

PTSD AND STRUCTURAL PERSONALITY CHANGES - THREE YEARS AFTER BOMBARDMENT IN SERBIA 1999, TREATED IN INSTITUTE FOR MENTAL HEALTH IN NIŠ

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Summary. *The investigation comprises 142 patients diagnosed as PTSD, who were seeking treatment at the Institute for Mental Health in Niš. Symptoms of PTSD have developed under of bombardment and war operations in the region of Serbia in 1999. Six months after the exposure to traumatic events 370 subjects were evaluated and showed the acute clinical picture of PTSD. Twelve months after the exposure to traumatic events 142 subjects were assessed showing the chronic form of PTSD. Three years after the traumatic events 26% of patients were diagnosed as PTSD also manifesting signs of lasting personality changes.*

Key words: *Posttraumatic stress disorder, structural personality changes*

Introduction

The symptoms of PTSD show an evolution from acute form to chronic form and finally to structural personality changes. These structural changes are developing in two phases. In the first phase, significant disturbances of the sense of oneself with the feeling of ineffectiveness, depersonalisation and disorientation, were noted (in younger individuals identity confusion). In the second phase, more or less persistent behavioural alterations were observed; alteration of affect and impulses regulation, somatization and alterations in relations with other. Persistent characterological alterations evolved predominantly in those individuals who, in the early phases of the disorder, developed the autonomic hyperarousal symptoms.

If the trauma concept is considered to be the primary criterion then the very existence of trauma (1) would be the clue for understanding the total disorder. On the other hand, in the existing etiological theories of the symptom development in PTSD the exposition to the trauma is not the exclusive factor of appearance of the disorders (2) but it may also be noted that the symptom formation requires that the subject of the specific characterological features (3) be exposed to the traumatic event.

This apparently paradoxical requirement is manifest in the existing classifications (4,5).

The aim of the investigation

In conditions when a considerable number of subjects is exposed to the same trauma one can estimate which specific individual replies will determine the final

outcome of the disorder. The individual replies that have formed the clinical picture of the PTSD have been noted as symptoms of intrusion, avoidance and increased arousal. The appearance of the symptom in terms of a specific trauma opens up the possibility of analyzing issues relating to the problem of which symptom constellation ought to be used as some sort of prediction for the outcomes leading to long-lasting characterological changes due to the stressogenic factor.

Trauma characteristics

1. The sirens sound signifying the air raid which is by its nature an artificial sound and is not present in the environment. This signal conditioned all subsequent reactions. The very sound was emitted into the air in the evening hours almost always at the same time, so that by multiple repetitions it created conditioned reaction. The subjects expecting bombardment at the very beginning of this stimuli complained of the trembling inside the body, usually in the region of epigastrium which caused subsequent emotional reactions that the subjects described as "a shake from the body foundation".

2. The sound of the planes in the evening hours when they were invisible.

3. Explosions and the bomb detonations.

4. Persistent unpleasant expectance. The bombardment of the country lasted 78 days. In that period, 57 days the town of Niš was bombed. In the days when bombardment did not happen, the time was free for the assumptions that the attack of even more destructive power is being planned.

Method

The investigation reviews the consequence of the trauma of bombardment, to which 300 000 inhabitants were exposed in the limited time period and in the limited region. The subject who developed the symptoms of PTSD are included in this presentation. The investigation comprises 370 subjects, 142 of them developed the clinical picture of PTSD and were diagnosed in the period of three and six months after the traumatic events, and also three years after the previous examination. We analysed the PTSD symptoms development.

Measurement instruments

Structurated Clinical Interview for DSM-Axis I Disorders (modified version) SCID for DSM-IV.

Clinical Administrated PTSD Scale for DSM-IV (CAPS-DX)

Davidson Trauma Scale (DTS).

PIE – Plutchik R. Keellerman H. (1974)

Subjects were evaluated using the psychometrical measurement instruments under the same conditions. The instruments were scored according to accepted criteria. The scores were evaluated, as well as the scores for distinct symptoms clusters. The scores were compared, presented and followed at six, twelve and twenty four months after the traumatic event.

Results

After exposal to one specific traumatic event disorders the following symptoms were recorded:

I phase:

Acute PTSD. Frequency of symptoms developed in the first 6 months.

- shattering of epigastrium – vegetative manifestations ($P < 0.01$)
- feeling of fright
- Irritability
- Difficulty in falling and staying asleep
- aimless behaviour
- intense images, thoughts and sensations connected for traumatic events
- flash-backs.

