

Psychosis: Impaired perception of reality

Psicosis: percepción alterada de la realidad

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SUMMARY

*The comorbidity of psychosis eliminates the patient's chances of social interaction and adversely affects their ability to work. **Objective:** The purpose of this study is to diagnose disorders of neurocognitive functions in endogenous psychosis. **Methods:** The leading method for achieving the goal was the clinical-psychopathological method. An experiment and neurophysiological methods were used as additional methods. **Results:** As a result of this study, the etiology of endogenous psychoses was analyzed, which is characterized by the presence of delusional ideas, hallucinations, and disorganization of thinking, speech, and behavior. **Conclusion:** It is proven that such patients have emotional impoverishment and autism phenomena. It has been demonstrated that in endogenous psychoses, pathopersonological transformations have signs of multidirectional*

tendencies toward compensatory stress of personal resources.

Keywords: psychotic disorder, mental illnesses, cognitive impairment, impaired consciousness, schizophrenia, delusions.

RESUMEN

*La comorbilidad de la psicosis elimina las posibilidades de interacción social del paciente y afecta negativamente a su capacidad laboral. **Objetivo:** El propósito de este estudio es diagnosticar trastornos de las funciones neurocognitivas en la psicosis endógena. **Métodos:** El método principal para alcanzar el objetivo fue el método clínico-psicopatológico. Como métodos adicionales se utilizaron experimentos y métodos neurofisiológicos. **Resultados:** Como resultado de este estudio se analizó la etiología de la psicosis endógena, que se caracteriza por la presencia de ideas delirantes, alucinaciones y desorganización del pensamiento, el habla y el comportamiento. **Conclusiones:** Se comprueba que dichos pacientes presentan fenómenos de empobrecimiento emocional y autismo. Se comprueba que en las psicosis endógenas hay transformaciones patopersonológicas que tienen signos de tendencias multidireccionales de tensión compensatoria de los recursos personales.*

Palabras clave: Trastorno psicótico, enfermedades clínicas, deterioro cognitivo, alteración de la conciencia, esquizofrenia, pérdida de realidad.

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INTRODUCTION

Any mental disorder is characterized by certain syndromes that change, manifesting themselves in a particular clinical disease. A modern approach to diagnosing mental pathologies allows for determining the nosological form inherent in a specific disease with high probability. Psychosis is characterized by severe disintegration of the psyche, inconsistency of mental reactions with the actual situation, the presence of delusions or hallucinations, a lack of criticism, and the ability to control one's behavior arbitrarily; it makes it impossible to give an adequate assessment of reality and one's actions and awareness of the patient's behavior (1). Consequently, the examination of the dynamics of the mental status of psychosis is of exceptional importance for assessing the effectiveness of treatment and rehabilitation measures and analyzing the progression of the disease, so the subject of this study is highly relevant.

In the paper by Fox (2), it is noted that the attitude towards the mentally ill in Ukraine was much more humane than in the United States, Great Britain, Austria, and France. In the past, people with mental diseases in the US have had to endure appalling circumstances in overcrowded, understaffed psychiatric facilities, where there have been allegations of patient abuse, neglect, and inadequate treatment. For instance, Willowbrook State School in New York was well-known for its horrendous living circumstances and maltreatment of students who had intellectual disabilities. Poor care standards beset the asylum system in the United Kingdom, where several facilities routinely used lobotomies, seclusion, and restraints as "treatments." Austria has also faced criticism for its previous treatment of mentally ill people, particularly the Nazi-era compulsory sterilization program. In the same way, France came under criticism for its mental institutions' poor standards and denial of patient rights. Reports of overcrowding, filthy surroundings, and limited access to therapy and rehabilitation programs were made. These examples demonstrate the widespread and persistent issues of inhumane practices towards individuals struggling with mental health challenges across these countries.

Until the middle of the 17th century, people with mental illnesses in Ukraine were also considered possessed by the devil, an "epidemic of witches." Although they were called "crazy" and "holy fools," they were not harmed in any way. The first psychiatric hospital was opened in Kharkiv in 1796 to isolate the mentally ill from society. Mental disorders began to be treated as diseases in 1834, and patients received care that included occupational therapy. The scientific approach to the treatment of mental illnesses in Ukraine started in the middle of the 19th century.

