

Psychopathology of combat stress – suicide risks

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Summary:

The multitude and variety of stressors connected with battle activities lead to qualitative and quantitative differences in the psychobiological results combat stress. One of the many threats resulting from disorders connected with combat stress may be depressive-anxiety disorders, suicide thoughts or tendencies. In this paper one presented some causes, mechanisms and conditionings of higher suicide risk in the course of combat stress connected with the multifactorial model of the results of combat and its influence on the mental well-being of soldiers.

Key words: psychopathology, combat stress, suicide risks.

Stress-inducing factors generated in battlefield activities and related circumstances are numerous and diverse.

Combat stress can be experienced by participants of both fighting parties and soldiers' reactions to so-called war stressors play crucial role in battlefield actions.

Armed forces commands are aware of the fact that human factors influence war even to a higher extent than the technique and material aspects and work on methods and strategies aiming at the increase of psychic, physical and emotional stress of enemies which simultaneously lead to immunization of their own army in terms of stress [1].

Combat stress can be used as a weapon and is a kind of challenge for the command which gives them a chance to verify their personal competences and values [2].

There are a few groups of specific war stressors: physical, cognitive, emotional, social and spiritual.

Potentially the most destructive are those which are the strongest and the most dangerous; however, on the other hand, it is known that apparently not threatening stressors which last adequately long, may result in a number of negative outcomes, especially if they are cumulated. A majority of war stressors is quite specific and does not appear in other than battlefield situations—it particularly refers to cognitive, emotional and social stresses.

Cognitive stressors which increase soldiers' burden are, among others, factors connected with lack of information or information surplus, disinformation, changeability of tasks, roles and their ambiguity, loyalty conflicts, monotony fatigue of everyday tasks and obligations, reevaluation processes of so far existing value systems.

Also emotional stressors can play a distinct role in combat stress development e.g. emotional shock being result of a friend's or colleague's loss,

constant feeling of physical danger, death and disability fears, shame and sense of guilt, helplessness, exposure to a direct contact with death and injuries, causing death.

However, factors such as isolation from the social support, lack of privacy and personal space, media's and public opinion's influence as well as some actions of the supervisors and leaders are considered to be social ones which have a strong, potentially destructive, impact on soldiers who are on the battlefields.

Soldiers' exposure to such a big number of stressors may be a reason for existence of a variety of adaptation reactions and serious or chronic stress disorders. A type and course of such disorders depend on the one hand, on intensity and duration of a stressor, on the other one, on efficiency of self-defence mechanisms, adaptation and compensation abilities of a soldier and ways of coping with stress. The ability to neutralise and oppose to negative impacts of combat stress is individual, varies and is always limited.

Results of combat stress vary from adaptation strategies regarding ability to cope with it. The differences stem from a number of reasons; it has been proved that, among others, in case of soldiers exposed to combat stress, there are constant central neurobiological and psychic disorders and stress symptoms may sustain in different forms for many years after completion of participation in war operations.

The American researchers have distinguished three main categories of combat stress indicating types of stressors which are responsible for disorders: traumatic stress as an outcome of fear, horror or helplessness, operation stress resulting from accumulation of different factors – mainly those which overburden, cause fatigue and stress – as a reaction to the death of a close person.

Traumatic stress appears when a person experiences, witnesses or participates in an event, situation which was directly connected with a 'real-life' danger, a serious body injury or a danger of physical integrity of this person or others. While experiencing such an event, an intense fear appears including sense of helplessness and horror. Also other dissociative

symptoms such as derealization, depersonalisation or dissociative amnesia, stupefaction and 'switch off' may occur.

Afghan and Iraq war experiences prove that witnessing friends' or leader's death, responsibility for children's death, accidental shelling of own army, unexpected enemy attack by ambush may result in an acute reaction to stress (ASD) [3].

Sometimes a kind of strong activation, excitation may appear and it can last long even if danger comes to an end. It is a main symptom of acute stress disorder (ASD) and post-traumatic stress disorder (PTSD). There are suggestions that excessive activation can lead to brain neuron damages, degeneration in the areas responsible for overcoming fear and integrating traumatic experiences [4].

Dissociative disorders, disturbing information processing, result in a situation when soldiers exposed to traumatic stress are disabled to integrate their observations, emotions and their own identity [5].

The test results regarding pathomechanism of neurons' structural and functional changes in brain in stressful conditions, especially in respect to hippocampal neurons responsible for integrating thoughts, impressions and feelings but in a stressful situation – for generating dissociative symptoms and fear seem to be quite interesting [6].

The tests conducted on animals proved unambiguously that hippocampal damage is a biological consequence of stress and that cortisol plays here an important role [7]. The research conducted on people suffering from PTSD proved that persons suffering from PTSD had lower hippocampal volume than the control group. However, cortisol's influence on the hippocampal damage has not been explicitly confirmed [8].

