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## **BASIC PRINCIPLES AND SUBSTANTIATION OF MEDICAL AND PSYCHOLOGICAL CORRECTION OF ADAPTATION DISORDERS IN STUDENTS**

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### **Abstract**

The purpose of this work is to identify and develop a system of measures for psychotherapeutic correction on the basis of identification and comprehensive evaluation of clinical and psychological manifestations and mechanisms of formation of maladaptive states in medical students. In order to achieve this aim, in compliance with the principles of bioethics and deontology, 412 students of the 2-5 academic years of the Kharkiv National Medical University, of both sexes, at the age of 17-22 years, were examined.

All the surveyed people were divided into three groups: Group 1 included 215 students-inhabitants of the Eastern Ukraine; Group 2 consisted of 87 students-residents of Luhansk and Donetsk regions, who entered the study at the KhNMU before the ATO; Group 3 consisted of 110 students-migrants from the ATO zone.

As the results of the study indicated, students- migrants have a higher level of adaptation disorders, compared with the students of the first and second groups. It was established that the structure of adaptation disorders is represented by depressive, neurasthenic, anxious and dissociative syndrome complexes.

Prognostically significant elements in the formation of adaptation disorders are excitability and imbalance, proneness to conflicts in relationships, disturbing confidence, disorganization of behavior, failure to self-regulation, inability to successfully overcome stressful situations, act in conditions of uncertainty, rigidity, and focusing on traumatic and negative feelings.

In order to correct the disorders of adaptation in medical students, we developed a system of medical and psychological support, which included individualized use of psychotherapeutic and psycho-educational influences. As a feedback of the psychotherapeutic correction, a positive dynamic of the psychological state was noted: rapid reduction of anxiety and depressive symptoms, reduction of the level of neuro-psychic tension, increase of students' psychophysical activity, positive change of coping strategy.

**Key words: medical students; adaptation disorders; anxiety; depression; personality traits; psychoeducation; psychotherapy.**

## **БАЗОВІ ЗАСАДИ ТА ОБҐРУНТУВАННЯ МЕДИКО-ПСИХОЛОГІЧНОЇ КОРЕКЦІЇ РОЗЛАДІВ АДАПТАЦІЇ У СТУДЕНТІВ**

**М. М. Хаустов**

Метою роботи є на основі ідентифікації та комплексної оцінки клініко-психологічних проявів та механізмів формування дезадаптивних станів у студентів медиків, обґрунтувати та розробити систему заходів їх психотерапевтичної корекції.

Для вирішення поставленої мети з дотриманням принципів біоетики і деонтології було проведено комплексне обстеження 412 студентів II–V курсів Харківського національного медичного університету, обох статей, у віці 17–22 років.

Усіх обстежених були розділено на три групи: 1 група – 215 – студентів мешканців східної України; 2 група – 87 студентів, мешканців Луганської та Донецької областей, які поступили до навчання у ХНМУ до початку АТО; 3 група – 110 студентів – переселенців з зони АТО.

Як показали результати дослідження студенти переселенці виявляють більш високий рівень розладів адаптації, в порівнянні зі студентами I та II груп. Встановлено, що структура розладів адаптації представлена депресивним, неврастеничним, тривожним та дисоціативним синдромокомплексами.

Прогностично значущими у формуванні розладів адаптації є збудливість і неврівноваженість, конфліктність у відносинах, тривожна помисливість, дезорганізація поведінки, неспроможність до саморегуляції, нездатність успішно долати стресові ситуації, діяти в умовах невизначеності, ригідність, фіксованість на травматичних і негативних переживаннях.

З метою корекції розладів адаптації у студентів медиків нами було розроблено систему їх медико-психологічної підтримки, яка включала індивідуалізоване застосування психотерапевтичного та психоосвітнього впливів.

На тлі проведеної психотерапевтичної корекції відмічена позитивна динаміка психологічного стану: швидка редукція тривожної та депресивної симптоматики, зниження рівня нервово-психічної напруги, підвищення психофізичної активності студентів, позитивна зміна копінг стратегії.

**Ключові слова:** студенти медици, розлади адаптації, тривога, депресія, особливості особистості, психоосвіта, психотерапія

## **БАЗОВЫЕ ПРИНЦИПЫ И ОБОСНОВАНИЕ МЕДИКО-ПСИХОЛОГИЧЕСКОЙ КОРРЕКЦИИ НАРУШЕНИЙ АДАПТАЦИИ СТУДЕНТОВ**

**М. Н. Хаустов**

Целью работы является на основе идентификации и комплексной оценки клинко-психологических проявлений и механизмов формирования дезадаптивных состояний у студентов медиков, обосновать и разработать систему мер их психотерапевтической коррекции.

Для решения поставленной цели с соблюдением принципов биоэтики и деонтологии было проведено комплексное обследование 412 студентов II-V курсов Харьковского национального медицинского университета, обоих полов, в возрасте 17-22 лет.

