Sexual dysfunctions and marital adjustment in veterans with PTSD

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Abstract

Introduction: Considering that we have in Iran a lot of veterans who suffer from post-traumatic stress disorder (PTSD), this research was performed to identify sexual dysfunction among a group of veterans who suffer from PTSD.

Material and methods: In this descriptive-correlation research we selected and studied 110 cases. Data gathering tools were sexual dysfunctions, PTSD checklist according to DSM-IV and Enrich marital satisfaction scale. Under study sexual dysfunctions in this research include: decrease of libido, decrease of arousal, premature ejaculation, aversion to intercourse, erectile dysfunction, ejaculation delay, masturbation, painful ejaculation, or without problem.

Results: The results show 89.1% of veterans with PTSD, at least one with sexual dysfunction and only 10.9% with no problems. Also the results show that most dysfunction includes: decrease of libido (68.2%), decrease of arousal (61.8%) and premature ejaculation (41.8%).Other results show that 45.5%, i.e. nearly half of the PTSD subjects, were dissatisfied with their marriage and sexual relationship and the dissatisfaction level of 11% was very high.

Discussion: Veterans afflicted with PTSD face marital maladjustment, which predisposes them to sexual disorders. Therefore, marriage counselling and prevention programmes should focus on reducing marital dissatisfaction. If marital maladjustment decreases, sexual problems and disorders will improve.

Key words: sexual dysfunctions, marital adjustment, veterans, PTSD.

Introduction

As has been described by Motta, relatives of veterans with post-traumatic stress disorder (PTSD) also suffer [1]. In a review of the clinical literature, Solomon noted that the emotional numbing and constricted effect associated with PTSD interferes with successful marital relationships and parenting [2]. Physical aggression toward spouses and offspring is not uncommon. Wives may be especially burdened by concurrently caring for their husbands while protecting themselves and their children from his hostility. In the National Vietnam Veterans Readjustment Study (NVVRS), spouses of veterans with PTSD also reported greater psychological distress and more marital problems and family violence than those without PTSD [3]. A recent report by Beckham, Lytle, and Feldman suggests that this burden in caregivers actually increases over time, even if the veterans are receiving treatment [4]. Research that has examined the effect of PTSD on intimate relationships reveals severe and pervasive negative effects on marital adjustment, general family functioning and the mental health of partners. These negative effects result in such problems as compromised

parenting, family violence, divorce, sexual problems, aggression and caregiver burden [5]. Male veterans with PTSD are more likely to report marital or relationship problems, higher levels of parenting problems, and generally poorer family adjustment than veterans without PTSD. PTSD veterans and their wives have also reported a greater sense of anxiety around intimacy. Sexual dysfunction also tends to be higher in combat veterans with PTSD than in veterans without PTSD. It has been posited that diminished sexual interest contributes to decreased couple satisfaction and adjustment [5]. Related to impaired relationship functioning, a high rate of separation and divorce exists in veterans with PTSD. Approximately 38% of Vietnam veteran marriages failed within six months of the veteran's return from Southeast Asia. The overall divorce rate among Vietnam veterans is significantly higher than for the general population, and rates of divorce are even higher for veterans with PTSD. The National Vietnam Veterans Readjustment Study (NVVRS) found that both male and female veterans without PTSD tended to have longer-lasting relationships with their partners than their counterparts with PTSD. Rates of divorce for veterans with PTSD were two times greater than for veterans without PTSD. Moreover, veterans with PTSD were three times more likely than veterans without PTSD to divorce two or more times. Studies have found that, in addition to more general relationship problems, families of veterans with PTSD have more family violence, more physical and verbal aggression, and more instances of violence against a partner. In these studies, female partners of veterans with PTSD also self-reported higher rates of perpetrating family violence than did the partners of veterans without PTSD. The severity of the veteran's PTSD symptoms was directly related to the severity of relationship problems and physical and verbal aggression against the partner [6]. PTSD can also affect the mental health and life satisfaction of a veteran's partner. For example, wives of veterans with PTSD have been found to report more mental health symptoms and more impaired and unsatisfying social relations compared to wives of veterans without PTSD. In at least two studies, including the NVVRS study noted above, partners of Vietnam veterans with PTSD reported lower levels of happiness, markedly reduced satisfaction in their lives, and more demoralization compared to partners of Vietnam veterans not diagnosed with PTSD. About half of the partners of veterans with PTSD indicated that they had felt „on the verge of a nervous breakdown". In addition, male partners of female Vietnam veterans with PTSD reported poorer subjective well-being and more social isolation [5]. Nelson and Wright indicate that partners of PTSD-diagnosed veterans often describe difficulty coping with their partner's PTSD symptoms, describe stress because their needs are unmet, and describe experiences of physical and emotional violence. These difficulties may be explained as secondary traumatizing, which is the indirect impact of trauma on those in close contact with victims [7].

