KAZAN FEDERAL UNIVERSITY

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DIAGNOSTIC METHODS IN PSYCHIATRY

Handbook

Kazan

2022

UDC 616.89
G75

Recommended for publication
Educational and Methodological Commission
Institute of Fundamental Medicine and Biology of KFU
(Protocol No. 6 of 18.05.2022)
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G75 Diagnostic methods in psychiatry. Handbook / Granitsa A.S., Kalimullin, P.G.Karina Y.V. / - Kazan: Kazan un-ty, 2022. - Educational and methodical manual. - 39 p.

This handbook discusses the main diagnostic methods in psychiatry, the principles of constructing a psychiatric diagnosis and the stages of diagnosing mental disorders. It is intended for students and residents of medical, psychological and pedagogical areas of training.

UDC 616.89

Preface

Since one of the priorities and fast developing approaches of Kazan Federal University nowadays is international sector – both – education of international students in English as well as international scientific partnership, we realized the necessity of having different educational and methodical manuals and handbooks of our teaching staff also in English language. This will help in the educational process of international students giving them in brief main terms, definitions and theoretical foundations on particular subject and also can enrich their understanding of the subject by review of Russian scientific studies and developments.

This handbook was first published in theInstitute of Fundamental Medicine and Biology of Kazan Federal University in Russian language in 2019 and got good feedback of both – our colleagues (Recommendation for publication was given by Educational and Methodological Commission of the Institute of Fundamental Medicine and Biology of KFU(Protocol No. 1 of 5.09.2019) Reviewer was Head of the Department of Psychiatry and Medical Psychology Kazan State Medical University,Doctor of Medical Sciences, Professor Mendelevich V.D.) who gave their professional evaluationand students who used it as an educational manual. So we decided to enrich studying process of international students by this handbook too.

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INTRODUCTION

Understanding the basics of psychiatry is necessary for doctors of various specialties, since the overwhelming number of patients initially visit not psychiatrists, but, for example, physicians or other narrowly focused specialists. At the same time, the prevalence of mental disorders, according to various estimates, puts them in the top five most common diseases and in the first place for causes of disability of patients. In addition, many symptoms of mental illness may be similar to those diseases that occur in general somatic practice. There is a wide variety of pathologies that future general practitioners will encounter most often: borderline, or minor, psychiatry (neuroses, personality disorders and transitional states), somatogenic mental disorders, mental disorders with general and brain infections, alcohol disorders of various levels, drug addiction, substance abuse, oligophrenia. A number of diseases relate to interdisciplinary problems with neurology, medical genetics, infectious diseases and others. And finally, patients with mental disorders may also suffer from concomitant somatic diseases, when providing this medical assistance, it will be necessary to take into account features of this group of comorbid patients. Thus, despite the specifics of psychiatry as a clinical discipline, a broad understanding of mental disorders, their clinical manifestations and principles of therapy is important for the general education of a student of a higher educational institution of a medical profile [7].

At the same time, psychiatry is a unique medical discipline, because along with the methods of patient's examination habitual to medical students: anamnestic, physical, instrumental, laboratory, examination, survey, - psychodiagnostics has great importance in psychiatry [4-7]. Another feature is the shift in emphasis on the study of the patient's anamnesis and interviewing during diagnosis, and lesser importance of physical, instrumental and laboratory methods. All of the above explains the relevance of a separate discussion of diagnostic methods in psychiatry.

The leading diagnostic methods in psychiatry are: clinical-anamnestic (anamnesis - study of family and social history), clinical-psychopathological (study

of the mental status of the patient), experimental-psychological (application of methods of psychodiagnostics) [2, 4-7]. Additional examination methods habitual for somatic medicine are used: laboratory (blood tests and tests of other physiological fluids), instrumental (electroencephalography, X-ray diagnostics, magnetic resonance imaging, etc.). A description of additional examination methods and the possibilities of their application in psychiatry can be obtained from the relevant literature. In this handbook we focus on three main methods that are unique to psychiatry as a medical discipline and often have the greatest difficulties – anamnesis, clinical interviewing and psychodiagnostics.

CHAPTER 1. ANAMNESIS

Anamnesis is a set of information obtained during a medical examination by questioning the patient and/or persons who know him [2,7].

Gathering anamnesis in psychiatry differs from other medical disciplines because it's necessary to separate objective (collected on the basis of the words of other people, medical and other documentation) and subjective (collected from the words of the patient) anamnesis. Mostly this is due to the frequent tendency of patients with mental disorders to simulations and dissimulations, distortions of cognitive processes, which leads to wrong presentation of the patient's history. So, for example, if the patient wants to avoid treatment, he can hide his actions, forget about them or report something that did not happen in reality. Therefore, for diagnosis in psychiatry, it is important to objectify the information received from the patient as much as possible through communication with relatives, clarifying facts and the sequence of events. During the examination, it is recommended to indicate separately the information received from the patient (subjective anamnesis) and other sources with its indication. On the other hand, the study of the life history and the history of the disease may have the key importance in cases when it is impossible to collect information from the patient – in cases of confusion, stupor, gross decrease in intelligence, pronounced negativism and other conditions. In addition, often after studying the patient's anamnesis it is possible to guess what kind of mental disorder can be diagnosed in this case.

Anamnestic information is divided into the following parts:

1. Anamnesis of life (life history). This section lists the main stages of the patient's life, starting with the peculiarities of pregnancy. Following sections of the life history are important for psychiatric diagnosis:

* Features of pregnancy.

* Features of the course of childbirth. Complicated pregnancy as well as complicated and premature birth can lead to brain damage, which may be important for the diagnosis of organic mental disorders, epilepsy or mental retardation.

