

PREDICTORS FORMATION OF SOCIAL MALADJUSTMENT IN PATIENTS WITH PARANOID SCHIZOPHRENIA WITH CONCOMITANT SOMATIC-NEUROLOGICAL DISORDERS

FORMAREA PREDICTORILOR SOCIALI AL DEZADAPTĂRII LA PACIENȚII CU SCHISOFRENIE PARANOIDĂ ȘI TULBURĂRI SOMATO-NEUROLOGICE COEXISTENTE

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Key words: paranoid schizophrenia, somatic disorders, neurological disorders, life quality, stress, social maladjustment.

Summary

The investigation of the stress level in patients with paranoid schizophrenia with concomitant somatic-neurological disorders and life quality as predictor of social exclusion formation. The influence of somatic-neurological pathology for paranoid schizophrenia at different levels of stress.

Cuvinte – cheie: schizofrenie paranoidă, tulburări somatice, tulburări neurologice, calitatea vieții, stres, dezadaptare socială.

Rezumat

Investigarea nivelului de stres la pacienții cu schizofrenie paranoidă care suferă de tulburări somatice și neurologice concomitente și calitatea vieții ca predictor ai formării exclusiunii sociale a acestora. Influența patologiei somatice-neurologice asupra schizofreniei paranoide în cazul diferitor nivele de stres.

Providing psychological care to patients with schizophrenia acquires its significance because it depends on the nature of the peculiarities of the pathology itself and the presence of comorbid diseases. Patients with schizophrenia are more vulnerable to physical disease and have a specific adaptive response to stressful situations [4, 5]. In 90% of patients with schizophrenia there is a disregard of various somatic functions, and in 34-74% of them, somatic diseases are not diagnosed [6, 7]. The presence of somatic pathology in the main disease forms an irrational model of the ratio that diseases reduces the effective-

ness of treatment in such patients.

Considering the causes of the emergence of various somato-neurological diseases, we can identify a number of factors. The patients with schizophrenia experience a significant stress, from real stressors (unfavorable life events, the presence of the disease, the difficulties of social adaptation, etc.) [13], having a high prevalence of depressive disorders [1-5] associated with cardiovascular diseases, which is widely discussed in cardiology [9].

It is known that stress and depression contribute to change the activity of hypothalamic-pituitary-adrenal axis,

which can lead to the development of abdominal obesity, insulin resistance, and elevated blood pressure [14].

In addition to positive symptoms in schizophrenia on the exchange processes, negative effects can also be exerted by negative symptoms. Inherently, the emotional-volitional disorders in schizophrenia lead to the formation of an unhealthy lifestyle: hypodynamia, inadequate nutrition, inadequate care for one's health, widespread prevalence of harmful habits [8, 11], and the formation of a hypo- and anosognosic type of attitude toward the presence of somatic pathology [12].

The living conditions and nutrition habits of patients' life can play a certain role. For example, those suffering from schizophrenia, according to European studies, are more likely to consume fats, less vegetable fiber [10], which explain the low socioeconomic level of their lives.

The study of stress resistance level and the specificity determination of stressful experiences, in patients with paranoid schizophrenia with concomitant somato-neurologic pathology, will allow to determine the main predictors of life quality decrease and will subsequently will serve as targets for psycho-correction intervention at rehabilitation stage.

To determine the goal, the following methods were used: the clinical-psychopathological method, the method for determining the stress-resistance and social adaptation of Holmes and Rage, the quality of life questionnaire "SF-36 Health Status Survey" (Ware J. E., 1994).

The research materials were collected during 2014 to 2016, at the department of clinical, social and child

psychiatry of the Institute of Neurology, Psychiatry and Narcology of the National Academy of Medical Sciences of Ukraine. Four study the groups which included patients with paranoid schizophrenia with concomitant somato-neurologic pathology, where formed a group that consisted of patients with paranoid schizophrenia without somato-neurologic pathology, in parallel as a comparison group.

Group 1 consisted from patients with cardiovascular pathology (44 patients). In the 2nd group where patients with gastroenterological pathology (48 patients). In the 3rd group where patients with endocrine pathology (50 patients). In the group 4th where patients with neurologic pathology (40 patients). The comparison group included 30 patients with paranoid schizophrenia without somato-neurologic pathology.

Study results.

In the study and comparison groups, the stress-resistance index was analyzed as an integrative indicator of the presence of psycho-traumatic factors in patients' life with paranoid schizophrenia (Tab. 1).

