# **Psychiatry and Pedopsychiatry** Ladislav Hosák Michal Hrdlička et al.

Psychiatry and Pedopsychiatry

Ladislav Hosák Michal Hrdlička et al.

Reviewed by: prof. MUDr. Eva Češková, CSc. prof. MUDr. Tomáš Kašpárek, Ph.D.

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## Introduction

This English-language textbook presents basic knowledge in the field of psychiatry from the Czech perspective to international students of medicine. The reader may ask: "Why another English psychiatry textbook? Is the number of English textbooks in psychiatry already available on the market insufficient?" We believe that an English textbook of Czech psychiatry is necessary. There are many reasons; Czech psychiatry differs from British or American in many respects, including philosophy, social culture, history, (sometimes) terminology, tradition, organization of services, economics, diagnostics (compared to the American DSM-5 system), the range of psychotropic drugs approved for the local market, genetics and pharmacogenetics of the patients, the use of psychotherapy, social aspects of mental disorders, medical law, and ethics. It is difficult to teach Oxford or New York psychiatry while practicing Czech psychiatry at the same time. Our textbook strives to eliminate this schism Czech teachers of psychiatry who educate international students face. We tried to include a variety of topics in the book; including history, organization of services, examination of psychiatric patients and communication with them, the biological aspects of mental disorders and their treatment, psychotherapy, re-socialization, mental symptoms of somatic diseases, ethics, law, stigma, transcultural psychiatry, and other interesting topics.

This book is based on the Czech textbook, *Psychiatrie a pedopsychiatrie* (Psychiatry and Pedopsychiatry), written by the same scholars and published by Karolinum Press in 2015. Some scholars translated their texts into English by themselves, while others entrusted Professor Hosák with the translation. Professor Hosák also checked the whole text, including language editing. The language of the book was further edited by the Karolinum Press staff in the early 2016 and it was decided that some of the chapters needed further language editing. This was carried out by two Czech doctors and psychologists, Štěpánka Beranová and Veronika Hublová, as well as Xavier Fung, a student of medicine in Hradec Králové, who is a native speaker of English, and Matthew Shane Renfro, BA, a teacher of medical English at the Language Institute of the Medical Faculty in Hradec Králové. In some cases, the language changes led to minor changes of the original content of chapters, be it for linguistic reasons or to include new information in psychiatry.

The authors hope you will enjoy your study.

## 1. A Short History of Psychiatry\*

Jan Libiger

#### Ancient times

Caring for and treating mentally ill people has been a part of medicine since its beginning in ancient civilizations. In the Old Testament, the gloominess of the Israeli king Saul is mentioned. This state of mind was explained as possession by an evil spirit and treated by listening to David playing the harp.

In early stages of medicine, the physician was a mediator between the patient and natural (as well as supernatural) forces, which at that time were thought responsible for causing or curing disease. Medicine was based on a tradition in which the roles of a priest and a therapist were intermingled. Physicians in the ancient times not only treated but also exorcized patients. They brought sacrifices to the Gods and performed magical rituals to influence the forces which had evoked the disease. They also used herbal potions, various ointments, rehabilitation exercises, a corrective life regimen, and music. Their practice was based on a therapeutic relationship which included the patient's expectations (placebo effect) and experience with time-tested procedures. This practice continued till the beginning of medical experiments and evidence-based medicine many centuries later.

In ancient Greece, the God Asclepion was believed to be responsible for treating diseases. The patron of hygiene, Hygeia, was one of Asclepion's daughters. She and Asclepion were patrons of shrines called "Asclepions". Asclepions were sanctuaries and medical facilities similar to our modern day spas. They served to support both physical and mental health. The patient was exposed to a mixture of psychotherapy and a cleric's care. The foundation of natural, scientific medicine probably originated in the asclepions. Hippocrates (about 460–370 BC) established and promoted a medical school on the Island of Kos which was based on the natural sciences. He taught that diseases have physical origins. The teachings of Hippocrates became the basis for ancient, as well as Arabic and European medieval medicine. The ethical principles of the ancients, such as the Hippocratic Oath, are still followed to this day. According to Hippocrates, internal diseases were the result of an imbalance in the basic bodily fluids

\* Adapted and translated by Ladislav Hosák.

(humors) – blood, phlegm, yellow bile and black bile. In later history, the Roman scholar and physician Claudius Galen (126-216 AD), who came from the Asia Minor city of Pergamon, significantly influenced the practice of medicine. He formulated the human typology of characters (sanguine, choleric, phlegmatic, and melancholic) based on the humoral theory of Hippocrates. Ancient medicine was able to describe and treat several mental disorders but did not distinguish their nature from somatic diseases. The ancient diagnostic terms "melancholy", "hysteria", "mania" and "paranoia" have survived up to the present even if their clinical meaning has undergone change. "Melancholy" denotes a clinical state with inertia of body and mind, sadness, loss of interest, lack of drive and joy, and persistent constipation. In ancient medicine, the cause of melancholy was thought to be black bile overflowing throughout the body, including the brain. Ancient herbalists used the plant Helleborus niger (Christmas Rose) to remove symptoms of melancholy. It would irritate the gastric and intestinal mucous membranes after ingestion, inducing diarrhea with melena. Ancient physicians thought that the black bile together with stools were being expelled from the body in this way. At the same time, somatic symptoms of melancholy subsided, depression and constipation disappeared. The toxic plant activated the patient's behavior. Later on however, in the Middle Ages, melancholy was considered a state of sinful indifference to religion and salvation. In modern usage, the term "melancholy" denotes a serious state of depression with psychomotor inhibition, depressive thoughts, and the risk of suicide. In a similar way, hysteria was regarded by the ancients as a clinical state due to the uterus freely moving through a woman's body. Today, hysteria is a non-professional term, usually denoting uncontrolled emotions.

Two different views on mental disorders can already be found in ancient medicine: one saw them as the result of disturbed relationships among people, Gods, or supernatural forces, the other sought a rational explanation based on physical causes like brain trauma or an imbalance of body fluid. This contradiction has been present more or less until the modern era.

## The Middle Ages and Renaissance

In the Middle Ages, the natural scientific attitude to mental disorders was largely replaced with a religious interpretation. The church dominated education and medicine after the break-up of the Roman Empire. Melancholy was regarded as a sinful sloth (taedium vitae), and was treated by hard physical work. The tradition of medicine developed by ancient Greek and Roman physicians was further developed in the expanding Arabic world by scholars of different religions. They practiced empirical diagnostics and treatment.

A department of psychiatry was established in Baghdad in the year 705. Somewhere around the year 800, mental hospitals (bimaristan) were located in Baghdad as well as Damascus and Cairo. Arabic, Jewish and Christian physicians worked in these facilities. Clinical medicine, together with medical science, was carried out in hospitals throughout the Arab world, including the Iberian Peninsula. Great Arabic physicians such as Avicenna (Tadjic Ibn Sin, 11th century) or Averroes (Ibn Rushd from Cordoba, 12th century) based their skills on the ancient medicine practiced by Hippocrates, Celsus and Galen. Mental disorders at this time underwent comprehensive classification and knowledge of them expanded. Arabic scholars studied the human brain, including its nerves and vessels. They learned that brain ventricles enlarge when the patient's personality deteriorates. Medicine started to be taught in Europe at universities with international faculties in the 11th century. Such schools were located, for example, in Salerno (Italy), Montpellier (France), Bologna (Italy) or Paris (France). Charity shelters for ill people were established near monasteries in the Christian world. Care for the sick was provided by an authorized monk (infirmarius). The church supported demonological and moral explanations of mental disorders. In Christian Europe, care of mentally ill people was a mixture of prejudices, superstitions and remnants of ancient Roman medicine. Mental disorders were often considered sins or possessions by evil forces. On the other hand, their association with real-life events and regimen was also observed. Physical restraint was applied for restless and strange behavior. Punishment and exorcism were also used in treatment. Disorders of behavior and conflicts with social norms were explained as a consequence of possession and intercourse with the devil. The fate of mentally ill people varied. The foundations for the diagnostics of witchcraft were laid in the late Middle Ages. The book "Malleus maleficarum" ("Hammer of witches") by Dominican monks H. Institoris and J. Sprenger (published in 1487) became a handbook of diagnostics and treatment for associations with the devil. Identifying possessed individuals who were commanded by the devil was the mission of the religious inquisition and was supported by respected lawyers. After a religious trial, sentencing to death (by burning) followed as an act of secular power. "Witch hunts" escalated in Europe in the 16th century. Some prominent physicians at that time, for example the Dutch scholar Johannes Weyer or the author of clinically accurate descriptions of mental disorders Professor Felix Platter from Basel, supported the medicinal attitude to mental disorders and doubted the demonological model. Humanistic thinkers like Professor Juan Louis Vives from Leuven advocated an individual attitude to mentally ill people and a good doctor-patient relationship.

Not all mentally ill subjects became victims of inquisition or the demonological model of mental disorders. Their fate was significantly influenced by the interest, both personal and financial, of their relatives. Mentally ill people without money, fortune, or the support of family necessary for their protection, drifted around medieval Europe, dependent on luck. The Church, mostly monasteries but also cathedrals and churches, offered charity asylums for the mentally ill. The model of care in Geel, Belgium, under the patronage of the clergymen of St. Dymfna in the 13<sup>th</sup> century, was well known. It represented a combination of community care and a long-term night sanatorium. Mentally ill people spent the night in this facility and were included in the families of citizens during the day. They were also involved in the local workforce. This system persisted for centuries, and was a good alternative to the social exclusion

of mentally disordered subjects. Many other cities placed mentally ill people together with beggars, vagrants and minor offenders in municipal facilities. These facilities restricted unwanted individuals but also offered them survival and supervision at the same time. In many places, the supervisors were cruel and behaved brutally. Patients deemed particularly odd or unusual were publicly exhibited for money in some cases. Some medieval charitable church asylums persisted for centuries. The famous Institute of Psychiatry at the King's College in London was associated with the hospital of St. Mary's Order, founded in the 13<sup>th</sup> century.

At the beginning of the Enlightenment, "madness" was divided into melancholy, mania and dementia according to the classification of William Cullen from Scotland. The patients were treated with medicinal as well as repressive procedures, e.g., physical restraint, handcuffs, pedagogical punishments, controlled bleeding, enema, diet, purification using mercury preparations, and sometimes prayers.

