IWEVDS)* (four studies).

Table 1 presents a detailed examination of the studies included in the systematic review under the subject headings of method, objective, and main results.

Rate Effect of Violence in Infertility

Thirteen studies found the rate of exposure to domestic violence and the incidence of domestic violence among infertile women to vary from 15% to 93.4%. Contrary to the literature, a study examining the relationship between parity and intimate partner violence in Nigeria reported no relationship between infertility and intimate partner violence (8).

The studies included in the review found depression to be common in women exposed to violence and identified a significant relationship between violence and anxiety (9-13). The sexual relations of infertile couples exposed to violence were also reportedly negatively affected (6, 12, 14).

Factors Associated with Violence in Infertility

Marriage Age: Three studies reported a relationship between marriage age and domestic violence; women who married when less than 18 or 19 years of age (17) were exposed to more domestic violence (15-17).

Length of Marriage: Three of the five studies investigating the relationship between the duration of marriage and violence reported that the length of marriage was not a risk factor in terms of violence (15-17) whereas two studies associated longer duration of marriage with domestic violence in two studies (9, 18).

Family structure: Only three studies conducted in Turkey examined infertility as related to violence in the family structure (6, 19, 20) Two studies reported that the rate of exposure to violence was higher for infertile women living in extended families (19, 20). The Nigerian study (8) concluded that the likelihood of domestic violence was 46% higher in communities where most women justified intimate partner violence.

Infertility Diagnosis Process: Some of the factors affecting the incidence of violence in infertile couples; a confirmed diagnosis of infertility, lengthy duration of infertility and number of treatments received. The duration of infertility was not reported as a risk factor in three studies (16, 17, 20).

Alcohol or Smoking: Six studies investigated the relationship between alcohol consumption and /or smoking in men in relation to intimate partner violence. Three studies reported alcohol consumption (9, 11, 17) and two studies reported cigarette consumption (16, 18) to be associated with violence.

Education/Employment Status: Nine studies evaluated education/employment status. Three studies concluded that the education level of a woman correlated to the likelihood of exposure to violence (8, 11, 15). In contrast to these studies, three studies reported the rate of exposure to violence to be higher in women with low levels of education (13, 18, 19). Four studies reported a relationship between women's employment and violence (18-20) whereas one study reported no relationship (17).

Table 1: Characteristics and Quality Assessment Criteria Scores of the Included Articles

References	Measurements	Participants	Aim	Findings	Quality (Score out of 15)
Çay, H. and Şen, S. 2017	Cross-sectional Researcher's questionnaire/ IWEVDS/Beck Depression Inventory (BDI)	306 women	Exposure to violence and depression of infertile women and the relationship between them	<i>Rate;</i> 69,4% <i>Type;</i> Emotional=85,8% Verbal=84,9% Physical=34,0% Sexual=30,2% Economic=77,4%	12
Öztürk, R. et. al, 2017	Cross-sectional Researcher's questionnaire/ IWEVDS	301 women	Prevalence of violence and the effect of infertility on violence in women receiving infertility treatment.	<i>Rate;</i> 32,5% <i>Type;</i> Verbal=38,7% Physical=31,9% Emotional=21,8%	12
Alijani et.al., 2018	Cross-sectional Researcher's questionnaire/ The Revised Conflict Tactics Scale (CTS2)	379 women	Prevalence of domestic violence among infertile women and associated risk factors	<i>Rate;</i> 88,9% <i>Type;</i> Emotional=85,8% Verbal=48,3% Sexual=28,2% Physical=25,9%	11
Bondada, S. et.al. 2018	Cross-sectional Hamilton Anxiety Rating Scale (Ham-A)/ Hamilton Depression Rating Scale (Ham-D)/ WHO Violence Against Women Instrument	100 women	Domestic violence and psychiatric comorbidity in infertile women	<i>Rate;</i> 50% <i>Type;</i> Emotional=34% Physical/Sexual=16%	11
Diericx, S. et.al. 2018	Qualitative Semi-structured questions	33 women	Effects of infertility on women's lives and its relation to gender and cultural norms and different social positions	<i>Type;</i> Emotional/Physical	8
Halic, E.C. and Saatçi, E. 2018	Cross-sectional Researcher's questionnaire/ CTS2/Marital Adjustment Test (MAT)	28 men	Male violence against his wife in couples applying for infertility treatment and the male's marital adjustment in these couples.	<i>Rate;</i> 93,4% <i>Type;</i> Emotional=93,4% Physical=37,4% Economic=32,2% Sexual=9%	13
Mansour, F. and Mohdy, H.A. 2018	Cross-sectional Researcher's questionnaire	246 women	Prevalence and types of domestic violence and the factors affecting its occurrence against infertile women	<i>Type;</i> Emotional, Sexual Physical	10

