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Embitterment in War Veterans with Posttraumatic Stress Disorder

Dzevad Sabic¹, Adela Sabic², Olivera Batic-Mujanovic^{3,4}

¹Health Centre Zivinice, Department of Neuropsychiatry Zivinice, Bosnia and Herzegovina

²Health Center Zivinice, Zivinice, Department of Family Medicine, Zivinice, Bosnia and Herzegovina

³Department of Family Medicine, Faculty of Medicine, University of Tuzla, Tuzla, Bosnia and Herzegovina

⁴Family Medicine Teaching Center, Public Health Center Tuzla, Tuzla, Bosnia and Herzegovina

Corresponding author: Dzevad Sabic, MD, Health Center Zivinice, ORCID ID: 0000-0002-9169-1139. Phone: +387603553549, E-mail: sabicdzevad@yahoo.com.

ABSTRACT

Aim: The aim of this study was to analyze frequency of embitterment in war veterans with Posttraumatic stress disorder (PTSD). **Patients and Methods:** It was analyzed 174 subjects (from Health Center Zivinice/ Mental Health Center) through a survey conducted in the period from March 2015 to June 2016, of which 87 war veterans with PTSD and control subjects 87 war veterans without PTSD. The primary outcome measure was the Post-Traumatic Embitterment Disorder Self-Rating Scale (PTED Scale) who contains 19 items designed to assess features of embitterment reactions to negative life events. Secondary efficacy measures included the Clinician-Administered PTSD Scale - V (CAPS), the PTSD CheckList (PCL), the Combat Exposure Scale (CES), the Hamilton Depression Rating Scale (HAM-D), the Hamilton Anxiety Rating Scale (HAM-A) and the World Health Organization Quality of Life Scale (WHO-QOL-Bref). All subjects were male. The average age of patients in the group war veterans with PTSD was 52.78 ± 5.99 . In the control group average age was 51.42 ± 5.98 . Statistical data were analyzed in SPSS statistical program. **Results:** Comparing the results, t tests revealed significant difference between group veterans with PTSD and control group ($t=-21.216$, $p<0.0001$). War veterans group with PTSD ($X=51.41$ $SD=8.91$), war veterans without PTSD ($X=14.39$, $SD=13.61$). **Conclusion:** Embitterment is frequent in war veterans with PTSD.

Keywords: Embitterment, Posttraumatic Embitterment Disorder, Posttraumatic Stress Disorder, War Veterans, Bitterness.

1. INTRODUCTION

Embitterment is an emotion, which is known to everybody and seen as normal emotion, in the context of other mental disorders and in the special form of PTED, this is similar to anxiety. The impact of negative life events in the development of embitterment has been first describe MD Michael Linden in east German people who had experienced sudden, uncontrollable events such as the sudden and unexpected loss of a job or uncertainty during the unification of Germany (1, 2, 3). This negative life event may further threaten mental health, lead to psychological shock and the collapse of basic beliefs of a person. I would like to give short description of PTED. MD Michael Linden has defined Posttraumatic Embitterment Disorder (PTED) as persistent feelings of being insulted or being a loser and being revengeful but helpless. PTED was recently introduced a subtype of Adjustment disorder (AD) and is a reaction to negative life events that are not life-threatening, such as loss of job, loss of income due to disability, low salaries, social injustice (5,

6, 7). Core criteria of PTED (Linden M.) are :

A. Development of clinically significant emotional or behavioral symptoms following a single exceptional, though normal negative life event.

B. The traumatic event is experienced in the following ways: (a) the person knows about the event and sees it as the cause of illness; (b) the event is perceived as unjust, as an insult, and as a humiliation; (c) the person's response to the event involves feelings of embitterment, rage, and helplessness; (d) the person reacts with emotional arousal when reminded of the event.

(C) Characteristic symptoms resulting from the event are repeated intrusive memories and a persistent negative change in mental well-being.

(D) No obvious mental disorder was present prior to the event that could explain the abnormal reaction.

(E) Performance in daily activities and roles is impaired.

(F) Symptoms persist for more than six months.

Additional symptoms are feelings of helplessness, self-blame, rejection of help, suicidal ideation, dysphoria,

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aggression, down-heartedness, seemingly melancholic depression, unspecific somatic complaints, loss of appetite, sleep disturbances, pain, phobic symptoms in respect to the place or to persons related to the event, reduced drive (8, 9, 10).

The purpose of our study is to address the following topics. Firstly, present embitterment at the war veterans with PTSD as well as the potential impact of embitterment on the development of chronic PTSD.