## Psychiatry in the 19th and 20th centuries

The term "psychiatry", to denote a field of medicine, was first used by the German physician Johan Christian Reil in 1808.

The French revolution was a turning point in the care of mentally ill people. It was associated with the French physician Philip Pinel, who became responsible for managing the Paris hospitals Bicetre (1792) and Salpétriere (1795). Pinel thought that physical restraint, handcuffs and a lack of freedom can only be a source of restlessness and aggressiveness in subjects with mental disorders. History books put it briefly: "Pinel liberated mentally ill people from bonds". Unrest and violence significantly decreased in the institutions directed by him. This attitude has sometimes been labeled a "revolution in psychiatry". The trend of modern psychiatry towards efficient treatment starts with eliminating the sense of oppression that patients might feel. "No restraint" was a slogan in institutions based on treatment involving a moral attitude ("treatment moral"). The principle was to influence the patient in a positive way by reinforcing his or her moral qualities. Mentally ill people should find an environment protecting them from the disorder and injustices of society in asylums. On the other hand, society should also be kept safe from the strangeness of asylum inmates. The asylum model of care for mentally ill people was one of repression associated with cultivation morality and understanding. This model was represented by famous psychiatrists of the high Enlightenment such as William Tuke (the founder of the Quakers' asylum "Retreat" in York, England), Vincenzo Chiarugi (Florence, Italy) or Pinel's follower Jean E. Dominik Esquirol, who eventually went on to become the director of a large asylum for mentally ill people in Charenton and supported a medical attitude to mental disorders. In the U.S., the physician Benjamin Rush, who was also a co-author of the U.S. Constitution, contributed to the termination of restraints, handcuffs and punishments in facilities for insane persons. Large psychiatric asylums were established around Europe in the 19th century. However, the care in these institutions did not lead to successful treatment and the eventual return of the chronic

patient back into society. That is why the necessity of implementing beds for chronic mentally ill subjects increased. Less serious mental disorders were treated by other means (physical exercise, traveling, and diet). Various physical and mechanical methods for influencing the patient's organism and brain positively were tested in the first half of the 19th century. The effectiveness of this treatment was slight. Hydrotherapy, calming wet packs, streams of water, showers, mechanical pressure and centrifuge were supposed to change blood perfusion and induce in the patient either activity or calm. For example, Benjamin Rush, mentioned above, created a revolving apparatus, a simple centrifuge, which was meant to increase blood perfusion in the brain of a patient and thus have a positive effect on his/her mental state. Progress in the care of mentally ill people was accompanied by advances in diagnostics. The number of diagnostic entities in psychiatry increased during the 19th century. A dispute arose among physicians as to whether mental disorders are spiritual and separated from somatic diseases or biological disorders of the brain. A model of care in big mental hospitals, which frequently offered patients' life-long asylum, led to dependence and negative changes in personalities. These consequences of inpatient treatment were present in psychiatry until recently. Leading psychiatrists were excellent neuropathologists as well. Not only were they interested in clinical psychiatry and neurology, but they were also experts in the pathological anatomy of the brain. They struggled to find the biological changes in the brain responsible for mental disorders. This effort was not successful, but respected neuropathologists such as P. Flechsig, K. Brodmann, and Oskar Vogt and his wife Cécile Vogt-Mugnier contributed significantly to our knowledge of the brain's anatomy and physiology. German academic psychiatrists like Emil Kraepelin (Head of the Dept. of Psychiatry in Munich), Ernest Bleuler (Switzerland), and later on Prof. Kurt Schneider (Heidelberg) significantly contributed to a systematic clinical classification of mental disorders. A comprehensive explanation of terms related to symptoms in psychiatry (general psychopathology) helped meaningfully in the development of psychiatry. Mention must also be made with regard to the excellent textbook "Allgemeine Psychopatologie" ("General Psychopathology") by young psychiatrist Karl Jaspers, who became a famous German philosopher later. The book has been repeatedly published since 1913. Mental disorders were divided into organic (i.e., markedly organic), endogenous (due to small, inner, poorly detectable causes), and exogenous (due to external causes). Psychiatry was divided into "small scale psychiatry" (anxiety disorders, neuroses, disorders of behavior) and "big scale psychiatry" (dementias, psychoses, mood disorders). This separation has partly persisted to the present day. In 19th and 20th century psychiatry patient stays in mental hospital were long, and care was based on basic nursing and supervision. Three changes in 20th century psychiatry were the most important - psychoanalysis as an explanation of surprising motivations and thinking, psychopharmacology as a way of clinical treatment as well as research in neuroscience, and the development of social psychiatry, which improved the status and treatment of mentally ill people.

## Social psychiatry

The aim of socially oriented psychiatry was to engage the patients and rehabilitate the social skills damaged by disease and long-term hospitalization. Later on, simultaneously with a development in ethics based on respect for patient autonomy, social psychiatry inspired policy of building and developing so-called "community centers", and deinstitutionalize mental health care. This was facilitated by the progress in psychopharmacology which mitigated the clinical symptoms in patients. Deinstitutionalization, however, was associated with some problems. The re-entry of chronic patients back into society brought about an increase in homelessness and repression, including incarceration. Society was not always and everywhere ready to deal with the mentally ill in an ordinary environment. Politicians in Italy were the most radical. The left-wing Member of Parliament Franco Basaglia passed law No. 180 in 1978, which sought the closure of stateowned mental hospitals. The law resulted in the founding of a series of decentralized facilities for mental health care outside hospitals. These centers offered outpatient treatment and rehabilitation. Necessary hospitalizations took place at small wards in general hospitals. The law limited the duration of psychiatric hospitalization. This reform initially led to serious problems and doubts among the public and professionals, but its significance and success have been proven over time. It brought the patients more safety and dignity, better conditions of treatment and quality of life. There are about 7 psychiatric beds for 100,000 inhabitants in Italy nowadays. In the Czech Republic, about 80 psychiatric beds are allotted to 100,000 inhabitants. Thus to summarize, social psychiatry strove to keep and treat patients in their original environment in society.

## Psychoanalysis and psychotherapy

The leading psychiatrists in the first half of the 20<sup>th</sup> century were neuropathologists and frequently also clinical neurologists as well. Sigmund Freud (1856-1939; born in Pribor in Moravia) was initially a neurophysiologist and neurologist focused on natural science with an interest in psychiatry. He lived in Vienna, and at the end of the 19th century and beginning of the 20th century, Freud and a group of his students created and further elaborated the method which came to be known as psychoanalysis. Psychoanalysis was based on many comprehensive clinical observations of patients with mental and neurological symptoms related to their life stories. The young Freud attended an educational stay in Paris with Jean-Martin Charcot, a prominent neurologist in the second half of the 19th century. Freud was influenced by Charcot's strong professional interest in hysteria, a nervous disorder considered curable by hypnosis. Psychoanalysis worked on the assumption that the unconscious content of the human psyche, previously described by the French psychiatrist Pierre Janet, affects behavior and the symptoms of diseases. Psychoanalysis was aimed at analyzing traumatic experience in childhood and inner conflicts. Psychological defense mechanisms were described as denial, displacement or dissociation used against conflicts and psychotraumas. Psychoanalysis placed emphasis on childhood experience because of its importance for future resilience and for an individual's ability to cope. As for the central content of childhood

as well as adult conflicts, Freud himself considered the collision between "libido" (an urge to erotic pleasure) and social restrictions of this compulsion to be important. Freud also created a model of the human mind. Individual's behavior was explained as a result of the clash between the unconscious part of the mental psyche "id" ("it"), comprising passions for pleasure, and "ego" ("myself"), the part of the personality controlled by reality. The "superego" ("superior-me"), representing behavioral norms set down by parents and society, is also involved in this conflict between passions and reality. Originally, the group of psychoanalysts was isolated from the predominant psychiatric practice. Support for their views was gradually obtained in Switzerland and Germany. Sigmund Freud and his colleagues introduced psychoanalysis as a treatment method in psychiatry. Psychological techniques such as the interpretation of free associations, and analysis of transference, dreams and erroneous acts were used. The treatment was not directed at the symptoms, but rather at their unconscious sources. Freud also interpreted various mythical and historical stories and cultural events from the psychoanalytic aspect. The fact that Freud was interested in conflicts only related to sexuality led to a breakup with many of his adherents. His disciples thereafter created psychodynamic psychotherapeutic schools which considered inner conflicts in a more general way. These psychodynamic schools have influenced treatment of anxiety disorders, neuroses and psychosomatic disorders significantly for a long time. Freud's follower Alfred Adler saw feelings of inferiority and disadvantage as a source of childhood as well as adult conflicts and subsequent neuroses. The Swiss psychiatrist Carl Gustav Jung studied conflicts occurring when harmony is sought among an individual, his or her values, and reality. Psychoanalytic and psychodynamic theories influenced culture and the world of thought in the 20th century. Recent psychiatrists have tried to find a neurophysiological basis for the mental processes described by psychoanalysis. They are mostly critical of it. This method is considered to be speculative because psychoanalysis is based on individual life stories. It is not possible to prove or disprove its conclusions in experiments. Treatment procedures of classical psychoanalysis are long-term, demanding in practice, and aimed at psychological constructions more than at clinical symptoms. Simultaneously with psychoanalysis, a school of behavioral psychology in clinical practice and research was developed. It is based on an explanation of human behavior as induced by stimuli, rewards, and punishments. Classical conditioning (I. P. Pavlov from Russia) and a theory of learning (John B. Watson and B. F. Skinner from the U.S.) were the background for behavioral psychology. The behavioristic attitude to psychotherapy denied any hypotheses on subjective processes in the human mind, and was connected with observable changes in behavior depending on reinforcement or extinction by external stimuli. This attitude was important for the development of animal models in neuroscience. It led to the establishment of cognitive behavioral therapy (CBT), which is focused on symptoms of mental disorders. Psychodynamic schools and CBT account for the two originally contrary pillars of psychotherapy, which in fact complement and influence each other.

