

## **PREVENTION OF ONSET AND DEVELOPMENT OF POSTTRAUMATIC STRESS DISORDER IN THE ARMED FORCES OF THE REPUBLIC OF CROATIA**

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### **ABSTRACT**

*The model of prevention of onset and development of PTSD in the Croatian military is based on theoretical models of PTSD as well as on military psychology experience from the Homeland Defence War.*

*Prevention of PTSD is conducted through the following adequate procedures and activities by all factors within the military:*

#### *1. SELECTION*

*- administration of psychological and other methods to select the candidates most apt for the military, and to screen out individuals having psychopathological and other characteristics unacceptable for the military.*

#### *2. SETTING THE FRAMEWORK FOR COMBAT OPERATIONS*

*activities directed towards achieving stress resistance, encompassing physical preparedness, instruction on stress, military discipline, routinization, improved unit effectiveness, attaining knowledge and skills and setting up cultural and social framework for the military*

#### *3. COMBAT PREPARING*

*- activities directed towards establishing a set of acceptable responses to stress; executed through psychological preparing, emphasizing assets and capabilities of the unit one belongs to; realistic training, enhanced cohesion in the unit and establishing motivational framework for combat*

#### *4. ACTIVITIES PRIOR TO COMBAT*

*directed towards reducing the unknown and the anxiety, and conducted through briefing, role definition, anticipating difficulties and responses to difficulties, definition of immediate goal and through psychological support*

#### *5. ACTIVITIES CONCURRENT WITH COMBAT*

*- establishing frame for positive emotions and acceptance; conducted through care for others, respect of moral standards and rules of warfare; emphasizing justifiedness and positive connotation of fighting, objectivization of the enemy and its strength*

#### *6. ACTIVITIES FOLLOWING COMBAT OPERATION*

*- activities directed towards recovery and rationalization of the experience, conducted through providing sufficient amounts of water, food and ensuring enough rest (sleep), as well as analysis of unit activities, debriefing, psychological support and defusing*

#### *7. POST-COMBAT ACTIVITIES*

*activities directed towards better adjustment; conducted through counselling (legal, psychological, marital...), social support and psychotherapy*

*All the activities imply continuous activity by military psychologists, commanders and other factors in the military, as well as cooperation with relevant civilian institutions and organizations*

Stress has over the last several decades aroused both research and public attention. The aggression on Croatia and the post-war period have brought war stress problem before the Croatian experts too. Adverse health effects and costly treatments of war-caused disorders prompted relevant subjects in Croatian Armed Forces to work on prevention strategies. Modern international research practice has presented several effective PTSD coping strategies, that ensure:

- a) systematic prevention aimed at stress minimising
- b) alleviation of impact of traumatic experiences

The extensive psychological research and practice and insight into foreign experiences have proposed a number of strategies of prevention of war trauma-induced PTSD. The strategies are mostly focused on resistance factors and risks detected in all theoretical models of PTSD, some however deal with alleviating stressor effects through "de-activating" them. This paper will therefore address stress resistance acquiring procedures, their relevance to the Croatian Armed Forces units, and the PTSD onset and development prevention procedures.

Some of the strategies are in psychology domain, while the others are interdisciplinary. Activities and procedures directed at stress effects prevention are categorised as follows:

1. selection
2. setting the framework for combat operation
3. combat preparation
4. pre-combat activities
5. in-combat prevention activities
6. post-combat activities
7. peacetime transition activities

The following is account of each of the categories, stating their principal goals and the activities and procedures employed:

### **1. SELECTION**

The issue that we are addressing here is quite a frequent one - can PTSD-prone individuals be detected by means of quality selection of candidates, especially for top units? The issue also defines the goal of selection within the prevention of onset and progression of PTSD. The psychological part of the overall medical screening procedure includes standardised tests and questionnaires to assess cognitive abilities and personality.