Всех обследованных были разделены на три группы: 1 группа - 215 - студентов жителей восточной Украины; 2 группа - 87 студентов, жителей Луганской и Донецкой областей, поступивших к обучению в ХНМУ до начала АТО; 3 группа - 110 студентов - переселенцев из зоны АТО.

Как показали результаты исследования студенты переселенцы проявляют более высокий уровень расстройств адаптации, по сравнению со студентами I и II групп.

Установлено, что структура расстройств адаптации представлена депрессивным, неврастеничным, тревожным и диссоциативным синдромокомплексами.

Прогностически значимыми в формировании расстройств адаптации является возбудимость и неуравновешенность, конфликтность в отношениях, тревожная мнительность, дезорганизация поведения, неспособность к саморегуляции, неспособность успешно преодолевать стрессовые ситуации, действовать в условиях неопределенности, ригидность, фиксированность на травматических и отрицательных переживаниях.

С целью коррекции расстройств адаптации у студентов медиков нами была разработана система их медико-психологической поддержки, которая включала индивидуализированное применение психотерапевтического и психообразовательного воздействий.

На фоне проводимой психотерапевтической коррекции отмечена положительная динамика психологического состояния: быстрая редукция тревожной и депрессивной симптоматики, снижение уровня нервно-психического напряжения, повышение психофизической активности студентов, положительное изменение копинг стратегии.

**Ключевые слова:** студенты медики, расстройства адаптации, тревога, депрессия, особенности личности, психообразование, психотерапия.

Among the negative medical and psychological consequences of social stress, which are now observed among the population of Ukraine, the most significant consequence is the high risk of the spread and development of various disorders of the mental sphere, among which donozological - socio-stress disorders and some signs of manifestations or clinically formed psychological maladaptation and clinically delineated mental disorders of the neurotic circle are predominant. [1, 2].

The issue of the impact on a person of emotional stress is one of the leading medical and social problems of today. The most urgent issue arises in the system of professional training and further medical and psychological support of professional activity, which is associated with constant nervous, mental and physical stress. [3].

Prevalence of maladaptation disorders in the student population, according to the literature ranges from 5.8% to 61.35%. They cause a decrease in working capacity, deterioration of academic adaptation and academic progress, as well as the quality of life of students [4, 5].

The current stage of higher education development in Ukraine requires the development of the concept of differentiated psychocorrectional and psychoprophylaxis measures aimed at predicting, preventing, timely diagnosis and treatment of adaptation disorders in students [6, 7].

The current stage of higher education development in Ukraine requires the development of the concept of differentiated psychocorrectional and psychoprophylaxis measures aimed at predicting, preventing, timely diagnosis and treatment of adaptation disorders in students [6, 7].

The priority task of modern medical psychology is the effective solution of the issue of the peculiarities of manifestations and mechanisms of development of maladaptive states in the conditions of social stress, optimization of rendering of qualified medical and psychological help and psychoprophylaxis of similar disease states [9, 10].

The abovementioned conditioned the relevance and necessity of this study.

**The purpose of the study** is to substantiate and develop a system of measures for medical students' psychotherapeutic correction based on the identification and comprehensive assessment of clinical and psychological manifestations and mechanisms of formation of maladaptive states in medical students.

**Contingent, materials and methods of research.** During the study, on the basis of the Kharkiv National Medical University, in compliance with the principles of bioethics and deontology, a comprehensive clinical-anamnestic, clinical psychopathological and psychodiagnostic examination of 412 students of the II-V academic years of medical faculties, of both sexes (147 men and 265 women) with an average age of  $19.5 \pm 2.5$  years was conducted.

All examined persons were divided into three groups: the 1st group consisted of 215 students-residents of Eastern Ukraine; the 2nd group included 87 students-residents of Luhansk and Donetsk regions, who enrolled in KhNMU before the ATO began; the 3rd group - 110 displaced students from the ATO area.

**The results of the studies and their discussion.** As the results of the study indicated, maladaptive conditions were detected in  $27.0 \pm 1.7\%$  of the examined persons of the 1st group, in  $36.4 \pm 1.9\%$  of the 2nd group and  $92.2 \pm 3.1\%$  of the 3rd group.

By the clinical scale of anxiety and depression, 46.1% of the students of the 3rd group revealed clinical manifestations of anxiety, compared with 4.2% of the students in the 1st group and 6.6% of the 2nd group. Subclinical manifestations of anxiety were found in 40.2% of the students of the 1st group, 12.5% of the 2nd group and 8.4% of the students of the 3rd

group. Clinical manifestations of depression are characteristic for 32.4% of the students of the 3rd group, 18.2% of the students of the 2nd group and 2.4% of the 1st group, and subclinical manifestations of depression for 33.1%, 15.6% and 4.9%, respectively.

The analysis of the level of neuro-psychic tension in the structure of maladaptive states showed the predominance of intense (moderate) tension in the students of the 1st and 2nd groups and extensive (excessive) stress in the examined persons of the 3rd group.

