

Increase of Frequency of Post-Traumatic Stress Disorder in Disabled War Veterans during Prolonged Stay in a Rehabilitation Hospital

Rudolf Gregurek, Ladislav Pavić, Daria Vuger-Kovačić¹, Herman Vukušić, Silva Potrebica¹, Zouheir Bitar¹, Darko Kovačić¹, Suzana Đanić, Eduard Klain

Department of Psychological Medicine, Zagreb University Hospital Center, Zagreb; and ¹Special Rehabilitation Hospital, Varaždinske Toplice, Croatia

Aim. To explore possible causative factors in the development of post-traumatic stress disorder (PTSD) in disabled Croatian war veterans.

Method. The sample comprised 42 disabled Croatian war veterans, aged 19 to 44 years, accommodated in the Varaždinske Toplice Rehabilitation Hospital for the purpose of long-term physical rehabilitation. Manifestation of PTSD symptoms (Mississippi Scale for Combat-Related Post-Traumatic Stress Disorder) and anxiety levels (Spilberger's State Trait Anxiety Inventory) were tested in 1994 and 1999.

Results. Patients with PTSD symptoms had significantly higher anxiety levels than patients without PTSD symptoms. The percentage of patients manifesting PTSD increased from 19% in 1994 to 41% in 1999. Over the same period, the anxiety levels decreased in the patients with PTSD.

Conclusion. Anxiety and PTSD seem to share common etiologic grounds. Nevertheless, staying in the same homogenous group for a substantial period of time, in combination with inadequate social support and deficient psychological care, may contribute to the development of the PTSD symptomatology.

Key words: anxiety; comorbidity; Croatia; disabled; stress disorder; post-traumatic; veterans; war

Post-traumatic stress disorder (PTSD) was first defined in the third edition of Diagnostic and Statistical Manual of Mental Disorders (DSM-III) (1). Usually, PTSD symptoms start around six months after the event, although they can occur years or even decades later. The prevalence of PTSD among combat veterans is between 15% and 60% (2,3), and is two to four times higher in disabled combat veterans than in other veterans (4,5). Among the psychiatric disorders associated with PTSD, increased anxiety is the second most common disorder, immediately after depression and followed by alcoholism and phobic disorders (6).

War situations urge people to cling together. They form numerous small, medium, or large informal groups, whose psychological functioning is dominated by regressive phenomena – the regression meaning turning back to the earlier and more primitive forms of mental functioning and being halted at the previously fixated moments (7). When entering such an unfamiliar and insufficiently structured group, one inevitably goes through the stages of heightened anxiety before reaching adaptation (8). After the process of adaptation is accomplished, the anxiety alleviates, but the regression pro-

cess persists. Finally, the regression of group members comes to a halt at certain primitive forms of psychological functioning. This process was especially manifest in informal groups formed by Croatian war veterans, which were characterized by intense feelings of loss (8). When entering such a group, the veterans felt helpless and threatened. Not knowing what was expected from them, they reacted with high anxiety and intense regression. In this way, the war circumstances promoted anxiety and regression not only in groups as a whole but also in individuals (9). Moreover, unexpected and often multiple combat injuries and consequent disability caused sufferings, which also induced strong anxiety and severe changes in self-image of the disabled veterans (10).

The aim of this study was to establish and monitor the prevalence of PTSD and anxiety levels in the group of disabled Croatian war veterans accommodated for rehabilitation in the Special Rehabilitation Hospital in Varaždinske Toplice over the five-year period. All the patients were admitted to the hospital during the first half of 1994 and stayed there continuously until 1999, except 14 of them who went home. The veterans persistently re-

Table 1. Scores for State Trait Anxiety Inventory (STAI) with anxiety as a trait (STAI-T) and anxiety as a state (STAI-S) for patients with and without post-traumatic stress disorder (PTSD)

Characteristic	Patients with PTSD				p§	Patients without PTSD		
	range	median	quartile			range	median	quartile
STAI-T	1994	43-47	62.5	56.5	<0.001	29-53	45.5	41.75
	p§		0.053				0.963	
	1999	23-51	47.0	41.5	0.021	24-56	43.0	37.0
STAI-S	1994	49-47	58.0	53.75	<0.001	34-53	43.5	38.75
	p§		0.097				0.913	
	1999	23-73	52.0	47.0	<0.001	29-57	43.0	35.5

§Mann-Whitney U-test.

The specificity of our study population was their prolonged stay in the hospital, even after they had finished with their physical rehabilitation and had been granted war-veteran pension and other material support from the state. All but 14 of them systematically refused every possibility to return home, wanting to stay in the familiar surroundings of the hospital as long as possible. This can be contributed to the fact that the group cohesion alleviated their anxiety (decreased anxiety levels in the patients with PTSD between the first and second investigation). On the other hand, the group cohesion kept them on the regressive level of psychological functioning, allowing for the mutual induction and fixation of PTSD symptoms. Furthermore, the psychodynamic functioning of the group was negatively influenced by the out-group factors (inadequate psychological support in the hospital and support from the state including only financial but no social support). Such out-group factors induced the regression of the psychodynamic process in the group and fixation on the regressive psychological level. This probably induced the development of PTSD in the subjects without that disorder and fixation of the symptoms in the subjects that were ill at the beginning of the rehabilitation process.

We believe that our findings indicate insufficiency of merely consultative approach in organizing psychological care in rehabilitation facilities. This especially holds true in the case of war-disabled persons, when a prolonged treatment can be expected. Also, the inadequacy of social support that comprised only of financial and material support contributed to this situation. We believe that war-disabled persons can be expected to develop PTSD symptoms, if not soon after the traumatic experience, then during their stay in such a closed community as a rehabilitation hospital, especially if adequate psychotherapeutic care and social support are not provided.

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Received: October 17, 2000
Accepted: January 31, 2001

Correspondence to:

Ladislav Pavić
Department of Psychological Medicine
Zagreb University Hospital Center
Kišpatićeva 12
10000 Zagreb, Croatia
lpavic@mef.hr