The state and dynamics of cognitive processes, features of emotional responses, and characteristics of voluntary processes are essential components determining individual behavior patterns in society. Based on the results of the study conducted by Drori et al. (3), the functional deficiency of these components in endogenous psychosis is a leading factor in the formation of social maladaptation, even in the case of long-term remission. According to Salomon et al. (4), the pathology of sensory cognition (the sphere of perception) plays a leading role in the formation of the clinical picture of psychosis. It is with sensations and perceptions that knowledge of the surrounding reality begins. Energy entering the analyzer is transformed from physical to physiological. In patients with psychosis, there is a violation of the processes of perception, namely, the curvature of real objects and phenomena. Illusions result from a distorted perception of the surrounding reality due to an external stimulus or illness. Hallucinations are a disorder of perception that violates regular mental activity: the patient feels an object without its real existence.

In turn, Faivre et al. (5) note that patients with psychosis have a violation of consciousness that manifests itself in a complete or partial disruption of orientation in their own personality, time, place, space, and environment; patients are not aware of events occurring around them and therefore are not able to establish contact with others; memory and thinking are fragmented, inconsistent, and incoherent. Modern studies of mental illnesses show that the etiology of some diseases is complex to determine by the same nosological unit. For example, symptoms of psychosis, such as impaired consciousness, perception, memory and thinking, adequacy of emotions, and behavior,

have different dynamics and end states (6). Therefore, in Austria, Germany, the United States, and the United Kingdom, national options for classifying symptoms are being created to establish a particular diagnosis. These options may include various clinical manifestations, such as the peculiarities of the disease course, treatment response, or differences in the detection and diagnosis of diseases in a particular country or cultural environment.

The purpose of this study is to demonstrate that differential diagnosis of mental illnesses serves to conduct timely preventive treatment, which substantially improves the condition of patients with psychosis and prevents the progression of the disease.

MATERIALS AND METHODS

While investigating the cognitive abilities of patients with psychosis, the following theoretical research methods were used: analysis, synthesis, and generalization. A clinical and psychopathological method was used during the study's empirical part. This method combines generally accepted principles in medicine and the main features of the psychopathological method: a conversation is conducted with the patient, and their facial expression and behavior are monitored. The psychodiagnostic examination was performed using a complex of neurocognitive techniques developed by Khomitsky (7), grouped to assess the cognitive functions of patients with psychosis, and the standardized method of personality research (SMPR) (8).

The clinical and catamnestic method was also used, during which the anamnesis of the course of the disease from outpatient patient records was analyzed in detail. Because psychiatry is closely related to medicine, much attention was paid to laboratory tests of biological fluids for a comprehensive examination of mentally ill people: a general analysis of blood, urine, and cerebrospinal fluid, the indicators of which were also reflected in the patient's medical documentation. The study included 108 patients diagnosed with psychosis who were admitted to the inpatient department at the Regional Clinical

Psychiatric Hospital of the Zaporizhzhia Regional Council. The average age of patients is 39 years, 60 women and 48 men; the disease lasts from 2 to 32 years, and on average, the first symptoms of psychosis in all patients began to appear at the age of 25 years. The group was made up of patients with severe somatic diseases and those who abused psychoactive substances. After signing the written consent for the examination, the psychodiagnostic stage of the study was initiated.

The collection of experimental data continued for a year in several stages: after a clinical conversation, during which behavioral responses were recorded using testing on the scales "Communication," "Cooperativeness," and "Effort," where one represents extreme severity/absence, and 4 represents the behavior of a healthy person (7). Patients were also offered several diagnostic techniques aimed at assessing the cognitive processes of patients with psychosis. The examination of emotional reactions took place through proposed photographs and plot pictures. The assessment of visual gnosis was conducted using a technique with contour images and real objects, with the presentation of different colors, faces, letters, and numbers. The analysis of somatosensory gnosis was conducted using samples of the cognition of objects by touch. Acoustic gnosis was diagnosed by recognizing melodies when the sound source was localized and repeating rhythms. The optic-spatial gnosis was evaluated by following the instructions when establishing posture, coordinating movements, copying object actions, and assessing the adequacy of symbolic movements. Language examination occurs through conversation, repetition of sounds and words, naming objects, understanding speech and words, and logical and grammatical constructions. Auditory speech and visual memory were assessed using tests for memorizing words, pictures, and texts. Writing and reading were tested using proofreading texts with letters, correctly spelled words and errors, meaningful phrases, and those that do not make sense. The evaluation of intellectual processes took place through tests for understanding stories, solving problems, correct endings of words, understanding analogies and opposites, figurative and generalized meaning, and the ability to classify.

