

# A quality of life in chronic combat related posttraumatic stress disorder - a study on Croatian War veterans

---

**Braš, Marijana; Milunović, Vibor; Boban, Maja; Mičković, Vlatko; Lončar, Zoran; Gregurek, Rudolf; Laco, Miro**

*Source / Izvornik:* **Collegium Antropologicum, 2011, 35, 681 - 686**

**Journal article, Published version**

**Rad u časopisu, Objavljena verzija rada (izdavačev PDF)**

*Permanent link / Trajna poveznica:* <https://urn.nsk.hr/urn:nbn:hr:105:169331>

*Rights / Prava:* [In copyright](#) / [Zaštićeno autorskim pravom.](#)

*Download date / Datum preuzimanja:* **2024-12-10**



*Repository / Repozitorij:*

[Dr Med - University of Zagreb School of Medicine  
Digital Repository](#)



# A Quality of Life in Chronic Combat Related Posttraumatic Stress Disorder – A Study on Croatian War Veterans

Marijana Braš<sup>1</sup>, Vibor Milunović<sup>2</sup>, Maja Boban<sup>3</sup>, Vlatko Mićković<sup>4</sup>, Zoran Lončar<sup>5</sup>, Rudolf Gregurek<sup>1</sup> and Miro Laco<sup>6</sup>

<sup>1</sup> University of Zagreb, Zagreb University Hospital Centre, Clinic for Psychological Medicine, Zagreb, Croatia

<sup>2</sup> University of Zagreb, School of Medicine, Zagreb, Croatia

<sup>3</sup> »Sve za nju« Centre for Psychological Support, Zagreb, Croatia

<sup>4</sup> Institute for Anthropological Research, Zagreb, Croatia

<sup>5</sup> University of Zagreb, »Sestre Milosrdnice« University Hospital Centre, Zagreb, Croatia

<sup>6</sup> Council of Zagreb, Department for Veteran Affairs, Zagreb, Croatia

## ABSTRACT

*The main objective of this study was to examine an association of various symptoms in chronic combat-related post traumatic stress disorder (PTSD) and the quality of life in this population. 248 Croatian male war veterans all diagnosed with chronic PTSD were consecutively enrolled in this study as they showed up at the routine check-up. They were given self report questionnaires Trauma Symptom Inventory (TSI-A) evaluating different PTSD symptoms and WHO Quality of Life-BREF assessing four different domains of the quality of life. After independent sample *t*-test was performed, the presence of each symptom defined by Trauma Symptom Inventory indicated the impairment of all four quality of life domains in a group of subject suffering from it, except of intrusive experience not being associated with the lesser quality in social domain. All quality of life domains were significantly correlated with various PTSD symptoms; however Pearson correlation factors ranged from small to medium value. As expected, PTSD symptoms are associated with lesser quality of life in the affected population. The further research is needed to show possible causal relationship between PTSD and, especially, physical health of these patients.*

**Key words:** PTSD, quality of life, war veterans, mental health

## Introduction

Post Traumatic Stress Disorder (PTSD) is defined by The Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IVTR)<sup>1,2</sup> as an extensive response to a major traumatic event. This disorder consists of different symptom clusters. First major cluster is defined by intrusive experiences such as images, thoughts, recollections following to exposure of stimuli resembling the traumatic event. Second cluster consists of different ways of avoiding the stimuli resembling the trauma such as phobic avoidance, withdrawal, dissociation. Third cluster indicates the presence of increased arousal manifesting as irritability, anger, hyper vigilance etc. Chronic

PTSD is diagnosed if the symptoms persist more than 3 months.

Sareen et al.<sup>3</sup> by analyzing data from Canadian Community Health Survey (n=36,984) found the significant association of PTSD with lower quality of life, greater disability and larger number of suicide attempts. PTSD differs from other anxiety disorders with its devastating effect on quality of life. Rapaport et al.<sup>4</sup> found the severe impairment in quality of life in 59% subjects suffering from PTSD unlike in other anxiety disorders such as panic disorder (20%), obsessive compulsive disorder (26%)

and social phobia (21%). This rate is similar to impairment occurring in mood disorder such as depression and dysthymia. Treatment of PTSD by sertraline or psychotherapy has been shown to improve the quality of life in these patients<sup>5-7</sup>. This primarily states the need for even more detailed exploration of the effect of PTSD on quality of life.

