

# Intimate Partner Violence among Women with Female Infertility

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**Abstract Background:** Violence against women is a serious abuse of human rights and an important public health problem that concerns all sectors of society worldwide. Intimate partner violence (IPV) is a global public health issue leading to the death of many people every year. Experience of infertility profoundly affects the personal well-being of women. **Aim:** to assess the prevalence, types of intimate partner violence and determine the factors influencing its occurrence against infertile women **Subjects and Methods:** This cross-sectional study was conducted on 246 infertile women referring to Adam international hospital in Cairo-Egypt in 2018. They were interviewed using a validated questionnaire for assessment of violence against women. Demographic data of infertile women and their husbands were collected. In addition, researcher-made questionnaire and general health questionnaire (were used). **Results:** In present study psychological violence was found to be the most common type of reported violence against infertile women followed by sexual and physical violence. Scurrility, humiliation and yelling and abstaining from sexual relationship were the most common type of psychological and sexual violence. The severity of IPV had a significant correlation with the social class of the woman, chronic disease of the husband, duration of marriage and trial of intracytoplasmic sperm injection (ICSI) treatment. **Conclusion:** psychological violence was found to be the most common type of reported violence against infertile women followed by sexual and physical violence. The severity of IPV had significant association with various socioeconomic and medical factors. **Recommendations:** Universal screening for intimate partner violence is still justified among women who are infertile, given the potential hazard to both pregnancy and future child. Screening of the victims and early intervention not only can help the woman, but also prevent child abuse later on.

**Keywords:** *infertility, violence, prevalence, contributing factors*

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## 1. Introduction

Violence against women especially intimate partner violence (IPV) has been recognized as one of the most serious social problems in every society and considered as violations of human rights. Recent worldwide prevalence statistics have shown that globally 35.0% of women have experienced either IPV or non-partner sexual violence during their life [1]. Violence directed at women is defined as any behavior including those which can cause physical, mental, social, economic, sexual or psychological harm, it has many consequences sometimes as serious as suicide attempts [2].

IPV leads to long-term, adverse consequences in the survivors, which may continue to exist even after the violence is stopped. Some of the common side effects associated with IPV are deficient overall health, poor quality of life, and avoidance of healthcare services, physical symptoms, and gynecological disorders [3].

According to the statistics of WHO, 60-80 million couples experience infertility across the world [4]. Failing

to conceive is a life crisis with effects on an individual's social and emotional life, including stigmatization, loss of social status and marital instability [5]. Couples live in fear and anxiety about infertility diagnosis, and treatment outcome [6]. This situation may cause conflict between the spouses. As a result, the bonds of marriage are put under psychological pressure therefore, it can be a reason for marital incompatibility and also divorce [7]. Many studies have considered infertile women vulnerable to domestic violence, and provided facts on the psychological and social effects of infertility.

A recent systematic review has also revealed existing evidence that infertility has a negative effect on the psychological well-being and sexual relationships of couples [8]. Ameh et al., study [9] in Nigeria have reported that 41.6% of infertile women experience marital violence as a result of infertility. In addition, Yıldızhan et al., study [10] in Turkey found that 33.6% of women diagnosed with primary infertility had been subjected to domestic violence due to infertility, verbal abuse was the most common type (63.4%) and abused women (87%) had been threatened with divorce by their husbands. Similarly,

Ardabili et al., [11] reported that 61.8% of infertile women experience marital violence.

However, regardless of the wide range of research on many aspects of domestic violence, adequate evidence is not available about violence against infertile women who are expected to have higher suffering while experiencing the infertility along with domestic violence. Therefore, the the present study was conducted to investigate the magnitude and patterns of IPV violence among infertile women seeking infertility treatment in Egypt.

## 2. Aim of the Study

The study was done to; assess the prevalence, types of intimate partner violence and determine the factors influencing its occurrence against infertile women.

## 3. Subjects and Methods

### 3.1. Study Design

An analytical cross-sectional study was used to investigate the current research problem.

**Study Setting:** This study was conducted in the infertility center during follow-up visits at Adam international hospital in Cairo-Egypt.

### 3.2. Study Sample

Considering level of significance of 5%, and power of study of 80%, and based on data from literature [12], the sample size can be calculated using the following formula:

$$\text{Sample size} = \left[ (Z_{1-\alpha/2})^2 \cdot \text{SD}^2 \right] / d^2$$

Where,

$Z_{1-\alpha/2}$  = is the standard normal variate, at 5% type 1 error ( $p < 0.05$ ) it is 1.96.