Qualitative analysis of the results for each test was conducted according to the recommendations proposed by Khomitsky (7), and a conclusion was made about the presence and severity of signs of cognitive disorders in patients with psychosis: mild, moderate, and severe. Special sensitized conditions were applied to patients, allowing them to perform the examination procedure better and expand the range of measurement procedures. For example, the pace of stimuli and instructions was accelerated, the volume of stimulus material or its presentation in a “noisy” form increased, quantitative criteria for performing tests were increased, diagnostic coefficients and age norms were introduced, and methodological principles were justified that contribute to the development of new research tools, including the use of experimental equipment. The next step was to examine the structure and typology of pathopsychological transformations of personality under the influence of mental illness.

RESULTS

The investigation of the clinical aspect of endogenous psychoses, their dynamics, and nonspecific differences is a determining factor in the formation of a system of psychotherapeutic and social rehabilitation interventions. Today, the possibilities of diagnosing psychosis with modern methods have improved, which has allowed us to examine the problem of cognitive and emotional disorders in psychosis in a different way, which will enable the creation of a comprehensive program of medical and psychological rehabilitation and treatment for mentally ill people. Assessment of the state of general somatic disorders in mentally ill people is also critical. A comparison of general somatic diseases and mental disorders will allow for obtaining a complete picture of mental illness since several somatic diseases are involved in the occurrence of mental illness and vice versa. Somatic pathology in psychoses has erased manifestations, and patients in a psychotic state are not able to accurately state their complaints. Thus, the determination of psychopathological signs of somatic diseases is an informative factor that further affects the results of the psychodiagnostic examination. Patients in

this study have such somatic diseases as heart failure, gastroenterological diseases, high blood pressure, and cirrhosis of the liver. These somatic diseases did not have a remarkable impact on the development of psychosis but were a consequence of the patient’s mental state. Available methods for diagnosing the cognitive sphere of patients with psychosis are aimed at investigating the level of arbitrary, conscious, speech-mediated performance of mental functions.

Table 1 shows the indicators of impaired performance of neuropsychological tests in patients with endogenous psychosis.

According to the results obtained, the examined patients showed signs of neurocognitive deficiency of various structures and severity. All indicators have a mild to moderate degree of cognitive impairment. Severe disorders are isolated and account for no more than 9 % of all cases of neurocognitive deficiency. Thus, the most pronounced indicators of decreased neurocognitive signs are short-term auditory-speech memory and understanding of logical-grammatical and phonotematic analysis. The most significant indicator of neurocognitive deficits was established when investigating the thinking process using plots and sequential images. In 69 patients, the degree of thinking disorders corresponds to the average and pronounced level of pathology.

According to the scales “Communication,” “Cooperativeness,” and “Effort,” the motivational component of cognitive activity was determined, and the features of social interaction modes were identified. The quality of indicators on the “Communication” scale was reduced in 55.6 % of patients, and the leading mechanism for facilitating this indicator was emotional impoverishment and autism phenomena. The corresponding number of patients had reduced indicators on the “Cooperativeness” and the “Effort” scales, indicating poor-quality social interaction modes. Patients were asked questions during the clinical conversation in direct and non-direct forms to determine their ability to navigate space, time, and the environment. The main purpose of such a conversation is to assess the state of consciousness, determining the degree of clarity that indicates the ease or severity of perception of reality. The degree of

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Table 1. Results of diagnostic examination using a complex of neurocognitive techniques.