Studies on Vietnam war veterans (as referred by Foy, 1994) showed that early life traumas and deprivations result in maladaptive behaviours that in interaction with PTSD become specific. PTSD symptoms show similarity with some personality disorders (e.g. antisocial personality disorder, accompanied with obsession with arms and violence, failure to accept social norms, poor empathy etc. and borderline disorders characterised by instability, poor relationships network, chronic depression, outbursts of anger), or may occur accompanied by other personality disorders (e.g. paranoid, narcissistic, schizoid). Put simply, PTSD may interact with disorders resulting from earlier traumatic experiences. Similarity and overlapping of symptoms are confusing, especially for non-experts, who often perceive a causal relationship between earlier disorders and PTSD.

Some of these findings parallel Croatian experience. Soldiers manifesting neurotic or deviant behaviours (primarily alcoholism and drug dependence), or other maladaptive behaviours in peacetime perform poorly in combat, and their symptoms exacerbate. Upon return from combat they have difficulties adapting to the life in the primary group and the environment in general. However, studies (including Croatian studies of the Homeland Defence War too) see the disorder severity related to trauma exposure degree. The general opinion does not see personality characteristics as a disposition factor for PTSD.

Selection for disposition to neurotic responding selection is justified inasmuch humans can learn to adapt to functioning under stress. High disposition to neurotic responding to stress

threatens one's adaptation to extreme demands of combat, thereby reducing his combat readiness. Selection for PTSD aims to prevent the interference of PTSD symptoms, should they appear, by other disorders.

The admission system comprises psychological testing with thorough medical examination and demanding training providing and testing basic military skills to ensure each soldier possesses minimum psychological and physical capabilities required.

Additional target examinations serve to assess abilities for more demanding or specific duties. Specific abilities and characteristics enable the individual to acquire specific skills too and thus lift his/her level of adaptability to extremely stressful situations.

## **2. SETTING THE FRAMEWORK FOR COMBAT OPERATION**

Procedures of setting of framework for combat operation aim at building stress resistance prioritizing physical preparation, essential for any combat activity. Combat stressors largely involve physical stressors, finding easy prey in underprepared individuals. Systematic building of physical preparedness improves resistance to physical stressors thereby also enhancing self-confidence and altering cognitive attitude towards endurance. The benefit of physical preparedness shows in later training phases, and in combat especially.

Military training basically is about superb physical preparedness, accompanied by enhanced self-confidence and sense of ability to meet highest demands acquired through martial arts and weapons training. Some studies show (military psychology papers, folio, 1993) physical exercising itself to have a stress-resistance-promotion effect. Recent experiences have revealed periodic hardship ("de-comfortization") drills involving extreme psychophysical efforts to be a most effective combat preparation to supplement superb training and physical preparedness. In view of non-predictable course of events in combat, where extended exposure to stressful situations impose double strain, such training makes optimal simulation of combat conditions. Rather exigent, it can only be conducted occasionally and in special venues, so it is more a practice of special units and some leader training centres.

Another activity in this framework (and phase) is instruction on stress, comprising basic notions on stressors, stress onset symptoms, stress results and stress coping strategies, which, optimally, is to convince soldiers of stress and stress reactions as normal, thereby minimising the risk of pathological reactions and stress-induced conditions.

The following step is mastering necessary military routines; its value as a stress-fighting strategy has been proved in a series of studies. This activity extends into military discipline and skills acquisition. Military skills and knowledge mastered (including education on stress), physical readiness attained, self-confidence and faith may guarantee soldiers resistance to and timely recovery from (acute) stress or combat fatigue and return to their duties.

It is in this phase, concurrent with joint training, that soldiers develop social relationships network and their own social framework, which can have critical part in combat, in view of the demonstrated benefit of social support in stressful situations. Soldier comradeship is a fine matter of which unit cohesion is made of and nurtured by, and the principal asset in facing failures and losses in combat.