SD = standard deviation of variable.

d = absolute error or precision.

So,

$$\text{Sample size} = \left[ (1.96)^2 \cdot (8)^2 \right] / (1.0)^2 = 245.9.$$

Based on the above formula, the sample size required for the study is 246.

A sample of 246 infertile women was purposefully recruited from the infertility center at Adam international hospital in Cairo-Egypt. Women were eligible for recruitment in the study sample if they met the following inclusion criteria:

- 1- Having a definite specific diagnosis of infertility for  $\geq$  one year
- 2- Accept the participation in the study

### 3.3. Data Collection

The data-collection tool was a researcher-made questionnaire which consisted of four parts:

- a. Socio demographic data of infertile women and her husband.

- b. The types and severity of IPV.

- c. The factors influencing the severity of IPV.

The questionnaire was designed to evaluate the rate of IPV within the past three months, it consisted of 53 items based on a five-point Likert scale (never=0, seldom=1, sometimes=2, often=3, always=4). The total violence scores were obtained by adding these points and range from 50 to 150. The total score demonstrates the level of marital violence experienced by the infertile woman. The questionnaire was validated using content validity by four specialist from obstetrics and gynecology of nursing. Internal consistency of the psychological IPV questionnaire was determined using Cronbach's alpha ( $\alpha=0.89$ ), and the reliability of the scale was measured using the test-retest method at a 10-day interval ( $r=0.81$ ).

Official permission was obtained by submission of an official letter from the Faculty of Nursing to the responsible authorities of the study setting to obtain the permission for data collection. After explaining the objectives of the study, written informed consent was obtained from the participants; and they were interviewed in private settings. The participants were assured that all their information would remain confidential. Their husbands were not required to be present at the time of interviews. The investigator completed survey forms through face to- face interviews with every woman. The average time for an interview was approximately 20 minutes. A pilot study was carried out on a sample of 20 mothers, to test the appropriateness of the interview questions and length of time needed. Collection of data was done from the first of December 2017 till the end of February 2018.

### 3.4. Field Study

Interview questions were developed based on a literature review that explored the experience of infertile women of IPV and assessed the factors influencing its severity. An interview guide was constructed for the present study, which included socio-demographic information of the participants and their spouses, such as age, occupation, and education, as well as the infertility diagnosis and treatment procedures. The participants completed this form after their appointment at the fertility clinic.

### 3.5. Statistical Design

Data entry and statistical analysis were done using SPSS 20.0 statistical software package. Data were presented using descriptive statistics in the form of frequencies and percentages for qualitative variables, and means and standard deviations and medians for quantitative variables.

## 4. Results

Table 1 shows that women's age was 30 years and more in more than half of the sample (52.4%) with a mean of  $31.6 \pm 5.5$  years. Almost two fifths of them had intermediate education and being housewives (39.0% and 42.3% respectively). Meanwhile, they were more apt to be rural dwellers. The same table also shows that the majority of the husbands (88.6%) were 30 years and more, had

higher education and being self-employed (54.1% and 55.3%, respectively).

**Table 1. Distribution of the Studied Sample According to Socio-Demographic Characteristics (n=246)**

1. The wife		
	No.	%
<b>Age (years)</b>		
20 - 30	117	47.6
>30	129	52.4
<b>Mean ±SD</b>	<b>31.6 ±5.5</b>	
<b>Educational status</b>		
Illiterate/Primary Education	48	19.5
Secondary Education	96	39.0
Higher education	102	41.5
<b>Employment Status</b>		
Housewife	104	42.3
Working women	142	57.7
<b>Income status</b>		
Less than enough	121	49.2
Just enough	96	39.0
More than enough	29	11.8
<b>Residence</b>		
Urban	74	30.1
Rural	172	69.9
2. The husband		
<b>Age (years)</b>		
20 - 30	28	11.4
>30	218	88.6
<b>Mean ±SD</b>	<b>39.0 ±7.3</b>	
<b>Educational status</b>		
Illiterate/Primary Education	42	17.1
Secondary Education	71	28.9
Higher education	133	54.1
<b>Employment Status</b>		
No work	21	8.5
Worker	89	36.2
Self-employed	136	55.3

