

ORIGINAL ARTICLE

DISORDERS OF ADAPTATION OF COMBATANTS AND THEIR MEDICAL AND PSYCHOLOGICAL REHABILITATION AT THE SANATORIUM STAGE OF TREATMENT

DOI: 10.36740/WLek202202121

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ABSTRACT

The aim of the study was on the basis of the study of clinical manifestations and mechanisms of the formation of disorders of psychological adaptation among the combatants, to develop the principles and program of their medical and psychological rehabilitation.

Materials and methods: The study was attended by 153 people at the sanatorium and resort stage of treatment, of which 98 people were combatants and 55 people were civilians. The study used a set of methods aimed at the study of emotional disorders (HDRS, BDI, Spielberger Scale, "Asthenic state scale"), individual psychological features (Multilevel personal questionnaire "Adaptability," Test questionnaire G. Shmishek, K. Leonhard), features of psychosocial functioning (Mississippian scale of PTSD-military version) and quality of life (WHOQOL-BREF).

Results: At the stage of sanatorium treatment of combatants is important readaptation to peaceful living conditions. A clinical and psychological analysis of combatants showed that the presence of experienced state of subjective distress and emotional disorder leads to a decrease in the productivity of adaptation to a stressful event. The stress factor disrupted the integrity of the micro-social network of combatants and their system of social support and social values, with the prevailing sense of inability to overcome problems and build plans. A detailed analysis of the nature of depressive and anxiety manifestations was carried out, which allowed to determine the predictors of the violation of adaptation in combatants.

Thus, on the basis of the study of clinical manifestations and mechanisms of the formation of disorders of psychological adaptation among the participants of hostilities, the principles of their medical and psychological rehabilitation at the sanatorium and resort stage of treatment are developed.

Conclusions: The peculiarities of stress response in combatants as a component of personal potential play a role in the formation of predictors of psychological adaptation disorders among combatants. Psychological intervention at the tertiary stage of rehabilitation (sanatorium-resort) should be targeted, taking into account individual-psychological characteristics (preventors) and psychosocial factors (predictors)

KEY WORDS: stress reactions, disruption of psychological adaptation, post-traumatic stress disorder, stress, depression, anxiety, quality of life

Wiad Lek. 2022;75(2):444-450

INTRODUCTION

Today, the population of Ukraine is massively under the influence of potentially traumatic events [1-6]. According to the UN data from April 14, 2014 to March 31, 2020, the total number of casualties from hostilities in the East of Ukraine was about 41-44 thousand people, of whom 13-13.2 thousand people were killed and 29-31 thousand people were wounded (UN, 14.04.2020) [7].

Psychological and psychopathological consequences of armed conflicts are manifested by a wide range of maladaptive reactions and painful conditions, the formation of which is determined by numerous factors [8-10]. At present, it is determined that post-war psychopathological changes in the form of disruption of psychological adaptation take place in the vast majority of combatants [11, 12].

The problem of preserving the health and efficiency of combatants participating in military conflicts is the main task of medical and psychological rehabilitation. However, the social and psychological aspects of the content and peculiarities of the implementation of complex programs of medical and psychological rehabilitation, focused on certain categories of wounded, on the specifics of manifestations of somatic and mental disorders among the combatants, are not developed enough today [13-19].

Today, rehabilitation and medical and psychological events for combatants are concentrated in the early stages, where numerous works are devoted to early response to mental disorders. Our attention was focused on the organization of medical and psychological rehabilitation of combatants at the sanatorium and resort stage, which is most close to a peaceful life.

THE AIM

The purpose of the study was to develop the principles and program of medical and psychological rehabilitation of combatants, based on the study of clinical manifestations and mechanisms of forming in them post-stress psychological disadaptation at the sanatorium-resort stage of treatment.

MATERIALS AND METHODS

The sample of the study was made up of 153 male persons, of whom 98 persons who were participants of hostilities in the area of the Joint Forces Operation in the East of Ukraine made up the main group, and the other 55 civilians who received spa treatment and had complaints about somatic and psycho-emotional state - a comparison group.

The following set of methods were used in the study: Hamilton's Scale of Anxiety and Depression (Hamilton, HDRS, HARS, 1967), A.T. Beck's Scale (BDI, 1961), C.D. Spielberger's Scale, Method "Asthenic state scale", Multilevel personal questionnaire "Adaptability", Mississippi PTSD scale (military variant), Test questionnaire G. Shmishek, K. Leongarda, WHOQOL-BREF. The results were processed using statistical methods using the computer program "SPSS for Windows"; The mathematical and statistical method was represented by a dispersive (used t-criterion of Studente, λ - criterion Kolmogorov-Smirnov, ϕ - Fischer) analysis.

