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SYSTEMATICS OF STATES OF MENTAL MALADAPTATION IN STUDENTS

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Abstract

The objective: to specify clinical, psychopathological and pathopsychological manifestations of psychological maladaptation in the students. A total clinical-anamnestic, clinical-psychopathological and psychodiagnostic examination was carried out for 412 students of the KhNMU with an average age of 19.5 ± 2.5 years, 147 men and 265 women. Based on the data of the analysis of the levels of maladaptation, we allocated three groups of students:

Group 1 - low level of maladaptation – $46.0 \pm 2.1\%$ of the surveyed people, group 2 - moderate level of maladaptation $37.6 \pm 2.1\%$, group 3 - high level of maladaptation $16.4 \pm 1.6\%$. In the course of the work, the phenomenology of the mental state of students was conducted. Maladaptive conditions were determined by a decrease in mental health, exhaustion of attention, decreased productivity intellectual activity, irritability, hyperesthesia, anxiety, painful decline in mood, asthenia, low self-esteem, self-doubt, high levels of severity asthenic state and neuro-psychic tension.

Key words: professional maladaptation, students, maladaptation classes, education, internally displaced persons.

Introduction

Study of adaptation is the subject of research both natural sciences and social disciplines and is an important area of research, located on the verge of different branches of knowledge - physiology, psychology, pedagogy, ecology, medicine, social psychology, etc. Each of these sciences has its own understanding of the allocation of significant emphases, the specifics of the study of the processes of adaptation and maladaptation in all spheres of life, which put forward increased demands for psychophysiological resources and human adaptation reserves. The development of students' maladaptation states during professional training is the main psychological, medical and socio-economic problem that adversely affects the effectiveness of future professional activity of medical students [1, 2].

Adaptation of students to study at a higher educational institution should be considered as an intensive and dynamic, multifaceted and complex process of life, during which the individual, based on appropriate adaptive reactions, develops stable skills to meet the requirements presented to him during the period of education at a high school. At the same time, at first (during the first and second academic years) there is an adaptation to the social environment of the university, and later - to the chosen profession and specialty [3].

Modern authors consider vocational and educational adaptation as one of the types of social adaptation, while allocating its own professional (which includes the psychophysiological component) and socio-psychological aspects. At the same time, the socio-psychological aspect plays a leading role in determining the nature of the course of other aspects of adaptation [4, 5].

The success of mental adaptation of a person is determined, first of all, by the achievement of the ability to perform the main tasks of the activity. When assessing the adaptation of students to educational activities, the most commonly used criteria were of two groups: objective (success, social and scientific activity, general and professional orientation, stabilization of the properties of attention, memory, thinking) and subjective (relation to educational subjects, to the chosen profession, to the received knowledge) [6].

The prevalence of maladaptive disorders in the student population, according to the literature, varies from 5.8% to 61.35%. They determine the reduction of disability, the deterioration of academic adaptation and academic performance, as well as the quality of life of students [7].

In the event of maladaptation, it should be noted the interaction of external risk factors as well as the individual-typological peculiarities of the person [8].

The study of individual-psychological predictors of the formation of educational

maladaptation can help find new resources for psychological support of students and to indicate new directions for research activities. The theoretical analysis of the problem indicates that such a difference may be due to differences in personality characteristics of students. Personal risk factors for the formation of maladaptive states include reduced communicative tolerance, high self-esteem, and the use of non-constructive coping strategies in conflict situations [9, 10].

The current development of the problems of maladaptation states shows their further clinical pathomorphism, the main cause of which is associated with the change in the spectrum of psychogenic factors, which has recently significantly expanded and changed [11].

In modern conditions, the issue of diagnostics of maladaptation, as well as practical issues regarding the psychotherapy of the corresponding contingent, unfortunately, will not be sufficiently developed. Also, in scientific publications and fundamental monographs for professionals, the problems of differential diagnostics of maladaptive reactions and conditions in young people who are being trained is not sufficiently highlighted [12].

The foregoing stipulated the relevance and necessity of this study.

The purpose of the study. Study of the specifics of clinical and psychopathological and pathopsychological manifestations of states of psychological maladaptation in students.

Materials and methods. In the course of work with the compliance with the principles of bioethics and deontology, a total clinical-anamnestic, clinical-psychopathological and psychodiagnostic examination was carried out for 412 students of the KhNMU with an average age of 19.5 ± 2.5 years, 147 men (35.7 ± 16.7 %) and 265 women (64.3 ± 2.2 %).

In the course of the study, the following methods were used: clinical-psychopathological with the use of the MKH-10 criteria, clinical-anamnestic and psychodiagnostic, which included a questionnaire on the severity of the Psychopathological Symptoms of Dehorotis (Symptom Check List-90-Revised - SCL-90-R), (by N. V. Tarabrina, 2001) and the scale of professional maladaptation by O.N. Rodina in the edition of M.A. Dmitrieva (2003), the questionnaire of neuro-mental stress (T.A. Nemchin, 1984), the scale of asthenic state (by L.M. Malkov and T.G. Chertova, 1981).

Mathematical-statistical methods included methods of mathematical statistics with the calculation of average values (M) and their errors (m). Differences in the indices in groups for Student's t-test were considered reliable at $p \leq 0.05$.