#### Biological therapies, psychopharmacology, and the onset of neuroscience

The 20<sup>th</sup> century, with its major developments in medicine and medicinal techniques, brought new attitudes to brain research. The controlling organ of the human body had only been available post-mortem at autopsy for a long time. Electroencephalography has made possible clinically useful assessments of brain function since 1929. Neuroimaging radiology was developed at the end of the 20th century. Computational tomography, magnetic resonance imaging, single photon emission computed tomography and positron emission tomography have enabled clinicians and researchers to see the brain and its functions in vivo. Using these methods, psychiatry sought the successful treatment of serious mental disorders throughout the 20th century. Two biological treatment methods in psychiatry saw their creators awarded the Nobel Prize. The Head of the Department of Psychiatry in Vienna, Otto Wagner von Jauregg (1857-1940), was awarded the Nobel Prize in medicine for the treatment of neurosyphilis by malarial fevers in 1927. Psychosis and dementia as the result of general paralysis of the insane or taboparalysis were a frequent diagnosis among the inmates of psychiatric institutions at that time. Inoculation of the protozoan Plasmodium falciparum in these patients stopped the progression of treponema infection and removed the symptoms. The mechanism of action is not fully clear, although it is thought that induction of an immune mechanism can play a role. Antibiotics rendered this way of treatment unnecessarily burdensome, but malariotherapy in resistant neurosyphilis was still used up to the end of the 1970s. The Portuguese neurosurgeon and pioneer of angiography Egas Moniz (1874-1955) was paradoxically awarded the second Nobel Prize in 1949 for the treatment of psychoses. The treatment of schizophrenia suggested by him was based on surgical incisions through neural tracts connecting the brain's frontal lobe with subcortical structures. This method had a calming effect on patients with acute psychosis. This psychosurgical procedure was very popular at first. The adverse effects that it had on cognition and the patient's character were only slowly seen. The prefrontal lobotomy described by Moniz was indicated frequently in the 1940s, especially in the U.S. The procedure was performed in a transorbital way. Organic changes to the patient's personality led to the method being abandoned and branded psychosurgery with a bad reputation. Treatment of mental disorders by inducing loss of consciousness was also based on seemingly understandable hypotheses, but the effect/risk ratio turned out not to be favorable in practice. Repeated hypoglycemic comas induced by insulin injections, comas induced by anticholinergic atropine and toxic epileptic seizures by pentatetrazole are now considered false pathways of a heroic and quickly developing medicine. On the other hand, electroconvulsive therapy, which is quick, effective, and safe, especially in severe major depression, has been successfully performed from the 1940s up to now. The most important turning point in psychiatry was represented by the onset of psychopharmacotherapy. Pharmacotherapy, together with diet, has been a part of psychiatric treatment since its beginning in ancient times. Opiate tinctures, herbal potions with anticholinergic alcaloids such as hyoscyamine and later scopolamine, later bromides and, even later, barbiturates were all pillars of

psychiatric pharmacotherapy before the onset of recent psychopharmacotherapy in the 1950s and 1960s. Phenothiazine chlorpromazine became the first antipsychotic medicament. Originally, it was synthesized by the French company Specia as an antihistaminic to treat allergies. Chlorpromazine's strongly sedative effect was used by military physicians to calm down agitated wounded soldiers, by anesthetists in inducing anesthesia, and also by psychiatrists. Jean Delay and Pierre Deniker were pioneers in the use of chlorpromazine in agitated mentally ill patients in 1950-1952. Chlorpromazine was first used in combination with barbiturates, but eventually came to be used as monotherapy. In addition to its sedative effect, the antipsychotic properties of chlorpromazine in the treatment of hallucinations, delusions and thought disorders have also been recognized. More medications influencing the human psyche were synthesized in the labs of French and Swiss pharmaceutical companies over the next decade. Some preparations were able to remove the symptoms of depression (imipramine in 1957). The monoaminooxidase inhibitor iproniazid, used in the treatment of tuberculosis, also had an antidepressive effect. Benzodiazepine anxiolytics diazepam (Valium) and chlordiazepoxide (Librium) were introduced into clinical practice. Valium and Librium started to be prescribed too frequently to temper anxiety and discomfort in common practice. The broad use of benzodiazepines made apparent the risk of substance dependence. Newly synthesized neuroleptics (an alternative term for antipsychotics) such as haloperidol were not as sedative as chlorpromazine, but caused serious adverse effects (extrapyramidal syndrome mostly) until the arrival of a second generation of antipsychotics. The effect of psychotropics on the ambience in psychiatric facilities, on the duration of hospitalization, and on bringing psychiatry closer to other fields of medicine was great. The proverbial straitjacket, a mechanical requisite to calm down agitated patients, became a museum exhibit. The problem of protecting the patient as well as protecting society against the patient's restlessness and aggressiveness did not disappear, but became a question of proper treatment instead of repression.

The pharmacotherapy of mental disorders, together with the pharmacology of psychotropic drugs, brought new knowledge of brain activity, brain biochemistry, and its connection with clinical psychopathology. Pharmacological models of schizo-phrenia worked on the knowledge of psychotic symptoms induced by hallucinogens (e.g., lysergic acid diethylamide; LSD), stimulants (amphetamine, methamphetamine) or later antiglutamatergic agents (ketamine, phencyclidine). These effects were the starting point for studies of brain neurochemistry in psychosis. Neurochemistry, brain morphology, brain imaging, electrophysiology and neuropsychology together constitute a mosaic of neuroscience which is necessary for our understanding of the function of the brain, the organ that controls the human body. The clinical disciplines of psychiatry and neurology are based on neuroscience. Psychiatry and neurology have been interconnected with each other via brain research and the combined skills of their leading experts for a long time. These fields of medicine are separate from each other now, but they very well may be connected again in the future. Three neuroscientists

whose research is important for clinical psychiatry as well as neurology were awarded the Nobel Prize in 2000. The findings on the role of dopamine in the brain, its significance for Parkinson's disease and schizophrenia, and the antidopaminergic effect of antipsychotics led to the Swedish pharmacologist Arvid Carlsson being awarded the Nobel Prize. In addition to Carlsson, the neurochemist Paul Greengard and neurophysiologist Eric Kandel have also been awarded the Nobel Prize for medicine. Greengard studied biochemical processes activated by dopamine at neuronal receptors and phosphorylation mechanisms activated by cyclic adenosine monophosphate (cAMP) which transmit dopamine signals inside neurons via so-called second messengers. Eric Kandel was awarded the Nobel Prize for modelling memory and learning processes by means of sensitization and habituation in a simple neuronal system of the sea slug Aplysia. Kandel is a neuroscientist at Columbia University in New York. His original specialization was psychiatry. During a study stay in Paris he was taught by the neurophysiologist Ladislav Tauc (of Czech origin), and Tauc steered him towards neuroscience.

#### **Czech psychiatry**

Mentally ill people were treated at beds set aside at the hospital managed by the Order of Merciful Brothers in Prague at the end of the 18th century. The first institution specializing in care for mentally ill people in the Czech lands was established in the period of the Enlightment related reforms in Prague in 1790. The head physician and the director of the Prague general hospital were responsible for medical supervision at this facility. The building still stands in the area of the Prague University General Hospital to this day. This asylum quickly ceased to be adequate for mental health care - 150 patients were treated there every year. This original institution, termed a "madhouse" by the public, was replaced by a newly established facility for mentally ill patients in a remodelled Augustinian monastery in Katerinska Street in Prague in 1821. This facility was also to serve as a teaching base in the "Studies of Insanity" at the medical school of the Prague University. This institution expanded and obtained the so-called "New House" thanks to the director Josef Riedel in 1844. This New House serves as the Department of Psychiatry at the Prague General University Hospital to this day. Josef Gottfried Riedel (1803-1870), born in Frydlant, became the first associate professor of psychiatry in the Austrian-Hungarian Empire, and an eminent organizer of psychiatry in Vienna thereafter. Since 1882, when the Charles-Ferdinand University in Prague (1622-1882) was divided into the Czech and German parts, theNew House served as a common seat for the Czech and German departments of psychiatry at the university, with a separate chair for each of the two nationalities. As for the german professors of psychiatry in Prague, it is worth to mention Arnold Pick, after whom a fronto-temporal dementia (Pick's disease) and a phenomenon of duplication of memories (Pick's reduplicating paramnesia) were named. Otto Pötzl was another important German personality in Prague psychiatry; he became the head of the university department of psychiatry in Vienna. The Czech university department of psychiatry in Prague was initially directed by Dr. Benjamin Čumpelík, and then Prof. Karel Kuffner, who was the author of the first Czech textbook on psychiatry in 1897. With the help of Kuffner follower Prof. Antonín Heveroch, the Purkinje Society for Studies of Nerves and Mind was established in 1919. The professional journal "Revue in Neurology and Psychiatry" started to be published in 1904. In 1924, the second Czech university department of psychiatry, managed by Prof. Antonín Heveroch, was created in Prague and existed for several years. After Karel Kuffner, the Czech university department of psychiatry in Prague was subsequently run by Prof. Zdeněk Mysliveček, the author of a textbook of psychiatry relevant even to this day. After Prof. Zdeněk Mysliveček came Prof. Vladimír Vondráček, a recognized scholar in psychopharmacology, psychology and sexology. The Masaryk University in Brno was founded in 1919 and offered instruction in psychiatry. Nevertheless, a non-academic clinical psychiatric ward had already been established in the general St Ann's Hospital in Brno in the 19th century. New schools of medicine with departments of psychiatry were established in Plzeň and Hradec Králové after World War II. A department of psychiatry was also opened at the Palacky University School of Medicine in Olomouc. Non-academic clinical psychiatric wards were built in Czech regional general hospitals step by step.