* Early and preschool development: the timing and features of the stages of early development (when patient started talking, walking, showed social interest, visiting preschool institutions, etc.). Changes in the timing of development may reflect the presence of organic mental disorders, mental retardation, autistic and schizophrenic spectrum disorders. Qualitative features of reactions and behavior in this period may also be important: openness, characteristics of play activity, the presence of children's fears and fantasies, features of speech, etc.

* School period: the timing of admission to school, the nature of academic performance, social contact with peers, physiological changes. Difficulties in completing school assignments and delayed physical development may indicate a wide range of organic mental disorders, mental retardation, and occur with autistic and schizophrenic spectrum disorders. Impaired social contact may indicate autistic and schizophrenic spectrum disorders, personality and emotional disorders.

* The next part describes the features of the mature period: education, hobbies, social contact, work, military service, menopause, pregnancy, driving, criminal record. It’s necessary to study education, work, military service, driving a carbecause during these types of activities thepsychiatristexamination is carried out, which may indicate the timing of the onset of the disease. Some mental disorders may be closely related to physiological processes: pregnancy, menopause and menstruation (for example, postpartum depression). The presence of criminal records, frequent work or study shiftshappen in case of personality disorders, and may indicate the date of the onset of mental disorder (for example, these areas of activity were not violated before the illness).

In this section we can also describe the character of the patient (from his own or his relatives’ words) – in order to trace the dynamics anditsconnection with a mental disorder.

2. Allergic history and the presence of side effects of drugs. It is equally important for all medical disciplines, since the appointment of medications is associated with the risk of adverse reactions.

3. Heredity. In many mental disorders, the factor of heredity is extremely significant. So the risk of developing schizophrenia in siblings is expressed by 12%. This section clarifies not only specific diseases, but also the character of the closest relatives. The cause of their death (for example, with bipolar affective disorder, the risk of suicidal behavior is increased).

4. Transferred and concomitant diseases. This section is not only of general medical and organizational importance, but in some cases it can help in diagnosis and partially goes to the section anamnesis of the disease. Thus, the presence of hypertension can increase the risk of vascular dementia, traumatic brain injuries - psycho–organic syndrome.

5. Bad habits. This section may also overlap with the history of the disease (in the case of addiction syndrome or the consequences of abuse in the form of organic brain damage).

6. Anamnesis of the disease. One of the most important sections demonstrating several aspects of diagnosis: the type of disorder (for example, personality disorder), the cause (for example, the consequences of head injury), the duration of the disease, the type of course (continuous or paroxysmal), characteristic and predominant symptoms, adherence to therapy. This section separately specifies the circumstances of hospitalization or psychiatric examination: self-referral, court decision, referral from another specialist. It reflects the patient's critical attitude towards the disease. The type of disorder should be indicated in this section in cases of previous hospitalizations or visits to a psychiatrist.

The cause of a mental disorder is indicated if it is possible to trace a causal relationship between exposure and the development of a mental disorder. For example, symptoms which can be attributed to the depressive circle appeared after the loss of a significant person or relationship in the patient's life. Or the patient suffered an acute violation of cerebral circulation, and then signs of anintelligence and memory decrease and fluctuations in the emotional background appeared, which previously were not typical for the patient.

The duration of the disease is important for determining the prognosis, since change or aggravation of symptoms are typical for many long-term diseases. For example, a psycho-organic syndrome can turn into dementia.

The type of course can indicate both the disease itself (for example, bipolar affective disorder is characterized by alternating phases of mania and depression) and the prognosis - it can be assumed how quickly the symptoms will progress (for example, with a continuous type of schizophrenia).

Adherence to therapy and previously received medications, in turn, help in building treatment tactics.

CHAPTER 2. CLINICAL INTERVIEWING

The interview differs from the usual questioning since it is aimed not only at complaints of a patient, but also at identifying the hidden motives of a patient's behavior and helping him to realize the true (internal) reasons for an altered mental state. Psychological support of the patient is also considered essential for the interview [2,6].

A clinical interview is a method of obtaining information about the individual psychological properties of a personality, psychological phenomena and psychopathological symptoms and syndromes, patient's subjective opinion of the illness and the structure of the patient's problem, as well as a method of psychological influence on a patient made directly on the basis of personal contact between a psychiatrist and a patient.

Before conducting a clinical interview, it is recommended to get as much information about the patient as possible from objective sources (not from the patient). For example, from records of documentation, words of relatives and accompanying persons, - this means to collect an objective anamnesis. Information obtained in this way helps in conducting interview in several aspects:

1. It allows us to put forward hypotheses that can be tested during the interview.

2. To identify missing components that can be clarified during the interview.

3. It helps to focus attention on the most important symptoms and syndromes of the disorder that resulted from the anamnesis.

4. It helps to evaluate the patient's criticism, his tendency to simulation or dissimulation.

5. It gives a reason to start a dialogue.

The main **objectives of clinical interviewing** are:

* assessment of individual psychological characteristics of the patient;

* ranking of identified features by quality, strength and severity;

* attributing them to psychological phenomenaor to psychopathological symptoms.

The functions of the interview are: diagnostic and therapeutic. They should be carried out in parallel, since only their combination can lead to the desired result for the professional (psychiatrist or psychologist) — the recovery and rehabilitation of the patient.

Patients often cannot accurately describe their condition and formulate complaints and problems. That is why the ability to listen to the presentation of a patient's problems is just a part of the interview, the second is the ability to tactfully help him formulate his problem, to let him understand the origins of psychological discomfort - to crystallize the problem.

The principles of a clinical interview are: unambiguity and accuracy, accessibility of question formulations, consistency (algorithmization), adequacy and verifiability of the information received, flexibility, impartiality (objectivity) of the survey.