### Objectives

The main purpose of this research is to explore the association between PTSD symptoms and different domains of quality of life. PTSD was examined in the multidimensional model consisting of different cluster of symptoms the subjects are suffering from, unlike other studies measuring the presence and severity of this disorder. Also, the quality of life was examined through multidimensional model developed by World Health Organization consisting of several domains<sup>8</sup>.

For the main object of this research, two hypotheses were formed. First hypothesis stated that a significant difference in score of all quality of life domains exists between subjects based on a presence of a specific symptom cluster of PTSD. For example, subjects suffering from dissociation symptoms have lesser quality of life than those not suffering from it. Second hypothesis states that there is a significant association between PTSD symptoms and quality of life domains.

## Subjects and Methods

### Participants

A total number of 248 Croatian male war veterans participated in this study. All subjects are being treated as outpatients for chronic PTSD in the Clinic for psychological medicine, University Hospital Centre in Zagreb. An inclusion criterion was the diagnosis of chronic PTSD related to war experience in Croatian Homeland war with the absence of acute psychosis and illegal substance abuse. Patients were consecutively enrolled in this study as they presented for routine check-up at the clinic and signed the letter of informed consent.

### Questionnaires

All subjects were tested by the general questionnaire, Trauma Symptom Inventory A<sup>9</sup> (TSI-A) and World Health Organization Quality Of Life-BREF instrument (WHOQOL-BREF)<sup>8</sup>. The general questionnaire consisted of items concerning age, sex, socio-economical status, other comorbid psychiatric disorders and physical disorders. TSI-A is an instrument with good to strong validity<sup>10</sup> developed to evaluate chronic and acute psychological trauma due to several traumatic stressors including war experience, abuse, and interpersonal violence. It consists of 86 items using four point scales varying from 0 standing for »never« to 3 standing for »often«. These items are divided in three validity scales and eight clinical scales representing the symptom clusters of PTSD and other difficulties arising from chronic psychological

trauma. The main difference between original TSI and TSI-A is exclusion of clinical scales Sexual Concerns and Dysfunctional Sexual Behavior evaluating sexual deficits. The clinical scales include Anxious Arousal (AA), Depression (D), Anger/Irritability (AI), Intrusive Experiences (IE), Defensive Avoidance (DA), Dissociation (DIS), Impaired Self-Reference (ISR) and Tension Reduction Behavior (TRB). All of them were used as variables in this study. WHOQOL-BREF is an instrument developed to evaluate different domains of quality of life. These domains are Physical Health, Psychological Health, Social Relationship and Environment. It consists of 26 items using five-point Likert scale. This instrument is abbreviated version of WHOQOL-100 with comparable results in a field trial with WHOQOL-100.

### Statistical analysis

After data collection, a statistical analysis was performed. To test our main hypothesis t-test for independent samples was used. To test a second hypothesis Pearson correlation factors were computed between TSI-A clinical scales and four quality of life domains. For all tests statistical significance was taken as  $p < 0.05$ .

## Results

### Background data

The average age of participants in this study is 41 years ( $M=41.76$ ,  $SD=4.48$ ). The majority of participants is in retirement (51.61%) with average monthly income between 150 euros and 400 euros (39.52%). Most of the subjects were first line fighters (90.73%), volunteer soldiers (84.67%) and 20.56 % of subjects were injured during the combat. The descriptive data for various symptoms measured by TSI-A are shown in Table 1. The vast majority of patients despite the treatment shows all the symptoms of PTSD; Anxious Arousal (74.2%), Depression (69.4%), Anger/Irritability (71.4%), Intrusive Experience (77.8%), Defensive Avoidance Scale (67.3%), Dis-