The survey of combatants was carried out under the conditions of informed consent and with the implementation of international standards of bioethics. Diagnosis and basic treatment were conducted according to the criteria of diagnosis and treatment of psychiatric and behavioral disorders and clinical protocols for providing psychiatric care to the adult population of Ukraine.

The first stage of the study was aimed at screening complaints and forming groups according to the criteria for inclusion at the stage of sanatorium treatment in the SE "Clinical sanatorium" Resort Berezovsky mineral waters". The main group included 98 combatants, which are divided into two subgroups according to the indicators of stress response: with signs of disruption of adaptation - 74 people; with signs of PTSD - 24 people.

At the second stage, clinical manifestations and mechanisms of formation of disorders of psychological adaptation were studied.

The final stage of the study was the justification and development of the principles and program of medical and psychological rehabilitation among the participants of combat operations at the stage of sanatorium treatment.

RESULTS

Analysis of the nature of complaints among combatants at the stage of sanatorium treatment showed their diversity. On average, 89% had complaints in the form of: affective spectrum (depression, anxiety, fear, feeling confused, reduced mood background and irritability, flashes of ag-

gression) ideomotor-asthenic spectrum (excitement, rapid fatigue after mental activity and weakness after minimal physical effort, obsessive thoughts and memories, exhaustion of attention and memory) headaches, sleep disorders and frightening dreams and complaints of changes in the functioning of body systems. Whereas in the comparison group, somatic case complaints that had a chronic nature of the course of the disease were more prevalent.

Using the Mississippi scale, the PTSD military variant determined the degree of expressiveness of post-traumatic stress reactions in the main group of combatants at the stage of sanatorium treatment. For subgroups with signs of adaptation disorders, the symptoms of "avoidance" are more characteristic in 92% and in 85% of symptoms of physiological excitability, where lockdown in yourself, your feelings and thoughts lead to the formation of a sense of physiological tension and changes in perception and reactions. In subgroups with signs of PTSD, all symptoms are distinct, where the feeling of guilt in 87% and the symptoms of "invasion" in 100% are a common manifestation and moral regulator of socially acceptable behavior.

According to the objective assessment of the emotional state of the Hamilton scale, depressive symptoms prevailed in individuals of the main group: in 10% there were depressive disorders of moderate severity, in 71% - mild level. According to subjective assessment on the Beck scale, expressiveness varies between mild levels - in 43% and average manifestations of depression in 38%. Comparing the results with the results of a group of civilians, it was found that they had significantly lower depression indicators both by objective and subjective assessment: according to the Hamilton questionnaire, 62% had no depressive symptoms, and only 31% had mild depressive manifestations. According to the Beck scale, 58% - no manifestations of depressive symptoms and 36% - have mild subdepressant complaints associated with a somatic state.

The results obtained on the distribution of the level of depression in the subgroups of combatants indicate the severity of emotional experience and inhibition of the adaptation process. In the adaptation disorders subgroup by objective evaluation, 81% have a mild degree of depression, and according to subjective self-esteem, only 51% note the presence of mild levels of depression. In the subgroup with signs of PTSD, depressive symptoms prevailed by an average degree, both by an objective assessment of 37% and by subjective ones - by 50%. The mild level of depression was 62% on the Hamilton scale and 17% on the Beck scale, which generally reflects a more threatening state of the emotional sphere in the subgroup with signs of PTSD.

In 77% of participants of hostilities with signs of adaptation disorders, depressive symptoms are based on complaints of psycho-emotional tension, namely a feeling of tension, a decrease in performance, an unreasonable feeling of anxiety in the absence of a threat to the mental state of their health. Whereas for 82% of combatants with signs of PTSD, manifestations of depression are accompanied not only by physiological discomfort and changes in physical condition (inhibition, tension, lack of sleep, decreased

libido, general symptoms and somatic anxiety), but also by psychoemotional overload with guilt with suicidal thoughts.

An analysis of anxiety by objective evaluation in the main group showed that 36% of combatants had an average level of anxiety symptoms and 50.00% - an easy level, which was significantly more prevalent than in the comparison group, where 54% had mild anxiety manifestations. According to the Spielberger survey, 77% of the main group had high jet alarm rates and 63% - personal anxiety. In the group of comparison by objective assessment, alarming symptoms were obtained in 56%, and 45% - absent at all. Along with this, according to the questionnaire Spielberger, only 25% of civilians noted the average level of anxious jet-type symptomatic and 49% - personal anxiety.