**Table 2. Number and Percent Distribution of Women According to their Infertility History (n=246)**

Variables	No.	%
<b>Age at current marriage (years)</b>		
<20	93	37.8
20 - 30	130	52.8
>30	23	9.3
<b>Mean ±SD</b>	<b>22.3 ±4.7</b>	
<b>Duration of current marriage</b>		
<5	57	23.2
5 - 10	129	52.4
>10	60	24.4
<b>Mean ±SD</b>	<b>8.8 ±6.2</b>	
<b>Duration of infertility (years)</b>		
≤5	75	30.5
≥6	171	69.5
<b>Mean ±SD</b>	<b>9.7 ±5.8</b>	
<b>Duration of treatment</b>		
≤3	52	21.1
≥4	194	78.9
<b>Mean ±SD</b>	<b>8.3 ±5.6</b>	
<b>*Used medical methods(515)</b>		
Ovarian stimulation	232	45.0
Anti-inflammatory drugs	191	37.1
Ovarian polycystic drugs	92	17.9
<b>*Used surgical methods (n=461)</b>		
Ovarian cystectomy	106	23
Salpingectomy/Salpingostomy	75	16.2
Hysteroscopy	131	28.5
Laparoscopy	149	32.3
<b>*Type of used ART Attempts (n=319)</b>		
IUI	55	17.3
IVF	166	52.0
ICSI	98	30.7
<b>*Frequency of ICSI (n=98)</b>		
None	21	8.5
Once	65	26.4
Twice	95	38.6
More than twice	65	26.4

\* Total is not exclusive.

**Table 3. Number and percent Distribution of the Studied Women According to the Types of Husband Physical Violence and the occurrence of physical injury (n = 246)**

	Never		Rarely		Sometimes		Often		Always	
	n	%	n	%	n	%	n	%	n	%
<b>1. Type of physical violent behavior</b>										
Pushing/shoving	71	28.9	29	11.8	74	30.1	42	17.1	30	12.2
Slapping	70	28.5	44	17.9	94	38.2	38	15.4	0	0.0
Kicking	59	24.0	74	30.1	97	39.4	16	6.5	0	0.0
Biting	185	75.2	31	12.6	21	8.5	9	3.7	0	0.0
Throwing objects	97	39.4	28	11.4	73	29.7	38	15.4	10	4.1
Hair pulling	83	33.7	28	11.4	36	14.6	85	34.6	14	5.7
Burning	225	91.5	20	8.1	1	0.4	0	0.0	0	0.0
Attack with chemicals	234	95.1	12	4.9	0	0.0	0	0.0	0	0.0
<b>2. Type of injury after physical violence</b>										
Sprain/abrasions	136	55.3	65	26.4	22	8.9	23	9.3	0	0.0
Ruptured eardrum	243	98.8	3	1.2	0	0.0	0	0.0	0	0.0
Teeth loosening/broken	238	96.7	8	3.3	0	0.0	0	0.0	0	0.0
Burns	239	97.2	7	2.8	0	0.0	0	0.0	0	0.0
Bleeding	198	80.5	28	11.4	20	8.1	0	0.0	0	0.0
Bone fracture	226	91.9	20	8.1	0	0.0	0	0.0	0	0.0
Syncope	193	78.5	45	18.3	5	2.0	3	1.2	0	0.0
Internal organ injury	226	91.9	20	8.1	0	0.0	0	0.0	0	0.0

Table 2 reveals that women age of marriage ranged between 18 and 35 years, with a mean of 22.3 ±4.7 years, its duration ranged between 5-10 years in 52.4% of them. The majority of the participants had primary infertility that lasted 6 years and more (91.5% and 69.5% respectively). More than three fourth (78.9%) of them sought treatment for 4 years and more with ovarian stimulation was the most common used medical treatment method followed by laparoscopy (45% and 32.3% respectively). ART was done for all the patients especially IVF (52%) and the trial for ICSI was done more than twice in more than one fourth (26.4%) of the sample.

It is obvious from Table 3 that 39.2% sometimes reported kicking during IPV physical violence and frequent exposure to pushing/shoving, slapping and throwing objects (17.1%, 15.4% and 15.4% respectively). The same table also revealed that 9.3% often suffered from sprains/abrasions and 8.1% sometimes were exposed to bleeding.

Table 4 shows that husband physical violence hurts their wives' face, back, abdomen and head at least one time (17.1%, 8.0%, 7.7% and 6.1% respectively).

However, a proportion of women were beaten more than once on the face and head (9.3% and 1.6% respectively).

Figure 1 shows that women with infertility problems were more likely to have face injuries (9.3%). However, other parts of the body have also been hit such as; the head, throat and limbs (43.2%, 54.1% vs. 3.0%, 1.2% & 0.8%, 0.8% respectively). put the percentages on the figure???