TABLE 1  
DESCRIPTIVE DATA FOR TRAUMA SYMPTOM INVENTORY-A SCALES

TSI	N	Minimum	Maximum	$\bar{X}$
AA	217	5	24	18.70
D	217	1	24	17.89
AI	217	4	27	20.88
IE	217	2	24	18.30
DA	217	5	24	17.44
DIS	217	1	27	17.24
ISR	217	1	27	17.70
TRB	217	0	24	10.84

\* AA=Anxious Arousal, D=Depression, AI=Anger/Irritability, IE=Intrusive Experience, DA=Defensive Avoidance, DIS=Dissociation, ISR=Impaired Self Reference, TRB= Tension Reduction Behaviour

**TABLE 2**  
DESCRIPTIVE DATA FOR WHOQOL-BREF DOMAINS

WHOQOL-BREF	N	Minimum	Maximum	$\bar{X}$
Physical health	234	28	120	66.58
Mental health	232	24	100	58.74
Social	237	12	56	34.06
Environment	232	32	140	86.48

sociation (72.2%), Impaired Self Reference (69.9%) and Tension Reduction Behaviour (62.5%). The mean values the subjects scored on the WHOQOL-BREF are shown in Table 2.

*The differences in groups suffering from particular symptoms of PTSD*

As seen in Table 3, the results for t-test for independent samples are shown. It can be concluded that subjects scoring above the TSI-A cut off values for specific symptom of PTSD have the greater impairment in all of the four quality of life domains, unlike those scoring under the cut off values for each symptom. Our first hypothesis has been accepted leading to a conclusion that the presence of every symptom of PTSD impairs the quality of life. The only exception is that the groups do not statistically significantly differ in the social domain of quality of life based on the presence of intrusive experiences.

*Association of PTSD symptoms and quality of life domain*

All Pearson correlation coefficients between quality of life domains and TSI-A scales are statistically significant as seen in table 3. Pearson correlation coefficients range from small to medium values<sup>11</sup>. Our finding show that all PTSD symptoms are associated negatively with the quality of life domains.

**TABLE 3**  
T-TEST ON INDEPENDENT SAMPLES FOR SIGNIFICANT DIFFERENCES IN GROUPS EXHIBITING PARTICULAR PTSD SYMPTOM

TSI-A	Physical health			Mental health			Social			Environment		
	t	df	p	t	df	p	t	df	p	t	df	p
D	6.17	208	.00	8.96	206	.00	5.81	211	.00	6.03	206	.00
AA	5.70	208	.00	6.17	206	.00	3.16	211	.00	4.43	206	.00
AI	5.17	221	.00	6.51	218	.00	3.31	223	.00	4.15	219	.00
IE	5.57	208	.00	4.68	206	.00	1.18	211	.00	2.64	206	.00
DA	3.73	208	.00	3.76	206	.00	2.08	211	.00	2.76	206	.00
DIS	7.08	208	.00	7.26	206	.00	4.72	211	.00	6.41	206	.00
ISR	6.79	208	.00	7.36	206	.00	4.70	211	.00	5.98	206	.00
TRB	4.37	208	.00	6.09	206	.00	2.99	211	.00	5.16	206	.00

\* AA=Anxious Arousal, D=Depression, AI=Anger/Irritability, IE=Intrusive Experience, DA=Defensive Avoidance, DIS=Dissociation, ISR=Impaired Self Reference, TRB= Tension Reduction Behaviour

**Discussion**

It is evident from the results that the presence of particular symptom is associated with the impairment of the quality of life as seen in table 2. For the purposes of discussion TSI-A scales will be divided in three major factors according to Briere<sup>9</sup>; first factor being directed to traumatic stress sequalea consisting of IE, DA, DIS, ISR scales, second factor manifesting generalized dysphoria consisting of D, AA, AI scales, and remaining scales making the third factor.