The next stage of the study was to determine the level of quality of psychosocial functioning. The overall score of the quality of life of the respondents of the main group varied from 39 to 52 points. The average arithmetic estimate of quality of life was 43.6 points. In turn, the comparison group received high indicators of quality of life in 82%, where the average score was 79.3 points. Especially increased indicators of micro- and macro- social support. In the group of combatants with signs of adaptation disorders, the indicator of social well-being was especially reduced, which reflected the level of satisfaction with the environment, its position and capabilities. For combatants with signs of PTSD, the indicators of self-perception and microsocial support were reduced, due to increased criticism.

For combatants, the most inherent accentuations were demonstrative, alarming-stimulating type and stuck type. Whereas individuals of the comparison group are characterized by an exalted-emotive type of accentuation. In the subgroup of combatants with signs of adaptation disorders, the characteristic features of demonstrative, exciting, hyperthymic and cyclothymic types were characterized. Extreme expressiveness of these types of accentuations - expresses violations of affective-volitional processes that affect the control of behavior and characterize a certain behavioral style of realization of life position and personal needs. For combatants of PTSD, the types of accentuations of extreme degree of stuck, pedantic and exalted types that form the basis for the development of aggressive-fixative psychopathological symptoms aimed at themselves were inherent. Whereas in the comparison group the scale had an average range of expressiveness without extreme expressiveness, but the most characteristic scales are "sensitivity" ($12 \pm 0,58$ points) and "exalted" ($11,8 \pm 0,47$ points).

The study of personal adaptive potential of combatants showed a low level of regulation of behavior and communication orientation, as evidenced by low indicators on the "Adaptability" scale and "neuro-psychological instability." In the group of comparison, the whisky indicators on the scale of "behavioral regulation" and "adaptability" are obtained. In the subgroup with adaptation disorders signs, indicators of moral normality and behavioral regulation are significantly reduced, while in the subgroup with signs of PTSD, the indicator of communicative potential is reduced.

Analysis and generalization of the results made it possible to conclude that subgroups of combatants are characterized by different types of maladaptation disorders. For subgroup 1 there are psychotic reactions due to low indicators of neuro-mental instability, high conflictogenicity in interpersonal relationships and tendency to affective arousal; for subgroup 2 are asthenic reactions that indicate the type of maladaptive manifestations in the form of deterioration of somatic functioning, with a prevalence of deterioration in sleep, appetite, a sense of tension, a decrease in performance with hypochondriac fixation.

Next, we identified both predictors and preventors (protective personal resources) of post-stress psychological disadaptation in combatants at the sanatorium-resort stage of treatment.

For persons with signs of adaptation disorders in the system of formation of violation of adaptation, there are "distorted" thoughts about the displacement of the value of their role at the microsocial level, the loss of a certain significant position. Predictors of disruption of psychological adaptation among combatants with signs of adaptation disorders are:

- low indicators of moral normality that structure thoughts and help in interpreting and analyzing negative events of stressful level. Irrational perception of its role in the system of social functioning at micro and macro levels, which leads to a shift in the centralization of attention to aspects that will help restore the past system of life. On the one hand, this is a protective model of "avoiding" the problem, not the desire to face in thoughts with painful conclusions about his "I," which allowed to preserve the remnants of control of the situation and emotional comfort. And, on the other hand, it blocks the possibility of rethinking and transforming the experience gained, and in emotional regulation does not make it possible to verbalize their feelings and their origins.
- emotional instability, which is due to the personal radical of "exciting" and "cyclothymic-hyperthymic" types of accentuation, which leads to excessive affective excitation and subsequent exhaustion. Characterologically, the instability of emotional experience is determined, which does not allow to be fixed on a certain emotion and understand its formation, the causes of experience.
- psychotic type of reaction of maladaptation disorder, as a tendency to respond to high neuro-mental tension on the challenges of stressful situations, low tolerance to adverse factors and because of decreased motivation and productive activity.

The preventors of disruption of psychological adaptation are:

- sufficient level of communicative potential, which lies in the structure of personal adaptation potential. as the need for a social environment and the possibilities of implementation, that is, the possibility of receiving from the social environment a sense of support, reinforcing self-esteem, motivation for activity, the certainty of the goals of future projects.

- personal radical by "demonstrative" type of accentuation acts as a strong side, thereby achieving the result of significance at all social levels.