## **3. COMBAT PREPARATION ACTIVITIES**

This phase and activities serve to prepare soldiers psychologically for combat in order to reduce its stressful impact on soldiers and comprise psychological preparation, realistic training and developing a sense of unit (group) superiority, thus facilitating unit cohesion and setting a combat motivation framework.

Psychological preparation for combat combines instruction on stress with a series of self-regulation techniques.

Stress situation brings about an array of changes at the physical, the emotional, the cognitive and the behavioural level respectively. In some individuals physical and emotional arousal may well outlast the situation, causing cognitive disturbances, social conflicts, psychosomatic dysfunction and the like, all of which call for self-regulation of psychological condition and nerve system arousal upon stressor termination.

These are some of the techniques:

**breathing exercises -**

breathing is an autonomous, life-essential process which in stressful situations changes in depth and rate. Stressful situations are also characterised by anxiety, tension and low intake of oxygen due to short breathing, which in its turn impairs functioning, especially cognitive. This is often accompanied by intrusive thoughts. By exercising some of specific techniques (abdominal breathing, meditated breathing, focusing on breathing or another breathing technique) these thoughts can be repelled or at least alleviated

**muscular (progressive) relaxation -**

stress situation and stress coping are characterised by higher muscle tonus, which can outlast stress, aggravated by anxiety and concern. This is what we refer to when we say one is tense, hard-relaxing and the like.

Muscle tension can be reduced through isometric exercises, Jakobson's progressive relaxation or a modification of those techniques; the techniques are also indicated for the effects of cold, a common combat stressor too, as they help heat our body where it is not possible otherwise.

**visualisation of relaxedness**

in stressful situations humans' thoughts are usually occupied with details of the situation, Negative perceptions, or the situation itself, lasting for extended time period expose an individual to increased tension and arousal, and tint his/her cognitive processes negatively. Such conditions exacerbate stress reactions, calling for alteration of processes, which is best achieved by means of visualisation of pleasant past experiences or projection of future "happy end" situations. People often do it spontaneously when in harsh situations, as witnessed by former prisoners of war too.

**physical relaxation and intrusive thoughts repelling -**

the need for physical relaxation is often sensed, especially following a hard day or exciting experiences, and is accompanied by thinking of past or future events, which interferes with relaxation. In such cases different relaxation and intrusive thoughts-repelling procedures are indicated.

Body awareness and focusing exercise is a simple procedure for segmental relaxation by successive focusing on body parts and breathing, thereby eliminating tension, a "body inventory" of a sort.

Modified yoga nidra is a similar procedure, whereby one "cruises" throughout his/her body, and visualises different sensations and events in all sensory channels.

Both physical relaxation and intrusive thoughts repelling are focused on the procedure itself, in order to repel intrusive thoughts, with relaxedness transferring into the psychological sphere too.

**permanent control of psychological and physical arousal - autogenous training**

autogenous training is a technique of relaxing skeleton muscles, vessel muscles and internal organs, which facilitates tissue blood supply thus restoring overall health condition. Muscular relaxation transfers into psychological relaxation. By exercising daily, an individual can attain a general level of relaxation and enhance his/her stress coping capacity.

**free emotion expressing and exchange**

those who are able to express their thinking and emotions also cope with stress better and are less susceptible. By expressing one's thoughts and emotions tension and fear are reduced, while communication with other people ensures social relationships and support, which itself is an effective stress-reducing means too. Therefore, training should not miss to underline the importance of expressing of emotions.

**planning the expected activities; difficulties coping planning**

other stressors common in combat include unpredictable course of events, time constraint, a sudden reverse in situation; they can be fought best by planning and predicting different scenarios. One's response (behaviour) to different adverse situations can be planned in this way. While situations can only be predicted to a certain extent, it is the awareness of having several possible courses "rehearsed" that reduces surprise and consequently stress.

**the sense of unit's superiority**

the training is also conceived to instill the sense of being a part of a superior unit in each member. This is achieved through emphasising the basic values and mission of the unit and cohesion-reinforcing procedures, aimed at enhancing self-confidence.

