

DEPARTMENT OF MENTAL HEALTH, MEDICAL PSYCHOLOGY AND PSYCHOTHERAPY

Health, the essence of mental health (MH). The burden of MH.
International and national legislation in the field of MH and the Rights of
people with mental disorders. The Stigma Phenomenon in MH.
Psychiatry – definition, purpose, objectives, historical data. Organization
of psychiatric care. MH services. Classification of mental and behavioral
disorders according to ICD-10 and DSM V. Psychiatric interview. Scales
used in psychiatry

Mental health is how we think, feel, act and face life's challenges.

It's how we view ourselves, our lives, and the people in them.

Mental health is a state of well-being in which an individual

- realizes his own abilities,
- can cope with the normal stresses of life,
- can work productively and
- is able to make a contribution to his community

(Mental Health: Fact sheet 2019, WHO).

Items identified as criteria of MH

- Positive attitudes towards oneself and others**
- Development and self-realization**
- Integration and emotional response**
- Autonomy and self-determination**
- Perception of reality**
- Social competence**

The essence of mental health

- The ability to love and be loved.
- Power to accept change and uncertainty without fear.
- A gift of deliberately running the risk to get rid of the endless obsession with the worst scenarios.
- Reserves of spontaneous joy of life and a wide range of emotional responses.
- efficient contact with reality.
- A rich imagination.
- A degree of self-knowledge.
- The power to say "I was wrong" and learn from experience.
- A feeling of safety and satisfaction apparently in society.
- Ability to meet the demands of the group.
- Freedom of expression as their own desires.
- The ability to fulfill his bodily desires and others.
- A sense of humor.



Source: WHO and Fountain House (2015) Excess mortality in persons with severe mental disorders.

Mental disorders make up about 12% of the total number of illnesses.

By 2030, they will constitute 15%.

Depression is assumed to be the second most important cause of dysfunction.



Source: GBD 2015 Disease and Injury Incidence and Prevalence Collaborators (2016) *Lancet*.

Prevalence of mental disorders

Mental disorders are one of the most significant public health challenges in the WHO European Region, as they are the leading cause of disability and the third leading cause of the global burden of disease (measured as disability-adjusted life years - DALY), after cardiovascular disease and cancer.

The estimated prevalence of mental disorders in the WHO European Region in 2015 was 110 million, equivalent to 12% of the entire population at the same time. Including substance use disorders increases this number by 27 million (up to 15%), while including neurological disorders such as dementia, epilepsy and headaches increases this number to over 300 million, up to 50 %.



Source: Chisholm et. al (2016), *Return on investment analysis*, *Lancet Psychiatry*

Mental health problems are more common in young people, the reproductive part of the population.



In the **developing countries**, in the coming years, the increase in the number of these disorders will be observed.

People with mental health problems are **stigmatized and discriminated** against.

Mental Disorder versus Normal Behavior

Sadness versus Depression;

Person with accentuated personality traits versus Personality Disorders;

What is the boundary line?

- duration of symptoms;
- how strongly the person has distanced himself from the usual behavior;
- the impact of the symptoms on the person's life or functionality.

*Legislation in the field of Mental
Health. Stigma and discrimination*

Legislation in the field of Mental Health


**“All people are born free
and equal in dignity and
rights”**

**The Universal Declaration
of Human Rights**

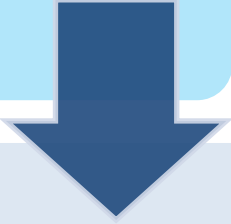
**People with mental health problems encounter human rights
violations, stigmatization and discrimination everywhere.**

The international regulatory framework

European Declaration of Mental Health (2005 in Helsinki, Finland), to which the Republic of Moldova also joined, through which the improvement of mental health became a priority direction for the country.



On November 26-27, 2010, the Republic of Moldova joined the European Declaration on the health of children and young people with intellectual disabilities and their families, „Better health, better life: children and young people with intellectual disabilities and their families”



In July 2010 The Republic of Moldova ratified the UN Convention for the Protection of the Rights of Persons with Disabilities, that is emphasizing on a human rights based approach towards people with disabilities, including those with intellectual and psycho-social disabilities

The legislative and regulatory framework

Laws:

**LAW No. 1402 of 16.12.1997 on mental health
(amended in 2008, 2010, 2016)**

<http://lex.justice.md/viewdoc.php?action=view&view=doc&id=312970&lang=1>



The legislative and regulatory framework

Government decisions:

No. 1203 of 31.10.2016 regarding the Amendment of GD 55 regarding the establishment of the Framework Regulation of the Community Mental Health Center and the Quality Standards

No. 337 of 26.05.2017 regarding the approval of the "National Program on mental health for the years 2017 - 2021"

The legislative and regulatory framework

Ministerial orders:

no. 591 of 20.08.2010 regarding the Organization and operation of the Mental Health Service in the Republic of Moldova.

no. 407 of 14.05.2014 Regarding Community Mental Health Centers.

no. 71 of 03.02.2015 Regarding the implementation of the Project "Support for the reform of Mental Health Services in Moldova"

no. 415 of 31.05.2017 regarding the organization of the activity of the psychiatric department in the general hospital

no. 474 of 15.06.17 regarding the approval of activity monitoring indicators and performance indicators of community mental health centers

Stigma is the social
compromise and
discrimination of a person

“Stigma - any attribute or physical or social sign that devalues the identity of an individual to the point that he can no longer benefit from the full acceptance of society”

How stigma affects our lives

When stigma translates into behaviors, it becomes discrimination.

Stigmatization and discrimination are "barriers" in assistance and treatment of various diseases. They affect not only stigmatized and discriminated people, but also those who discriminate, gripped by fear and ignorance.

Stigma results in the generation of fear, mistrust and violence against people suffering from mental illness

Stigma results in families and friends turning their backs on the person with mental illness

Stigma deters people from receiving mental health services

The criteria for the prohibition of discrimination:



- Race
- Color
- Nationality
- Ethnic origin
- Language
- Religion, religious belief, lack of religion
- Sex
- Age
- Health state
- Disability
- Sexual Orientation
- Opinion
- Political affiliation
- wealth
- Social origin
- Matrimonial status
- Professional status
- HIV
- Any other possible criteri

Psychiatry

Psychiatry is a medical scientific specialty, dedicated to the prevention, diagnosis, treatment and rehabilitation of patients with mental disorders.

The notion of psychiatry was introduced by the German physician Johann Christian Reil in 1808 and means "*medical treatment of the soul*" (*psych-* "*soul*" from ancient Greek - *psykhē* "*soul*" and *iatry* "*medical treatment*" from Gk. *iātrikos* "*medical*" from *iàsthai* "*to heal*").

The psychiatric subspecialties are:

- general psychiatry,
- emergency psychiatry,
- geronto- and
- child psychiatry,
- forensic psychiatry,
- addiction psychiatry (narcology),
- social psychiatry.

Ancient ages

- Mental illnesses have been known since ancient times.
- In the ancient times, mental disorders were considered as a disease caused by different supernatural forces.
- People believed that mentally ill were possessed by the demons or devils or a foreign object with magical power had entered the body.
- In the Neolithic period it was considered that the madness was caused by a „stone” in the brain, that is why it was tried to „remove” it with the help of a cranial trepanation.
- In the works of Egypt from the 7th century BC. describes „unclean spirits”, which are found in the soul of the mentally ill.

Treatment was directed at driving out the demon from the body:

- Triphening (drilling holes in skull) was used to allow the spirit to escape.
- Person was beaten.
- Person was isolated from society.

Hippocrates (460-377 BC)

- Hippocrates was the first person, who believed that diseases had natural causes, not related to superstitions and gods.
- Hippocrates separated medicine from religion, claiming that disease is not a punishment given by the gods, but rather the product of environmental factors, diet and lifestyle habits.
- Hippocrates divided mental disorders into delirious fever, mania, melancholy, epilepsy, hydrophobia and suffocation of the uterus (which will later be called hysteria).
- The Hippocratic School gave importance to the art of inspection, sensory exploration, verbal communication, clinical observation and documentation.
- For this reason, Hippocrates can rightly be called the „Father of medicine”.

Galenus (129-200 BC)

- The next doctor of considerable importance after the Hippocrates was Galenus (129-200 BC), who perpetuated the tradition of Hippocratic medicine.
- Galenus was the last great physician of Antiquity, one of the founders of pharmacology.
- Galenus wrote that the disease is caused by the imbalance of four temperaments.
- Of his more than 500 writings, „*Passions and Defects of the Soul*” has a psychiatric content.

Avicenna (Ibn Sina) (980-1037)

- Avicenna's medical work was for five centuries the basis of the study of medicine in both the East and the West.
- Among the more than 300 works, Avicenna wrote „Melancholy”.

Medieval Europe

In Medieval Europe, medicine and medical diagnosis suffered a regression, especially the diagnosis of psychiatric diseases, whose sufferers were not considered sick but deserving of the divine punishment.

For this reason, many patients have been tortured.

With the Renaissance, great progress has been made in scientific investigations.

Medical schools were established in Salerno, Montpellier, Avignon.

Paracelsus (1490-1541) wrote that the appearance of the disease is determined by the chemism of the physiological phenomena.

Jean Fernel (1486-1557) wrote about frenzy, paraphrenia, melancholy, lethargy, catalepsy.

Rudolf Goeckel (1547-1628) first introduced the term Psychology in 1590.

At the end of the sixteenth century, a number of doctors considered that mental illness is a disease of the brain.

Modern psychiatry

Philippe Pinel (1745-1826) - Father of modern psychiatry. In 1792, Philippe Pinel untied the chains of aliens at Bicêtre.

Through this recovery of mental illness in the medical sciences, Pinel made the **first major revolution** in psychiatry.

Pinel introduced a humanitarian attitude towards patients, but also increased attention towards the organization of psychiatric care.

He wrote several papers of major importance for psychiatry:

- „Research and observations on the treatment of aliens” (1798),
- „Observations on the moral regime which is most appropriate to restore, in some cases, the misguided reason of maniacs” (1789) and
- „Medico-philosophical treatise on mental alienation, ou la Manie” (1800).

Pinel's ideas and reforms were extended

by:

Jean-Étienne Dominique Esquirol (1772-1840),

Antoine Bayle (1799-1858),

Jean-Pierre Falret (1794 –1870),

Ernest-Charles Lasègue (1816-1889),

Bénédict Augustin Morel (1809-1873),

Jacques-Joseph-Valentin Magnan (1835-1916),

Karl Ludwig Kahlbaum (1828-1899),

Ewald Hecker (1843-1909),

Wilhelm Griesinger (1817–1868),

Benjamin Rush (1745-1813).

Contemporary psychiatry (I)

The founder of modern scientific psychiatry was **Emil Kraepelin** (1850-1926).

Kraepelin developed the basis of the clinico-nosological conception in psychiatry.

Richard Freiherr von **Krafft-Ebing** (1840-1902) wrote many specialized articles, but his most important work remains „Psychopathia Sexualis: eine Klinisch-Forensische Studie”, first published in 1886.

Karl Theodor **Jaspers** (1883–1969) developed the biographical method in psychiatry.

In 1923 **Kurt Schneider** (1887-1967) presents the work „Die psychopathischen Persönlichkeiten”, in which he describes 10 types of psychopathic personalities.

In 1917 **Karl Bonhoeffer** (1868-1948) published his famous work „Die exogenen Reaktionstypen” in „Archiv für Psychiatrie und Nervenkrankheiten”.

Contemporary psychiatry (II)

At the end of the eleventh century, with the publications of **Sigmund Freud** (born Sigismund Schlomo Freud) (1856-1939), the **second great revolution** in psychiatry begins.

Freud is considered to be the **parent of psychoanalysis**, and his works introduce notions such as the unconscious, defense mechanisms, missed acts and the symbolism of dreams.

Adolf Meyer (1866-1950) was president of the American Psychiatric Association in 1927-28 and was one of the most influential psychiatric figures in the first half of the twentieth century.

Meyer published the first American diagnostic manual, inaugurating the birth of DSM with DSM - I - Diagnostic and Statistical Manual of Mental Disorders.

Paul Eugen Bleuler, better known as Eugen Bleuler, (1857-1940) in 1908 invented the term **schizophrenia**, and in 1911 published his famous monograph „Dementia praecox oder Gruppe der Schizophrenien”.

In the same year, he introduced in the practice of psychoanalysis the term of **ambivalence** and that of **autism** in 1912.

The **third great revolution** in psychiatry began with the synthesis of **chlorpromazine** in 1950

1950 - 52. **Chlorpromazine** by Pierre Deniker and Jean Delay from Center Hospitalier Sainte-Anne Paris.

meprobamate (1950) and **chlordiazepoxide** (1955),
iproniazid (1951), from the IMAO group and
imipramine (1951), a tricyclic antidepressant.

In 1958 **clozapine** and **haloperidol** were synthesized.

In 1960 Valproate

Subsequently, there has been poor clinical progress in psychiatry in terms of
psychopharmacology.

They appeared: in 1984 – risperidone;

Fluoxetine (Prozac) (1988),

Sertraline (1991),

in 1992-Paroxetine, in 1996 – olanzapine,

in 1997 – quetiapine, citalopram (1998),

aripiprazole in 2002, paliperidone in 2006 and

lurasidone 2010.

Diagnostic systems of psychiatric disorders

the World Health Organisation : used world wide

ICD-10 (International Classification of Diseases)

- F 01-F 09 Organic Mental Disorders
- F 10-F 19 Mental and Behavioral Disorders Due to Psychoactive Substances Use
- F 20-F 29 Schizophrenia, Schizotypal and Delusional Disorders
- F 31-F 39 Mood (Affective) Disorders
- F 40-F 48 Neurotic, Stress-related and Somatoform Disorders
- F 50-F 59 Behavioral Syndromes Associated with Physiological Disturbances and Physical Factors
- F 60-F 69 Disorders of Adult Personality and Behavior
- F 70-F 79 Mental Retardation
- F 80-F 89 Disorders of Psychological Development
- F 90-F 98 Behavioral and Emotional Disorders with Onset Usually Occurring in Childhood and Adolescence
- F 99 Unspecified Mental Disorder

In USA:

Diagnostic and Statistical Manual of Mental Disorders (DSM-V -
Multiaxial Assessment Diagnosis)

- **Axis I:** Clinical disorders
- Other conditions that may be a focus of clinical attention.
- **Axis II:** Personality disorders
- Mental retardation
- **Axis III:** General medical conditions
- **Axis IV:** Psychosocial and environmental problems
- **Axis V:** Global assessment of functioning

Classification (DSM-V)

- Neurodevelopmental Disorders
- Schizophrenia Spectrum and Other Psychotic Disorders
- Bipolar and Related Disorders
- Depressive Disorders
- Anxiety Disorders
- Obsessive-Compulsive and Related Disorders
- Trauma- and Stressor-Related Disorders
- Dissociative Disorders
- Somatic Symptom and Related Disorders
- Feeding and Eating Disorders
- Elimination Disorders
- Sleep-Wake Disorders
- Sexual Dysfunctions
- Gender Dysphoria
- Disruptive, impulse-Control, and Conduct Disorders
- Substance-Related and Addictive Disorders
- Neurocognitive Disorders
- Personality Disorders
- Paraphilic Disorders
- Other Mental Disorders
- Medication-Induced Movement Disorders and Other Adverse Effects of Medication

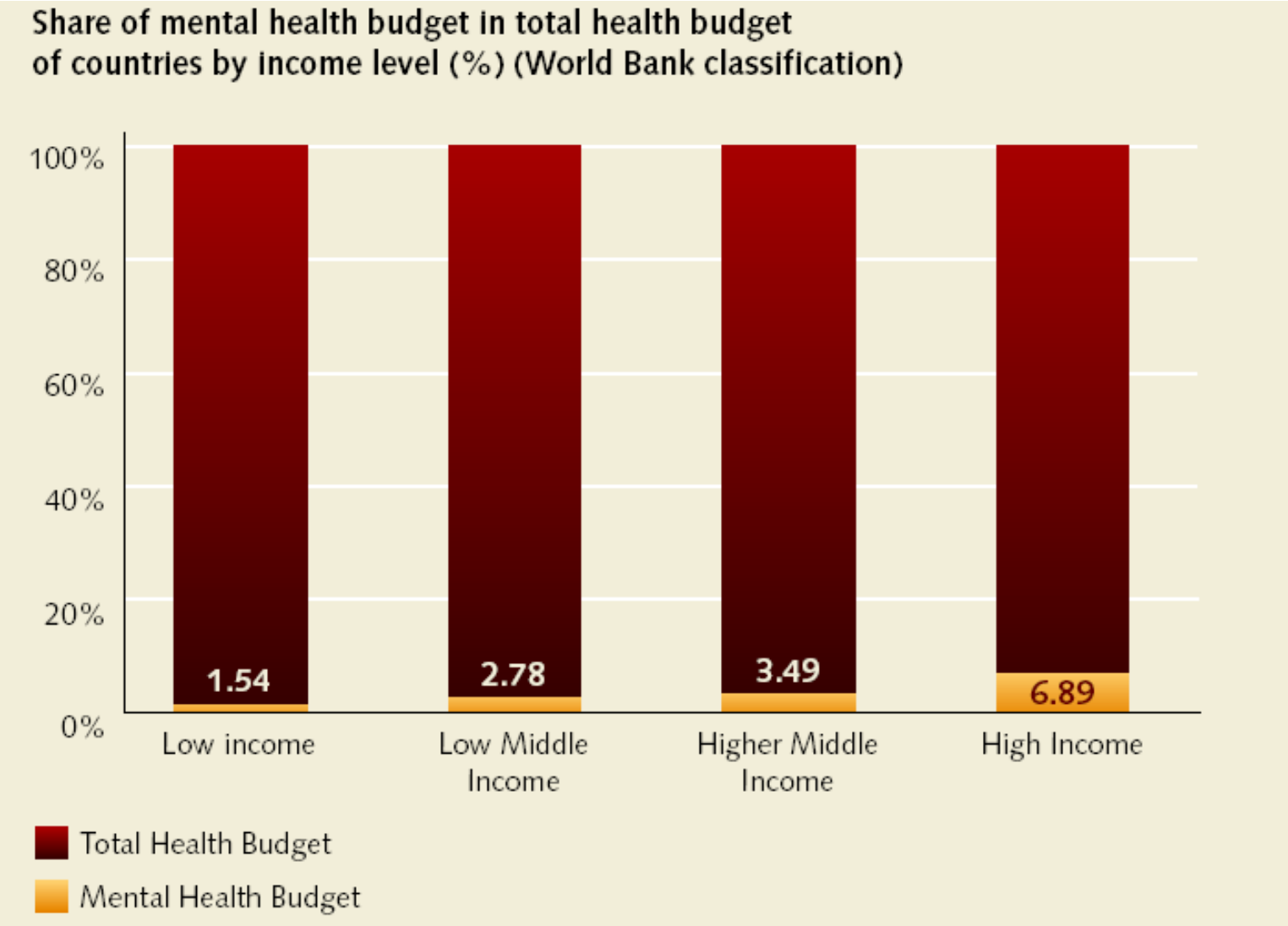
Mental Health “Reforms” world -wide

- 40% of countries do not have MH Policy
- 41% of countries do not have a MH Law
- 60% of countries don not have MH Policy AND Law
- 80% of countries with Legislation or/and Policy do not implement them

Components of MH Policy from > frequent to < frequent (very seldom they are all presents in a Policy) (sample:36 countries)

- Capacity Building at Primary Care Level
- Establishing National Psych. Hosp.
- Norms and Standards
- Awareness campaigns for General Population
- Empowerment family Associations
- Establishment of Community Based Mental Health Centers
- Establishment of Catchement Areas
- Establishment of Psychiatric Wards or Beds in General Hospitals
- Phasing down of Psychiatric Hospitals number and beds
- Promotion of half way houses or protected housing
- Promotion of work and employment opportunities

The Gap Between the Burden and the Budget

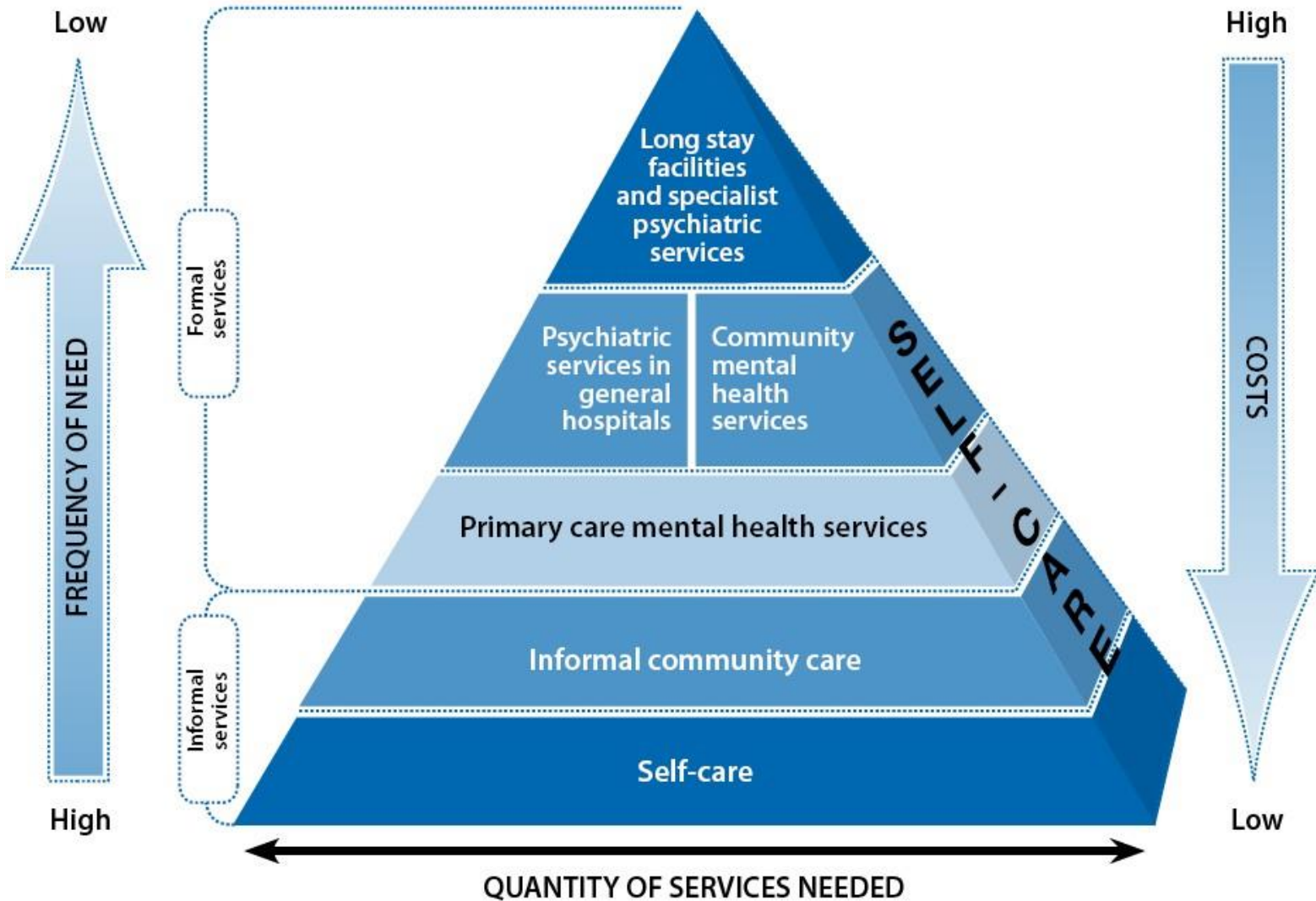


Organization of services

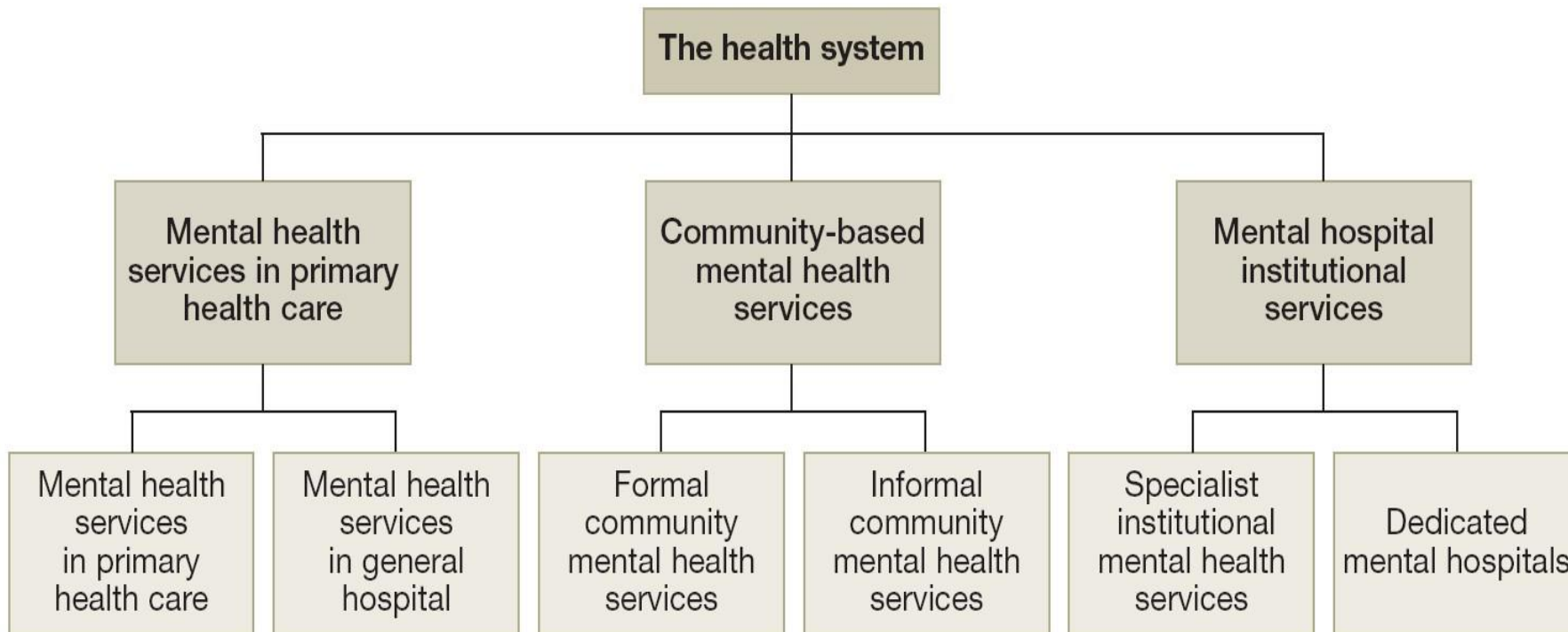
Magnitude of mental disorders

- 10-15% of adult population affected
- 20% of patients seeking primary health care have one or more mental disorders, though not recognised
- One in four families have at least one member with a behavioural or mental disorder at any point in time.

WHO Service Organization Pyramid for an Optimal Mix of Services for Mental Health



Components of mental health services



Community Mental Health: 2 additional aspects

- The patient/beneficiary is the co-creator of care / nothing about us without us
- Assertive care / flexibility

Community Mental Health:

We support the recovery of health, function and identity

We offer hope for recovery

In all interventions, we ask ourselves: are we helping or making worse?

We go from what is bad to what is good

We do not decide anything about the patient without the patient

We consider communication with the patient a communication between 2 experts

We work together with interested actors

We recognize the patient's right to take risks

We involve the family as a producer and consumer of care

We exchange and integrate knowledge

Relationship between doctor and patient

It is known the fact that the simplest medical act involves interpersonal relationships, a special type human contact between the one who helps and those who suffer with the ultimate goal of alleviating suffering.

T. Sydenham said that physicians should treat the patient as he himself would like to be treated, and G. Thibon said that what the doctor asks the patient is being treated as a person by person.

Patient and the doctor does not ignore nor any other, that without a reliable therapeutic environment is impossible.

However, often the patient is considered a chapter of pathology, an opportunity for experimentation, scientific way, doctor-patient relationship is transformed into the relationship between experimenter and subject.

- This was possible due to the increased the importance of the laboratory, the results of new therapeutic agents, making many to consider not only disease (no patients).
- Many doctors see the clinical bed being alive, but the person with soul.
- The physician should be useful not only in its specialized knowledge, but also gives you tips for a spiritual and moral reconstruction.
- A person who is totally sick, the whole person involved in this drama.
- The patient has certain attitudes; to the disease, but also attitudes to the doctors as: trust, esteem, sympathy, but possible and doubt, fear, contempt, hatred.

The relationship between doctor and patient is a part of the psychology of interpersonal behavior. Here we have at least seven categories:

1. Social interaction(cooperative or competitive), produced by trends, which are not social
- 2.dependence, including acceptance, interaction, assistance, protection, guidance
3. affiliation, including physical proximity, contact with eyes, warm and friendly answers
- 4.domination - others to accept as leader, or teacher, or critic, or counselor, or judge, etc..
- 5.sexuality, including physical proximity, body contact, intimate interaction, usually of the opposite sex, attractive
6. aggression, injury to others physically, verbally, etc..
- 7.self-esteem and ego identity: self acceptance by others, or accepting the image others have about himself.

Psychiatry
History
Classification of mental disorders
General psychopathology

Psychiatry studies the causes of mental disorders, gives their description, predicts their future course and outcome, looks for prevention of their appearance and presents the best ways of their treatment

Definition

Psychiatry studies the causes of mental disorders, gives their description, predicts their future course and outcome, looks for prevention of their appearance and presents the best ways of their treatment

Psychiatry in professional practice

- **Special psychiatry** is devoted to individual mental diseases
- **General psychiatry** studies psychopathological phenomena, symptoms of abnormal states of mind:
 1. perception
 2. mood (emotions)
 3. volition
 4. motor activity
 5. consciousness.
 6. intelligence
 7. memory & attention
 8. thinking

Disturbances of Perception

- **Perception** is a process of transferring physical stimulation into psychological information.
- **Illusions**
- **Hallucinations**
- **Psychosensorial disturbances**

Disturbances of Perception

- **Illusions** are false perception and they appear mainly in conditions of decreased level of analyzer excitement or qualitative disturbances of consciousness (missing insight) (misperception or misinterpretation of real external sensory stimuli)

by analyzer

- visual (more often)
- auditory
- olfactory
- gustatory
- tactile (visceral or interceptive)

also

- Physiological, due to imperfection of analyzers
- Affective
- Pareidolias

Disturbances of Perception

- **Hallucinations** are percepts without any obvious stimulus to the sense organs; the patient is unable to distinguish it from reality (false sensory perception not associated with real external stimuli)
 - **Hypnagogic hallucination:** false sensory perception occurring while falling asleep; generally considered nonpathological phenomenon.
 - **Hypnopompic hallucination:** false perception occurring while awakening from sleep; generally considered nonpathological.

Hallucinations

- **Auditory hallucination:** false perception of sound, usually voices but also other noises, such as music; most common hallucination in psychiatric disorders
- **Visual hallucination:** false perception involving sight consisting of both formed images (for example, people) and unformed images (for example, flashes of light); most common in medically determined disorders
- **Olfactory hallucination:** false perception of smell; most common in medical disorders
- **Gustatory hallucination:** false perception of taste, such as unpleasant taste caused by an uncinate seizure; most common in medical disorders
- **Tactile (haptic) hallucination:** false perception of touch or surface sensation, as from an amputated limb (phantom limb), crawling sensation on or under the skin (formication).

Hallucinations

by projection in space

- **True hallucinations-** patient cannot distinguish them from reality
- **Pseudohallucinations-** they are perceived as strange, unreal, inserted in mind, look like „internal screen”

Disturbances of Perception

- **Psychosensorial disturbances** – are the form of pathological perception with appear an impression of deformation of objects, the proper person and environment
- **Methamorphopsias**
 - **Macropsia**: state in which objects seem larger than they are
 - **Micropsia**: state in which objects seem smaller than they are (both macropsia and micropsia can also be associated with clear organic conditions, such as complex partial seizures)
 - **Dismegalopsia**
 - **Porropsia**

Psycho-sensorial disturbances

- **Derealization:** a subjective sense that the environment is strange or unreal; a feeling of changed reality
 - **déjà vu, jamais vu etc.**
- **Depersonalization:** a subjective sense of being unreal, strange, or unfamiliar to oneself (feelings of unrealness, such as if one is „outside” of the body and observing his own activities)
- **Dismorphophobias.**

Disorders of Mood (Emotions)

Mood: a pervasive and sustained emotion, subjectively experienced and reported by the patient and observed by others; examples include depression, elation, anger

- **Euthymic** mood: normal range of mood, implying absence of depressed or elevated mood
- **Dysphoric** mood: an unpleasant mood
- **Expansive** mood: expression of one's feelings without restraint, frequently with an overestimation of one's significance or importance
- **Irritable** mood: easily annoyed and provoked to anger.

Disorders of Mood (Emotions)

- **Labile mood:** oscillations between euphoria and depression or anxiety
- **Elevated mood:** air of confidence and enjoyment; a mood more cheerful than usual
- **Euphoria:** intense elation with feelings of grandeur
- **Ecstasy:** feeling of intense rapture

Disorders of Mood (Emotions)

- **Depression:** psychopathological feeling of sadness
- **Anhedonia:** loss of interest in and withdrawal from all regular and pleasurable activities, often associated with depression
- **Grief or mourning:** sadness appropriate to a real loss
- **Alexithymia:** inability or difficulty in describing or being aware of one's emotions or moods

Other emotions

- **Agitation:** severe anxiety associated with motor restlessness
- **Tension:** increased motor and psychological activity that is unpleasant
- **Anxiety:** feeling of apprehension caused by anticipation of danger, which may be internal or external
- **Fear:** anxiety caused by consciously recognized and realistic danger

Phobia: persistent, irrational, exaggerated, and invariably pathological dread of some specific type of stimulus or situation; results in a compelling desire to avoid the feared stimulus

- a. Specific phobia: circumscribed dread of a discrete object or situation (for example, dread of spiders or snakes)
- b. Social phobia: dread of public humiliation, as in fear of public speaking, performing, or eating in public
- c. Acrophobia: dread of high places
- d. Agoraphobia: dread of open places
- e. Algophobia: dread of pain

Phobia:

- f. Ailurophobia: dread of cats
- g. Erythrophobia: dread of red (refers to a fear of blushing)
- h. Panphobia: dread of everything
- i. Claustrophobia: dread of closed places
- j. Xenophobia: dread of strangers
- k. Zoophobia: dread of animals

Other emotions

- **Panic:** acute, episodic, intense attack of anxiety associated with overwhelming feelings of dread and autonomic discharge
- **Apathy:** dulled emotional tone associated with detachment or indifference
- **Ambivalence:** coexistence of two opposing impulses toward the same thing in the same person at the same time
- **Shame:** failure to live up to selfexpectations
- **Guilt:** emotion secondary to doing what is perceived as wrong

Motor Disorders

Motor disorders occur frequently in mental disorders of all kinds, especially in catatonic schizophrenia.

- **Catatonic excitement:** agitated, purposeless motor activity, uninfluenced by external stimuli
- **Catatonic stupor:** markedly slowed motor activity, often to a point of immobility and seeming unawareness of surroundings

Catatonic excitement:

- **Echolalia:** psychopathological repeating of words or phrases of one person by another
- **Echopraxia:** pathological imitation of movements of one person by another
- **Echomimia:** pathological imitation of facial expression of one person by another
- **Stereotypy:** repetitive fixed pattern of physical action or speech
- **Mannerism:** ingrained, habitual involuntary movement
- **Aggression:** forceful goal-directed action that may be verbal or physical; the motor counterpart of the affect of rage, anger, or hostility

Catatonic stupor:

- **Catalepsy:** general term for an immobile position that is constantly maintained
- **Catatonic rigidity:** voluntary assumption of a rigid posture, held against all efforts to be moved
- **Catatonic posturing:** voluntary assumption of an inappropriate or bizarre posture, generally maintained for long periods of time
- ***Cerea flexibilitas* (waxy flexibility):** the person can be molded into a position that is then maintained; when the examiner moves the person's limb, the limb feels as if it were made of wax.
- **Negativism:** motiveless resistance to all attempts to be moved or to all instructions
- **Mutism:** voicelessness without structural abnormalities

Disorders of Consciousness

- **Consciousness:** state of awareness of the self and the environment
- Disorders of consciousness:
 - quantitative
 - short-term
 - long-term
 - qualitative
- **Hypnosis** – artificially incited change of consciousness
- **Syncope** – short-term unconsciousness

Disorders of Consciousness

- **Quantitative changes of consciousness** mean reduced vigility (alertness):
 - **somnolence**- abnormal drowsiness
 - **obnubilation** (twilight state) – starts and ends abruptly, amnesia is complete; the patient is disordered, his acting is aimless, sometimes aggressive, hard to understood.
 - **sopor**
 - **coma**: profound degree of unconsciousness

Qualitative changes of consciousness

- **Qualitative changes of consciousness** mean disturbed perception, thinking, affectivity, memory and consequent motor disorders:
 - **Delirium** – characterized by disorientation, distorted perception (hallucinations), enhanced suggestibility, misinterpretations and mood disorders
 - **Dreamlike state**: often used as a synonym for complex partial seizure or psychomotor epilepsy
 - **Amentia** - confusional state.

Disorders of Memory

- **Quantitative**

- Hypermnesia
- Hypomnesia
- Amnesia

- **Qualitative**

- Confabulation
- Criptomnesia
- Pseudoreminiscence

Disorders of Memory

- **Hypermnesia** – increased recall function with appearance in mind of a lots of events from own past (exaggerated degree of retention and recall)
- **Hypomnesia** – decreasing in memorizing and recall function
- **Amnesia**: partial or total inability to recall past experiences; may be organic or emotional in origin
 - a. **Anterograde**: amnesia for events occurring after a point in time (in case of events that happened after the disease)
 - b. **Retrograde**: amnesia prior to a point in time (in case of events that happened until the disease)

Disorders of Memory

- Qualitative (paramnesias)
 - **Confabulation** or pseudologia phantastica when pts fill the gaps in memory with absolutely fantastic, unreal events
 - **Criptomnesia** – pts fill the gaps in memory with events about which they read or heard, or have seen on TV
 - **Pseudoreminescence** – pts live in present the events from their past

Korsakov's syndrome:

- Fixative amnesia
- Amnesic disorientation
- Confabulations.

Disorders of Thinking

Thinking: goal-directed flow of ideas, symbols, and associations initiated by a problem or a task and leading toward a reality-oriented conclusion.

