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COMBAT RELATED POST-TRAUMATIC STRESS DISORDER – CAUSES, SYMPTOMS AND CONSEQUENCES

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Abstract:

Post-traumatic stress disorder (PTSD) is observed as a group of post-traumatic mental and physical clinical symptoms. It affects soldiers returning from missions as well as victims of different types of disasters. The combat stress symptoms are follow-up of a triggering factor. The reaction of the limbic system associated with the emotional state circulation in the Papez area, causing the variety of vegetative effects, especially circulatory, plays a significant role. Consequences of the combat stress apply to mental and emotional changes, a dynamic stereotype and have indirect effects within individual's family life and his/her immediate surroundings. Providing people suffering from combat stress syndromes with psychological and psychiatric care is crucial.

Keywords:

stress, combat stress, post-traumatic stress disorder

1. POST-TRAUMATIC STRESS DISORDER – ESSENCE, STATISTICS, BASIC DEFINITIONS

Considerations of combat stress (battlefield stress, war stress) are directly connected with matters regarding the influence of chronic, extreme and traumatic stress on a human. The combat stress entails the post-traumatic stress disorder (PTSD) issue. The most figurative examples of such situations are disasters, cataclysms and war experiences either of soldiers or civilians [11].

During the World War I and immediately after its end the traumatic experiences related to the war reality were called “the shell shock”. British pathologist and Colonel Frederick Mott introduced this term in 1919. During the World War II the combat stress was called “operational tiredness” or ”war neurosis”. The terminology of “tiredness” or “battle fatigue” was adopted during the Korean and Vietnam Wars [4].

The studies of soldiers and other people taking part in a war have shown that the stress they experienced was intense and caused by physical stimuli. The veterans of the World War I demonstrated disorientation, fear, tremor, nightmares and difficulty falling asleep as well as inability to function normally [9].

The studies of war veterans conducted throughout the years have proved that post-traumatic stress disorder had occurred almost commonly. The battle fatigue or the acute stress syndrome is not of significant importance in contemporary wars, however even today the combat stress appears after a certain time and it does not relate to the physical exertion but to psychological experiences and inability of body’s response to a stressor (an attack or escape). The latest studies analysed the relation between war experiences and subsequent post-traumatic stress disorder occurrence. It has been proved that post-traumatic stress disorder affected more frequently soldiers whose life and health had been in danger during the fighting [4].

Post-traumatic stress disorder was described for the first time in 1980. Not only does PTSD concern the psychological symptoms but also many of the somatic. PTSD is the consequence of traumas experienced by a soldier on a battlefield. It is a chronic reaction on an intense stress underpinned by hard traumatic experiences. It is linked with decompensation of the endocrine system of the hypothalamic-pituitary-adrenal axis [1].

In addition to PTSD syndrome the disease entity called ASD (*Acute Stress Disorder*) occurs. The criteria of its appearance are strictly based on the regulations that have been established for PTSD. The ASD diagnosis structure sort of reflects the PTSD one. In both cases there are indicated definitions of a stressor, re-experience, avoiding, emotion, duration and the rejection criterion. However, there is a significant difference between PTSD and ASD. As regards for the first of these, the dissociative symptoms are pointed out. Coming into contact with an intense stress is the initial criterion for ASD recognition. Its description seems to be identical to PTSD case. An individual has to witness an event threatening to him/her or other person. In addition, the strong fear, helplessness and terror must appear. These two disease entities are different because of dissociative syndromes. The occurrence of three of the symptoms: subjective feeling of catalepsy or alienation, the reduced environment awareness, de-realisation,

depersonalisation or dissociative amnesia confirms the ASD syndrome. The symptoms can appear during trauma or one month after its end [2].

2. SOURCES OF POST-TRAUMATIC STRESS DISORDER AND CHARACTERISTICS OF FIGHTING SOLDIER'S WORK ENVIRONMENT

The characteristic features of a battlefield during World Wars II and I are known from the historical studies. Today's acts of war conducted by Polish soldiers in Afghanistan or Iraq are more mentally burdensome in comparison to a traditional open struggle. The Polish soldiers are obliged to comply with the United Nations (UN) or the North Atlantic Treaty Organisation (NATO) rules and regulations. They are equipped only with the self-defence weapons. They have to meet the requirements defined in the particular legal frameworks; they are not at liberty to engage but only to defend in case of threat. The risk becomes more exacerbated due to the fact that they have to cope with an enemy that is difficult to trace, fails to comply with rules and conventions, hides among civilians and attacks in a deceitful way with the use of rockets, improvised explosive devices (IED) and really dangerous car bombs or suicide attacks. The fact that soldiers taking part in open military conflicts and becoming invalids under these actions are not considered as war veterans and as a consequence they cannot exercise the same privileges as World War's veterans seems to be flagrant injustice. They are only granted pension bonuses [7].