Weakness of potency and other libidinous problems are often a source of family problems as well as auto-aggressive acts. Libidinous problems are a taboo topic and the task of a psychodynamically oriented psychotherapist is to point out this problem [8]. The results of recent studies have suggested that combat veterans with PTSD experience a higher rate of sexual dysfunction than do those without PTSD. The research showed that the mean total IIEF score was significantly lower in the 44 patients with PTSD than in the 46 controls (26.38 versus 40.86; $p=0.035$). With respect to individual IIEF domains, patients with PTSD had poorer scores on overall satisfaction and orgasmic function and showed trends toward poorer scores on intercourse satisfaction and erectile function. No statistically significant difference was observed for sexual desire. The rate of erectile dysfunction was 85% in patients with PTSD and 22% in controls. Moderate to severe erectile dysfunction was present in 45% of the patients with PTSD and in only 13% of controls [9]. The result of another study show that untreated and treated PTSD patients had significantly poorer sexual functioning in all domains (desire, arousal, orgasm, activity and satisfaction) as compared to normal controls. There was a high correlation between sexual dysfunction among the PTSD group and the anger-hostility subscale of the SCL-90 [10].

Material and methods

In this descriptive-correlation research we selected by simple random sampling 110 cases from Baqiyatallah hospital (Tehran-Iran) in 2005. Selected patients were diagnosed with PTSD by a psychiatrist during summer and autumn 2005. The samples are veterans with PTSD from the Iran-Iraq war.

To gather the data we used the ENRICH marital satisfaction scale and sexual dysfunction checklist according to DSM-IV-Tr [11] and also questionnaire diagnosis symptoms according to DSM-IV. The ENRICH main test copy includes 115 questions. This form was first used for the description of dynamism of marriage and then used as a tool for diagnosis of couples who were seeking marriage counseling. The questionnaire validity index in the clinical affairs was between 0.85 and 0.95 [12, 13]. This questionnaire includes subscales such as: personality issues, marital communication, conflict resolution, financial problems, leisure activities, sexual relationship, parental, family and friends and religiosity [14]. Under study sexual dysfunctions in this research include: decrease of libido, decrease of arousal, premature ejaculation, aversion to intercourse, erectile

Table I. Descriptive data of the examinees

Factors	Minimum	Maximum	Mean	SD	Index
Veteran's age	34	54	41.4	4.2	year
Spouse's age	29	51	36.5	5.4	year
Marital record	1	36	17.5	5.9	year
Time spent at the war front	2	120	35.7	25.7	month
Duration of physical injury	2	25	18.79	4.78	year
Percentage of injury	0	60	29.2	13.9	percent
Frequency of intercourse per month	0	20	3.7	3	time
Duration of each intercourse	0	40	10.2	8.1	min
PTSD intensity	15	46	27	9.8	according to PTSD index

dysfunction, ejaculation delay, masturbation, painful ejaculation, or without problem.

Gathered data were analysed by statistical indices such as percentage, frequency, mean and Pearson's correlation index.