By data analysis was received a significant differences in stress distribution levels depending on the presence of somatic disorders in patients with paranoid schizophrenia. So 53.29% in the study prevailed fairly low stress tolerance ($\varphi_{emp}=5,04 > 2,31 = \varphi_{cr}$, $\rho_{\varphi} < 0,01$). While in the comparison group of patients without somatic disorders prevailed threshold 53.33% ($\varphi_{emp}=1,98 > 1,64 = \varphi_{cr}$, $\rho_{\varphi} < 0,05$) and high level of stress tolerance of 36.67% ($\varphi_{emp}=3,46 > 2,31 = \varphi_{cr}$, $\rho_{\varphi} < 0,01$).

Table 1

Comparison of stress in patients with paranoid schizophrenia with / without somatic-neurological disorders

(According to the Holmes and Rahe questionnaire)

Scale	The main group (With somatic-neurological disorders), n=182		A comparison group (without somatic pathology), n=30		Criterion of Fischer
	Absol. c.	%	Absol. c.	%	
Low ≥ 300 points	97	53,29	3	10,00	5,04 ¹⁾
The average 200-299 points	63	34,62	16	53,33	1,98 ¹⁾
High scores 150-199 points	17	9,34	11	36,67	3,46 ¹⁾
Very high ≤ 150 points	5	2,75	1	3,33	0,18

Thus, the presence of stressful life events of patients with paranoid schizophrenia worsens somatic state and reduces adaptive capacity, which negatively turn on impact on all spheres of interaction between the individual and overall quality of life.

For a detailed analysis of stress tolerance in patients given somatic disorders was conducted comparing the results in subgroups of study.

In the main group and subgroups based on somatic disorders typology were found significant differences with the prevalence of stress tolerance, reliably inherent to 70.45% (with $p < 0,01$) of patients with cardiovascular system diseases and 72.00% (with $p < 0,01$) patients with impaired functioning of the endocrine system low stress tolerance. Whereas for 52.08% (with $p < 0,05$) of patients with impaired functioning of gastrointestinal tract and 40,00% (with $p < 0,05$) with disorders of the nervous system was characterized a threshold of stress tolerance.

In the analysis of stressful factors in patients with pancreatic somatic disorders was found that 86.26% of pa-

tients often note the presence of disease / injury that was noted in the average ($1,8 \pm 0,64$) times last year.

Further the reducing stress factor hierarchy is composed as follows: changing social functioning, availability problems of physical functioning baseline (sleep disorders, personal habits, diet), family relationships problems (conflicts, sexual problems) which could lead to changes of living conditions, which are an effect of patient social maladjustment. This problems lead to lower or even no activity of social interaction outside the family, of awareness of their social status and social role behavior, of acceptance, of norms and values of social groups.

To determine the effect of stressful factors on the life quality of patients with pancreatic somatic disorders we conducted an analysis and comparison of the results of QOL. Due to the spread of a holistic approach in medical and psychological practice, "in recent decades has gained a particular importance to study the life quality (QOL) of patients, where they are treated as a single biological, psychological, so-

cial and spiritual unit, with levels of human functioning and carried vision as an “unique integrity who possesses a unique life experience, inner world, unique different from other reaction to the circumstances of life. The term „life quality” is being used in various fields of scientific knowledge. In the 80s of the last century, the concept of “life quality related to health” was introduced in rehabilitation as comprehensive evaluation need of patients at different treatment and rehabilitation stages, and as a need of preventive measures implementation.

According to research data, disease occur as a subject life violations at different levels - a somatic suffering directly caused by disease (somatic level), and loss of ability to perform daily activities in the usual style (behavioral level), and also develop limitations of social role (social level) and psychological abuse (psychological level).

The disease cause a complexity of many changes and dimension of life quality, our study helps to understand QOL. WHO defines life quality as individual perceptions of their position in life in the context of the cultural environment and system value in which the individual lives in accordance with its goals, expectations, standards and outlook.

The QOL study problem can be viewed as standpoint of interdisciplinary concepts of mental adaptation because the impairments will inevitably change the whole system of human relationships, blocking its actual needs, reducing totally the life prosperity.

The research objective of QOL of patients with paranoid schizophrenia is relevant directing attention to the ratio

of physical and psychological state of the patient. That enables more rationally medication treatment for targeted adjustment behavior of the patient, its interaction with family and social life, and satisfaction of vital functions in the presence of disease.

This study is comparing the state of the life quality of patients with the somatic disease and with schizophrenia; and schizophrenia patients without evidence of somatic disorders.

The studied social aspects of patients with paranoid schizophrenia with a burden of physical condition it is shown in table 2.