The results of the study. Based on the data of the analysis of the levels of maladaptation, we allocated three groups of students:

Group 1 - low level of maladaptation – $46.0 \pm 2.1\%$ of the surveyed people ($p < 0.05$), group 2 - moderate level of maladaptation $37.6 \pm 2.1\%$ ($p > 0.05$), group 3 - high level of maladaptation $16.4 \pm 1.6\%$ ($p > 0.05$).

The examined people of the first group did not manifest signs of maladaptation and in the situation of neuro-psychic stress presented only a few complaints about general well-being.

The examined students of the second group in a situation of high emotional and mental load presented complaints of mental disability, reduced mood, anxiety, internal tension, feeling of longing, weakness, fatigue and vegetative paroxysms.

We allocated asthenic ($28.1 \pm 4.0\%$ of the surveyed people), anxious ($20.5 \pm 3.3\%$), subdepressive ($22.4 \pm 3.4\%$), vegetative ($11.9 \pm 4.2\%$) and mixed ($17.1 \pm 4.6\%$) variants of moderate level of maladaptation.

The examined students of the third group showed complaints about the reduced background of mood, the effect of anxiety, thoughts about their own inferiority, self-doubt, and inability to cope with the educational load.

The states of high level of psychological maladaptation were manifested in the links of clinically defined disorders. In $15.2 \pm 4.4\%$ of the examined students, the mixed anxiety and depressive disorder was diagnosed, in $8.7 \pm 6.3\%$ - a short-term depressive reaction, in $12.0 \pm 4.1\%$ - prolonged depressive reaction, in $22.8 \pm 3.1\%$ - mixed anxiety-depressive reaction, in $18.5 \pm 4.9\%$ - an adaptation disorder with a predominance of disturbance of other emotions, in $8.7 \pm 6.3\%$ - somatoform autonomic dysfunction, in $8.7 \pm 6.3\%$ - hypochondriac disorder and in $5.4 \pm 5.3\%$ of the examined patients, neurasthenia was defined.

The prevalence of states of the moderate and high levels of maladaptation, depending on the year of study, is presented in Table 1.

Table 1

Distribution of maladaptation states among students of different academic years (%)

| Academic year | Maladaptation level | | |
|---------------|---------------------|----------------|----------------|
| | Low | Moderate | High |
| 1 | 46.0 ± 2.1 | 37.6 ± 2.1 | 16.4 ± 1.6 |
| 2 | 45.4 ± 1.9 | 37.6 ± 4.5 | 17.0 ± 5.2 |
| 3 | 61.5 ± 4.1 | 28.7 ± 4.0 | 9.8 ± 4.5 |
| 4 | 61.1 ± 2.9 | 26.4 ± 3.9 | 12.5 ± 4.2 |
| 5 | 53.3 ± 2.5 | 29.0 ± 4.0 | 17.7 ± 1.6 |
| 6 | 89.1 ± 5.1 | 8.2 ± 6.3 | 9.1 ± 6.3 |

$p > 0.05$

According to data obtained during the study, during the six-year study period, there is a wave-like dynamics of the mental state of students, namely the severity of the maladaptive states during the first two academic years, its gradual decrease in the middle of study and its growth during the last academic years.

In the course of work, phenomenology of the mental state of medical students is determined. Maladaptive conditions were determined by a decrease in mental working capacity ($27.7 \pm 3.9\%$ of students), exhaustiveness of attention ($51.0 \pm 18.5\%$), decrease in productivity of intellectual activity ($66.9 \pm 9.1\%$), irritability ($95.9 \pm 4.1\%$), hyperesthesia ($35.7 \pm 17.7\%$), anxiety ($92.3 \pm 6.5\%$), mood reduction ($69.5 \pm 10.2\%$), asthenia ($87.3 \pm 10.5\%$), low self-esteem ($31.4 \pm 14.2\%$), lack of self-confidence ($45.7 \pm 7.7\%$), high levels of asthenic state expressiveness by the scale of L.M. Malkova and T. G. Chertova (53.2 ± 1.8) and the nervous-psychic stress by the scale of T.A. Nemchin (48.8 ± 1.7).

In the structure of clinical manifestations of adaptation disorders, a violation of the cycle “sleep – wakefulness” ($76.7 \pm 1.8\%$) was identified - difficulties associated with superficial, anxious sleep and waking in the night, sleepiness in the daytime.

Obligatory for the clinical image of the adaptation disorders were vegetative-vascular paroxysms. In $35.6 \pm 1.5\%$ of the examined people, vegetative crises began with chills, accompanied by an accelerated heartbeat, often with a feeling of numbness or extremity coldness, that is, they had sympathetic-adrenal orientation; in $33.2 \pm 1.6\%$ - weight-insular orientation, began with the elements of “heart flutter”, shortness of breath, a feeling of “inflow of heat to the face or body”, which changes with chills and tachycardia; in $29.8 \pm 1.3\%$ of the surveyed, the crisis structure could be attributed to the mixed ones, which had close interweaving of both sympathetic-adrenal and weight-insular manifestations.

The given regularities indicate that the decrease of mental performance, anxious-depressive symptoms, deterioration of general well-being are the first manifestations of deterioration of the mental state of students.

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