- **Specific disturbances in form of thought**
- **Specific disturbances in content of thought**

Specific disturbances in form of thought

- 1. **Neologism:** new word created by the patient, often by combining syllables of other words, for idiosyncratic psychological reasons
- 2. **Word salad:** incoherent mixture of words and phrases
- 3. **Circumstantiality:** indirect speech that is delayed in reaching the point but eventually gets from original point to desired goal; characterized by an overinclusion of details
- 4. **Tangentiality:** inability to have goal-directed associations of thought; patient never gets from desired point to desired goal
- 5. **Incoherence:** thought that, generally, is not understandable; running together of thoughts or words with no logical or grammatical connection, resulting in disorganization

Specific disturbances in form of thought

- **Perseveration:** persisting response to a prior stimulus after a new stimulus has been presented, often associated with cognitive disorders
- **Verbigeration:** meaningless repetition of specific words or phrases
- **Derailment:** gradual or sudden deviation in train of thought without blocking
- **Flight of ideas:** rapid, continuous verbalizations or plays on words produce constant shifting from one idea to another;
- **Blocking:** abrupt interruption in train of thinking before a thought or idea is finished;

Specific disturbances in content of thought

- **Obsessions** are recurrent persistent thoughts, impulses or images entering the mind despite the person's effort to exclude them.
- Obsessive phenomena in acting (usual as senseless **rituals** – cleaning, counting, dressing) are called **compulsions**.
- **Overvalued idea**: unreasonable, sustained false belief maintained less firmly than a delusion
- **Delusion**: false belief, based on incorrect inference about external reality, not consistent with patient's intelligence and cultural background, that cannot be corrected by reasoning

Disorders of Thinking

Division of delusions:

- according to onset
 - a) primary (delusion mood, perception)
 - b) secondary (systematized)
 - c) shared (folie a deux)
- according to theme
 - a) **Delusion of persecution:** false belief that one is being harassed, cheated, or persecuted
 - b) **Delusion of reference:** false belief that the behavior of others refers to oneself
 - c) **Delusion of control:** false feeling that one's will, thoughts, or feelings are being controlled by external forces
 - d) **Delusion of infidelity** (delusional jealousy): false belief derived from pathological jealousy that one's lover is unfaithful

Disorders of Thinking

- a) **Delusion of grandeur:** exaggerated conception of one's importance, power, or identity
- b) **Erotomania:** delusional belief, more common in women than in men, that someone is deeply in love with them
- c) d. of power, noble origin.

Disorders of Thinking

- Thought withdrawal: delusion that one's thoughts are being removed from one's mind by other people or forces
- Thought insertion: delusion that thoughts are being implanted in one's mind by other people or forces
- Thought broadcasting: delusion that one's thoughts can be heard by others, as though they were being broadcast into the air
- Thought control: delusion that one's thoughts are being controlled by other people or forces

Disorders of Thinking

- **Nihilistic delusion:** false feeling that self, others, or the world is nonexistent or ending
- **Delusion of selfaccusation:** false feeling of remorse and guilt
- **Hypochondria:** exaggerated concern about one's health that is based not on real organic pathology but, rather, on unrealistic interpretations of physical signs or sensations as abnormal

Scales in psychiatry

A wide array of psychiatric rating scales have been developed and refined over the past 50 years to provide reliable and objective assessments of the symptom severity of a large number of psychiatric disorders.

Although primarily used to assess changes in illness severity during treatment trials (i.e., as dependent measures in randomized controlled trials), psychiatric rating scales also may be used as relatively brief screening tools for diagnosis and as useful tools in non-research settings to monitor illness activity and response to treatment within disease management or measurement-based care paradigms.

The most widely used psychiatric rating scales are for depression, mania, generalized anxiety disorder, obsessive-compulsive disorder, schizophrenia, and dementia, as well as several of the common conditions in children and adolescents.

Rating scales for **Addiction**

- Alcohol Use Disorders Identification Test
- Bergen Shopping Addiction Scale
- CAGE Questionnaire
- CRAFFT Screening Test

Rating scales for ADHD

Attention deficit hyperactivity disorder

- ADHD Rating Scale
- Adult ADHD Self-Report Scale
- Brown Attention-Deficit Disorder Scales
- Disruptive Behavior Disorders Rating Scale
- Swanson, Nolan and Pelham Teacher and Parent Rating Scale
- Vanderbilt ADHD Diagnostic Rating Scale

Rating scales for **Autism spectrum**

- Adult Asperger Assessment
- ASAS (Australian scale for Asperger's syndrome)
- Autism Spectrum Quotient (AQ)
- Childhood Autism Rating Scale (CARS)
- Childhood Autism Spectrum Test (CAST)
- Q-CHAT (Quantitative CHecklist for Autism in Toddlers)
- Autism Diagnostic Observation Schedule (ADOS)

Rating scales for **Anxiety**

- Beck Anxiety Inventory
- Clinician Administered PTSD Scale (CAPS)
- Generalized Anxiety Disorder 7 (GAD-7)
- Hamilton Anxiety Scale (HAM-A)
- Hospital Anxiety and Depression Scale
- Panic and Agoraphobia Scale (PAS)
- Panic Disorder Severity Scale (PDSS)
- PTSD Symptom Scale – Self-Report Version
- Social Phobia Inventory (SPIN)
- Taylor Manifest Anxiety Scale
- Yale–Brown Obsessive Compulsive Scale (Y-BOCS)
- Zung Self-Rating Anxiety Scale

Rating scales for **Dementia and cognitive impairment**

- Abbreviated mental test score
- Addenbrooke's Cognitive Examination
- Clinical Dementia Rating
- General Practitioner Assessment Of Cognition
- Informant Questionnaire on Cognitive Decline in the Elderly
- Mini-mental state examination
- Montreal Cognitive Assessment

Rating scales for **Dissociation**

- Dissociative Experiences Scale (DES)

Rating scales for **Depression**

- Beck Depression Inventory (BDI)
- Edinburgh Postnatal Depression Scale (EPDS)
- Geriatric Depression Scale (GDS)
- Hamilton Rating Scale for Depression (HAM-D)
- Major Depression Inventory (MDI)
- Montgomery-Åsberg Depression Rating Scale (MADRS)
- PHQ-9
- Mood and Feelings Questionnaire (MFQ)
- Zung Self-Rating Depression Scale

Rating scales for **Eating disorders**

- Anorectic Behavior Observation Scale
- Binge Eating Scale (BES)
- Eating Attitudes Test (EAT-26)
- Eating Disorder Inventory (EDI)

Rating scales for **Mania and bipolar disorder**

- Altman Self-Rating Mania Scale (ASRM)
- Bipolar Spectrum Diagnostic Scale
- Child Mania Rating Scale
- Hypomania Checklist
- Mood Disorder Questionnaire (MDQ)
- Young Mania Rating Scale (YMRS)

Rating scales for **Personality and personality disorders**

- Buss-Perry Aggression Questionnaire (AGQ)
- Hare Psychopathy Checklist
- Minnesota Multiphasic Personality Inventory
- Narcissistic Personality Inventory

Rating scales for **Schizophrenia** **and psychosis**

- Brief Psychiatric Rating Scale (BPRS)
- Calgary Depression Scale for Schizophrenia (CDSS)
- Positive and Negative Syndrome Scale (PANSS)
- Scale for the Assessment of Positive Symptoms (SAPS)
- Scale for the Assessment of Negative Symptoms (SANS)

Intervention methods in mental health

- ❧ Biological (psychopharmacology, ECT, DBS [deep brain stimulation], etc.)
- ❧ Psychotherapy
- ❧ Psychosocial rehabilitation

Basic principles and types of treatment in psychiatry

according to:

- the stage of the disease
- the patient's condition
- the patient's physical condition, body weight,
- type of metabolism, type of elimination,
- the half-life of the drug,
- formation of active metabolites

Main Psychopharmacological DRUGS

- ❧ Antipsychotics
- ❧ Antidepressants
- ❧ Anxiolytics
- ❧ Mood stabilizers
- ❧ Hypnotic
- ❧ Procognitive
- ❧ Psychostimulants

Neuroleptics (Antipsychotics)

1st generation – "classical neuroleptics";

2nd generation - atypical antipsychotics,

Main effect - antipsychotic action:

- hallucinations, psychomotor agitation, stupor, etc. through the blocking action on the predominantly dopamine neurotransmitter system
- are substances with different chemical structure,

Antipsychotic action includes:

The anti-”autistic” and/or disinhibitory effect (resolve primary negative symptoms from schizophrenia and secondary ones from defective states dominated by negative symptoms):

- autism,
- ambivalence,
- incoherence,
- flat affect,
- dissociation
- depression.

The stimulation effect is present in some neuroleptics with action on the prefrontal area, used in the negative symptoms of schizophrenia.

Example: aripiprazole, brexpiprazole, cariprazine, etc.

The antidepressant effect produced by some typical or atypical neuroleptics (flupentixol, thioridazine, sulpiride, clozapine, quetiapine, etc.).

Antipsychotic action includes:

The anti-manic, anti-confusional effect

➤ **Extrapyramidal and metabolic effect** - the most common adverse reactions after taking neuroleptics.

Somatic effects of antipsychotics

Cardiovascular effect	<ul style="list-style-type: none">➤ hypotension, tachycardia,➤ dizzy,➤ arrhythmias,➤ sudden death
Gastrointestinal effect	<ul style="list-style-type: none">➤ anorexia, dysphagia, constipation,➤ diarrhoea, change in taste,➤ glossitis, feeling sick
Sexual side effects	<ul style="list-style-type: none">➤ decreased libido,➤ erection difficulties,➤ inhibition of ejaculation, anorgasmia,➤ priapism

Efectele somatice ale antipsihoticelor

Endocrine effects	<ul style="list-style-type: none">➤ breast enlargement,➤ hyperlactation, galactorrhea, amenorrhea,➤ increased appetite, weight gain,➤ hyperglycemia,➤ tardive hypothalamic sindrom
Eye effects	<ul style="list-style-type: none">➤ reduced visual acuity,➤ pigmentary retinopathy
Sensitivity reactions	<ul style="list-style-type: none">➤ photosensitivity,➤ photoallergic reactions,➤ skin pigmentation abnormalities,➤ rashes, erythematous eruptions➤ agranulocytosis,➤ eosinophilia

TYPE OF	Definition	Effects
NEUROLEPTIC 1st generation antipsychotics – "classical neuroleptics"	defined by Delay and Denicker (1957), as being characterized by the blocking action of predominantly subcortical D2 receptors, and of α 2 NA receptors	➤ reduction of psychotic disorders, predominantly positive symptoms;
		➤ the occurrence of extrapyramidal syndrome and some neurovegetative manifestations;
		➤ reduction of motor excitement and agitation.

Overview of Antipsychotic Medications

Conventional Antipsychotic Drugs

Chemical group	Brand name drug	Generic drug	Dosage (mg)
Phenothiazines	chlorpromazine	AMINAZIN LARGACTIL, PLEGOMAZIN, MEGAPHEN, THORAZIN	200-800
	levomepromazine	TISERCIN, NOZINAN	50-400
	periciazine	NEULEPTIL	10-40

* Generic medications are a chemical copy of the original brand, with the same active ingredients

Overview of Antipsychotic Medications

Conventional Antipsychotic Drugs

Chemical group	Brand name drug	Generic drug	Dosage (mg)
Phenothiazines	fluphenazine	MODITEN	2-16
	trifluoperazine	STELAZIN	10-50
Butyrophenones	haloperidol	HALOPERIDOL, HALDOL, APO- HALOPERIDOL	2,5-10

* Generic medications are a chemical copy of the original brand, with the same active ingredients

Antipsihotice convenționale cu acțiune prelungită*

Brand name drug	Generic drug	Test dosage (mg)	Dosage (mg/week)	Interval of administration (weeks)	Clinical observations
Flupenthixolum decanoat	Fluanxol, Depixol	20	12,5 - 400	2 - 4	High mood
Zuclopenthixolum decanoat	Clopixol	100	100 - 600	2 - 4	Usefull in controlling agitation with agression
Fluphenazinum decanoat	Moditen depot, Modecat	12,5	6,25 - 50	2 - 5	Important Extrapiramidal side effects (EPS) marcate, Agravetes depression
Haloperidolum decanoat	Haldol	25	12,5 - 75	4	Important EPS, sedation
Pipothiazinum decanoat	Piportil	25	12,5 - 50	4	Rare EPS

In recent decades - the new class of "atypical" antipsychotics (neuroleptics) have brought optimism through their qualities:

- antipsychotic strength,
- active in many of the refractory cases,
- also active in negative symptoms (Clozapine, Risperidone, Aripirazole, Cariprazine).
- significantly reduce or prevent cognitive impairment.
- effect in resistant patients with schizophrenia.
- patient compliance is better.

TYPE OF NEUROLEPTIC atypical antipsychotics – second generation antipsychotic agents	Definition	Effects
	defined by Martres (1994), as psychotropic substances antagonists of dopamine receptors D2 variants (D2, D3, D4), D1, D5 serotonergic 5-HT2, nicotinic, muscarinic and histamines; this "multivalent action", expressed at mesencephalic, hippocampal and cortical levels	<ul style="list-style-type: none"> <li data-bbox="1668 1428 2514 392">➤ antipsychotic effect on positive and negative symptoms; <li data-bbox="1668 392 2514 714">➤ less often extrapyramidal phenomena or tardive dyskinesias; <li data-bbox="1668 714 2514 1428">➤ tendencies to change the blood formula.

Second generation of Antipsychotics

Brand name drug	Generic drug	Dosage (mg)
Sulpiride	DOGMATIL, PROSULPIN,EGLONYL	50-1200
Amisulpride	SOLIAN, DENIBAN	50-1200
Risperidone	RISPERDAL, RISPEN, RISPERDAL QUICKLET	4-8
Clozapine	LEPONEX	200-600
Olanzapine	ZYPREXA i.m. inj. 10 mg	5-20

Antipsihotice „atipice” cu acțiune prelungită

Brand name drug	Generic drugs	Dozage (mg)	Administrati on interval (weeks)
Risperidonum	Rispolept Consta	25; 37,5 or 50 mg	2
Paliperidonum palmitat	Invega Sustenna	39, 78, 117, 156 or 234 mg	4
Paliperidonum palmitat	Xeplion	150 mg in day 1 of treatment and 100 mg after week 1 (day 8). Dosage usual 75-150 mg/month	4
Paliperidonum palmitat	Invega Trinza	273; 410 or 546 mg	12
Paliperidonum palmitat	Trevicta	175, 263, 350 or 525mg	12
Aripiprazolum	Maintena	Initial dosage and the usual one is 400 mg/ 2-3 week.	2 - 3
Olanzapinum	Zip-Adhera	210 mg/2 week, 300 mg/2 week, 405 mg 4 week, 300 mg/4 week	2 - 4

Side effects

Side effects	Manifestations
3. Neurologic effects	Extrapyramidal reactions: <ul style="list-style-type: none">• dystonia (slow movements of the muscles of the limbs, face, tongue with contortions or muscle contractions),• akathisia (constantly feels the need to move, to walk),• pseudoparkinsonism (bradypsychia, bradylalia, fine tremor, rigidity),• dysphagia,• urinary incontinence,• delayed vomiting

Side effects

Neuroleptic malignant syndrome

- muscle stiffness,
- tachycardia,
- hyperthermia,
- alterations of vital functions,
disturbances of consciousness

Antidepressants

When do we indicate antidepressants?

- Major depression Disorder;
- Depressive episodes in bipolar and unipolar disorder.

Affective disorders:

- **Dysthymia;**
- **Depressive symptoms secondary to medical problems;**
- **Seasonal affective disorder;**
- **Postpartum depression;**
- **Premenstrual dysphoric disorder**

- Obsessive-Compulsive Disorders
- Panic Disorders,
- Social phobia.
- Generalized anxiety disorder
- Eating Disorders (anorexia, bulimia)
- Psychosomatic disorders
- Posttraumatic Stress Disorder
- Symptoms of Alcohol and Drug Withdrawal (Narcotic)
- Algic syndrome

Types of antidepressants:

Three classes of drugs are used as antidepressants:

- heterocyclic antidepressants (tricyclic, tetracyclic),
- specific serotonin and noradrenaline agents
- other antidepressant agents.

Antidepressants:

1 Generation of Antidepressants (Tricyclic and Tetracyclic)

Brand name drug	Generic drugs	Dosage (mg)	Mechanism of action
Amitriptyline	AMITRIPTYLIN	75-200	Serotonin and/or Norepinephrine Reuptake Inhibition Followed by Increasing Their Concentration in the Synaptic Cleft
Imipramine	MELIPRAMIN	75-250	
Clomipramine	ANAFRANIL, HYDIPHEN	75-225	
Maprotiline	LUDIOMIL, MAPROTILINE	75-150	

Specific serotonin agents:

- the new class of drugs for depression.**
- Fewer side effects, have no side effects in relation to the cardiovascular system**

Antidepressive

Brand name drug	Generic drugs	Dosage (mg)	Mechanism of action
SSRI (Selective Serotonin reuptake inhibitors)			
Fluvoxamine	FEVARIN	100-300	Selective Serotonin Reuptake Inhibition
Fluoxetine	DEPREX, DEPRENON, PROZAC, PORTAL, FLOXET, FLUXONIL, MAGRILAN	20-60	
Citalopram	SEROPRAM, CITALEC, CEROTER, PRAM	20-60	
Escitalopram	CIPRALEX	10-20	
Paroxetine	SEROXAT, PAROLEX, APO-PAROX, REMOD	20-60	
Sertraline	ZOLOFT, SERLIFT, ASENTRA, STIMULOTON	50-200	

Brand name drug	Generic drugs	Dosage (mg)	Mechanism of action
Antidepressants with Double Serotonergic Efficiency			
Trazodone	TRITTICO AC	4-8	Double Serotonergic Efficiency
Noradrenaline reuptake inhibitors			
Reboxetine	EDRONAX	4-8	Noradrenaline reuptake inhibitors

Dual action antidepressants Mixed serotonin and adrenaline reuptake inhibitors

Brand name drug	Generic drugs	Dosage (mg)	Mechanism of action
IRSN			
Venlafaxine	EFECTIN	75-375	Serotonin and Norepinephrine Reuptake Inhibition
venlafaxine ER (with prolong elimination)	EFECTIN ER	75-225	
Duloxetine	Duloxgamma	30-120	

Side effects

Anticholinergic effects

- drying of mucous membranes (occasionally associated with sublingual adenitis),
- visual disturbance as a result of mydriasis and cycloplegia,
- increased intraocular pressure,
- hyperthermia,
- constipation,
- adynamic intestinal occlusion,
- urinary retention.

Side effects of antidepressants

Effects on the nervous system

- Drowsiness, asthenia most common.
- agitation,
- anxiety,
- obsessive rumination,
- insomnia.

•3. Cardiovascular effects

- postural hypotension.
- arrhythmias,
- syncope, collapse,
- sudden exit,
- hypertension,
- thrombosis and thrombophlebitis,
- congestive heart failure.

Gastrointestinal side effects:

- anorexia,
- nausea, vomiting,
- diarrhea,
- abdominal cramps,
- increased pancreatic enzymes,
- epigastric pain,
- stomatitis,
- characteristic taste
- black coloration of the tongue.

Endocrine effects

- Increasing or decreasing libido,
- Prolonging sexual intercourse in men
- Difficulty reaching orgasm in women
- testicular inflammation,
- painful ejaculation,
- gynecomastia in men,
- galactorrhea in women,

Mood stabilizers

The main classes of mood stabilizers substances are:

- Lithium and lithium salts;

Anticonvulsants (AEDs – Anti-Epileptic Drugs):

- Sodium valproate;
- carbamazepine;
- lamotrigine;
- gabapentin;
- topiramate;
- clonazepam.

Mood stabilizers

Brand name drug	Generic drug	Dosage (mg)	Concentration in blood
Litium carbonicum	LITHIUM CARBONICUM	900 – 1000	0.5 – 0.8 mmol/l
	CONTEMNOL	1000 - 1500	0.8 – 1.2 mmol/l
Carbamazepine	BISTON, TEGRETOL, TIMONIL	400 - 1500	5 – 10 ng/ml
Valproic acid	EVERIDEN, ORFIRIL,	900 - 2000	50 - 100 ng/ml

Adverse effects of lithium:

- gastrointestinal irritation (nausea, abdominal pain, diarrhea)
- muscle fatigue, fatigue, dysarthria, blurred vision, vertigo;
- fine tremor of the extremities,
- weight gain,
- polyuria,
- polydipsia,
- edema;
- headache,
- itchy
- sexual dysfunctions,
- hyperglycemia,
- anemia,
- dizziness;
- in the long term – kidney damage, hypothyroidism, hyperparathyroidism with hypercalcemia.

Anxiolytic drugs

Indications:

- Anxiety states
- Insomnia
- Withdrawal syndrome
- Depressive states
- Epilepsy
- Extrapyramidal Side Effects of Antipsychotic Drugs
- Premedication in Anesthesia
- Panic states (Alprazolam, Bromazepam, Clonazepam, Diazepam)
- Algic Syndrome (Stomatodynia, Trigeminal Neuralgia, Cephalgia)

Benzodiazepines (după Marinescu, D., Chiriță, A.)

Duration of action	Drug
Ultrashort	Midazolam (Versed) Triazolam (Halcion)
Short	Alprazolam (Xanax)
Intermediate	Bromazepam (Lexonil) Lorazepam (Ativan) Oxazepam (Seresta)
Long	Clordiazepoxid Clonazepam (Rivotril) Diazepam (Valium) Nitrazepam (Mogadon)

Medicamento Anxiolitice

Brand name drug	Generic drugs	Form	Dosage (mg)
<p>■ Derivates of Propandiol</p>			
Meproamat	MEPROBAMAT LÉČIVA	tbl. 400 mg	800 - 2400
<p>■ Derivates of Piperazine</p>			
Hydroxyzine	ATARAX	tbl. 10, 25 mg inj. 100 mg sir.	20 – 100 300 - 400
<p>■ Derivates of Azapironul</p>			
Buspirone	ANXIRON, BUSPIRON-EGIS	tbl. 5, 10 mg	15-30

Benzodiazepines

Brand name drug	Generic drugs	Form	Dosage (mg)
Diazepam	DIAZEPAM SLOVAKOFARMA APO-DIAZEPAM AP Aurin, SEDUXEN DIAZEPAM DESITIN DIAZEPAM DESITIN SUPP.	tbl. 2.5; 10 mg inj. 10 mg supp. 5 mg	10 - 60
Chlordiazepoxid	DEFOBIN, ELENIUM RAPEDUR	tbl. a drg. 10 mg	20 - 60
Oxazepam	OXAZEPAM LÉČIVA	tbl. 10 mg	10 - 60
Alprazolam	NEUROL XANAX FRONTIN, HELEX	tbl. 0.25 mg ; 1 mg tbl. 0.25; 0.5; 1; 2 mg	1 - 10
Bromazepam	LEXAURIN	tbl. 1; 5; 3 mg	3 - 36
Medazepam	ANSILAN, RUDOTEL	tbl. 10 mg	20 - 40
Tofisopam	GRANDAXIN	tbl. 50 mg	100 - 400
K+ clorazepate	TRANXENE	tbl. 5; 10; 50 mg inj. 20; 50; 100 mg	15 - 30 50 - 300
Clonazepam	RIVOTRIL, ANTELEPSIN	tbl. 0.5 ; 2 mg gttae 10-25 mg/ml inj. 1 mg	1 - 4

Hipnotics

	<i>Brand name drug</i>	<i>Generic drug</i>	<i>Form</i>	<i>Dosages mg</i>
1st Generation	Barbiturates			
2nd Generation	Nitrazepam	NITRAZEPAM SLOVAKOFARMA FORTE	tbl. 5; 10 mg	5 - 20
	Flunitrazepam	ROHYPNOL, SOMNUBENE	tbl. 1 a 2 mg inj. 2 mg	0.5 – 2 1 - 2
3rd Generation	Zolpidem	STILNOX, HYPNOGEN, EANOX	tbl. 10 mg	10 - 20
	Zopiclone	IMOVANE, SOMNOL	tbl. 7.5 mg	3.75 – 7.5
	Zaleplone	SONATA, ANDANTE	tbl. 10 mg	5 – 10
Other drugs with hypnotic effect	Antihistamines (promethazină – PROTHAZIN)			
	Antidepressants (mirtazapină, trazodon)			
	Antipsychotics			
	Melatonine			

Procognitive drugs

Acetylcholinesterase inhibitor drugs

Rivastigmine

EXELON

8 - 12 mg

Donepezil

ARICEPT

5 - 10 mg

Galantamine

REMINYL

8 - 24 mg

NMDA (N-methyl-D-aspartate) receptor antagonists

Memantine

EBIXA

10 - 30 mg

**Psychostimulants (used in ADHD, hypersomnia,
narcolepsy, etc)**

Brand name drug	Generics	Dosage (mg)
Amfetamine	PSYCHOTON, ADDERAL	5 – 50
Dexamfetamine	DEXEDRON	5 – 30
Efedrine	EPHEDRIN	12,5 – 50
Mezocarb	SYDNOCARB	5 – 50
Metilfenidate	RITALIN, CENTEDRIN	10 – 40
Modafinil	VIGIL, PROVIGIL	200 – 400

Psychotherapy

A therapeutic relationship between the patient and the psychotherapist, designed to investigate and understand the nature of the patient's mental disorders in order to correct them.

The objectives of psychotherapy mainly aim at the following aspects:

- Help in existential crisis.
- Reduction or elimination of symptoms.
- Strengthening the ego and the integrative capacities of the patient's personality.
- Resolving or restructuring the patient's intrapsychic conflicts.
- Modification of the personality structure in order to obtain a more mature functioning, with a capacity to adapt effectively to the environment.
- Changing erroneous opinions about themselves and the world around them.
- Developing a clear sense of personal identity.

Psychotherapy - Indications and contraindications

Each psychotherapy technique has its patient.

The only absolute contraindications are:

- Impairment of the patient's ability to contact reality, unconscious or disturbed patient – eg: delirium, coma
- Patient unable to understand/use words, presence of major cognitive disorders – profound dementia, severe mental retardation
- The patient's lack of desire to do psychotherapy, inadequate motivation
- The presence of a degree of kinship or personal interests vis-à-vis the patient
- The presence of symptoms in an organic basis

Psychotherapy - Indications and contraindications

Relative contraindications are:

- Acute psychotic state (there are only a few techniques, therapy is limited)
- The presence of minor cognitive impairment

Indications:

- All neurotic level states, states with a psychogenic component in etiology/pathogenesis, e.g.: depression, psychosomatic disorders, somatoform disorders, personality disorders, phobias, obsessive compulsive disorder, addictions, etc.
- With limitations in effectiveness and/or purpose – psychotic disorders (schizophrenia, bipolar disorder)

Classification of psychotherapy

Psychotherapy can be:

- individual (the object of the intervention is the individual),
- in the group (the object of the intervention is the individual included in a therapeutic group) or
- group (the object of the intervention is the group, for example, couple, family, etc.).

Psychotherapies can be:

- Short-term - from 10 sessions to 1-2 months
- Average duration - from 3-6 months
- Long-term - starting with 6 months and more.

PSYCHOTHERAPIES, according to the approach, are classified as:

a) Active-Directives:

- relaxation techniques;
- suggestion and hypnosis;
- the cognitive-behavioral approach;
- the humanist-existential-experiential approach;
- Adlerian psychotherapy.
- Within these guidelines there are various schools. It is estimated (Bergin and Garfield, 1994) that there are approximately 200 schools of psychotherapy and over 600 intervention techniques.

b) Holistic, oriented towards:

- subject as a complex and unrepeatable entity, in a microsocial environment with a unique specificity; revealing intrapsychic conflicts and reducing them in order to obtain a better adaptation.

This category includes:

- dynamic approaches (Freudian, Jungian);
- the non-directive approach - Carl Rogers;

ORIENTATIONS IN PSYCHOTHERAPY

- ▣ **Psychoanalysis** was the first known form of psychotherapy.
- ▣ it encourages free associations as a basic technique, the fantasies and dreams from which the analyst interprets the nature of the unconscious conflicts that produce the patients' symptoms.

- ▣ **Cognitive-behavioral psychotherapy**
- ▣ through various methods to identify and modify maladaptive cognitions, beliefs and behaviors in order to influence destructive negative emotions and problematic dysfunctional behaviors.

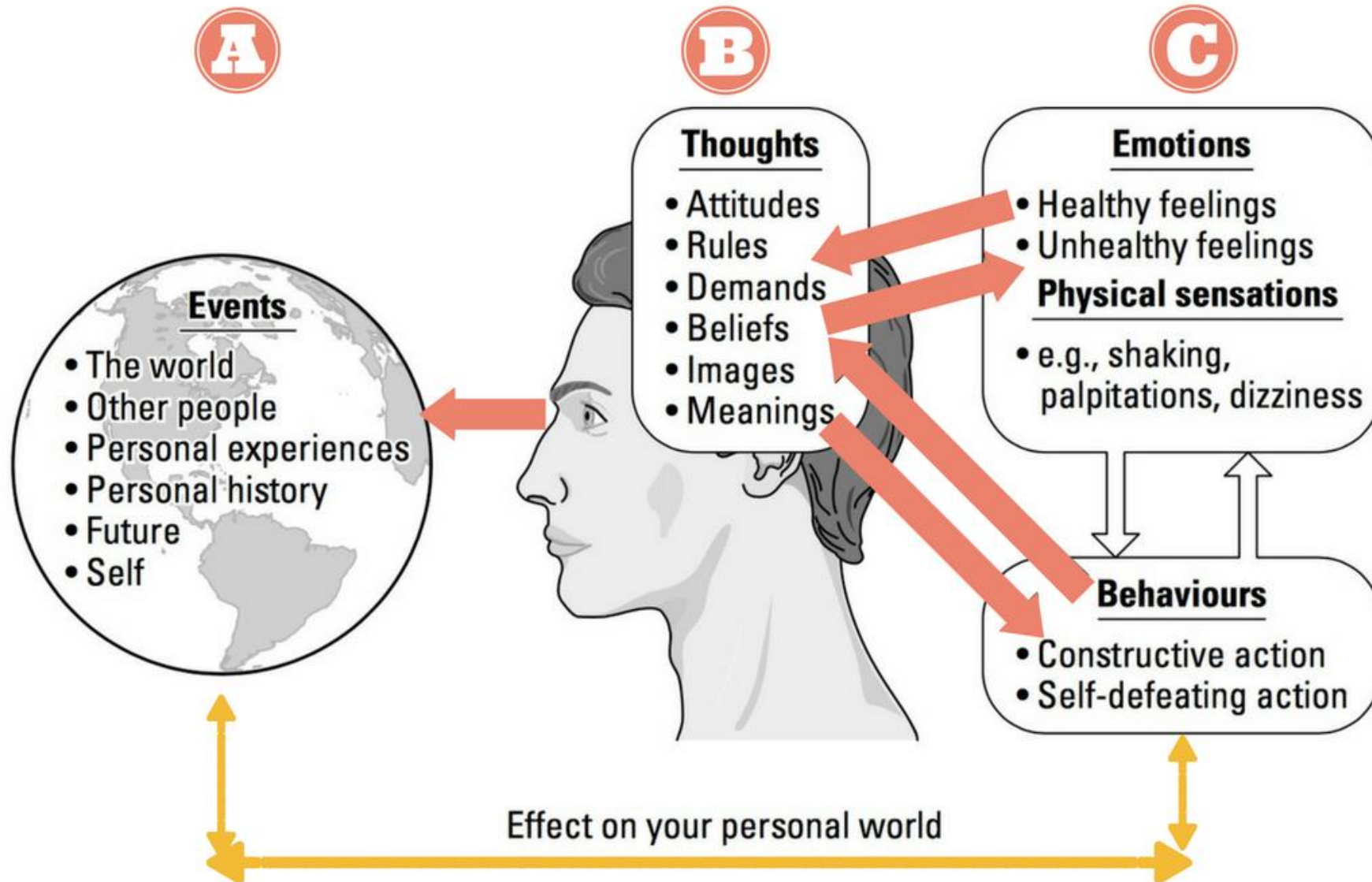
▣ **Psychodynamic psychotherapy** focuses on revealing the unconscious content of the client's psyche with the aim of alleviating mental tension. Its roots are in psychoanalysis, but psychodynamic psychotherapy tends to be shorter and less intensive than traditional psychoanalysis.

▣ **Existential psychotherapy** is based on the existential belief that human beings are unique in the world. This isolation leads to a sense of meaninglessness that can only be overcome by creating one's own values and meanings.

▣ **Humanistic psychotherapy** emerged as a reaction to behaviorism and psychoanalysis and is therefore known as the Third Force in the development of psychology.

▣ Humanistic psychotherapy deals with the human context of individual development emphasizing the subjective meaning, rejecting determinism and being concerned with positive growth rather than pathology.

The ABC of Cognitive Behavioural Therapy



A



B



C

Activating event
External Internal

Beliefs about the event
Rational
(preference, moderate
frustration tolerance,
unconditional self/other
acceptance, objective
evaluation)
Irrational
(demandingness, low/high
frustration tolerance, self-
downing, awfulizing)

Consequence(s)
emotional or behavioral
Positive
Negative Functional (sadness,
concern, discontent, remorse,
disappointment)
Negative Dysfunctional
(depression, anxiety, anger, guilt,
hurt)

Cognitive (ABC) Model

(Beck, 1976; Ellis, 1962; Seligman, 1991)

A - Adversity

(Negative Event / Circumstance)

I didn't get selected for choir



B - Beliefs

I have a terrible voice. I'm never going to be any good at singing.



C - Consequences

(Feelings/Behaviors)

Feel sad, give up on practicing singing

Disadvantages:

- The cognitive-behavioral theory ignores the unconscious, does not deny its existence, but does not consider it necessary to take this psychic reality into account.

HYPNOSIS

Hypnosis (from the Greek Hypnos-vis). Temporary state of consciousness, characterized by reducing its volume and focusing on the content of what the therapist said.

It appears as a result of special influences of the person doing hypnosis or directed towards self-influence.

Types of hypnosis

We can talk about two major types of hypnosis: classic hypnosis and Ericksonian hypnosis. Classic hypnosis, also called directive, is not indicated in all types of ailments, depending to a large extent on the hypnotability of the patient. Unlike this type of hypnosis, in which the psychotherapist leads the session, in Ericksonian the psychotherapist suggests the patient to help himself.



AUTOGEN TRAINING

The active method of psychotherapy, psychoprophylaxis and psychohygiene, is aimed at restoring the dynamic balance of the homeostatic system of self-regulatory mechanisms of the human body, deregulated as a result of the stressful action.

The basic elements of the methodology are muscle relaxation training, self-suggestion and self-education. The activism of autogenic training opposes some negative parts of hypnosis in its classic form – the passive attitude of the patient in the treatment process, the dependence on the doctor.



TRANSACTION ANALYSIS

Transactional analysis originated in the United States.

Eric Berne, the "inventor" of Transactional Analysis in 1961.

In each of us there are three parts, three States of the Self.

We make decisions and react starting from one of these three parts of ourselves (parent, adult, child), starting from one of the three states of the Ego.

GESTALT - THERAPY

The method was created by the American psychologist and psychoanalyst Perls under the influence of the gestalt idea - psychology, existentialism, psychoanalysis and, especially, Reich's theory about the physiological appearances of repressed psychological material.

Gestalt - emphasized the need for the patient to be aware of the present and the importance of direct emotional experience. The information necessary for the therapeutic change is received directly from the patient's behavior.

psychoanalysis

definitions

- Freud, 1922.
- A procedure for investigating mental processes almost inaccessible by other methods;
- A method based on this type of investigation for the treatment of neurotic disorders;
- A series of psychological concepts related to the human psyche and personality, acquired through this means and which develop together to progressively form a new scientific discipline.

the methods

- Psychoanalysis has no other means of researching psychic functioning than the patient-analyst relationship or the individual-individual relationship.
- the unconscious-to-unconscious functioning of these two protagonists of the psychoanalytic process – the analyst and the analysand.
- the methods/means by which the investigation of the human psyche takes place are **free associations, floating attention, transference, countertransference.**

Free associations

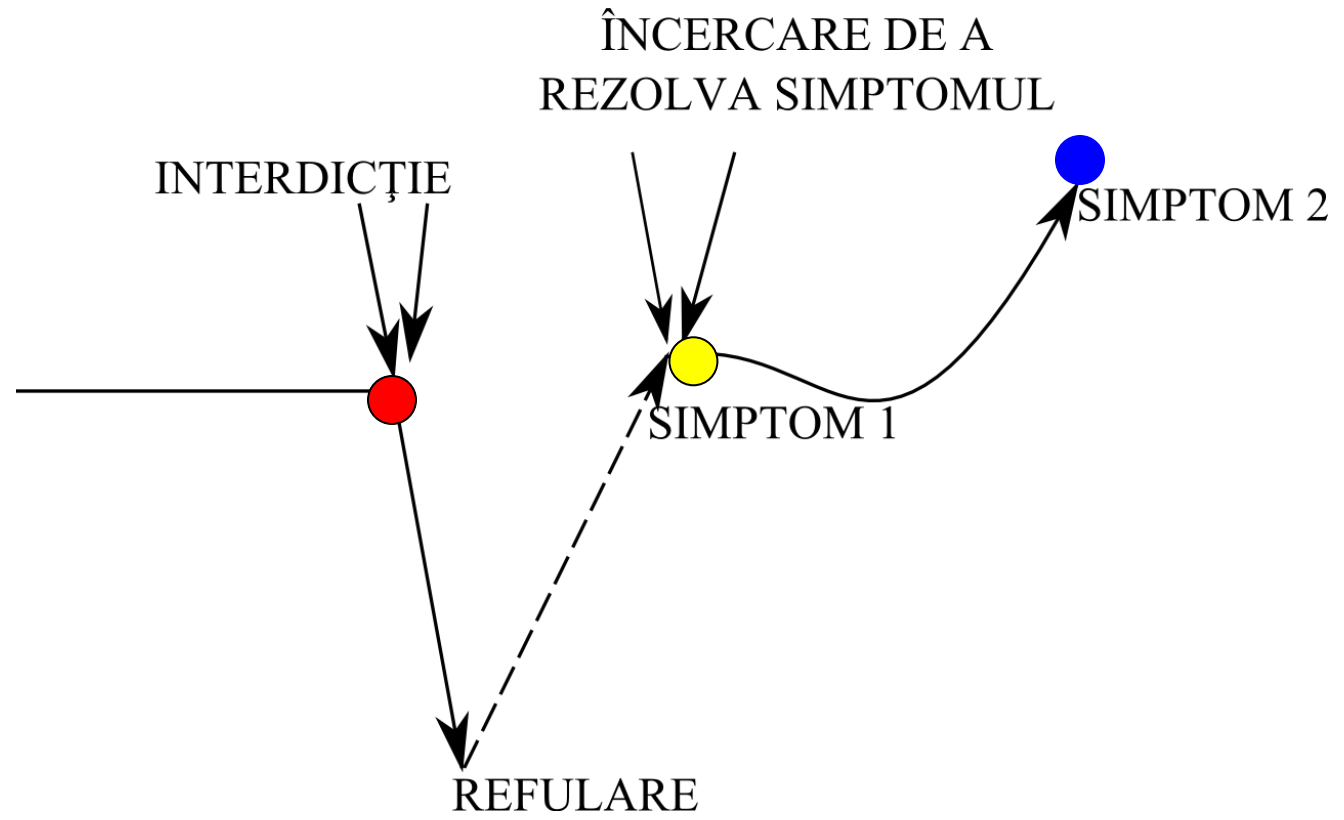
- Association - any connection between two or more psychic elements whose series constitutes an associative chain.
- free associations consist of expressing without discrimination all the thoughts that come to mind, either starting from a given element (word, number, image of a dream, some representation...), or spontaneously.

Floating attention.

- one of the main technical recommendations for the analyst within the psychoanalytic method.
- it refers to the way in which the psychoanalyst must listen to the patient: to let his own unconscious activity function as freely as possible, without a priori privileging any element of the patient's discourse.

Personal analysis

- Didactic analysis represents the process of personal psychoanalysis followed by those who will dedicate themselves to practicing the profession of psychoanalyst.
- Didactic analysis represents one of the three constitutive, mandatory dimensions of the professional training process of the psychoanalyst: theoretical training, supervision of clinical cases and personal analysis.