**realistic training**

on very joining their military units soldiers can anticipate to take part in combat as the basic military purpose.

Different behaviour of combat-experienced soldiers versus those unexperienced is readily perceivable. Combat is a very stressful experience for "newcomers", who not only experience excessive stress (unable to recognise real threats), but also lack of trust by the experienced peers and, consequently, psychological support. Experience obviously being a salient factor in adaptation to stress, training contains as much combat simulation as possible.

Realistic training of the kind aims at helping the soldiers develop a sense of positive combat experience, and assumably plays a critical role in enhancing resistance to stress.

The unit as a group can by means of preparation procedures minimise stressors and their impact on its members and unit performance in general.

This phase contains several factors ameliorating coping with a stressful situation:

**well-organised unit**

military unit is a complex organisation with different segments and individual units performing different functions. Synchronised operation, planning, performance and correction during plan and order execution is a condition of unit effectiveness. Members of well-organised units feel safe and have a sense of belonging to a well-stress-coping unit that takes care them. They are also much less likely to be affected gravely by stress than soldiers in poorly organised units.

**interpersonal relationships**

interpersonal relationships within a unit is another factor facilitating coping with stress. In the military those relationships are built over time, and they give unit members a sense of safety and belonging. Stressful situations have been found to affect far worse the individuals lacking acceptance from peers, isolated individuals and those admitted recently, that have not established satisfactory horizontal communication (with peers). Concern for the interpersonal relationships among the subordinated is a commander responsibility, who should introduce appropriate joint activities to improve them.

#### **4. PRE-COMBAT PREVENTION ACTIVITIES**

**- uncertainty and anxiety-reducing activities**

Preceding other activities is realistic insight into the present situation - a clear outline of the unit's mission and of other units included in a joint operation, of possible problems along the way etc. It also includes spacial and temporal orientation and orientation within the predicted course of activities, and operational information about the enemy.

Defined and clear roles, both one's own and peers', help cope with stressors better. Therefore, vital in this phase is to check comprehension of the roles by each member and to practice the roles in advance.

Predicting possible adversities and pre-defining response sets is another important pre-combat preparation activity, serving to reduce uncertainty and anxiety and thus reinforce self-confidence. This activity is affine with mission goal definition.

Mutual support and assistance is a critical stress repellent; awareness should be fostered of necessity of good interpersonal relationships, of readiness to help one's peers and of seeking help not as a sign of weakness but of sense of safety and identification with others.

The escape reaction rather than facing the situation is a normal and evolutionally conditioned reaction of humans perceiving a situation extremely dangerous. Training should also address the replacing of the natural escape reaction with the appropriate conditioned reaction.

By training adjustment reactions to extreme stressors conditioned taking of responsibility is reinforced, and this reflects on stress experience too.

## 5. IN-COMBAT PREVENTION ACTIVITIES

- activities establishing a positive emotions and acceptance framework (i.e. averting self-destructive or antisocial behaviour).

The focus is on concern for unit members, especially by the commander (e.g. avoid unjustified exposure to enemy fire and unjustified casualties, ensuring enough rest, food, water, assistance for wounded and killed); soldiers take it hard to see the wounded or killed peers remain out of reach and fall to the enemy's hands and they rate such situations as the most stressful.

Another important factor in combat is respect of ethical and warfare norms (i.e. international norms of warfare, refraining from inhuman treatment of enemy soldiers, prisoners etc)

Awareness of justifiedness and value of "the cause" is an important aspect of in-combat stress prevention, including prevention of motive conflict in soldiers and facilitating coping with the combat hardships as well as embitterment and questioning after. Realistic assessment of enemy's power is another activity in this phase; the enemy's power it should not be overrated nor underestimated, to avoid excessive fear, panic and hazardous behaviours.

## 6. POST-COMBAT ACTIVITIES

These activities are focused on recovery and rationalisation of combat experiences.

Stress exposure calls for special strategy (or strategies) of inactivation of traumatic experience and stress-induced changes.