Most of the patients were treated in big mental hospitals suitable for long-term stays and not at psychiatric wards in general hospitals. In 1863, a big mental hospital was established in Brno-Černovice. In Bohemia, mental hospitals were established, for example, in Kosmonosy, Opařany and Horní Berkovice. This was organized by Prof. Franz Köstel during the second half of the 19th century. Other mental hospitals wer established in Dobřany, Opava and Jihlava. In 1909, the big mental hospital in Prague-Bohnice came into existence. New mental hospitals also emerged in the first half of the 20th century in Kroměříž, Havlíčkův Brod, etc. In the second half of the 20th century, outpatient psychiatric departments and psychiatric units in general hospitals were widely established. Today, about 30 psychiatric units in general hospitals, approximately 20 mental hospitals and roughly 800 outpatient offices of psychiatry are in operation in the Czech Republic, a country of approximately 10 million inhabitants. Large mental hospitals, as opposed to small psychiatric units in general hospitals focus on providing specialized care for particular diagnostic groups, e.g., psychoses, anxiety disorders, dementias, mental disorders in the childhood, sexological patients, substance dependence or psychiatric rehabilitation. Even the biggest mental hospitals have recently decreased the number of beds and duration of hospitalization and increased the number of staff. Czech psychiatry now faces the necessity of offering patients an extensive network of outpatient facilities - see the chapter on the organization of psychiatric care in the Czech Republic. It is important to keep the patient in contact with his/her family. Hospitalization should be as short as possible because the patient is separated from his or her loved ones and not able to live in an ordinary way while hospitalized. The aim of a stay at a psychiatric facility is for the patient to come back to his or her family and society as soon as possible.

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# 2. Organization of Mental Health Care in the Czech Republic and Forthcoming Reform

Martin Hollý

Psychiatric care is an integral part of health care. The main bodies that form the structure of health care in the Czech Republic are the Ministry of Health, and the General Health Insurance Company (the biggest of all health insurance companies in the country).

The basic elements of the existing system of mental health care in the Czech Republic are psychiatric outpatient and inpatient facilities. In contrast to the recommendations of WHO (the World Health Organization), community care is not yet well developed.

#### **Historical perspective**

In the 19<sup>th</sup> and 20<sup>th</sup> centuries, big psychiatric hospitals formed the basis of mental health care in the country. This was based on the concept that mental illnesses are incurable and the patients should be isolated from society. It was assumed that the best thing for patients is to live in the country and work according to their capabilities in agriculture. Although this view of psychiatry is now completely untenable, psychiatric (mental) hospitals still constitute a major component of psychiatric care and their abrupt elimination from our surroundings seems impossible.

The systematic development of outpatient psychiatry was induced by Prof. Prokupek in the second half of the 20<sup>th</sup> century. All health care, including mental health care, was entirely in the hands of the state and financed from the state budget. Outpatient services of all medicinal branches were concentrated in big health centers. No free choice of a physician was available; patients were assigned to individual physicians based on location.

Outpatient mental health care was divided according to regions, accessible and partly focused on the social needs of the patients. However, it created a non-competitive environment among health care providers. Individual psychiatric facilities were evaluated according to ideological (communist) criteria rather than the level of professional care achieved. The whole psychiatric system under the totalitarian regime was inefficient and unresponsive to the psychosocial needs of the patients. After societal democratic changes in 1989, there was also a change in the system of health care organization in the Czech Republic. Independent (private or regional) health care facilities became the central element of the new system. Outpatient health care facilities were largely privatized. However, this decentralization brought a number of problems due to the uneven distribution of health care. The control system of the state as a guarantor of health care was maintained through regional offices. Regional authorities have a duty to ensure that adequate medical services are provided on their territory. They also perform the registration of medical doctors and permit the establishment of new medical facilities. Further control is provided by health insurance companies. Psychiatric facilities are paid based on their reported performance (e.g., number of patients, number of hospitalization days, psychotherapy sessions).

#### The current status

#### Psychiatric outpatient offices

853 outpatient psychiatric offices with 774 psychiatrists were registered in the Czech Republic in 2013. More than 2.8 million examinations were carried out in these offices in 2013. Since 2000, the number of outpatient psychiatric offices has increased by almost 40%. More than 600,000 patients were treated in 2013. In comparison with the year 2000, the number of treated adult patients increased by almost 66%.

The psychological treatment of mentally ill people is an integral part of the system. The health insurance companies registered 552 contracted psychologists nationwide in 2012. One outpatient psychological office treated approximately 240 patients per year. The outpatient facilities for pediatric psychiatry, clinical sexology and addictology are underdeveloped.

## Psychiatric hospitals (mental hospitals)

The current psychiatric hospitals are almost exact copies of psychiatric institutions created in the 19<sup>th</sup> and 20<sup>th</sup> centuries. The government at that time invested massively in mental health care. Since the establishment of these institutions, there has been huge progress in psychiatric treatment and the therapeutic methods have changed. The big mental hospitals are not suitable for modern therapeutic trends because of their big catchment areas (up to 200 km around) and insufficient financing during the last decades. In particular, high-capacity rooms and long corridors making nursing care difficult are now obsolete. The average number of beds per one psychiatric hospital is about five hundred and the catchment area serves several hundred thousands of people.

#### Psychiatric wards in general hospitals

In addition to the beds in psychiatric hospitals, there are about 30 psychiatric wards in general hospitals in the Czech Republic. However, the imbalance in the number of beds concentrated in 18 large psychiatric hospitals (8,847 beds) and the psychiatric wards in general hospitals (1,260 beds) is striking. It is also worth mentioning that out of the 188 general hospitals in the Czech Republic, only 29 of them have an inpatient psychiatric ward. The problem of psychiatric wards in general hospitals is the fact that, due to the small number of beds and staff (as opposed to psychiatric hospitals), psychiatric wards in general hospitals cannot provide specialized care for all groups of mentally ill people, e.g., sexology, pediatric psychiatry, geriatric psychiatry or addictology. These patients are therefore transferred to psychiatric hospitals, often far away from their homes.

## **Community mental health services**

In particular, there is an overall lack of day care centers, crisis centers, sheltered houses and other services of community care in the Czech Republic. In 2012, about 5,000 patients received care in crisis centers and psychotherapeutic care centers. (See also the specialized chapter on community care in this textbook.)

### Social services

The contribution of the Ministry of Labor and Social Affairs in the direct care of mentally ill people is not clearly quantifiable from the available data. Most of the psychiatric patients are long-term clients with a chronic disease and functional disabilities. There are two types of social care institutions where mentally ill patients can live – in special homes (8 facilities for psychiatric patients with 900 beds and 8 facilities for people with chronic substance dependence with 350 beds) or in homes for people with various disabilities. The approximately 2,000 people living in these facilities require special psychiatric assistance and support. Outpatient social services are provided by about 30 non-profit organizations. They have the capacity to offer services to around 4,000 users. Their needs are similar to the needs of chronic patients living in mental hospitals. Many chronic patients cannot be discharged from psychiatric hospitals because of the limited capacity of outpatient social services.

#### International comparison

Figure 2.1 gives an overview of the number and distribution of beds for mentally ill people in some European countries. The Czech Republic ranks among the countries with a significantly high proportion of long-term institutional care (psychiatric hospitals and social care institutions).

#### Financing and cost

The financing of mental health care has been an unaddressed problem for a long time in our country. The mental health care budget only represents 2.91% of the total health care budget in the Czech Republic. This percentage is one of the lowest in Europe. Selected European countries and their financial contribution to mental health care are shown in Figure 2.2.

The total cost associated with mental disorders in the Czech Republic was estimated at about 100 billion Czech Crowns in 2010. It is the sum total of direct medical costs,

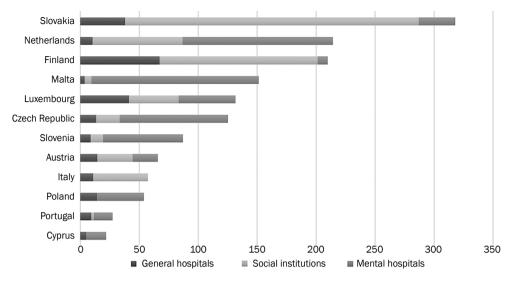
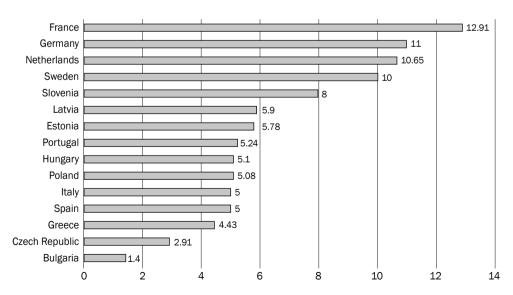


Figure 2.1. The total number of beds for mentally ill people per population of 100,000 (WHO, 2011)

direct non-medical costs and indirect costs caused by disability, sick leave and the decreasing life expectancy in mentally ill people. More than a quarter of cases of severe disability is caused by mental disorders. It is paradoxical that so little attention (in terms of the allocation of financial resources) has been paid to this important issue in the Czech Republic.



**Figure 2.2.** Financial resources for psychiatry as a percentage of the total health care budget (WH0, 2011)

#### The future

Together with the economic point of view mentioned above, there are also other factors that led the Ministry of Health to prepare **the strategy of mental health care reform in the Czech Republic**. These other factors include international obligations (the Helsinki Declaration of 2005; the UN Convention on the Rights of Persons with Disabilities of 2009) and expert advice (the National Program of 2007; the Concept of Psychiatry of 2008; the European Mental Health Action Plan of 2013).

It is the culmination of a long-term effort by the professional community in the Czech Republic to launch the transformation of mental health care in order to meet European standards. In 2013, Martin Holcat, the Minister of Health, issued a strategic document defining the basic direction for mental health care in the next decade.

The most important principle in this reform is the quality of life of people with mental illness. The strategic goals are as follows:

- 1. To increase the quality of the mental health care system by changing its organization.
- 2. To limit the stigmatization of mentally ill people and psychiatry in general.
- 3. To increase the satisfaction of psychiatric care users.
- 4. To increase the effectiveness of psychiatric care, early diagnostics and identification of "hidden" psychiatric morbidity.
- 5. To integrate mentally ill people back into society (particularly by improving conditions for their employment, education, housing, etc.).
- 6. To improve the consistency and cooperation of the health care system and social/ other related services.
- 7. To humanize psychiatric care.