- Referring to the objectives of psychoanalytic treatment, Freud offers the following recommendations: "The unconscious must become conscious", "Where the Self was, there must be the Ego". Reflecting on healing in psychoanalysis, Freud mentioned in his writings about the individual's capacity for work, love and pleasure as a result of psychoanalytic treatment.

- The goals of psychoanalytic treatment, by McGlashan and Miller (1982) (apud. W. Mertens):
- Suspension of inhibitions in development (trust and security; separation and individuation; constructive aggression; sexuality);
- Aspects of the self (self-responsibility; self-identity; sense of self-worth);

- *Relationships with others (outward orientation versus inward orientation, relationship with parents; relationship with peers and groups; empathy, intimacy);*
- *Acceptance of reality (decreasing omnipotence, ability to mourn, impulse control and frustration tolerance, ability to give in, reality test);*
- *Completeness of living and vivacity (feelings, energy, relaxation, ability to enjoy);*
- *Coping mechanisms (defense mechanisms, adaptation and socio-cultural change);*

- *Integrative capacity (tolerance to ambivalence, the ability to make transitions);*
- *Self-analytical abilities (self-observation and self-analysis, transference awareness).*

- PSYCHOANALYTIC CURE
- CLASSIC PSYCHOANALYSIS (MINIMUM 3-4 SESSIONS BACK TO THE PSYCHOANALYST) – EXCLUDES POSSIBLE CORRECTIONS THROUGH THE NON-VERBAL REACTION OF THE PSYCHOANALYST (only for neurotics)
- PSYCHOANALYTIC PSYCHOTHERAPY (more severe conditions)

Transference and countertransference

- **Transference** - constitutive process of the psychoanalytic cure through which the unconscious desires of the analysand in relation to various "objects" - significant persons for the client, are repeated within the analytical relationship through the transfer onto the person of the analyst.

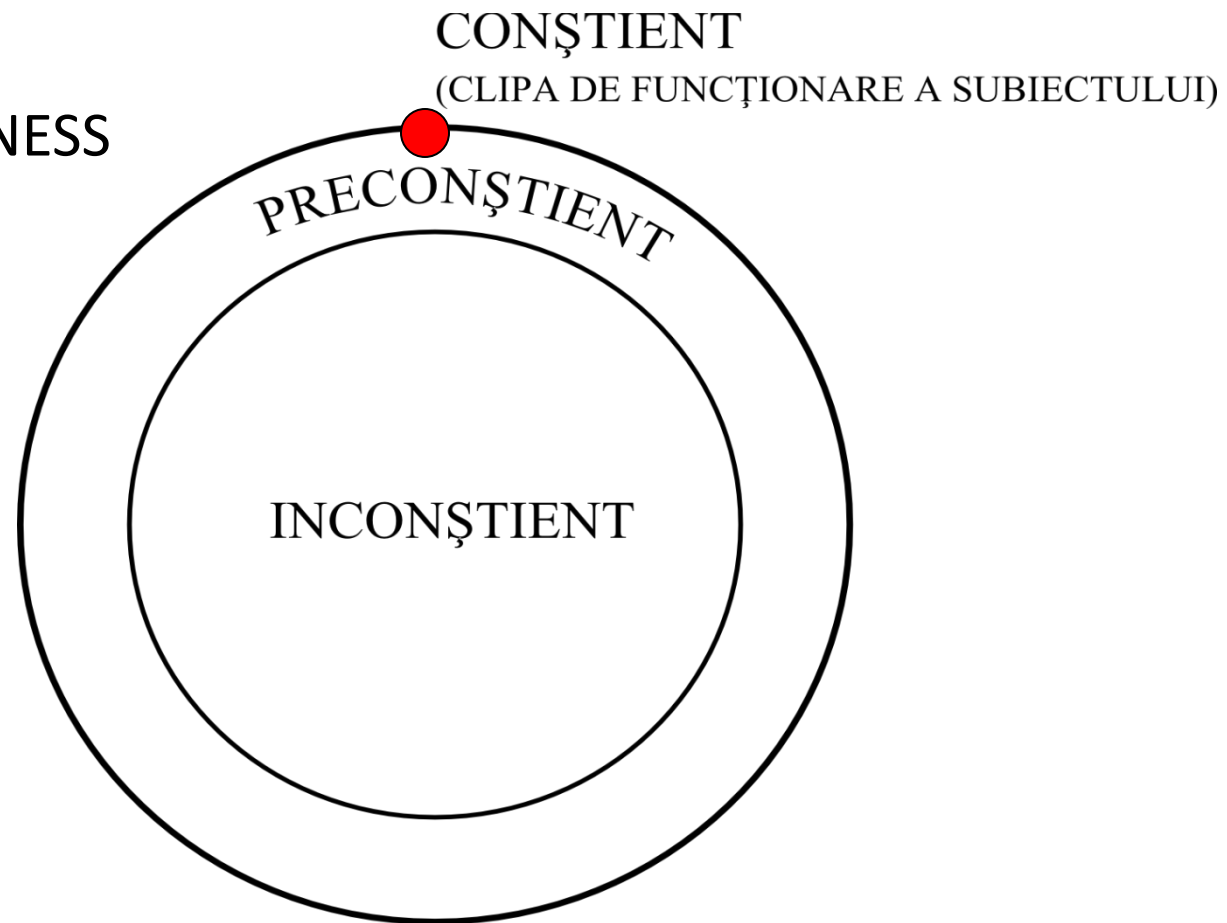
- It is a repetition of some infantile prototypes, experienced with a marked sense of actuality.
- These prototypes, which consist of feelings, thoughts, attitudes, behaviors, were formed in early childhood in the relationship with parents or their substitutes.

countertransference

- **Countertransference** - represents the psychotherapist's unconscious reaction to a patient's transference. Freud defined countertransference in 1910 as "the influence the patient exerts on the unconscious feelings of his analyst".

- First TOPIC

- UNCONSCIOUS
- PRECONSCIOUSNESS
- AWARE



- **Unconscious** – made up of repressed contents that were denied access to the preconscious-conscious system through the action of repression.

- **Rejection** - operation by which the subject tries to consciously reject and unconsciously maintain representations (thoughts, images, memories) related to a drive.
- It is produced by separating representation from affect

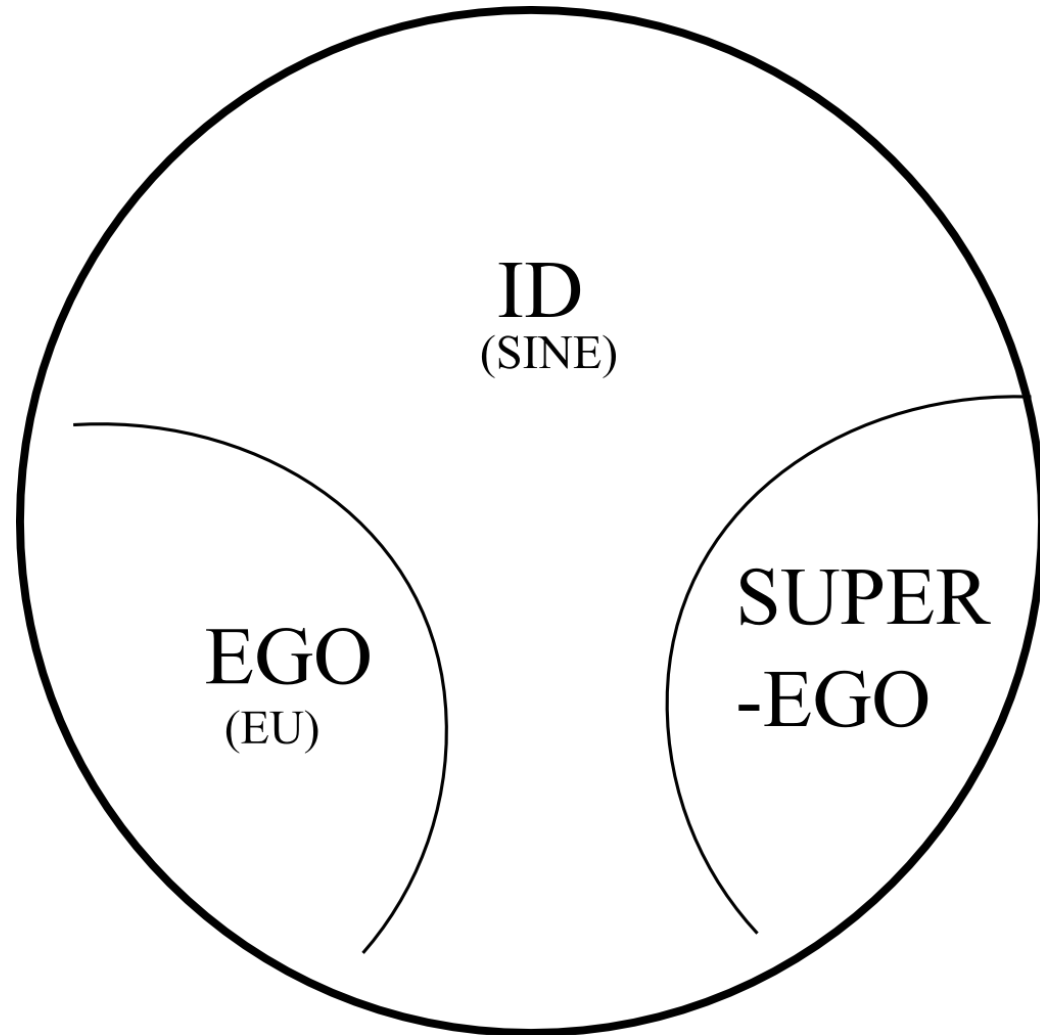
- **Preconscious** - the contents of the preconscious are not present in the current field of consciousness and are therefore unconscious, but they differ from the contents of the unconscious system in that they actually remain accessible to consciousness (unactualized knowledge and memories, for example).

- **Conscious** - the perception-consciousness system is located on the periphery of the psychic apparatus, receiving information both from the external world and from the internal world in the form of sensations that are part of the unpleasant-pleasure series and mnesic reminiscences, accompanied by processes of controlled understanding of events.
- The unconscious, the preconscious and the conscious are not isolated systems, but are closely related and constantly influence each other.

A II topică

Second TOPIC

- ID,
- EGO,
- SUPER-EGO



- **Self/ ID** – is the driving pole of the personality; its contents, psychic expressions of drives, are unconscious: some inherited and innate, others repressed and acquired.

- **Ego** - is in a relationship of dependency both to the demands of the Self and to the imperatives of the Superego and the demands of reality.

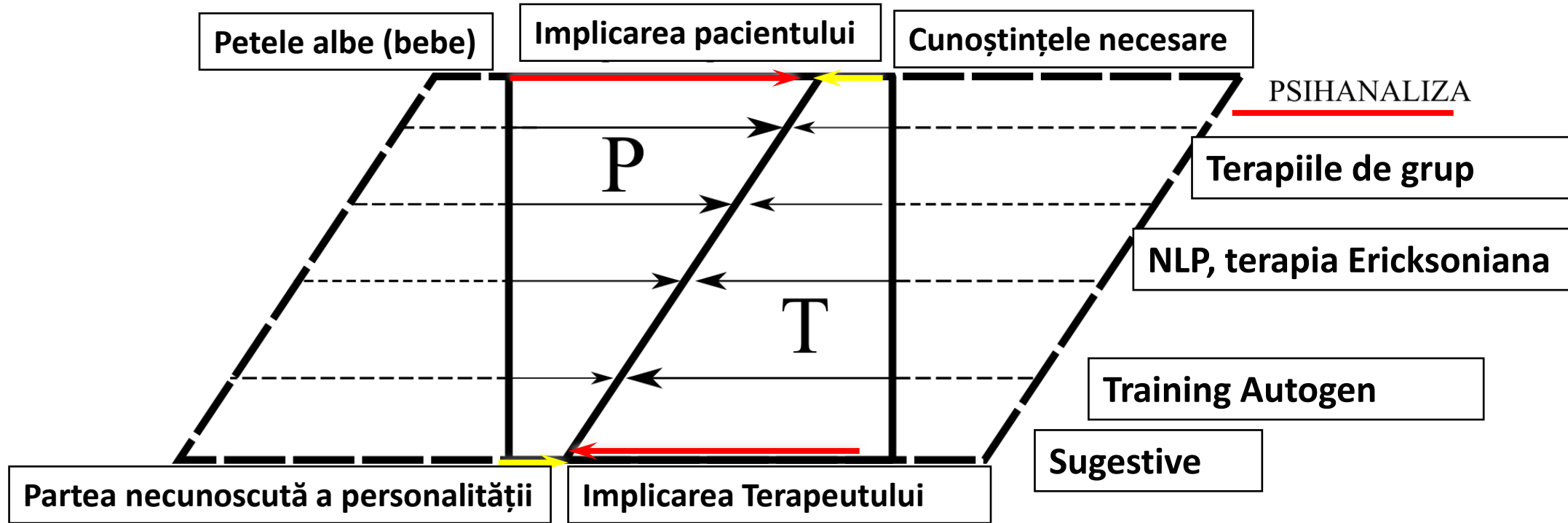
Functions of the Ego:

1. Self-preservation of the organism
2. Testing and modifying reality
3. Control of the Self, of the instinctual life
4. Towards the Superego. Consider the moral framework

- Psychic maturity is reached when the Ego acquires autonomy in relation to the other psychic instances (Self, Superego).
- We can talk about a mature Ego when it is no longer commanded by the Self and tutored by the Superego, managing to fulfill its function of command and control of psychic life.

- **Superego** – its role is equivalent to that of a judge or censor in relation to the Ego. According to Freud, moral consciousness, self-observation, the formation of ideals (the Ideal Ego) are functions of the Superego.

Comparația diferitor terapii



- As more the client is implicated the less the risk of inducing something foreign – “FALSE SELF”
- As less the therapist is implicated the more the efficiency – increase of subject’s autonomy of functioning

Defense mechanisms

- In psychoanalytic theory, a defense mechanism is an unconscious psychological mechanism that reduces anxiety arising from unacceptable or potentially harmful stimuli.

Defense mechanisms

Psychiatrist George Eman Vaillant introduced a four-level classification of defense mechanisms

Level I – pathological defenses (psychotic denial, delusional projection)

Level II – immature defense (fantasy, projection, passive aggression, acting out)

Level III – neurotic defenses (intellectualization, reaction formation, dissociation, displacement, repression)

Level IV – mature defenses (humor, sublimation, suppression, altruism, anticipation)

Defense mechanisms - Level 1: pathological

- When predominant, the mechanisms at this level are almost always grossly pathological. These defenses together allow one to effectively rearrange external experiences to eliminate the need to deal with reality. Pathological users of these mechanisms frequently appear irrational or insane to others. These are the "pathological" defenses common in overt psychosis. However, they are normally found in dreams and throughout childhood. They include:
- Delusional projection: Delusions about external reality, usually persecutory in nature
- Denial: Refusal to accept external reality because it is too threatening; arguing against an anxiety-provoking stimulus by saying it doesn't exist; resolving emotional conflicts and reducing anxiety by refusing to consciously perceive or acknowledge the more unpleasant aspects of external reality
- Distortion: A gross reshaping of external reality to satisfy internal needs

Defense Mechanisms- Level 2: Immature

These mechanisms are often present in adults. These mechanisms reduce the stress and anxiety produced by the threat of people or an uncomfortable reality. Excessive use of such defenses is seen as socially undesirable in that they are immature, difficult to deal with, and seriously out of touch with reality. These are so-called "immature" defenses, and overuse almost always leads to serious problems in a person's ability to cope effectively. These defenses are often seen in major depression and personality disorder.

They include:

Acting out: direct expression of an unconscious desire or impulse into action without awareness of the emotion driving the expressive behavior

Hypochondria: An excessive preoccupation or worry about a serious illness

Passive-aggressive behavior: indirect expression of hostility

Defense Mechanisms- Level 2: Immature

- **Projection:** A primitive form of paranoia. Projection reduces anxiety by allowing the expression of unwanted impulses or desires without becoming aware of them; attributing one's own unacknowledged, unacceptable or undesirable thoughts and emotions to another; includes severe prejudice and jealousy, hypervigilance to external danger, and "collecting wrongs," all with the goal of changing one's unacceptable thoughts, feelings, and impulses onto someone else so that the same thoughts, feelings, beliefs, and motivations are perceived to be present in the other.
- **Schizoid fantasy:** The tendency to retreat into fantasy to resolve inner and outer conflicts

Defense Mechanisms- Level 3: Neurotic

These mechanisms are considered neurotic, but quite common in adults. Such defenses have short-term advantages in coping, but can often cause long-term problems in relationships, work, and the possibility of a happy life when used as the primary style of coping with the world.

They include:

Displacement: defense mechanism that shifts sexual or aggressive impulses to a more acceptable or less threatening target; redirecting emotions to a safer outlet; separating the emotion from its actual object and redirecting the intense emotion to someone or something less offensive or threatening to avoid dealing directly with what is scary or threatening.

Dissociation: Temporarily drastically altering one's personal identity or character to avoid emotional distress; separating or postponing a feeling that would normally accompany a situation or thought.

Defense Mechanisms- Level 3: Neurotic

- **Intellectualization:** A form of isolation; focusing on the intellectual components of a situation so as to distance oneself from the associated emotions that cause anxiety; separating emotion from ideas; thinking about desires in formal, affectively bland terms and not acting on them; avoiding unacceptable emotions by focusing on intellectual aspects (loneliness, rationalization, ritual, cancellation, compensation, and magical thinking)
- **Reaction Formation:** The transformation of unconscious desires or impulses that are perceived to be dangerous or unacceptable into their opposites; behavior that is the complete opposite of what you really want or feel; taking the opposite belief because the true belief causes anxiety
- **Repression:** The process of attempting to push back desires toward pleasurable instincts, caused by the threat of suffering if the desire is satisfied; the desire is moved into the unconscious in an attempt to prevent it from entering consciousness; seemingly inexplicable naivety, lack of memory or lack of awareness of one's own situation and conditions; the emotion is conscious, but the idea behind it is absent

Defense Mechanisms- Level 4: Mature

They are commonly found among emotionally healthy adults and are considered mature, even though many originate at an immature stage of development. They are conscious processes, adapted over the years to optimize success in society and human relationships. Using these defenses increases pleasure and feelings of control. These defenses help integrate conflicting emotions and thoughts while remaining effective. Those who use these mechanisms are usually considered virtuous.

Mature defenses include:

Altruism: Constructive service to others that brings personal pleasure and satisfaction

Anticipation: realistic planning for future discomfort

Humor: The open expression of ideas and feelings (especially those that are unpleasant to focus on or too terrible to talk about directly) that gives pleasure to others. The thoughts retain some of their innate distress, but are "surrounded" by humor/joking talk, eg. self-deprecation.

Defense Mechanisms- Level 4: Mature

- **Sublimation:** Transforming unnecessary emotions or instincts into healthy actions, behaviors or emotions, for example playing a hard contact sport such as football or rugby can turn aggression into a game.
- **Suppression:** The conscious decision to postpone paying attention to a thought, emotion, or need in order to deal with the present reality; making it possible to later access uncomfortable or upsetting emotions while accepting them

Psychosocial rehabilitation

Psychosocial rehabilitation

It includes a range of interventions:

- Medical
- Psychological
- Pedagogical
- Social and economic

The goals of psychosocial interventions

- Professional recovery (training, retraining)
- Employment in the service
- Social assistance
- Integration in the social environment
- Ensuring decent living conditions
- Psychoeducation
- Formation of communication skills
- Countering stigma and discrimination
- Increasing the autonomy and protection of patients with mental disabilities

Treatment versus recovery

- ❧ The goal of treatment is to reduce pathological symptoms,
- ❧ and the goal of rehabilitation is the development of the patient's social, family and professional potential

- ❧ Treatment is to reduce the disease,
- ❧ and rehabilitation is the induction of health

- ❧ The treatment focuses on the patient's incapacities following the disease,
- ❧ and rehabilitation focuses on developing the patient's strengths and abilities

Psychoeducation of the patient and his family:
communicating knowledge about the disease, its symptoms, treatment methods, methods of coping with symptoms, available treatment, recovery and support facilities, the rights of the patient, the benefits to which he is entitled and the possibilities of employment with facilities;

Skill Building:

- basic life skills,
- communication and social skills,
- skills to deal with emotionally difficult situations,
- problem solving;
- strengthening cognitive functions;

Occupational Therapy:

- crafts, cooking, fine arts,
- amateur level manufacturing,
- art therapy,
- bibliotherapy,
- movement and dance therapy,
- music therapy,
- psycho-drawing;

Sociotherapy:

- therapeutic community,
- techniques with rewards,
- different activities in groups,
- competitions,
- trips,
- evening meetings,
- meetings,
- Recreation,
- sports, cultural and educational activities.

Rehabilitation program

<p>The main objective</p>	<p>Recovery of mental health</p>		
<p>General objectives</p>	<p>Psychiatric recovery</p>	<p>Vocational recovery</p>	<p>Social recovery</p>
<p>Secondary objectives</p>	<p>Reduction of mental deficiency</p>	<p>Reacquiring work capacity</p>	<p>Social readjustment</p>
<p><i>Means of achievement</i></p>	<p><i>Psychotropic therapy</i> <i>Psychotherapy</i> <i>Outpatient supervision</i> <i>Sanatorium post-cure</i></p>	<p><i>Occupational therapy</i> <i>Ergo therapy</i> <i>Reprofessionalization</i> <i>Activity</i> <i>protected professional</i></p>	<p><i>Group therapy</i> <i>Sociotherapy</i> <i>Social assistance</i> <i>Family care</i></p>

The means of achieving Psychosocial Rehabilitation

∞ The community multidisciplinary team, which is the interdisciplinary group of specialists trained in mental hygiene action.



UNIVERSITATEA DE STAT
DE MEDICINĂ ȘI FARMACIE
„NICOLAE TESTEMITANU”
din REPUBLICA MOLDOVA

Bipolar and Related Disorders.

(Bipolar affective disorder. Cyclothymia.)

Depressive Disorders.

(Recurrent depressive disorder. Dysthymia.)

Psychological aspects of suicides.



Mood Disorders (I)

Incidence and prevalence.

Mood disorders are common.

Major depressive disorder has the highest lifetime *prevalence* (almost 17%) of any psychiatric disorder.

The annual *incidence* (number of new cases) major depressive episode is 1.59% (women, 1.89%; men, 1.10%).

The annual incidence of bipolar illness is less than 1%, but it is difficult to estimate because milder forms of bipolar disorder are often missed.

Mood Disorders (II)

Sex.

Major depression is more common in women; bipolar I disorder is equal in women and men.

Manic episodes are more common in women, and depressive episodes are more common in men.

Mood Disorders (III)

Age.

The age of the onset for bipolar I disorder is usually about age 30.

However, the disorder also occurs in young children, as well as older adults.

Mood Disorders (IV)

Socio-cultural.

Depressive disorders are more common among single and divorced persons compared to married persons.

No correlation with socio-economic status.

No difference between races or religious groups.

Mood Disorders (V)

Etiology.

In the etiology of mood disorders an important role plays **serotonin, norepinephrine** and **dopamine**.

Stressful life events often precede first episodes of mood disorders.

Such events may cause permanent neuronal changes that predispose a person to subsequent episodes of a mood disorder.

Losing a parent before age 11 is the life event most associated with later development of depression.

A **family history** of bipolar disorder is one of the strongest and most consistent risk factors for bipolar disorders.

Mood (Affective) Disorders (VI)

The fundamental disturbance.

The **fundamental disturbance** is a change in **mood** or affect, usually to **depression** (with or without associated anxiety) or to **elation**.

The mood change is usually accompanied by a change in the overall level of **activity**.

Mood (Affective) Disorders (VII)

Types.

The mood disorders may be subdivided into **2 types**:

- ❖ **UNIPOLAR** (those that are characterized by **depression only** and
- ❖ **BIPOLAR** (those that are characterized by **manic episode** either alone or in combination with depression)

Bipolar Affective Disorder

Bipolar affective disorder is characterized by repeated, at least two episodes in which the patient's mood and activity levels are significantly disturbed (manic or depressive syndromes).

Patients who suffer only from repeated episodes of mania are comparatively rare.

The first episode may occur at any age from childhood to old age.

The frequency of episodes and the pattern of remissions and relapses are both very variable.

The **lifetime prevalence** is between 0,5 an 1 %.

Suicidality – about 19%.

Comorbidity – with alcohol and drug abuse.

Types of bipolar disorder (I):

- ❖ **BIPOLAR I** characterized by the occurrence of manic episodes with or without a major depressive episode and
- ❖ **BIPOLAR II** disorder characterized by at least depressive episode with or without a hypomanic episode.

If there is a history of a single full-blown manic episode, the diagnosis will always be bipolar I; a history of a major depressive episode is always present in bipolar II.

Types of bipolar disorder (II):

The **BIPOLAR I DISORDER** criteria represent the modern understanding of the classic **manic-depressive disorder** or affective psychosis described in the nineteenth century.

BIPOLAR II DISORDER is no longer thought to be a „milder” condition than bipolar I disorder, largely because of the amount of time individuals with this condition spend in depression and because the instability of mood experienced is typically accompanied by serious impairment in work and social functioning.

Mania (manic episode) (I).

Persistent elevated expansive mood.

For a diagnosis of bipolar I disorder, the manic episode may have been preceded by and may be followed by hypomanic or major depressive episodes.

Criteria's for mania:

- A. A distinct period of abnormally and persistently elevated, expansive, or irritable mood and abnormally and persistently increased goal-directed activity or energy, lasting at least **1 week** and present most of the day, nearly every day (or any duration if **hospitalization is necessary**).

Mania (manic episode) (II)

B. During the period of mood disturbance and increased energy or activity, three (or more) of the following symptoms (four if the mood is only irritable) are present to a significant degree and represent a noticeable change from usual behavior:

1. Inflated self-esteem or grandiosity.
2. Decreased need for sleep (e.g., feels rested after only 3 hours of sleep).
3. More talkative than usual or pressure to keep talking.
4. Flight of ideas or subjective experience that thoughts are racing.
5. Distractibility (i.e., attention too easily drawn to unimportant or irrelevant external stimuli), as reported or observed.
6. Increase in goal-directed activity (either socially, at work or school, or sexually) or psychomotor agitation.
7. Excessive involvement in activities that have a high potential for painful consequences (e.g., engaging in unrestrained buying sprees, sexual indiscretions, or foolish business investments).

Depression (major depressive episode) (I)

Symptoms have been present during **2-week period** and represent a change from previous functioning.

1. Depressed mood most of the day, nearly every day, as indicated by either subjective report (e.g., feels sad, empty, hopeless) or observation made by others (e.g., appears tearful).
2. Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day (as indicated by either subjective account or observation).
3. Significant weight loss when not dieting or weight gain (e.g., a change of more than 5% of body weight in a month), or decrease or increase in appetite nearly every day.
4. Insomnia or hypersomnia nearly every day.

Major Depressive Episode (II)

5. Psychomotor agitation or retardation nearly every day (observable by others, not merely subjective feelings of restlessness or being slowed down).
6. Fatigue or loss of energy nearly every day.
7. Feelings of worthlessness or excessive or inappropriate guilt (which may be delusional) nearly every day (not merely self-reproach or guilt about being sick).
8. Diminished ability to think or concentrate, or indecisiveness, nearly every day (either by subjective account or as observed by others).
9. Recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide.

Other types of bipolar disorders:

1. Rapid-cycling bipolar disorder.

Four or more depressive, manic, or mixed episodes within 12 months.

Bipolar disorder with mixed or rapid-cycling episodes appears to be more chronic than bipolar disorder without alternating episodes.

2. Hypomania.

Elevated mood associated with decreased need for sleep, hypoactivity, and hedonic pursuits.

Less severe than mania with no psychotic features.

Hypomanic Episode (I)

A. A distinct period of abnormally and persistently elevated, expansive, or irritable mood and abnormally and persistently increased activity or energy, lasting at **least 4 consecutive days** and present most of the day, nearly every day.

Hypomanic Episode (II)

B. During the period of mood disturbance and increased energy and activity, three (or more) of the following symptoms (four if the mood is only irritable) have persisted, represent a noticeable change from usual behavior, and have been present to a significant degree:

1. Inflated self-esteem or grandiosity.
2. Decreased need for sleep (e.g., feels rested after only 3 hours of sleep).
3. More talkative than usual or pressure to keep talking.
4. Flight of ideas or subjective experience that thoughts are racing.
5. Distractibility (i.e., attention too easily drawn to unimportant or irrelevant external stimuli), as reported or observed.
6. Increase in goal-directed activity (either socially, at work or school, or sexually) or psychomotor agitation.
7. Excessive involvement in activities that have a high potential for painful consequences (e.g., engaging in unrestrained buying sprees, sexual indiscretions, or foolish business investments).

Treatment of bipolar affective disorders

1. Biologic

2. Psychological.

Biologic treatment of bipolar affective disorders (I)

Lithium, **divalproex** (Depakote), and **olanzapine** (Zyprexa) are **first-line treatments** for the manic phase of bipolar disorder, but **carbamazepine** (Tegretol) is also a well-established treatment.

Gabapentin (Neurontin) and **lamotrigine** (Lamictal) are also of use.

Topiramate (Topamax) is another anticonvulsant showing benefit in bipolar patients.

ECT is highly effective in all phases of bipolar disorder.

Carbamazepine, divalproex, and valproic acid (Depakene) may be more effective than lithium in the treatment of mixed or dysphoric mania, rapid cycling, and psychotic mania, and in the treatment of patients with a history of multiple manic episodes or comorbid substance abuse.

Biologic treatment of bipolar affective disorders (II)

Treatment of acute manic episodes often requires adjunctive use of potent sedative drugs.

Drugs commonly used at the start of treatment include **clonazepam** (1 mg every 4 to 6 hours) and **lorazepam** (Ativan) (2 mg every 4 to 6 hours).

Haloperidol (Haldol) (2 to 10 mg/day), **olanzapine** (2.5 to 10 mg/day), and **risperidone** (Risperdal) (0.5 to 6 mg/day) are also of use.

Bipolar patients may be particularly sensitive to the side effects of typical antipsychotics.

The atypical antipsychotics (e.g., olanzapine [Zyprexa] [10 to 20 mg/day]) are often used as monotherapy for acute control and may have intrinsic antimanic properties.

Psychological treatment of bipolar affective disorders (I)

Psychotherapy in conjunction with antimanic drugs (e.g., lithium) is more effective than either treatment alone.

Psychotherapy is not indicated when a patient is experiencing a manic episode.

In this situation, the safety of the patient and others must be paramount, and pharmacologic and physical steps must be taken to protect and calm the patient.

Psychological treatment of bipolar affective disorders (II)

Psychotherapy in conjunction with antimanic drugs (e.g., lithium) is more effective than either treatment alone.

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- a. **Cognitive**
- b. **Behavioral.**
- c. **Psychoanalytically oriented.**
- d. **Supportive.**
- e. **Group.**
- f. **Family.**

Cyclothymic disorder

Cyclothymic disorder is less severe disorder than BAD, with alternating periods of hypomania and moderate depression.

The condition is chronic and nonpsychotic.

Symptoms must be present for at least 2 years.

Equally common in men and women.

Onset usually is insidious and occurs in late adolescence or early adulthood.

Substance abuse is common.

Major depressive disorder and bipolar disorder are more common among first-degree relatives than among the general population.

Recurrent mood swings may lead to social and professional difficulties.

May respond to lithium.

Major depressive disorder.

Can occur alone or as part of bipolar disorder.

When it occurs alone it is also known as *unipolar depression*. Symptoms must be present for at least 2 weeks and represent a change from previous functioning.

More common in women than in men by 2:1.

Precipitating event occurs in at least 25% of patients.

Diurnal variation, with symptoms worse early in morning.
Psychomotor retardation or agitation is present.

Associated with vegetative signs.

Mood-congruent delusions and hallucinations may be present.
Median age of onset is 40 years, but can occur at any time.

Genetic factor is present.

Major depressive disorder may occur as a single episode in a person's life or may be **recurrent**.

Recurrent depressive disorder

Recurrent depressive disorder is characterized by repeated episodes of depression without any history of independent episodes of mood elevation and overactivity.

Recovery is usually complete between episodes, but a substantial part of patients will have a recurrence and about 30% may develop a persistent depression.

The risk of suicide - approximately 10-15%.

Mild Depressive Episode

For **mild depressive episode** are typical depressed mood, anhedonia and increased fatigability.

The afflicted person is usually distressed by the symptoms and has some difficulty in continuing with ordinary work and social activities.

Moderate Depressive Episode

An individual with **moderate depressive episode** suffers from more symptoms of greater severity and will usually have considerable difficulty in continuing with social, work or domestic activities.

Severe Depressive Episode

In a **severe depressive episode**, the sufferer usually shows considerable distress or agitation.

Loss of self-esteem or feelings of guilt are likely to be prominent, and suicide is a distinct danger in particularly severe cases; a number of „**somatic**“ symptoms:

- waking in the morning 2 hours or more before the usual time
- depression worse in the morning
- loss of appetite
- weight loss
- loss of libido
- are usually present.

Psychotic symptoms may be present, such as:

- **delusions** (ideas of imminent disasters)
- **hallucinations** (defamatory or accusatory voices)
- **depressive stupor**

Ordinary social activities are impossible.

Dysthymic disorder (I)

(Dysthymia)
(Persistent Depressive Disorder)
(Depressive neurosis)

Dysthymic disorder is less severe than major depressive disorder.

Dysthymia is more common and chronic in women than in men.

Dysthymic disorder present insidious onset and occurs more often in persons with history of long-term stress or sudden losses; often coexists with other psychiatric disorders (e.g., substance abuse, personality disorders, obsessive-compulsive disorder).

Symptoms tend to be worse later in the day.

Onset of this disease is generally between ages of 20 and 35, although an early-onset type begins before age 21.

Dysthymic disorder is most common among first-degree relatives with major depressive disorder.

Dysthymia (II)

Diagnostic Criteria:

- A. Depressed mood for most of the day, for more days than not, as indicated by either subjective account or observation by others, for **at least 2 years**.
- B. Presence, while depressed, of two (or more) of the following:
 1. Poor appetite or overeating.
 2. Insomnia or hypersomnia.
 3. Low energy or fatigue.
 4. Low self-esteem.
 5. Poor concentration or difficulty making decisions.
 6. Feelings of hopelessness.

Dysthymia (III)

Diagnostic Criteria:

C. During the 2-year period (1 year for children or adolescents) of the disturbance, the individual has never been without the symptoms in Criteria A and B for more than 2 months at a time.

D. Criteria for a major depressive disorder may be continuously present for 2 years.

E. There has never been a manic episode or a hypomanic episode, and criteria have never been met for cyclothymic disorder.

Course and prognosis of depression.

Fifteen percent of depressed patients eventually commit suicide.

An untreated, average depressed episode lasts about 10 months.

At least 75% of affected patients have a second episode of depression, usually within the first 6 months after the initial episode.

The average number of depressive episodes in a life-time is five.

The prognosis generally is good:

- 50% recover,
- 30% partially recover,
- 20% have a chronic course.

About 20% to 30% of dysthymic patients develop, in descending order of frequency, major depressive disorder.

Depressed patients with suicidal ideation should be hospitalized if there is any doubt in the clinician's mind about the risk.

If the clinician cannot sleep because of worry about a patient, that patient belongs in a hospital.

Psychological tests (I)

1. Rating scales.

Can be used to assist in diagnosis and assessment of treatment efficacy.

The Beck Depression Inventory (BDI) and Zung Self-rating Scale are scored by patients (**Self-reported scales**).

The Hamilton Rating Scale for Depression (HAM-D), Montgomery Asberg Depression Rating Scale (MADRS), and Young Manic Rating Scale (YMRS) are scored by the examiner (**Interview with physician**).

Psychological tests (II)

2. Rorschach test.

Standardized set of 10 inkblots scored by examiner—few associations, slow response time in ***depression***.



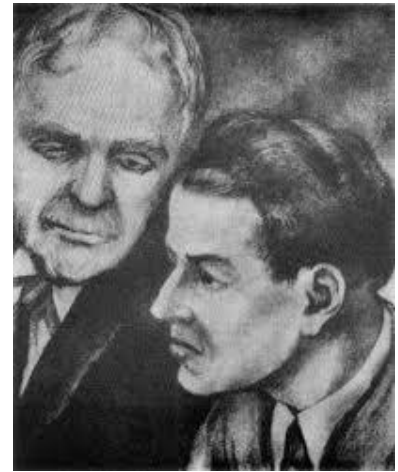
Psychological tests (III)

3. Thematic apperception test (TAT).

Series of 30 pictures depicting ambiguous situations and interpersonal events.

Patient creates a story about each scene.

Depressives will create depressed stories, manics more grandiose and dramatic ones.



Treatment of Depressive disorders

Major depressive episodes are treatable in 70% to 80% of patients.

The most effective approach is to integrate pharmacotherapy with psychotherapeutic interventions.

1. **Psychopharmacologic.**
2. **Psychological.**

Psychopharmacologic Treatment of Depressive disorders (I)

Most clinicians begin treatment with a selective serotonin reuptake inhibitor (**SSRI**).

Early transient side effects include anxiety, gastrointestinal upset, and headache.

Educating patients about the self-limited nature of these effects can enhance compliance.

Sexual dysfunction is often a persistent, common side effect that may respond to a change in drug or dosage, or adjunctive therapy with an agent such as **bupropion** (Wellbutrin) or **bupirone** (BuSpar).

The early anxiogenic effects of SSRIs may aggravate suicidal ideation and can be managed by either reducing the dose or adding an anxiolytic (e.g., 0.5 mg of **clonazepam** [Klonopin] in the morning and at night).

Psychopharmacologic Treatment of Depressive disorders (II)

Insomnia can be managed with a benzodiazepine, **zolpidem** (Ambien), **trazodone** (Desyrel), or **mirtazapine** (Remeron).

Patients who do not respond to or who cannot tolerate one SSRI may respond to another.

Some clinicians switch to an agent with a different mechanism of action, such as **bupropion**, **venlafaxine** (Effexor), **desvenlafaxine** (pristiq), **duloxetine** (Cymbalta), **mirtazapine** (Remeron), a **tricyclic**, or a **monoamine oxidase inhibitor** (MAOI).

The tricyclics and MAOIs are generally considered as second- or third-line agents because of their side effects and potential lethality in overdose.

Psychopharmacologic Treatment of Depressive disorders (III)

The tricyclics and **MAOIs** are generally considered as second- or third-line agents because of their side effects and potential lethality in overdose.

The tricyclics are highly effective but require dose titration.

Side effects include anticholinergic effects in addition to potential cardiac conduction delay and orthostasis.

The secondary amines, such as **nortriptyline**, are often better tolerated than the tertiary amines, such as **amitriptyline** (Elavil).

Blood levels can be helpful in determining optimal dosage and adequacy of a therapeutic trial.

Lethality in overdose remains a concern.

Psychopharmacologic Treatment of Depressive disorders (IV)

Augmentation strategies in **treatment-resistant** or partially responsive patients include **liothyronine** (Cytomel), **lithium**, **amphetamines**, **bupropion**, or antidepressant combinations such as bupropion added to an SSRI.

If symptoms still do not improve, try an MAOI.

An MAOI is safe with reasonable dietary restriction of tyramine-containing substances.

Major depressive episodes that have atypical features or psychotic features or that are related to bipolar I disorder may preferentially respond to MAOIs.

MAOIs must not be administered for 2 to 5 weeks after discontinuation of an SSRI or other serotonergic drugs (e.g., 5 weeks for **fluoxetine** [Prozac], 2 weeks for **paroxetine** [Paxil]).