*PTSD and physical quality of life*

One of the most important issues arises from poor physical self perceived quality of life in PTSD population confirmed by this study. Other studies have confirmed this finding with direct association of PTSD and poorer physical functioning regardless of comorbid mental disorders<sup>12-14</sup>. Beckham et al.<sup>14</sup> identified increased rates of somatization and hypochondriacs among the population of veterans suffering from PTSD, while other studies<sup>3,15</sup> show increase of several physical disorders such as pain disorders, tumors, gastrointestinal illnesses, respiratory illnesses and cardiovascular disorders in this population in strong correlation with PTSD severity which is possibly due to hypothalamus-pituitary-adrenal (HPA) axis or autonomic instability. Our study found strong negative correlation ( $r = -0.50$ ;  $p < 0.05$ ) between depression and physical quality of life unlike some other studies, but also medium correlation with other scales forming the factor of sequalea and the factor evaluating dysphoria. Only tension reduction behavior has low correlation factor with physical health domain. This indicates that PTSD as a whole complex disorder leads to impairment in this domain without a specific symptom being dominant in this area of quality of life. PTSD may lead to an altered perception of one's health, although 43.2% of subjects report a specific disorder with majority of them being pain related such as low back pain disorder. PTSD patients are prone to somatization and dissociation. Furthermore, Brown et al. in their meta-analysis conclude that

**TABLE 4**  
CORRELATION BETWEEN QUALITY OF LIFE DOMAINS AND PTSD SYMPTOMS

VARIABLES	AA	D	AI	IE	DA	DIS	ISR	TRB	Physical health	Mental health	Social	Environment
AA	1.00											
D	0.74*	1.00										
AI	0.69*	0.63*	1.00									
IE	0.72*	0.68*	0.66*	1.00								
DA	0.57*	0.62*	0.53*	0.64*	1.00							
DIS	0.70*	0.77*	0.62*	0.76*	0.66*	1.00						
ISR	0.70*	0.76*	0.62*	0.72*	0.68*	0.83*	1.00					
TRB	0.54*	0.51*	0.58*	0.56*	0.50*	0.68*	0.69*	1.00				
Physical health	-0.44*	-0.51*	-0.33*	-0.46*	-0.33*	-0.43*	-0.46*	-0.27*	1.00			
Mental health	-0.50*	-0.63*	-0.43*	-0.43*	-0.39*	-0.50*	-0.52*	-0.35*	0.71*	1.00		
Social	-0.33*	-0.46*	-0.27*	-0.21*	-0.20*	-0.34*	-0.34*	-0.17*	0.49*	0.64*	1.00	
Environment	-0.40*	-0.44*	-0.31*	-0.29*	-0.30*	-0.40*	-0.42*	-0.34*	0.57*	0.66*	0.54*	1.00

there is a lot of evidence supporting the connection between somatoform disorders while proposing the new classification of pseudoneurological syndrome<sup>16</sup>. They also report the higher level of traumatic event in this group of patients. Since by our results the dissociative symptoms worsen physical domain life, this connection seems to be bilateral through unknown psychological and neurological mechanisms. PTSD could possibly be a model linking those two groups of disorders. Negative intrusive thoughts seem to be bilaterally connected with poorer physical functioning. Some authors have proposed the biological effects of these experiences leading to the prolonged psychological stress, hence the exaggerated autonomic response of adrenergic system and HPA axis, although results are contradictory.

#### *PTSD and the social domain of the quality of life*

Domain of social quality of life is surprisingly weakly correlated with most of PTSD symptoms, except impaired self reference and dissociation, although PTSD has been associated with the severe impairment of social life. Although it may be attributed to only three items questioning the social domain in WHOQOL-BREF, a large trial in a population of Dutch psychiatric outpatients has validated the test and found a strong correlations between social domain in this questionnaire and Perceived Social Support questionnaire<sup>17</sup>. While other studies have found defensive avoidance, anger, arousal and alcohol abuse as the most prominent factor contributing to lesser quality of life in this social domain<sup>18–20</sup>, our studies shows that the effect of emotional numbing could have devastating consequences in this area. This may be attributed to the understated presence of complex PTSD or Disorders of Extreme Stress (DES NOS) defined by DSM-IV<sup>1,21</sup>. The presence of alteration in regulation of affect manifesting itself as generalized dysphoria, dissociation symptoms, somatization and most importantly, alterations in self-perception defined in this study as Impaired Self Reference TSI-A scale as the most

