

44th World Congress of the International Committee of Military Medicine (ICMM).

Abstract Title

E-learning training platform for psychosocial support and prevention of stress-related illnesses

Abstract Body



Protracted stress-related illnesses can occur as the result of mental stress during service. The interactive e-learning training platform CHARLY, for psychosocial support and primary prevention to prevent stress related illnesses and post-traumatic stress disorder, enables soldiers to train in order to successfully overcome mental service stress. This solution is being used both in civil and military offices. The aim is to reduce the likelihood of the effect of mental stress. CHARLY is therefore a preventive measure for prevention and protecting health. The concept differs substantially from other existing training approaches in that not only is information or training given on a cognitive level in an interactive and sensor-based setting, but also

individual behavior training is initiated through self-awareness and interactive testing of self-management methods.

CHARLY was already developed ten years ago for Bundeswehr [German Armed Forces] soldiers in the military context. In an evaluation study by the Bundeswehr's Psychotrauma Centre, the effectiveness of the CHARLY method was compared with known procedures. This showed significantly fewer trauma-specific symptoms among CHARLY training participants after service abroad in Afghanistan. Accordingly, the CHARLY training has a higher degree of efficiency than the methods known hitherto for service preparation or primary stress prevention.

Training with CHARLY addresses communication, knowledge, self-calming and self-efficacy, which sustainably strengthen mental fitness. In the training the participants practice COMMUNICATION – both to acquire psychosocial support for themselves and to assist someone else through an opportunity to talk in a mental stress situation. Another basis for dealing consciously and attentively with the topic of “mental stress and coping” is KNOWLEDGE. This addresses firstly everyday stress, the contrast with an acute stress reaction and with the symptoms of a post-traumatic stress disorder, secondly the mental processes after experiencing traumatic stress and possible protecting mental attitudes as well as expedient personal convictions as prevention of stress-related pressures. The methods of SELF-CALMING comprise coping skills with which the vegetative consideration can be reduced in an acute stress situation. The participants practice and test three relaxation techniques

that are easy to learn, standardized and to be used pragmatically: thought stopping, imagination and a form of physical brief relaxation (Jacobsen's progressive muscle relaxation).

In the training the participants are inducted into stress by a stress game and confrontation with a realistic service situation. After that, relaxation techniques are applied. This involves using mental monitoring to measure the entire time over the heart rate variability – as psychovegetative parameters for the current stress of the autonomous nervous system. The training participants have their activities fed back to them as objective measurement data and illustrated. In this way they experience SELF-EFFICACY – the participants find out that through their self-management they can control vegetative sensitivities in their body. The application of biofeedback is therefore an essential element of the CHARLY concept.

The presentation with one solution in the area of mental fitness will conclude with a short video how this is further developed for fire fighters. Furthermore, we will show how this interacts with physical fitness and human performance enhancement.

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