An SSRI or other serotonergic drug (e.g., **clomipramine** [Anafranil]) must not be administered for 2 weeks after discontinuation of an MAOI.

Serotonergic-dopamine antagonists are also of use in depression with psychotic features.

Psychopharmacologic Treatment of Depressive disorders (IV)

Maintenance treatment for at least 5 months with antidepressants helps to prevent relapse.

Long-term treatment may be indicated in patients with recurrent major depressive disorder.

The antidepressant dosage required to achieve remission should be continued during maintenance treatment.

Psychopharmacologic Treatment of Depressive disorders (V)

ECT is useful in refractory major depressive disorder and major depressive episodes with psychotic features.

ECT also is indicated when a rapid therapeutic response is desired or when side effects of antidepressant medications must be avoided.

Repetitive transcranial magnetic stimulation (rTMS) is currently experimental.

Shows promise as a treatment for depression. rTMS uses magnetic fields to stimulate specific brain regions (e.g., left prefrontal cortex) believed to be involved in the pathophysiology of specific disorders.

Vagus nerve stimulation with implanted electrodes has been successful in some cases of depression and is being studied.

Psychological Treatment of Depressive disorders (VI)

Psychotherapy in conjunction with antidepressants is more effective than either treatment alone in the management of major depressive disorder.

- a. **Cognitive**
- b. **Behavioral.**
- c. **Psychoanalytically oriented.**
- d. **Supportive.**
- e. **Group.**
- f. **Family.**

Psychological aspects of suicides (I)

Definition.

The word **suicide** is derived from Latin, meaning „self-murder.”

Suicide is self-inflicted death with explicit or implicit evidence that the person intended to die.

Suicide is intentional death self - induced.

If successful, it is a fatal act that fulfills the person's wish to die.

Various terms used to describe para-suicidal thoughts or behaviors-that is, suicidality, ideation-should be used with clear meaning and purpose.

Identification of the potentially suicidal patient is among the most critical tasks in psychiatry.

Psychological aspects of suicides (II)

Incidence and prevalence.

1. About 40,000 persons commit suicide per year in the United States.
2. The rate is 12.5 persons per 100,000.
3. About 250,000 persons attempt suicide per year.
4. The United States is at the midpoint worldwide in numbers of suicides (e.g., 25 persons per 100,000 in Scandinavian countries).
The rate is the lowest in Spain and Italy.

Psychological aspects of suicides (III)

Associated risk factors.

1. Gender. Men commit suicide three times more often than women. Women attempt suicide four times more often than men.

2. Method. Men's higher rate of successful suicide is related to the methods they use (e.g., firearms, hanging), while women more commonly take an overdose of psychoactive substances or a poison.

3. Age. Rates increase with age.

a. Among men, the suicide rate peaks after age 45; among women, it peaks after age 65.

b. Older persons attempt suicide less often but are more successful.

c. After age 75, the rate rises in both sexes.

d. Currently, the most rapid rise is among male 15- to 24-year olds.

4. Race. In the United States, two of every three suicides are committed by male white persons.

The risk is lower in nonwhites.

The suicide rates are higher than average in Native Americans and Inuits.

Psychological aspects of suicides (IV)

Associated risk factors.

5. Religion. Rate is the highest in Protestants; the lowest in Catholics, Jews, and Muslims.

6. Marital status. Rate is twice as high in single persons than in married persons.

Divorced, separated, or widowed persons have rates four to five times higher than married persons.

Divorced men register 69 suicides per 100,000, compared with 18 per 100,000 for divorced women.

Death of spouse increases risk.

For women, having young children at home is protective against suicide.

Homosexual persons are at higher risk than heterosexuals.

7. Physical health.

Medical or surgical illness is a high-risk factor, especially if associated with pain or chronic or terminal illness.

Psychological aspects of suicides (V)

Associated risk factors.

8. Mental illness

a. Depressive disorders.

Fifty percent of all persons who commit suicide are depressed.
Fifteen percent of depressed patients kill themselves.

b. Schizophrenia.

Ten percent of persons who commit suicide are schizophrenic with prominent delusions.

Patients who have command hallucinations telling them to harm themselves are at increased risk.

c. Alcohol and other substance dependence.

Alcohol dependence increases the risk of suicide, especially if the person is also depressed.

The suicide rate for persons who are heroin dependent or dependent on other drugs is approximately 20 times the rate for the general population.

Psychological aspects of suicides (VI)

Associated risk factors.

8. Mental illness.

d. Personality disorders.

Borderline personality disorder is associated with a high rate of parasuicidal behavior.

An estimated 5% of patients with antisocial personality disorder commit suicide, especially those in prisons.

e. Dementia and delirium.

Increased risk in patients with dementia and delirium, especially secondary to alcohol abuse or with psychotic symptoms.

f. Anxiety disorder.

Unsuccessful suicide attempts are made by almost 20% of patients with a panic disorder and social phobia.

If depression is an associated feature, the risk of suicide rises.

Panic disorder has been diagnosed in 1% of persons who successfully kill themselves.

Other risk factors for suicide (I):

- a. Unambiguous wish to die.
- b. Unemployment.
- c. Sense of hopelessness.
- d. Rescue unlikely.
- e. Hoarding pills.
- f. Access to lethal agents or to firearms.
- g. Family history of suicide or depression.
- h. Fantasies of reunion with deceased loved ones.

Other risk factors for suicide (II):

i. Occupation: *dentist, physician, nurse, scientist, police officer, farmer.*

j. Previous suicide attempt.

k. History of childhood physical or sexual abuse.

l. History of impulsive or aggressive behavior.

m. Social context-Key features of the epidemiology of suicide, however, can vary among different countries or ethnic groups.

For example, in China, women commit suicide more than men.

Rates vary from some South American countries reporting rates of 3/100,000 to rates in the Russian Federation of 60/100,000.

Management of the suicidal patient (I):

1. Do not leave a suicidal patient alone; remove any potentially dangerous objects from the room.

2. Assess whether the attempt was planned or impulsive.

Determine the lethality of the method, the chances of discovery (whether the patient was alone or notified someone), and the reaction to being saved (whether the patient is disappointed or relieved).

Also, determine whether the factors that led to the attempt have changed.

3. Patients with severe depression may be treated on an outpatient basis if their families can supervise them closely and if treatment can be initiated rapidly.

Otherwise, hospitalization is necessary.

Management of the suicidal patient (II):

4. The suicidal ideation of alcoholic patients generally remits with abstinence in a few days. If depression persists after the physiologic signs of alcohol withdrawal have resolved, a high suspicion of major depression is warranted.

All suicidal patients who are intoxicated by alcohol or drugs must be reassessed when they are sober.

5. Suicidal ideas in schizophrenic patients must be taken seriously, because they tend to use violent, highly lethal, and sometimes bizarre methods.

6. Patients with personality disorders benefit mostly from empathic confrontation and assistance in solving the problem that precipitated the suicide attempt and to which they have usually contributed.

7. Long-term hospitalization is recommended for conditions that contribute to self-mutilation; brief hospitalization does not usually affect such habitual behavior.

Para-suicidal patients may benefit from long-term rehabilitation, and brief hospitalization may be necessary from time to time, but short-term treatment cannot be expected to alter their course significantly.

Yes and No to the suicidal patient (I)

1. **Yes**, ask about suicidal ideas, especially plans to harm oneself. Asking about suicide does not plant the idea.

2. **Do not** hesitate to ask patients if they „*want to die*.”

A straight forward approach is the most effective.

Understand what and how suicide solves a problem, feel in control of such thoughts, and the degree they can see and pursue other solutions.

3. **Yes**, conduct the interview in a safe place.

Patients have been known to throw themselves out of a window.

4. **Do not** offer false reassurance (e.g., „*Most people think about killing themselves at some time*”).

5. **Yes**, always ask about past suicide attempts, which can be related to future attempts.

Yes and No to the suicidal patient (II)

6. **Yes**, always ask about access to firearms; access to weapons increases the risk in a suicidal patient.

7. **Yes**, explore how people understand their ability, strategies, and desire to alert others of impending self-harm.

8. **Do not** release patients from the emergency department if you are not certain that they will not harm themselves.

9. Never assume that family or friends will be able to watch a patient 24 hours a day.

If that is required, admit the patient to the hospital.

10. Never worry alone-if you are unsure about the level of risk or course of action involve others.



UNIVERSITATEA DE STAT
DE MEDICINĂ ȘI FARMACIE
„NICOLAE TESTEMIȚANU”
din REPUBLICA MOLDOVA

Schizophrenia Spectrum and Other Psychotic Disorders.



Schizophrenia

Schizophrenia - (Greek Σχιζοφρένεια) - skhizein = to split, phren = mind - „*dissociation of the mind*”.

There is no objective test or biomarker to confirm the diagnosis.

The ***characteristic symptoms*** of schizophrenia involve a range of cognitive, behavioral and emotional dysfunctions, but ***no single symptom is pathognomonic*** of the disorder.

The diagnosis involves the recognition of a constellation of signs and symptoms, associated with impaired occupational or social functioning.

Individuals with the disorder will vary substantially on most features, as ***schizophrenia is a heterogeneous clinical syndrome.***

Schizophrenia spectrum and other psychotic disorders

Schizophrenia spectrum disorders include:

- *schizophrenia,*
- *other psychotic disorders, and*
- *schizotypal (personality) disorder.*

Diagnostic Features

A. Two (or more) of the following, each present for a significant portion of time during a **1-month period** (or less if successfully treated).

At least one of these must be (1), (2), or (3):

1. ***Delusions.***

2. ***Hallucinations.***

3. ***Disorganized speech*** (e.g., frequent derailment or incoherence).

4. ***Grossly disorganized*** or ***catatonic behavior.***

5. ***Negative symptoms*** (i.e., diminished emotional expression or avolition).

Diagnostic Features

B. For a significant portion of the time since the onset of the disturbance, level of functioning in one or more major areas, such as:

- *work,*
- *interpersonal relations,*
- *or self-care,*

is markedly below the level achieved prior to the onset (or when the onset is in childhood or adolescence, there is failure to achieve expected level of interpersonal, academic, or occupational functioning).

Diagnostic Features

C. Continuous signs of the disturbance persist for at least 6 months.

This 6-month period must include at least ***1 month of symptoms*** (or less if successfully treated) that meet Criterion A (i.e., active-phase symptoms) and may include periods of prodromal or residual symptoms.

During these ***prodromal*** or ***residual periods***, the signs of the disturbance may be manifested by only negative symptoms or by two or more symptoms listed in Criterion A present in an attenuated form (e.g., odd beliefs, unusual perceptual experiences).

Historical background.

Jean-Étienne Dominique Esquirol (1772-1840) (F)		1838
Bénédict Augustin Morel (1809-1873) (B)	Démence précoce	1852
Ewald Hecker (1843-1909) (D)	Hebefrenia	1871
Karl Ludwig Kahlbaum (1828-1899) (D)	Catatonia	1874

Emil Kraepelin-dementia praecox (dementia: *deterioration*; praecox: *early onset*).

Eugen Bleuler renamed Kraepelin's dementia praecox as **schizophrenia** (1911).

Bleuler's fundamental symptoms of schizophrenia (**4 A's of Bleuler**):

- **Ambivalence** (*marked inability to decide for or against*)
- **Autism**: *withdrawal into self*.
- **Affect disturbances**: *for ex., inappropriate affect*.
- **Association disturbances** (*loosening of associations; thought disorder*).

These groups of symptoms are „**primary**” for this diagnosis.

The other known symptoms, hallucinations, delusions, etc. are „**secondary symptoms**”, because they could be seen in any other psychotic disease.

Prevalence.

The *lifetime prevalence* of schizophrenia appears to be approximately **0.3%-0.7%**,

although there is reported variation by race/ethnicity, across countries, and by geographic origin for immigrants and children of immigrants.

The *sex ratio* differs across samples and populations:

for ex., *an emphasis on negative symptoms and longer duration of disorder* (associated with poorer outcome) *shows higher incidence rates for males*,

whereas definitions allowing for the inclusion of more mood symptoms and brief presentations (associated with better outcome) show equivalent risks for *both sexes*.

Development and Course (I).

The psychotic features of schizophrenia typically emerge between **the late teens and the mid-30s**; onset prior to adolescence is rare.

The **peak age at onset** for the first psychotic episode is in the early- to mid-20s for males and in the late-20s for females.

The onset may be **abrupt** or **insidious**, but the majority of individuals manifest a slow and gradual development of a variety of clinically significant signs and symptoms.

Half of these individuals complain of depressive symptoms.

Development and Course (II).

Earlier age at onset has traditionally been seen as a predictor of **worse prognosis**.

However, the effect of age at onset is likely related to gender, with **males having worse premorbid adjustment, lower educational achievement, more prominent negative symptoms and cognitive impairment, and in general a worse outcome**.

Impaired cognition is common, and alterations in cognition are present during development and precede the emergence of psychosis, taking the form of stable cognitive impairments during adulthood.

Cognitive impairments may persist when other symptoms are in remission and contribute to the disability of the disease.

Risk and Prognostic Factors (I).

Environmental.

Season of birth has been linked to the incidence of schizophrenia, including **late winter/early spring** in some locations and summer for the deficit form of the disease.

The incidence of schizophrenia and related disorders is higher for children growing up in an **urban environment** and for some **minority ethnic groups**.

Risk and Prognostic Factors (I).

Genetic and physiological.

There is a strong contribution for genetic factors in determining risk for schizophrenia, although most individuals who have been diagnosed with schizophrenia have no family history of psychosis.

Liability is conferred by a spectrum of risk alleles, common and rare, with each allele contributing only a small fraction to the total population variance.

Pregnancy and birth complications with hypoxia and greater paternal age are associated with a higher risk of schizophrenia for the developing fetus.

In addition, other prenatal and perinatal adversities, including stress, infection, malnutrition, maternal diabetes, and other medical conditions, have been linked with schizophrenia.

However, the vast majority of offspring with these risk factors do not develop schizophrenia.

Etiology of Schizophrenia

The etiology and pathogenesis of schizophrenia is not known.

No single factor is considered causative.

Multifactorial disease:

- ***Internal factors*** – genetic, inborn, biochemical;
- ***External factors*** – trauma, infection of CNS, stress.

❖ ***Dopamine hypothesis.***

❖ ***Norepinephrine hypothesis.***

❖ ***G-Aminobutyric acid (GABA) hypothesis.***

❖ ***Glutamate hypothesis.***

❖ ***Serotonin hypothesis.***

Clinical Picture

The **positive symptoms** are characterized by the presence of:

- *hallucinations,*
- *delusions* and
- *disorganized behavior.*

The **negative symptoms** are represented by:

- *cognitive disorders,* having its origin probably in the disorders of associations of thoughts, combined with
- *emotional blunting.*

Schizophreniform Disorder

The characteristic symptoms of schizophreniform disorder are identical to those of schizophrenia.

Schizophreniform disorder is distinguished by its difference in duration: the total duration of the illness, including prodromal, active, and residual phases, is **at least 1 month but less than 6 months**.

The diagnosis of schizophreniform disorder is made under two conditions:

- 1) when an episode of illness lasts between 1 and 6 months and the individual has already recovered, and
- 2) when an individual is symptomatic for less than the 6 months' duration required for the diagnosis of schizophrenia but has not yet recovered.

Schizoaffective Disorder

In addition to meeting the Criterion A for schizophrenia (***delusions, hallucinations, disorganized speech, grossly disorganized or catatonic behavior, negative symptoms***), there is a **major mood episode** (major depressive or manic).

Episodes of depression or mania are present for the majority of the total duration of the illness (i.e., after Criterion A has been met).

Schizotypal disorder (I)

The essential feature of schizotypal personality disorder is a pervasive pattern of social and interpersonal deficits marked by acute discomfort with, and reduced capacity for, close relationships as well as by cognitive or perceptual distortions and eccentricities of behavior.

This pattern begins by early adulthood and is present in a variety of contexts.

Individuals with schizotypal personality disorder often have ***ideas of reference*** (i.e., incorrect interpretations of casual incidents and external events as having a particular and unusual meaning specifically for the person).

These should be distinguished from delusions of reference, in which the beliefs are held with delusional conviction.

These individuals may be superstitious or preoccupied with paranormal phenomena that are outside the norms of their subculture.

They may feel that they have special powers to sense events before they happen or to read others' thoughts.

Schizotypal disorder (II)

They may believe that they have magical control over others, which can be implemented directly (e.g., believing that their spouse's taking the dog out for a walk is the direct result of thinking an hour earlier it should be done) or indirectly through compliance with magical rituals (e.g., walking past a specific object three times to avoid a certain harmful outcome).

Perceptual alterations may be present (e.g., sensing that another person is present or hearing a voice murmuring his or her name).

Their speech may include unusual or idiosyncratic phrasing and construction.

It is often loose, digressive, or vague, but without actual derailment or incoherence.

Responses can be either overly concrete or overly abstract, and words or concepts are sometimes applied in unusual ways (e.g., the individual may state that he or she was not „talkable” at work).

Delusional Disorder

The essential feature of delusional disorder is the presence of one or more delusions that **persist for at least 1 month**.

Apart from the direct impact of the delusions, impairments in psychosocial functioning may be more circumscribed than those seen in other psychotic disorders such as schizophrenia, and behavior is not obviously bizarre or odd.

If mood episodes occur concurrently with the delusions, the total duration of these mood episodes is brief relative to the total duration of the delusional periods.

The delusions are not attributable to the physiological effects of a substance (e.g., cocaine) or another medical condition (e.g., Alzheimer's disease) and are not better explained by another mental disorder, such as body dysmorphic disorder or obsessive-compulsive disorder.

Delusional Disorder

Subtypes:

- erotomanie type;
- grandiose type;
- jealous type;
- persecutory type;
- somatic type.

Treatment of Schizophrenia

• Distinction between typical and atypical antipsychotic drugs

- The term atypical antipsychotic agent was introduced to distinguish the newer antipsychotic drugs from conventional typical agents, such as chlorpromazine and haloperidol. An alternative term is second generation.
- Although the definition of the term 'atypical' varies in the literature, a fundamental property of an atypical antipsychotic is its ability to produce an antipsychotic effect without causing extrapyramidal side effects.

Treatment of Schizophrenia

Atypical antipsychotics	sulpiride, amisulpride, clozapine, olanzapine, quetiapine, risperidone
	paliperidone, iloperidone asenapine, lurasidone, brexpiprazole, cariprazine, pimavanserin

Treatment of Schizophrenia

Conventional antipsychotics (typical, classical neuroleptics)	chlorpromazine, levomepromazine, thioridazine
	haloperidol, trifluoperazine, perphenazine, periciazine, chlorprothixene
	clopenthixol, flufenazine, pimozide, fluspirilen, penfluridol

Treatment of Schizophrenia

Conventional antipsychotics (classical neuroleptics)	chlorpromazine, levomepromazine, thioridazine
	haloperidol, trifluoperazine, perfenazine, periciazine, chlorprothixene
	clopenthixol, flufenazine, pimozide, fluspirilen, penfluridol

Antipsychotics of the 2nd Generation

<i>Generic Name</i>	<i>Trade Mark</i>	<i>Dose (mg)</i>
sulpiride	DOGMATIL, PROSULPIN	50-1200
amisulpride	SOLIAN, DENIBAN	50-1200
risperidone	RISPERDAL, RISPEN, RISPERDAL QUICKLET	4-8
ziprasidone	ZELDOX	40-160
sertindole	SERDOLECT	12-20
clozapine	LEPONEX	200-600
olanzapine	ZYPREXA i.m. inj. 10 mg	5-20
quetiapine	SEROQUEL	300-600
zotepine	ZOLEPTIL	75-300

Depot Antipsychotics

<i>Generic Name</i>	<i>Trade Mark</i>	<i>Mean Dose (mg)</i>	<i>Interval</i>
fluphenazine	MODITEN DEPOT	25	14-28 days
haloperidol	HALDOL DEPOT	50,100	
flupenthixol	FLUANXOL DEPOT	40	
zuclopenthixol	CISORDINOL DEPOT	200	
Risperidone Aripiprazole extended-release injection Paliperidone palmitate extended-release injection Olanzapine	RISPERDAL CONSTA ABILIFY XEPLION ZYPREXA		14 days 4 weeks on a monthly basis

• Some unwanted effects of antipsychotic drugs

- **Antidopaminergic movement effects**
- Acute dystonia
- Akathisia
- Parkinsonism
- Tardive dyskinesia
- **Antiadrenergic effects**
- Sedation
- Postural hypotension
- Inhibition of ejaculation
- **Anticholinergic effects**
- Dry mouth
- Reduced sweating
- Urinary hesitancy and retention
- Constipation
- Blurred vision
- Precipitation of glaucoma
- **Antihistaminic effects**
- Sedation
- Weight gain
- **Other effects**
- Cardiac arrhythmias
- Metabolic syndrome and diabetes
- Amenorrhoea
- Galactorrhoea
- Hypothermia
- Pulmonary embolus

TIMOSTABILIZERS

<i>Generic Name</i>	<i>Trade Mark</i>	<i>Doses (mg)</i>
lithium carbonicum	LITHIUM CARBONICUM	900 – 1000
	CONTEMNOL	1000 - 1500
carbamazepine	BISTON, TEGRETOL, TIMONIL	400 - 1500
valproic acid	EVERIDEN, ORFIRIL,	900 - 2000
lamotrigine		300-500 mg
gabapentine		1.2-2.4 g

Thanks for your attention

ANXIETY DISORDER



- **Anxiety, stress-related and somatoform disorders.** Phobic anxiety disorders. Panic disorder. Generalized anxiety disorder. Obsessive-compulsive disorder. Acute stress reaction. Post-traumatic stress disorder. Adjustment disorder. Somatoform disorders.

- **Dr. Jana Chihai, Associate Professor, PhD**
- **DEPARTMENT OF Mental Health, Medical Psychology and psychotherapy**

ANXIETY

- Anxiety defined as a subjective sense of unease ,dread or foreboding can indicate a primary psychiatric condition
- Anxiety can be described as an uncomfortable feeling of vague fear or apprehension accompanied by characteristic physical sensations.
- Anxiety can produce uncomfortable and potentially debilitating psychological (e.g., worry or feeling of threat) and physiological arousal (e.g., tachycardia or shortness of breath).

ANXIETY

- It is a **fundamental** feeling (anger, joy, amazement, disgust, disdain and sadness) that we see in people of all cultures;
- It was defined by Janet as a "fear without any object";
- Then by Delay as a "distressing experience of an imminent and indefinite danger, as a state of tense waiting".



Anxiety

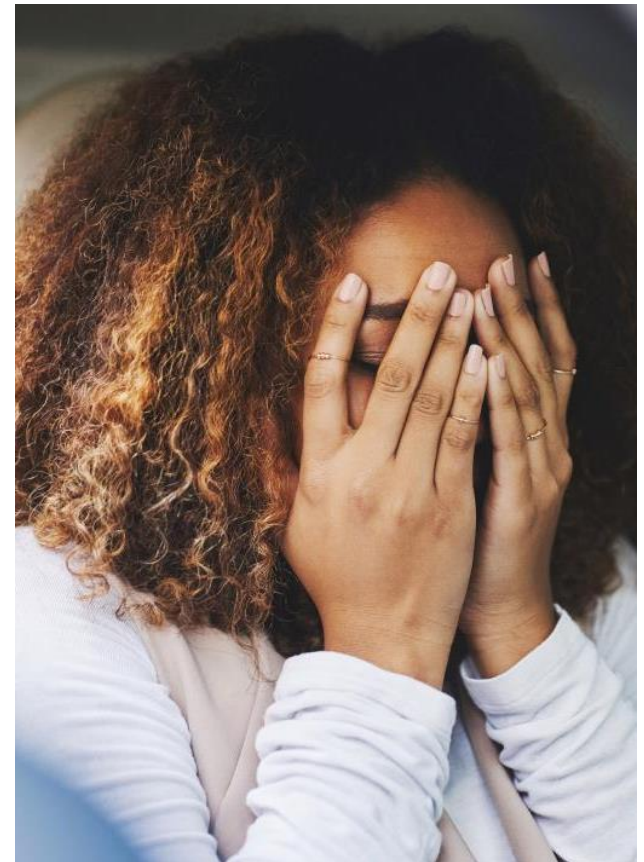
Anxiety is characterized by a diffuse, unpleasant, vague feeling of fear or worry, accompanied by vegetative symptoms: headache, sweating, palpitations, tachycardia, gastric discomfort, etc. Thus, it has two components, a physiological and a psychological one, the individual being aware of the existence of both of them.

It implies:

Subjective feelings (worry);

Physiological responses (tachycardia, ↑cortisolemia, etc);

Behavioural responses (avoidance).





Anxiety

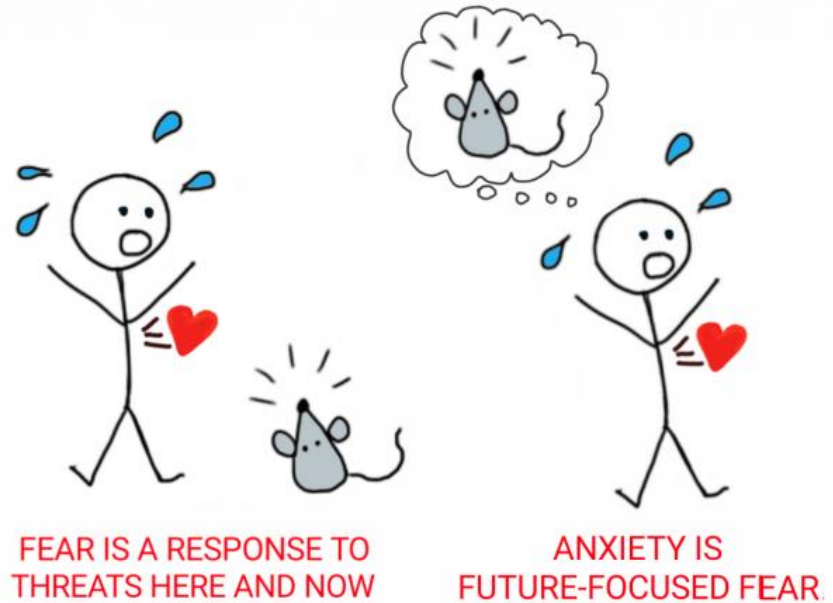
- It can be beneficial (it makes the body ready for action, having a protective role against an imminent danger and an adaptive role);
- It can be abnormal (it overwhelms and disrupts the individual's daily life and his/her condition, resulting in avoidance behaviour and compensatory strategies).

Anxiety vs Fear

Anxiety – a feeling of "fear without any object", accompanied by somatic signs, indicating the hyperactivity of the autonomic nervous system;

Fear – a feeling of "fear of an object", as a response to a known cause.

Phobia – „irrational fear of an object”.



Anxiety disorders - Epidemiology

- These are the most common mental health problems worldwide.
- The prevalence of anxiety disorders is relatively high - about **18%**, and studies in both **adolescents** (Kathleen Merikangas 2010) and **adults** (Ronald Kessler 2005) show that the lifetime prevalence of anxiety disorders is \approx **31%**.
- Women prevalence rates are higher than men prevalence;
- The youth prevalence rates are higher than the prevalence among the elderly;
- It is the most common mental health condition dealt with in primary care (\approx 20%).



Anxiety disorders – Etiopathogenesis

- The exact cause of anxiety disorders is not known, but, as with other types of disorders, the vulnerability-stress model is accepted.
 - Anxiety disorders are the complex result of a combination of environmental, personal, interpersonal and neurobiological factors.
-

Anxiety disorders – Etiopathogenesis

- Anxiety disorders have in common some disturbances of **serotonergic** and **noradrenergic** neurotransmission, of the endocrine hypothalamic-pituitary-adrenal and hypothalamic-pituitary-thyroid axis function.
 - The body's response to lactate, CO₂ and other anxiety-inducing substances.
 - The **serotonergic pathways** involve the amygdala, the nucleus accumbens and the frontal cortex, facilitating the avoidance behaviour and the escape behaviour.
 - The **noradrenergic** and **dopaminergic** systems sensitize the autonomic activation and vigilance in response to a threat.
-

Anxiety disorders – Etiopathogenesis

- The neuroimaging studies have demonstrated the involvement of the prefrontal, temporal, parietal and occipital **cortex** and of the limbic system in the pathophysiology of anxiety.
- The **limbic system** receives projections with an important role in anxiety from the locus coeruleus and raphe nuclei.
- The **hippocampus** and **amygdala**, components of the limbic system, have a particular importance due to their interconnection, and also due to the projections to the subcortical and cortical nuclei.

EPIDEMIOLOGY

- In general, anxiety disorders are a group of heterogeneous illnesses that develop before age 30 and are more common in women, individuals with social issues, and those with a family history of anxiety and depression.
- United States, the 1-year prevalence rate for anxiety disorders was 13.3% in persons aged 18 to 54 years and 10.6% in those over age 55 years

SYMPTOMS OF ANXIETY:

- Sensitivity of noise
- Dry mouth
- Difficulty in swallowing
- Palpitations
- Restlessness ,tremor
- Gastrointestinal discomfort
- Headache
- Insomnia.
- Constriction in chest
- Poor concentration



Symptoms in anxiety

Clinically, the anxiety has the following symptoms:

1. Somatic
2. Cognitive
3. Emotional
4. Behavioural



Somatic symptoms

Respiratory

- feeling of "lack of air/suffocation"
- feeling of chest tightness
- tachypnea
- feeling of "lump in the throat"

Cardiovascular symptoms

- tachycardia
- palpitations
- precordial pain
- syncope

Neurological

- Headaches, vertigo
- Paresthesia, hyperesthesia
- Visual illusions
- Blurred vision

Muscular

- Tremor
- Muscle contraction
- Muscle hypotonia
- Muscle twitching
- Low back pain

Vegetative

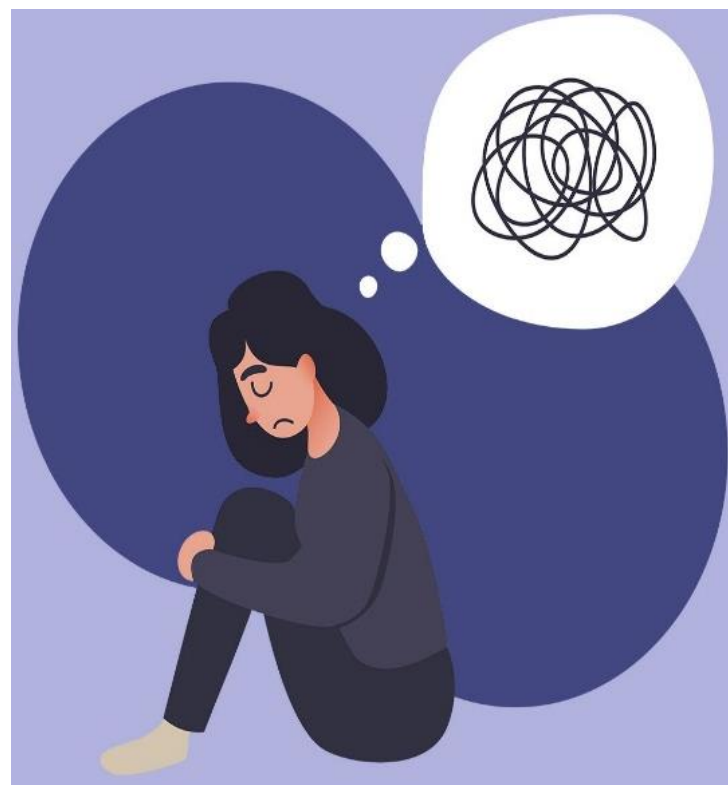
- Dry mouth
- Pale skin
- Hyperemia of the face and neck skin
- Sweating
- Hot flashes

Gastrointestinal

- Accelerated bowel movement
- Cramps
- Nausea, vomiting
- Abdominal pain

Cognitive symptoms

- worries
- self-depreciation, self-blame thoughts
- lack of confidence in one's own abilities
- interpreting ordinary situations as being threatening
- self-focus (social anxiety)
- low attention
- hypervigilance (scanning the external environment for threatening stimuli)



Emotional symptoms

- fear of uncertainty
- lack of interest in trying new things
- restlessness
- hypervigilance (in detecting negative feelings)
- irritability
- inner tension



Behavioural symptoms

1. Avoidance behaviours (e.g. social anxiety, specific phobia)
2. Assurance (e.g. generalised anxiety)
3. Checking (e.g. obsessive-compulsive disorder)



Signals of a possible anxiety

Request for tranquilizers and sleeping pills;
Absenteeism from work;
Alcohol and drug abuse;
Depressive symptoms;
Hyperventilation-like symptoms;
Traumatic life event;
Avoidance behaviour;
Family members suffering from an anxiety disorder
(aggravated heredity).



DSM-V**Classification of anxiety disorders (F)****ICD-10 CHAPTER V**

Panic disorder with/without agoraphobia
300.01

Panic disorder (episodic paroxysmal anxiety) F41.0
Agoraphobia with panic disorder F40.01

Agoraphobia 300.22

Agoraphobia F40.00

Specific phobias (simple phobias) 300.29

Specific (isolated) phobias F40.2

Social phobias 300.23

Social phobias F40.1

Obsessive-compulsive disorder (OCD) 300.3

Obsessive-compulsive disorder F 42

Post-traumatic stress disorder (PTSD) 309.81

Post-traumatic stress disorder F 43.1

Acute stress disorder 308.3

Mixed anxiety and depressive acute stress reaction
F43.22

Generalized anxiety disorder (GAD) 300.02

Generalized anxiety disorder F41.1

Anxiety disorder due to a general medical
condition 293.84

Organic anxiety disorder F06.4

Anxiety disorders not otherwise classified
300.09

1. Mixed anxiety and depressive disorder F41.2
2. Other mixed anxiety disorders F41.3
3. Other specified anxiety disorders F41.8
4. Anxiety disorder, unspecified F41.9

Hypochondria 300.7

Hypochondriac disorder F 45.2

Body dysmorphic disorder 300.7

Body dysmorphic disorder F 45.2

ICD-11 vs. ICD-10

- In **ICD-10**, there were two chapters covering the anxiety disorders :
 - F40: Phobic anxiety disorders
 - F41: Other anxiety disorders
- In **ICD-11**, the two chapters have been merged into one, called "Anxiety and fear-related disorders".
- absence of 'Mixed depressive-anxiety disorder' as a diagnosis – F41.2
- "Separation anxiety disorder" and "Selective mutism", which were included in ICD-10 in chapters dedicated to children (F94), are part of this chapter
- "'Olfactory reference disorder' is another new condition whose main symptom is the belief that one emits an unpleasant body odour.
- „Hoarding disorder" – (6B24) is a new diagnosis

ICD-11 vs. ICD-10

- In **ICD-11**, the sub-chapter "Stress-related disorders" covers two distinct conditions:
 - „Post-traumatic stress disorder“ (PTSD)
 - „Complex post-traumatic stress disorder“ (complex PTSD).
- Another new element is the absence of „Acute stress reaction“ as a diagnosis
- „ Prolonged grief“ (6B42) is a new diagnosis introduced in “Stress-related disorders” subchapter

PATHO PHYSIOLOGY:

GABA system:

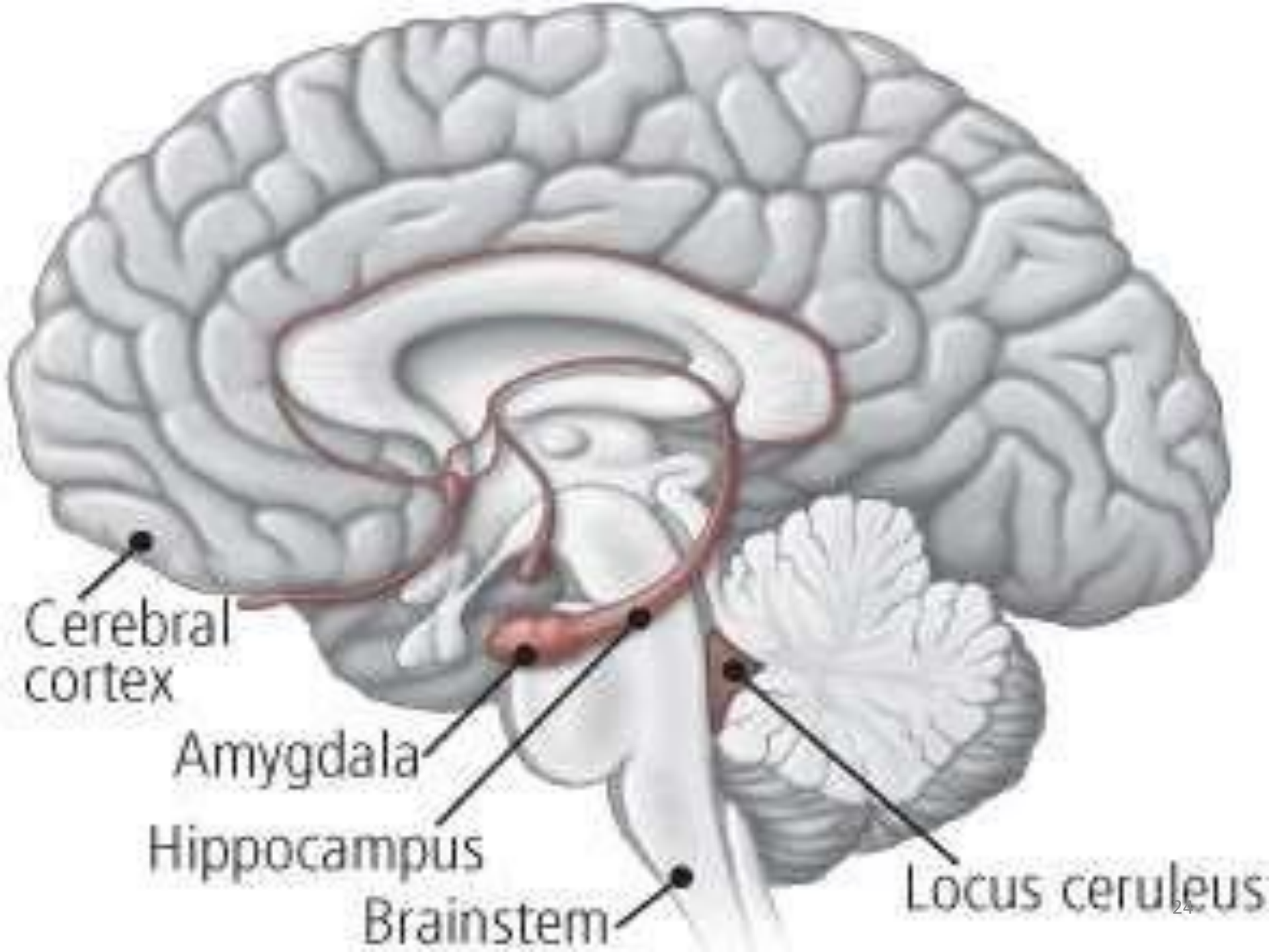
- The role of GABA- benzodiazepine receptor complex in anxiety disorders has not been fully characterized
- However a potential role has been implicating in panic disorders, GAD and PTSD.
- In GAD reduced temporal lobe benzodiazepine receptor are observed.
- In PTSD, cortical benzodiazepine receptor are reduced.
- In PANIC decreased GABA_A binding is noted.
- Angiogenic agents – having the property of altering the binding of benzodiazepines to the gamma amino butyric acid receptor

↓ leads to

nerve cell excitability

↓ Anxiety

- **SEROTONIN SYSTEM :**
- 5-HT is involved in the pathophysiology of anxiety disorders.
- as abnormal regulations of serotonin release and reuptake or abnormal responsiveness to 5-HT signals.