Neurocognitive functions	Average score	% of subjects
Expressive speech		
Spontaneous and dialogical speech	17	15.7
Automated speech	22	20.4
Reflected speech (repetition)	52	48.1
Short-term hearing and speech memory	69	63.9
Understanding speech and verbal meanings		
Understanding situational speech and words	40	37
Understanding logical and grammatical structures	54	50
Phonothematic analysis	41	38
Writing		
Copying, composing words, writing under dictation, and independently	20	18.5
Reading		
Reading out loud and silent reading	33	30.6
Counting		
Automated arithmetic, written counting, solving simple problems	36	33.3
Praxis		
Ideatory and ideomotor	21	19.4
Constructive	58	53.7
Dynamic	60	55.6
Oral	18	16.7
Perception of noises, rhythms, and melodies		
Recognizing sounds, melodies, and playing rhythms	46	42.6
Body Diagram		
Left-right orientation	50	46.3
Finger gnosis	44	40.7
Orientation in space		
Spatial ratio of a part of the world, the “blind dial” of the watch	41	38
Stereognosis		
Tactile object recognition	15	13.9
Visual gnosis		
Visual imagination	26	24.1
Subject visual gnosis	37	34.3
Gnosis of faces	64	59.3
Short-term visual memory	41	38
Plot and sequential pictures		
Thinking	69	63.9

Source: compiled by the author based on (7).

understanding of the patient’s disease also affects the experience of the internal picture of the disease and the specific features of psychotherapy treatment. Given that patients with psychosis have disorientation in space, hallucinations, and delusional ideas, the behavior is not predictable. In this case, it can be concluded that such patients have a disorder of consciousness, a simultaneous or sequential decrease in the ability to reflect the

surrounding reality. With a concurrent reduction in reflection, the volume and depth of all mental activity disappear. The ability to reflect objective reality through consciousness covers mental processes and past and present experiences. Still, in patients with psychosis, the ability to engage in cognitive activity decreases, and there is a violation of all cognitive processes and the emotional-volitional sphere.

That is why, in this study, much attention was paid to the examination of the neurocognitive functions of patients with psychosis. During the diagnostic examination in this study, 100 % of patients had mild to moderate (suppressed conditioned reflex activity of the body) levels of impaired consciousness. Patients with a severe degree of impaired consciousness, in which the unconditional reflex functions of the body are impaired, were not identified. During the clinical conversation, patients' complaints about pain in the body were recorded because the second signal system processes pain sensations. The lesion's nature and location indicate the individual's socio-moral attitudes and the conscious and organized nature of their behavior. The feeling of discomfort in the body is regulated by an individual system of psychological parameters of the sensory organization of the body, namely, sensory analyzers, from which impulses are sent to the brain. As it was established during the diagnostic examination and observation during the conversation, patients do not receive enough stimuli due to the pathology of a mental illness and live in conditions of sensory isolation; that is, these patients, under the influence of psychotraumatic factors, plunge into oblivion and do not remember some periods from their lives.

Reflection of the surrounding world is a complex process in which both sensations and perceptions participate. Evidence of impaired perception in patients in this study is shown due to reduced indicators of neurocognitive functions (Table 1). A meager image of past events described during a clinical conversation indicates a low level of representation. In addition, patients who took part in the study had a self-awareness disorder that manifests itself in a lack of contact with the surrounding reality; empathy disappears, and a person does not feel emotional and intellectual impoverishment. The patient loses their identity and the integrity of their "Me" and cannot oppose themselves to the outside world. Memories of the past disappear or become fragmented and unrelated to today's events. Thus, this study determined that the state and dynamics of neurocognitive processes, combined with the features of emotional response and characteristics of volitional processes, are important components that determine individual behavior patterns in society. Therefore,

neurocognitive disorders in endogenous psychoses were considered a component of pathopersonological transformations in this study. A comprehensive analysis of the clinical manifestations of the structure and nonspecific differences of pathopersonological transformations in psychoses was conducted using the standardized method of personality research (SMPR) (8).

The results of the examination using this method indicate the existing loci of compensatory stress in the individual under the influence of mental illness (Table 2).

Table 2. Quantitative characteristics of personal profiles.

SMPR scales	Severity, T-points
L (insincerity)	48.72
F (unreliability)	63.18
K (corrections)	53.47
1 (over-control)	61.34
2 (depression)	72.37
3 (emotional lability)	61.31
4 (impulsivity)	69.47
5 (masculinity/femininity)	60.73
6 (rigidity)	64.23
7 (anxiety)	66.59
8 (individualism)	71.73
9 (optimism and activity)	60.48
0 (social introversion)	61.28

Source: compiled by the author.