The reform of Czech psychiatry should entail a complex change in the system. A key element in the new system should be represented by the so-called **Centers of Mental Health** (Centra duševního zdraví – CDZ). These medical-psychological-social facilities will systematically develop the mental health care services still lacking. One CDZ should have a catchment area of about 100,000 inhabitants. This new psychiatric system in the country will be balanced compared to the state of the present system, and this new, balanced system will provide:

- Services which reflect the priorities of users patients and their relatives
- A balance between community services and hospital services
- Services that are provided near the residence of the patient
- A balance between stationary services and mobile ones
- Interventions addressing both the symptoms (medical model) and functional disabilities (rehabilitation concept) of the patients

The primary target group will be represented by the people suffering from serious mental disorders who are currently institutionalized, and their life in a natural setting would generally require a high level of support. The fundamental characteristics of the CDZ, formulated in the Strategy of Psychiatric Reform, are:

 Availability, i.e., the CDZ should be situated in a common housing estate, reachable within a half an hour from any place in the catchment area, 24 hours a day

- Providing health care and social services through a multidisciplinary team (psychiatrists, psychologists, medical social workers, psychiatric nurses and other experts)
- Stationary as well as mobile (field) services
- A clearly defined region (catchment area) which does not restrict the patient's choice of medical facility and the unequivocal responsibility for providing psychiatric care in this region for all psychiatric patients

Another important step of the reform is to support **the creation of psychiatric** wards in general hospitals. In this way, acute psychiatric care will be shifted back to the patient's residential area, and more emphasis will be given to liaison psychiatry and early identification of psychiatric morbidity.

As a result of the reform, the number of beds in large mental hospitals will be reduced and only patients for whom community or general hospital psychiatric care is not suitable will be hospitalized.

During the reform of Czech psychiatry, it will be necessary to carefully analyze the experiences from more developed European countries in order to minimize the risks and mistakes of the reform process. Because the population of mentally ill people is vulnerable, the transformation process will have to be carefully monitored. Another important goal of the reform is to increase the funding for Czech psychiatry and to guarantee that these finances are used in a cost-effective way.

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# 3. Classification of Mental Disorders\*

Jan Libiger

## Why and how to diagnose?

Seeking associations and similarities among symptoms in individual patients, and inferring the course of the disease and its treatment belong to the physicians' profession. Subjective as well as objective signs of a disease usually come in clusters which frequently reflect the pathophysiology of a given disorder. Local reddening, heat, swelling and pain in inflammation may serve as an example. In psychiatry, pathophysiology takes place in the most protected organ of a human body, the brain. We do not know the pathophysiology of mental disorders very well. The mechanism of a relation among symptoms of a mental disorder and its cause has not yet been fully recognized. Our current knowledge on the causes of mental disorders is not sufficient enough for a reliable etiological classification. Neurosyphilis is a rare example of a psychiatric disease where a cause was unequivocally found, which led to reliable laboratory diagnostics and an efficient treatment. For the time being, we only classify mental disorders according to the experience and behavior of patients, also considering a course of the disease. An imperfect knowledge on brain pathophysiology may tempt us to think that diagnostics is not necessary in psychiatry, and a simple typecasting of the patient's behavior leads to a harmful simplification of the subject's problems. The replacement of the patient's diagnosis by the story of his or her life, and understanding the associations among external events and the patient's symptoms is useful in psychological counseling. In medicine, this attitude makes possible an individualized treatment plan, which is tailored for the concrete patient. On the other hand, diagnoses have many advantages. The benefits of diagnostics are as follows:

- It makes possible to apply the knowledge of our colleagues in the field, which requires an understandable and simple communication about a clinical finding.
- It makes possible to create hypotheses, study clinical and pathophysiological variables in mental disorders. The diagnosis itself is exactly such a hypothesis. It contains information about the expected course and treatment response. Hypotheses make research and progress in medicine possible.

\* Adapted and translated by Ladislav Hosák.

 It makes possible to study the epidemiology of symptoms and use this knowledge in prevention.

Diagnostic systems in psychiatry reflect the diagnostic methods available at that time. The names of diseases have changed, even if their symptoms remained the same. In some cases, on the contrary, the name of a mental disorder remained the same but its meaning changed. Because some names of mental disorders are associated with a stigma, the change in the diagnostic term may induce a change in society's attitude to the patients for the better, and even a change in the patient's opinion of him/herself. For example, the diagnostic term "schizophrenia" ("mind-split-disease") was substituted with "integration disorder" in Japan in 2002. This change led to an improvement in the patients' knowledge of the disease and compliance with the treatment.

Several important characteristics are required for a diagnostic term. A diagnostic term should be true (valid) and trustworthy (reliable). A valid diagnosis describes a real disease, in which a specific pathogenesis, a typical course and a treatment response are expected instead of only a transient variation or divergence from the norm. Diagnostic entities in psychiatry may sometimes overlap, because their symptoms are not unequivocal and specific. Neurasthenia can only be another term for adjustment disorder with an insufficient performance, irritability, and anxiety. So-called "chronic fatigue syndrome" is hardly distinguishable from long-term depression with apathy. The reliability of a diagnostic category means that examinations by different qualified physicians of the same patient result in the same diagnostic conclusions. Recent classifications of mental disorders are reliable, because they clearly state the procedure of how to diagnose individual disorders. It is still discussed as to whether only real diseases are included in current classification systems. E.g., in the past homosexuality was considered a mental disorder, while pathological gambling was not. There are few doubts that alcohol dependence is a mental disorder, but whether alcohol (or illegal drug) abuse is also a disease remains questionable.

## **Classification of disorders in psychiatry**

Classification can be systematic or empirical, i.e., based on observations. A systematic assortment, e.g., the Periodic Table of the Elements, is based on a theory which contains a classifying criterion. In psychiatry of future, e.g., brain imaging or endocrinological findings may serve as such criteria if their association with the clinical symptoms of mental disorders is proved. Because our recent knowledge of the etiopathogenesis of mental disorders is imperfect, current classifications are based on patients' experience and behavior, i.e., psychopathology. Classification in psychiatry may be based on diagnostic categories (e.g., agoraphobia) or measurable dimensions like anxiety or depression. A diagnostic category is specified by the manifestation and sequence of typical symptoms as well as the typical course and significant environmental variables in a given disease. In some cases the diagnosis is not clear and the patient simultaneously suffers from symptoms belonging to different diagnostic entities. Mania accompanied by a systemized network of delusions may serve as an example. The final

decision on a concrete patient's diagnosis may depend on the education, practice and opinions of a given psychiatrist. Such a typological diagnosis may not always be reliable. During the last thirty years, a criterial attitude to diagnostic categories has been promoted. Every concrete diagnosis is defined by means of confirming criteria – which symptoms should be present, for how long, and in which context. The diagnostic criteria are operationalized. This means that it is described in detail how to establish the diagnosis and how to assess the presence of individual diagnostic criteria. In this way, the diagnosis is highly reliable.

A knowledge of traditional psychiatric terms, which are commonly used by laypersons now, belongs to the skills of a physician. In history, "mental diseases" (serious but episodic) have been sometimes differentiated from "mental disorders" (less serious but permanent). Neuroses and psychoses belonged to "mental diseases". The term "psychosis" traditionally designated a serious, chronic disease with delusions and hallucinations, which substantially disrupted the patient's personality.

"Neurosis" was commonly considered as a transient and less serious disease (as opposed to psychosis), induced by poor coping with a conflict in the patient's mind, changing the patient's behavior, but never accompanied by delusions or hallucinations.

Life-long intellectual disability and personality disorders ("psychopathy") were counted among "mental disorders". Anxiety, dysphoria and fear prevailed in neuroses, while an inability to adapt oneself to a social environment dominated in personality disorders.

Psychosis is a serious mental disease for which the loss or impairment of contact with reality is typical. The patient does not share common perception of reality, this ability is distorted by his or her delusions, hallucinations, and serious disorders of thought.

Symptoms of psychosis (hallucinations, delusions, thought disorders, disorganization of behavior) as well as neurotic symptoms (anxiety, fear, gloom, loss of power) may occur in acute organic mental disorders. In chronic organic mental disorders, changes of personality, its decay and degradation are present more frequently. Deterioration of cognitive functions (intellect and memory) and non-specific disorders of behavior are also present in organic changes of personality. These organic mental symptoms may combine with each other in various ways.

"Psychopathy" is a term which formerly denoted any mental disorder. Afterwards, this term started to be used in life-long clinical states, which were attributed to personality abnormalities requiring education and guidance more than treatment. The "moral insanity" was a prototype of psychopathy. Later a whole group of character anomalies was described and classified as variants of personality, and their individual subtypes were included into the term psychopathy. People labeled with psychopathy were different from other subjects in their values, temperament, attitudes and coping skills. They caused problems to themselves or their social surroundings. Today, the term psychopathy is used in its original sense again, i.e., to denote anti-social, unreliable and morally different persons, and usually it is not applied as a professional psychiatric term any more. Abnormal personalities with character anomalies have recently been classified as "personality disorders" (e.g., schizoid or histrionic).

The current classification of mental disorders is based on criteria. The diagnoses are exactly defined. If the subject fulfills the criteria for some mental disorder, his or her diagnosis is unequivocal and reliable. It is clearly described in the diagnostic guidelines how to proceed in the assessment of symptoms, the diagnosis is "operationalized". In a real patient, some other symptoms may also be present apart from the ones corresponding to the criteria for a certain diagnosis. In this case, more than a single diagnosis can be assigned to one patient and described as "comorbidity". Comorbidity is frequently found, e.g., in major depression associated with an anxiety disorder.

Classicifation of diseases can also be based on the intensity of some significant characteristic of the disorder. This way of classification is described as "dimensional". The extent of anxiety, depression or delusions is assessed using a standard rating scale. The diagnosis is defined on the basis of values significantly exceeding usual observation in one or more dimensions. Symptoms of mental disorders are regarded as pathological after the threshold of intensity is exceeded. Some mild anxiety or sadness as an adequate reaction to a life situation are considered to be adaptive mechanisms which help the people to cope with troubles. They only become psychiatric symptoms if their intensity or duration is excessive. Dimensional classification is applied in psychiatry, e.g., in personality disorders, which are considered anomalies of usual character qualities.