Based on these data were found significant differences in the life quality of patients with paranoid schizophrenia with concomitant somatic-neurological disorders by comparing the performance group without comorbid diseases.

Particular attention represent the decline of physical health component in the study group, where the average was $53,7 \pm 2,14$ points at $p < 0,01$ and physical functioning $55,2 \pm 2,09$ points at $p < 0,01$. The reduction, according to the scales indicating the degree of restriction perform physical actions as self-loading, the presence of fatigue and reduce both physical and vitality.

Also significantly was found reduced rates for the mental health component in patients with concomitant somatic-neurological disorders by comparing with other group. So for the main group of patients the significant reduction is characterized by mental health component, namely scales, role-functioning due to emotional state, where the average figure was $(53,7 \pm 3,58)$ points, mental

health ($54.01 \pm 3,11$) points at $p < 0,01$ and vitality ($54,8 \pm 2,61$) points at $p < 0,01$. The received aspect of patients with paranoid schizophrenia with comorbid diseases, it was observed the presence of concomitant emotional

disorders with distinct mental troubles. There are taking place some certain limitations of emotional disturbances in everyday activities related to interpersonal interaction and social activity.

Table 2

Data of average quality of life of patients with paranoid schizophrenia

Scale	The main group (With somatic-neurological disorders), n=182	A comparison group (without somatic pathology), n=30	t-criterion
	M ± m	M ± m	
The mental health component			
Mental health (MH)	54,01±3,11	63,7±1,68	2,74 ¹⁾
Role functioning due to emotional state (RE)	53,7±3,58	66,2±1,24	3,31 ¹⁾
Social functioning (SF)	59,3±2,49	67,2±1,08	2,91 ¹⁾
Vitality (VT)	54,8±2,61	61,5±1,14	2,35 ¹⁾
The physical component of health			
Physical functioning (PF)	55,2±2,09	68,7±1,05	5,76 ¹⁾
Role functioning due to physical condition (RP)	58,4±3,04	71,2±1,28	3,89 ¹⁾
The intensity of pain (BP)	62,26±2,57	74,3±1,07	4,33 ¹⁾
General Health (GH)	53,7±2,14	65,4±1,36	4,62 ¹⁾

quality of patients with presence of somatic pathology the history of mental disorder occurrence was significantly reduced in physical and mental health components.

Based on the results analysis it was found a prevalence of poor mental and physical health of patients with concomitant somatic-neurological disorders. The average of main group 50.55% (92 patients) and 20.00% (6 patients the comparison group) had lower life quality. The most commonly complaints overall health as physical health component was at the patients with somatic-neurological disorders,

observed in 69.78% cases and 55.49% cases showed a decrease in vitality, as a mental health component.

Further it was considered, the distribution of social malfunctioning in patients with paranoid schizophrenia based somatic-neurological disorders.

A direct correlation with the type of medication represent a significant deterioration in mental and physical components of health, which reduce the leading role in the further condition and degrade, serving as a factor to refuse the treatment. This factor acts as an indicator of alignment between social significance priority and physical func-

tioning, with irrational internal picture of the disease. Therefore, the main motive of drug therapy continuation is not only health and underlying disease, and it is also the preservation of social functioning in the future. Also, it was found that after a month of treatment there is a change in the life quality that affects primarily the role-functioning reducing interpersonal interaction, leading to the interruption of treatment and worsening of the underlying disease.

In summary, the following conclusions concerns the influencing peculiarities of concomitant somatic-neurological disorders of social functioning and life quality of patients with paranoid schizophrenia before treatment:

a) the patients with cardiovascular disorders is characterized a significant decline in their life quality for the components of physical functioning, namely scales, "overall health" by 77.27%, "Physical functioning" by 68.18%, "Role functioning due to physical condition" of 65.91% and a reduced rate" vitality "by 79.54%;

b) the group of patients with gastroenterological pathology it is characteristic a decline in "general health" by 70.83%, "Role functioning due to physical condition" by 66.67% and social functioning in 62.5%, and availability indicator of pain in 64.58% cases.

c) the patients with endocrine disorders has an extreme decline of life quality seen in the mental component scales for the "vitality" by 70.00% and "Physical functioning" by 74.00%, other indicators of life quality also had a lower level.

d) the patients with neurological disorders was characteristic the role functioning reduction due to both

physical and emotional state at 66.25%, and is marked a low vitality index of 67.5%, mental health 60,00%, general health of 72.5% and social functioning in 62.5% and an additional destructive component was the presence of pain in 65% cases.

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Primit la redacție 21.03.2017

Editat 05.05.2017

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