This is achieved through three groups of activities:

- ensuring sufficient quantities of water, food and appropriate conditions for sleeping and resting to make possible physical recovery and to eliminate physiological stress effects;
- in most cases rest and food will do. Soldiers should be provided a proper and a safe place for quality sleep (off the battlefield, or at least well-protected) and thus proper rest too.

Soldiers' impressions, emotions and moods following a combat mission (either successful or not) may result in dysfunctional behaviour and misinterpretations, often contradictory. Post combat period is often characterised by an array of behavioural, cognitive and emotional disorders. Prevention in this aspect consists in *mission or activity analysis*, which is conducted by each sub-unit separately, and lead by the respective leader. Soldiers are encouraged to express their experiences, which has a ventilating effect, and at the same time helps "reconstruct" the entire situation. It is in this phase that severe stress reactions can be detected, and the proper psychological counselling organised.

Commanders are expected to highlight the positive elements of the experience behind the unit, and to complete the procedure with the "lesson learned" and its elements useful work for future unit effectiveness.

In case of casualties or exposure to other intensive stressors, the *debriefing procedure* is employed, conducted by unit psychologist assisted by another trained person, and the commander. Debriefing is best scheduled within 2-3 days following the stressful event, although in combat conditions this might mean a week or two, even more, depending on the situation and the unit members (and psychologists) themselves. Experience by Croatian military psychologists reveals delayed debriefing is better than no debriefing at all.

The formal debriefing procedure is conducted through a 6-phase model:

- phase I - military psychologist (moderator) introducing himself/herself and explaining the reason and the rules of the procedure and other (technical and organisational) details as well

- phase II - the facts phase; the moderator encourages the soldiers to speak of their sensations (visual, auditory, olfactory etc), of their role in the event and the like

- phase III - feelings phase - soldiers speak of their feelings during the combat situation, after the stressful event and of their present feelings; they sometimes express their feelings in the phase II, or skip the phase III due to social inhibition, so the moderator is advised not to insist upon expression of feelings

- phase IV - symptoms verbalisation (symptoms experienced during the stressful situation and following it)
- phase V - psychologist provides instruction on stress, trauma and reactions, with the emphasis on presenting trauma reactions as normal behaviour in abnormal situations
- phase VI (completion phase) - psychologist answers soldiers' questions and, if necessary, schedules another meeting with the group, or offers individual counselling for those who may need it

Debriefing procedure is very demanding, and calls for a trained moderator (the effort should be shared between two moderators minimally), capable of dealing with a stream of emotions expectable.

## **7. PEACETIME TRANSITION ACTIVITIES**

Peacetime transition activities are focused on assisting the soldiers adjust to new, non-combat or peacetime conditions, and involve counselling focused on post-combat problems, mostly manifested in re-adjustment to the family, friends, neighbours and return to daily peacetime activities. Some soldiers will have alcohol abuse or other dependence problems, calling for appropriate counselling support.

Some soldiers will need social support, either as understanding. Others may need assistance with pursuing their rights through administration mechanisms, exhausted from combat as they are they lack patience for them. Assistance in this regard (and phase) consists in appropriate counselling and instructions with the administrative procedures, but also counselling of the administration personnel on interaction with the ex-combatants to minimise or avoid the problems.

Even with debriefing, counselling and social support, some soldiers may still have not resolved stress effects, and need psychotherapy. By the medical and psychological service organisation in Croatian Armed Forces, they are referred to psychotherapists (psychologists and psychiatrists) in specialised medical institutions. However, basic military unit continues to have an important role in this phase too, by providing additional support to its members, as also do military psychologists, who co-work with the institutions and, if necessary, are included in therapy, especially group therapy.

To conclude, all the aforelisted activities call for constant involvement of military psychologists and commanders, as well as of other subjects within the military, and for cooperation with relevant civilian institutions and organisations. Also, the model presented allows integration and extension with new research achievements and findings.