The principle of unambiguity and accuracy in the framework of a clinical interview is understood as the correct and accurate formulation of questions. An example of ambiguity can be such a question addressed to the patient: "Are you experiencing a mental impact on yourself?" An affirmative answer to this question does not give the diagnostician practically anything, since it can be interpreted in a variety of ways. The patient could mean by "impact" both ordinary human experiences, events, people around him, and, for example, "energy vampirism", the impact of aliens, etc. This question is inaccurate and ambiguous, therefore, it is uninformative and superfluous.

The principle of accessibility is based on several parameters: linguistic, educational, cultural, national, ethnic and other factors. The speech addressed to the patient should be understandable to him and coincide with his speech practice based on a variety of traditions. The diagnostician's question: "Do you have hallucinations?" it may be misunderstood by a patientwho hearssuch a scientific termfor the first time. On the other hand, if a patient is asked if he hears voices, then his understanding of the word "voices" may radically differ from the doctor's understanding of the same term. Accessibility is based on an accurate assessment

by the diagnostician of the patient's status, his level of knowledge, vocabulary, subcultural characteristics, slang practice.

In medical documentation, the result of a clinical interview is the registration of the patient's mental status. **Mental status** is a description of the state of a person's psyche, including his intellectual, emotional and physiological capabilities. The mental status is descriptive and informative in nature with the reliability of a psychological (psychopathological) "portrait" and from the standpoint of clinical information (i.e. evaluation).

When reflecting the mental status, it is important to use the maximum possible number of details that allow each reader to form an image of the patient. Therefore, it is better to back up all the descriptions used by disclosing what you had in mind. For example, the mental status may describe the appearance as careless. But for one person, negligence implies a disheveled hairstyle and poorly ironed clothes, and for another – dirty, torn clothes, disheveled, greasy hair, etc. In order to avoid confusion, any characteristic should be supported by what exactly the diagnostician observed and had in mind.

Structure of mental status [2, 4-6]:

1. The state before the interview. This section indicates the available information about the patient's behavior before the direct meeting with the doctor. If this is an outpatient appointment, then how he behaved in the corridor, whether he wanted to go to a meeting, and so on. If inpatient, then you can find out their records or reports of medical staffabout how the patient spent time in the department: violated or did not violate the department's regime, whether there is aggressiveness of behavior, conflicts, how he sleeps, eats, takes medications. Knowing patient’s behavior can indicate the severity of the condition and guide the dialogue.

2. Circumstances of the interview: where the interview takes place (in the office, in the ward, etc.), the patient's motivation for the conversation (he turns to the conversation himself, comes accompanied by the staff, refuses to talk in the office, etc.). If the conversation takes place in the office, then this may indicate

compliance between the patient and the doctor, his adherence to treatment or compliance with the rules of medical care. If the conversation does not take place in the office, then this may be due to the severe somatic or mental state of the patient, his negative reaction to the regime of the department or the doctor. If the patient turns to the conversation himself, this may indicate compliance, his criticism, or the anxiety and discomfort that he is experiencing, and which he is ready to share with the doctor. Refusal to talk may be due to a lack of criticism of disease or lack of trusting relationship with the doctor.

3. Definition of clear or clouded consciousness (if necessary to differentiate of these states). If there is no doubt about the presence of a clear (not clouded) consciousness, this section can be omitted. A sign of clarity of consciousness is presence of orientation in the place (knows where he is), time (knows the current date), his own personality (knows his name, age). Another sign is contact with the surrounding reality - answers or seeks to answer the questions asked, correctly perceives the environment, can correctly name objects and surrounding people, etc. Disorientation may be associated with loss of contact with the outside world and immersion in hallucinatory and delusional experiences, which is observed in the syndromes of clouded consciousness (delirium, amentia, oneiroid, twilight clouding). Another reason may be memory disorders (amnestic disorientation). In this case, the patient retains contact with others, but cannot determine the current place, time and parts of his personality due to amnesia.

4. The presence or absence of complaints and their content. This section describes complaints that patient makes, with a primary focus on complaints of mental, behavioral or social content: mood, relationships with other people, relationships with society, etc.

5. Appearance. This section describes appearance of a patient and its compliance with age, culture, social norms, situation: the peculiarities of his clothes (cleanliness, integrity, season), hair (cleanliness, hairstyle features), makeup, etc. The appearance may be neat, well-groomed, careless, pretentious, or the patient may show complete indifference to appearance.

6. Behavior. It describes the behavioral acts of the patient: his motor activity, gestures, completed actions. The behavior can be calm, fussy, excited, ridiculous, pretentious, demonic, aggressive, auto-aggressive, mannered. Also here you can describe the features of gait, posture (free, natural, unnatural, pretentious, forced, ridiculous, monotonous, open or close), gestures (active, poor gestures).

7. Contact features. It specifies the features of interaction with the patient, his ability and desire to maintain a conversation with the doctor. Contact can be active (the patient himself addresses questions and requests, shares experiences, fully answers the doctor's questions), passive (the patient only answers the doctor's questions), formal (the patient answers yes or no); productive (conversation leads to a result), unproductive (conversation does not lead to a result). The unproductiveness of the conversation may be due to the patient's unwillingness and his hostile, oppositional or negative attitude towards the doctor. Similarly, unproductiveness may be due to the mental state of the patient: deep disorganization of thinking, a deep decrease in intelligence and memory, confusion, psychomotor agitation, attention disorders, dominance of hallucinatory experiences during a conversation, stupor. In this regard, it is worth to specify in detail both the reason for the productiveness of the contact and its unproductiveness.

8. Speech. Speech allows you to evaluate several features of patients at once: the general level of intelligence and erudition, the structure and pace of thinking, the presence of neurological symptoms, the emotional state of the patient. In some cases, patients may not answer questions asked in a normal voice, but may respond to whispered or written speech. Speech can be described by the following parameters: vocabulary and literacy (literate, agrammatic, primitive, rich, poor, with jargon and neologisms); by logical harmony (harmonious, illogical and para-logical), by internal coordination of words, phrases and syllables (coherent, incoherent); by sequence (sequential, inconsistent, with slipping, torn, schizophasia); by detail (thorough, usual), by tempo (slow, accelerated); by the number of words (voluble, talkative, brief, "speech pressure"); by dynamics

(sudden stops of speech, silencing, acceleration, slowing down, repetition – verbigerations, getting stuck). It's possible to give here the most striking examples of speech (quotes).