Amygdala



- its role includes detecting, coordinating and maintaining fearful emotions.
- The amygdala integrates information from multiple sensory areas to assess for threats with consideration of input regarding the context of presenting stimulus Once a threat has been detected by the amygdala a rapid response is coordinated.

- **NON-ADRENERGIC SYSTEM :**
- Locus coeruleus which is located in the brainstem
 - ↓
 - Locus coeruleus is the neither primary nor epinephrine containing area of the brain
 - ↓
 - According to the noradrenergic theory of anxiety, in the presence of perceived threat, the locus coeruleus serves as an alarm center release nor epinephrine
 - ↓
 - Leads to anxiety.
 - α_2 adrenergic antagonist yohimbine, carbon dioxide inhalation, caffeine, isoproterenol each of these stimuli activates a pathway leads to anxiety.

A woman with blonde hair, wearing a blue tank top, is shown from the chest up, holding her hands to her head in a gesture of distress or frustration. The background is a word cloud of various terms related to stress and anxiety, including 'Sick', 'Tired', 'Headache', 'Bills', 'payments', 'Stress', 'Debt', 'Work', 'Anxiety', 'Expectations', 'Time Management', 'Late Nights', 'Fear', 'Worry', 'No Sleep', 'Dread', 'Health', 'No Time', 'Savings', 'Overdue', 'Guilt', 'Anxiety', 'Expectations', 'Time Management', 'Late Nights', 'Fear', 'Worry', 'No Sleep', 'Dread', 'Health', 'No Time', 'Savings', 'Overdue', 'Guilt'. The text 'GENERALIZED ANXIETY DISORDER' is overlaid in large, bold, red capital letters across the center of the image.

GENERALIZED ANXIETY DISORDER

- Chronic anxiety state associated with uncontrollable worry.
- Patients with GAD have persistent, excessive, unrealistic worry associated with muscle tension, impaired concentration and insomnia.
- Complaints of shortness of breath, palpitations and tachycardia are relatively rare
- Alcohol abuse and dependence are common in GAD patient



Risk Factors

Factors that may increase the risk of GAD include:

- Family members with an anxiety disorder
- Increase in stress
- Exposure to physical or emotional trauma
- Unemployment, poverty
- Drug abuse



Diagnosis/clinical presentation

- **GAD** is diagnosed when an individual experiences unrealistic or excessive anxiety and worry for a period of at least 6 months.
- Additionally, the individual must have difficulty in controlling that anxiety or worry.
- Accompanying the anxiety or worry for 6 months with 3 or more of the following symptoms: feeling tense or restless, easily fatigued, difficulty concentrating, irritability, and difficulty with sleep.

A woman with a shocked expression, surrounded by colorful digital glitch effects. The image is heavily distorted with pixelated, multi-colored lines and blocks, particularly around the edges and the woman's face. The background is white, and the woman is wearing a grey top.

PANIC DISORDER

- Panic disorder is defined by the presence of recurrent and unpredictable panic attacks, which are distinct episodes of intense fear and discomfort associated with a variety of physical symptoms.

SYMPTOMS :

- Palpitations
- Sweating
- Trembling or shaking
- Sensations of shortness of breath
- Chest pain or discomfort
- Nausea
- Feeling dizzy
- Fear of dying
- Paresthesias
- Chills or hot flushes.



- **Diagnosis/clinical presentation**
- A panic attack usually peaks in 10 mins and lasts no longer than 30 mins.
- A patient is diagnosed with a panic disorder when that individual experiences repeated unexpected panic attacks and these attacks are followed by a 1-month period of one or more:
persistent concern over future attacks
- During an attack individual will often feel like they are losing control or dying.

A group of children, including a boy in a purple shirt on the left and a girl in a purple shirt on the right, are standing together. The image has a pixelated, glitch-like border. Overlaid in the center is the text 'PHOBIC DISORDERS' in a large, bold, red serif font.

PHOBIC DISORDERS

SPECIFIC PHOBIA

A specific phobia is any kind of **anxiety disorder** that amounts to an unreasonable or irrational fear related to exposure to specific objects



MODEL - NOT ACTUAL PATIENT



SOCIAL PHOBIA

- Social **phobia** is fear of social situations where you may be embarrassed or judged.
- Common physical symptoms include blushing, diarrhea, sweating, and tachycardia.



AGOROPHOBIA

- Agorophobia is a fear of places or situations that might cause you to panic and make you feel trapped, helpless



- Phobic disorder are common ,affecting 10% of population
- The Patients avoids phobic stimulus and this avoidance usually impairs occupational or social functioning.
- Common phobias include fear of closed spaces (clustrophobia), fear of blood,fear of flying.
- Patient with social phobia, in particular, have a high rate of co-morbid alcohol abuse, as well as of other psychiatric conditions (e.g. eating disorder)

Treatment of anxiety



Anxiety symptoms	Anxiety disorder	Anxiety with severe social dysfunction, suffering or psychiatric co-morbidity
Patient education	Patient education, bibliotherapy	Patient education
Day structuring	Day structuring and scheduling activities	Day structuring and scheduling activities
Scheduling activities	Physical activities Self-support (bibliotherapy/mental health) Short psychological intervention	Psychotherapy or beta-blocking drugs, anxiolytics, antidepressants with anxiolytic effect, depending on the patient, antipsychotics, preferably atypical

First-line drugs

Antidepressant drugs: Selective serotonin reuptake inhibitors (SSRIs)

Treatment shall start with low doses which shall be gradually increased.

SSRI	Anxiety disorders				
	PD	OCD	SAD	GAD	PTSD
Paroxetine	X	X	X	X	X
Fluvoxamine	X	X	X		
Fluoxetine	X	X			
Sertraline	X	X	X		X
Escitalopram	X	X	X	X	

Second-line drugs

Dual-action antidepressants

Venlafaxine

Duloxetine

Other antidepressants

Third-line drugs

- **Benzodiazepines**

- All benzodiazepines may cause physical **addiction (!!!)**, if the duration of therapy exceeds the limit of 2-4 weeks.



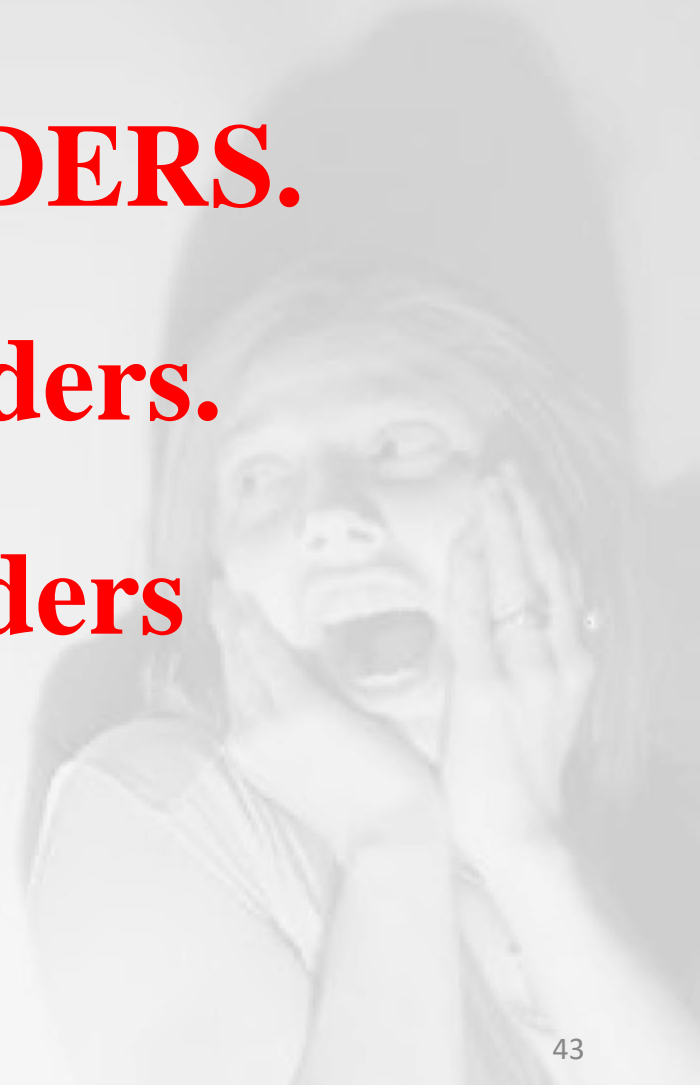
IV –line drugs

Atypical antipsychotics:

- Risperidonum
- Olanzapinum
- Quetiapinum
- Aripiprazolum
- Amisulpridum
- Cariparzinum.

The drugs in this list may be/become a first-line choice in severe PTSD or OCD, with psychotic symptoms and high suicide risk or recurrent autolytic behaviour.

POST TRAUMATIC
STRESS DISORDERS.
Acute stress disorders.
Adjustment disorders



Acute stress reaction.

a transient severity disorder that usually resolves within hours or days

Causes

several theoretical perspectives on trauma response, including cognitive, biological, and psycho-biological

The symptoms: an initial state of „daze”, with some constriction of the field of consciousness and narrowing of attention, inability to comprehend stimuli, and disorientation. This state may be followed either by further withdrawal from the surrounding situation (extreme variant - dissociative stupor), or by agitation and overactivity

Autonomic signs - tachycardia, sweating or flushing, as well as other anxiety or depressive symptoms.

In addition to these characteristics, ASD can be present in the following four distinct symptom clusters

Intrusion symptom cluster

Recurring and distressing dreams, flashbacks, and/or memories related to the traumatic event. Intense/prolonged psychological distress or somatic reactions to internal or external traumatic cues.

Negative mood cluster - A persistent inability to experience positive emotions such as happiness, loving feelings, or satisfaction.

Avoidance symptom cluster - The avoidance of distressing memories, thoughts, feelings (or external reminders of them) that are closely associated with the traumatic event.

Arousal symptom cluster - Sleep disturbances, hyper-vigilance, difficulties with concentration, easily startled, and irritability/anger/aggression

Types of ASD

1) Sympathetic

- Sympathetic acute stress disorder is caused by the release of excessive adrenaline and norepinephrine into the nervous system. These hormones may speed up a person's pulse and respiratory rate, dilate pupils, or temporarily mask pain.

2) Parasympathetic

Parasympathetic acute stress disorder is characterised by feeling faint and nauseous. This response is fairly often triggered by the sight of blood. In this stress response, the body releases acetylcholine. In many ways, this reaction is the opposite of the sympathetic response, in that it slows the heart rate and can cause the patient to either regurgitate or temporarily lose consciousness

Diagnosis

According to the DSM-V, symptom presentation must last for three consecutive days to be classified as acute stress disorder

- If symptoms persist past one month, the diagnosis of PTSD is explored
- Also, the symptoms show a mixed and rapidly changing picture; although "daze" depression, anxiety, anger, despair, hyper-activity, and withdrawal may all be seen, no one symptom dominates for long

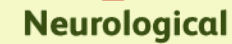
In cases where the stress continues, the symptoms usually begin to diminish after 24–48 hours and are usually minimal after about three days.

The DSM-V specifies that there is a higher prevalence rate of ASD among females compared to males due to higher risk of experiencing traumatic events and neurobiological gender differences in stress response



Genetics

Lack of support



Neurological



Life stressors



Traumatic Event



Previous trauma

Post-traumatic stress disorder - PTSD

- Patients with stress disorders are at risk for the development of other disorders related to anxiety, mood and substance abuse (especially alcohol)
- **Symptoms** : nightmares, negative thinking and mood,
unwanted distressing memories of the traumatic event
- Symptoms usually begin early, within 3 months of the traumatic incident, but sometimes they begin years afterward. Symptoms must last more than a month

PTSD

is a severe mental condition that occurs as a result of a single or repeated events that have a powerful negative impact on the psyche of an individual

In PTSD, for more than a month after psychological trauma, a group of characteristic symptoms persists, such as psychopathological re-experiences (flashbacks), avoidance of what can activate memories of trauma, nightmares and high levels of anxiety

Sometimes there are dissociative reactions and amnesia (no memory of the traumatic event)

Symptoms of PTSD can appear both immediately after the injury and many years after the traumatic event

PTSD can lead to problems such as depression, generalized anxiety disorder, panic attacks, addictions, suicidal behavior, aggressiveness

In children and adolescents, the clinical picture of PTSD depends on age

The risk of PTSD depends on the severity of the trauma [⇒],

Prevalence of PTSD

70 PERCENT of adults experience at least one traumatic event in their lifetime



1 IN 13 PEOPLE will develop PTSD at some point in their life

20 PERCENT of people who experience a traumatic event will develop PTSD



Prevalence of PTSD in the United States is equal to the **TOTAL POPULATION OF TEXAS**

Causes of PTSD

Traumatic events

Trauma can be caused, for example:

- military actions (see. Combat mental trauma);
- natural and man-made disasters;
- terrorist acts;
- violence, torture;
- sexual assault (see Sexual Assault Trauma Syndrome);
- accidents;
- long-term or serious illnesses, especially those accompanied by a strong increase in body temperature;
- poisoning;
- surgical operations, medical manipulations, the use of general anesthesia
- Abortion and psychological trauma

WHAT CAUSES PTSD?

TOP 4 REASONS MEN AND WOMEN SUFFER PTSD:

Men	Women
1 Rape	1 Rape
2 Combat exposure	2 Sexual molestation
3 Childhood neglect	3 Physical attack
4 Childhood physical abuse	4 Being threatened with a weapon

CAUSES THAT LEAD TO PTSD:

ASSAULT	DOMESTIC ABUSE OR INTIMATE PARTNER VIOLENCE	PRISON STAY	RAPE	TERRORISM	WAR
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ACTIVITIES THAT MIGHT LEAD TO PTSD:

CRASH	NATURAL DISASTERS	CIVILIANS IN THE MIDST OF WAR	ASSAULT
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Duration classification of injuries

There are 2 types of traumatic situations that lead to PTSD with different clinical presentations

1) Simple trauma

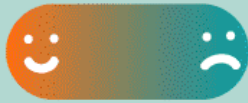
A short-term, usually unexpected event (for example, sexual assault, natural disaster), which usually poses a threat to the individual and exceeds his / her ability to protect himself. Such an event leaves a very vivid, concrete and indelible mark on the memory. The individual can later see dreams in which certain aspects of the event are present.

2) Prolonged trauma

Recurrent traumatic situations ("serial trauma" or "prolonged traumatic disorder"): for example, repeated physical or sexual abuse, bullying, fighting. In this case, the harm is more likely to be intentional. For the first time, such an event is perceived by an individual as a type 1 trauma. Eventually, events become more predictable, and the victim experiences fear of repetition of the trauma, while feeling a sense of helplessness regarding the possibility of preventing trauma

PTSD Diagnostic Criteria

Negative Alterations
in Mood



Alterations in
Arousal or Reactivity



Duration



Avoidance



Functional
Significance



Intrusion



Stressor



Exclusion



Stages of PTSD. Acute crisis phase

During and immediately after the traumatic event, the individual is in a state of psychological shock.

May manifest:

Intense fear, causing a desire to run or a numb response. Some trauma victims may continue to feel defenseless after the event, tremble for hours, fear being left alone, or, conversely, feel fearful and distrustful of people.

The defensive reaction of denial often manifests itself in the form of symptoms of dissociation: an event that is happening or has just happened seems unreal to a person or happened not to him, but to someone else. It may seem to a person that events take place in a dream or in a film, he is outside his own body, time passes faster or slower than in reality.

A state of confusion: it is difficult for a person to navigate the situation, make decisions and take the necessary actions (sometimes up to the inability to speak or move).

State of psychological vulnerability: a person is very receptive to the advice of people around him (often with an uncritical attitude to these advice) and at the same time becomes extremely vulnerable, painfully perceiving comments or inattention to him from others.

Self-disgust and shame, which is more typical of victims of sexual assault. Disgust touches one's own personality or body parts touched by the aggressor, they are perceived as "contaminated". In this case, sometimes a person may experience an obsessive desire to constantly wash.

Psychosomatic symptoms such as nausea, complete loss of appetite.

Post-Traumatic Stress Disorder (PTSD)



Avoid Thinking of the Trauma



Avoid Talking of the Trauma



Easily Frightened



Negative Mood



Negative Thinking



Always on Guard



Avoiding Places



Avoiding Activities



Flashbacks



Cannot Concentrate



Aggressive Behavior



Loss of Interest



Feeling Guilt or Shame



Substance Abuse



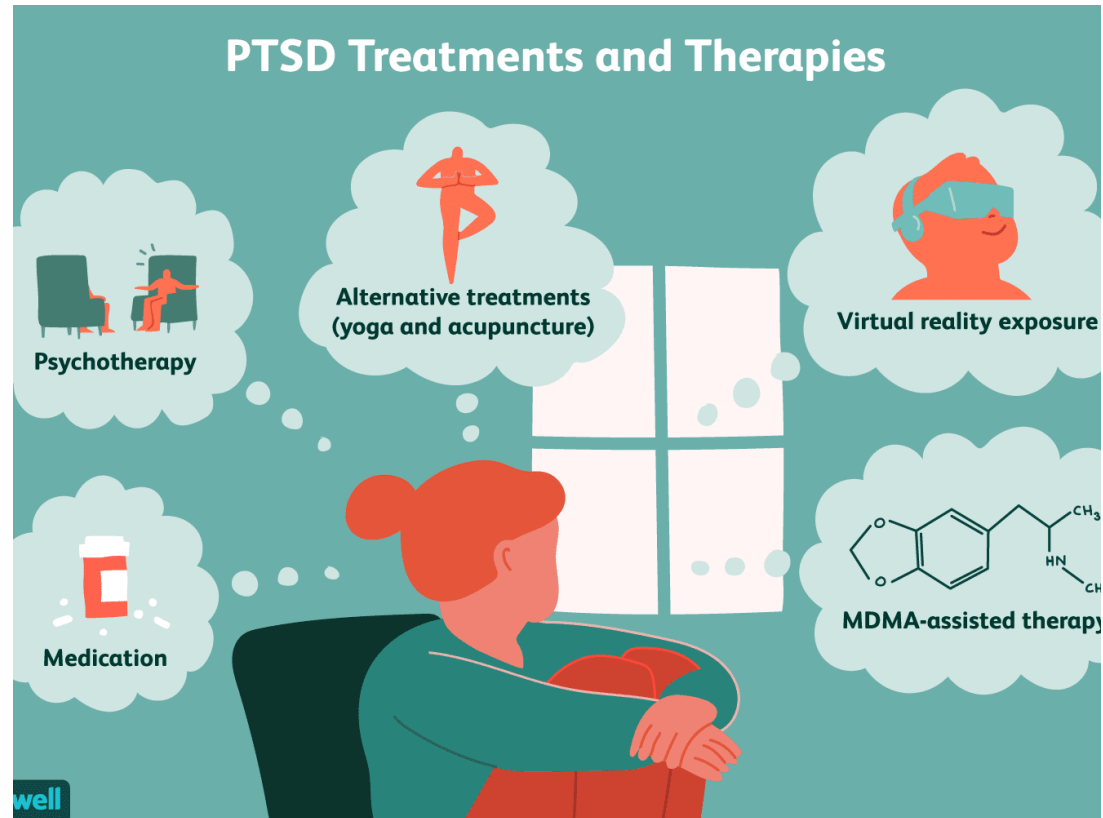
Sleeping Difficulty



Bad Dreams

Treatment options:

- The treatment of PTSD should be a friendly approach using a variety of correction and support methods. It is important to adhere to the following **principles:**
- Medicines should be prescribed strictly according to indications and for the shortest possible time.
- Psychotherapy should begin as soon as possible after the onset of psychological trauma.
- Social support of the patient is also required
- Drug therapy for PTSD should always be combined with psychotherapy



Coping methods:

- The World Health Organization recommends the following treatments for PTSD primarily:
- individual or group trauma-focused cognitive behavioral therapy (CBT-T);
- desensitization and processing by eye movement;
- training in stress reduction techniques (eg, breathing techniques, progressive muscle relaxation);
- assistance in finding positive coping strategies and social support



- At the same time, tranquilizers reduce anxiety, anticonvulsants and normotimics reduce nervous excitement and panic anxiety (they can be prescribed if medications of a different type are ineffective), and antipsychotic drugs help reduce nervous excitement and feelings of anger

Residual symptoms	First choice medicines	Second choice medicines
Psychopathological re-experiencing, hypervigilance	risperidone, valproic acid, topiramate, lamotrigine, phenytoin	quetiapine, olanzapine, gabapentin, carbamazepine
Depression symptoms	lithium preparations, mirtazapine, clomipramine, clonidine	olanzapine
Insomnia	valproic acid, gabapentin, prazosin, olanzapine, topiramate	
Nightmares	valproic acid, risperidone, topiramate, phenytoin, olanzapine	gabapentin, carbamazepine

Adjustment disorders.

a state of subjective distress and emotional distress, usually interfering with social functioning and productivity and occurring during a period of adaptation to a significant life change or stressful life event

The stress factor can be associated with negative changes in the patient's close social circle (separation experience, loss of loved ones) or affect the broader sphere of social relations (change in social status, migration)

Diagnostics

An important role in the emergence and formation of manifestations of adaptive disorders is played by individual predisposition or vulnerability. However, it is believed that adjustment disorder would not have occurred without the stressor.

Disorder of adaptive reactions is manifested by various symptoms: depressed mood, anxiety, irritability. In adolescents, conduct disorders (such as aggressive or dissocial behavior) may occur.

However, none of the symptoms are significant or predominant enough to indicate a more specific diagnosis.

OBSESSIVE-COMPULSIVE

DISORDER

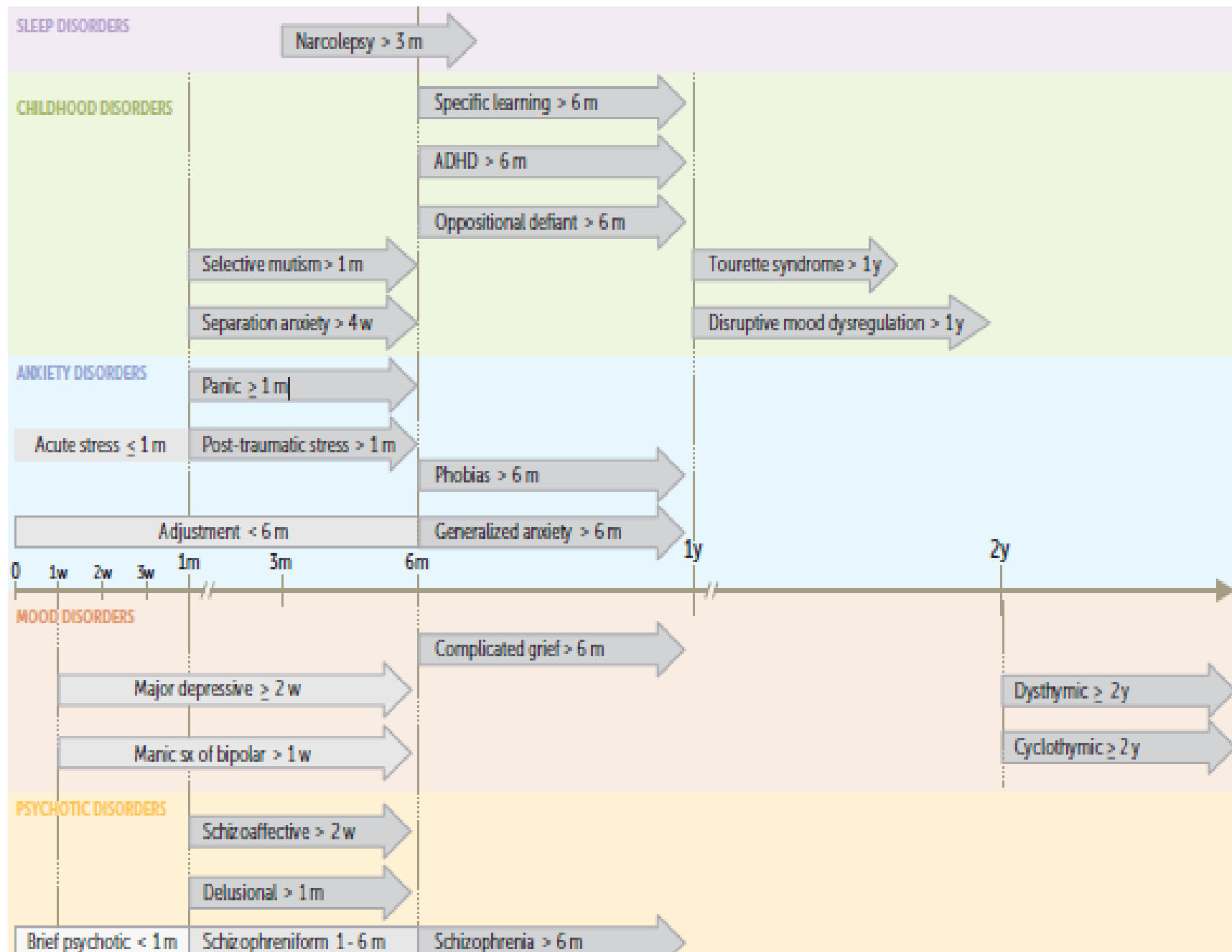




- OCD is characterized by obsessive thoughts and compulsive behaviors that impair everyday functioning.
- Fears of contamination and germs are common as are hand washing, counting behaviors and having check and recheck the actions like whether a door is locked.



Diagnostic criteria by symptom duration



Non pharmacological treatment:

- Psychological education, short term counseling, stress management, psychotherapy, meditation, or exercise.



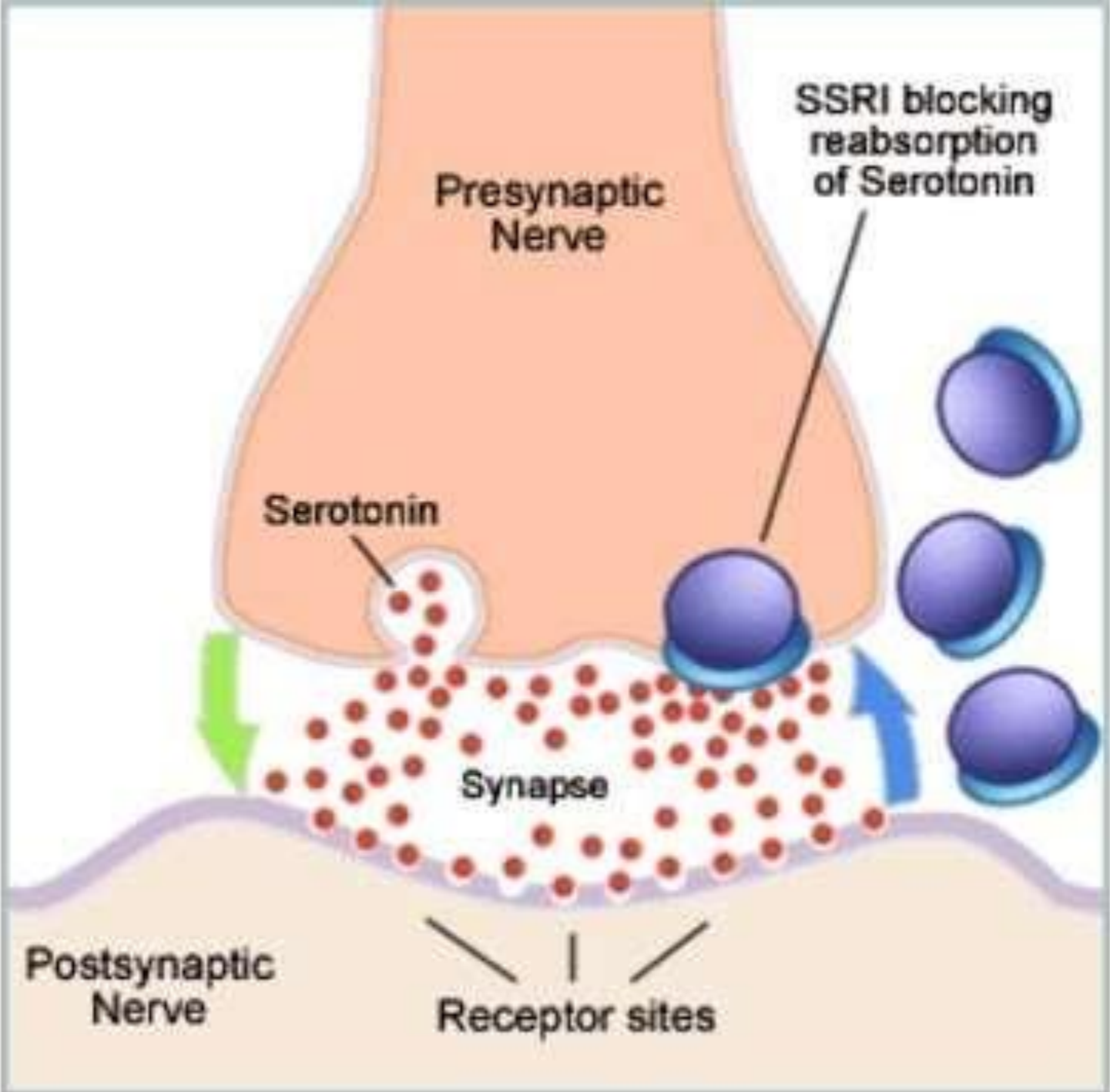
- Psychological therapy:
- Psychological therapies (talking therapies) are generally considered first line treatments in all anxiety disorders because they provide a longer lasting response and lower relapse than pharmacotherapy.
- The specific psychotherapy with the most supporting evidence in anxiety disorders is **cognitive behavioral therapy**
- Therapy usually for 8-16 weeks or longer in more resistant cases.

SELECTIVE SEROTONIN REUPTAKE

INHIBITOR

- Paroxetine
 - Escitalopram,
 - Citalopram
 - Fluoxetine
-
- SSRI's are the first-line treatment of GAD ,SAD, panic disorder
 - Treatment effect usually takes at least 4 weeks





- **Mechanism of action:**
- The SSRIs block the reuptake of serotonin, leading to increased concentrations of the neurotransmitter in the synaptic cleft and, ultimately, to greater postsynaptic neuronal activity

Agent	Starting dose (mg/day)	Usual dose (mg/day)	Half life
Fluoxetine(Prozac)	10-20	20-60	7-9 days
Paroxetine	10-20	20-60	21 hrs
Sertraline	25-50	50-200	24hrs
Citalopram(Celexa)	10-20	20-60	35 hrs
Escitalopram	5-10	10-20	27-32 hrs

SIDE EFFECTS:

- Vivid dreams.
- Tremor.
- Nausea.
- vomiting.
- Insomnia.
- Osteopenia.
- Headache.



TRICYCLIC ANTIDEPRESSANTS

Tertiary amine

- Imipramine
- Amitriptyline (Elavil)
- Trimipramine (Trimip)

Secondary amine

- Desipramine (Norpramin)
- Nortriptyline (Aventyl)



- **MECHANISM OF ACTION:**

- Mechanism of action of the tricyclic antidepressants (TCAs) is that they inhibit the reuptake of the biogenic amines, mostly nor epinephrine (NE), as well as serotonin (5HT)

- **SIDE EFFECTS:**

- Blurred vision, constipation, urinary retention, dry mouth, sedation, weight gain, and orthostatic hypotension, insomnia

FOCUS
FOCUS
FOCUS
FOCUS
FOCUS



- **DOSE AND ADMINISTRATION:**
- **IMIRAPINE:**
- Initiated with 10 mg/day at bedtime and slowly increased by 10 mg every 2 to 4 days as tolerated to 75 to 100 mg/day, and then increased by 25 mg every 2 to 4 days over a 2 to 4 week period.

MONOAMINE-OXIDASE INHIBITOR

- The substrate for MAO-A enzyme is serotonin, melatonin, epinephrine and norepinephrine
- **MECHANISM OF ACTION:**
- MAOIs, form stable complexes with the enzyme, causing irreversible inactivation. This results in increased stores of nor epinephrine, serotonin, and dopamine within the neuron and subsequent diffusion of excess neurotransmitter into the synaptic space.

- **Dosing and Administration:**

- The starting dose of phenelzine is 15 mg/day after the evening meal, increasing by 15 mg/day every 3 to 4 days until a maximum dose of 45 mg/day (in two or three divided doses) is reached.
- If a patient was on an antidepressant previously, it should be discontinued 2 weeks before phenelzine is started to prevent a potential drug interaction.

ADVERSE EFFECTS:

- orthostatic hypotension
- insomnia
- weight gain,
- peripheral edema



BENZODIAZEPINE THERAPY

- Benzodiazepines are effective medications due to their anxiolytic properties and may provide rapid symptom relief.
- Benzodiazepines may be most useful when used early in treatment in combination with an antidepressant.

- **Adverse effects**

- Drowsiness, Sedation, Ataxia,
Disorientation, Depression,
Confusion, Irritability, Excitement



DRUG	APPROVED DOSAGE RANGE (mg/day)	APPROXIMATE EQUIVALENT DOSE
Alprazolam(Xanax)	0.74-4	0.5
Chlordiazepoxide(Li brium)	25-100	25
Clonazepam (Klonopin)	1-4	0.25

BUSPIRONE (buspirex) THERAPY:

- Buspirone is a non benzodiazepine anxiolytic therapy

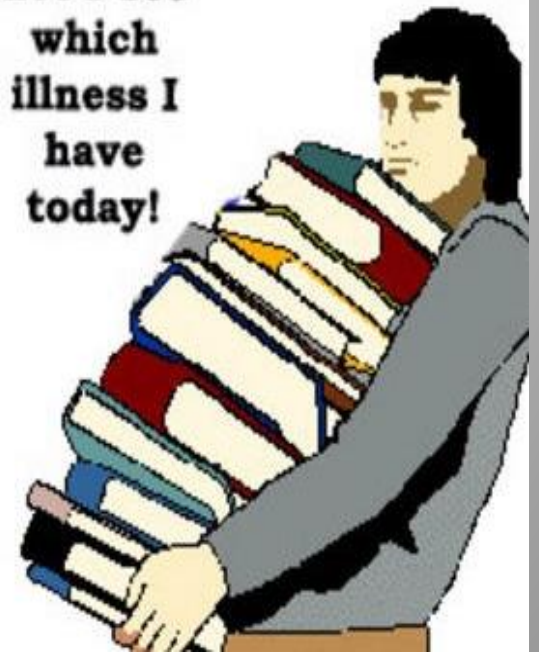
Mechanism of action:

- The anxiolytic properties of buspirone may be due to partial agonism of 5-HT 1A-receptors by reducing the firing of serotonin neurons.
- The effectiveness of buspirone may take up to 4 weeks.
- Side effects are mild and include dizziness, nausea, and headaches, stomach upset
- **Dose :**
- Initial dose -7.5mg twice daily
- With dosage increments of 5 mg/every 2-3 days as needed.
- The usual therapeutic dose of buspirone is 30-60 mg/day.

Selective serotonin reuptake inhibitors	DAILY DOSE	MAX DOSE
Citalopram (Celexa)	20mg/day	20-40
Escitalopram (Lexapro)	10mg/day	10-20
Fluvoxamine (Prozac)	50mg/day	150-300
Paroxetine (Paxil)	10-20mg/day	20-60
Sertraline (Zoloft)	25-50mg/day	50-200
Serotonin-norepinephrine reuptake inhibitor		
Venlafaxine (Effexor)	75mg/day	75-225
Benzodiazepine		
Clonazepam (Klonopin)	0.25mg/day	1-3
Monoamine oxidase inhibitor		
Phenelzine(Nardil)	15mg q pm	60-70
Alternate agents	10mg twice per day	45-60
Buspirone (buspirex)		

SOMATOFORM DISORDERS

**Let's see
which
illness I
have
today!**



Somatoform disorders are grouped together by the presence of physical symptoms suggesting a general medical condition. These symptoms are not explained fully by a general medical condition, or by the effects of substances or other mental disorders. There is no diagnosable medical condition to fully account for the physical symptoms, and there must be a significant functional impairment.

These disorders are divided into the following categories :

- Somatization disorders
- Hypochondriasis
- Persistent somatoform pain disorder
- Undifferentiated somatoform disorders
- Body dysmorphic disorder

ICD- 10 CLASSIFICATION

F45 Somatoform disorders

- F45.0 Somatization disorder
- F45.1 Undifferentiated somatoform disorder
- F45.2 Hypochondriacal disorders
- F45.3 Somatoform autonomic dysfunction
 - .30 Heart and cardiovascular system
 - .31 Upper gastrointestinal tract
 - .32 Lower gastrointestinal tract
 - .33 Respiratory system
 - .34 Genitourinary system
 - .38 Other organ or system
- F45.4 Persistent somatoform pain disorder
- F45.8 Other somatoform disorders
- F45.9 Somatoform disorder, unspecified

ETIOLOGY

Psychodynamics:

- As an ego defense mechanism
- Physical complaints are the expression of low self esteem and worthlessness.
- Easier to feel something is wrong with body than to feel something is wrong with self.

Learning theory:

- Somatic complaints are reinforced when the sick role relieves the individual from the need to deal with a stressful situation
- They learn to avoid stressful obligations and excused from troublesome duties
- Become the prominent focus of attention

Family dynamic theory:

- Some families have difficulty in expressing emotions openly and resolving conflicts verbally.
- When this occurs the child may become ill, a shift in focus from open conflict to child's illness.
- Somatization of child may bring some stability to the family.

Genetics

More in first degree relatives

Biochemical

decreased level of serotonin

SOMATIZATION DISORDER

Somatization disorders are characterized by chronic multiple somatic symptoms in the absence of physical disorders. The symptoms are vague, presented in a dramatic manner and involve multiple organ system.

EPIDEMIOLOGY

- Symptoms usually begin in the teen years
- affect about 0.2- 2% of females and rarely in males.

Somatic Symptom Disorder

Diagnostic Criteria

300.82 (F45.1)

- A. One or more somatic symptoms that are distressing or result in significant disruption of daily life.
- B. Excessive thoughts, feelings, or behaviors related to the somatic symptoms or associated health concerns as manifested by at least one of the following:
 1. Disproportionate and persistent thoughts about the seriousness of one's symptoms.
 2. Persistently high level of anxiety about health or symptoms.
 3. Excessive time and energy devoted to these symptoms or health concerns.
- C. Although any one somatic symptom may not be continuously present, the state of being symptomatic is persistent (typically more than 6 months).

Specify if:

With predominant pain (previously pain disorder): This specifier is for individuals whose somatic symptoms predominantly involve pain.

Specify if:

Persistent: A persistent course is characterized by severe symptoms, marked impairment, and long duration (more than 6 months).

SIGNS AND SYMPTOMS

Multiple somatic complaints, unexplained by medical findings.

Complaints of pain in at least four different location.

Two gastrointestinal, one sexual or reproductive , one neurologic symptom and four pain .

Moderate to severe anxiety.

Inability to voluntarily control the symptoms.

Dependency with demanding, attention getting behaviors.

Significant distress or impairment in social or occupational areas.

In gastro intestinal system: Vomiting other than in pregnancy, nausea, diarrhea, abdominal pain other than when menstruating, intolerance of several different foods.

Pain symptoms: pain in extremities and joints, pain during urination, back pain headache etc.

Sexual symptoms: burning sensation in sexual organs or rectum other than during intercourse, pain during intercourse, impotence.

Female reproductive symptoms: painful menstruation, excessive menstrual bleeding, irregular menstrual periods, vomiting throughout pregnancy.

