

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

FORMAREA PREDICTORILOR MALADJUSTMENTULUI SOCIAL LA PACIENȚII CU SCHISOFRENIA PARANOIDĂ ȘI TULBURĂRI SOMATICO-NEUROLOGICE CONCOMITANTE

V. S. PIDKORYTOV, N. A. BAIBARAK

Keywords: paranoid schizophrenia, somatic disorders, neurological disorders, quality of life, stress, social maladjustment.

Abstract

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

Termeni-cheie: schizofrenie paranoidă, tulburări somatice, tulburări neurologice, calitatea vieții, stres, maladjustment social.

Rezumat

Articolul are ca obiect investigarea nivelului de stres la pacienții cu schizofrenie paranoidă care suferă de tulburări somatice și neurologice concomitente și calitatea vieții ca predictor ai formării excluziunii sociale a acestora. Se fac referiri la influența patologiei somatice-neurologice asupra schizofreniei paranoide în cazul diferitor nivele de stres.

The problem of 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 violation 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 in

such patients an irrational model of the ratio that diseases, in turn, reduces the effectiveness of treatment.

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

It is known that stress and depression contribute to changes in the activity of the hypothalamic-pituitary-adrenal axis, which in turn can lead to the development of abdominal obesity, insulin resistance, and elevated blood pressure [14].

On the exchange processes, in addition to positive symptoms in schizophrenia, negative effects can also be exerted by negative symptoms. So the emotional-volitional disorders inherent 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], the formation of a hypo- and anosognosic type of attitude toward the presence of somatic pathology [12].

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

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

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 received from 2014 to 2016. In 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 groups were formed, which included patients with paranoid schizophrenia with concomitant somato-neurologic pathology and a comparison group that consisted of patients with paranoid schizophrenia without somato-neurologic pathology.

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

Results of the study.

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

By data analysis received significant differences in levels of stress distribution 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 at 53.33% ($\varphi_{emp}=1,98>1,64=\varphi_{cr}$, $\rho_{\varphi}<0,05$) patients without somatic disorders prevailed threshold and at 36.67% - a high level of stress tolerance ($\varphi_{emp}=3,46>2,31=\varphi_{cr}$, $\rho_{\varphi}<0,01$).

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 in patients with paranoid schizophrenia worsens somatic state and reduces adaptive capacity, which in turn, negative 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.

The allocation of the main group into subgroups based somatic disorders were found significant differences in the prevalence of stress tolerance.

Reliably inherent to 70.45% (with $\rho\phi < 0,01$) of patients with diseases of the cardiovascular system and to 72.00% (with $\rho\phi < 0,01$) patients with impaired functioning of the endocrine system low stress tolerance. Whereas for 52.08% (with $\rho\phi < 0,05$) group with impaired functioning of the gastrointestinal tract and 40,00% (with $\rho\phi < 0,05$) of patients with disorders of the nervous system characterized threshold stress tolerance.

In the analysis of stressful factors in a group of patients with pancreatic somatic disorders found that last year

86.26% of patients often note the presence of disease / injury that was noted in the average ($1,8 \pm 0,64$) times.

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

To determine the effect of stressful factors on the quality of life of patients with pancreatic disorders with somatic we conducted further analysis and comparison of the results of QOL.

Due to the spread of a holistic approach to medical and psychological practice, in which are treated as a single unit biological, psychological, social and spiritual levels of human functioning and carried the vision of the patient as a "unique integrity who

possesses a unique life experience, inner world, unique different from other reaction to the circumstances of life “in recent decades has gained particular importance study of quality of life (QOL) of patients. The term “quality of life” is being used in various fields of scientific knowledge. In the 80s of the last century the concept of “quality of life related to health” was introduced in rehabilitation because of the need of comprehensive evaluation of patients with different stages of treatment and rehabilitation and the implementation of preventive measures.

According to research data, resulting in disease occur violations of life of the subject 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 as a result disease and social role limitations (social level) and psychological abuse (psychological level).

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

The problem QOL study can be viewed from the standpoint of interdisciplinary concepts of mental adaptation because the impairments will inevitably change the whole system of human relationships, blocking its actual needs, reduce total 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, in turn, enables more rationally adjust's medication treatment for targeted adjustment behavior of the patient, its interaction with family and social life and satisfaction with regard to the vital functions of the presence of the disease.

A study comparing the state of the quality of life in patients with schizophrenia with the presence of somatic disease and schizophrenia patients without evidence of somatic disorders.

Thus the social aspect studied patients with paranoid schizophrenia with a burden of physical condition (Tab. 2)

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

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

Also significantly reduced rates for the mental health component in patients with concomitant somatic-neurological disorders by comparing a comparison group. So for the main group of patients significantly reduce characterized by a mental health component, namely scales, role-functioning due to emotional state, where the av-

erage figure was (53,7 ± 3,58) points, mental health (54.01 ± 3,11) points at $p < 0,01$ and vitality (54,8 ± 2,61) points at $p < 0,01$. In this picture received the quality of life of patients with paranoid schizophrenia with comorbid diseases

also observed the presence of concomitant emotional disorders with distinct mental troubles. If there some certain emotional disturbances limitations 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⁾

Thus the presence of comorbid disease in patients with paranoid schizophrenia not only burdens the course of the underlying disease, but also impairs the general state of quality of life.

According to data obtained quality of life of patients with somatic pathology presence of a history of mental disorder was significantly reduced substantially both physical component and mental health.