2. SUBJECTS AND METHODS

2.1. SUBJECTS

It was analyzed 174 subjects (from Health Center Zivinice/Mental Health Center) through a survey conducted in the period from March 2015 to June 2016, of which 87 war veterans in war in Bosnia and Herzegovina (1992-1995) with PTSD and control subjects 87 war veterans without PTSD. Respondents was significantly associated with more complex traumatic events, scary anticipation in a hostile environment, having a friend who was seriously wounded or killed, seeing dead or seriously injured soldiers, smelling blood and body parts after the death of soldiers from grenade explosion or decomposing bodies. War veterans with PTSD is patients who are treated in a Mental health center Zivinice. Approximately 20% of the subjects with PTSD were treated in hospital. The subjects without PTSD were interviewed when they came to the regular systematic medical examinations, regular medical examination at family doctor due to other diseases such as hypertension, diabetes mellitus, etc. From studies have excluded respondents who developed PTSD due to events that have just heard that occurred or respondents who had the maximum score on CAPS 5 and PCL Scale and respondents who may have a clear secondary gain. All subjects were male.

2.2. MEASUREMENT

The primary outcome measure was the Post-Traumatic Embitterment Disorder Self-Rating Scale (PTED Scale) who contains 19 items designed to assess features of embitterment reactions to negative life events. The PTED Scale is a reliable and valid measure for embitterment. The characteristic features of reactive embitterment were summarized and translated into self-rating questions by an expert team of researchers experienced with pathological reactive embitterment The PTED scale is a dimensional instrument. It can not make a diagnosis. This is similar to self rating depression scales. The PTED scale measures subjective feelings of embitterment, humiliation and withdrawal in response to some negative life event (2, 3).

Respondents with PTSD conducted with Clinician Administered PTSD Scale for DSM-5 (CAPS-5). CAPS-5 is a 30-item structured interview and is considered a gold-standard for assessing and diagnosing PTSD using DSM-V criteria. In addition to assessing the 20 DSM-5 PTSD symptoms, questions target the onset and duration of symptoms, subjective distress, impact of symptoms on social and occupational functioning, overall PTSD severity, and specifications for the dissociative subtype (depersonalization and derealization). The

CAPS has high reliability and high convergent validity with other PTSD assessments. It is also done and testing for certain entities (11, 12, 13). In CAPS-5 items evaluated examiner/clinician, and each item is evaluated on two dimensions - the frequency (how often a particular symptom appears) and intensity (how strong the symptom is expressed and how interferes with the functioning of the respondents). Before meeting the CAPS-V, respondents are asked to fill the list of events, a list of possible traumatic events, where for each of the events a person can indicate whether you experienced personally witnessed such an event occurred when another person or had heard of such an event (14).

The PTSD Checklist PCL-M (military) is a psychometrically measure of PTSD symptoms. It is one of the most commonly used measures of PTSD, and clinicians and researchers are compare their data with other findings. The PTSD Checklist PCL-M was designed as a screening. Self-report measure that assesses the 20 DSM-5 symptoms of PTSD, that can be divided into four subscales corresponding to the clusters B-E in the DSM-5: Intrusion (five items), Avoidance (two items), Negative alterations in cognitions and mood (seven items), and Alterations in arousal and reactivity (six items) (12, 16). Some items following individual criteria for PTSD according to DSM V can be directly compared with the corresponding items in CAPS-in (14). The CAPS as the "gold standard" measure of PTSD symptomatology, but the PCL demonstrated high diagnostic accuracy pre- and post treatment. Significant variations in accuracy were evident in the ability of the PCL to determine the presence and severity of individual symptoms at each time point (17).

Testing anxiety and depression as individual psychopathological entity, was conducted with Hamilton Anxiety Rating Scale (HAM-A), and Hamilton Depression Rating Scale (HDRS). The HAM-A was one of the first rating scales developed to measure the severity of anxiety symptoms. The scale consists of 14 items, each defined by a series of symptoms, and measures both psychic anxiety (mental agitation and psychological distress) and somatic anxiety (physical complaints related to anxiety). The Hamilton depression scale has been the standard for the assessment of depression for more than 40 years is the most widely used clinician administered depression assessment scale. The original version contains 17 items (HDRS17) pertaining to symptoms of depression experience over the past week (18, 19, 20).