Table 4. Number and percent distribution of the studied women according to the frequency of hitting various body parts (246)

Affected part	0. No		1. Once		2. twice		3. More than two	
	No.	%	No.	%	No.	%	No.	%
Face	181	73.6	42	17.1	23	9.3	0	00.0
Head	227	92.3	15	6.1	4	1.6	0	00.0
Abdomen	227	92.3	19	7.7	0	0.0	0	00.0
Limbs	240	97.6	4	1.6	2	0.8	0	00.0
Throat	237	96.3	7	2.8	2	0.8	0	00.0
Back	224	91.1	22	8.9	0	0.0	0	00.0
Genital area	244	99.2	2	0.8	0	0.0	0	00.0

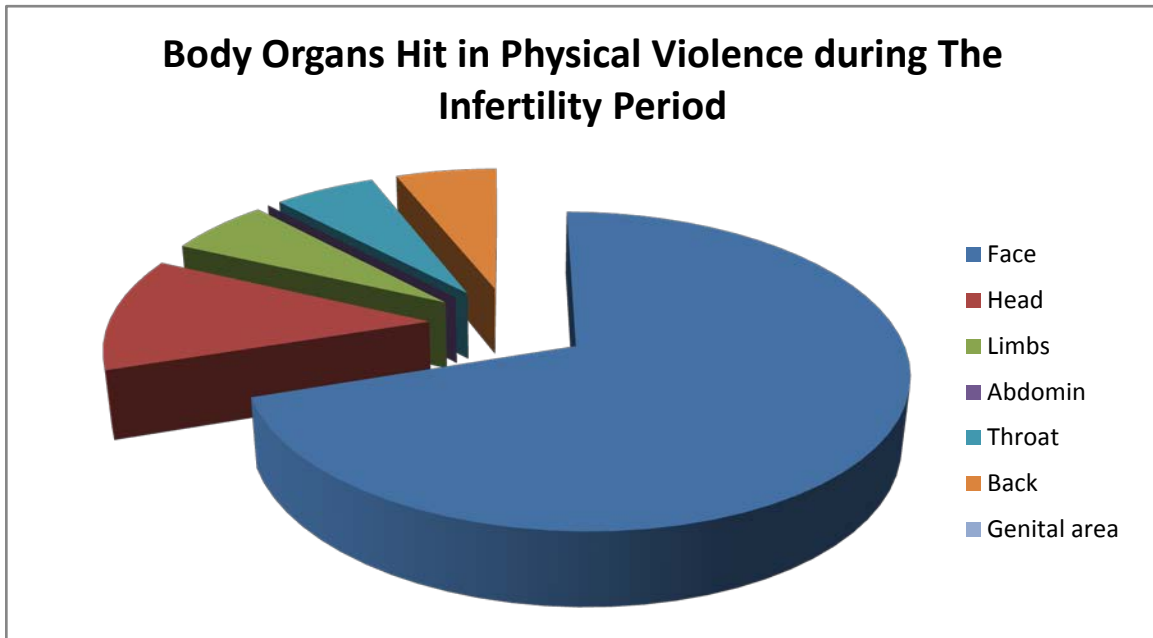


Figure 1. Percent distribution of the studied women according to the body parts that have been hit (246)

Table 5. Number and percent Distribution of the Studied Women According to the Types of Husband Sexual and Psychological Violence (246)

	Never		Rarely		Sometimes		Often		Always	
	n	%	n	%	n	%	n	%	n	%
<b>Type of Sexual Violence</b>										
Abstaining from sexual relationship	50	20.3	54	22.0	82	33.3	56	22.8	4	1.6
Showing dissatisfaction of her sexual relationship	61	24.8	50	20.3	47	19.1	55	22.4	33	13.4
Intimidate the wife to have sex	134	54.5	47	19.1	61	24.8	4	1.6	0	0.0
Enforced sexual relationship	155	63.0	60	24.4	31	12.6	0	0.0	0	0.0
<b>Type of Psychological Violence</b>										
Scurrility/humiliation/ yelling	142	57.7	41	16.7	53	21.5	10	4.1	0	0.0
Embarrassing humiliating in front of others	40	16.3	45	18.3	95	38.6	34	13.8	32	13.0
Restricting women relations with her family	105	42.7	20	8.1	77	31.3	33	13.4	11	4.5
Restricting the women in eating wearing cloths	163	66.3	54	22.0	20	8.1	9	3.7	0	0.0
Restricting to utilize health care	161	65.4	22	8.9	51	20.7	12	4.9	0	0.0
Cutting financial allowance	128	52.0	29	11.8	77	31.3	12	4.9	0	0.0
Check up on women and control her phone calls	146	59.3	38	15.4	42	17.1	15	6.1	5	2.0
Forcing the women to leave the house	149	60.6	43	17.5	19	7.7	21	8.5	14	5.7
Threatening to divorce or polygamy	180	73.2	11	4.5	40	16.3	15	6.1	0	0.0