II phase:

Frequency of symptoms after 12 months

A. Chronic PTSD type I

- difficulties in stimulus discrimination, problems of attention and concentration - dissociation
- impulsivity, aggression
- difficulties in social functioning
- generalized hyperarousal
- loss of significant interpersonal relations, loss of orientation to future
- excessive dependancy.

II phase:

B. Chronic PTSD type II

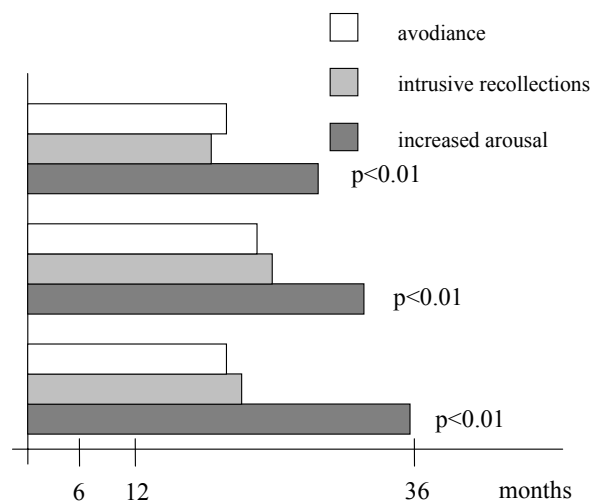
- generalized hyperarousal $P < 0,01$
- numbing of responsiveness
- avoidance symptoms
- co-morbidity with depression

III phase

Persistent characterological alteration caused by stress –after 3 year

- maladaptive behaviour
- social alienation
- sense of foreshortened future
- feeling of detachment

Persistent characterological alteration caused by stress



The first symptoms that had appeared, the symptoms of autonomic hyperarousal, were also the last that disappeared in individuals included in follow-up. Those individuals who did not resolve the autonomic hyperarousal symptoms six months after their development, had the highest rate of the persistent characterological alterations caused by stress.

Discussion

Formation of the diagnostic category of PTSD started with difficulties in the early 70's. Since traumatic neurosis of war to pregnant nozological entity the decade has passed. Since 1980's when PTSD entered diagnostic classification, there were only a few information connected with the outcome of the disorder. Classification ICD 10 creates a separate diagnostic category to accommodate enduring personality changes after catastrophic experience whilst in DSM IV it is not included explicitly. At the same time vast research literature points out that strikes of trauma cause not only psychological alteration in PTSD, but also numerous alteration in neuronal transmission as well as in endocrinal and immunological systems (6). These complex changes eventually lead to vegetative hyperarousal and its

manifestation in symptoms of hyperarousal. Unless individual finds ways to manage these symptoms, they may lead to behavioral changes that add new characteristics to the individual's previous character (7). Simultaneously, prominent intrusive and avoidance symptoms can be conceptualized as an unsuccessful restitutive attempt of the damaged cognitive functioning (8) to cope with traumatic experience by means of conceptualization. Therefore introduction of diagnosis of Enduring Personality Changes in Classification seems to be justified. Enduring personality changes represent the habituation (9) of the recently created functional neuronal occurrences manifested in the hyperarousal symptoms and subsequent behavioral shifts.

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Conclusion

PTSD belongs to anxiety disorders. The patterns of coping with anxiety determine the destiny of the clinical picture of PTSD.

Autonomic hyperarousal is the first response to traumatic event.

Intrusive symptoms are the manifestations of the attempt to cope with trauma.

Impossibility of conceptualization of the trauma and of processing the traumatic event enables the persistence of hyperarousal symptoms.

Persistent personality changes after the catastrophic experience represent the ultimate impossibility of processing the autonomic hyperarousal which is finally resolved by the new characterological construct.

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Kratak sadržaj. *Istraživanje obuhvata 142 pacijenta dijagnostikovanih kao PTSD koji su se za pomoć obratili na Klinici za mentalno zdravlje u Nišu. Simptomi PTSD razvili su se za vreme bombardovanja i ratnih operacija u Srbiji 1999. Šest meseci posele izlaganja traumi kod 370 subjekata je ustanovljen PTSD poremećaj. Dvanest meseci od izlaganja traumi 142 subjekata je evaluirano kao hronična forma PTSD. Trideset šest meseci od izlaganja traumi 26% pacijenata razvilo je simptome trajnog poremećaja karaktera usled dejstva stresa. Praćenje evolucije simptoma ukazuje da su za razvoj karakteroloških promena, presudni perzistentni simptomi povišene autonomne budnosti.*

Ključne reči: *Posttraumatski stresni poremećaj, strukturalne karakterološke promene*