Results

Out of 110 veterans afflicted with PTSD in this study, 22.1% were high school dropouts, 32.4% held high school diplomas, 37.1% held an associate diploma or a bachelor's degree and 8.3% held a master's degree or higher. About 20.7% were retirees or unemployed, 75.5% were army personnel and 3.8% were self-employed or businessmen. According to the decision made by the Special Commission for Iranian Veterans, all subjects are considered disabled and retired. Their degree of disability was 29.23%±13.9. Their average age was 41.4±4.2. Only 2.8% were drug abusers. They had spent 25.7±35.7 months at a war front and had been veterans for ±4.8 to 18/8 years. All the subjects studied were married. The average age of their spouses was 36.5±5.4 years and they had 2.9 children on average. The frequency of sexual intercourse was 3.7±3 in one month and the average length of each sexual intercourse was 10.2±8.1 minutes (Table I).

Table II. Marital satisfaction and PTSD intensity among PTSD veterans

	Marital satisfaction status	Frequency	Percentage
Marital satisfaction	Strong dissatisfaction	12	11
	dissatisfaction	38	34.5
	Borderline	57	51.8
	Strong satisfaction	3	2.7
	Extreme satisfaction	0	0
PTSD intensity	mild	18	16.4
	severe	62	56.4
	Very severe	30	27.2

Based on the questionnaire diagnosis symptoms according DSM-IV, the severity of PTDS according to criteria of DSM-IV (diagnosis by psychiatrists), the signs were mild in 16.4% (18 subjects), severe in 56.4% (62 subjects) and extremely severe in 27.2% (30 subjects). In case of marital satisfaction, 45.5% (i.e. nearly half) of the PTSD subjects were dissatisfied with their marriage and sexual relationship and the dissatisfaction level in 11% was very high. The subjects" marital satisfaction was borderline in 51.8% of cases. Finally, only 2.7% were happy with their marital relationships. Perfect marital satisfaction was not seen at all. The presented figures show that marital satisfaction in veterans afflicted with PTSD show a little positive skewness in respect of their relations and their average satisfaction is lower than that in the general population (Table II).

In this study, nine types of sexual dysfunction were studied. 68.2% of veterans afflicted with PTSD showed a decrease in their libido and 61.8% showed a decrease in sexual arousal; 41.8% suffered from premature ejaculation; 22.7% were averse to sexual intercourse; 20.9% had erection problems; 13.6% suffered from delayed ejaculation; 10.9% masturbated; and 8.2% suffered from painful ejaculation. 89.1% of the subjects studied suffered from at least one of these sexual disorders while 10.9% of them had no problems at all (Table III).

The study of correlation between variables showed that marital adjustment has a significant negative relationship with the intensity of PTSD (-0.29) and with the rate of sexual disorders (-0.30). Furthermore, the frequency of sexual intercourse has a meaningful relationship of -0.21 with the duration of being at war and of -0.34 with the duration of being veterans with PTSD. There also exists a significant relation of -0.31 between the degree of disability and sexual disorders. This significant association proves that marital adjustment is inversely related with the intensity of PTSD and sexual disorders. As PTSD increases, marital dissatisfaction decreases. Additionally, marital adjustment is associated with sexual disorders; that is, as the veterans" sexual dysfunction worsens,

marital adjustment decreases. And as seen, the degree of disability affects sexual disorders. Therefore, it can be concluded that with an increase in PTSD intensity, marital maladjustment increases; hence, the sexual disorders increase as well. Also, demographic studies revealed that veteran's age had a correlation of 0.65, 0.62 and 0.22 with spouse's age, marital record, and time spent at war front, respectively; spouse's age had a 0.68 correlation with marital record, marital record had 0.20 correlation with time spent at war front and 0.26 correlation with duration of injury. In other variables, no meaningful relation between the variables was seen (Table IV).

Table III. Frequency of sexual dysfunction among PTSD veterans

Type of sexual dysfunction	Frequency	Percentage
Decrease of libido	75	68.2
Decrease of arousal	68	61.8
Premature ejaculation	46	41.8
Aversion to intercourse	25	22.7
Erectile dysfunction	23	20.9
Ejaculation delay	15	13.6
Masturbation	12	10.9
Painful ejaculation	9	8.2
Without problem	12	10.9