Other symptoms: Amnesia, loss of voice, double vision, seizure or convulsion, paralysis or muscle weakness, difficulty in swallowing, deafness, blurred vision, fainting or loss of consciousness, trouble walking, urinary retention or difficulty in urination.

DIFFERENTIAL DIAGNOSIS:

nonpsychiatric medical conditions

-multiple sclerosis, myasthenia gravis, systemic lupus erythematosus, AIDS, hyperparathyroidism, hyperthyroidism, and chronic systemic infections.

Many mental disorders

-major depressive disorder, generalized anxiety disorder, and schizophrenia

- panic disorder

other somatoform disorders

-hypochondriasis, conversion disorder, etc.

TREATMENT

Regularly scheduled visits

Additional laboratory and diagnostic procedures be avoided.

Emotional expressions

Psychotherapy, both individual and group

- decreases personal health care expenditures (50%)

- decreasing their rates of hospitalization.

- helped to cope with their symptoms

- to express underlying emotions

- to develop alternative strategies for expressing their feelings

Giving psychotropic medications

- with coexisting mental disorders

- Medication must be monitored

HYPOCHONDRIASIS

Is a condition where the patient misinterprets trivial symptoms as having a serious disease and the idea is non-delusional and usually lasts for at least 6 months

The belief is not fixed and could be removed transiently by explanation and reasoning to have another belief about another organ of the body.

The condition interferes with the patient's daily life and causes him distress, It causes disability and physical dysfunction.

Hypochondriacal symptoms could occur in most of the psychiatric disorders.

EPIDEMIOLOGY

-The disorder affects 2-7% of patients attending general medical clinics.

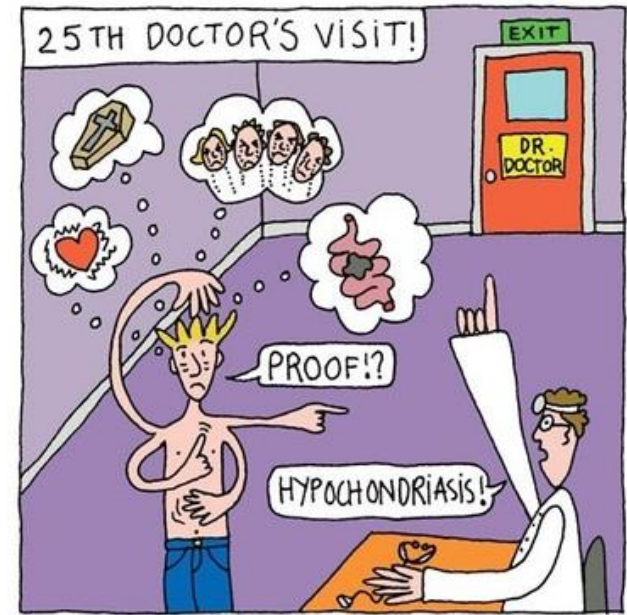
-The disorder most commonly appears in persons 20 to 30 years of age.

-social position, education level, and marital status do not appear to affect the diagnosis.

-There may be co morbid depression or other anxiety disorder

SIGNS AND SYMPTOMS

- ✓ Fear or preoccupation with bodily functioning misperceived as a major illness.
- ✓ Repeated health care visits seeking verification of fear.
- ✓ Symptoms reported in specific detail.
- ✓ Involvement of one or more body system.
- ✓ Unconvinced by repeated examinations, investigations and reassurance that disease does not exist.
- ✓ Impaired social and family relationship



DIFFERENTIAL DIAGNOSIS:

Other psychiatric disorders

Delusional disorders

Physical disorders such as multiple sclerosis, Myasthenia Gravis, thyroid and parathyroid disorders.

TREATMENT

Patients with hypochondriasis usually resist psychiatric treatment, although some accept this treatment if it takes place in a medical setting and focuses on stress reduction and education in coping with chronic illness.

You might not be able to treat the symptoms but you can teach the patients to cope with the symptoms.

psychotherapy, such as individual insight-oriented psychotherapy, behavior therapy, cognitive therapy, and hypnosis may be useful.

Pharmacological treatment with antidepressants might be useful.

When hypochondriasis is secondary to another primary mental disorder, that disorder must be treated in its own right

PAIN DISORDER

Pain has been defined by the International Association for the Study of Pain (IASP) as “an unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage”

Psychological factors play an important role in the disorder.

The primary symptom is pain, in one or more sites, which is not fully accounted for by a nonpsychiatric medical or neurological condition.

The symptoms of pain are associated with emotional distress and functional impairment.

The disorder has been called somatoform pain disorder, psychogenic pain disorder, idiopathic pain disorder, and atypical pain disorder.

EPIDEMIOLOGY

Low back pain has disabled an estimated 7 million people;
more than 8 million physician office visits annually;

Female : male=2:1;

The peak ages of onset are in the fourth and fifth decades;
genetic inheritance or behavioral mechanisms are possibly involved;

DSM criteria

- A. Pain in one or more anatomical sites is the predominant focus of the clinical presentation and is of sufficient severity to warrant clinical attention.
- B. The pain causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- C. Psychological factors are judged to have an important role in the onset, severity, exacerbation, or maintenance of the pain.
- D. The symptom or deficit is not intentionally produced or feigned (as in Factitious Disorder or malingering).
- E. The pain is not better accounted for by a Mood, Anxiety, or Psychotic Disorder and does not meet criteria for Dyspareunia.

Code as follows:

307.80 Pain Disorder Associated with Psychological Factors

307.89 Pain Disorder Associated with Both Psychological Factors and a General Medical Condition

Note: The following is not considered to be a mental disorder and is included here to facilitate differential diagnosis: Pain Disorder Associated with a General Medical Condition

Specify if:

Acute: duration of less than 6 months

Chronic: duration of 6 months or longer

SIGNS AND SYMPTOMS

Patients with pain disorder do not constitute a uniform group but, instead, are a heterogeneous collection of people with low back pain, headache, atypical facial pain, chronic pelvic pain, and other kinds of pain.

A patient's pain may be posttraumatic, neuropathic, neurological, iatrogenic, or musculoskeletal; to meet a diagnosis of pain disorder, however, the disorder must have a psychological factor that is judged to be significantly involved in the pain symptoms.

Patients with pain disorder often have long histories of medical and surgical care .

- They visit many physicians, request many medications, and may be especially
- insistent in their desire for surgery.

Indeed, they can be completely preoccupied with their pain and cite it as the source of all their misery.

Such patients often deny any other sources of emotional dysphoria and insist that their lives are blissful except for their pain.

Their clinical picture can be complicated by substance-related disorders, because these patients attempt to reduce the pain through the use of alcohol and other substances.

DIFFERENTIAL DIAGNOSIS:

Purely physical pain can be difficult to distinguish from purely psychogenic pain, especially because the two are not mutually exclusive.

-Physical pain fluctuates in intensity and is highly sensitive to emotional, cognitive, attention, and situational influences.

- Pain that does not vary and is insensitive to any of these factors is likely to be psychogenic.

- When pain does not even temporarily relieved by distraction or analgesics, clinicians can suspect an important psychogenic component.

Pain disorder must be distinguished from other somatoform disorders, although some somatoform disorders can coexist.

TREATMENT

General consideration

- discuss the issue of psychological factors early in treatment;
- fully understand that the patient's experiences of pain are real.

Pharmacotherapy

- Analgesic medications are not generally helpful;
- Sedatives and antianxiety agents are not especially beneficial;
- Antidepressants (TCA, SSRIs) are useful;
- Amphetamine used as an adjunct to SSRIs.

Behavioral therapy

- Biofeedback can be helpful;
- Hypnosis, transcutaneous nerve stimulation, and dorsal column stimulation have been used;
- Nerve blocks and surgical ablative procedures are ineffective

Psychotherapy

BODY DYSMORPHIC DISORDER

Body Dysmorphic disorder (BDD), also known as body dysmorphia or dysmorphic syndrome, is a mental illness that involves belief that one's own appearance is unusually defective when in reality, the perceived flaw might be nonexistent, or, if it does exist, it is negligible, unnoticeable, or its significance is highly over exaggerated.

Sufferers of this disorder believe that the 'flaw' should be hidden from others and their thoughts often lie parallel to how their body is being perceived either by themselves or others.

One interesting aspect of BDD is sometimes people either become fixated on mirrors or avoid mirrors to an almost phobic extent.

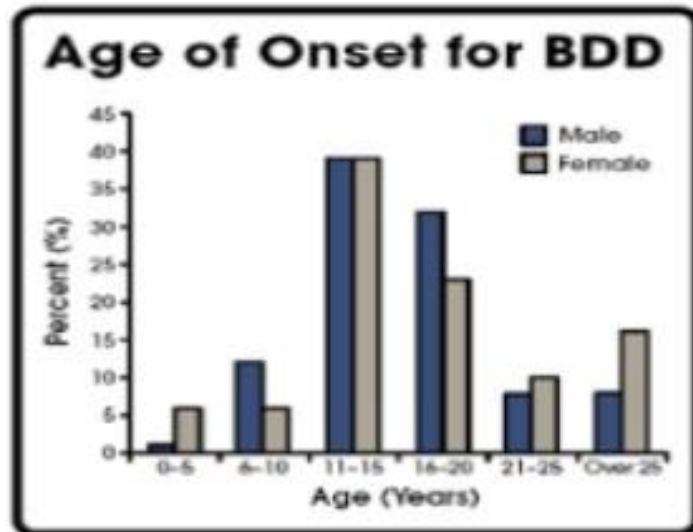


TABLE 7.4 • DSM-5 Diagnostic Criteria for Body Dysmorphic Disorder

- A.** Preoccupation with one or more perceived defects or flaws in physical appearance that are not observable or appear slight to others.
- B.** At some point during the course of the disorder, the individual has performed repetitive behaviors (e.g., mirror checking, excessive grooming, skin picking, reassurance seeking) or mental acts (e.g., comparing his or her appearance with that of others) in response to the appearance concerns.
- C.** The preoccupation causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- D.** The appearance preoccupation is not better explained by concerns with body fat or weight in an individual whose symptoms meet diagnostic criteria for an eating disorder.

EPIDEMIOLOGY

- Worldwide, it affects 8% of the total population
- Men and women are both affected, with a slightly higher chance in females
- It is noticed that BDD occurs more frequently in families where parents expect 'perfection' from their children
- Age onset usually begins at the pre-pubertal or teenager stage and can also be seen in young adults.



SIGNS AND SYMPTOMS

Obsession occurs usually with one part of the body such as facial features, hips, thighs, feet, etc. but in some cases patients have multiple issues with various body parts.

A constant need to 'fix' the flaw(s) by adopting certain behaviors such as wearing only certain kinds of clothing, modifying eating habits, constantly re-applying makeup, or in extreme cases, cosmetic surgery. Due to this, BDD is often classified as a variation of OCD.

Depressive behaviors such as lack of interest in getting ready for parties, formal occasions, etc.

Constant comparison of their own bodies with other people, either friends, random strangers, or celebrities.

Catching sight of one's appearance in mirrors or other reflective surfaces, thus earning the name 'mirror syndrome'.

Self-injury

Attribution of one's 'flaws' to other problems in daily life

Overachieving nature

Self-esteem issues

TREATMENT

Treatment usually includes psychotherapy and positive body image reinforcement.

Psychotherapy involves reminding the patient that day to day happenings are not dependent on how they look and that external appearances are not the key for achieving one's personal goals and other successes.

The family environment should be modified such as parents refraining from complimenting other siblings excessively, and telling the patient some of their personal qualities which are unique to them.

It has been observed that symptoms of BDD usually lessen if the patient develops a close bond with a non-related member of the opposite sex in the form of a best friend, future spouse, etc.

In some cases, anti-depressant medications are used to treat negative or suicidal thoughts.



Thank
You





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din REPUBLICA MOLDOVA

Neurocognitive disorders.

Dementia.

Delirium.

**Mental disorders due to a general
medical condition.**

Postpartum mental disorders.



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The neurocognitive disorders (NCDs) (I)

The neurocognitive disorders (NCDs) include the syndromes of major NCD, mild NCD, and their etiological subtypes.

The major or mild NCD **subtypes** are:

- **NCD due to Alzheimer's disease;**
- **vascular NCD;**
- **NCD with Lewy bodies;**
- **NCD due to Parkinson's disease;**
- **frontotemporal NCD;**
- **NCD due to traumatic brain injury;**
- **NCD due to HIV infection;**
- **NCD due to Huntington's disease;**
- **NCD due to prion disease;**
- **substance/medication-induced NCD;**
- **NCD due to another medical condition;**
- **NCD due to multiple etiologies and delirium.**

The neurocognitive disorders (NCDs) (II)

The NCD category encompasses the group of disorders in which the **primary clinical deficit** is in **cognitive function**, and that are acquired rather than developmental.

Although cognitive deficits are present in many if not all mental disorders (e.g., schizophrenia, bipolar disorders), **only disorders whose core features are cognitive are included in the NCD category.**

The NCDs are those in which impaired cognition has not been present since birth or very early life, and thus represents a decline from a previously attained level of functioning.

Several of the NCDs frequently coexist with one another.

The neurocognitive disorders (NCDs) (III)

The term neurocognitive disorder is widely used and often preferred for conditions affecting **younger individuals**, such as impairment secondary to traumatic brain injury or HIV infection.

Dementia is the customary term for disorders like the degenerative dementias that usually affect **older adults**.

Dementia is subsumed under the newly named entity **major neurocognitive disorder**.

The term dementia is retained in **DSM-5** for continuity and may be used in settings where physicians and patients are accustomed to this term.

The neurocognitive disorders (NCDs) (IV)

Major and mild neurocognitive disorders (NCDs) are primarily subtyped according to the known or presumed etiological/pathological entity or entities underlying the cognitive decline.

These subtypes are distinguished on the basis of a combination of time course, characteristic domains affected, and associated symptoms.

For certain etiological subtypes, the diagnosis depends substantially on the presence of a potentially causative entity, such as Parkinson's or Huntington's disease, or a traumatic brain injury or stroke in the appropriate time period.

For other etiological subtypes (generally the neurodegenerative diseases like Alzheimer's disease, frontotemporal lobar degeneration, and Lewy body disease), the diagnosis is based primarily on the cognitive, behavioral, and functional symptoms.

The neurocognitive disorders (NCDs) (V)

A cognitive concern differs from a complaint in that it may or may not be voiced spontaneously.

Rather, it may need to be elicited by careful questioning about specific symptoms that commonly occur in individuals with cognitive deficits.

For example, memory concerns include difficulty remembering a short grocery list or keeping track of the plot of a television program; executive concerns include difficulty resuming a task when interrupted, organizing tax records, or planning a holiday meal.

At the **mild NCD level**, the individual is likely to describe these tasks as being more difficult or as requiring extra time or effort or compensatory strategies.

At the **major NCD level**, such tasks may only be completed with assistance or may be abandoned altogether.

Major Neurocognitive Disorder (I)

Diagnostic Criteria.

A. Evidence of **significant cognitive decline** from a previous level of performance in one or more cognitive domains (complex attention, executive function, learning and memory, language, perceptual-motor, or social cognition) based on:

1. Concern of the individual, a knowledgeable informant, or the clinician that there has been a **significant decline in cognitive function**; and
2. A **substantial impairment in cognitive performance**, preferably documented by standardized neuropsychological testing or, in its absence, another quantified clinical assessment.

Major Neurocognitive Disorder (II)

Diagnostic Criteria.

- B. The cognitive deficits interfere with independence in everyday activities (i.e., at a minimum, requiring assistance with complex instrumental activities of daily living such as paying bills or managing medications).
- C. The cognitive deficits do not occur exclusively in the context of a delirium.
- D. The cognitive deficits are not better explained by another mental disorder (e.g., major depressive disorder, schizophrenia).

Mild Neurocognitive Disorder (I)

Diagnostic Criteria.

A. Evidence of **modest cognitive decline** from a previous level of performance in one or more cognitive domains (complex attention, executive function, learning and memory, language, perceptual motor, or social cognition) based on:

1. Concern of the individual, a knowledgeable informant, or the clinician that there has been a **mild decline in cognitive function**; and
2. A **modest impairment in cognitive performance**, preferably documented by standardized neuropsychological testing or, in its absence, another quantified clinical assessment.

Mild Neurocognitive Disorder (II)

Diagnostic Criteria.

- B. The cognitive deficits do not interfere with capacity for independence in everyday activities (i.e., complex instrumental activities of daily living such as paying bills or managing medications are preserved, but greater effort, compensatory strategies, or accommodation may be required).
- C. The cognitive deficits do not occur exclusively in the context of a delirium.
- D. The cognitive deficits are not better explained by another mental disorder (e.g., major depressive disorder, schizophrenia).

Definition.

Dementia (ICD-10; DSM-IV)(**Major Neurocognitive Disorder** DSM-5) is defined as a **progressive impairment of cognitive functions** occurring in **clear consciousness** (e.g., in the absence of delirium).

Global impairment of intellect is the essential feature, manifested as difficulty with:

- memory,
- attention,
- thinking and
- comprehension.

Other mental functions can often be affected, including:

- mood,
- personality,
- judgment and
- social behavior.

Dementing disorders (I).

Characteristic changes of dementia involve:

- cognition,
- language and
- visuospatial functions, but

behavioral disturbances are common as well and include:

- agitation, restlessness, wandering,
- rage, violence, shouting,
- social and sexual disinhibition,
- impulsiveness, sleep disturbances, and delusions.

Dementing disorders (II).

Dementias are commonly accompanied by **hallucinations** (20% to 30% of patients) and **delusions** (30% to 40%).

Symptoms of **depression** and **anxiety** are present in 40% to 50% of patients with dementia.

About 10% to 15% of all patients who exhibit symptoms of dementia have potentially **treatable conditions**.

Dementing disorders (III).

Known **risk factors** for dementia are:

- age,
- family history, and
- female sex.

Epidemiology (I)

The prevalence of dementia is rising.

The **prevalence of moderate to severe dementia** in different population groups is approximately:

- ❖ 5% in the general population older than 65 years of age,
- ❖ 20% to 40% in the general population older than 85 years of age,
- ❖ 15% to 20% in outpatient general medical practices, and
- ❖ 50% in chronic care facilities.

Epidemiology (II)

Of all patients with dementia, 50% to 60% have **the most common type of dementia, dementia of the Alzheimer's type** (Alzheimer's disease).

The second most common type of dementia is vascular dementia, which is causally related to cerebrovascular diseases.

Other common causes of dementia, each representing 1% to 5% of all cases, include:

- **head trauma,**
- **alcohol-related dementias,** and
- **various movement disorder-related dementias,** such as:
 - ☐ **Huntington's disease** and
 - ☐ **Parkinson's disease.**

Aetiology.

The most common causes of dementia in individuals older than 65 years of age are:

- (1) *Alzheimer's disease,*
- (2) *vascular dementia, and*
- (3) *mixed vascular and Alzheimer's dementia.*

Other illnesses that account for approximately 10% include:

- *Lewy body dementia,*
- *Pick's disease,*
- *Fronto-temporal dementias,*
- *Normal pressure hydrocephalus (NPH),*
- *Alcoholic dementia,*
- *Infectious dementia,* such as that due to infection with *human immunodeficiency virus* (HIV) or *syphilis,* and
- *Parkinson's disease.*

Dementia of the Alzheimer's type (I)

Most common type of dementia.

It is higher in women than in men.

Characterized by the gradual onset and progressive **decline of cognitive functions.**

Memory is impaired and at least one of the following is seen:

- **apraxia,**
- **agnosia,** and
- **disturbances in executive functioning.**

Neurological defects (e.g., gait disturbances, aphasia, apraxia, and agnosia) eventually appear.

About 50% of patients with Alzheimer's disease experience **psychotic states.**

Dementia of the Alzheimer's type (II)

Etiology.

Genetic factors play a role; up to 40% of patients have a family history of DAT.

Concordance rate for monozygotic twins is 43%, versus 8% for dizygotic twins.

Several cases have documented **autosomal dominant transmission**.

Down syndrome is associated with DAT.

The gene for **amyloid** precursor protein on chromosome 21 may be involved.

The neurotransmitters most often implicated are **acetylcholine** and **norepinephrine**.

Dementia of the Alzheimer's type (III)

Neuropathology.

The **characteristic neuropathological changes**, first described by Alois Alzheimer, are:

- neurofibrillary tangles,
- senile plaques, and
- granulovacuolar degenerations.

These changes can also appear with normal aging, but they are always present in the brains of DAT patients.

Dementia of the Alzheimer's type (IV)

Epidemiology.

May affect as many as 5% of persons over age 65 and 15% to 20% of persons age 85 or older.

Risk factors include:

- female sex,
- history of head injury, and
- having a first-degree relative with the disorder.

Incidence increases with age.

Patients with DAT occupy more than 50% of nursing home beds.

Dementia of the Alzheimer's type (V)

Subtypes:

- I. DAT with **Early Onset** - before the age of 65
- II. DAT with **Late Onset** - after the age 65.

Course and prognosis.

1. Onset usually insidious in person in their 50s or 60s: slowly progressive.
2. Aphasia, apraxia and agnosia often present after several years.
3. Motor and gait disturbances may develop later; patient may become bedridden.
4. Mean survival is 8 years; ranges from 1 to 20 years.
DAT patients can be impulsively violent.
If agitation is present, be prepared for such events.

Vascular (Multi-infarct) Dementia (I)

The second most common type of dementia is dementia resulting from cerebrovascular disease.

Vascular dementia usually progresses in a stepwise fashion with each recurrent infarct.

Some patients notice one specific moment when their functioning became worse and improved slightly over subsequent days until their next infarct.

Other patients have a progressively downhill course.

Vascular (Multi-infarct) Dementia (II)

Epidemiology.

Accounts for 15% to 30% of all dementia; most common in persons 60 to 70 years of age.

Less common than DAT.

More common in men than in women.

Onset is at an earlier age than onset of DAT.

Risk factors include hypertension, heart disease, and other risk factors for stroke.

Vascular (Multi-infarct) Dementia (III)

Diagnosis, signs, and symptoms.

Multiple cognitive impairments and behavioral changes.

Neurological signs are common; small and medium-sized cerebral vessels are usually affected.

Infarcts may be caused by occlusive plaque or thromboembolism.

Physical findings may include carotid bruit, funduscopic abnormalities, and enlarged cerebral chambers.

Cognitive impairment may be patchy, with some areas intact.

Pick's disease.

This relatively rare primary degenerative dementia is clinically similar to DAT.

Pick's disease accounts for approximately 5% of all irreversible dementias.

The frontal lobe is prominently involved, and frontal signs of disinhibited behavior may present early.

With a relative preservation of cognitive functions, Klüver-Bucy syndrome (hypersexuality, hyperorality and placidity) is more common in Pick's disease than in DAT.

The frontal and temporal lobes show atrophy, neuronal loss, gliosis, and intraneural deposits called ***Pick's bodies***.

The diagnosis often is made at autopsy, although CT or MRI can reveal prominent frontal lobe involvement.

Dementia Caused by Creutzfeldt-Jakob Disease or Prion Disease.

Prion diseases are rapidly progressive degenerative dementing diseases caused by a **prion infection**.

A prion is a replicative protein that, when it mutates, causes a variety of spongiform diseases.

Prions can mutate spontaneously, and abnormal prions can be transmitted by the use of contaminated dura mater or corneal grafts, or by ingesting meat from cattle infected with bovine spongiform encephalopathy.

Huntington's Disease (I)

Definition.

A genetic autosomal dominant disease with complete penetrance (chromosome 4) characterized by choreoathetoid movement and dementia.

The chance for the development of the disease in a person who has one parent with Huntington's disease is 50%.

Diagnosis.

Onset usually is in a patient's 30s to 40s (the patient frequently already has children).

Choreiform movements usually present first and become progressively more severe.

Dementia presents later, often with psychotic features.

Dementia may first be described by the patients family as a personality change.

Look for a family history.

Huntington's Disease (II)

Associated psychiatric symptoms and complications:

1. Personality changes (25%).
2. Schizophreniform (25%).
3. Mood disorder (50%).
4. Presentation with sudden-onset dementia (25%).
5. Development of dementia in patients (90%).

Parkinson's Disease

Definition.

An idiopathic movement disorder with onset usually late in life, characterized by bradykinesia, resting tremor, pill-rolling tremor, masklike face, cogwheel rigidity, and shuffling gait.

Intellectual impairment is common, and 40% to 80% of patients become **demented**.

Depression is extremely common.

Epidemiology.

Annual prevalence in the Western Hemisphere is 200 cases per 100,000 persons.

Etiology.

Unknown for most patients.

Characteristic findings are decreased cells in the substantia nigra, decreased dopamine, and degeneration of dopaminergic tracts.

Parkinsonism can be caused by repeated head trauma and a contaminant of an illicitly made synthetic heroin, *N*-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP).

Dementia Caused by Head Trauma (I)

Dementia caused by head trauma usually does not progress.

The one notable exception is **dementia pugilistica**, which is caused by repeated trauma (e.g., boxing).

Dementia due to traumatic brain injury (TBI) is caused by an impact to the head, or other mechanisms of rapid movement or displacement of the brain within the skull, as can happen with blast injuries.

Dementia Caused by Head Trauma (II)

Traumatic brain injury is defined as brain trauma with **specific characteristics** that include at least one of the following:

- loss of consciousness,
- posttraumatic amnesia,
- disorientation and confusion, or, in more severe cases, **neurological signs** (e.g., positive neuroimaging, a new onset of seizures or a marked worsening of a preexisting seizure disorder, visual field cuts, anosmia, hemiparesis).

The cognitive presentation is variable.

Difficulties in the domains of complex attention, executive ability, learning, and memory are common as well as slowing in speed of information processing and disturbances in social cognition.

In more severe TBI in which there is brain contusion, intracranial hemorrhage, or penetrating injury, there may be additional neurocognitive deficits, such as aphasia, neglect, and constructional dyspraxia.

Dementia in human immunodeficiency virus (HIV) disease

Dementia caused by the effect of the HIV virus on the brain.

Clinical presentation includes:

- psychomotor retardation,
- forgetfulness,
- poor concentration,
- apathy,
- difficulties with problem-solving and reading,
- flat affect,
- social withdrawal.

Neurological symptoms are frequently present (tremor, ataxia, hyperreflexia).

Clinical Evaluation of Dementia

All patients presenting with cognitive deficits should be evaluated to determine the etiology of the dementia.

Some causes of dementia are treatable and reversible.

A medical and psychiatric history and a physical examination and psychiatric assessment, with special attention to the neurological exam, should be completed.

Laboratory Evaluation of Dementia

- A.** Complete blood chemistry.
- B.** CBC (Complete Blood Count) with differential.
- C.** Thyroid function tests.
- D.** Urinalysis.
- E.** Drug screen.
- F.** Serum levels of all measurable medications.
- G.** Vitamin B12 level.
- H.** Heavy metal screen.
- I.** Serological studies (VDRL (Venereal Disease Research Laboratory) or MHA-TP (Microhemagglutination Assay for *Treponema pallidum*)).
- J.** EKG (electrocardiogram).
- K.** Chest X-ray.
- L.** EEG (electroencephalogram).
- M.** Brain Imaging (CT, MRI) is indicated if there is a suspicion of CNS pathology, such as a mass lesion or vascular event.

Course and prognosis.

Dementia may be progressive, remitting, or stable.

Because about **15% of dementias are reversible** (e.g., hypothyroidism, central nervous system (CNS) syphilis, subdural hematoma, vitamin B12 deficiency, uremia, hypoxia), the course in these cases depends on how quickly the cause is reversed.

If the cause is reversed too late, the patient may have residual deficits with a subsequently stable course if extensive brain damage has not occurred.

For dementia with no identifiable cause (e.g., dementia of the Alzheimer's type), the course is likely to be one of slow deterioration.

The patient may become lost in familiar places, lose the ability to handle money, later fail to recognize family members, and eventually become incontinent of stool and urine.

Treatment of Dementia

Psychological.

Supportive therapy, group therapy, and referral to organizations for families of demented patients can help them to cope and feel less frustrated and helpless.

Pharmacologic.

In general, barbiturates and benzodiazepines should be avoided because they can worsen cognition.

For agitation, low doses of an antipsychotic may be effective (e.g., 2 mg of **haloperidol** orally or intramuscularly or 0.25 to 1.0 mg of **risperidone** per day orally).

When using antipsychotics, use the lowest effective dose and review progress frequently.

Some clinicians suggest a short-acting benzodiazepine for sleep (e.g., 0.25 mg of **triazolam** orally), but this may cause further memory deficits the next day.

Pharmacotherapy of cognitive symptoms (acetylcholinesterase inhibitors):

- **rivastigmine**
- **donepezil**
- **galantamine.**

Delirium (I)

Diagnostic Features (I).

The essential feature of delirium is a disturbance of attention or awareness that is accompanied by a change in baseline cognition that cannot be better explained by a preexisting or evolving neurocognitive disorder (NCD).

The disturbance in attention is manifested by reduced ability to direct, focus, sustain, and shift attention.

The individual is easily distracted by irrelevant stimuli.

The disturbance in awareness is manifested by a reduced orientation to the environment or at times even to oneself.

Delirium (II)

Diagnostic Features (II).

The disturbance develops over a short period of time, usually ***hours to a few days***, and tends ***to fluctuate*** during the course of the day, often with worsening in the evening and night when external orienting stimuli decrease.

The disturbance is a physiological consequence of an underlying medical condition, substance intoxication or withdrawal, use of a medication, or a toxin exposure, or a combination of these factors.

Delirium often occurs in the context of an underlying NCD.

The impaired brain function of individuals with mild and major NCD renders them more vulnerable to delirium.

Delirium (III)

Diagnostic Features (III).

The perceptual disturbances accompanying delirium include ***misinterpretations, illusions, or hallucinations***; these disturbances are typically visual, but may occur in other modalities as well, and range from simple and uniform to highly complex.

Delirium should not be diagnosed in the context of coma.

Delirium (IV)

Associated Features Supporting Diagnosis.

Delirium is often associated with a disturbance in the *sleep-wake cycle*.

This disturbance can include daytime sleepiness, nighttime agitation, difficulty falling asleep, excessive sleepiness throughout the day, or wakefulness throughout the night.

In some cases, complete reversal of the night-day sleep-wake cycle can occur.

Sleep-wake cycle disturbances are very common in delirium and have been proposed as a core criterion for the diagnosis.

Delirium (V)

Associated Features Supporting Diagnosis.

The individual with delirium may exhibit ***emotional disturbances***, such as anxiety, fear, depression, irritability, anger, euphoria, and apathy.

There may be rapid and unpredictable shifts from one emotional state to another.

The disturbed emotional state may also be evident in calling out, screaming, cursing, muttering, moaning, or making other sounds.

These behaviors are especially prevalent at night and under conditions in which stimulation and environmental cues are lacking.

Mental Disorders Due to a General Medical Condition

General medical conditions may cause and be associated with a variety of mental disorders.

Mood Disorder Due to a General Medical Condition (I)

Epidemiology

1. Appears to affect men and women equally.
2. As much as 50% of all poststroke patients experience depressive

illness.

A similar prevalence pertains to individuals with pancreatic cancer.

3. Forty percent of patients with Parkinson's disease are depressed.

4. Major and minor depressive episodes are common after certain illnesses such as Huntington's disease, human immunodeficiency virus (HIV) infection, and multiple sclerosis (MS).

5. Depressive disorders associated with terminal or painful conditions carry the greatest risk of suicide.

Diagnosis and clinical features (II)

1. Patients with depression may experience psychological symptoms (e.g., sad mood, lack of pleasure or interest in usual activities, tearfulness, concentration disturbance, and suicidal ideation) or somatic symptoms (e.g., fatigue, sleep disturbance, and appetite disturbance), or both psychological and somatic symptoms.

2. Diagnosis in the medically ill can be confounded by the presence of somatic symptoms related purely to medical illness, not to depression.

In an effort to overcome the underdiagnosis of depression in the medically ill, most practitioners favor including somatic symptoms in identifying mood syndromes.

Course and prognosis (III)

Prognosis for mood symptoms is best when etiologic medical illnesses or medications are most susceptible to correction (e.g., treatment of hypothyroidism and cessation of alcohol use).

Treatment (IV)

1. Pharmacotherapy.

The underlying medical cause should be treated as effectively as possible.

Standard treatment approaches for the corresponding primary mood disorder should be used, although the risk of toxic effects from psychotropic drugs may require more gradual dose increases.

Standard antidepressant medications, including tricyclic drugs, monoamine oxidase inhibitors (MAOIs), selective serotonin reuptake inhibitors (SSRIs), and psychostimulants, are effective in many patients.

Electroconvulsive therapy (ECT) may be useful in patients who do not respond to medication.

2. Psychotherapy.

At a minimum, psychotherapy should focus on psychoeducational issues.

The concept of a behavioral disturbance secondary to medical illness may be new or difficult for many patients and families to understand.

Specific intrapsychic, interpersonal, and family issues are addressed as indicated in psychotherapy.

Psychotic Disorder Due to a General Medical Condition (I).

To establish the diagnosis of psychotic disorder due to a general medical condition, the clinician first must exclude syndromes in which psychotic symptoms may be present in association with cognitive impairment (e.g., delirium and dementia of the Alzheimer's type).

Disorders in this category are not associated usually with changes in the sensorium.

Psychotic Disorder Due to a General Medical Condition (II).

Epidemiology.

1. The incidence and prevalence in the general population are unknown.
2. As much as 40% of individuals with temporal lobe epilepsy (TLE) experience psychosis.
3. The prevalence of psychotic symptoms is increased in selected clinical populations, such as nursing home residents, but it is unclear how to extrapolate these findings to other patient groups.

Psychotic Disorder Due to a General Medical Condition (III).

Etiology.

Virtually any cerebral or systemic disease that affects brain function can produce psychotic symptoms.

Degenerative disorders, such as Alzheimer's disease or Huntington's disease, can present initially with new-onset psychosis, with minimal evidence of cognitive impairment at the earliest stages.

Psychotic Disorder Due to a General Medical Condition (IV).

Diagnosis and clinical features.

Two subtypes exist for psychotic disorder due to a general medical condition:

with delusions, to be used if the predominant psychotic symptoms are delusional, and

with hallucinations, to be used if hallucinations of any form comprise the primary psychotic symptoms.

To establish the diagnosis of a secondary psychotic syndrome, determine that the patient is not delirious, as evidenced by a stable level of consciousness.

Conduct a careful mental status assessment to exclude significant cognitive impairments, such as those encountered in dementia or amnestic disorder.

Psychotic Disorder Due to a General Medical Condition (V).

Course and prognosis.

Psychosis caused by certain medications (e.g., immunosuppressants) may gradually subside even when use of those medications is continued.

Minimizing doses of such medications consistent with therapeutic efficacy often facilitates resolution of psychosis.

Certain degenerative brain disorders (e.g., Parkinson's disease) can be characterized by episodic lapses into psychosis, even as the underlying medical condition advances.

If abuse of substances persists over a lengthy period, psychosis (e.g., hallucinations from alcohol) may fail to remit even during extended intervals of abstinence.

Psychotic Disorder Due to a General Medical Condition (VI).

Treatment.

The principles of treatment for a secondary psychotic disorder are similar to those for any secondary neuropsychiatric disorder, namely, rapid identification of the etiologic agent and treatment of the underlying cause.

Antipsychotic medication may provide symptomatic relief.

Anxiety Disorder Due to a General Medical Condition (I).

The individual experiences anxiety that represents a direct physiologic, not emotional, consequence of a general medical condition.

In substance-induced anxiety disorder, the anxiety symptoms are the product of a prescribed medication or stem from intoxication or withdrawal from a nonprescribed substance, typically a drug of abuse.

Anxiety Disorder Due to a General Medical Condition (II).

Epidemiology.

1. Medically ill individuals in general have higher rates of anxiety disorder than do the general population.
 2. Rates of panic and generalized anxiety are especially high in neurologic, endocrine, and cardiology patients, although this finding does not necessarily prove a physiologic link.
 3. Approximately one-third of patients with hypothyroidism and two-thirds of patients with hyperthyroidism may experience anxiety symptoms.
 4. As much as 40% of patients with Parkinson's disease have anxiety disorders.
- Prevalence of most anxiety disorders is higher in women than in men.

Anxiety Disorder Due to a General Medical Condition (III).

Etiology.

Causes most commonly described in anxiety syndromes include:

- substance-related states (intoxication with caffeine, cocaine, amphetamines, and other sympathomimetic agents;
- withdrawal from nicotine, sedative–hypnotics, and alcohol),
- endocrinopathies (especially pheochromocytoma, hyperthyroidism, hypercortisolemic states, and hyperparathyroidism),
- metabolic derangements (e.g., hypoxemia, hypercalcemia, and hypoglycemia), and neurologic disorders (including vascular, trauma, and degenerative types).

Many of these conditions are either inherently transient or easily remediable.

Anxiety Disorder Due to a General Medical Condition (IV).

Diagnosis and clinical features.

Anxiety stemming from a general medical condition or substance may present with:

- physical complaints (e.g., chest pain, palpitation, abdominal distress, diaphoresis, dizziness, tremulousness, and urinary frequency),
- generalized symptoms of fear and excessive worry,
- outright panic attacks associated with fear of dying or losing control,
- recurrent obsessive thoughts or ritualistic compulsive behaviors, or phobia with associated avoidant behavior.

Anxiety Disorder Due to a General Medical Condition (V).

Course and prognosis.

1. Medical conditions responsive to treatment or cure (e.g., correction of hypothyroidism and reduction in caffeine consumption) often provide concomitant relief of anxiety symptoms, although such relief may lag the rate or extent of improvement in the underlying medical condition.

2. Chronic, incurable medical conditions associated with persistent physiologic insult (e.g., chronic obstructive pulmonary disease) or recurrent relapse to substance use can contribute to seeming refractoriness of associated anxiety symptoms.

3. In medication-induced anxiety, if complete cessation of the offending factor (e.g., immunosuppressant therapy) is not possible, dose reduction, when clinically feasible, often brings substantial relief.

Anxiety Disorder Due to a General Medical Condition (VI).

Treatment.

Aside from treating the underlying causes, clinicians have found benzodiazepines helpful in decreasing anxiety symptoms; supportive psychotherapy (including psychoeducational issues focusing on the diagnosis and prognosis) may also be useful.

The efficacy of other, more specific therapies in secondary syndromes (e.g., antidepressant medications for panic attacks, SSRIs for obsessive-compulsive symptoms, behavior therapy for simple phobias) is unknown, but they may be of use.

Sleep Disorder Due to a General Medical Condition (I).

Sleep disorders can manifest in four ways:

- by an excess of sleep (hypersomnia),
- by a deficiency of sleep (insomnia),
- by abnormal behavior or activity during sleep (parasomnia), and
- by a disturbance in the timing of sleep (circadian rhythm sleep disorders).

Primary sleep disorders occur unrelated to any other medical or psychiatric illness.

Sleep Disorder Due to a General Medical Condition (II).

Treatment.

The diagnosis of a secondary sleep disorder hinges on the identification of an active disease process known to exert the observed effect on sleep.

Treatment first addresses the underlying neurologic or medical disease.

Symptomatic treatments focus on behavior modification, such as improvement of sleep hygiene.

Pharmacologic options can also be used, such as benzodiazepines for restless legs syndrome or nocturnal myoclonus, stimulants for hypersomnia, and tricyclic antidepressant medications for manipulation of rapid eye movement (REM) sleep.

Sexual Dysfunction Due to a General Medical Condition (I).

Sexual dysfunction often has psychological and physical underpinnings.