**Table 6. The relation between the severity of the total exposure of husband violence and women profile (246)**

	Exposure to overall violence						Chi square test	
	no exposure		Mild/moderate		Severe		X <sup>2</sup>	p
	No.	%	No.	%	No.	%		
<b>Age of wife (years)</b>								
20 – 30	0	0.0	112	48.9	5	35.7		
>30	3	100.0	117	51.1	9	64.3	3.675	0.159
<b>Educational status</b>								
Basic education	0	0.0	39	17.0	9	64.3		
Secondary Education	0	0.0	91	39.7	5	35.7		
Higher education	3	100.0	99	43.2	0	0.0	25.388	<0.001
<b>Family income</b>	0	0.0	24	10.5	9	64.3		
Low	3	100.0	85	37.1	0	0.0		
Moderate	0	0.0	96	41.9	0	0.0		
High	0	0.0	24	10.5	5	35.7	52.075	<0.001
<b>Exposure to overall violence among husbands</b>								
	no exposure		Mild/moderate		Severe		Chi square test	
	n	%	n	%	n	%	X <sup>2</sup>	p
<b>Educational status</b>								
Basic education	0	0.0	33	14.4	9	64.3		
Secondary Education	0	0.0	71	31.0	0	0.0		
Higher education	3	100.0	125	54.6	5	35.7	27.066	<0.001
<b>Employment status</b>								
No work	0	0.0	21	9.2	0	0.0		
Worker	3	100.0	86	37.6	0	0.0		
Self-employed	0	0.0	122	53.3	14	100.0	17.010	<0.001
<b>Smoking status</b>								
No	3	100.0	94	41.0	0	0.0		
Yes	0	0.0	135	59.0	14	100.0	13.973	<0.001
<b>Chronic disease</b>								
No	3	100.0	196	85.6	5	35.7		
Yes	0	0.0	33	14.4	9	64.3	23.806	<0.001

**Table 7. The relation between the severity of the total exposure of husband violence and women profile (n= 246)**

<b>Duration of currant marriage</b>								
<5	0	0.0	57	24.9	0	0.0		
5 – 10	0	0.0	124	54.1	5	35.7		
>10	3	100.0	48	21.0	9	64.3	23.951	<0.001
<b>Duration of infertility (years)</b>								
≤5	0	0.0	70	30.6	5	35.7		
≥6	3	100.0	159	69.4	9	64.3	1.497	0.473
<b>Duration of seeking treatment</b>								
≤3	0	0.0	52	22.7	0	0.0		
≥4	3	100.0	177	77.3	14	100.0	4.895	0.087
<b>Cause of infertility</b>								
Male problem	0	0.0	88	38.4	0	0.0		
Female problem	3	100.0	79	34.5	0	0.0		
Unexplained	0	0.0	62	27.1	14	100.0	38.942	<0.001
<b>Used medical methods</b>								
<b>Ovarian stimulation</b>								
No	0	0.0	14	6.1	0	0.0		
Yes	3	100.0	215	93.9	14	100.0	1.102	0.576
<b>Salpingectomy/Salpingostomy</b>								
No	0	0.0	166	72.5	5	35.7		
Yes	3	100.0	63	27.5	9	64.3	15.344	<0.001
<b>Frequency of ART Attempts</b>								
None	0	0.0	21	9.2	0	0.0		
Once	3	100.0	57	24.9	5	35.7		
Twice	0	0.0	86	37.6	9	64.3		
More than twice	0	0.0	65	28.4	0	0.0	16.806	0.010
<b>Used traditional treatment</b>								
None	0	0.0	14	6.1	5	35.7		
Once	0	0.0	24	10.5	0	0.0		
Twice	3	100.0	80	34.9	0	0.0		
More than twice	0	0.0	111	48.5	9	64.3	27.866	<0.001

Concerning to the types of husband sexual and psychological violence (Table 5), abstaining from sexual relationship was the most common type of sexual violence that sometimes or frequently occurred (33.3% and 22.8% respectively). Moreover, women were always embarrassed and humiliated in front of the others (13.0%) and frequently restricted her relationship with her family and friends (13.4%). Threat of divorce or expulsion from home was encountered among 16.3% and 8.5% of the infertile women.

