

MODERN THEORIES OF SCHIZOPHRENIA EMERGENCE AND ISSUES RELATED TO THE DIAGNOSIS

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This article presents the literature data, which are connected with the contemporary understanding of reasons and theories of the schizophrenia origin within the scope of psychiatry. Reasons of theoretical, clinico-diagnostic, and interpretational dissonance within the problem of schizophrenia are shown. In addition, reasons of nosological disqualification of schizophrenia, as well as reasons of strengthening of insights concerning existence of a «group of various schizophrenias» are analyzed. The reasons of the prevalence of psycho-pharmacological methods of therapy of schizophrenia, as well as phenomena of a common therapeutic stagnation are considered.

Keywords: schizophrenia, diagnostics, psychotherapy.

Statement of the problem. Contemporary stage of development of community is characterized by complicating of a civilisation process and formation of new social phenomena. New worldview doctrines emerge, and these events require to reconsider the established opinions in various branches of knowledge [1]. This is valid in respect of the psychiatry to the full extent as well, because it is the branch of the medicinal knowledge, which is intended for investigation of dissociations of the human psychology. There is no doubt that schizophrenia ranks the first place within the entire spectrum of the psychiatry problems [2].

Review of the last investigations and printed media publications. At the present moment, a great amount of data is accumulated and a wide range of theoretical concepts concerning the schizophrenia problem is formed.

Separation of the earlier unresolved sections of the common problem. At the same time, it is needless to say that an analytical treatment of the accumulated problems and a system development of conceptional directions of their solutions are required at this stage [3, 4].

Formulation of goal of the present article. The main goal of this review is connected with the studying of the printed media, which are connected with contemporary understanding of reasons and theories of the schizophrenia origin within the scope of the psychiatry, as well as the reasons of theoretical, clinico-diagnostic, and interpretational dissonance in the sphere of the schizophrenia problem.

Description of the main material. There are no doubts that the term of «schizophrenic» (in its multiform variations) may be applied to the processes (process diseases), as well as both to the states, and reactions – only in the last two cases this term has the suffixes that are mentioned as a «similar», namely «schizoid», «schizophrenic-similar», «schizophrenic-formed» and other notions.

Moreover, it is not possible to disbelieve in the existence of various clinical variations of schizophrenia – and the answer to this supposedly anti-

nosological challenge was already given within the scope of the doctrine on existence of various forms of schizophrenia [5].

It should not also be remembered that all diseases, any forms of pathology evolve. However, without regard to macroevolution of pathology, there exists a microevolution of nosoforms [6]. With respect to the schizophrenia, this is manifested as a convergence of its forms along with the potentiative influence of dissociation of clinical manifestations (symptomatology, psychopathological phenomenology). Without getting into a formal analysis, it is possible to state ex abrupto that paranoid manifestations are reduced and unstabled ones with ever increasing frequency, while apathetic-abulic manifestations rest upon the boundary of the amotivation, catatonic manifestations are registered in the form of negativism components, and hebephenic manifestations are increasingly polymorphic ones, and they are increasingly qualified on the basis of the age-dependent parameters only [7].

Theories/concepts of schizophrenia may be systematized in a number of basics of the following classification.

Concepts of the genetical nature of schizophrenia:

The concept of the genetical nature of schizophrenia was based as a result of investigations of risk of the disease development for monozygotic and dizygotic twins, siblings, parents, and children, as well as a result of investigation of the adopted children of the parents suffering from schizophrenia. There exist evidences that schizophrenia is associated with one gene (a monogenic theory) along with the varying expressivity and incomplete penetrance, small quantity of genes (an oligogenic theory), great quantity of genes (a polygenic theory) or multiple mutations [8, 9, 10].

A hypothesis of the genetical inhomogeneity of schizophrenia was proposed as a consensus. The assumptions were declared that the basis of schizophrenia is in a schizotype – a carrier of the schizotaxy markers, which (being a neutral integrative

defect) becomes evident under the influence of the environment factors as a pathological process [11].

Constitutional hypotheses of schizophrenia:

It is thought that constitutional factors take part in formation of the manifestation rate and responsiveness of the process.

Specifically, schizophrenia of women and gynaecomorphic men proceeds as a more laudable process and has a trend to periodic repetition. At the age of more than forty years, progression of this disease is more laudable as well. As concerns the men having an asthenic constitution, this disease is unremitting more frequently, while as concerns women having a picnic constitution this disease is periodical more frequently.

However, the constitution itself does not determine a susceptibility to this disease in a definite manner. As a rule, morphological dysplasias evidence on the possible atypia of the process, and such patients respond to treatment more badly [12, 13, 14].