9. Emotional processes are evaluated through a whole group of phenomena. Emotional background (a certain dominant level of emotions during a conversation): lability (mobility), rigidity, excitability (speed and strength of occurrence), inhibition (speed and depth of extinction). Background quality: reduced, elevated, smooth (without pronounced fluctuations). Mood: good, bad, elated, satisfactory. The dominant emotion is: anger (irritation, rage, resentment), joy (gaiety, euphoria, ecstasy), sadness (longing, grief), fear (fright, horror, excitement, anxiety), interest, surprise, shame, disgust, guilt, contempt.

10. Patient's reaction to his experiences, clarifying questions from the doctor, comments, attempts at correction, humor, emotionally significant life events (talking about loved ones, traumatic situations). A decrease in emotional response can be a symptom of many mental disorders andmanifest itself as sensitivity (hypersensitivity), explosiveness (explosive with a predominance of anger), coldness (a decrease in the level of emotional reactions), ambivalence (the coexistence of opposite emotional reactions), paradoxicity (the discrepancy between the emotional reaction and the stimulus).

11. Facial expressions (facial reactions) reflect the dominant emotion during the conversation. Facial expressions can be lively, rich, poor, monotonous, expressive, "frozen", pretentious (mannered), grimacing, masked, hypomimia, amimia, etc.

12. Voice. It can also reflect an emotional background and be closely related to the emotion being experienced. The voice can be described as quiet, loud, monotonous (without changing the pitch), modulated (the ability to change the pitch is preserved), expressive, hoarse, trembling.

13. Somatic manifestations of emotions: hyperemia, pallor, increased breathing, pulse, hyperhidrosis, tremor.

14. Presence of suicidal thoughts and tendencies (whether patient denies or not, necessary to describe in detail). Since there are no reliable ways to read the patient's thoughts, the presence or absence of suicidal thoughts can only be detected through the patient's own statements. In addition, behavior observation and anamnesis can predictrisk of suicidal tendencies.

15. Presence of aggressive tendencies (whether patient denies or not, necessary to describe in detail). Aggression is a behavioral act aimed at causing physical, psychological or social harm to another person. Aggression can be accompanied by emotional experiences, but it can also be isolated. An intention to cause harm may be indicated by patient's own statements or/and observation of his behavior and his anamnesis.

16. Attention is a mental process associated with the ability to be focused on object or activity. It is characterized by: stability (duration of concentration on the same object or activity), selectivity (ability to select significant stimuli and ignore secondary ones), switchability (purposeful change of the object of concentration of attention), distribution (ability of attention to simultaneously concentrate on several objects of different nature), exhaustion (reduced ability to focus on a certain phenomenon or activity for a long time due to increased fatigue), absent-mindedness (a violation of the ability to concentrate for a long time with constant transitions from one object to another, without lingering on anything), arbitrariness (the ability to deliberately, consciously concentrate one's attention on an object).

17. Memory characterizes the ability of the patient to remember, save and reproduce the receivedinformation. In this section, it is appropriate to ask the patient about the events of the recent and distant past. According to Ribot's law, with an increasing decrease in memory, first of all, the closest memories are lost, and distant, children's, are preserved for a long time. During the conversation you can ask the patient to remember a number or a word / words and ask him to remind him after a few minutes. Here we describe the amount of memory, signs of

memory loss, paramnesia, amnesia (describe the type of disorders), or corresponds to age and level of education.

18. Intelligence is characterized by the development of abilities for successful activity. Intelligence is based on the processes of thinking and memory. For a preliminary assessment, you can ask to perform simple mental operations – to count, to a logical problem, etc. It is studied in more detail by special psychological tests. When describing intelligence, it is necessary to indicate signs of decline (in this case describe the type of violations), or safety and accordance to age group and level of education.

19. Thinking is the process of reflecting the essential properties of objects, as well as the connections between them, which leads to the appearance of ideas about objective reality. It is characterized by: pace (moderate, slow, accelerated), consistency, mobility, that is, the ability to switch from one mental task to another (or violations in the form of inertia, rigidity, stiffness, stability), harmony (purposefulness, logic), violations of harmony (slipping, discontinuity, diversity, incoherence, paralogicity, illogicality), productivity (the ability to come to a result), the ability to abstract or concreteness.

20. Presence or absence of volitional disorders and drive disorders (describe the type and nature of violations). Willpower characterizes the ability to regulate one's own behavior and mental processes and is closely related to the concepts of purpose and motive. Drives characterize activities aimed at satisfying needs. It is worth to describe if the patient is able to control his actions (activity, consistency, orderliness), or vice versa, his impulsivity or passivity; as far as he can manage his behavior to meet his needs and to what extent these needs are socially acceptable.

21. Active psychopathological products: the presence and nature of delusional symptoms, supervaluable ideas and obsessions, the presence and nature of sensation and perception disorders, or active psychopathological products are not detected. Examples of the patient's statements can be given here to characterize sensory disorders (paresthesia, senestopathy, etc.), perceptions (illusions,

hallucinations, psychosensory disorders), meaningful thinking disorders (delusional, over-valued, obsessive ideas). It is worth to describe here in as much detail as possible these disorders and concomitant behavior and changes in the dynamics of other mental processes. For example, when experiencing true hallucinations, the patient has congruent behavior (he interacts as with a real object: looking for the source of sound, looking around, trying to catch), attention is redistributed (he pays more attention to hallucinatory images and sounds), there may be an emotional reaction (vivid emotions: surprise, interest, fear, anger, joy). In the presence of meaningful thinking disorders changes in the emotional sphere may be detected, according to the context of ideas (increased fear in case of ideas of a threat to the patient), a redistribution of accents during a conversation (focus on the topic), or a tendency to avoid the conversation (in case of distrust of the doctor).