According to the results indicators on the L, F, and K scales indicate the absence of attempts to make a better impression during the examination and indicate a stressful state, excitement, and internal tension caused by the course of the disease. In addition, evidence of the patient's unwillingness to deny the presence of a problem and sensitivity to the assessment of personal and behavioral traits is on the part of the researcher. The analysis performed on nine main assessment scales indicates the following characteristics of the individual profile of patients with psychosis:

1. Alertness, suspiciousness, and anxiety about their health.
2. Indicators of T-points on the scale of "Depression" indicate a tendency toward a groundless appearance of a sense of internal tension and dissatisfaction with one's "Me" and position in society, which causes a desire to avoid social contact. As a result of this tension, intellectual and creative abilities are limited.
3. On the "Emotional lability and demonstrativeness scale," some patients desire to involve others in their problems and impress them. Indicators on the scale of "Impulsivity" indicate existing problems with regulating emotions and implementing actions that violate social norms.
4. Indicators on the scale "Masculinity-femininity" indicate that among the experiment participants, there is no tendency to deviate from the role behavior of their gender, which is a possible complication of sexual interpersonal adaptation.
5. T-score indicators on the "Rigidity" scale indicate distrust of their decisions, conformity, and hostility towards others.
6. On the "Anxiety" scale, T-scores reflect increased levels of anxiety with an "avoidance" strategy and a tendency toward co-dependent relationships.
7. Indicators on the scale of "Individualism" indicate the subjectivity of life views, even in meeting their basic needs.
8. Indicators on the "Optimism and activity" scale reflect intentions and aspirations for social activity. Still, they do not move on to implementing socially active behavior.
9. This is confirmed by indicators on the "Social introversion" scale, which reflect a tendency to reduce social needs and the desire to distance themselves socially.

Consequently, in the personal profile of patients with psychosis, persistent signs of nonspecific differences in pathopersonological transformations are noted. In the anamnesis of each patient, there are signs of multidirectional

trends in the compensatory stress of personal resources. The increased scales of both the hyposthenic and hypersthenic registers confirm this. Thus, a violation of the perception of reality in psychosis occurs by a progressive decrease in the work of neurocognitive functions of the psyche. The incoherence of the insane state of patients with psychosis increases due to the rise in the level of ambivalence, the appearance of pathological symbolism, and the contamination of concepts, which, as a result, reaches total subjectivism. With such a mental illness, there is a violation of cognitive activity (processes of perception, attention, representations, thinking, and memory). All these processes involve analyzing and synthesizing a complex of sensations, considering previous experience. However, the reflection of objects and phenomena of the surrounding reality during traumatic events that affect the senses changes the biochemical state of neurocognitive functions, which leads to the impoverishment of brain activity and avoidance of reality. The difficulty of treating this condition lies in false judgments of painful origin. As long as this condition lasts, as expressed by the corresponding aspirations and behavior of the patient, the correction process is impossible. Therefore, the examination of the neurocognitive functions of patients with psychosis will become a determining factor in the formation of a system of timely psychotherapeutic and social rehabilitation interventions.

DISCUSSION

Given the substantial amount of research in the examination of psychosis, researchers do not have a clear answer about the cause of this mental illness. However, it is necessary to note progress in determining the mechanism of pathology development, which consists of a complex violation of the work of brain cells. Riches et al. (9) proved that disorders initially relate to the abnormal functioning of mitochondria, which are responsible for cell respiration. In a patient with psychosis, the mitochondria do not produce enough adenosine triphosphoric acid (ATP) molecules, provoking oxygen deficiency in the cells. The current research validates the researchers' conclusions.

However, it offers a more thorough analysis of the neurocognitive deficiencies connected to these physiological alterations. It also looks at how these neurocognitive deficits affect psychotic patients' social functioning and personal lives.