Sexual dysfunction due to a general medical condition subsumes multiple forms of medically induced sexual disturbance, including:

- erectile dysfunction,
- pain during sexual intercourse,
- low sexual desire, and
- orgasmic disorders.

Sexual Dysfunction Due to a General Medical Condition (II).

Epidemiology.

1. Little is known regarding the prevalence of sexual dysfunction due to general medical illness.
2. Prevalence rates for sexual complaints are highest for female hypoactive sexual desire and orgasm problems and for premature ejaculation in men.
3. High rates of sexual dysfunction are described in patients with cardiac conditions, cancer, diabetes, and HIV.
4. Forty to 50% of individuals with multiple sclerosis describe sexual dysfunction.
5. Cerebrovascular accident impairs sexual functioning, with the possibility that, in men, greater impairment follows right hemispheric cerebrovascular injury than left hemispheric injury.
6. Delayed orgasm can affect as much as 50% of individuals taking SSRIs.

Sexual Dysfunction Due to a General Medical Condition (III).

Etiology.

The type of sexual dysfunction is affected by the cause, but specificity is rare; that is, a given cause can manifest as one (or more than one) of several syndromes.

General categories include medications and drugs of abuse, local disease processes that affect the primary or secondary sexual organs, and systemic illnesses that affect sexual organs via neurologic, vascular, or endocrinologic routes.

Sexual Dysfunction Due to a General Medical Condition (IV).

Course and prognosis.

Varies widely, depending on the cause.

Drug-induced syndromes generally remit with discontinuation (or dose reduction) of the offending agent.

Endocrine-based dysfunctions also generally improve with restoration of normal physiology.

By contrast, dysfunctions caused by neurologic disease can run protracted, even progressive, courses.

Sexual Dysfunction Due to a General Medical Condition (V).

Treatment.

When reversal of the underlying cause is not possible, supportive and behaviorally oriented psychotherapy with the patient (and perhaps the partner) may minimize distress and increase sexual satisfaction (e.g., by developing sexual interactions that are not limited by the specific dysfunction).

Support groups for people with specific types of dysfunctions are available.

Other symptom-based treatments can be used in certain conditions; for example, *sildenafil* (Viagra) administration or surgical implantation of a penile prosthesis may be used in the treatment of male erectile dysfunction.

Postpartum Blues.

Postpartum Blues is a very common but self-limited condition that begins shortly after childbirth and can present with a variety of symptoms such as mood swings, irritability, and tearfulness.

Mothers may experience negative mood symptoms mixed with intense periods of joy.

Up to 85% of new mothers are affected by postpartum blues, with symptoms starting within a *few days* after childbirth, reach their maximum on the 4-5th day and lasting up to *two weeks* in duration.

The symptoms do not affect the mother's ability to function and take care of the baby.

Clears spontaneously.

No evidence of psychotic thinking.

Treatment is supportive, including ensuring adequate sleep and emotional support.

Post-partum Depression

It develops in the first 1-4 months after birth, but can occur at any time during the first year.

Postpartum depression is manifested by depressive mood, easy crying, anhedonia, insomnia, fatigue, loss of appetite, autolytic thoughts, anxiety or despair.

It is also specific and manifests anxiety, as well as obsessive thoughts about the health and well-being of the child.

The mother may have an ambiguous or negative attitude towards the child, phobias and obsessions to harm the child.

There is also a decrease in the degree of functionality.

Post-partum psychosis (I)

Postpartum psychosis is already manifested in the first 48-72 hours or during the first 2 weeks after birth by:

- ❑ manic,
- ❑ depressive or
- ❑ mixed episodes with:
 - ❖ restlessness,
 - ❖ insomnia,
 - ❖ irritability,
 - ❖ emotional lability,
 - ❖ rapidly changing and
 - ❖ disorganized behavior.

And progress to:

- confusion,
- irrationality,
- delusions and
- obsessive concerns about the infant.

Postpartum psychosis (II).

Epidemiology.

Incidence is about 1 to 2 per 1000 childbirths.

Most of them episodes occur at primiparous.

Etiology.

Usually secondary to underlying mental illness (e.g., schizophrenia, bipolar disorder).

1. Sudden change in hormonal levels after parturition may contribute.
2. Psychodynamic conflicts about motherhood - unwanted pregnancy, entrapment in unhappy marriage, and fears of mothering.

Post-partum psychosis (III)

There may be delusional ideas about the baby (for example, the child is sick or at risk of death).

Thoughts of wanting to harm the baby or self are characteristic.

The clinical picture may be similar to schizophreniform disorder.

There may be imperative auditory hallucinations, dangerous to the child; the infant-killing rate reaches 4%.

There may be disturbances of consciousness (oneiroid, delirium, drowsiness, coma).

Treatment

Non-drug treatment is indicated for mild to moderate depressive symptoms in mothers who are breast-feeding and wish to avoid medication).

In these cases, individual or group psychotherapy (cognitive-behavioral and interpersonal) and psychoeducation groups, or support groups are applied.

Electroconvulsive therapy (ECT) will be considered, which is fast, harmless and effective for women with severe postpartum depression, especially with active suicidal ideation.

Drug treatment

Drug treatment is indicated for moderate to severe depression.

The problem of stopping breastfeeding is solved, the mother and relatives are informed about the possible risks of side effects in the child, and in case of continued breastfeeding, medicines are used with maximum safety.

Drug treatment (antidepressants, thymostabilizers, neuroleptics, tranquilizers) is combined with non-pharmacological.

Inpatient hospitalization may be required for severe cases.


Disorders Due to

Psychoactive Substances


Psychoactive drugs are substances that, when taken in or administered into one's system, affect mental processes:

- ❖ perception,
- ❖ consciousness,
- ❖ cognition or
- ❖ mood and emotions.

Basic conceptions conceptions

- 
- ❖ **Psychoactive substance:** compound that can alter one's state of mind
 - ❖ **Reinforcer:** that causes pleasant or stops unpleasant condition

Psychoactive Substance Abuse properties:



Continuing to use substance even though the person knows there are reoccurring physical or psychological problems being caused by using the substance



Disorders Due to Psychoactive Substances

- Mental disorders due to substance abuse
 - Intoxication
 - Abuse
 - Addiction
 - Withdrawal syndrom
 - Psychotic disorders due to addiction
- Physical complications of substance abuse



Basic conceptions

Harmful use - a pattern of psychoactive substance use that is causing damage to health; the damage may be to physical or mental health.

Basic definitions: substance abuse



- Failure to fulfill role obligations at work, school or home
- Physically hazardous situations
- Legal problems
- Continued use despite serious social and interpersonal problems



Basic conceptions

Addiction

- ❖ Compulsive behavior pattern of seeking drugs, consumption of drugs
- ❖ Characterized by strong desire towards the drugs, and strong tendency to the relapse after the withdrawal



Basic conceptions

Tolerance

This is a state in which, after repeated administration, a drug produces a decreased effect, or increasing doses are required to produce the same effect



Basic conceptions

Withdrawal state

This refers to a group of symptoms and signs that occur when a drug is reduced in amount or withdrawn, which last for a limited time.

The nature of the withdrawal state is related to the class of substance used.

Sometimes the pharmacological properties of substances allow for *cross-tolerance*; for example, benzodiazepines can be used to stave off alcohol dependence.



Basic conceptions

Dependence

When the substance s use is reduced or ceased withdrawal symptoms develop

Two types:

- ❖ physiological dependence
- ❖ psychological dependence

Dependence

When the substance use is reduced or ceased withdrawal symptoms develop

Two types

- **physiological dependence** (alcohol, BZDs, opioids –drug-specific effects on certain receptors: e.g. GABA receptors)
- **psychological dependence** (most of the psychoactive substances – dopaminergic effects, reward and motivation systems (striatum, n. accumbens))

What Are Substance Use Disorders?

The DSM 5 recognizes substance-related disorders resulting from the use of 10 separate classes of drugs:

❖ alcohol;

❖ caffeine;

❖ cannabis;

❖ hallucinogens (phencyclidine or similarly acting arylcyclohexylamines, and other hallucinogens, such as LSD);

❖ inhalants;

❖ opioids;

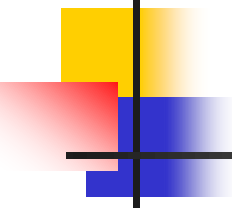
❖ sedatives, hypnotics, or anxiolytics;

❖ stimulants (including amphetamine-type substances, cocaine, and other stimulants); tobacco;

❖ and other or unknown substances.

Abused Psychoactive Substances

ICD-X

- 
- ❖ Alcohol (F10)
 - ❖ Opioids (F11)
 - ❖ Cannabinoids (F12)
 - ❖ Sedatives/hypnotics and benzodiazepins (F13)
 - ❖ Cocaine (F14)
 - ❖ Other stimulants (F15)
 - ❖ Hallucinogens (F16)
 - ❖ Tobacco (F17)
 - ❖ Inhalants (F18)
 - ❖ Other substances or combinations (F19)



Neuropsychiatric disorders due to alcohol consumption

- ❖ Delirium tremens
- ❖ Alcoholic hallucinatory state
- ❖ Alcoholic delusion disorder
- ❖ Alcoholic personality changes
- ❖ Alcohol-induced Persisting Dementia
- ❖ Wernicke's encephalopathy
- ❖ Korsakoff's syndrome

Drug	Action
Opiates	Agonist at μ -, δ - and κ -opioid receptors*
Cocaine	Indirect agonist at dopamine receptors by inhibiting dopamine transporters [‡]
Amphetamine	Indirect agonist at dopamine receptors by stimulating dopamine release [‡]
Ethanol	Facilitates GABA _A receptor function and inhibits NMDA receptor function
Nicotine	Agonist at nicotinic acetylcholine receptors
Cannabinoids	Agonist at CB ₁ and CB ₂ cannabinoid receptors [¶]
Phencyclidine (PCP)	Antagonist at NMDA glutamate receptors
Hallucinogens	Partial agonist at 5-HT _{2A} serotonin receptors
Inhalants	Unknown

Neurobiology of tolerance and dependence

The phenomena of tolerance and withdrawal are believed to be a result of *neuroadaptive changes* in the brain.

These are part of a homeostatic process that counteracts the acute pharmacological effects that occur when a drug is administered.

For example, many drugs that are misused for their anxiolytic and hypnotic properties (e.g. barbiturates, benzodiazepines, and alcohol) have, among their acute pharmacological effects, the ability to enhance brain GABA function.

During continued treatment with these agents, adaptive changes occur in GABA- and benzodiazepine-receptor sensitivity that tend to offset the effect of the drugs to facilitate GABA neurotransmission.

Neurobiology of tolerance and dependence

Such an effect could account for the phenomenon of tolerance, with the result that an individual needs to take more of the drug to produce the same pharmacological effect.

If the drug is abruptly discontinued, persistence of the adaptive changes in receptor function could lead to a sudden decline in GABA activity.

In fact, many of the clinical features of withdrawal from anxiolytic drugs, such as anxiety, insomnia, and seizures, can be explained on the basis of diminished brain GABA function.

Such an effect can also explain the well-known phenomenon of cross-tolerance between anxiolytics and hypnotics and alcohol, which makes it possible, for example, to treat alcohol withdrawal with a benzodiazepine.

Neurobiology of tolerance and dependence

Similar kinds of adaptive changes have been proposed to account for the tolerance and withdrawal phenomena that are seen with other drugs of misuse.

For example, while acute administration of opioids decreases the firing of noradrenaline cell bodies in the brainstem, tolerance of this effect occurs during repeated treatment, probably because of adaptive changes in the sensitivity of opioid receptors.

If opioids are now abruptly withdrawn, there is a sudden increase in the firing of noradrenaline neurons and in the release of noradrenaline in terminal regions.

Increased noradrenergic activity may account for several of the clinical features of acute opioid withdrawal, including sweating, tachycardia, hypertension, and anxiety.

These studies have led to the use of the noradrenaline autoreceptor agonists, clonidine and lofexidine, in the management of opioid withdrawal

Severity of Substance Use Disorders

The DSM 5 allows clinicians to specify how severe or how much of a problem the substance use disorder is, depending on how many symptoms are identified.

- 2 or 3 symptoms indicate a mild substance use disorder;
- 4 or 5 symptoms indicate a moderate substance use disorder,
- and 6 or more symptoms indicate a severe substance use disorder.

4 Phases of Use in Alcohol Use Disorder

- -Phase 1: Pre-alcoholic phase
- -Phase 2: Early alcoholic phase
- -Phase 3: Crucial phase
- -Phase 4: Chronic phase

Phase 1: Pre-alcoholic phase

- This phase is characterized by **the use of alcohol to relieve the everyday stress and tensions** of life.
- As a child, the individual may have observed parents or other adults drinking alcohol and enjoying the effects.
- The child learns that use of alcohol is an acceptable method of coping with stress.
- **Tolerance develops**, and the amount required to achieve the desired effect increases steadily.

Phase 2: Early alcoholic phase

- This phase begins with **blackouts**—brief periods of amnesia that occur during or immediately following a period of drinking.
- **Now the alcohol is no longer a source of pleasure or relief for the individual but rather a drug that is required by the individual.**
- Common behaviors include sneaking drinks or secret drinking, preoccupation with drinking and maintaining the supply of alcohol, rapid gulping of drinks, and further blackouts.

Phase 3: Crucial phase

- In this phase, the **individual has lost control**, and **physiological addiction is clearly evident**.
- This loss of control has been described as the inability to choose whether or not to drink.
- Binge drinking, lasting from a few hours to several weeks, is common.

Phase 4: Chronic phase

- This phase is characterized by emotional and physical disintegration.
- The individual is usually intoxicated more than he or she is sober.
- Emotional disintegration is evidenced by profound helplessness and self-pity.
- Impairment in reality testing may result in psychosis.

F10.x Mental Disorders Due to Use of Alcohol

➤ Acute intoxication:

- euphoria, flushed face, ataxia, slowed reaction time, impaired motor performance, slurred speech, poor concentration; in higher doses behavioural changes – disinhibition of sexual and aggressive impulses, increased suicidal and homicidal behaviour

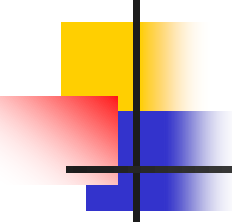
➤ Pathological intoxication:

- sudden change of consciousness with aggressive behaviour and amnesia

➤ Harmful use:

- physical complications – hypertension, arteriosclerosis, heart infarction, cardiomyopathy, brain stroke, liver cirrhosis, fatty liver, gastritis, etc.
- psychic complications - depression

Alcohol Intoxication



Alteration in behavior depending on the amount of used alcohol and individual variation and tolerance

(impaired judgment, mood lability, disinhibition of aggressive impulses, social dysfunction)

0,3g/l euphoric effect

0,5g/l cognitive deficits, motor coordination problem

2,5g/l significant confusion, decreased state of consciousness

4g/l coma, death

Alcohol Induced Medical Complication

- **Wernicke's Encephalopathy.**
- **Korsakoff's Psychosis.**
- **Alcohol-Induced Dementia.**
- **Fetal Alcohol Syndrome.**



Delirium tremens

- Delirium occurs on the 2-3 day, **usually in the evening**, after the termination of heavy drinking, on a background of alarm, fear, confusion, vegetative disorders.
- The patient **is disoriented in place and time**.
- The inflow of frightening **visual zooptic hallucinations** is marked, **which determine the behaviour of the patient**.
- At combination of delirium with a somatic pathology the exacerbation of disorder of consciousness up to muttering (muttering delirium) and amentia is probable.
- **Sometimes** in the structure of experiences there **is a schizophrenic-like semiology** with the symptom of openness of ideas, delirium of influence and prosecution.



Delirium tremens

Vegetative and somatic symptoms

- Autonomic hyperactivity:
tremulousness, hyperhidrosis,
tachycardia,
- hypertension, fever
- Inversion of sleeping
- Convulsions



Alcohol Psychotic Disorders

- Alcoholic paranoid psychosis
 - Heresy jealous, persecute
- Alcoholic hallucinosis
 - Auditory hallucinations without clouding of sensorium
- Alcohol amnestic disorder (Korsakoff 's psychosis)
 - Memory defect, confabulations, intellectual function is preserved
- Alcoholic dementia



Alcoholic hallucinatory state

❖ At prolonged and heavy alcohol consumption, after alcohol-abuse or cease of alcohol consumption

Alcoholic hallucinatory state



Symptoms:

- Hallucinations
- Clear consciousness, kept orientation
- Severe anxiety
- Persecutory delusions
- Delusions of reference
- Altered behaviour by the psychotic contents
- Suicidal danger



Alcoholic hallucinatory state

Symptoms:

- ❖ Hallucinations
- ❖ Clear consciousness,
- ❖ kept orientation
- ❖ Severe anxiety
- ❖ Persecutory delusions
- ❖ Delusions of reference
- ❖ Altered behavior
- ❖ Suicidal danger

Alcoholic delusional disorder



Delusions of jealousy (most often)

- persecutory
- reference

Alcoholic paranoid



- Alcoholic paranoid may remind of **acute transient psychotic disorder**, proceed on a background of **abstinence** at mental strain.
- The symptoms and signs are **ideas of prosecution, relation; the ideas of jealousy are typical**. In the latter case the course of paranoid is chronic.
- At acute alcoholic hallucinosis on a background of changed consciousness there are true acoustical hallucinations of the commenting contents, imperative hallucinations.

Alcohol - induced Dementia

Reason - Direct neurotoxic effect of alcohol
and thiamine deficiency

Symptoms:

- Deterioration of intellectual functions
- Impaired memory,
- Impaired ability of abstraction
- Impaired judgement,
- Impaired problemsolving thinking
- Impaired orientation

Physical Complications of Alcohol Abuse/dependence

- Alcoholic peripheral neuropathy
- Alcoholic encephalopathy
- Alcoholic liver disease (steatosis, hepatitis, cirrhosis)
- Cardiovascular disorders (dilated cardiomyopathy, hypertension, hemorrhagic stroke, „holiday heart syndrome“)
- Hematological disorders (anemia, macrocytosis, leukopenia, thrombocytopenia, abnormalities of homeostasis)

Physical Complications of Alcohol

Abuse/dependence

- GIT complications (gastritis, peptic ulcer, esophagitis, esophageal varices, diarrhea, malabsorption, acute or chronic pancreatitis)
- Malnutrition (thinning of the hair, ecchymosis, glossitis, peripheral oedema, abdominal distension, neuropathy, tetany)
- Endocrinological Disease (amenorrhoea, hypogonadism, virilisation/feminization)
- Acute or chronic alcoholic myopathy
- Osteoporosis
- FAS

hepatic encephalopathy

At hepatic encephalopathy sensitivity is disturbed,

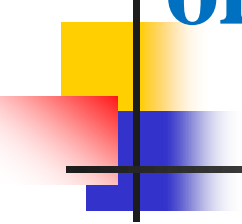
- tremor,
- hyperreflexia,
- sometimes spasms,
- dysarthria,
- choreoathetosis,
- ataxia
- and dementia with derangements of memory are observed.
- The expressiveness of amnesic disorders is not always connected with the alcoholic experience and tolerance, but frequently — with hypovitaminosis, age, additional somatic pathology.

Sedatives/hypnotics/benzodiazepins

Addiction

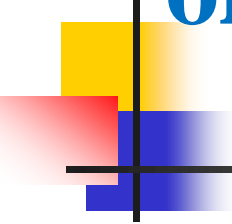
- Most often: Alprazolam, bromazepam, clonazepam, diazepam, zolpidem
- High doses (multiple LD)
- Signs of intoxication and withdrawal as alcohol addiction, withdrawal often complicated by seizure or delirium
- Consequences: seizures, memory impairment, dementia, accidents!
- Combinations with alcohol or replacement of alcohol

F13.x Mental Disorders Due to Use of Sedatives and Hypnotics



- **benzodiazepines** – potentiate the action of GABA
- **risk of dependence**
- short-acting benzodiazepines: alprazolam, flunitrazepam, oxazepam, lorazepam, temazepam
- long-lasting benzodiazepines: diazepam, clorazepate, chlordiazepoxide, etc.
- **withdrawal state can be accomplished with epileptic seizures**
- **interaction with alcohol may induce qualitative changes of consciousness**

F13.x Mental Disorders Due to Use of Sedatives and Hypnotics



The withdrawal syndrome includes the following:

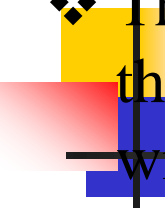
➤ **Benzodiazepines**

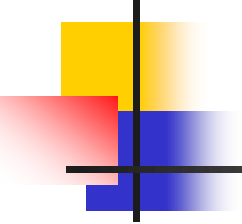
- **Anxiety symptoms**—anxiety, irritability, sweating, tremor, and sleep disturbance.
- **Altered perception**—depersonalization, derealization, hypersensitivity to stimuli, abnormal body sensations, and abnormal sensation of movement.
- **Other features** (rare)—depression, suicidal behaviour, psychosis, seizures, and delirium tremens.



Opioids

- Illegal drugs (heroin=diacetylmorphine, brown=codeine)
- Subutex (buprenorphine), methadone
- Opioid analgetics (morphine, dihydrocodeine, hydromorphone, oxycodone)
- Opioid-like analgetics (pethidine, tramadol, fentanyl)
- Medicaments with contents of codeine
 - Alnagon, Korylan, Spasmoveralgin, Spasmopan
 - Pleumolysin, Talvosilen

- 
- ❖ The term “opioids” includes compounds that are extracted from the poppy seed as well as semisynthetic and synthetic compounds with similar properties that can interact with opioid receptors in the brain.
 - ❖ Opioids are commonly used for the treatment of pain, and include medicines such as morphine, fentanyl and tramadol.
 - ❖ Their non-medical use, prolonged use, misuse and use without medical supervision can lead to opioid dependence and other health problems.
 - ❖ Due to their pharmacological effects, opioids can cause breathing difficulties, and opioid overdose can lead to death.
 - ❖ Worldwide, about 0.5 million deaths are attributable to drug use. More than 70% of these deaths are related to opioids, with more than 30% of those deaths caused by overdose.

- 
-
- ❖ There are effective treatment interventions for opioid dependence that can decrease the risk of overdose, yet less than 10% of people who need such treatment are receiving it.
 - ❖ The medication **naloxone** can prevent death from an opioid overdose if administered in time.

Opioid Intoxication



- **Euphoria** immediately after use, then apathy and psychomotor retardation
- **Miosis** - the pupils are narrowed (punctate, pinhole),
- **Slurred speech**
- **Impairment of judgment, attention, concentration, memory**
- **Analgesia**
- **Suppression of cough reflex,**
- **Slow regular respiration**
- **Respiratory depression and peristalsis,**
- **Reduction of libido,**
- **Bradycardia and hypotonia.**

Effects of opiate use



- **flushing** -orgasmic sensation in the abdomen
- **euphoria** -calmness



Opioid overdose

Opioid use can lead to death due to the effects of opioids on the part of the brain which regulates breathing.

An opioid overdose can be identified by a combination of three signs and symptoms:

- ❖ pinpoint pupils;
- ❖ unconsciousness; and
- ❖ difficulties with breathing.



Opioid Withdrawal

- ❖ Craving
- ❖ Lacrimation, rhinorrhea, yawning, sweating
- ❖ Mydriasis, piloerection
- ❖ Anorexia, tremor, irritability, insomnia
- ❖ Weakness
- ❖ Nausea, vomiting, diarrhoea
- ❖ Muscle spasms, restless lower extremities
- ❖ Abdominal pain
- ❖ Flushing, fever

F14.x,15.x Mental Disorders Due to Use of Stimulants



- Cocaine, amphetamine, metamphetamine (pervitine), phenmetrazine, methyphenidate, MDMA (ecstasy, methylenedioxyamphetamine)
- Positive mood, activity, planning, diminished need of sleep
- Tachycardia, arrhythmia, hypertension, hyperthermia, intracerebral haemorrhage
- Withdrawal symptoms: severe craving, depression, decreased energy, fatigue, sleep disturbance
- Prolonged use can trigger paranoid psychoses, impulsivity, aggressivity, irritability, suspiciousness and anxiety states

F14.x,15.x Mental Disorders Due to Use of Stimulants



Stimulant drugs

These drugs include *amphetamines*, and related substances such as methylphenidate. *Cocaine* is also a stimulant drug, but is considered separately in the next section.

F14.x,15.x Mental Disorders Due to

Use of Stimulants **Amphetamines**

Apart from their immediate effect on mood, amphetamines cause over-talkativeness, overactivity, insomnia, dryness of the lips, mouth, and nose, and anorexia.

The pupils dilate, the pulse rate increases, and the blood pressure rises.

With large doses there may be **cardiac arrhythmia, severe hypertension, cerebrovascular accident**, and, occasionally, **circulatory collapse**.

At increasingly high doses, neurological symptoms such as seizures and coma may occur.

Acute adverse psychological effects of amphetamines include dysphoria, irritability, insomnia, and confusion.

Anxiety and panic can also be present.

Obstetric complications include miscarriage, premature labour, and placental abruption

F 14.x, 15.x Mental Disorders Due to Use of Stimulants **Amphetamine-induced psychosis**

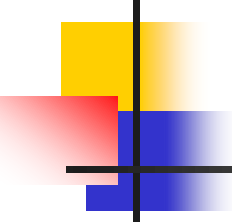


Prolonged use of high doses of amphetamines may result in repetitive stereotyped behaviour (e.g. repeated tidying).

A **paranoid psychosis** that has been likened to paranoid schizophrenia may also be induced by prolonged high doses. The features include persecutory delusions, auditory and visual hallucinations, and sometimes hostile and dangerously aggressive behaviour.

The ability of amphetamines to provoke psychosis has been one of the observations that has supported the dopamine hypothesis of schizophrenia.

Stimulants

- 
- Cocaine, pervitin, phentermine, ephedrine

 - Intoxication
 - Anxiety, irritability, agitation, paranoia, confusion, hallucinations, sympathomimetic effects (dizziness, tremor, mydriasis, tachycardia, hypertension, hyperpyrexia)
 - Withdrawal
 - Dysphoria, insomnia/hypersomnia, hyperphagia
 - Risks
 - Convulsions, heart attack, psychosis, accidents

Stimulants

Some complications of amphetamine and cocaine misuse

Medical

~~Cardiovascular—hypertension, stroke, arrhythmias, myocardial infarction~~

Infective—abscesses, septicaemia, hepatitis, HIV

Obstetric—reduced fetal growth, miscarriage, premature labour, placental abruption

Other—weight loss, dental problems, epilepsy, general neglect

Psychiatric

Anxiety, depression, antisocial behaviour, insomnia, paranoid

psychosis

Psychostimulants Including Caffeine



- The group includes **amphetamines** and **caffeine**. To amphetamines ephedrin, d-metamphetamine (ice) which is also used for smoking relate.
- **They are indirect monoamine agonists that release noradrenaline, serotonin, dopamine** from presynaptic endings.
- Caffeine, theobromin and theophyllin block adenosine receptors and induce the displacement of endocellular calcium, and also inhibit the enzyme of phosphodiesterase. They are antagonists of adenosine receptors.

Clinical Features

At acute intoxication

- the increase of work capacity, activity,
- decreased fatigueability, high spirits,
- the increase of concentration of attention,
- decreased appetite,
- sleeplessness,
- spasms,
- tremor are observed
- The fatal dose of caffeine makes up 100 teaspoonfuls of dry soluble coffee a day.
- To somatic symptoms of intoxication palpitation and stenocardia pain, arrhythmia and extrasystoles, expansion of bronchial tubes, anorexia, nausea, diarrhea, metal smack in the mouth, diuretic effect, morbidity in the chest refer.
- To psychopathological disturbances **narcolepsy**, stereotypy, **asthenia** and **alarm** relate.



Cocaine

Cocaine is a central nervous stimulant with effects similar to those of amphetamines.

These latter effects probably stem from the ability of cocaine to block the reuptake of dopamine into presynaptic dopamine terminals.

This leads to substantial increases in extracellular levels of dopamine in the ventral striatum, and consequent activation of the physiological ‘reward system’



The symptoms of cocaine intoxication are the following

- perforation of the nasal septum,
- cocaine traces in the place of injections (salmon bruises),
- crack keratosis,
- crack finger as a result of repeated contact of the finger with a wheel of a lighter,
- crack hand with hyperkeratosis and thermal changes, erosion of teeth.



The symptoms of cocaine intoxication are the following

The psychological effects of cocaine include excitement, increased energy, and euphoria.

This can be associated with grandiose thinking, impaired judgement, and sexual disinhibition.

Higher doses can result in visual and auditory hallucinations.

Paranoid ideation may lead to **aggressive behaviour**.

More prolonged use of high doses of cocaine can result in a **paranoid psychosis** with violent behaviour.

This state is usually short-lived, but may be more enduring in those with a pre-existing vulnerability to psychotic disorder.

Formication (**'cocaine bugs'**)—a feeling as if insects are crawling under the skin—is sometimes experienced by heavy cocaine users.



The symptoms of cocaine intoxication are the following

The physical effects of cocaine include increases in pulse rate and blood pressure.

Dilatation of the pupils is often prominent.

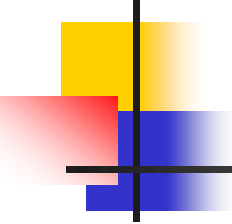
Severe adverse effects of cocaine use include **cardiac arrhythmias, myocardial infarction, myocarditis, and cardiomyopathy.**

Cocaine use has also been associated with cerebrovascular disease, including cerebral infarction, subarachnoid haemorrhage, and transient ischaemic attacks.

Seizures and respiratory arrest have been reported.

Obstetric complications include miscarriage, placental abruption, and premature labour

Cocaine delirium

- 
- is accompanied by tactile and olfactory hallucinations,
 - incoherence of thinking,
 - disorientation.
 - ideas of prosecution,
 - suspiciousness,
 - attacks of aggression.
 - The features of schizophrenic-like cocaine disorder are inadequacy of behaviour, dysphoria, acoustical, visual and tactile hallucinations (cocaine beetles, teeming under the skin), ideas of influence.



Nicotinism

- The basic mechanism of **psychoactive action** of nicotine is its binding to **cholinergic** and **nicotinic** receptors in the CNS, brain substance of the adrenal glands, nervous-muscular synapses and vegetative ganglions.



Stimulant withdrawal

- fatigue
- depression
- nightmares
- headache
- sweating
- muscle cramps
- hunger

Cannabis

Cannabis is derived from the plant *Cannabis sativa*.

It is consumed either as the dried vegetative parts in the form known as marijuana or grass, or as the resin secreted by the flowering shoots of the female plant.

Cannabis contains several pharmacologically active substances, of which the most powerful psychoactive compound is δ -9-*tetrahydrocannabinol* (*THC*).

It seems likely that the pharmacological effects of cannabinoids are mediated through interaction with specific cannabinoid receptors in the central nervous system.

Endogenous ligands for these receptors include 2-arachidonoyl glycerol and arachidonoyl ethanolamide (**anandamide**).

Over the past decade more potent cannabis preparations (known as 'skunk') have become widely available; these have higher levels of THC and a greater risk of adverse effects.



Marihuana

- Intoxication:
 - Tachycardia, conjunctival injection, dry mouth, increased appetite,
 - Impaired short-term memory, labile affect, altered time perception, enhanced sociability
- Withdrawal:
 - Craving, insomnia, dysphoria, irritability
- Medical and psychological consequences:
 - Bronchitis, impaired sexual function, chromosomal damage
 - Panic attacks, amotivational syndrome, cannabis psychosis, dementia



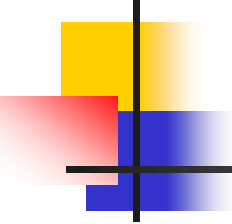
Marihuana

Inhaled cannabis smoke irritates the respiratory tract and is **potentially carcinogenic**.

The most common adverse psychological effect of acute cannabis consumption is **anxiety**.

- . At higher doses, **toxic confusional states** and occasionally **psychosis** in clear consciousness may occur.

Consequences

- 
-
- ❖ Amotivational syndrome
 - ❖ Memory disturbance
 - ❖ Marijuana impairs the transfer of material from mediate to long term memory
 - ❖ is well established that cannabis can modify the course of an established schizophrenic illness, with evidence from a systematic review that users are more likely to experience more **severe positive symptoms**, more **relapses**, and **longer hospitalizations**



Inhalants

- Abused inhalants: alkyl-nitrites, toluene and toluene mixtures – glues, paints, thinners, gasoline, ketones – nail polish remover, printing ink, halogenated hydrocarbons – halothane, trichloroethylene, ethylene glycol...
- Clinic similar to alcohol, high toxicity!!, high risk of overdoses!!
- Consequences: hepatopathia, neuropathia, nefropathia, cardiopathia, pneumonia, organic mental syndrome, pulmonary and brain oedema



Hallucinogens

The synthetic hallucinogens include LSD, dimethyltryptamine, and methyldimethoxyamphetamine.

Hallucinogens also occur naturally in some species of mushroom ('magic mushrooms'), and varieties containing **psilocybin** are consumed for their hallucinogenic effects.

The mode of action of hallucinogenic drugs is unclear, but most act as partial agonists at brain 5-HT_{2A} receptors.



Hallucinogens

The physical actions of LSD are variable.

There are initial sympathomimetic effects—heart rate and blood pressure may increase and the pupils may dilate.

The most remarkable experiences are distortions or intensifications of **sensory perception**.

There may be confusion between sensory modalities (**synaesthesia**), with sounds being perceived as visual, or movements being experienced as if heard.

Objects may be seen to merge with one another or to move rhythmically. The passage of time appears to be slowed, and experiences seem to have a profound meaning.

F1x.2 The Course of Dependence Syndrome

F1x.20 **currently abstinent (remission)**

F1x.21 currently abstinent in a protected environment

F1x.22 currently abstinent on a maintenance regime

F1x.23 currently abstinent - receiving treatment with aversive or blocking drugs (naltrexone, disulfiram)

F1x.24 currently active dependence

F1x.25 **continuous (chronic) use**

F1x.26 **episodic use (dipsomania)**



Treatment

- Intoxication – **detoxification**: (5-10 days) substance specific, but generally involves calming support, adjunctive pharmacology, diagnosis and treatment of medical complications
- **Rehabilitation**: (usually a month) cessation of use, developing new skills that prevent relapse
- **Group therapy**: AA, NA, etc



Treatment

Alcoholics Anonymous is based on a number of fundamental principles, known as the ‘Twelve Steps’, to which members adhere.

It does not appeal to all problem drinkers because the meetings involve an emotional confession of problems, and because of the evangelical, quasireligious nature of the twelve-step approach.

Long-term management of substance dependence: psychosocial treatment and rehabilitation



- Confrontation with reality and **motivating** according to individual needs and capacity to change
- Focusing on and treatment of co-morbid mood and anxiety disorders (30-40%)
- Family-level intervention

Treatment of delirium



- Prevention
- Benzodiazepines
- Thiamine
- Ensure fluid and electrolyte ballance
- High calorie, high carbohydrate diet supplemented by multivitamins
- Treatment of internal disorders, infections, etc.

Treatment of delirium



Prevention

There are more effective interventions to prevent delirium than to treat it.

This applies to pharmacological and particularly to non-pharmacological strategies.

The latter include a range of validated approaches such as the **Hospital Elder Life Program (HELP)** and targeting of delirium risk factors (e.g. reorientation, promotion of sleep)).

Low doses of antipsychotics, gabapentin, and melatonin also have some efficacy in preventing delirium.

Delirium is a medical emergency

Alcoholism treatment

High-intensity psychological therapies for alcohol focused specialist treatment

Community reinforcement approach. Components include training in communication skills, problem-solving, and assertive drink refusal.

Social behaviour and network therapy.

Behavioural self-control training. Key components include setting drinking limits, development of methods to control drinking rate, drink refusal skills training, and self-reward for successful behaviours that replace drinking.

Coping and social skills training. Can be used in a group or individual format. Improves relationships by building up interpersonal skills, and uses cognitive emotional coping for mood regulation. Coping skills training enhances activities of daily living and facilitates dealing with stressful life events and the impact of

Alcoholism treatment

High-intensity psychological therapies for alcohol focused specialist treatment

Cognitive behavioural relationship therapy. Uses behavioural contracting, communication skills training, and behavioural rehearsal with the drinker and their partner.

Cue exposure. Based on Pavlovian conditioning theory, and views craving for alcohol as a conditioned response to specific environmental cues

Relapse prevention. Based on cognitive behavioural techniques, and involves training in social skills and coping and behavioural rehearsal.



Alcoholism treatment

- The course of treatment of alcoholic dependence includes **behavioural therapy**;
- aversion to alcohol is achieved by **Teturam** (Esperal) or with the help of **hypnotherapy**.
- For psychological correction methods of provocative psychotherapy, **group methods** in the clubs of **anonymous alcoholics** are applied.
- Taking into account that alcoholic dependence may only serve as a cover of the developing depression, it is necessary to administer average doses of **antidepressants** (Amitriptyline, Melipramin, Remeron).

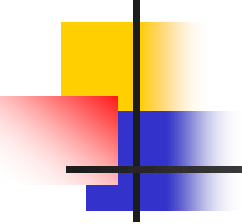


Alcoholism treatment

Disulfiram - Known as Antabuse, used in the treatment of alcoholism that inhibits aldehyde dehydrogenase (ALDH) and causes severe physical reactions when combined with alcohol

Acamprosate - reduces the risk of relapse by reducing the individual's urge to drink and thereby reducing the drive to use alcohol as a way of reducing anxiety and other negative psychological

Alcoholism treatment

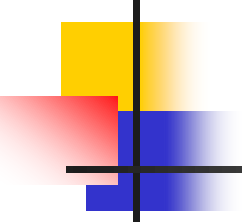


Disulfiram (Antabuse) acts by blocking the oxidation of alcohol so that acetaldehyde accumulates.

Some patients find it useful because the anticipation of an unpleasant reaction acts as a deterrent to impulsive drinking. The reaction includes facial flushing, throbbing headache, hypotension, palpitations, tachycardia, and nausea and vomiting.

In vulnerable patients, cardiac arrhythmias and collapse may occur.

Alcoholism treatment



Acamprosate (calcium acetyl homotaurinate) appears to suppress the urge to drink in response to learned cues, and can produce modest but useful reductions in drinking behaviour in alcohol-dependent individuals.

It is believed to act by stimulating GABA-inhibitory neurotransmission and decreasing the excitatory effects of glutamate.

Alcoholism treatment



Naltrexone. The opioid antagonist, *naltrexone*, is believed to block some of the reinforcing effects of alcohol and in this way decrease the likelihood of relapse after detoxification.

The therapy of acute overdose of opiates



- The therapy of acute overdose of opiates **includes application of Naloxon** (0.01 mg per kg of weight) or Antaxon.
- Methods of **detoxication** with the help of hemosorption, hemodialysis, **intravenous injection of Novocain and benzodiazepines** are applied.
- To the specific therapy the following refers: **methadone initial therapy** at detoxication and as a supporting therapy during rehabilitation.
- treatment with **Clonidin** in the course of detoxication, and also the therapy with Naloxon and Nalthrexon or Buprenorphine as a partial agonist of opiate



Marijuana dependence treatment

- It includes **detoxication** with the usage of
- **Bromcryptine**
- and **antidepressants**.
- **Benzodiazepines**,
- **beta-blockers** and
- **calcium channel inhibitors**,
- the activated coal
- and laxatives are also applied.
- The **psychotherapy** directed against relapse, behavioural therapy are used.