Based on the analysis of the results shows that in patients with concomitant somatic-neurological disorders significantly more prevalent poor mental and physical health. On average, 50.55% (92 patients) of the main group and

20.00% (6 patients) comparison group had lower quality of life. The most commonly in patients with the presence of somatic-neurological disorders observed in 69.78% complaints overall health as physical health component and a 55.49% decrease in vitality, as a mental health component.

Further considered in more detail the distribution of a violation of social functioning in patients with paranoid schizophrenia based somatic-neurological disorders.

Thus, a significant deterioration in mental and physical components of health has a direct correlation with the type of medication, which reduce scales

defines a leading role in the further degraded condition and can serve as a factor in the refusal to continue treatment. This factor acts as an indicator of alignment between priority social significance and physical functioning, with irrational internal picture of the disease. Therefore, the main motive continuation of drug therapy is not only health and underlying disease, and the preservation of social functioning in the future. If after a month of treatment there is a change in the quality of life that affects primarily on the role-functioning with reduced interpersonal interaction, which in turn leads to the interruption of treatment, which in turn leads to worsening of the underlying disease.

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

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

b) For a group of patients with gastro-entorolohichnoyu pathology and characteristic decline in “general health” of 70.83%, “Role functioning due to physical condition” of 66.67% and social functioning in 62.5%, and availability indicator of pain in 64.58%

c) in patients with endocrine disorders extreme decline in the quality of life seen in the mental component

scales for the “vitality” of 70,00% and “Physical functioning” of 74.00%. Other indicators of quality of life also had a lower level;

d) For patients with neurological disorders characterized by a reduction in role functioning due to both physical and emotional state at 66.25%, and is marked low vitality index of 67.5%, mental health 60,00% general health of 72.5% and social functioning in 62.5%; additional destructive component was the presence of pain in 65%.

References

1. Дробижев М. Ю. *Нозогенные (психогенные) реакции при соматических заболеваниях*: автореф. дис. д.м.н. / М. Ю. Дробижев. – М., 2000. – 38 с.

2. Карпов А. М. *Отношение врачей-психиатров к своей работе*. / А. М. Карпов, Ф. Ф. Гатин, Ф. З. Фаттахов [и др.] // Материалы Российской конференции «Современные тенденции организации психиатрической помощи. «Клинические и социальные аспекты». – М., 2004. – 60 с.

3. Колодкина О. Ф. *Изменение вегетативной регуляции ритма сердца у больных шизофренией на фоне длительной терапии нейролептиками и ее клиническое значение*. / О. Ф. Колодкина, О. А. Моргунова // V Российский национальный Конгресс «Человек и лекарство». Тезисы докладов. – М., 1998. – 99 с.

4. Свердлов Л. К. *Клиническое и экспериментально-психологическое исследование больных приступообразной шизофренией: (К проблеме ранней диагностики и профилактики рецидивов)* / Л. С. Свердлов, А. И. Скорик, Е. Г. Лаврентьева. // Профилактическая и противорецидивная терапия психических заболеваний. – Л., 1986. – С. 52 – 57.

5. Brown S. *Excess Mortality in Schizophrenia* / S. Brown // *British Journal of Psychiatry*. – 1997. – Vol. 171. – P. 502 – 508.

6. Dinan T. *Stressing enesis diabetes mellitus in patient with schizophrenia: analysis* / T. Dinan // *British Journal of Psychiatry*. – 2004. – Vol. 184, suppl. 47. – P. 72 – 75.

7. Sands J. R. *Depression during the longitudinal course of schizophrenia* / J. R. Sands, M. Harrow // *Schizophrenia Bulletin*. 1999. – Vol. 25 (1). – P. 157 – 172.

8. Addington D. *Prevalence of depression in schizophrenia results of international survey* // 10th Congress SNS. Abstracts – Nice 1997 – P. 7 – 9.

9. Мазо Г. Э. *Влияние депрессии на течение шизофрении* / Г.Э.Мазо // Психиатрия и психофармакотерапия. 2006. – Т. 8. – № 3. – С. 22 – 24.

10. Васюк Ю. А. *Особенности патогенетической взаимосвязи депрессии и сердечно-сосудистых заболеваний*. / Ю. А. Васюк, Т. В. Довженко, Е. Л. Школьник // Псих, расс-ва в общей медицине. 2007. – Т. 2. – № 1. – С. 14 – 19.

11. *Частота и характер метаболических нарушений у больных шизофренией*. / Н. Г. Незнанов, И. А. Мартынихин, Н. А. Соколян, Д. А. Танянский // *Обозр. психиат. и мед. психол. им. В.М. Бехтерева*. – 2009. – №2. – С. 17–20.

12. *The unhealthy lifestyle of people with schizophrenia*. / S. Brown, J. Birtwis-

tle, L. Roe, C. Thompson // *Psychol. Med.* – 1999. – V. 29. – P. 697 – 701.

13. *Частота и характер метаболических нарушений у больных шизофренией*. /Н. Г. Незнанов, И. А. Мартынихин, Н. А. Соколян, Д. А. Танянский // *Обозр. психиат. и мед. психол. им. В.М. Бехтерева*. – 2009. – №2. – С. 17–20.

14. *The unhealthy lifestyle of people with schizophrenia*. / S. Brown, J. Birtwis-

Primit la redacție 21.03.2017

BAIBARAK Natalia Anatolievna, Ph.D., Psychiatrist, researcher department of clinical, social and child psychiatry of the Institute of Neurology, Psychiatry and Narcology of the National Academy of Medical Sciences of Ukraine, e-mail: baybarak-n@mail.ru

PIDKORYTOV Valeriy Semionovici, Doctor of Medical Sciences, Professor, Head of 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