Table 6 shows the relation between the severity of IPV and the factors influencing. It is evident that older women (30+), those having low education and low family income were more likely to suffer from severe violence compared to the other groups of women (64.3%, 64.3% and 64.3% vs. 35.7%, 35.7% & 35.7% respectively). The same pattern of significant relation was found between the severity of IPV and husband's education, job and smoking status as well as his exposure to chronic diseases (<0.001).

Table 7 shows the association of severity of violence with the history of infertility management. It revealed that the longer the duration of marriage, the more the severity of IPV (<0.001). Meanwhile women who had primary infertility and those with unexplained infertility were significantly more vulnerable to have severe IPV. Moreover, those exposed to surgical tubal treatment or experience more than one trial of traditional treatment were more apt to have significantly severe IPV (<0.001).

## 5. Discussion

Intimate partner violence (IPV) has been recognized as one of the most serious social problems in every culture and society across the world [13]. Women who are victims of violence may frequently suffer from physical injuries or chronic health problems [14]. Each year, 5.3 million cases of domestic violence are recorded among women aged 18 years or over, resulting in more than as much as two million injuries and 1400 deaths (15-17). Prevalence of violence ranged between 15-71% worldwide [15]. The highest level of violence against women comes from their husbands.

According to the statistics of WHO, 60-80 million couples experience infertility. Infertility results in community isolation, anger, blame, separation, fear, hopelessness, and violence [16]. Furthermore, this crisis is accompanied by physical, economic and psychological pressure, which directly affects various aspects of one's life [17]. Infertility and treatment for infertility may cause tremendous stress in both partners. However, little is known about intimate partner violence among women seeking infertility treatment in Egypt. Therefore, the aim of the present study was to assess the prevalence, types of intimate partner violence and determine the factors influencing its occurrence against infertile women.

Several studies have been done specifically trying to link domestic violence and infertility [18]. In present study psychological violence was found to be the most common type of reported violence against infertile women followed by sexual and physical violence. In the same line a similar study conducted in Valiasr infertility center in Tehran, 61.8% of infertile women were exposed to domestic violence due to their infertility problem. Psychological violence was reported in 33.8% as the most

common type of domestic violence during infertility followed by physical violence in 14% and sexual violence in 8% while the violence leading to injuries in 6% of the infertile women [19].

Similar finding of psychosexual violence (51.5%) was reported by Ameh et al., [9] and Ardabili et al., [11] who described it as women being exposed to emotional violence (55.6%). Also Sami and Ali [20] who found a psychological violence rate of 60.8% and described it as verbal violence that include the threat of separation or divorce

Also, Yildizhan et al., [10] who found the prevalence of domestic violence against infertile women to be 33.6% and Sheikhan et al., [21] study in Iran who reported that the prevalence of domestic violence, physical, emotional and sexual violence was 34.7%, 5.3%, 74.3% and 47.3%, respectively. The differences between the previously mentioned studies and the present one could be due to the cultural diversities in study populations, as well as the differences in the sample selection and the tools of data collection.

According to the present study findings the most common type of physical violence was kicking followed by slapping and pushing. In agreement with this Farzadi et al., [22] reported that slapping was reported in 37 % of the participants followed by throwing objects in 26.5%. This rate is higher than that reported for HIV-infected women collectively for slapping, kicking and punching [19]. In Feseha et al., [23] study on women living in Shimelba refugee camp in Northern Ethiopia the most common type of physical violence was slapping (61.6%) followed by throwing objects(19.5%). Moreover, the study done in an urban slum area of Pune showed the prevalence of physical violence against wives was 61.5%, with slapping (98.8%) followed by pushing (39.8%) & kicking wives (33.7%) being the most common type of physical violence [24].

The current study results demonstrates that Scurrility, humiliation and yelling were the most common type of psychological violence among infertile women involving more than half of them. Meanwhile, women tried to overcome stress by keeping themselves away from social environments where they would encounter children. In congruence with this Farzadia et al., [22] study in Tehran, found that the above mentioned types of psychological violence among infertile women involving more than two-third of them. Social withdrawal and avoidance were some of the most prevalent and ineffective coping strategies among infertile women. In particular, many of them avoided interactions with those expecting a baby or who had children [25].