### ICD and DSM classification systems

The heterogeneity of psychiatric terms due to their historical development was an obstruction to epidemiological research, that helps to provide available medical care in psychiatry. The classification of mental disorders was firstly incorporated into the 6<sup>th</sup> version of the International Classification of Diseases (ICD) by the World Health Organization (WHO) in 1948. In the U.S., the 1st version of the Diagnostic and Statistical Manual of Mental Disorders (DSM) was approved by the American Psychiatric Association (APA) in 1952. These manuals mostly served for communication and record keeping. The DSM-III classification (the 3rd version of DSM) based on exact diagnostic criteria was introduced in the U.S. in 1980. Ten years later, the 10th version of ICD was implemented by WHO. Some old terms such as "melancholy", "hysteria" or "endogenous" disappeared from the psychiatric professional vocabulary. Both classifications increased the reliability of diagnostic categories because they used operationalized criteria. Additional part of the description of a patient's clinical state was expressed as supplementary, independent axes. A multiaxial system is intended to describe the situation of the patient in several axes independent of each other, where every axis represents a significant dimension of the patient's state. In the American Diagnostic and Statistical Manuals, starting with DSM-III up to the recent DSM-5, the patient's state is evaluated at five axes. Axis I is defined as the main diagnosis of a mental disorder for which the patient has recently been treated. Axis II reflects a simultaneous personality disorder or intellectual disability, which are life-long, in contrast with the mental disorders depicted on Axis I. On Axis III, somatic diseases relevant for mental disorders are recorded. As examples: diabetes mellitus is mentioned on Axis III because this disorder may significantly influence the intensity and duration of depression; thyreotoxicosis may induce anxiety disorders; and epilepsy leads to character changes or psychotic features in the course of a psychomotoric epileptic seizure. Axes IV and V describe the current patient's life situation and his or her level of functioning. Recent stressful life events related to the actual mental disorder are represented on Axis IV. Stressors, such as the death of a close person, moving, loss of a job or debt, are important psychosocial factors influencing the diagnosis and treatment of mental disorders. Axis V quantifies the patient's ability to function successfully in society. In the DSM classification, the "Global Assessment of Functioning" (GAF) is used on Axis V. It describes the patient's actual level of functioning in occupational, family and social situations on a scale from 0 to 100 points. Operationalized and nontheoretical diagnostic systems improve communication among psychiatrists. In an non-theoretical system, the involvement of a certain diagnostic entity is not based on some coherent theory, which would predict all possible diagnoses of mental disorders, similar to Mendeleev's Periodic Table of the Elements. Recent classification systems of mental disorders try to avoid assumptions which are not supported by reliable scientific evidence.

DSM is usually applied in psychiatric research because its diagnostic categories are exactly defined. They are also useful for health insurance and planning of psychiatric services. On the other hand, the growing number of psychiatric diagnostic entities included in the DSM induce doubts as to whether all diagnoses are valid and have a specific pathogenesis and treatment. The present version of DSM (DSM-5) was published in 2013, and WHO experts are working on the next version of ICD (ICD-11), which will be available within a few years.

### **Mental disorders in ICD-10**

For recent classification of mental disorders, the Chapter V of the International Classification of Diseases, 10<sup>th</sup> version (ICD-10) has been in effect since 1992. This chapter is identified by the letter F with two subsequent numbers – the first one denotes a broad diagnostic category (e.g., F0 for organic mental disorders, F3 for mood disorders, etc.), the second one specifies the mental disorder (e.g., F20 for schizophrenia within the group of F2 psychoses). It is also possible to add another number beyond the point (e.g., F20.0 for paranoid schizophrenia), so that the system may incorporate up to one thousand psychiatric diagnostic entities. The ICD system also makes multiaxial diagnostics of mental disorders possible. On Axis I, all mental disorders including personality disorders and intellectual disabilities, as well as all somatic diseases of the patient are recorded. Disorders of functions or decrease in the abilities due to the current mental disorder are assessed on Axis II. The standard instrument

WHO-DAS-S (World Health Organization - Disability Assessment Schedule - Short) was introduced by WHO experts for this purpose. This scale integrates a description of the consequences of mental disorders, diagnosed on Axis I. The following areas of the patient's life are scored in a standard way - care about him/herself, employment, position in the family and in society as friendship, hobbies, etc. Axis II of ICD-10 is analogous to Axis V of DSM, and the DAS scale is analogous to the GAF scale. On Axis III of ICD-10, psychosocial or other environmental burden is recorded. There are defined "Z-codes", which may or may not be associated with a mental disorder in a concrete patient, e.g., unemployment, legal problems, lifestyle problems, family problems or a demanding social environment. Different Z-codes may be present in different patients with the same diagnosis on Axis I. As a part of the treatment, psychiatrists try to help the patient to influence the negative burden of the environment, e.g., with the help of medical social workers, they try to find accommodation for a homeless patient. In an everyday clinical practice, the ICD axes are usually neglected (apart from Axis I), and valuable information about the patient is lost. The traditional division of mental disorders into "psychotic" versus "neurotic" still persists. The problem is that psychotic features may or may not be present in the same diagnosis, e.g., in major depression. In organic mental disorders, symptoms from all groups of psychopathology may occur. The expected ICD-11 classification will probably be influenced by the already used DSM-5 classification. DSM-5 is somewhat simpler than DSM-IV. In DSM-5, subtypes of schizophrenia (paranoid, catatonic, disorganized) are not listed, although they have been used in clinical practice for a long time. A detailed classification of mental disorders related to somatic symptoms (somatoform disorders) was removed, and all of them were included in a single diagnostic entity called "somatic symptom disorder". The dimensional characteristics of mental disorders were introduced, e.g., in depression, psychotic symptoms or anxiety. The DSM-5 system is supplemented with many rating scales related to the patient's functioning.

Psychiatric classification will be further developed together with our increasing knowledge on neuronal brain circuits. Anomalies in the function of neuronal systems, like executive network, default mode network (the brain's activity at rest), neuronal circuits selecting motivationally important stimuli or socially significant situations, may become the base for a pathogenetic classification of mental disorders in the future. Until then, psychiatric classification will be (as it is now) based on an analysis of the patient's experience and behavior, i.e., psychopathology and its context.

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## 4. Examination of a Patient in Psychiatry

Věra Bažantová

#### **General remarks**

A psychiatric examination is different from a somatic examination. Psychiatric patients often come in non-standard situations, life crises, and sometimes against their will. In some cases, they are brought to a psychiatrist at night by relatives, ambulance or the police. It is necessary to take these facts into consideration.

First of all, it is necessary to establish a good relationship (verbal communication) with the patient. This includes the standard rules of adequate behavior and specific skills that every physician gradually learns during his or her practice. The first contact with a psychiatrist basically determines the further success of a therapeutic relationship. It is appropriate to tell the patient the expected length of the examination (40–60 minutes). If the patient comes to the examination in the company of other people, always speak with the patient first. If possible, it is better to obtain the patient's verbal consent to an interview with the accompanying people (family members, friends). This is necessary to obtain an "objective" history, which may play an important role in the diagnostics.

Patient and psychiatrist should sit facing each other and there should be no fixed obstacles between the patient and the doctor. If the patient is agitated or aggressive, the psychiatrist should sit close to the door, and the door should be left ajar. We avoid direct eye contact and any confrontation with an aggressive patient. In the case of a patient's growing tension, the examination has to be immediately interrupted, and if necessary, staff should be called for.

The interview starts with the basic identification data of the patient. We ask about the patient's full name, date of birth, place of residence, ID number, and his/her health insurance company. In the record, it is necessary to specify the circumstances under which the patient has come (by him/herself, taken by the family, brought by police, emergency ambulance, etc.). It should be recorded whether the examination was scheduled or not, and who referred the patient to a psychiatrist. Then the psychiatrist asks the patient about his/her main troubles. It is useful to let the patient talk freely at first. The psychiatrist shows his/her interest in the patient's problems both verbally and nonverbally, and encourages the patient to talk further. It is always good to verbally summarize the information received and make sure that we really understand the patient's problem. The psychiatrist starts to ask questions after that. Closed questions (yes – no) and suggestive questions should be avoided. If the patient refuses to talk about some topic, the psychiatrist leaves it for now and tries to return to this issue later. The goal of the interview is to obtain the necessary anamnestic (history) data, identify and describe the present problems, and assess the patient's psychopathology. The psychiatrist also states a differential diagnosis, the most probable diagnosis of the patient, a plan for auxiliary examinations, and a treatment plan. In the end, the patient should get the basic information about the diagnosis, examination and treatment plans. This must always be done clearly, with regard to the patient's current state of health, education, IQ, etc. It is necessary to individually tailor the examination for every patient. The following text focuses on individual, important items of a psychiatric examination.

## Family history (anamnesis)

In taking the family history, we are mainly interested in the incidences of neuropsychiatric disorders in any near and distant biological relatives. We ask whether anyone in the family has been treated by a psychiatrist, whether anyone has been in a psychiatric hospital, and for which mental disorder. Most mental disorders have significant heritability. We ask whether someone in the family has had problems with alcohol or illegal drug abuse/dependence. Suicides/suicidal attempts in the family are another important issue. It is necessary to notice the number of siblings, and the birth order of the patient. We record whether the patient has children, their age and health condition.

## **Personal History (anamnesis)**

#### Somatic history

This part of examination relates to a history of the somatic state of the patient. We ask whether s/he knows about the circumstances of his/her birth (physiological, by caesarean section, with resuscitation...). If the birth was complicated, the individual usually hears about it from the parents. We should ask about psychomotor development in their childhood (when the patient as a child learned to sit, stand, walk, talk), whether it was physiological or not. We are interested in any speech defects and enuresis in the childhood, we also inquire about common childhood illnesses (scarlet fever, measles, mumps, rubella), whether the patient suffers from any permanent disease now, if they are treated for it and if so we want to know the relevant medical doctor's name. We always ask about common diseases such as cardiovascular disorders, breathing problems, diabetes mellitus, thyroid and kidney problems. We want to know whether the patient underwent any surgery, serious injury (especially to the head), coma or seizure. We also ask about venereal diseases in their history. The aim of this part of the examination is to identify and consider whether a somatic illness does or does not affect the current mental state of the patient. Another aim is to get information on the patient's somatic diseases because we are also expected to treat them even if the patient is hospitalized at a department of psychiatry. The patient is often not able to recall all the necessary information because of alterations in his/her mental status. In this case, it is necessary to get to know the name of the general practitioner at least, and unclear or incomplete data can be completed afterwards. Some important data may also be known by the patient's relatives (current diseases and medication). We ask about all the current medicaments used by the patient. A question about food and drug allergies should not be left out.