Discussion

Veterans afflicted with PTSD show the following symptoms: re-experiencing the trauma (e.g. flashbacks), emotional numbing, physiological arousal, and impaired personal, familial and social performance [11]. Perhaps these symptoms present initially in the family, which increases the stress level within the family. The first person affected by this is the veteran's wife. Therefore, marital maladjustment is more at stake than other familial aspects in families of such veterans. According to previous research [2, 3], and as the present study suggests, the rate of marital dissatisfaction in veterans with PTSD is high in 45.5%, borderline in 51.8%. The latter do not enjoy marital life and experience conflicts, for the removal of which both partners do their best. The present study confirms the finding of Gruden and Gruden, which states that more than half of veterans have marital maladjustment. This study showed 45.5% of veterans had marital maladjustment, out of whom 11% had extremely severe maladjustment [8]. There is, however, a difference in Iranian veterans; they mostly get married for spiritual reasons. Due to the spiritual atmosphere of Iran and the fact that veterans are

Table IV. Correlation coefficients between marital and other study variables among PTSD veterans

Factor	Marital adjustment	PTSD intensity	Veteran's age	Spouse's age	Marital record	Time spent at the war front	Duration of injury	Percentage of injury	Frequency of intercourse per month	Duration of each intercourse
PTSD Intensity	-0.29 p=0.002									
Veteran's age	-0.14 p=0.13	-0.15 p=0.12								
Spouse's age	-0.05 p=0.62	-0.03 p=0.74	0.65 p=0.0001							
Marital record	-0.09 p=0.36	0.11 p=0.25	0.62 p=0.0001	0.68 p=0.0001						
Time spent at the war front	-0.08 p=0.41	-0.005 p=0.95	0.22 p=0.02	0.07 p=0.45	0.20 p=0.04					
Duration of injury	0.03 p=0.8	-0.04 p=0.73	0.19 p=0.07	0.17 p=0.11	0.26 p=0.01	0.11 p=0.31				
Percentage of injury	0.12 p=0.22	0.009- p=0.93	0.15 p=0.15	0.004 p=0.97	0.009- p=0.92	0.12 p=0.26	0.06 p=0.57			
Frequency of intercourse per month	0.17 p=0.09	0.16- p=0.11	0.001- p=0.99	0.05- p=0.60	0.12- p=0.22	0.21- p=0.04	0.34- p=0.002	0.09 p=0.38		
Duration of each intercourse	0.13 p=0.24	0.17- p=0.12	0.04- p=0.69	0.01 p=0.90	0.03- p=0.79	0.02- p=0.52	0.02- p=0.86	0.15 p=0.17	0.12 p=0.27	
Rate of sexual problems	0.30- p=0.001	0.16 p=0.09	0.08- p=0.42	0.06- p=0.56	0.02 p=0.81	0.05- p=0.62	0.13- p=0.21	0.31- p=0.002	0.10- p=0.31	0.07- p=0.53