22. The dynamics of the mental state during the conversation may reflect the patient's compliance, the degree of his trust in the doctor and treatment, the presence of signs of organic brain damage (with increasing fatigue): improved contact (deterioration), increased suspicion, detachment, confusion, the appearance of delayed, slow, monosyllabic responses, malice, aggressiveness, or, conversely, greater interest, confidence, goodwill, friendliness.

23. Criticism of the disease is the patient's ability to realize the fact that he has a mental disorder, signs of its manifestation (symptoms), the influence of the disease on his life, behavior and mental processes, as well as the need for treatment. *Criticism can be active (the patient visits doctor himself/herself), passive (the patient visits doctor by another people), complete (incomplete, partial), formal.* Criticism of individual manifestations of the disease (symptoms) in the absence of criticism of the disease as a whole. Criticism of the disease in the absence of criticism of "personality changes".

24. Range of interests (breadth or limitation). Assessed: the degree of satisfaction from these activities, any changes in them, the accordance of interests to the age and education, the degree of immersion in them.

25. Plans for the future (their realism, structuring).

26. Sleep: sufficient (an objective number of hours, subjective feeling of being rested and energized after sleep), the dynamics of the number of hours of sleep, intermittent, difficulty falling asleep, early awakening, altered sleep and wakefulness, lack of sleep.

27. Appetite: sufficient (with a sense of satisfaction of hunger), objective amount of eaten food, dynamics in the amount of eaten food, reduced, increased.

28. **Brief somatic state**.

CHAPTER 3. FUNDAMENTALS OF PSYCHODIAGNOSTICS IN PSYCHIATRY

Psychodiagnostics is a theory, principles and tools for evaluating and measuring individual psychological characteristics [1,3, 6].

Concepts related to psychodiagnostics:

Psychological testing is generally an equivalent concept, which is more common in Western terminology. In a narrow sense, it refers to the procedure for establishing and measuring individual psychological differences.

Psychometry studies the theory and methodology of psychological measurements, including the measurement of knowledge, abilities, attitudes and personality qualities.

Psychological assessment is the study of individuality in relation to the problems arising in life. Collection and integration of data that can be obtained in various ways. It is a broader concept than psychometry and psychological testing.

All methods of psychodiagnostics can be divided into three categories:

Experimental - factor isolation and its registration.

Non-experimental - observation, conversation, products of activity.

Diagnostic - quantitative and qualitative assessment.

Another division according to the principles of the diagnostic approach:

Objective approach – diagnostics is carried out on the basis of the success of the activity.

Subjective approach - diagnostics based on self-description or information about behavior, personal characteristics, etc. reported to the subject about himself.

Projective approach – diagnostics is carried out on the basis of interaction with externally neutral material.

The purpose of the psychodiagnostic study

a) providing additional data for differentiated diagnosis;

b) assessment of the structure and degree of mental disorders (in particular, during psychiatric examination – labor, military, judicial, etc.);

c) assessment of the dynamics of mental disorders and objectification of the effectiveness of therapy;

d) a special group of diagnostic tasks consists of studies of the personality and social positions of the patient to make a functional diagnosis reflecting the degree, methods and main trends of compensation for mental disorders, and serving as the basis for a system of rehabilitation measures.

The procedure for conducting a psychodiagnostic study [1,3, 6]**[4]**

1) **Clinical and psychological research** includes acquaintance with anamnesis, conversation with the patient and observation of his behavior during the study.

2) **Experimental psychological research** (EPI) includes the following minimal set of experimental methods covering the main areas of mental activity. Specific results on individual mental processes of the cognitive sphere, the structure and level of intelligence, the emotional-volitional sphere of personality, individual psychological characteristics are described according to the following scheme:

a) Cognitive processes:

- results of neuropsychological research;
- mental performance, attention;
- memory processes;
- thinking: features of dynamics, operational side, motivational and semantic side, critical thinking.

b) Intelligence:

- level,
- features of the structure (profile analysis).

c) Personality:

- structural and typological features;

- the presence and level of anxiety, depressive, aggressive, paranoid tendencies;
- the nature and severity of emotional-volitional deficit;
- adaptation disorders.

3) **A set of methods for evaluating the effectiveness of therapy** is determined by the psychologist independently, depending on the target and type of therapeutic intervention.

4) **Data processing and analysis**. Formulation of the conclusion. The summary summarizes the information obtained from the results of clinical and psychological and experimental psychological studies. It contains a holistic characteristic of the structure of disorders of the cognitive and emotional-volitional sphere of personality in the form of certain pathopsychological symptom complexes, unambiguously understood by psychologists and clinicians. The summary should also include a description of the mental state of the subject at the time of the examination.

The structure of the psychologist's conclusion [1,3, 6]

1. FULL NAME
2. The purpose of the study
3. Methods used
4. Observation and conversation data (mental status)
5. Results of psychodiagnostic research
6. Conclusion

Recommendations on the use of psychodiagnostic techniques [1,3, 6]

1. **neuropsychological study** of gnosis, praxis, speech, writing, counting - sensitized samples of the "Standardized set of diagnostic neuropsychological techniques";

2. **research of workability and attention** (Correction test (or Bourdon test), the Landolt C (Landolt rings), Schulte tables, Munstenberg test (Munsterberb technique), Kraepelin and Pauli test (newspaper count), etc.– at least 1 method;

3. **memory tests** (digital series, 10 words, story playback, image memory, Benton test, pictograms, etc.) – at least 2 techniques;

4. **research of mental activity** (classification, exclusion of the 4th, comparison of concepts, simple and complex analogies, discrimination of essential features, explanation of proverbs and metaphors, logical analysis, pictograms, free and thematic associations, plot pictures, etc.) - at least 4 techniques characterizing operational and motivational-semantic aspects of thinking on verbal and visual material;

5. **study of the structure and level of intelligence** – (Wexler's test, Raven's test or CFIT by Kettell).