important factors effecting the impairment of quality of life indicates that the sample in our study may be primarily affected by the complex traumatic response leading to a comorbidity of complex PTSD. Although this diagnosis is most common in patients suffering from childhood abuse and severe interpersonal violence<sup>22</sup>, Jongedijk et al.<sup>23</sup> have found in their sample of war veterans 38% subjects meeting criteria for DES NOS. By showing the potential presence of complex PTSD due to its chronicity, in our sample, we are trying to emphasize the importance of disturbance in self-perception and personality changes in impairment of all domains of quality of life. Contrary to some others study evaluating the role of perceived social support<sup>24–26</sup>, we found that a social domain of quality of life, which can be interpreted as a perceived social support, may not play a great role in a symptoms of chronic PTSD. This result may be explained possibly by the permanent personality changes and long term victimization of the veterans suffering from this disorder resulting with the predominance of impaired »self« and dissociation disorders. Brewin et al. have shown in their meta-analysis that inadequate social support after the traumatic event is moderate predictor of the occurrence of PTSD<sup>27</sup>. A prospective study at multiple points of the development of chronic PTSD is needed to clarify the role of social support in this disorder. The preliminary data obtained by Jelusic et al. that the level of social support diminishes during the course of PTSD<sup>28</sup>. We hypothesize that a lack of significance of social domain of quality of life may reflect the role of chronic internal processing of trauma and inadequate social support at the beginning of this disorder. The patients are in the beginning of their disorder reaching out to their social environment which does not respond to their needs. Furthermore, the role of the secondary traumatization of the family itself may contribute to these findings. Klaric et al. have demonstrated in a sample of 154 wives of PTSD higher levels of stress and burnout, which leads to marital problems and alienation<sup>29</sup>. With the development of the chronic out-

come, a priori expectation of not getting enough social support diminishes the need and impact on the severity and the presence various symptoms. However, an additional research is needed.

A curious absence of a significant effect of intrusive experiences as a major symptom of PTSD on social domain of quality of life could be explained by a tendency of war veterans to engage in social connections with other PTSD affected veterans.

### *The association of comorbid depression and the quality of life*

In our sample, 39% of participants have an additional diagnosis of depressive disorder, while 69.4% of subjects experiences depressive symptoms according to TSI-A Depression scale. It is well established that depression is often comorbid mental disorder in PTSD ranging from 25% to 50%<sup>30,31</sup>. Our study has shown through highest correlation factors of depressive symptoms with all four quality of life domains, especially mental and physical health domain, which is similar result to other studies<sup>32,33</sup>. Depression could mediate its effect on physical domain through somatization phenomenon, especially pain disorders<sup>34</sup>. Furthermore, depression TSI-A scale has the highest correlation factors with impaired self reference and dissociation indicating that depression exhibits its role on quality of life through complex PTSD. This study once again emphasizes the importance of assessing the comorbid depression issue in the everyday treatment

of PTSD patients as well as in the future research on quality of life.

### *The limitations of the study*

There are several limitations to be considered while analyzing this study. First limitation is that PTSD and depression were not assessed by a structured interview such as Clinician-Administered PTSD Scale. Discrepancies exist between studies using structured interviews and those using self-administered questionnaires as reported by Beck et al.<sup>35</sup>. Researchers mostly concentrate on comorbid mood disorders while using interviews as a method of assessment, while in studies using self-reported measures other symptoms of PTSD such as emotional numbing predominate. Since quality of life is by the definition of WHO »individuals' perceptions of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns«, certainly assessing subject's personal perception of PTSD is essential. Second limitation of this study is not being able to examine subject's medical record concerning various physical disorders our sample is suffering from for various reasons. This limited our study to examine the differences between self-reported physical quality of life and »real« medical problems. But, however this discrepancy was not our main objective. Another possible limitation of our study is not having a healthy control group because in the planning of this study our main goal was not to show that PTSD patients have a significant deterioration in the quality of life, as shown by the previous studies.