Fig. 1. Algorithm of medical and psychological rehabilitation of combatants at the stage of sanatorium treatment.

For a subgroup of combatants with signs of PTSD, "distorted automatic thoughts" there is a hyperbolized sense of guilt and shame. Predictors of disruption of psychological adaptation among combatants with signs of PTSD are:

low communicative potential, which, with a significant impact of stressogenic factors, isolates from close social interaction and prevents family members from affecting the emotional state. Support from the family is leveled and perceived as a trigger for irritation;

fixation of attention on the sharpness of emotional experiences, support in the tone of negative manifestations, as a form of punishment. It also acts as a way to maintain control of their values in the system of life and an attempt to reorient for the future. But the level of guilt is so high that it has no limit of punishment. Therefore, this method of emotional response very quickly leads to exhaustion at all levels, and mental and somatic;

asthenic reaction of maladaptive disorder, which immediately invades the system of satisfaction of basic needs and disrupts physiological functioning, shifting attention to somatic complaints.

The preventors of disruption of psychological adaptation among the participants of combat operations with signs of PTSD are established:

- moral normalcy, which ensures understanding of their position and adequately perceive the defined social role. In this case, the unfavorable role of the combatants is distinguished from their own internalized norms of accepted behavior. But it allows you to determine new norms;
- due to emotional fixation, the process of reevaluating past events, information received, understanding of their position takes place. That is, there is a constant search for a new understanding of the stressful situation that can satisfy the needs of the individual;
- an "exalted" type of accentuation, which acts as a certain social barrier, is directed to the desire for social usefulness, which corresponds to the vital position of combatants with signs of PTSD.

Based on the study of clinical manifestations and mechanisms for the formation of disorders of psychological adaptation, the principles of medical and psychological rehabilitation of combatants at the stage of sanatorium treatment, which included:

1. principle of maximum synergistic cooperation: doctor/psychologist - patient - therapeutic complex;
2. multi-level nature of sanogenic measures;
3. combined nature of biological and psychological-oriented influences;
4. the sequence and stage of the events;
5. an integrated approach to solving clinical problems, that is, a combined consistent effect on all etiopathogenetic links of functional disorders;
6. the principle of optimality of the use of medical-psychological, psychotherapeutic, natural, preformed, drug and non-drug factors;
7. the principle of structuring the construction of sessions (structured psychological interview).

Due to certain targets of psychocorrectional intervention, a program of medical and psychological rehabilitation of combatants was developed at the stage of sanatorium treatment, taking into account the presence of signs of RA and PTSD. This program includes three main stages: initial, rehabilitation and support. The structuring of the sessions of the medical and psychological rehabilitation program was in compliance with a certain algorithm of certain sessions, depending on the subgroup of the study with signs of PA or PTSD.

For persons with signs of RA, rehabilitation is aimed at stabilizing the psycho-emotional state through self-regulation skills, psycho-educational sessions aimed at understanding the peculiarities of conflict resolution, support of reflection with family members, understanding and assessing their condition with subsequent constructive response to symptoms.

For persons with signs of PTSD, rehabilitation was aimed at the resource-supporting aspect with the transformation of self-reliance and awareness of internal manifestations with the subsequent need for continued psycho-correctional intervention. Skills of self-regulation and grounding techniques were also acquired, in situations of high psycho-emotional stress.

The structuring of the sessions of the medical and psychological rehabilitation program was in compliance with a certain algorithm of certain sessions, depending on the subgroup of the study with signs of PA or PTSD (Fig. 1).

The effectiveness of these measures has been proven by improving the performance of reactive anxiety and quality of life, and reducing the feeling of asthenization. Participants of hostilities with signs of RA saw a decrease in the level of jet alarm in 50.0% (presence from 74.32% to 24.32%), no feeling of asthenization in 45.95% (a decrease from 58.11% to 12.16%) and an increase in the overall quality of life from 11.58 points to 17.85 points; in subgroup 2 with signs of PTSD decrease in reactive anxiety level in 50.0% (presence from 87.5% to 37.5%), there is no feeling of asthenization in 33.83% (decrease from 79.16% to 45.33%) and an increase in the overall quality of life from 10.37 points to 18.26 points.