Women should be asked about their basic gynecological history. We are interested in the age of the start of their menstruation cycles, their regularity, and end at a relevant age (menopause). The number of pregnancies, spontaneous and medical abortions, and childbirths is also important from a somatic as well as a psychiatric point of view, as well as any previous gynecological surgeries. We ask women of childbearing age about their use of contraception and possible current pregnancy. Most psychotropic medicaments are contraindicated during pregnancy and lactation. Severe premenstrual syndrome may also be accompanied by mental problems. Although some of the questions seem to be irrelevant, they may often have a significant relationship to psychiatry. For example, if a woman requested a medical abortion many times without any medical reason, simply because her pregnancy was unwanted, apparently her higher ethical values are damaged, which may be the case in a personality disorder.

### Childhood

We do not ask about diseases in childhood, because this was already included in the somatic history, but we are rather interested in the patient's childhood from a psychosocial point of view. We ask where the patient was born and spent his childhood (a large or a small town, a rural area). We are interested in the profession of his/her father and mother. How would the patient generally describe his/her childhood – happy, good, normal or unhappy? Why? We especially ask about any sad events in the childhood, sexual or any other abuse, physical punishments, bullying, escapes from home etc. We are interested in the relationships with the parents and who, if either had a significant educational impact on the patient? Did the parents live together, or get divorced? Who raised the patient afterwards? We ask whether the divorced parents found other partners in their lives, and how the patient got along with them? Relationships with siblings in childhood are also important. We also ask about friends in the childhood.

#### Education

We gradually ask the patient about all the schools he/she has attended. As for primary school (9 years in the Czech Republic, usually from 6 to 15 years of age), we are interested in adaptation to school order, peer relationships, school performance in subjects as well as behavior, right- or left-handedness, skills at sport or any other talent. We ask whether and why the patient repeated a grade (school year) at school. We inquire whether and why he/she was transferred to a special school (usually for children with intellectual or sensory disability). We are interested in any unexcused absence at school or bullying. Behavioral problems at school can be related to a mental disorder, e.g., emotional instability or antisocial personality. We ask which subjects the patient liked, about relationships with teachers and classmates. In a similar way, we ask about all further schools the patient has attended. As for high school, we are interested in whether or not the patient was separated from his/her family, e.g., at a boarding school, and how he/she coped with this situation. What was his/her social position in the class (e.g., a clown, a loner, a class confidant)? We are interested whether the patient chose his/her schools by him/herself or was directed by the parents. If the patient has a university degree, we ask about the field and academic performance. We are also interested in any other education (Ph.D., courses, etc.).

A significant part of mental disorders manifests during early adulthood. Therefore we look for a "turning point" in the life line of the patient, changes in behavior, temperament and areas of interest. A sudden failure in study may be related to a mental disorder.

### **Occupational history**

We ask about the patient's part-time jobs during study, his or her first occupation, and all other consequent jobs. We inquire about whether it was accompanied by permanent social conflicts, frequent dismissals, or failures in employment. We ask why the patient changed jobs. Was it his or her decision, did other factors play a role? We assess whether the patient had a job position corresponding to his or her education and qualifications. We ask about current employment (the patient's satisfaction, salary, etc.). We ask whether the patient has a disability pension (for how long, how much money, for which disease). If the patient has been unemployed, we ask about the cause, whether he or she tried to change this situation (employment agency). We are interested in fundamental changes in occupational functioning. Difficulties present from early adulthood may also be relevant for a mental disorder (persistent conflicts with authorities, e.g., related to a personality disorder). We ask about unexcused (unauthorized) absences from work, and problems with alcohol or illegal drugs at work (intoxication). The patient's current income can be a source of his/her psychological problems. If the patient is not able to recall all his/her jobs in detail, we ask at least about the general data (e.g., "I have worked successively in about twenty construction companies as a bricklayer").

### Partnership/marital/sexual history

It is necessary to discuss this topic with tact and sensitivity. It is appropriate to tell the patient that you will ask about a personal information now. At the beginning, we ask about the patient's sexual orientation and current status (single, married, widowed, etc.). We ask questions related to conflicts or problems in a relationship that could be associated with the current mental disorder. If the patient does not want to talk about something, we should not force him/her to do so. The psychiatrist should not

wonder about or morally evaluate any facts given by the patient. We should know at what age the patient started having sex. When did he or she begin to create serious relationships and long-term partnerships, for how long have they lasted (item-by-item), and what were the reasons for the breakups? We ask whether the patient is or has been married, whether he or she has children, or pays alimony. If there was a divorce, we find out the reason tactfully, and ask who provides care for the children. We gradually ask about all of the patient's long-term relationships/marriages, including the current one (for how long, with whom, quality of relationship, children, living conditions, and the reasons for the break-up). In widowed patients, we ask whether they feel lonely. At least in general, we ask about the lifetime number of sexual partners (the average is about 6-8 in the Czech Republic). E.g., if the patient states 100 sexual partners in a lifetime, this is most likely a reflection of his/her emotionally unstable personality. On other occasions, a sharp increase or decrease in sexual activity may be associated with a mental disorder (mania, depression). A minority sexual orientation can lead to social conflicts, resulting, e.g., in the patient's adjustment disorder. We ask about problems in the sexual life, which may be related to the mental state of the patient and his or her treatment (sexual disorders, sexological adverse side effects of some psychotropic medicaments).

### Social and economic history

This part of the examination immediately follows the previous one as for its content. The aim is to explore the current social network of the patient. We ask where and with whom the patient lives. We are interested in whether the patient lives in a house or an apartment, or is homeless. We ask whether the patient owns his or her apartment or house, or not. The patient's economic/financial situation may be very important for his/her mental state. We ask whether the patient has any debts, how big, and whether or not he/she is able to pay them off.

We also ask who the patient's closest friend is. If the response is, e.g., "myself" or "my dog", the patient's interpersonal relationships are not optimal. Even in adults, we ask about relationships with other family members, and friendships.

#### Psychoactive substance abuse

We ask whether the patient is a smoker, how many cigarettes a day he or she smokes. We are interested in whether the number of cigarettes has recently changed (it often reflects a change in the patient's mental state). E.g., a sharp increase in the number of cigarettes smoked is often present at the beginning of an acute psychotic episode in patients with schizophrenia.

We want to know whether the patient drinks alcohol, from what age and how frequently. We inquire at what occasions the patient enjoys alcohol, which kind (beer, spirits, wine) and how many drinks on average. We do not accept general and vague information ("I only drink occasionally, like everybody else..."). We ask, e.g., "How many times a month do you drink alcohol?" We specifically ask about palimpsests (a loss of memory related to a state of drunkenness), stays at a drunk tank, morning sips of alcohol, and drinking continuously for several days. We are interested whether the patient is able to control his/her alcohol intake. We are especially interested in the gradual increase in alcohol tolerance (increasing doses of alcohol in the course of time), also in enormous amounts of alcohol consumed at one occasion. We ask, "Do you think you are dependent on alcohol?" A question about a withdrawal state in the patient's history is crucial, because this definitely confirms the diagnosis of alcohol dependence (not only a psychological dependence but also a somatic one).

We gradually ask about all illegal drugs the patient has used during his or her life. The questions are always related to the onset of the drug abuse (the patient's age), whether the drug is still used now, dosage, frequency of use, way of use (intravenous, sniffing, smoking etc.), mental effect of an acute intoxication, description of a withdrawal state, and potential psychotic symptoms during drug abuse. We especially ask about paranoid-persecutory psychosis during methamphetamine abuse ("stihy" in the Czech language), and flashbacks in hallucinogenic abuse. When the drug is administered intravenously, the patient may become infected with HIV or hepatitis. We ask whether the patient him/herself feels dependent on the drug.

After that, questions are related to (pathological) gambling. Practically all gambling in the Czech Republic is associated with playing slot machines. Typical questions are as follows: Since what age has the patient been playing, does it continue even now, how often does the patient play, is the frequency increasing, does the patient regularly win or lose, is he or she able to stop playing after repeated losses, is the patient able to control his/her gambling, did the patient borrow/steal money because of gambling, what is the total amount of all his/her financial losses due to gambling, and has he/she considered suicide because of the negative consequences of gambling?

We also ask about the legal purchase of some addictive medicaments which are available in the Czech pharmacies – sleeping pills, anxiolytics, pain killers, etc. – for how long, dosage, and symptoms of the patient's dependence.

### Hobbies

We gradually ask about all of the patient's hobbies – e.g., reading books, television, sports, music, homework, gardening, etc. The choice of hobbies is usually a reflection of the patient's personality. From the psychopathological point of view, changes in hobbies are important (a decline in substance abuse/addiction or depression, increase in mania, bizarre hobbies in schizophrenia).

#### Premorbid personality

We ask the patient about his or her character, good and bad qualities. If the patient is not able to answer, we ask, "What would your mother/partner say about you?" We can offer alternatives to the patient – merry or serious, calm or excitable, sociable or loner. We also ask about aggressiveness.

### Legal issues/problems

We are interested in whether the patient has been investigated by the police, or sentenced by a court of law – for what reason, what was the punishment? How many times has he or she been in prison, for how long, and how did he or she cope with this situation? Was his or her crime minor, property-related or violent? Is the patient being prosecuted now? Prosecution may be a source of mental problems (e.g., adjustment disorder, depression). On the other hand, some patients may aggravate or invent their symptoms in order to avoid prison. We also ask about civil legal disputes, related, e.g., to divorce, custodial care or property. We are also interested in fines the patient got and for what reason?

#### **Military service**

We ask whether the patient has been in the armed service, for how long, at what rank and position, whether he or she experienced bullying. Till 2005, army service was mandatory for males in the Czech Republic, and lasted for two years (one year only for university graduates). Since 2005, we have only had a fully professional army. On the other hand, some women serve in the army gladly now, also because of a good salary.

### Other important history data

Does the patient have a driver's license? What is the extent of his or her driver's license (cars, trucks, motorcycles etc.), and is it applied professionally? (Some mental disorders make driving legally impossible.) Does the patient have a gun license? Does the patient believe in God, is he or she involved in any religion? (Religious belief generally reduces aggression and suicidal behavior in mentally ill people.) Is the patient involved into politics?