Combat exposure were tested with The Combat Exposure Scale (CES). That is a 7-item self-report measure that assesses wartime stressors experienced by combatants (12). Combat exposure a subjective scale that attempts to quantify an experience through retrospective review (21). Respondents are asked to respond based on their exposure to various combat situations, such as number of combat patrols or other dangerous duty that the respondent had during the war, time spent under enemy fire, how often respondent opened fire rounds at the enemy, how often the respondent saw killed or wounded soldiers or how the respondent was in danger

PTED Scale items	With PTSD (n=87)		Without PTSD (n=87)		t	P
	(X ± SD)	Σ	(X ± SD)	Σ		
1. That hurt my feelings and caused considerable embitterment	3.25 ± 0.719	283	1.43 ± 1.052	124	-13.375	<0.0001*
2. That lead to a noticeable and persistent negative change in my mental well-being	3.02 ± 0.647	263	0.91 ± 0.936	79	-17.347	<0.0001*
3. That I see as very unjust and unfair	3.32 ± 0.707	289	1.36 ± 0.964	118	-15.333	<0.0001*
4. About which I have to think over and over again	2.85 ± 0.900	284	0.70 ± 0.915	78	-15.753	<0.0001*
5. That causes me to be extremely upset when I am reminded of it	3.17 ± 0.686	276	0.94 ± 0.992	82	-17.243	<0.0001*
6. That triggers me to harbour thoughts of revenge	2.02 ± 1.056	176	0.44 ± 0.742	38	-11.459	<0.0001*
7. For which I blame and am angry with myself	2.45 ± 0.974	213	0.68 ± 0.842	59	-12.826	<0.0001*
8. That led to the feeling that there is no sense to strive or to make an effort	2.51 ± 0.729	218	0.73 ± 0.931	63	-13.949	<0.0001*
9. That makes me to frequently feel sullen and unhappy	2.94 ± 0.737	256	0.67 ± 0.931	57	-17.769	<0.0001*
10. That impaired my overall physical well being	2.53 ± 0.775	220	0.57 ± 0.785	50	-16.499	<0.0001*
11. That causes me to avoid certain places or persons so as to not be reminded of them	2.59 ± 0.708	225	0.72 ± 0.817	63	-16.068	<0.0001*
12. That makes me feel helpless and disempowered	2.95 ± 0.761	257	0.74 ± 1.351	64	-13.346	<0.0001*
13. That triggers feelings of satisfaction when I think that the responsible party having to experience a similar situation	2.24 ± 1.151	195	0.67 ± 0.831	58	-10.348	<0.0001*
14. That lead to a considerable decrease in my strength and drive	2.30 ± 0.631	200	0.64 ± 0.862	56	-14.449	<0.0001*
15. That made that I am more easily irritated than before	2.87 ± 0.661	250	0.80 ± 0.833	70	-18.144	<0.0001*
16. That makes that I must distract myself in order to experience a normal mood	2.60 ± 0.580	226	0.80 ± 0.833	53	-16.478	<0.0001*
17. That made me unable to pursue occupational and/or family activities as before	2.60 ± 0.637	226	0.56 ± 0.773	49	-18.941	<0.0001*
18. That caused me to draw back from friends and social activities	2.51 ± 0.697	218	0.56 ± 0.788	49	-17.226	<0.0001*
19. Which frequently evokes painful memories	2.80 ± 0.847	251	0.76 ± 0.945	64	-14.880	<0.0001*

Table 1. Comparison for each item on the Posttraumatic Embitterment Disorder (PTED) Scale for two analyzed groups *Signifikant level <0.0001 X-average value, SD—standard deviatoin, t—test value, p—statistical significance, Σ—sum

of being injured or killed (i.e. be pinned down, overrun, ambushed etc.) (12).

Quality of live both groups of exam with WHO Quality of Life-BREF (WHOQOL-BREF). The WHOQOL-BREF instrument comprises 26 items, which measure the following broad domains: physical health, psychological health, social relationships, and environment (22).

2.3. SOCIO-DEMOGRAPHIC CHARACTERISTICS

The average age of respondents in the group war veterans with PTSD at the time of testing was 52.78 ± 5.99. In the control group average age at the time of testing was 51.42 ± 5.98. The average age of respondents in the group war veterans with PTSD when they were soldiers is 28.81 ± 6.01 and in the control group average age of respondents when they were soldiers is 27.56 ± 6.05. In the group war veterans with PTSD at the time of testing is a 56.3 % (n=49) unemployed, 16.1 % (n=14) is employed, 27.6 % (n=24) is pensioners. In control group 46.0 % (n=40) is unemployed, 40.2 % (n=35) is employed, 13.8 % (n=12) is pensioners. Comparing the level of education in a group of war veterans with PTSD most with a high school education 59.8 % (n=52), primary school education 36.8 % (n=32) and faculty 3.4 % (n=3). In control group high school education 72.4 % (n=63), primary school education 24.1 % (n=21) and faculty 3.4 % (n=3). Most are married 92 % (n=80) in group war veterans with PTSD and in the control group 85.1 % (n=74).