Satheesan, S.C. and Satyanarayana, V.A. 2018	Cross-sectional Researcher's questionnaire/ Marital Quality Scale (MQS)/ Domestic Violence Questionnaire/ Depression Anxiety Stress Scale-21(DASS-21)/ Connor Davidson Resilience Scale (CD-RISC)	30 women	Quality of the marital relationship, domestic violence, psychological violence and resilience in a sample of women with primary infertility.	<i>Rate;</i> 47% <i>Type;</i> Emotional=46% Physical=16% Sexual=7%	13
Sis Çelik, A. and Kirca, N. 2018	Cross-sectional IWEVDS	423 women	Prevalence and risk factors of domestic violence among women with infertility	<i>Rate;</i> 93% <i>Type;</i> Emotional=62% Physical=30% Sexual=6% Economic=19%	13
Solanke, B.L. et al. 2018	Researcher's questionnaire	8664 women	Relationship between parity and domestic violence	<i>Rate;</i> 21,5%	10
Şahin, S. et al. 2018	Cross-sectional Researcher's questionnaire/ BDI	774 women	Frequency of family violence among infertile women, examining some related variables and the anxiety	<i>Rate;</i> 15% <i>Type;</i> Emotional=56,1% Physical=11% Verbal=11% Sexual=21,9%	11
Yurtçu, B.G. and Saatçi, E. 2018	Descriptive Researcher's questionnaire/ IWEVDS/Beck Depression Inventory For Primary Care(BDI-PC)	350 women	Relationship between the violence that the woman is exposed to and depression in couples who apply for infertility treatment	<i>Scores ($\bar{X} \pm SD$).</i> IWEVDS=49,53±13,66 BDI-PC=3,54±2,75	10
Akpınar, F. et al. 2019	Cross-sectional Researcher's questionnaire/ Abuse Assessment Screen(AAS)	142 women	Data on domestic violence related to infertility among women in Middle Eastern countries	<i>Rate;</i> 47,9% <i>Type;</i> Emotional=76,5% Physical=17,6% Sexual=4,4% Physical/Sexual Violence=1,5%	9
Ghaly, A.S. et al. 2019	Descriptive Researcher's questionnaire	300 women	Spousal violence against infertile women	<i>Type;</i> Emotional=96,3% Physical=50,7% Sexual=45,7%	10
Kırıl, A.E. and Kılıç, M. 2019	Descriptive/ correlational Researcher's questionnaire/ Infertility Distress Scale (IDS)/IWEVDS	240 women	Psychological state and exposure to violence in infertile women and the relationship between them	<i>Scores ($\bar{X} \pm SD$).</i> IDS=60,91±10,26 IWEVDS=85,12±15,37	12

Poornowrooz, N.et.al.2019	Cross-sectional Researcher's questionnaire/ Domestic Violence Inventory/ Female Sexual Function Index (FSFI)	147 infertile 199 fertile women	Exposure to violence and sexual function status between fertile and infertile women	<i>Rate;</i> 56.5% of infertile women 35.7% of fertile women <i>Type;</i> Emotional=52,4% Sexual=27,2% Physical=34%	12
Rahebj.SM. Et.al.2019	Case-control WHO Domestic Violence Questionnaire	200 infertile 200 fertile women	Relationship between domestic violence and factors associated with infertility	<i>Rate;</i> 83,5% <i>Type;</i> Emotional=70% Physical=68% Sexual=60%	13