## REFERENCES

1. APA, Diagnostic and Statistical Manual of Mental Disorders, Text Revision 4th ed. (American Psychiatric Association, Washington DC 2000).
2. PHILLIPS KA, BECKHAM JC, DAVIDSON JRT Anxiety Disorders: Traumatic Stress Disorders. In: KAY J, TASMAN A (Eds) Essentials of Psychiatry (New York, Wiley, 2006).
3. SAREEN J, COX BJ, STEIN MB, AFIFI TO, FLEET C, ASMUNDSON GJ, Psychosomatic Med, 69 (2007) 242.
4. RAPAPORT MH, CLARY C, FAYYAD R, ENDICOTT J, Am J Psychiatry, 162 (2005) 1171.
5. RAPAPORT MH, ENDICOTT J, CLARY CM, J Clin Psychiatry, 63 (2002) 59.
6. LUNNEY CA, SCHNURR PP, J Trauma Stress, 20 (2007) 955.
7. SEEDAT S, LOCHNER C, VYTHILINGUM B, STEIN DJ, Pharmacoeconomics, 24 (2006) 989.
8. DIVISION FOR MENTAL HEALTH AND PREVENTION OF SUBSTANCE ABUSE, WHOQOL User Manual, accessed 20.7. 2008. Available from: URL: [http://www.who.int/mental\\_health/evidence/](http://www.who.int/mental_health/evidence/)
9. BRIERE J. Trauma Symptom Inventory professional manual. (Psychological Assessment Resources, Odessa, 1995).
10. NORRIS FH, HAMBLIN JL, Standardized self-report measures of civilian trauma and PTSD. In: WILSON JP, KEANE TM, MARTIN T (Eds) Assessing psychological trauma and PTSD (Guilford Press, New York, 2004).
11. COHEN J, COHEN P, WEST SG, AIKEN, LS, Applied multiple regression/correlation analysis for the behavioral sciences. (Lawrence Erlbaum Associates, Hillsdale, 2003).
12. ZAYFERT C, DUMS AR, FERGUSON RJ, HEGEL MT, J Nerv Ment Dis, 190 (2004) 233.
13. CLOITRE M, COHEN LR, EDELMAN RE, HAN H, Women Health, 34 (2001) 1.
14. BECKHAM JC, MOORE SD, FELDMAN ME, HERTZBERG MA, KIRBY AC, FAIRBANK JA, Am J Psychiatry, 155 (1998) 1565.
15. BARRETT DH, DOEBBELING CC, SCHWARTZ DA, VOELKER MD, FALTER KH, WOOLSON RF, DOEBBELING BN, Psychosomatics, 43 (2002) 195.
16. BOSCARINO JA, Ann N Y Acad Sci, 1032 (2004) 141.
17. BROWN RJ, CARDEÑA E, NIJENHUIS E, SAR V, VAN DER HART O, Psychosomatics, 48 (2007) 369.
18. MASTHOFF ED, TROMPENAAERS FJ, VAN HECK G., HODIAMONT PP, DE VRIES J, Qual Life Res, 14 (2005) 151.
19. SOLOMON Z, DEKEL R, ZERACH G, J Fam Psychol, 22 (2008) 659.
20. TAFT CT, STREET AE, MARSHALL AD, DOWDALL DJ, RIGGS DS, J Fam Psychol, 21 (2007) 270.
21. BABIĆ D, MARTINAC M, BJELANOVIĆ V, BABIĆ R, SUTOVIĆ A, SINANOVIĆ O, Coll Antropol, 34 (2010) 23.
22. LUXEMBERG T, SPINAZZOLA J, VAN DER KOLK BA, Complex trauma and disorders of extreme stress Part I accessed 12.2 2008. Available from: URL: <http://www.ptsdforum.org/images/DESNOS.pdf>
23. VAN DER KOLK BA, PELCOVITZ D, ROTH SH, MANDEL FS, MCFARLANE A, HERMAN JL, Am J Psychiatry, 153 (1996) 83.
24. JONGEDIJK RA, CARLIER IV, SCHREUDER BJ, GERSONS BP, J Trauma Stress, 9 (1996) 577.
25. SOLOMON Z, MIKULINCER M, AVITZUR E, J Pers Soc Psychol, 55 (1998) 279.
26. SOLOMON Z, WAYSMAN M, LEVY G, FRIED B, MIKULINCER M, BENBENISHTY R, FLORIAN V, BLEICH A, Family process, 31 (1992) 289.
27. CHARU-VASTRA A, CLOITRE M, Annu Rev Psychol, 59 (2008) 301.
28. BREWIN CR, ANDREWS B, VALENTINE JD, J Consult Clin Psychol, 68 (2000) 748.
29. JELUSIĆ I, STEVANOVIĆ A, FRANDIAKOVIĆ T, GRKOVIĆ J, SUKOVIĆ Z, KNEZOVIĆ Z, Coll Antropol, 34 (2010) 853.
30. KLA RIĆ M, FRANCISKOVIĆ T, PERNAR M, NEMČIĆ MORO I, MILIĆEVIĆ R, CERNI OBRDALJ E, SALCIN SATRIANO A, Coll Antropol, 34 (2010) 15.
31. BRADY KT, KILLEEN TK, BREWERTON T, LUCERINI S, J Clin Psychiatry, 61 (2000) 22.
32. DUCROCQ F, VAIVA G, COTTENCIN O, MOLENDAS S, BAILLY D, Encephale, 27 (2001) 159.
33. RICHARDSON JD, LONG ME, PEDLAR D, ELHAI JD, Can J Psychiatry, 53 (2008) 594.
34. CHEN YS, CHEN MC, CHOU FH, SUN FC, CHEN PC, TSAI KY, CHAO SS, Qual Life Res, 16 (2007) 1289.
35. GRUNBER AM, GOLDSTEIN RD, Mood disorders: Depression. In: KAY J, TASMAN A (Eds) Essentials of Psychiatry (New York, Wiley, 2006).
36. BECK JG, GRANT DM, CLAPP JD, PALYO SA, J Anxiety Disord, 23 (2009) 443.