2.4. STATISTICAL ANALYSES

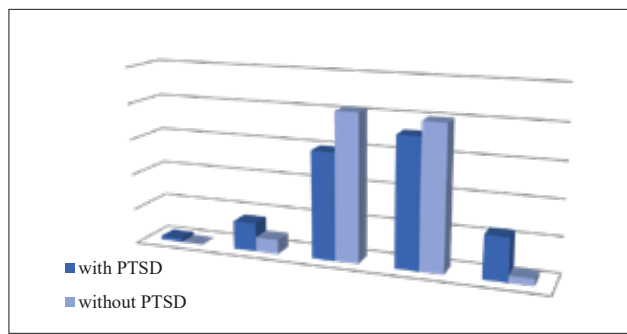
SPSS Statistics package (Officially named IBM SPSS Statistics) was used to perform the statistical analysis of the data. Differences between categorical variables were estimated by Independent Samples t Test. Statistical values were considered significant at p<0.0001.

3. RESULTS

Comparing the results, t test revealed significant difference in incidence of embitterment between group veterans with PTSD and control group (t=-21.216, p<0.005). War veterans group with PTSD (mean= 51.41 SD=8.91), war veterans without PTSD (mean=14.39, SD=13.61).

In group war veterans with PTSD 31 (35 %) is respondents with high embitterment, in group war veterans without PTSD number of respondents with high embitterment is 7 (8 %). Of the 31 respondents in the group of war veterans with PTSD 26 of them are unemployed, three are pensioner and two employees with a monthly income of less than 400 €. In control group all of seven respondents with higher embitterment is unemployed. Respondents with high embitterment had a high score on the 1, 2 and 7 CES a question concerning the number of combat patrols or other dangerous duty that the respondent had during the war, the situation when they were surrounded and how the respondent was in danger of being injured or killed.

By comparing the data obtained by CES for exposure to combat was found no significant difference between



Graph 2. The total exposure to combat score for two analyzed groups

the two analyzed groups (with PTSD and without PTSD) $p = 0.324$. Combat score for responding war veterans with PTSD is: “light” showed 2 % responding, “light-moderate” 9% responding, “moderate” 35 % responding, “hard moderate” 41 % responding and “hard” 13 % responding, in group control responding combat score is: “light moderate” showing 5 % responding , “moderate” 48 % responding, “hard moderate” 45 % responding and “hard” 2% responding.

Examining the quality of life we get a statistically significant difference $p < 0.0001$ in all domains, overall quality of life and general health, physical health, psychological, social relationships and environment.

Domains in WHO	With PTSD	Without PTSD	t	P
Quality of Life-BREF	(X ± SD)	(X ± SD)		
General health	4.23 ± 1.34	7.43 ± 1.45	-15.06	<0.0001*
Physical health	16.60 ± 4.20	27.91 ± 4.09	-17.98	<0.0001*
Psychological	14.48 ± 3.04	24.13 ± 4.22	-17.26	<0.0001*
Social relationships	7.99 ± 1.45	11.33 ± 2.07	-12.31	<0.0001*
Environment	21.85 ± 3.01	29.38 ± 3.84	-14.38	<0.0001*

Table 2. Distribution for all domains the quality of life between two groups. *Significant level <0.0001, X- average value, SD- standard deviation, t-test value, p-statistical significance

Testing the individual psychopathological entity, anxiety and depression, in a group of war veterans with PTSD, 43.6% of respondents showed mild anxiety severity, 19.5 % mild to moderate severity and 36.8% moderate to severe anxiety. In the same group of respondents 41.4% were in clinical remission of depressive disorder, 43.7% mild to moderate depressive disorder while 14.9% of them showed severe clinical depressive disorder.

4. DISCUSSION

Embitterment, a feeling known to most persons, rarely described in the manuals of psychopathology as a mixture of anger and hopelessness, arising from feeling unjustly treated by other people or fate patients feel powerful, sad and tired of life (23).