6. **research of individual typological features of personality, mental states and adaptation disorders**:

6.1multifactorial questionnaires (MMPI, ISTA, accentuated character's tests (Lichko, Leonhard, Schmishek), Kettell's test, etc.) - at least 1 methodology;

6.2thematic scales - anxiety (Taylor, Spielberger, Beck, etc.), depression (Hamilton, Zung, Beck, etc.), aggressiveness (Bass-Darkey, Assinger), etc. –if prescribed;

6.3 projective techniques (TAT, Rorschach, Rosenzweig, Sondi, Lusher tests, Wagner's Hand-test, free and thematic drawing, etc.) - at least 1 technique;

6.4 self-assessment and the subjective perception of the disease (self–assessment by Dembo-Rubinstein, by Eysenck, Q-sorting, personality differential, TOBOL, etc.) - at least 2 methods;

6.5 maladapting factors and defense mechanisms (Life Style Index by Plutchik, unfinished sentences, reactions to frustration by Rosenzweig, Sondi test, some projective techniques, etc.) – at least 2 techniques;

6.6 personal resources, level of social competence and coping behavior (personal characteristics, Giessen test, semantic differential, coping-strategies tests byHeim or Lazarus) - at least 2 techniques.

List of psychodiagnostic techniques that can be used in the process of clinical interview [1,3, 6]

1. **Kraepelin and Pauli test (newspaper count)**. The methodology can be used to study the stability of attention, the switchability of attention (with a modification of the instructions), mental performance and mental pace.The subject (patient) is asked to add up in his mind a series of single-digit numbers written in a column. The results are evaluated by the amount of numbers added in a certain period of time and the mistakes made. Another option is to subtract the number 7 (17) from 100 (200) sequentially in mind.

2. **The technique of memorizing 10 words** (by Luria A.R.). The technique is aimed at studying the ability to direct short-term or long-term memory. The subject (patient) is read 10 words selected so that it is difficult to establish any semantic relations between them. Immediately after the reading, as well as an hour after it, the subject is asked to reproduce these words in any order. The procedure is repeated 5 times in a row. The following indicators are noted: 1. the number of reproduced words; 2. quantitative dynamics of reproduced words (memorization curve). In addition, after an hour, you can ask the patient to repeat the words that he was able to remember, thereby checking delayed memorization.

3. **Tests to identify hallucinatory and illusory symptoms**. G. Aschaffenburg's test (trial?)– the subject is asked to talk on the phone, which is previously disconnected from the network.

In the M.Reichardt's test a blank sheet of paper is presented to the subject and is invited to consider what is drawn on it.

In the Lipman's test after pressing on the eyelids of the subject is asked to say what he sees.

4. **Assessment of orientation** – obtaining information about the place, time, self, which are described above. In addition, you can add questions about the nearest known facts – the upcoming holidays, the name of the president, the names of relatives, the cost of food, the amount of pension, etc.

5. **Understanding the figurative meaning of proverbs and metaphors**. The technique is used to study the intellectual level, purposefulness and criticality of thinking. In addition to explaining the figurative meaning of proverbs and metaphors by patient, it is also checked how they relate to reality, to the events of patient's own live.

6. **Comparison of concepts**. To define a concept, it is necessary to analyze a number of features of an object or phenomenon and identify the most significant of them.The degree of accuracy of the definition depends on the features chosen to characterize a particular object or phenomenon.

The most accurate definition is through the closest genus and species difference (for example, a table is a type of furniture needed in everyday life or for work);

the correct, but less accurate definition is based only on generic characteristics (a table is furniture);

at a lower level, there is a definition of an object on a functional basis (a table for eating or writing);

a definition that marks only visual signs of an object (a wooden table with 4 legs) is completely insufficient.

Using this technique we can detect following characteristics: the ability to identify the main features, the nature (characteristics) of the construction of the definition and the clarity of the formulation, vagueness of judgments, excessive details and a tendency to reasonableness.

7. **Assessment of general erudition**. It is important in the examination of patients with mental retardation. Relevant questions from general school knowledge: "the capital of Russia", “the highest mountain”, “the largest ocean”,

"what revolves around the Sun?", "what year was the October Revolution in Russia?", etc.

CHAPTER 4. THE STRUCTURE OF ACADEMIC MEDICAL HISTORY IN PSYCHIATRY

Using method of anamnesis:

1. Anamnesis of life. Subjectively and objectively (according to the records of medical and other documentation, the story of relatives, doctors and other persons): heredity, family description, the presence of siblings, pregnancy (burdeness), childbirth (burdeness, APGAR), early development (age-appropriate), attending DDU, school (what time did it start, the success of studies, characteristics of the school (secondary school, lyceum, correctional, number of classes)), after-school activities (continuing studies, work), military service (if not, the reason), work history (where he worked, how long, how many jobs he changed and for what period), marriage, having children, criminal records, living conditions at the moment (with whom, where). Description of the character throughout life.

2. Allergic history and previous diseases (infections, TBI, ONMC), chronic diseases (GB, DM, etc.), operations, blood transfusions.

3. Bad habits. Smoking experience, number of cigarettes per day.Alcohol experience, characteristics of drinks, volume at a time, the presence of a gag reflex, the presence of binge drinking, the presence of abstinence.Drug experience, characteristics of the drug, volume at a time, the presence of cravings and binge drinking, the presence of abstinence.