Central neurotransmitters, especially noradrenaline and serotonin, also play an important role in pathogenesis of psychic disorders present in acute and chronic stress, as their level decreases. Decrease of these system's activity results in deterioration of brain's ability related to the balanced and easily adopted functioning [9].

Some of psychobiological and psychosocial conditionings related to generation and course of stress disorders connected with war actions prove that in a number of cases they may constitute favourable basis for suicide risks among persons suffering from the above mentioned disorders. This danger seems to be quite realistic, especially if one takes into consideration very often dramatic character of combat stressors and, observed in a number of cases, chronic and long course of traumatic stress disorders among veterans.

The results of many tests prove that people who suffered from the combat stress are prone to other diseases, including psychological diseases and disorders, cardiological diseases, those of nervous system and others. It is also closely connected with increased mortality [10].

It has been stated that, among others, veterans of the Vietnam war suffering from PTSD more frequently committed suicides and their death was triggered by the harmful use of alcohol and psychoactive substances [11]. Reports on the veterans of wars in Iraq and Afghanistan also highlight increased indexes regarding their psychological problems, disorders and higher suicide risk after coming back to their country [12].

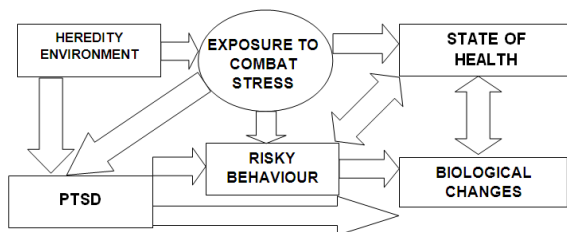


Figure 1: Multifactor model of combat stress impact and results.

Source: Boscarino J.A.: The mortality impact of combat stress 30 years after exposure: implications for prevention, treatment, and research. In: Figley Ch.R., Nash: Combat stress injury. Theory, research and management, PWN-WIM, Warsaw, 2010:134.

If a combat stress danger and post-traumatic disorders related to it can be treated as a suicide risk factor, the necessity to take preventive actions seems to be obvious.

Such actions should be conducted in the army not only within the scope of standard psychoprophylaxis on the level of recruitment, selection and trainings organized before a war takes place, but also during and after its completion. In the US army there are special groups of stress control (combat stress control – CSC) whose key mission

is to prevent reactions to combat stress and provide short-term treatment of stress disorders on the war territory. These teams consist of a psychiatrist or a psychologist, psychiatric nurse, occupational therapist, psychic health and occupational therapy specialists. CSC units, provided they are properly used, can help soldiers with stress symptoms to recover from it and come back to the earlier level of functioning. The soldiers who suffer from stress generated disorders or those who have it after coming back from battlefield actions usually require a long-term therapy [13].

American Psychiatric Association recommends in such cases antidepressants such as SSRI, IMAO or TLPD. Also the second generation neuroleptics prove to be effective. The anti-epileptic medicines and those blocking androgenic receptors may be prescribed in individual cases as supporting treatment. Benzodiazepines are ineffective in the treatment of PTSD symptoms however, given for a short period of time may improve the quality of sleep [14,15].

Psychotherapy, especially cognitive and behavioural therapy to distorted evaluation, dangers in order to convert dysfunctional models of thinking connected with PTSD symptoms, play essential role in prevention and treatment of PTSD. Promising results have also been achieved by conducting virtual reality exposure therapy (VRET) reflecting time and place of traumatic battlefield actions [16,17].

Reduction of PTSD symptoms, obtained as a result of conducted therapy, decreases risks of future negative health consequences including suicide dangers, as half of soldiers suffering from PTSD have depression symptoms and fear which often accompanies depression increases suicide risks. The effectiveness of the therapy applied in case of the soldiers with PTSD should be also evaluated in terms of effectiveness regarding suicide prevention.

The answer to the question on suicidology borders in combat stress psychiatry may only be an attempt to present a complex multifactor problem and its numerous conditionings. Prevention of suicides among soldiers in combat stress conditions i.e. psychoprophylaxis of suicidal behaviour, faces limits resulting from the specificity of this particular type of stress and on the other

hand, from difficulties with applying optimal diagnostic methods, psychological and psychiatric treatment. Mainly, it refers to the soldiers participating in the battlefield actions and staying in the areas where war takes place. Veterans with PTSD symptoms resulting from combat stress can mostly be provided with a complex specialist

care including anti-suicide treatment however, a number of them are not willing to obtain it or they do not know how to do it. It also constitutes a barrier decreasing effectiveness of psychiatric treatment offered to the combat stress victims and simultaneously a cause limiting effectiveness of prophylaxis against suicide.

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