To begin with I would like to give comparison between PTED and other diagnostic entities of the group of stress reactions. Clinical practice has shown that PTED different from PTSD. PTSD that an anxiety disorder that develops after exposure to an extremely traumatic event. It is characterized by intrusive recollections, emotional

numbing, avoidance behavior, and symptoms of vegetative hyperarousal (24). Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) includes 20 PTSD symptoms clustered into four symptomatic domains: intrusive symptoms, active avoidance, disturbed emotional states, and alterations of arousal and reactivity (25). Arousal is marked by aggressive, reckless or self-destructive behavior, sleep disturbances, hyper-vigilance or related problems (26). Anger and aggression have been frequently reported after the experience of sexual abuse (27). Researchers have proposed many theories to explain the development of PTSD, including biological theories, and psychological theories. Psychology theories include the psychodynamic theory as well as learning theory and cognitive theories; while cognitive theory best explains the development of PTSD (28). Ehlers and Clark assumes that PTSD becomes permanent when people processed traumatic an event in such a way as giving rise to a sense of the real, present threat. The experience of the threat stems from inadequately negative assessment of trauma and or its consequences, poor working out the traumatic event and contextualization and inadequate integration. All this leads to difficulties in the deliberate remembering, reliving in the present (the absence of a time context), the lack of integration with other relevant information, and easy activation of memory in situations where there are physically similar characters (29, 30).

AD is the condition of subjective distress and emotional disorders that interfere with social functioning and resulting in a period of adjustment to a significant life change. Intrusive preoccupations with the stressors, avoidance and failure to adapt should separate this disorder from normal reactions and no requirements for severity of the stressor should distinguish it from PTSD (31). Events are varied and include depressed mood, anxiety, worry, feelings of inability to solve tasks, carrying out everyday tasks. A person can feel propensity dramatic behavior and none of the symptoms is not enough highlighted to set another diagnosis. The beginning is usually a month after the stressful event and the duration of symptoms does not exceed six months (32). In PTED intensity is not reduced after six months, but is getting worse and tends chronicity (2). Anastasia et al in their study, they found that main stressors linked to the development of AD were represented by working problems (32.30%), family problems (23.70%), and/or somatic disease (22.60%) with significant differences with respect to age and sex (33).

Main stressors linked to the development of AD often related to negative life events that are responsible for the development of PTED, and because of still unclear defined criteria for the diagnosis of AD, some clinicians PTED put in the same box with adjustment disorder. PTED is subtype of AD, but not the same as adjustment disorder. Bitterness is a lot more complex problem.

There are few studies that deal with embitterment. Blom et al are explored Embitterment in patients with a rheumatic disease after a disability pension examination. Eighteen to 27 percent of patients had high levels of embitterment with no differences between diagnos-

tic groups (34). Sensky et al. explored chronic embitterment among occupational health professionals. They investigated the associations between chronic embitterment and procedural justice, and aspects of the psychological work contract. In the investigation, 236 respondents, most of whom were female. The most frequent professional groups were nurses and health care assistants. This study identified chronic embitterment and its key associations with sickness absence and with organizational and procedural justice in NHS staff. Embittered respondents reported more certified sickness absence than those who were not embittered (35). Znoj developed an "embitterment scale" when working with cancer patients (36). And Linden M (2009), gave recommendations for diagnostic criteria for PTED.

The patient with high level embitterment does not feel that is sick, believes that the problem is not it see that problem in society which he believes is ill, which often refuses treatment, and in patients with PTSD can be a cause of chronic PTSD. In our study, it was not of statistical significance for embitterment between groups unemployed, employed and retirees. The reasons for embitterment are low standard of living, low monthly income, feeling that they are not sufficiently rewarded for their contribution, feeling that the door institution the country brakes just for them. Our country after the war entered the transition process, the social order is completely changed. Previously, workers had a sense of security, the new crew will it not feel that in the end the feeling of not being adequately rewarded for their contribution to the defense of the country and lack of social support gives a sense of embitterment. Lueger-Schuster et al. stresses the importance of social support in PTSD. Perceived social support, that is being embedded in social interactions that provide individuals with actual assistance perceived to be caring, and having the notion that support is available at any time, might buffer trauma related psychopathology, thus perceived social support might be an influential factor for the recovery (27).

War veterans who developed PTSD are subjected to long-term treatment, which involved hospitalization, regular treatment in mental health centers, group and individual psycho-therapy, socio-therapy, EMDR, but severity of the disease has not decreased, on the other hand some symptoms become more intense, such as the symptoms of intrusion, increased arousal, nightmares and loss of concentration. Working with these patients I noticed a high level of Embitterment, as evidenced by this study, but such a high level embitterment is probably the reason for the development chronic PTSD in these patients.

5. CONCLUSION

The aim of this study was to demonstrate the prevalence embitterment in the population war veteran with PTSD. From the obtained results it was observed a higher incidence of embitterment in the population of war veterans with PTSD in regards. This study attempts to reveal the complexity of the relationship between Embitterment and chronic PTSD. Embitterment is a appears

in clinical practice and neglect of embitterment in patients with PTSD have for consequences development of chronic PTSD and worsening of the underlying disease, prolonged the treatment and increase in the cost of treatment.

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