considered 'living martyrs", some girls voluntarily marry them and are committed to their marriage. Bearing difficulties is also considered rewarded in the other world and a way to reach paradise. Therefore, it is possible that PTSD veterans" spouses in Iran divorce less than their counterparts in other countries. However, they are more prone to show signs of psychosomatic or conversion disorders. Several studies in Iran confirm this finding, which is in contrast with the finding of Gruden and Gruden [8] stating that nothing can stop the breakdown of their marriage. Nevertheless, these conditions have not decreased violence of PTSD veterans against their family. Violence control mechanisms including abused drugs are less common in our subjects and passage of time, changes in our cultural values related to war and people's less attention to veterans make them angry, which is directed toward their family. According to present rules in Iran, the veteran's spouse can be considered his nurse as well, and earn a salary for that, but there are no regular consultation services or psychotherapy for them in stressful conditions. Marriage counselling is essential for the first group (the group which has marital maladjustment comprises 45.5% of PTSD veterans).The second group needs counselling to help prevent further family problems (those whose marital relations are sometimes good and sometimes bad are considered borderline and comprise 51.8% of PTSD veterans). Although reporting sexual problems in our society is difficult, 89% of PTSD veterans reported one or several kinds of sexual dysfunction. Considering that our subjects were war PTSD cases, the results are very similar to those of Cosgrove et al. (89 and 85%) [9]. According to many studies [9, 10] and also the present study, among all sexual dysfunctions, decreased libido and decreased sexual arousal, which is a result of decreased libido to some extent, were the most common problems (68.2 and 61.8%, respectively). Also, 41.8% of our subjects experienced premature ejaculation. According to clinical reports, premature ejaculation is so severe in some of them that it makes sexual intercourse impossible. 22.7% of them are averse to sexual relations, but whether they dislike having sex just with their wives or anyone else needs further studies because some of them masturbate. 2.5% of the 10.9% who masturbate are those who are averse to sexual relations. 20.9% have erectile disorders and 8.2-13.6% have ejaculation problems. The results of this study, with inference from findings of Cosgrove et al. [9], reveal that sexual dysfunction is more frequent among PTSD veterans, and because sexual desire has an important role in marital life it can affect marital relations. As Kotler et al. mentioned, there is a significant relation between sexual dysfunction and violence and anger [10]. Violence and anger reduce relations between husband and wife and hence reduce libido. Although marital dissatisfaction in families of veterans with PTSD may occur and deteriorate following the emergence of the symptoms, it is also possible that the emergence of marital dissatisfaction, due to one or more factors, leads to the intensification of PTSD in veterans. This vicious cycle is changed to three factors by the entrance of another variable. 1 – PTSD signs, 2 – marital maladjustment, and 3 – sexual dysfunction. There is a significant correlation of -0.29 between marital maladjustment and severity of PTSD signs and -0.30 between marital maladjustment and sexual dysfunction. Therefore, comprehensive therapy for PTSD veterans" families consists of couple therapy, sex therapy and treatments for reducing PTSD signs.

As the results show, the rate of sexual problems has a correlation of -0.31 with severity of injury. In this case, the decreasing degree of disability with increasing sexual malfunction necessarily means that veterans with a lower degree of physical problems will show more sexual dysfunction. To explain this, several possibilities can be considered: first, it is possible that veterans with higher rates of impairment do not pay much attention to sexual matters. With regard to the self-sacrificing attitude of our country's veterans, those with higher rates of disability are still committed to the war front and combat culture and so give less value to sexual affairs; therefore, considering the fact that Iranian combatants have a lot of spiritual values, fewer sexual problems are reported by them. Second, it is possible that the veterans with higher rates of physical disability are more mentally supported by their families and society, hence face less marital maladjustment. Veterans with PTSD have received the lowest disability rate compared to those afflicted with physical disabilities. Unfortunately, it is difficult to determine the degree of disability due to PTSD, and in such a case the rate is low.

In conclusion, veterans afflicted with PTSD will likely face marital maladjustment, which predisposes them to sexual disorders. Therefore, marriage counselling and prevention programmes should focus on reducing marital dissatisfaction. If marital maladjustment decreases, sexual problems and disorders will improve. Perhaps for this very reason, out of many sexual disorders common in veterans with PTSD, a decrease in libido and arousal rank first.

Thus the best intervention policy is to improve a PTSD veteran's relations with his partner. On this basis, Wright and Nelson suggested that the most effective therapy for PTSD veterans should include couple and family therapy [5]. The available data show that those treatment principles that emphasize family therapy will successfully reduce chronic mental disorders and it seems that we can generalize these findings to PTSD veterans as well [15]. Studying the correlation between demographic variables, we found out that veteran's age with his wife's age, marital record and time spent at the war front; marital record and spouse's age; marital record and time spent at the war front and duration of injury

were correlated. Such correlation is compatible with the condition of PTSD veterans in Iran.

Conclusions

The high rate of marital maladjustment and sexual dysfunction in veterans of PTSD necessitates intervention in these fields. Based on our findings, severity of PTSD signs, marital maladjustment and sexual dysfunction have a triangular relation and intervention in all three fields is mandated. Therefore, PTSD veterans" problem is a family problem.

All in all, researchers suggest that: (1) marital satisfaction be investigated and taken care of in all PTSD veterans; (2) family therapy sessions, especially couple therapy, be emphasized in treating PTSD veterans; (3) couple therapy of PTSD veterans focus on the improvement of the couple's communication with an emphasis on the treatment of their sexual relation; (4) behavioural couple therapy be used more.

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