When listing the sources of the combat stress, first of all it must be indicated that its peculiar symptoms depend on the type of the military service, the character and intensity of traumatic experience, which affects a soldier, and personality of an individual suffering from stress [4].

The most destructive among the stressors are these related to the risk of one's own death or the sight of another person's death. Different types of warfare stressors can be extracted. By their nature, they can be separated into physical, cognitive, emotional, social or spiritual ones [12].

Among physical factors almost all of those appearing in the warfare area can be stated. The temperature is one of the primary stressor of this group. It is the highly important stressor due to the fact that in South-East Asia the temperature reaches 49^{o} C. Soldiers' clothing (the Kevlar helmet and the bullet proof vest) boosts the feeling of heat, increasing the wind chill by 5,5-11^{o} C, and despite being recognised as measures required to survive causes the additional psychological burden. The nuisance heat grows in vehicles as well.

In such conditions, under excessive sweating, the support of potable water is necessary. Dehydration can lead to death or other neurological disorders connected with the loss of consciousness, e.g. reaction disorders. Humidity constitutes a significant danger as well. High level of atmospheric humidity contributes to the heat loss, overheating and electrolytic losses. The exposure to cold can lead to hypothermia. Another physical factor that can make life complicated is air dustiness.

Sleep and circadian cycles disorders seem to be not without significance. The lack of sleep contributes to the disorder of cognitive functions and in particular reduces memory, attention and concentration.

Moreover, noise and blasts are physical factors that have an impact on the stress appearance. If specific sounds are associated with risk situations they will trigger by implication a stronger stress situation, even after a mission has been accomplished and after the return to the country.

A bright light and darkness are also physical stressors. At night the use of light is avoided to the minimum on order not to notify an enemy about the own positions [12].

The psychological and social factors constitute the important group. On a battlefield there are different socio-psychological and interpersonal factors that cause fast soldiers' breakdowns. One can name here restrictions of personal freedom, frustration and separation from home and family. It was also found, that the post-traumatic stress disorder more often affected those soldiers who had difficulty adapting to the war situation during the wartime. The individuals were not able to acclimate subsequently to the normal life, as they had not been able to cope with the combat stress under war conditions [4].

Emotional stressors include, first of all the, the loss of friends and colleagues as a result of death or injuries. It must be underlined, that the nascent ties between soldiers participating in military missions are very strong and unique under any other circumstances [12].

3. POST-TRAUMATIC STRESS DISORDER EFFECTS AND SYMPTOMS

Through the DSM system *(Diagnostic and Statistical Manual of Mental Disorders)* it was possible to describe the criteria, which allow creating the picture of clinical symptoms of soldiers suffering from PTSD.

In addition, researchers point out that the clinical picture represented by PTSD patients is not exclusively limited to the symptoms described in the classification [10].

In case of many soldiers the chronic symptoms of post-traumatic stress disorder appear; when they more resistant to stress the effects are postponed over the time. They occur most often sometime after the return home and are caused by a stressful event, which previously did not result in any significant consequences [4].

When it comes to post-traumatic stress disorder one can indicate similar symptoms as for various situations of experiencing traumatic stress. Memories of traumatic events when appearing are extremely bothersome. The more intense they are, the greater fear they cause. They appear continuously and lead to obsessions, which unbalance the soldier's emotional equilibrium. A person affected by combat stress disorder constantly lives the traumatic event which can be explained by the circulation of the active state in the Papez emotional circuit causing the follow-up circulation effects such as tachycardia, arrhythmia or sleep disorder [3], [8].

Table 1. The classification of PTSD diagnosis criteria

Name of criterion	Description of diagnostic criterion	Symptoms in a person under examination
A	traumatic experience affecting a person as a victim, witness or perpetrator	fear, insecurity, aversion
B	rebirth of events in consciousness in different psycho-behavioural forms	visual, auditory and smell hallucinations; reminding stress situations, constant nightmares
C	avoiding incentives associated with trauma, general hyperactivity	avoiding everything which reminds traumatic experiences or the incentive associated with them
D	increased excitement, uncertainty	difficulty falling asleep, waking up at night, increased vigilance, irritability

Source: Own study based on (Crocq, 2003)

It has been noticed, that war veterans react on the past experiences in a dramatic way even decades after the end of a war [5].

One of the most frequent symptoms of PTSD sufferers is alcoholism motivated by elimination of psychological tensions and sleeplessness. Oftentimes, drinking alcohol has the opposite effect causing irritability, aggression and not justified suspicion. It has been observed, that soldiers returning home before the end of a mission have the feeling of guilt and failure. Different types of addictions, divorces, traffic accidents, suicides, as well as high mortality of miscellaneous systemic diseases are worth noting [7].