DISCUSSION

We all face this problem when people who have participated in hostilities return to peaceful life, and it turns out that they need psychological help. In this case, it is confirmed that the cessation of participation in hostilities is not yet the cessation of the impact on the psyche of the same hostilities. All these consequences have participants in combat, in similar circumstances, and in other countries of the world. In the study on the results, we should note that the consequences have a prolonged effect. The results of the work of Svetlana Vyazmitinova proved that there are different options for violation of adaptation that require comprehensive assistance. It is very important that the system of sanatoriums is used, because this mechanism exists in our country and it is traditionally used to improve the state of health, because the influence of natural factors

has always been very significant for the human body. In this case, it is important to provide comprehensive assistance.

It is still noteworthy that, very often, as we see, the participants in the fighting do not recognize the need for psychological and psychiatric assistance. On this occasion, they avoid, to seek specialized assistance in psychiatric institutions. The use of the sanatorium allows you to naturally connect the mechanism of providing medical and psychological assistance to the complex of restorative institutions, without causing dissatisfaction with the fighters. The article thoroughly examines the components of personal, the basis of the occurrence of these psychological disorders. A phased model of assistance was worked out. This is very important, because it is a work for the future - the formation of new mechanisms, new adaptation skills that will help return the participants of the fighting to society, an effective peaceful life, because it suffers the most.

The period when our country got into a state of hostilities, we studied the experience of other countries that have faced this before. Undoubtedly, these are American studies, Israeli and Croatian. Our tactics regarding medical and psychological rehabilitation in relation to combatants were based on the studies of our colleagues. Now we have a rich personal experience. But the vast majority of works that would study the psychological state of combatants or active military, participating in hostilities, they relate to or the period of direct participation, or the period that arises after the end of participation in hostilities, that is, it is a military hospital, or just a return to peaceful life, if he is not somatically injured, and if he does not have clinically defined expressed disorders of the psychological sphere, then he comes home. But we understand that most disorders of psychological adaptation have a pre-natological level of impression. That is, such persons do not fall under the supervision of psychiatrists. And it is specialists in medical psychology that should work first. Another important point is that we have programs of medical and psychological rehabilitation, psychological correction of disorders of psychological adaptation of soldiers in the early stages of receiving specialized medical care. This work is the first to analyze the condition of the soldier at the stage of sanatorium treatment. New and important was found that most of the fighters, who already received specialized medical care, still got into sanatorium treatment with signs of disorders of psychological adaptation of different levels. The second value of Svetlana's work is that 2 clinical and psychological variants of disorders of psychological adaptation were determined, namely: with signs of adaptation disorders and with signs of PTSD, in this case it is not about clinically defined, but about pre-natological (syndromological) manifestations. This differentiation helped the author to determine the psychopathogenesis of these disorders, namely, to determine the predictors and preventors of each type of disorder and they turned out to be specific, differentiated for each of the options. This was the key to the development of a personalized program of medical and psychological rehabilitation. Now our medicine lives

in the trend of personification of medical care. Of course, each person is a separate world. While the nosological diagnosis may be the same, the approach to each patient should be as individual as possible. This work helps to personalize the approach to medical and psychological work with such patients.

CONCLUSIONS

The work analyzes the phenomenon of post-stress psychological disadaptation of combatants at the late - spa - stage of rehabilitation, and justifies the need to provide them with medical and psychological assistance at this stage, because the vast majority of modern research is devoted to the development of programs of medical and psychological rehabilitation, psychological correction of disorders of psychological adaptation of UBD in the previous, earlier stages of specialized medical care. Two clinical variants of the occurrence and course of pre-nosological manifestations of post-stress psychological disadaptation at the sanatorium stage of medical care - according to the type of disorder of adaptation with the predominance of the rod pathopsychological response such as "avoidance," and by the type of post-traumatic stress disorder with pathopsychological radicals "invasion" and "feelings of passage" were identified.

A program of medical and psychological rehabilitation of combatants at the stage of sanatorium treatment, taking into account the options of their stress response, which provides them with personalized medical care aimed at improving their rehabilitation potential, level of social functioning and quality of life, has been developed.

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The research was carried out within the framework of the scientific research work of the Department of Psychotherapy of the Kharkiv Medical Academy of Postgraduate Education of the Ministry of Health of Ukraine on the topic "Mental health disorders under social stress: clinical phenomenology, predictors of formation, system of psychodiagnostics, psychotherapy and psychological rehabilitation" (state registration number 0120U101490).

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Conflict of interest:

The Authors declare no conflict of interest

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Received: 09.07.2021

Accepted: 10.01.2022

A – Work concept and design, **B** – Data collection and analysis, **C** – Responsibility for statistical analysis,
D – Writing the article, **E** – Critical review, **F** – Final approval of the article