4. Anamnesis of the disease. Predisposing factors (peculiarities of upbringing, heredity, somatic diseases, personality traits). The onset of the disease (year, causality). The course of the disease (leading syndrome, frequency of exacerbations). Compliance to therapy (observation by a psychiatrist, taking medications). Current exacerbation (onset, clinical picture, circumstances of hospitalization). Clinical picture from the moment of hospitalization.

5. Mental status at the time of examination.

6. Data from other methods of examination (conclusion of the clinical psychologist, neurologist, therapist, functional diagnostician, if available).

7. **Preliminary diagnosis** (ICD-10 cipher, ICD-10 disease formulation, leading syndrome/syndromes at the time of examination or prevailing since hospitalization) and its confirmation (conclusions from anamnesis, from data from other examination methods, symptoms and syndromes).

8. Differential diagnosis (with which diseases (at least 3), based on the clinical picture of a particular patient, indication of similarities and differences). For example, a patient shows signs of apathetic-abusive syndrome within the framework of schizophrenia. This syndrome can occur with depression, epilepsy and psychoorganic syndrome, respectively, it is worth comparing with them. It would be wrong to compare schizophrenia with bipolar disorder, autism spectrum disorder or dementia just because schizophrenia itself may have similar symptoms. You should compare the symptoms of a particular patient with the symptoms of diseases and thereby confirm why it is worth choosing your diagnosis.

9. Offer for additional examination (if appropriate).

10. The proposal of treatment tactics (medication (indication of the drug group, justification of the choice, example), non-drug) and rehabilitation.

CHAPTER 5. EXAMPLE OF THE DIAGNOSTIC PROCESS

The sequence of the diagnosis

- Anamnesis
- Mental status
- Additional surveys
- Symptoms
- Syndromes
- Mental disorder
- Differentiation with other disorders.

Psychiatric case (example) [2, 3]

Patient Sh., 20 years old.

Life anamnesis (according to parents):

Patient's paternal grandfather was treated in a psychiatric hospital in his old age.

Patient was born in Baltasy, from the first pregnancy, on time, by caesarean section due to mother's risk of threat of retinal detachment. (Baby) screamed immediately. Developed up to a year in accordance with age norms. Up to 3 years old, he often cried at night, after 3 started to sleep well, calmly. From the age of 1.5, he attended a nursery, adapted easily, was a favorite of educators. He was a moderately active child, willingly read poetry, took part in matinees (performances). He went to school at the age of 6 (almost 7). At the same time, he entered a music school in the kurai class (tatar national musical instrument). He always studied well, was an activist. Tried to play sports, basketball, football, karate, but not for a long time. He graduated from school with a gold medal, immediately entered the KAI. Where he studied only perfectly and passed the first session for all A's.

Character traits.He has always been an owner. As a child he did not let anyone play with his toys. When guests came home, he had hidden his toys. Especially he loves soft toys, sometimes he sleeps with his beloved toy dog even now. He has not been very sociable, has loved peace and quiet.

Since he started studying at the institute, he suddenly began to ask parents about meaning of their life, about their purpose, whether they achieved it or not. He asked his mother: "Are these garden beds the meaning of your life?" He reflected about the purpose of his life and whether he had chosen the right specialty.

Anamnesis of the disease according to the parents.We noticed oddness in his statements for the first time on May 23, whenhe, calling his mother, asked her in a pleading voice how she found out that he had stolen an extension cord. Then he told that he was cleaning the utility room in the hostel, and for some reason put the extension cord in the trash and put it out the door. He asked out of place who of his grandfathers had a scar on his head and when his nephew's birthday was. On May 24, unexpectedly, without informing, he came home to Baltasy. He was tensed, "as zombified, his eyes were running," blamed himself for theft, wanted to surrender himself to the police, and said that he was guilty in front of everyone. He said that he was being watched, that his account had been hacked, that he needed to be isolated. He asked himself when it all started for him. The parents turned to Prof. M., who sent Sh. to the hospital.

Subjective anamnesis of life:

Patient remembers himself from the age of 4-5, "was an ordinary average child." He attended kindergarten, but he does not remember the details, "probably read poetry and played." He went to school at the age of 6 (turned 7) in November. There were some friends, usually 3-4 people, but he was not too sociable. He tried to play sports, football, basketball, but he decided that he had no talent for it and left. The coaches never said that there were no prospects, but he realized that others were better than him. He went to judo for two weeks, but he couldn't continue, because he couldn't bring himself to wrestle and fight.

He always studied well, but became an excellent student from the 8th grade, "everyone has their own priorities." There was no time and desire to communicate with friends. He was doing lessons diligently. After graduating from the 11th

grade, he was admitted to KAI-university on budget. But recently he realized that he was a humanitarian, that he had to choose a different specialty.

At the age of 10, he began to analyze himself, probably there were periods of bad mood. He tried to figure out whether he lived right way, whether he did everything correctly, whether he developed physically correctly, compared himself with other children, "it was the beginning of puberty."

At the end of the 10th grade, he began to self-reflect on his destiny, on the meaning of life.

Subjective anamnesis of the disease. Over the last few days before admission, he felt that he was being watched, "to find out my emotions, what I am, will lead me to what." "They made me think that I needed to steal something to find out what I would do in such a situation, steal or not." He claims that he stole from Pyaterochka, put everything in a backpack, but no one noticed. He showed a large list of products that he allegedly stole. He is sure that "there is a full proceeding of the state now." He understood it from the judgmental looks of the people around, in which it was read that it's forbidden to steal. He believes that he should be in court now, that the judge should sentence him, and he is ready to be punished. He would like to read the Penal, Civil and other Codes in order to get to the point.

Allergic anamnesis is not burdened. He categorically denies the use of alcohol, tobacco, and drugs. Of the transferred diseases – colds.