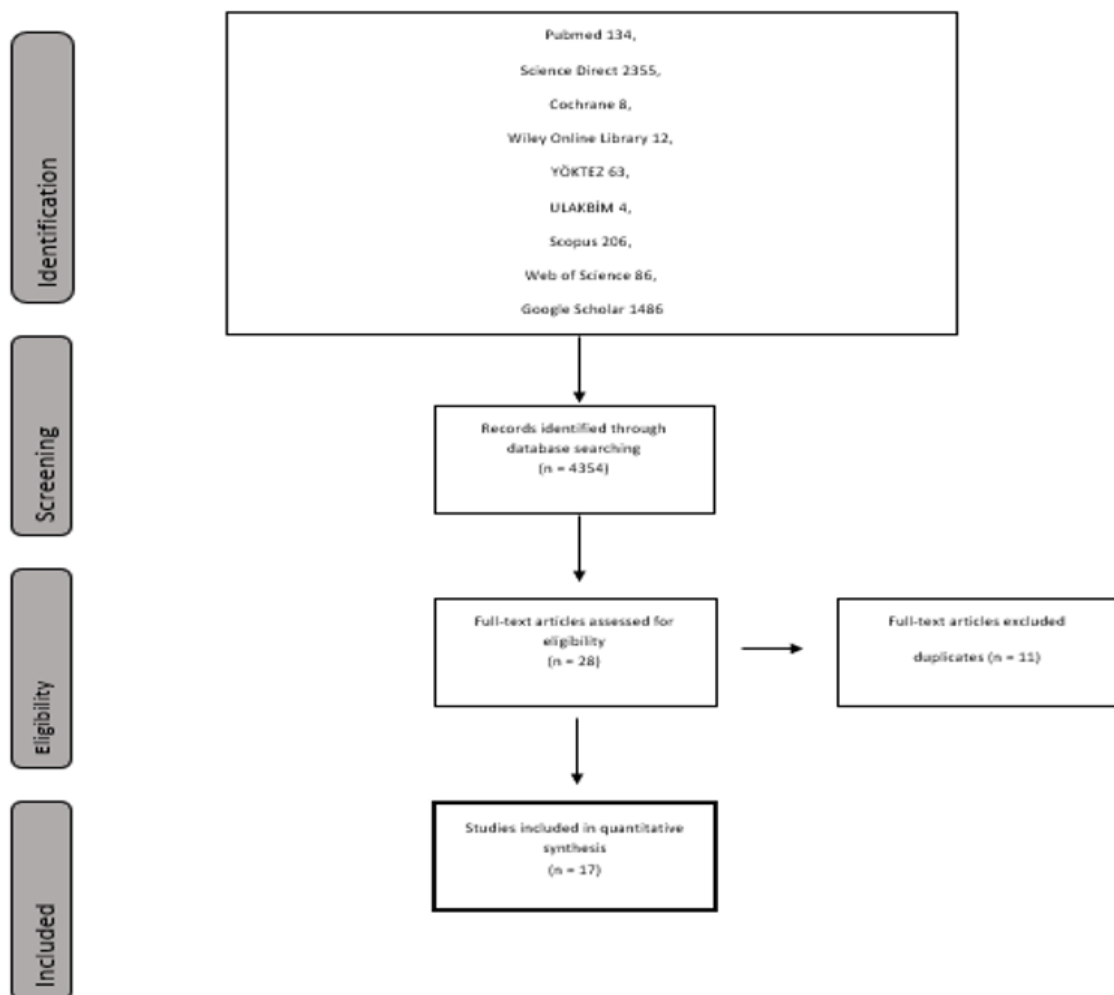


Figure 1: Flowchart of the selection procedure adapted from the Preferred Reporting Items for Systematic

Type of Violence in Infertility

Thirteen studies examining the types of violence directed toward infertile women found that infertile women were exposed to emotional, verbal, physical, sexual, and economic violence. These studies reported the incidence of emotional,

verbal, physical, sexual, and economic violence to be 96.3%; 84.9%; 68%; 60%; 77.4% respectively.