Also similar to the findings of the present study, it was found that among Iranian immigrants in Canada, psychological abuse was most common type of violence, however, with higher ratio of sexual violence, abstaining from sexual relationship over physical violence in the present study [26]. In addition a recent systematic review has also revealed existing evidence that infertility has a negative effect on the psychological well-being and sexual relationships of couples [7-14]. In the present study, it was also clear that a sizable number of women have been marginalized and threatened by the husband or his family to get divorced. This correspond well with the finding of Ozgoli et al., [26] who found that the rate of psychological and sexual violence among infertile women was very high.



Regarding the factors influencing the severity of IPV, the current results indicates that the lower the social class the greater the severity of IPV among these disabled infertile women. This was expected as procreation and especially having a male child in this family is a source of livelihood for her. Meanwhile, the cost of infertility treatment is overstretched so the psychological stress and domestic violence followed by divorce become the only solution to cope with this problem.

In this respect, the relation between the low socioeconomic and IPV has been highlighted by Akyuz et al [27], and Ozgoli et al., [26]. Furthermore, and in support with these present study findings the presence of chronic diseases among the husbands, the duration of marriage and the cause of infertility have been significantly associated with the severity of IPV. Moreover there is a relationship of statistical significance between the failure of ICSI and its repetition more than one time and the severity of IPV. This deserves our attention to the intervention of the officials in the contribution cost of treatment together with providing therapeutic counselling for them [24].

## 6. Conclusion

The study results lead to the conclusion that infertile women are more likely to have experienced, physical, sexual and psychological violence. However psychological violence was found to be the most common type of reported violence against infertile women followed by sexual and physical violence. The severity of IPV was significantly related to women age, social class, and chronic disease of the husband, duration of marriage and ICSI treatment.

## 7. Recommendation

Premarital counseling for both couples about sexual, psychological and family life is imperative together with stressing the importance of the role of everyone in the family and avoidance of domestic and IPV for any reason

Universal screening for intimate partner violence is still justified among women who are infertile, given the potential hazard to both pregnancy and future child. Screening of the victims and early intervention not only can help the woman, but also prevent child abuse later on.

It is necessary to define women's changing emotional needs, empower them with healthy coping skills, and make individual and group action plans toward crisis management at every stage of the treatment in infertility clinics. Considering the availability of the nurses at every stage of the treatment, including psychiatry nurses,

It is recommended that future studies be conducted as to compare the rate of different types of IPV in other medical facilities of Egypt.