#### Plans for the future

What are the patient's plans for the future life? If a young person, e.g., says: "I want to finish my school successfully, find a job and housing, and start a family", this is quite physiological. A depressed patient may have no future plans – "all life is misery..." A manic or schizophrenic patient may have bizarre plans, e.g., "I will travel to India, become a porn actor and Buddha at the same time, and buy a palace".

#### **Objective history (objective anamnesis, heteroanamnesis)**

It is appropriate to supplement information from the patient with information from other people (usually relatives). We have to record the name of the source, his or her relationship to the patient, and contact information (address, phone number). In psychiatry, "objective data" is especially important. The patient may not be aware of his/her mental disorder, may not communicate, or his/her information is completely invalid (e.g. confabulations of a patient with dementia). The patient may neglect, aggravate or fake the symptoms. We especially ask about the presence of suicidal thinking or behavior. We ask about the patient's hallucinatory behavior (e.g., covering ears, monologue) or delusional behavior (e.g., unjustified fear of humans, arming himself/herself). Patients dependent on addictive substances do not often tell correct information about their substance use. We should understand that "objective data" is not always objective, e.g., if a demented spouse speaks about her demented husband, an alcoholic brother of the patient tells us about the alcoholic patient, or divorcing partners speak about each other. It is important to note that different people (family members) have a different tolerance to the patient's mental problems. Some families are able to tolerate even very serious manifestations of psychopathology for a long time, while in other families even the slightest signs are unacceptable. Objective history is seldom available straight at the beginning of an examination. It is usually completed several hours or days later.

#### **History of present illness**

At the beginning, we ask about the symptoms of the patient's mental disorder so far and their treatment (hospitalizations – where, when, for which diagnosis; outpatient treatment – for how long, by whom, which medication was given at which dose for how long, effect of the treatment including adverse effects, why changes in therapy were made, what the current medication is). We can also obtain discharge reports from psychiatric hospitalizations, and borrow the patient's outpatient record. An important question is whether the patient took his or her psychiatric medication properly. We can also ask whether the patient tried some alternative therapies (reiki, visiting a healer, diet, etc.).

Furthermore, we let the patient talk about his/her current mental problems. We note the patient's own words about the symptoms. Only a few patients are able to articulate their problems clearly and accurately. Most of the information must be collected through a structured interview. Our goal is to get as much information as possible. This will help us to identify the most serious psychopathology. We should let the patient tell his/her point of view of his/her mental problem first. Let the patient describe what is subjectively important for him/her.

Only after that and if necessary, we start to ask questions. We gradually focus, e.g., on mood, anxiety, suicidal thoughts or behavior, sleep, appetite, changes in body weight, impaired perception, thought disorders, memory problems, and somatic problems potentially related to mental disorder. (For a complete list of items, see the chapter on Psychopathology.)

We stress asking about symptoms which may be adequate in the suspected diagnosis in our concrete patient. It is clear that our questions are different to some degree, e.g., in a child with enuresis, a sexual deviant, or a demented patient with delirium.

## Indicative examination of intellect, memory and attention

This is performed at the end of a psychiatric examination. At first, we examine the patient's orientation (what the date, month and year are, where we are – city, place, in which situation). After that, we assess vocabulary, expression, and a general overview

of the patient. We compare these abilities to the degree of his/her education. We ask about well-known historical, cultural and geographical facts (e.g., who the president in our country is, the names of previous presidents, capital city, with which other countries the Czech Republic borders directly). We should get a general idea about the patient's intellect. (If symptoms of intellectual disability are present, a detailed psychological testing is indicated.) The intellect of the patient is also reflected in his or her history data. If the patient says, e.g., "I failed a year twice at primary school, and then they put me in a special school," a mild intellectual disability may be present.

We are interested, whether the patient is able to maintain attention during the examination. We also evaluate the basic components of memory. Long-term memory contains significant events in the patient's life; we investigate this during the whole process of taking the history. Our questions may be, e.g., "Where did you grow up? What were your parents like? When and where did you move?" Short-term memory stores information for a few minutes. We can, e.g., enumerate three objects to the patient and ask him/her to remember them. We ask about the names of the objects five minutes later, and evaluate the accuracy of the patient's answer. A discrepancy between a relatively well-preserved long-term memory and an impaired short-term memory is frequent in patients with incipient dementia. They also tend to unknowingly fill in the gaps in memory with fiction. This can be revealed by asking about the same fact again after a short time. The patient gives us different information because he/she has forgotten the previous one. In suspected dementia, we should conduct a MMSE (Mini-Mental State Examination). In this way, we are able to assess the severity of cognitive impairment.

We also investigate the patient's formal logical (conceptual, abstract) thinking. It tends to be impaired in intellectual disability. We ask for example about differences (stone – brick, pond – lake, island – peninsula, lie – mistake, baby – dwarf). We also inquire about similarities (to state a general term for: chair, armchair and table; apple, pear and orange; poem, song and sculpture). After that, we will start a proverb, and the patient is expected to complete it correctly, and explain its meaning.

We investigate general knowledge and cognitive estimates as well (for example: How many people live in Prague, how high is the highest Czech mountain Snezka).

We examine arithmetic capabilities of the patient, including understanding and solving word problems. We ask for example: How much is  $3 \ge 17$ , how much is two squared, which is more – one half or 50%.

# Assessment of present psychopathology - status praesens psychicus

Here we describe the current mental status of the patient briefly, clearly and concisely using only medical terms (symptoms). We avoid extensive descriptions of symptoms and non-professional terms used by the patient – those belong to the personal history or history of present illness. For the proper medical terms – see the chapter Psychopathology.

## **Consciousness and orientation**

We start with an evaluation of consciousness. The optimum situation can be described as "the patient is fully conscious, lucid, consciousness is clear". Quantitative disturbances of consciousness are not very frequent at a department of psychiatry; these patients are rather treated at intensive care units. Qualitative disorders of consciousness are more common in mental disorders.

As for the patient's orientation, the proper questions were partially described in "Indicative examination of intellect, memory, and attention" (the patient's full name, date of birth, permanent address, today's date, month, year, place, and situation). In hospitalized or retired patients, we can tolerate a slight inaccuracy in the data. The optimum norm is a patient's full orientation during the entire examination. We describe the patient's orientation to person, time, place and situation.

## Overall impression made by the patient and his/her attitude to the examination

We notice the exterior of the patient, whether he/she is dressed adequately, eccentrically, or neglected. We also pay attention to the patient's makeup and hair. We evaluate whether the patient's visage corresponds to his/her calendar age. We describe obvious scars, tattoos or piercing.

The patient's cooperation during the examination is also recorded. Is his/her information credible, exaggerated, or does the patient downplay the problem? Is his/ her social conduct appropriate to the situation? Does he/she observe the conventions, personal space? We assess the patient's posture (stooping, bizarre or uncomfortable positions), the presence or absence of eye contact, method of handshake.

### Speech

The patient's speech may be smooth, modulated, or vice versa monotonous, bland. The voice is e.g. silent, or unreasonably loud. We assess whether the patient responds spontaneously, quickly, richly in content, or with latency, in brief. We may find aphasia, dysarthria, stuttering, mutism, coprolalia, or neologisms. In elderly patients, we must consider their problems in hearing and communication. The content of speech gives us an indirect insight into the patient's thinking.

### **Psychomotor speed**

This part is related to quantitative disorders of behavior – see Psychopathology. This may be accompanied by urgency in speech, gestures and excessive facial expressions in increased activity. On the contrary, if the activity is decreased, we can also see a reduction of most intellectual functions, lack of spontaneity, minimization of facial expression, no gestures, and a rigid stance.

### Mood and affective reactivity

We let the patient describe his/her mood. Is it sad, irritable, angry, or happy, euphoric? Is there any reason for depression/euphoria? Is the mood the same the whole day,

or does it fluctuate in a typical way? When did the mood start to change (e.g., a few weeks or months ago)? Why? Is the patient's mood accompanied by somatic symptoms (hyperventilation, tremor etc.)? We describe whether the patient's thinking and behavior are adequate to his/her reported mood. Is the patient's affectivity flattened or labile? To evaluate this part of psychopathology, we can use some questionnaires, e.g., Beck Depression Inventory (BDI), Beck Anxiety Inventory (BAI), Young Mania Rating Scale (YMRS). We also notice non-verbal expressions of the patient.

#### Thinking (thought)

We notice how the patient formulates and organizes his/her thoughts. Are they expressed clearly? Is it a continuous flow of ideas, logical, aimed at the goal? A coherent thought is optimal. In this situation, the patient's thought process can be easily tracked. We describe disturbances in speed, structure and content of thought.

The presence of delusions may be clear from the patient's information. It is important to distinguish whether the delusions are congruent with mood or not. (Congruent delusions are, e.g., megalomaniac ones in mania, depressive ones in depression.) We evaluate the extent of the delusions (solitary, a few, systematized net of delusions). Patients often deny their delusions. We never ask: "Mr. Novak, do you have any delusions?" The answer is almost always "no" even in a completely psychotic patient. That is why we rather ask in an indirect way, e.g. "Do you feel threatened or monitored? Do you know somebody who wants to hurt you (rob, kill etc.)? Do you have any special skills or talents which other people do not have? Do you blame yourself for some fault or any disaster?" We ask what reasons the patient has for his/her opinions. We never argue with a delusional patient. It can lead to an increase in mental tension, aggressive behavior, and damage to the doctor-patient relationship.

#### Perception

We assess whether the patient has illusions or hallucinations. We also observe the patient's behavior in this sense (hallucinatory behavior). We ask, e.g., "Did you hear/ see anything special that others do not hear/see? Do you notice any unusual odor or smell? Do you have any unusual physical experience (tactile hallucinations)? Do you have feelings of insertion or withdrawal into and from your self (intrapsychic hallucinations)?"

### Intellect, memory and attention

See above for testing these components of mental status. Intellect can be described as average, above average, or poor. We should distinguish whether it is only a low value within the standard or mental disorder (intellectual disability or dementia).

### Personality

In this item, we should record the presence or absence of psychiatric symptoms related to the patient's personality. The personality of the patient may not be available for our