According to the DSM classification, within the PTSD syndrome there were shown such symptoms as: psychological, psychical and sexual asthenia. The alleged loss of sight and hearing can occur as well as desensitisation and paralysis. In the syndrome both the obsessive and somatic symptoms occur, which include: stomach ulcers, asthma, eczema, hypertension, hair greying, alopecia, psoriasis, crop, diabetics and neurogenic dermatoses. This is the original method of passing emotions that cannot be expressed via speech, gestures or intellectual visualisation. Alcoholism, drug dependency, smoking, suicide attempts, criminal and aggressive behaviours can accompany it. After the Vietnam War drug dependency, smoking, alcoholism and criminal behaviours were so common that doctors were debating why those symptoms had not been classified as main PTSD symptoms.

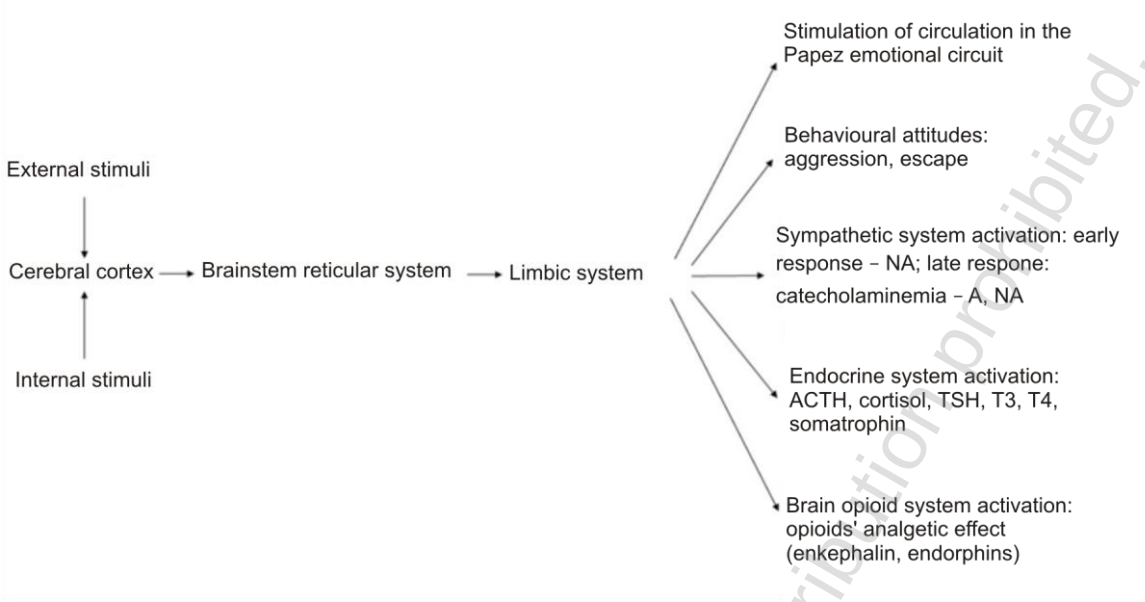

Fig. 1. The reaction course from a stressor to the appearance of multi-systemic changes

Source: Own study based on (Całkosiński et al., 2013)

All of above mentioned post-traumatic stress disorder consequences usually do not appear separately but co-exist with other symptoms. Individuals affected by them lose the motivation to live, act and work; they stop to believe in themselves, possibility of achieving the career, changing their lives for the better. It is of significant importance that individuals experiencing combat stress represent the antisocial and anti-family attitude [5].

CONCLUSION

The post-traumatic stress disorder resulting from either psychological or physical traumas entails consequences connected with psychological disorders such as: different forms of aggression, suicidal ideation, number of dependencies e.g. alcoholism, smoking, drug dependency, sleep and concentration disorders, impossibility of performing day-to-day responsibilities and the dynamic stereotype disorder. The stress causes mainly psychological reactions and tics, auditory and sight losses, stomach ulcers, hypertension, hair greying, alopecia, sleep disorder and nightmares. The problems appear usually sometime after returning home, to a family. They make proper functioning in the society impossible. Individuals affected by post-traumatic stress disorder have difficulties with interpersonal relations, lose motivation to live and stop to believe in themselves. Their problems are transferred to their family and immediate surroundings. Every single person being on a military mission should be subject to a many month programme, run by psychologists and psychiatrists, which would enable to detect changes in the psyche and would facilitate recovery from the shock or combat stress and as a consequence the return to normal life.

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