Evolutionary theories of schizophrenia:

Evolutionary theories consider genesis of schizophrenia within the scope of the evolutionary process or as a «fee» for increase of the average intelligence of population and technological progress, or as a «hidden potential» of the progress, which did not received its own niche yet.

A posturing and fleeing response is considered as a biological model of this disease. Those patients, who suffer from schizophrenia, have a number of selective advantages, they are more resistant to pain and heat shocks. Average intelligence of healthy children of those parents, who suffer from schizophrenia, is high [15].

Ecological theories of schizophrenia:

Ecological theories explain the fact of predominant birth of the schizophrenia patients during the cold season as a consequence of the prenatal deficiency of vitamins, as well as a mutagenous impact during the period of conception of child in spring [16].

Neuromorphological hypotheses of the schizophrenia origin:

Pathomorphological investigations have shown that in the course of the schizophrenia (hallucinatory and paranoid form), the cerebral cortex is involved unevenly and that destructive cortical process is very variable and dynamic. At the same time, upper strata of the cortex, big pyramidal cells of the III and V strata, brain conduction tracts, which combine various segments of the cortex, are involved [17, 18].

However, no specific neuronal or glial histomorphologic changes were found.

Hypotheses of the neurogenic origin of the schizophrenia:

In accordance with the neurogenetical theories, positive symptoms of the disease are associated with the disfunction of the system of the brain caudate nucleus, of the limbic system. Disorganisation in operation of cerebral hemispheres and dysfunction of the frontal cerebellar bonds were found. With the help of computer tomograms, it is possible to identify the ectasia of frontal and lateral horns of the ventricular system. Voltage from the frontal leads is decreased in the case of «nuclear» forms of the disease at the electroencephalogram [19, 20, 21].

Neurodynamic concept of schizophrenia:

In the late forties of the XX century, a hypothesis concerning the interconnection of electric processes and functioning of the brain systems was proposed. This hypothesis was confirmed by the investigations, which have shown that these interconnections are interrupted in the course of mental illnesses, particularly, in the case of schizophrenia. If positive symptoms dominate in the clinical picture of schizophrenia (delusion, hallucinations and so on), then bioelectrical activity of the brain in various sections exceeds normal level. In the case of a pathological process, which is connected with the negative symptoms (flattened affect, absence of will and other factors) low-amplitude, bioelectrical oscillations are registered [22].

Interhemispheric bonds of the patients, who suffer from schizophrenia, are changed in a different manner: they have a trend to decrease in the frontal sections as compared with the normal level and a trend to increase in the precentral and sincipital sections. This means that schizophrenic process interrupts the systematic organisation of the bioelectrical processes of the brain and (consequently) functioning of the brain systems. In the course of complication of the clinical pattern of the schizophrenia as a result of disintegration of mental processes, new pathological system of the brain functioning is created [23].

Comparison of the dynamics of the evoked potentials and clinical features of mental disorders has made it possible to identify one of the important pathogenetical mechanisms of the schizophrenia development. This mechanism is connected with the dysplasia of the optimum relationship of the information processes, which are in the systems of the ascending cortical projections [24].

Biochemical concepts of the schizophrenia origin:

Biochemical investigations assume that schizophrenia is connected with excess of dopamine. Blocking of dopamine by neuroleptic agents in the case of the positive symptoms facilitates relaxation of patient. However, not only deficiency of dopamine is identified at the defect, but deficiency of other neuromediators (noradrenaline, serotonin) is identified as well. At the same time, in the case of positive symptoms not only quantity of dopamine is increased, but quantity of cholecystokinin, somatostatin, and vasopressin is increased as well. Various changes are identified in the carbohydrate metabolism, protein metabolism, as well as in the lipoprotein metabolism [25, 26].

Autointoxication theory of the schizophrenia origin:

In accordance with this theory, schizophrenia is developed as the result of dysplasia of the protein metabolism and depression of oxidation processes, which cause accumulation of intermediate products and development of the autointoxication. This point of view is confirmed by the fact that blood of those patients, who suffer from schizophrenia, has toxic properties. Biological fluids of the patient, who suffers from schizophrenia, have a membrane-acting effect and an inhibitory action upon the metabolic processes, and cause immunological changes as well. This conclusion was made on the basis of results of the pathomor-

phological, histochemical, and electrophysiological studies [27, 28, 29].

Psychological concepts of schizophrenia:

Psychological theories explain development of the disease from the point of view of revival of the archaic (paleolithic, mythopoetic) thinking, action of the depriving situation, as well as action of the selectively decomposed information, which causes semantical aphasia. Pathopsychologists identify the following factors, which have patients, who suffer from schizophrenia: versatility and ambivalence of judgements; egocentric fixation, in accordance with which judgements are made by such patients on the basis of their own motives [30, 31].