The clinical structure of adaptation disorders in the examined students was depressed ( $22.1 \pm 1.6\%$  of the examined people of the 1st group,  $23.1 \pm 1.5\%$  of the 2nd group and  $25.2 \pm 1.6\%$  of the examined of the 3rd group), neurasthenic ( $27.8 \pm 1.7\%$ ,  $25.4 \pm 1.6\%$ ,  $22.2 \pm 1.6\%$ , respectively), anxious ( $24.5 \pm 1.5\%$  of the 1st group,  $26.6 \pm 1.6\%$  of the 2nd group and  $25.3 \pm 1.5\%$  of the examined students of the 3rd group) and dissociative ( $25.6 \pm 1.5\%$ ,  $24.9 \pm 1.6\%$  and  $26.8 \pm 1.6\%$ , respectively) syndrome complexes.

According to the results of the pathopsychological examination, high levels of somatization, depression and anxiety by the SCL-90-R scale; the prevalence of severe depressive and anxiety episodes by the Hamilton scale; clinical manifestations by the hospital anxiety and depression scale were characteristic for the examined students with disorders of adaptation.

As the results of the study showed, the social and psychological factors that influence the emergence of conditions of maladaptation of students are: the change of life stereotype (28.6% of students of the 1st group, 29.6% of the 2nd group and 92.4% of the 3rd group), difficult educational material, complicated terminology (24.2% of students of the 1st group, 23.1% of the 2nd group and 31.1% of the students of the 3rd group), rigorous academic discipline, necessity of working out of missed classes and lectures (15.4%, 16.6% and 17.9% of students examined respectively), imperfection of mechanisms of psychological protection (26.8% of the students of the 1st group, 27.1% of the 2nd group and 81.2% of the 3rd group), the lack of self-control (33.1%, 35.2% and 37.6% respectively).

For migrant students, a stressful factor is the need for adaptation in the new environment (66.4%), a sudden change in the stereotype of life (79.8%), and the status of the forced migrant (92.5%).

In order to correct the disorders of adaptation in medical students, we have developed a system of their medical and psychological support, which included the individualized use of psychotherapeutic and psychoeducational influences.

The psychotherapy program included four consecutive stages: Stage 1 - initial adaptation to the psychotherapeutic process; Stage 2 - psychoeducational influences; Stage 3 -

stabilization of the emotional state; Stage 4 - prevention of recurrence of maladaptive conditions.

Psychotherapy correction for depressive adaptation disorders included the use of rational psychotherapy, cognitive behavioral therapy of Beck, and art therapy in the technique of "Drawing yourself". In the neurasthenic variant, we used Beck's cognitive-behavioral therapy, personality-oriented psychotherapy, psychotonic variant of autogenous training. When the most anxious option, Beck's cognitive-behavioral therapy, personality-oriented psychotherapy, and art therapy in the technique "The Star of the Feelings" was used. When the dissociative variant, short-term psychodynamic psychotherapy, cognitive-behavioral therapy of Beck, autogenous training in the modification of M.S. Lebedynskiy, T.L. Bortnik were used.

A sense-making element of the developed model of psychotherapy inclusion was psychoeducation with the use of information modules and communicative therapy and problem-oriented discussions.

It should be emphasized that taking into account the specifics of the psycho-traumatic circumstances of the displaced students and their need to adapt not only to the requirements of education, but also to the new social status as a forcibly displaced person, as well as the greater severity of anxiety-depressive manifestations, the psychotherapeutic program for this group has been changed increasing the duration of psychotherapy interventions.

Against the background of the psychotherapeutic correction, a positive dynamics of the psychological state was noted: rapid reduction of anxiety and depressive symptoms, reduction of the level of neuro-psychological tension, increase of students' psychophysical activity.

It should be noted that the effectiveness of psychotherapeutic influence is possible only in combination with the measures of organizational and pedagogical plan.

The results of a three-year follow-up study proved the effectiveness of the proposed system of psychotherapeutic correction of the maladaptive states, against the background of its conduction, a positive dynamics of the mental state was noted, the maladaptive states were reduced; in 92.6% of the examined people, there were no relapses of adaptation disorders.

### **Conclusions:**

1. The structure of maladaptation states in medical students is depressed (22.1% of the examined persons of the 1st group, 23.1% of the 2nd group and 25.2% of the 3rd group), neurasthenic (27.8%, 25.4% and 22.7% respectively) , anxious (24.5% of the examined of the

1st group, 26.6% of the 2nd group and 25.3% of the 3rd group) and dissociative (25.6%, 24.9% and 26.8% respectively) syndrome complexes.

2. The effectiveness of the system of psychotherapeutic correction of maladaptation states in medical university students, which will consist of four consecutive stages, is proved: I - the stage of formation of compliance, primary adaptation to the psychotherapeutic process; II - psychoeducational stage aimed at eliminating the students' lack of knowledge regarding the mechanisms of formation and features of the course of adaptation disorders; III - corrective stage aimed at stabilization of emotional state, formation of adaptive forms of behavior; IV - the stage of consolidation and support of results by potentiation of positive emotions, prevention of relapse of maladaptive states.

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