The result of combining the efforts of researchers in brain physiology in the structure of cognitive neuroscience based on a multidisciplinary approach was the accumulation of a substantial amount of material on the cognitive processes and behavior of patients with psychosis. Some of these studies indicate that damage to neurocognitive connections in endogenous psychoses is a leading factor in the formation of social maladaptation, which manifests in a violation of the perception of reality (10). For example, when investigating the causes of acute psychotic disorder, Cavieres and López-Silva (11) state that acute psychosis occurs due to excessive dopamine activity, especially in the mesolimbic tract. Excessive dopamine production can be caused genetically or in the case of traumatic brain injuries. Evidence that psychosis is formed due to a disruption of the physiology of the brain includes cases of acute psychosis that occurred in patients with schizophrenia during the manic phase of bipolar disorder, depression, long-term lack of sleep, fatigue, and emotional burnout (12,13). That is, the stress experienced leads to a violation of dopamine metabolism and the appearance of psychotic symptoms. This study expands on the previous findings by showing how specific neurocognitive and behavioral abnormalities in patients are caused by physiological changes. It also looks at how pathophysiological changes and compensatory stress contribute to the onset and course of psychosis.

The symptoms detected in patients in this study were accompanied by a functional deficiency, which manifests in changes in behavior and character and affects neurocognitive ligaments. During observation, patients showed lethargy, apathy, a lack of empathy, and an interest in everyday affairs. The patients' thinking was stereotypical, rigid, and confused; speech was impoverished, indistinct, and sometimes illegible; and disorientation in space and time was noted. It is precisely because of the decrease in the amount of working memory and the inability to concentrate and direct their thought process

that patients' ability to work and intellectual productivity deteriorated. Such symptoms are associated with losing certain personality traits, which leads to losing contact with reality. Treatment of psychoses is quite complex, and therefore, the search for effective drugs that would affect cognitive impairment and reduce or eliminate symptoms led to the emergence of interest in the scientific community in the analysis of cognitive functions in psychoses of various etiologies (14). Thus, in the study by Hasson-Ohayon et al. (15), the effectiveness of drugs used to reduce the manifestations of neurocognitive deficiency in psychosis was proved, namely, nootropics, acetylcholinesterase inhibitors, and antidepressants are prescribed. The positive effects of cognitive-social training and neurocognitive training using virtual reality have also been demonstrated. Although the current study supports the findings of the scholars, it offers a more thorough examination of the particular neurocognitive processes compromised in psychosis and how these connect to the social and personal functioning of patients.

Confirmation that psychosis is formed due to dystrophic changes in the nervous tissue is the result of the study by Haut et al. (16) on exogenous psychoses. In exogenous psychoses, the cytosol index in the cerebrospinal fluid is 20-300 cells; the moderate protein content is 0.5-1 g/L, globulin reactions are positive, colloidal reactions change their nature of action, and pressure in the cerebrospinal fluid increases. That is, diseases of organic or psychogenic origin change the biological functions of the brain at the cellular level, which in turn change the nature of cognitive functions of the psyche, which can lead to a disruption of the perception of reality in the form of illusions, hallucinations, delusional ideas, and sensory pathologies. In this study, in the anamnesis of some patients, cases of delusional ideas were noted (false conclusions that completely took over the patient's consciousness).

An example of the fact that psychoses are characterized by confusion of consciousness is the study conducted by Montag et al. (17) on acute vascular psychosis. Unlike psychoses of other origins, the dynamics of acute vascular psychoses are characterized by frequent changes in various syndromes of confusion. In this state, a person often has a state of professional

delirium; the patient reproduces movements accustomed to professional actions or oneiroid, a state of change in consciousness under the influence of fantastic experiences with a complete plot (18). Such conditions most often occur at night and have stereotypical repetition. Acute vascular psychoses can be a transitional state to the underlying disease, or they can occur independently. This condition causes significant difficulties in diagnosis since such patients are reluctant to contact others, treating them with hostility and distrust and ignoring social rules. The findings of this study, which used the SMPR approach to diagnose a decline in the quality of rapport between the patient and the researcher, support this.

Particular difficulties arise in the diagnosis of delusional and depressive psychoses because these conditions must be differentiated from endogenous or endoform psychoses of another genesis (19). For example, in endoform psychoses of vascular origin, in some cases, the psychoorganic nature of the origin of psychosis is clearly traced. Still, the rest of the instances of endoform psychoses are challenging to distinguish from psychoses of endogenous origin. In both cases of these psychoses, the cause of the disease's development may be heredity (the accumulation of schizoid personalities in the patient's family) (20,21). Still, they differ only in the premorbid features of psychosis. Thus, with prolonged endoform psychoses, paranoid states occur with a delirium plot, which is usually haphazard. Patients most often have an unstable emotional state and chronic verbal hallucinosis, which is mostly threatening (22). Endogenous psychoses differ only in the appearance of automatism. Therefore, a thorough differential diagnostic examination is required for the nosological delineation of these disorders, and this work has demonstrated the efficacy of such an examination.