Diagnostic problems:

The biologically-oriented diagnostics and therapy of the schizophrenia were developed in accordance with two basic directions. The first direction is connected with application of physical, surgical, and biogenic agents with the purpose of direct or indirect impact upon the mental substrate or upon the so-called «general biological action». The second direction is connected with the contemporary stage of the psychopharmacotherapy [32].

Psychotherapy is used in the course of the schizophrenia treatment in order to ensure reduction of the anxious affect, preformation of the destructive variations of the personal reaction to the adaptive relations as well as to formation of the compliance relations.

The systemically important factors of the clinico-theoretical dissolution (ergo, therapeutical inadequacy within the schizophrenology (despite the fact that these factors are common for the entire psychiatry) are as follows:

medicine wishes (as any societal practice in respect of its own share) to return psychiatry to its niche, subordinate it to the same procedures and algorithms, protocol and order, methods of application and supervision, and provide it with the status of «homunculus unus e multis»;

growing trends (almost critical trends already) to the social and pharmacological arrangement of the daily living activities of an individuum, particularly:

commercialisation of the psychopharmacology, which had an originally-competitive relation not only to the verbal psychotechnical and psychotherapeutic methods, but to the «biological» methods as well (first of all, to the insulin-comatose

therapy, because of negation of the therapeutical value of this therapy is a kind of a marker of the professional competency of a psychiatrist) has received an institutional/governmental and conjunctural societal/information support [33].

For the most part, these problems are connected with differentiation and specialisation in the sphere of psychological disciplines – these processes, unfortunately, are accompanied by the competitive type of mutual relations, and this fact creates actual theoretical and practical confrontation instead of the multidisciplinary interactions, as it is usually declared [34].

Conclusions of this study and future prospects:

To date, we have multilevel unresolved problems in the sphere of schizophrenia diagnostic: normative, evolutionary ethiopathogenetic, clinicodiagnostic, and obstructive problems (which are connected with discursive interpretations and conjuncture, as well as with the therapeutical stagnation, and it would be very difficult to overcome consequences of this stagnation). Up to the present moment, researchers of this problem do not make the methodical mistake, they make a methodological mistake, because they carry out substrate investigations. It is possible that such investigations are efficient in the course of investigation of organic pathology, but they cannot produce an effect (in principle) within the sphere of the endogenic and procedural pathology. It is necessary to study ethiopathogenetic mechanisms of schizophrenia from the position of the information processing theory, introduction of the diagnostic standards to the clinical protocols along with utilisation of the experimental and psychological methods, which make it possible to provide evidences that are required for fixation of the specific schizophrenic interruptions of thinking. In addition, a systemic principle of the therapeutical competency must be introduced into the standard of the schizophrenia therapy. Actual models and organisational forms must be developed on the basis of the multidisciplinary approach in the form of medical/scientific/training centres. Solution of these problems does not make it possible to solve all problems that are connected with schizophrenia, however, it would be possible to ensure essential harmonisation and optimisation of diagnostics, treatment, and psychosocial rehabilitation of many patients, who have dissociations of psychology and behaviour.

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СУЧАСНІ ТЕОРІЇ ВИНИКНЕННЯ ШИЗОФРЕНІЇ ТА ПРОБЛЕМИ ЇЇ ДІАГНОСТИКИ

Анотація

Наведені результати досліджень сучасного стану проблеми шизофренії в рамках психіатрії. Показані причини теоретичної, клініко-діагностичної, інтерпретаційної диссонантності в галузі проблеми шизофренії, аналізуються причини нозологічної дискваліфікації шизофренії та закріплення уявлень про існування «груп шизофреній». Розглянуті причини превалювання психофармакологічних методів терапії шизофренії та явищ загальної терапевтичної стагнації.

Ключові слова: шизофренія, діагностика, психотерапія.

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СОВРЕМЕННЫЕ ТЕОРИИ ВОЗНИКНОВЕНИЯ ШИЗОФРЕНИИ И ПРОБЛЕМЫ ЕЕ ДИАГНОСТИКИ

Аннотация

Приводятся результаты исследований современного состояния проблемы шизофрении в рамках психиатрии. Показаны причины теоретической, клинико-диагностической, интерпретационной диссонантности в области проблемы шизофрении, анализируются причины нозологической дисквалификации шизофрении и укрепления представлений о существовании «группы шизофрений». Рассмотрены причины превалирования психофармакологических методов терапии шизофрении и явления общей терапевтической стагнации.

Ключевые слова: шизофрения, диагностика, психотерапия.