THEREFORE

- No external factors and causes have been identified.
- There were character traits before the disease: against the background of good inclinations, he could develop them, but when he faced with difficulties, he tried to look for other easier ways, some aloofness and isolation, diligence.
- He has been inclined to philosophize in the last few years.
- The disease started recently.
- The ideas of persecution and self-blaming prevailed in the clinical picture (presentation).

Mental status and psychodiagnostic examination

During the examination, the patient is motorically calm, even mood, low emotional, hypomimic, constrained, cautious, formal. "Withdrawal into himself" is periodically noted. Criticism is reduced, the reason for being in the hospital he namedas "they say psychosis against the background of studies; there was insomnia, confusion of reality, memory lapses." The contact is available, answers the questions on the merits, in terms of the asked, the pace is unstable.

In the process of attention research instability with a tendency to exhaustion is noted. **Direct memorization** is productive in positive dynamics. **Mediated memorization** has an average level of productivity (65%). The drawings have formal, symbolic, attributive and specific-situational nature. Thepatient occasionally uses letter designations("victory - the V sign", "deception – the letter L – a lie", "doubt – hmmm ...").A poorly differentiated fragmentary image is noted (for the word "feat"(heroic dead) patient drew a "semicircle" with the explanation "this is a muscle that is connected with strength and strength with a hero - that's why the feat is such a logical connection"). **In the method of "exclusion of excess"** instability, diversity of processes of generalization and exclusion processes, equalization of essential and secondary features, actualization of latent ones ("the book should be excessed, and the rest can create unpleasant, prick") are noted.When designating a generalizing concept, patient operates with functional values (“key is superfluous, and the rest is for storing liquids, the cart is superfluous, and the rest is for moving a person").

When comparing concepts - with a sufficient level of comparison operations, he actualizes latent signs with a tendency to compare distant concepts ("fraud and false - common begin with F, difference – at will – by chance", "alarm and rooster – both can sing – inanimate and alive"). The figurative meaning of proverbs is inaccessible, patient interprets only familiar simple proverbs, sayings.

In the associative experiment a formality is noted, a combination of both higher and primitive associations.

Thus, in the process of **experimental psychological research**, against the background of a tendency to exhaustion, there is a violation of the purposefulness of thinking with a slip to latent signs in a person with an accentuation of the "sensitive schizoid" type, a conflicting combination of multidirectional tendencies.

So from the mental status we can distinguish:

• Signs of disorganization of thinking: diversity, slippage, reliance on latent signs.

• Low emotional expressiveness.

• Isolation.

• The ideas of persecution and self–accusation expressed are nonsense of persecution and self-accusation.

• Partial criticism of the condition.

The ideas of self-accusation and persecution can be interpreted as delusional ideas. Delusional ideas are false, erroneous judgments (conclusions) that have arisen on a painful basis and are inaccessible to criticism and correction.

They belong to the category of primary delirium. The primary delirium, or delirium of interpretation, interpretation follows directly from disorders of thinking and is reduced to the establishment of wrong connections, a wrong understanding of the relationship between real objects.

Delusional ideas form the basis of paranoid delusions. Paranoid syndrome is a systematic delusion of attitude, jealousy, invention. The judgments and conclusions of patients outwardly give the impression of being quite logical, but they proceed from wrong premises and lead to wrong conclusions.

Thus, the leading syndrome in the patient:

Paranoid syndrome, combined with ideas of self-accusation.

Let's compare the detected symptoms with the criteria for ICD-10[1]:

Criteria for the diagnosis of "schizophrenia":

thought echo;

thought insertion or withdrawal;

thought broadcasting;

delusional perception and delusions of control; ***delirium***

influence or passivity; (*catatonic devices: arousal, waxy flexibility, negativism, mutism and stupor;* ***behavior change: loss of interest, lack of direction, inactivity, self-absorption and autism; smoothness or inadequacy of emotional reactions****)*

hallucinatory voices commenting or discussing the patient in the third person; *hallucinatory experiences*

thought disorders and negative symptoms. *apathy, abulia, poverty of speech;* ***loosening of associations: schizophasia, reasonableness***

Thus, a comparison of the detected symptoms and syndromes with the ICD-10 criteria suggests "paranoid schizophrenia".

To differentiate with other mental disorders, it is necessary to answer the question: "In what diseases can this syndrome occur?"

It can occur in the following diseases:

• Schizophrenia

• Organic schizophrenic disorder

• Epilepsy

• Depression

• Bipolar affective disorder

• Reactive psychoses

• Psychoses caused by the use of psychoactive substances.

Let's go back to the anamnesis:

• No external factors and causes have been identified.

• There were character traits before the disease: against the background of good inclinations, he could develop them, but when faced with difficulties, he tried to look for other easier ways, some aloofness and isolation, diligence.

• Has been inclined to philosophize in the last few years.

• The disease started recently.

• The ideas of persecution and self-accusation prevailed in the clinical picture.

Consequently, it is possible to exclude Organic schizophrenic disorder, reactive psychoses, psychoses caused by the use of psychoactive substances. In addition, there are no indications of seizures, what help us to exclude epilepsy. There is no indication of fluctuations in the emotional background towards depression or mania, which excludes bipolar affective disorder. Thus, the diagnosis of schizophrenia remains.

So, the final diagnosis will look like this:

Schizophrenia, paranoid form, paranoid syndrome, the period of observation is less than a year.

QUESTIONS FOR SELF-CONTROL:

1. The concept of anamnesis in psychiatry
2. The meaning of objective and subjective anamnesis
3. The main sections of mental status
4. The concept of psychodiagnostics
5. The structure of the conclusion of the psychodiagnostic examination
6. Psychodiagnostic techniques used in clinical interviewing
7. The structure of academic medical history in psychiatry
8. The sequence of the diagnostic process in psychiatry

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Educational publication

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Handbook