## References

- [1] World Health Organization Fact sheet N°23 Intimate partner and sexual violence against women 2014; 9-7.
- [2] Dufort M, Stenbacka M, Gumpert CH, Physical domestic violence exposure is highly associated with suicidal attempts in both women and men. Results from the national public health survey in Sweden Eur J Public Health 2014.
- [3] Campbell JC. Health consequences of intimate partner violence. The Lancet. 2002; 359(9314):1331-1336.
- [4] Guruge S, Roche B, Catallo C. Violence against Women: An Exploration of the Physical and Mental Health Trends among Immigrant and Refugee Women in Canada Nurs Res Pract 2012 2012; 434592.
- [5] Rusen. O, Aylin, T., Sezer E Gi, and Bulent Y(2017): Another face of violence against women: Infertility, Pak J Med Sci. 2017 Jul-Aug; 33(4): 909-914.
- [6] Özçelik B, Karamustafaloğlu O, Özçelik A. The psychological and psychiatric aspects of infertility. Anadolu Psikiyat. 2007; 8: 140-148.
- [7] Behboodi Moghadam Z, Salsali M, Eftakhar Erdabili H, Ramezanzadeh F, Veismoradi M. The impact of infertility on psychological and social status of women in Iran: A content analysis study. Int J Fertil Steril. 2011; 5 Suppl 1; Pnm-6.
- [8] Tingting Wang, Yuan Liu, Zhanzhan Li, Kaihua Liu. Prevalence of intimate partner violence (IPV) during pregnancy in China: A systematic review and meta-analysis, 2017. China.
- [9] Ameh N, Kene TS, Onuh SO, Okohue JE, Umeora DU, Anozie OB. Burden of domestic violence amongst infertile women attending infertility clinics in Nigeria. Niger J Med. 2007; 16(4): 375-377.
- [10] Yildizhan R, Adali E, Kulusari A, Kurdoglu M, Yildizhan B, Sahin G. Domestic violence against infertile women in a Turkish setting. Int J Gynaecol Obstet. 2009; 104(2): 110- 112.
- [11] Ardabili HE, Moghadam ZB, Salsali M, Ramezanzadeh F, Nedjat S. Prevalence and risk factors for domestic violence against infertile women in an Iranian setting. Int J Gynaecol Obstet. 2011; 112(1): 15-17.
- [12] Akyuz A, Seven M, Şahiner G, Bakır B (2013): Studying the effect of infertility on marital violence in Turkish women. Int J Fertil Steril 2013; 286-293.
- [13] Wahed T, Bhuiya A. Battered bodies & shattered minds: violence against women in Bangladesh. Indian Journal of Medical Research. 2007; 126(4):341-354.
- [14] Roelens K, Verstraelen H, Egmond K, Temmerman M. A knowledge, attitudes, and practice survey among obstetrician-gynecologists on intimate partner violence in Flanders, Belgium. BMC Public Health. 2006; 6(1):238.
- [15] Koski AD, Stephenson R, Koenig MR. Physical violence by partner during pregnancy and use of prenatal care in rural India. Journal of Health, Population and Nutrition. 2011; 29:245-254.
- [16] Jeyaseelan L, Kumar S, Neelakantan N, Peedicayil A, Pillai R, Duvvury N. Physical spousal violence against women in India: some risk factors. Journal of Biosocial Science. 2007; 39(5): 657-670.
- [17] Hunter WM, Sadowski LS, Hassan F, Jain D, De Paula CS, Vizcarra B, et al. Training and field methods in the WorldSAFE collaboration to study family violence. Injury Control and Safety Promotion. 2004; 11(2): 91-100.
- [18] Leung TW, Ng EH, Leung WC, Ho PC. Intimate partner violence among infertile women Int J Gynaecol Obstet 2003; 83: 3323-4. Accessed at 5-2018.
- [19] Iliyasu Z, Abubakar IS, Babashani M, Galadanci HS, Domestic violence among women living with HIV/AIDS in Kano, Northern Nigeria Afr J Reprod Health 2011; 15: 341-9.
- [20] Sami N, Ali TS. Domestic violence against infertile women in Karachi, Pakistan. Asian Rev Soc Sci. 2012; 1(1): 15-20.
- [21] Sheikhan Z, Ozgoli G, Azar M, Alavimajd H. Domestic violence in Iranian infertile women. Med J Islam Repub Iran 2014 (22 December). Vol. 28:152.
- [22] Farzadi L, Ghasemzadeh A, Bahrami Z, Mahini M, et al (2018): Intimate Partner Violence against Infertile Women, Journal of Clinical Research & Governance, Vol 3, No 2 (2014).
- [23] Feseha G, mariam A, Gerbaba M, Intimate partner physical violence among women in Shimelba refugee camp, northern Ethiopia BMC Public Health 2012; 12: 125.
- [24] Ruikar MM, Pratinidhi AK, Physical wife abuse in an urban slum of Pune Maharashtra Indian J Public Health 2008; 52: 4215-7.

- [25] *Gibson DM, Myers JE.* The effect of social coping resources and grow the fostering relationship on infertility stress in women. *J Ment Health Couns.* 2002; 24: 68e80.
- [26] *Ozgili G, Sheikhan Z, Zahiroddin A, Nasiri M, Amiri S, Kholosi Badr F.* Evaluation of the Prevalence and Contributing Factors of Psychological Intimate Partner Violence in Infertile Women. *Journal of Midwifery and Reproductive Health.* 2016; 4(1): 571-581.
- [27] *Akyuz A, Sahiner G, Seven M, Bakir B,* The Effect of Marital Violence on Infertility Distress among A Sample of Turkish Women, *Int J Fertil Steril* 2014; 8: 167-76.
- [28] *Fardiazar Z, Amanati L, Azami S,* Irrational parenthood cognitions and health-related quality of life among infertile women *Int J Gen Med* 2012; 5: 591-6. Accessed at 5-2018
- [29] *Luk BH, Loke AY,* The Impact of Infertility on the Psychological Well-Being, Marital Relationships, Sexual Relationships, and Quality of Life of Couples: A Systematic Review *J Sex Marital Ther* 2014; 11: 1-16.
- [30] *Sato-DiLorenzo A, Sharps PW.* Dangerous intimate partner relationships and women's mental health and health behaviors. *Mental Health Nursing.* 2007; 28(8):837-848.
- [31] *Wilson JS, Websdale N.* Domestic violence fatality review teams: an interprofessional model to reduce deaths. *Journal of Interprofessional Care.* 2006; 20(5):535-544.