*M. Braš*

*University of Zagreb, Zagreb University Hospital Centre, Clinic for Psychological Medicine, Kišpatićeva 12, 10 000 Zagreb, Croatia  
e-mail: mbras@kbc-zagreb.hr*

## **KVALITETA ŽIVOTA U KRONIČNOM RATNOM POSTRAUMATSKOM STRESNOM POREMEĆAJU; STUDIJA NA HRVATSKIM RATNIM VETERANIMA**

### **S A Ž E T A K**

Glavni cilj ovog rada jest bio pokazati povezanost pojedinačnih simptoma posttraumatskog stresnog poremećaja (PTSP) i kvalitete života i ocijeniti njihov međuodnos. U studiji je sudjelovalo ukupno 248 ratnih veterana koji imaju dijagnozu PTSP-a. Uključivani su uzastopno u studiju pri rutinskoj kontroli. PTSP je bio određen pomoću multidimenzionalne samoocjenjske skale »Trauma Symptom Inventory-A«, a razina kvalitete života pomoću samoocjenjske skale »WHO Quality of Life-BREF« koja određuje četiri različite domene kvalitete života. Nakon upotrebe t-testa za neovisne uzorke, pokazano da je kvaliteta života u sve četiri domene statistički značajno smanjena s obzirom na prisutnost pojedinog simptoma PTSP-a. Statistički značajnom se jedino nije pokazala prisutnost intruzivnih doživljaja s obzirom na socijalnu domenu. Sve domene kvalitete života su bile značajno povezane s pojedinačnim simptomima PTSP-a, iako su vrijednosti Pearsonovih korelacijskih faktora imale malu do umjerenu vrijednost. Kao što je bilo očekivano, simptomi posttraumatskog stresnog poremećaja su povezani sa smanjenom kvalitetom života u populaciji ratnih veterana. Buduće studije bi trebale pokazati kauzalnu povezanost između PTSP i kvalitete života, pogotovo poremećenog fizičkog stanja ratnih veterana.