DISCUSSION

The Rate Effect of Violence in Infertility

Violence is an intercultural and global issue and infertility can trigger a crisis that may pave the way for violence. According to WHO (2021), violence against women is the most common type of violence, usually hidden, and most often committed by intimate partners. The rate of women (between 15-49 years old) who were subjected to violence by their spouses was reported as 27% (1). Thirteen (76.47%) of the articles included in this systematic review addressed domestic violence in infertile couples whereas some investigated social violence. Solanke et. al (2018) found that infertile individuals were not exposed to violence and emphasized that this result, which was different from other studies, could be due to cultural differences between societies.

Factors Associated with Violence in Infertility

All studies, including the one study involving men, concluded that the likelihood of violence against women increased in the presence of a diagnosis of infertility. A qualitative study reported that being a mother was an important role for an adult woman, and women who were not mothers were socially stigmatized and, exposed to severe violence by society (21).

The results of the studies included in this systematic review provided the reasons for violence against women which include the cultural infrastructure of society, the social perspectives on women, the meaning attributed to women in society and the belief that fertility is a woman's self-fulfilment.

In the study by Sis Celik Kirca (2018), the vast majority (76%) of women exposed to violence stated that they did not seek help since they did not want any problems in the family, which supports the above-mentioned findings.

A 2021 report published by WHO emphasized the importance of the related factors triggering violence, particularly in individuals exposed to domestic violence. Violence is known not to depend on a single cause or factor but is associated with many factors. There may include education level, employment status of the woman or man, alcohol or substance consumption, tendency toward physical violence, communication level between partners and gender roles (1). Family structure and social structure were evaluated in four studies conducted in Turkey and Nigeria (6, 8, 19, 20). The likelihood of exposure to domestic violence was higher among women living in extended families that considered intimate partner violence to be normal (8, 19, 20). The difference between the study by Halici and the other studies in the present review may be that the study by Halici studied men, and the violence experienced by women, particularly the emotional violence, may not be clearly expressed by men.

Early marriage is a common social problem in developing and undeveloped countries, particularly in societies where the traditional family structure was adopted (22). The patriarchal

structure of traditional societies, the prevalence of gender inequality, and the inability of women to benefit from education due to early marriage are thought to contribute to the likelihood of women marrying at an early age to suffer from domestic violence (22). Studies that evaluated marriage duration, a confirmed diagnosis of infertility, infertility duration and number of treatments, alcohol consumption, smoking, and education level showed that women were more likely to experience violence in the presence of smoking, alcohol consumption, or in marriages of longer duration, with increased number of infertility treatments, and when education level increased in women and decreased in men. These results supported the expert opinions from the literature. The reason for the differences between the studies is attributed to the private nature of violence, the characteristics of the society in which the research was conducted, and the design of the research.

The psychosocial well-being of individuals is positively affected by employment and socioeconomic status (20). Studies that evaluated employment status concluded that employment status of the spouse or women affected the incidence of violence, such that the IWEVDS scores of working women were lower (13, 20). The likelihood of exposure to violence was also reported to decrease if the man had a job. Rahebi et.al (2019) found in their study that women whose husbands were not employed were sixteen times more likely to experience violence. It is thought that increased stress and financial and moral difficulties caused by infertility treatment are combined with employment problems and negative socioeconomic conditions, the tendency to violence increases. This, however, varies from country to country.

Type of Violence in Infertility

The results of fourteen studies (including the study with men) evaluating the types of violence showed that emotional violence was the most common type, followed by verbal violence, physical violence, sexual violence, and economic violence, though the rankings vary in different cultures and societies. One study concluded that the rate of violence against infertile women was low, and women were most often exposed to verbal violence, but physical and emotional violence were also common (3).

CONCLUSIONS

The studies included in the present systematic review showed that infertility is a factor affecting women's exposure to domestic violence. They concluded that violence was not only associated with the infertility factor but also with education level, employment status, alcohol or substance consumption, the mental state of the partner, gender inequality, and the structure of the family or society were other factors associated with increased exposure to violence. The literature review showed that in the context of infertility, only violence against women was investigated while violence against men was ignored.

Peer Review: Externally peer-reviewed.

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