The etiology and pathogenesis of manic-depressive psychosis are not fully understood. Some studies indicate that in 27 % of cases, patients with bipolar disorder have a risk of developing the disease, and 50 %-70 % have a risk of developing psychosis if two parents have mental illnesses of different etiologies (23,24). In turn,

Mysula and Venger (25) explain the mechanism of the development of manic-depressive psychosis through the pathology of the thalamic-hypothalamic zones of the midbrain, which are responsible for the work of the autonomic apparatus and play a vital role in affective manifestations. This goes along with the current study, which also extends it by examining the neurocognitive and personal profile implications of these physiological changes in patients with psychosis. Unlike the researchers, the current research does not exclusively focus on manic-depressive psychosis but rather encompasses a broader range of psychotic disorders. González-Rodríguez and Seeman (26) call the most characteristic manifestations of manic-depressive psychosis such symptoms as heart palpitations or cardiac irregularities, enlarged pupils, diabetes mellitus, gastrointestinal disorders, weight loss, and dehydration. In addition, all these changes are associated with increased excitability in the hypothalamic region. However, the key to the pathogenesis of this disease is a disruption of transmission between synapses of neurons in parts of the brain due to changes in the activity of neurotransmitters (27). Depressive states in this disease are associated with a functional deficiency of catecholamine neurotransmitters at specific synapses, while manic states are associated with a functional excess of these amines.

Acute and prolonged psychoses are observed in almost 30 % of patients with mental illnesses (28). A feature of acute psychoses is the confusion of consciousness, which is formed after convulsive attacks and is accompanied by emotional tension and aggression. The course of this condition is accompanied by emotional experiences: fear, horror, delight, and a vivid sensory delirium with verbal hallucinations may appear. After 12-14 years of this condition without treatment, prolonged psychoses occur, which are characterized by a decrease in the frequency of attacks of confusion because a person lives in isolation from reality for the vast majority of the time. Often, this condition is accompanied by somatic diseases, and treatment will continue until the end of life. These studies once again prove the fact that the diagnosis of neurocognitive functions is essential in determining the diagnosis of "psychosis," its treatment, and prevention.

CONCLUSIONS

This study highlights how crucial a thorough neuropsychological evaluation is to correctly diagnose and comprehend the types of cognitive impairments present in psychotic patients. The findings show that various neurocognitive deficits exist in individuals with endogenous psychoses, especially in auditory-speech memory, language comprehension, emotional processing, and higher-order cognitive processes, including abstract thought and problem-solving. These deficiencies seem to be a central aspect of the disease, adding to the typical disarray of perception, thinking, and behavior associated with psychosis. Notably, the research also emphasizes how behavioral, affective, and cognitive abnormalities in psychosis are interrelated. Patients showed deficiencies in social cognition, emotional expressiveness, personality traits, and fundamental perceptual and cognitive processes. This emphasizes the necessity of treating psychotic diseases with a multifaceted, biopsychosocial approach. These patients' social maladaptation and trouble upholding meaningful relationships and roles in society are probably caused in part by the disintegration of cognitive, emotional, and interpersonal functioning that has been documented in them.

The thorough neurocognitive and psychopathological feature profiling conducted in this study can direct the creation of individualized rehabilitation and psychotherapy plans for individuals who have psychosis. Improving the quality of life, long-term prognosis, and social functioning may be made more accessible by focusing on the particular cognitive, emotional, and behavioral impairments found. To address the complex nature of the disorder, social skills training, and emotion management techniques could be combined with cognitive remediation therapies, which try to improve memory, attention, and problem-solving abilities. To improve evaluation techniques and investigate the underlying neurobiological mechanisms that connect cognitive deficiencies to the clinical phenomenology of psychosis, more study is required.

In conclusion, this study reinforces the value of comprehensive neuropsychological evaluation as

a critical component in the differential diagnosis and personalized management of endogenous psychotic disorders. By elucidating the complex neurocognitive profile of psychosis, clinicians can better understand the illness and develop more effective, holistic treatment approaches that address the diverse symptomatic manifestations and functional impairments experienced by these patients.

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