Treatment from the Psychostimulants dependence

- The treatment is **symptomatic, including detoxication,**
- **small doses of Haloperidol or Aminazine,**
- **the temperature control,**
- **introduction of blockers of alpha-receptors.**
- **Psychotherapy and behavioural therapy are applied.**



treatment from the hallucinogens dependence

- Benzodiazepines
- and barbiturates,
- detoxification
- and increase of excretion of psychoactive substances are used.



treatment from the nicotine dependence

- behavioural therapy,
- group therapy
- and psychotherapy;
- **Nicotin-substitutive therapy** — nicotinic chewing gums and transdermal nicotinic plasters,

Clonidine, bupropione, varenicline

- 1. Personality disorders.**
- 2. Sexual dysfunctions, paraphilias and gender identity disorders.**
- 3. Impulse control disorders: kleptomania, pathological gambling, pyromania, trichotillomania.**
- 4. Sleep disorders: dyssomnias, parasomnias.**

Anatol Nacu

PERSONALITY DISORDER

Definition. Personality - the configuration of patterns of behavioral responses visible in everyday life is usually stable and predictable.

When this totality differs in a way that exceeds the range of variability found in most people, and the personality traits are rigid and maladaptive and affect functioning and cause subjective suffering, one can speak of a personality disorder.

- **Cluster A -Patient is eccentric and/or fears social relationships:** 1. Paranoids; 2. Schizoids; 3. Schizotypals;
- **Cluster B -Patient is emotional, erratic, and/or dramatic:** 4. Antisocials; 5. Narcissists; 6. Borderlines; 7. Histrionics;
- **Cluster C -Patient is fearful and/or anxious:** 8. Avoiders; 9. Dependents; 10. Obsessive-compulsives;

- **F60 Specific personality disorders**
- **F60.0 Paranoid personality disorder**
- **F60.1 Schizoid personality disorder**
- **F60.2 Dissocial personality disorder**
- **F60.3 Emotionally unstable personality disorder**
- **F60.4 Histrionic personality disorder**
- **F60.5 Anankastic personality disorder**
- **F60.6 Anxious (avoidant) personality disorder**
- **F60.7 Dependent personality disorder**
- **F60.8 Other specific personality disorders**
- **F60.9 Personality disorder, unspecified**

Characteristics and diagnosis

- 1. The features are pervasive (extensive) and persistent.
- 2. Traits are ego-syntonic (acceptable to the ego), and not ego-dystonic or strange to the ego.
- 3. The features are alloplastic, and not autoplasmic (the patient seeks to change the environment, not to change himself).
- 4. Traits are rigidly maintained.

PERSONALITY DISORDER

- 5. Protection against internal impulses and external stress involves defensive patterns, such as:
 - a. Fantasy: specific to schizoid patients, who have a fear of intimacy, closeness can seem distant and create imaginary worlds.
 - b. Dissociation. Unpleasant affects are repressed or replaced, typical of histrionic patients.
 - c. Isolation. Events are recalled without affect: obsessive-compulsive patients.
 - d. Projection. Unaccepted experiences are attributed to others: paranoid patients.

PERSONALITY DISORDER

- e. Splitting, Cleavage. People, events are seen as totally good or totally bad - borderline patients.
- f. Turning against oneself. - involves intentional failure and deliberate self-destructive acts: passive-aggressive behavior towards others (borderline).
- g. Acting-out. Desires or conflicts are expressed through action, without reflexive awareness of the idea or affect: antisocial personality disorder.
- h. Projective identification. - they are forced to identify with a projected aspect of the self, so that the other person feels feelings similar to those of the patient: borderline patients.

PERSONALITY DISORDER

- 6. The patient shows fixation on development and immaturity: all personality disorders
- 7. Relationships with others are disturbed. The patient shows interpersonal difficulties in affective and work relationships and does not appreciate the impact he has on others.

PERSONALITY DISORDER

- Epidemiology
- 1. Prevalence is 6–9%, even up to 15%.
- 2. As a rule, the personality disorder becomes evident for the first time towards the end of adolescence or in the period of young adulthood, it is formed from childhood.
- 3. After summing up all types, women and men are equally affected.
- 4. The patient's family has a nonspecific history of psychiatric disorders, although:
 - Schizoid, Schizotypal and Paranoid – schizophrenia
 - Paranoid - delusional disorder (persecutory type)
 - Antisocial – substance abuse and somatization disorders
 - Borderline -- Mood disorders, substance abuse and antisocial personality disorder
 - Avoidant -- anxiety disorder

Etiology

1. The etiology of personality disorders is multifactorial.
2. Sometimes certain biological determinants are evident (genetics, perinatal injuries, encephalitis, head trauma).
3. The developmental history often highlights interpersonal difficulties and family problems, sometimes severe (abuse, incest, neglect, illness and parental death).

PERSONALITY DISORDER

Psychological tests

1. Neuropsychological tests can reveal organicity. EEG, computed tomography, and electrophysiological maps may also be helpful.
2. Projective tests can reveal preferred personality patterns and styles: Minnesota Multiphasic Personality Inventory–2 (MMPI–2), Thematic Apperception Test (TAT), questionnaires specific to personality disorders.

Psychodynamics. Most personality disorders tend to involve problems:

1. Alteration of Ego functioning.
2. Alteration of the Superego.
3. Problems with self-image and self-esteem.
4. "Playing out" of internal psychological conflicts based on past experiences, with alterations of judgment.

Cluster A

Paranoid, schizoid and schizotypal personality disorders

- **Paranoid**
- Paranoid thinking is not necessarily pathological. The paranoid-schizoid position is a basic way of organizing experience, it persists in the human psyche during life.
- Dangerous or unpleasant thoughts and feelings are split off, projected outwards, and attributed to others.

DSM–V DIAGNOSTIC CRITERIA FOR PARANOID PERSONALITY DISORDER

- A. Pervasive mistrust and suspicion of others, such that the motivations of others are interpreted as malevolent, beginning in early adulthood and present in various contexts, indicated by four (or more) of the following:
 - (1) suspects, without sufficient grounds, that others are exploiting, harming or deceiving him;
 - (2) is concerned with unwarranted doubts about the loyalty or trust shown by friends or associates;
 - (3) avoids trusting others out of unreasonable fear that such information will be used maliciously against him;

- (4) finds demeaning or threatening hidden meanings in trivial/harmless remarks or events;
- (5) constantly holds grudges, in other words – is unforgiving [grudging] to insults;
- (6) perceives attacks, which are not visible to others, on his character or reputation and without delay reacts angrily or counterattacks;
- (7) has repeated suspicions, without justification, regarding the fidelity of the marital or sexual partner.

- Paranoid patients are frequently brought in by family members, fed up with the patient's constant statements and accusations.
- Even when they enter treatment willingly, they usually remain unconvinced that they have a psychiatric disorder. The problems they present themselves with - how others have mistreated them and betrayed them.

- They approach every relationship with the belief that the other person will be "wrong" and confirm their suspicions.
- In the paranoid-schizoid mode of existence, the patient lives in a state of permanent anxiety stemming from a belief that the world is populated with untrustworthy and unpredictable strangers (Ogden, 1986).

DSM-V DIAGNOSTIC CRITERIA FOR SCHIZOID PERSONALITY DISORDER

- A. Pervasive pattern of detachment from social relationships and restricted range of emotional expression in interpersonal contexts, pattern that begins in early adulthood and is present in diverse contexts, indicated by four (or more) of the following:
 - (1) neither wants nor enjoys close relationships, including being part of a family;
 - (2) almost always choose solitary activities
 - (3) has little or no interest in sexual experiences with another person;

- (4) enjoys few or no activities;
- (5) has no close friends or confidants other than first degree relatives;
- (6) seems indifferent to the praise or criticism of others;
- (7) exhibits emotional coldness, detachment, or flattened affectivity.

DSM–V DIAGNOSTIC CRITERIA FOR SCHIZOTYPAL PERSONALITY DISORDER

- A. Pervasive pattern of social and interpersonal deficits, marked by acute discomfort in, and reduced capacity for, close relationships, as well as cognitive or perceptual distortions and behavioral eccentricities, pattern that begins in early adulthood and is present in various contexts, indicated by five (or more) of the following:
 - (1) ideas of reference (delusions of reference are excluded);
 - (2) strange beliefs or magical thinking that influence behavior and do not fit with subcultural norms (eg, superstition, belief in clairvoyance, telepathy, or "sixth sense"; in children and adolescents - bizarre fantasies or preoccupations);
 - (3) unusual perceptual experiences, including bodily illusions;

- (4) odd thinking and speaking (eg, vague, circumstantial, metaphorical, overelaborate, or stereotypical);
- (5) suspiciousness or paranoid ideation;
- (6) inappropriate or constricted affect;
- (7) strange, eccentric or unusual behavior or appearance;
- (8) lack of close friends or confidants other than first degree relatives;
- (9) excessive social anxiety that does not diminish with familiarization and tends to be associated with paranoid fears rather than negative self-judgments.

- Schizoid and schizotypal patients frequently live on the fringes of society.
- They may be ridiculed as "strange" or "misfit" or they may just be left alone to continue a solitary and idiosyncratic existence.

- Parents of adolescents or young adults may bring them to a psychiatrist because of concerns that their child is not enjoying life enough (Stone, 1985). Other schizoid or schizotypal patients voluntarily seek psychiatric treatment because of painful loneliness.

- These people are often a bundle of contradictions. Akhtar (1987): "The "apparent" schizoid individual is detached, self-sufficient, absent-minded, uninteresting, asexual..., while "covertly", he is particularly sensitive, with high emotional needs, acutely alert, creative, frequently perverted and vulnerable to corruption" (p. 510).

DSM–V DIAGNOSTIC CRITERIA FOR ANTISOCIAL PERSONALITY DISORDER

- A. There is a pervasive pattern of ignoring and violating the rights of others, occurring since age 15, indicated by three (or more) of the following:
 - (1) non-compliance with social norms regarding behavior within the limits of the law, indicated by repeated committing of acts that constitute reasons for arrest;
 - (2) cheating, lying repeatedly, using false names, or defrauding others for personal gain or pleasure;
 - (3) impulsivity or lack of future plans;

- (4) irritability and aggressiveness, repeated beatings or physical attacks;
- (5) disregarding one's own safety or that of others;
- (6) persistent irresponsibility, repeated inability to maintain regular work behavior or honor financial obligations;
- (7) lack of remorse, indifference to, or rationalization of having harmed or mistreated another or stolen from another.

- The psychopath's severe internalizing deficit leads to a massive failure to develop the Superego—their classic feature.
- The absence of any moral sense in these individuals is one of the disheartening qualities that make them seem inhuman.
- Moral justification or rationalization of antisocial behavior (Meloy, 1988). Confronted with their own antisocial behavior, psychopaths respond that the victims of their antisocial acts got what they deserved. They often choose to lie or avoid taking any responsibility for their behavior.

DSM–V DIAGNOSTIC CRITERIA FOR BORDERLINE PERSONALITY DISORDER

- Pervasive pattern of instability of interpersonal relationships, self-image, and affect, and marked impulsivity, paternal beginning in young adulthood and present in diverse contexts, indicated by five (or more) of the following:
 - (1) efforts to avoid real or imagined abandonment.
 - (2) pattern of unstable and intense interpersonal relationships, characterized by alternating extremes of idealization and devaluation;
 - (3) identity disturbance: markedly and persistently unstable self-image or sense of self;
 - (4) impulsivity in at least two areas that are potentially detrimental to the self (eg, spending money, substance abuse, dangerous driving, compulsive eating).

- (5) recurrent suicidal behavior, gestures or threats, or self-injurious behavior;
- (6) affective instability due to marked mood reactivity (eg, intense episodic dysphoria, irritability, or anxiety, usually lasting a few hours and only rarely more than a few days);
- (7) chronic feelings of inner emptiness;
- (8) inappropriate, intense anger, or inability to control one's anger (eg, frequent tantrums, constant anger, repeated physical fights);
- (9) transient, stress-related, paranoid ideation, or severe dissociative symptoms.

- A group analysis of the data on these patients suggested that there are four subgroups of borderline patients. These patients appeared to occupy a continuum from the "psychotic end" (type I) to the "neurotic end" (type IV). Between the two extremes, one can find a group with predominant negative affects and difficulties in maintaining stable interpersonal relationships (type II) and another group (type III) characterized by a general lack of identity, which results in the need to borrow identity from others.

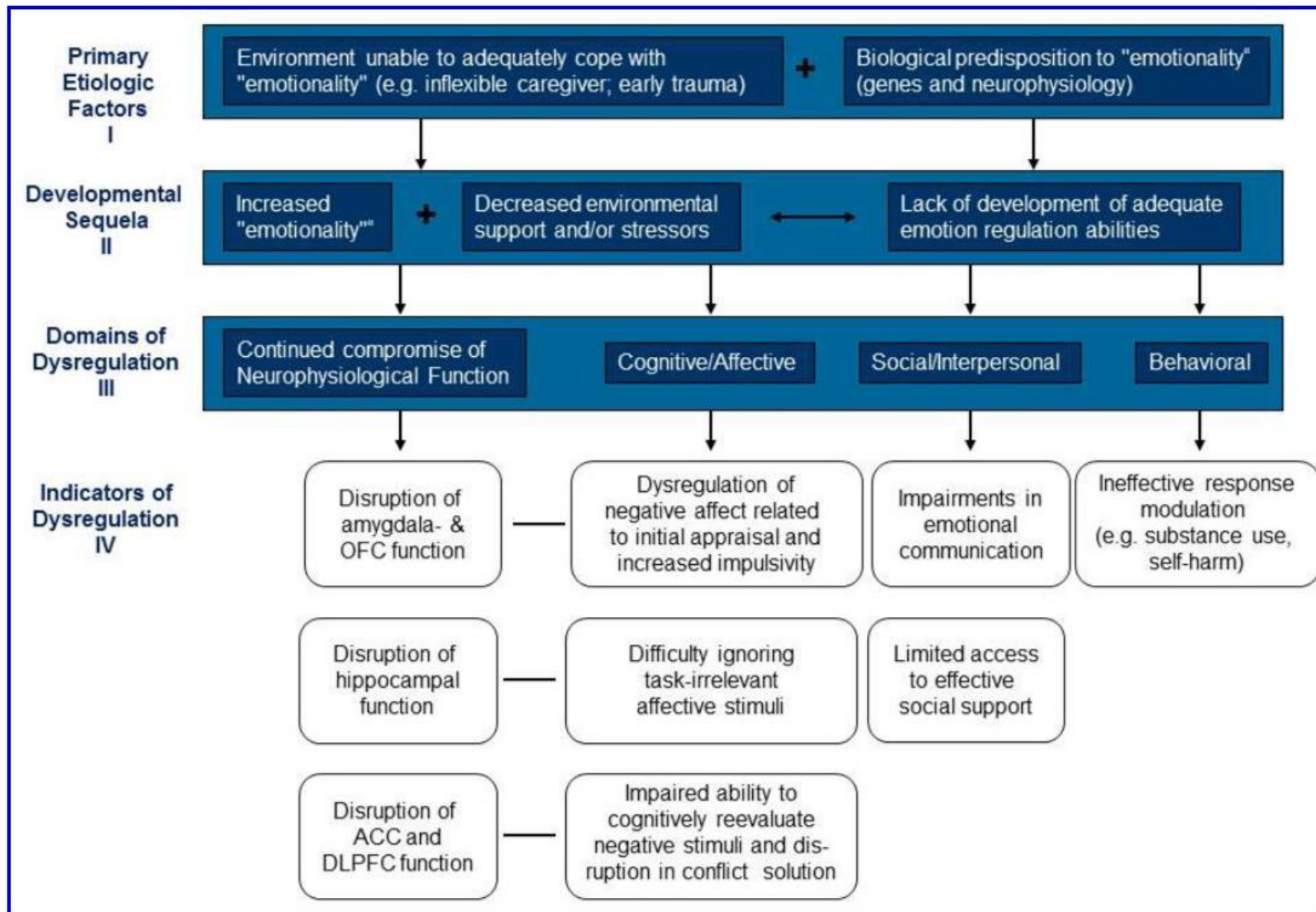


FIGURE 1. A developmental psychopathology model of borderline personality disorder. From Putnam KM, Silk KR: Emotion dysregulation and the development of borderline personality disorder. *Dev Psychopathol* 17:899-925, 2005

Note. OFC, orbitofrontal cortex; ACC, anterior cingulate cortex; DLPFC, dorsolateral prefrontal cortex

DSM–V DIAGNOSTIC CRITERIA FOR HISTRIONIC PERSONALITY DISORDER

Pervasive pattern of excessive emotionality and attention-seeking, beginning in young adulthood and present in various contexts, indicated by five (or more) of the following:

- (1) feels uncomfortable in situations where he is not the center of attention;
- (2) interaction with others is often characterized by inappropriate sexually seductive or provocative behavior;
- (3) exhibit rapidly changing and shallow emotional expressions;
- (4) constantly uses physical appearance to draw attention to himself;

- (5) has a speaking style that is overly impressionistic and lacks detail;
- (6) exhibits self-dramatization, theatricality, and exaggerated expression of emotions;
- (7) is suggestible, in other words – easily influenced by others or circumstances;
- (8) considers the relationships to which he is entitled much more intimate than they are.

- Bollas (2000) - hysterical people tend to eroticize a life history in which they are someone else's erotic object. They spend much of their lives trying to find a "waiting object" that will grant them the role of that person's object of desire.

- The phenomenon of multiple romantic partners typical of hysterical and histrionic personality disorders frequently follows a fixed pattern: the chosen romantic man will never be the right one and can be replaced.

DSM–V DIAGNOSTIC CRITERIA FOR NARCISSIC PERSONALITY DISORDER

Pervasive pattern of grandiosity (in imagination or behavior), need to be admired, and lack of empathy, beginning in young adulthood and present in various contexts, indicated by five (or more) of the following:

- (1) has a grandiose sense of self-importance (eg, exaggerates his accomplishments and talents, expects to be recognized as superior without commensurate accomplishments);
- (2) is preoccupied with unlimited fantasies of success, power, brilliance, beauty, or ideal love;
- (3) believes that it is "special" and unique and that it can only be understood by, and should only be associated with, other special or high-status people (or institutions);

- (4) demands excessive admiration;
- (5) feels that he is entitled to unreasonable expectations of particularly favorable treatment or automatic compliance with his own expectations;
- (6) takes advantage of interpersonal relationships, takes advantage of others to achieve his own goals;
- (7) lacks empathy; does not want to recognize or identify with the feelings and needs of others;
- (8) is often envious of others or thinks others are envious of him;
- (9) displays arrogant or superior behaviors or attitudes.

- The inability of these people to love is a tragedy that affects their lives. Healthy interpersonal relationships can be recognized by qualities such as empathy and concern for the feelings of others, a genuine interest in the ideas of others, the ability to tolerate ambivalence in long-term relationships without giving up, and the ability to be aware of one's own contribution to interpersonal conflicts .

- They approach people as objects that are used until exhaustion and then abandoned according to their needs, without any regard for their feelings. People are not seen as having a separate existence or having their own needs.

- The individual with narcissistic personality disorder ends a relationship when the other person begins to make demands related to their own needs.
- Such relationships "do not work" in terms of the narcissist's need to maintain his own self-esteem (Stolorow, 1975).

DSM–V DIAGNOSTIC CRITERIA FOR OBSESSIVE-COMPULSIVE PERSONALITY DISORDER

- Pervasive pattern of preoccupation with order, perfectionism, and mental and interpersonal control, at the expense of flexibility, openness, and efficiency, pattern that is beginning in young adulthood and present in diverse contexts, indicated by four (or more) of the following:
 - (1) is preoccupied with details, rules, lists, orders, organization or schedules, to such a degree that the major purpose of the activity is lost;
 - (2) exhibits perfectionism that interferes with task performance (eg, cannot complete a project because his own overly strict standards are not met);
 - (3) is excessively devoted to work and productivity, to the exclusion of leisure activities and friendships (unexplained by obvious economic necessity);

- (4) is hyperconscientious, scrupulous, and inflexible in matters of morals, ethics, or values (unexplained by cultural or religious identification);
- (5) is unable to discard worn or worthless items, even when they have no sentimental value;
- (6) hesitates to delegate tasks or work with others if they do not exactly follow his way of doing things;
- (7) adopts a miserly style of spending, both toward himself and toward others; money is seen as something to be collected in the event of future catastrophes;
- (8) shows rigidity and stubbornness.

- The considerable difficulty they have in expressing aggression, Stubbornness - was linked to early power conflicts with maternal figures regarding toilet training exercises.

DSM–V DIAGNOSTIC CRITERIA FOR AVOIDANT PERSONALITY DISORDER

- Pervasive pattern of social inhibition, feelings of inadequacy, and hypersensitivity to negative evaluation, paternal beginning in young adulthood and present in diverse contexts, indicated by four (or more) of the following:
- (1) avoids occupational activities involving significant interpersonal contact, due to fears of criticism, disapproval, or rejection;
- (2) does not want to engage with people unless he is sure that he is liked by them;
- (3) shows restraint in intimate relationships due to fear of embarrassment

- (4) is concerned about the possibility of being criticized or rejected in social situations;
- (5) is inhibited in new interpersonal relationships due to feelings of inadequacy;
- (6) is viewed as socially unfit/inadequate, personally unattractive, or inferior to others;
- (7) is unusually reticent about taking personal risks or engaging in any new activities because they might put him in an embarrassing situation.

DSM–V DIAGNOSTIC CRITERIA FOR DEPENDENT PERSONALITY DISORDER

- Pervasive and excessive need to be cared for by another, resulting in submissive and clingy behavior and fears of separation, beginning in young adulthood and present in a variety of contexts, indicated by five (or more) of the following:
- (1) has difficulty making everyday decisions in the absence of an excessive amount of advice and reassurance from others;
- (2) needs others to take responsibility for most important areas of life;
- (3) has difficulty expressing disagreement with others because of fear of losing their support or approval.
- Note: Do not include realistic fears of reprisal;

- (4) finds it difficult to initiate projects or do things on his own (due to lack of confidence in his own judgment or abilities, rather than lack of motivation or energy);
- (5) strives excessively to obtain protection and support from others, going so far as to volunteer for unpleasant things;
- (6) feels uncomfortable or helpless when alone because of exaggerated fears that he will not be able to care for himself;
- (7) compulsively seeks another relationship as a source of care and support when a close relationship ends;
- (8) was unrealistically concerned with the fear of not being left to take care of himself.

Treatment of Personality Disorders

- **Psychotherapy**
 - people who complain about lack of confidence and have difficulties in making relationships are usually motivated for psychotherapy
 - in emotionally unstable and dissocial personalities disorders the patient should recognize the situations which provoke his/her pathological reactions and should manage to avoid them
 - psychotherapy of personality disorders is a very difficult task and to reach a partial effect requests patient's thorough motivation
- **Pharmacotherapy helps in emotional disorders**
 - anxiolytics and SSRI antidepressants suppress anxiety and depressive symptoms
 - lithium and other mood stabilizers (carbamazepine, valproic acid) reduces mood fluctuation and aggressive tendencies

Sexual desire disorders

- Hypoactive sexual desire disorder (decreased libido or frigidity),
 - the deficiency or even the absence of sexual fantasies and the desire for sexual activity;
 - sexual aversion disorder, characterized by avoidance of genital sexual contact with a sexual partner.
-
- Lack of desire can be used as a defense to protect oneself from unconscious fears related to sexual relations.
 - It can be associated with chronic anxiety or depressive disorders.

Sexual arousal disorders

It includes male erectile dysfunction and female arousal disorder.

In women - the inability to achieve and maintain lubrication in response to sexual arousal and causes marked distress or interpersonal difficulties.

In men - manifests as an inability to achieve or maintain an adequate erection and causes marked distress or interpersonal difficulties

It can have psychological causes (personal underestimation with the inability to trust or feelings of inadequacy, difficulties relating to partners).

Orgasmic disorders

In women - recurrent or persistent delay or absence of orgasm after a normal phase of sexual arousal. There are psychological factors - fear of pregnancy, rejection from the sexual partner, hostility towards men, feelings of guilt about sexual impulses or conflicts in the couple.

In men - difficult or no ejaculation and painful ejaculation.

If this inhibition has existed throughout life, a more severe psychopathology can be considered.

Ejaculatory inhibition, which appeared some time after the onset of sexual life, often reflects interpersonal difficulties.

Premature ejaculation (early)

It affects 35-40% of men treated for sexual disorders.

Persistently and recurrently, they reach orgasm and ejaculation before they want to. The disorder is more common in young men, in men with a new partner, and is thought to be related to an excessive preoccupation with satisfying the partner.

Premature ejaculation can be associated with unconscious fears related to the vagina, it can be the result of some initial experiences of the man where being surprised by others would have been embarrassing.

Sexual pain disorders

Vaginismus is an involuntary muscle contraction of part of the vagina, which affects sexual intercourse.

The cause can be a previous sexual trauma (rape or sexual abuse in childhood), the education of the woman in a strict, puritanical religious spirit that associates sexual relations with sin.

Dyspareunia is recurrent or persistent genital pain that occurs before, during or after intercourse, common in women with a history of rape or sexual abuse in childhood.

In the case of men, this disorder occurs - painful coitus or painful ejaculation, although less common.

It can be the result of mental tension and anxiety, but more often it is associated with an organic condition.

The paraphilias

- ***Mechanisms of psychopathological pathogenesis***

- *From a psychodynamic point of view, the pattern of atypical sexual arousal usually develops before puberty, involving at least 3 processes:*

- *anxiety or early emotional trauma, which interferes with psychosocial development considered normal;*

- *replacing the pattern of erotic arousal considered to be normal with an alternative sexual pattern, sometimes through early exposure to erotically charged experiences, designed to build the person's need to seek sexual pleasure in them;*

- *the arousal pattern acquires symbolic connotations and conditioning elements (for example, the fetish symbolizes the element capable of generating arousal, but it may have been selected because it was accidentally associated with a sexual curiosity, desire or arousal).*

Fetishism

It involves the use of non-human objects as the primary method to produce sexual arousal.

Fetishism disorder involves intense, recurrent sexual arousal through the use of inanimate objects or excessive attention to certain body parts that causes significant distress or disruption in daily functioning.

The most common fetishes can be remembered: clothing made of leather or latex, aprons, shoes, female underwear.

Transvestic fetishism

Transvestic fetishism - dressing in the clothes of the opposite sex for the purpose of sexual arousal and ranges from the occasional wearing of a few items of clothing to the complete change of clothing with that of the opposite sex.

The man with this disorder has a collection of female clothing that he uses intermittently for cross-dressing, and while cross-dressing, he masturbates, imagining that he is both the male and female subjects of his sexual fantasy.

Typically, the disorder begins with cross-dressing in childhood or early adolescence.

Exhibitionism

Sexual arousal produced by exposing the genitals to an unknown person. It can also be manifested by the desire to be looked at by others during a sexual act

The clinical form involves practicing this behavior with a non-consenting partner or experiencing a high level of secondary distress, such as impairment of social or occupational functioning.

More common among men. Some exhibitionists may masturbate while performing this act and may be aware of the impact it has on other individuals. Sexual contact is rarely present, physical aggression is unlikely.

Voyeurism

It represents the sexual pleasure of looking at nudes, people undressing or engaging in sexual acts.

This type of paraphilia can be at the core of marital difficulties or get the individual into trouble with the law.

Orgasm is reached by masturbating along with watching the sexual act, not wanting to have sexual contact with those they are watching.

Frotteurism

It represents the sexual arousal produced by physical contact (usually by rubbing or touching) with other people in public spaces.

It usually occurs in crowded public spaces, public transport, so that the person being assaulted thinks it was an accident.

Most of those who have a clinical form of paraphilia are men between the ages of 15-25, it can also be identified in the elderly, shy individuals, socially or sexually inhibited people. Touch is seen as a bond with the victim.

Masochism

It involves humiliation, physical abuse, tying up or any other form of abuse directed at one's own person in order to experience sexual pleasure.

The most common methods: tying up, pricking the skin, applying electric shocks, burning, hitting, humiliating by defecating or urinating, resorting to transvestism or simulating rape

Erotic autoasphyxia (asphyxiophilia) is a subtype of masochistic disorder.

It occurs at the moment or immediately before reaching orgasm. Clothing items are used. Loss of consciousness can set in quickly due to blockage of venous return from the brain. This causes significant disturbances of cerebral perfusion, and if not stopped immediately, severe brain damage or death may occur.

Sadism

It is characterized by the desire to induce physical or psychological suffering to another person for full arousal or to achieve orgasm.

It can be manifested by the request for the total submission of the partner.

Pedophilia

Defines directing sexual fantasies, needs or behaviors towards adolescents or pre-teens (under 13 years of age).

The diagnosis will be established when the person is older than 16 years or is at least 5 years older than the minor partner, who becomes the target of his erotic fantasies.

Many pedophiles are male, the attraction can be channeled towards both girls and boys. Most pedophiles prefer training in erotic activities with people of the opposite sex.

In most cases, the pedophile is an acquaintance (family member, step-parent or person in authority), and the person being looked at or touched prevails over actual sexual contact.

Treatment

- Many studies have shown that maximum effectiveness is achieved when psychotherapeutic techniques are combined with drug therapy, especially psychodynamic and psychoanalytic techniques, as well as cognitive-behavioral therapy. Treatment aims at understanding the reasons, maturation of the Ego, reduction and control of deviant sexual behavior rather than its cancellation.
- Anti-androgenic drug treatment will be reserved for people who exhibit deviant sexual behavior, manifested by the risk of assaulting others. Antiandrogens reduce the intensity of erections, sexual fantasies or stimulation of the need to engage in sexual relations.
- The reduction of sexual needs has also been noticed in the case of the use of some antidepressants (selective serotonin reuptake inhibitors) and atypical neuroleptics.

Transgender

- Sex refers to the biological characteristics (external and internal sex organs, specific hormonal proportions, genetics, etc.) on the basis of which human beings are categorized as female or male.
- Gender, which is a concept referring to social differences (as opposed to biological differences) between women and men, differences that are acquired and likely to change over time.
- The earliest estimates of the worldwide prevalence of transgenderism were 1 in 37,000 in males and 1 in 107,000 in females. The most recent estimate from the Netherlands of the prevalence of the segment of gender identity disorder, represented by transsexuality, is 1 in 11,900 in men and 1 in 30,400 in women

- Transsexual (TS) is the term used to define a person who feels that their body does not correspond to their gender identity.
- The general expression by which TS people are defined is "female prisoner in a male body/male prisoner in a female body".
- Transgender people are: male-to-female (MTF) or female-to-male (FTM).

DISRUPTIVE BEHAVIOR, IMPULSE CONTROL AND CONDUCT DISORDERS

- ***Oppositional defiant disorder***

- *Frequent and persistent presence of a pattern of angry/irritable mood, confrontational/defiant, or vindictive behavior lasting at least 6 months.*

- *People with this disorder usually do not see themselves as angry, confrontational, or defiant.*

- *If this disorder persists throughout the developmental period, then these individuals have numerous conflicts with parents, teachers, supervisors, peers, and spouses.*

Intermittent explosive disorder

- It is manifested by repeated episodes of aggressive (explosive) behavior, resulting from the individual's inability to control his aggressive impulses.
- They have a rapid onset and a short prodromal period with a feeling of discharge at the time of action.
- They usually last less than 30 minutes and occur in response to a minor provocation from a loved one or colleague.
- Frequently, individuals have less severe episodes of verbal and/or physical aggression, without destruction of property or injury to persons, interspersed between more severe episodes of destruction or aggression.

Conduct disorder

- A pattern of repetitive and persistent behavior that violates the fundamental rights of others or age-specific social norms and rules. These behaviors fall into four main groups:
- 1. aggressive behavior that causes or risks causing physical damage to other people or animals;
- 2. non-aggressive conduct, which causes the loss or destruction of goods;
- 3. fraud or theft;
- 4. serious violation of the rules.
- The diagnosis requires the presence of at least three characteristic types of behavior in the past 12 months, with at least one type of behavior present in the past 6 months.

Pyromania (pathological fire-setting)

- The presence of several episodes of deliberate and intentional fire.
- I feel a state of tension or emotional excitement before setting fire.
- Fascination, interest, curiosity, or attraction to fire and its associated context (eg, accessories, uses, consequences).
- I feel pleasure, satisfaction, or relief when starting a fire, witnessing its effects, or participating in its aftermath.
- Arson is not committed for financial gain, as an expression of a socio-political ideology, to conceal criminal activity, to express anger or revenge, to improve one's living conditions in response to a delusional idea or hallucination

Kleptomania (Pathological Theft)

Repeated inability to resist urges to steal items, even if they are not needed for personal use or financial value.

Increased subjective feeling of tension immediately before committing the theft and feeling pleasure, satisfaction or relief in committing the theft.

Theft is not committed to express anger or revenge, and does not occur in response to a delusion or hallucination.

The individual steals items despite the fact that they usually have little value to him and that he can afford to pay for them, and often gives them away or throws them away.

Can collect stolen items or sneak them back.

They do not premeditate their thefts and do not consider the risk of arrest.

Theft is committed without the help or cooperation of others.

Ludomania (Pathological Gambling)

It means risking something of value in the hope of gaining something of even greater value.

Problematic behavior characterized by persistent and repeated engagement in gambling, with negative consequences on personal, family, and/or professional life.

The individual may develop a pattern of "recovering one's own losses," characterized by the drive to keep trying to get even after losses.

Trichotillomania (hair pulling disorder)

Characterized by a noticeable lack of hair due to repeated irresistible urges to pull out hairs.

Hair pulling can affect any part of the body covered with hair; the most commonly affected are the scalp, eyebrows and eyelashes, while the less affected areas are the armpits, face, pubic region and peri-rectal area.

They may try to hide or camouflage their hair loss (eg, by using make-up, scarves or wigs).

They may look for a specific type of hair to pull (eg, hairs of a certain texture or color), they may try to pull the hair in a particular way (eg, so that the root comes out intact), may visually examine or act tactilely or verbally on the hair after pulling it out (eg, rolling the hair between the fingers, pulling the hair strand between the teeth, biting the hair into pieces, or swallowing the hair).

Sleep disorders

Insomnia disorder.

Characteristic - unsatisfactory quantity or quality of sleep, accompanied by allegations of difficulty initiating or maintaining sleep.

Sleep problems are associated with discomfort and significantly affect social, occupational or other important areas of functioning.

Sleep disturbance can occur during the course of another mental disorder or medical condition, or independently.

- *Insomnia to fall asleep (or initial insomnia) involves difficulty falling asleep at bedtime.*
- *Sleep maintenance insomnia (or middle insomnia) involves frequent or prolonged awakenings during the night.*
- *Tardive insomnia is characterized by waking up early in the morning and not being able to go back to sleep.*
- *The sleep problem lasts at least 3 nights a week, is present for at least 3 months, and occurs despite adequate sleep conditions.*

Hypersomnia disorder

Excessive sleep duration (eg, prolonged nocturnal sleep or involuntary sleep during the same day),

Impaired quality of wakefulness (tendency to fall asleep while awake, difficulty waking, or inability to stay awake when needed)

Sleep inertia (a period of impaired performance and reduced alertness that follows awakening from a regular sleep episode or short-term sleep). The symptoms of excessive sleepiness are present regardless of the duration of nocturnal sleep. Hypersomnia occurs at least three times a week for at least 3 months.

Narcolepsy

- Recurrent daytime sleepiness or falling asleep suddenly.
- Drowsiness is usually present daily, but must occur at least three times a week for at least 3 months.
- Narcolepsy produces cataplexy, which manifests as brief episodes (seconds to minutes) of sudden, bilateral loss of postural muscle tone, precipitated by emotions, especially laughter or jokes.
- The affected muscles may be those of the neck, mandible, upper or lower limbs, or the whole body, with oscillations of the head in the vertical plane, dropping of the mandible, or total collapse. Individuals are awake and conscious during the episode of cataplexy.

Sleepwalking.

Repeated episodes of complex motor behavior initiated during sleep that include getting out of bed and moving around.

Sleepwalking episodes most commonly begin during slow-wave sleep, in the first third of the night. Alertness and responsiveness are reduced, the individual stares blankly and does not respond to others' attempts to communicate and their efforts to wake him. If awakened during the episode (or upon awakening the next morning), the ability to recall the event is limited. After this episode, there may initially be a brief period of confusion or disorientation, followed by full recovery of cognitive function and appropriate behavior.

Night terror

The recurrent occurrence of repeated sudden awakenings from sleep with a cry or scream of panic.

In the first third of the main period of sleep and lasts 1-10 minutes, especially in children. The events are accompanied by extreme vegetative stimulation and behavioral manifestations of intense fear. During an episode, the individual is difficult to wake up or calm down. He remembers little or no dream at all.

Nightmare disorder

- Nightmares are sequences of long, elaborate, epic dream images that seem real and produce anxiety, fear. The content of the nightmare focuses on attempts to avoid or face imminent danger.
- Nightmares following traumatic experiences can reproduce the dangerous situation ("replicative nightmares"), but in most cases this is not achieved. Upon awakening, the nightmares will be well remembered and can be described in detail. They occur almost exclusively during the rapid eye movement (REM) phase of sleep and as a result can occur throughout sleep, but are more likely in the second half of the night when dreams are longer and more intense.

Deep developmental disorders

childhood autism, Rett's syndrome, Asperger's syndrome.

Behavioural and emotional disorders with onset usually occurring in childhood and adolescence—hyperkinetic

disorders, conduct disorders, oppositional defiant disorder. News, epidemiology, diagnostic criteria, differential diagnosis, treatment.

**Jana Chihai - PhD, Associate Professor,
Faculty of Psychiatry, Narcology and Medical Psychology**

Child and Adolescent Psychiatry

Differences between child psychiatry and general psychiatry (adult):

- The child's existence and emotional development depends on the family or caregivers - cooperation with family members; sometimes written consent
- The developmental stages are very important assessment of the diagnosis
- Use of psychopharmacotherapy is less common in comparison to general psychiatry
- Children are less able to express themselves in words
- The child who suffers from psychiatric problems in childhood can be an emotionally stable person in adulthood, but some of the psychic disturbances can change the whole life of the child and his family

F84 Pervasive Developmental Disorders

Disorders characterized by qualitative abnormalities in reciprocal social interactions and in patterns of communication, and by a restricted, stereotyped, repetitive repertoire of interests and activities.

ICD -10

F84.0 Childhood autism

F84.1 Atypical autism

F84.2 Rett's syndrome

F84.3 Other childhood disintegrative disorder

F84.4 Overactive disorder associated with mental retardation and stereotyped movements

F84.5 Asperger's syndrome

F84.8 Other pervasive developmental disorders

F84.9 Pervasive developmental disorder, unspecified

F84.0 Childhood autism

- Described by Kanner in 1943 as infantile autism
- It manifests itself in early childhood, affecting the daily functioning of the patient and is characterized by a triad of disruption of mutual social relationships, communication skills, behaviors and repetitive actions.

Essential symptoms:

Social

- *Social, but clumsy*
- *Asocial*
- *Antisocial*

Communication

- *Expressive language*
- *Literalness*

Emotional

- *Empathy*
- *Anxiety*

Epidemiology

- According to WHO data, the regional estimates of the ASD incidence are: the average indicator for Europe is 61,9 / 10 000 (range 30.0 - 116.1/10,000), and for American countries it is 65,5 / 10 000 (range 34-90 / 10 000).
- Incidence — 2 cases per 10,000 population.
- The ratio of the incidence of autistic disorders in boys and girls is in the range of 2,6: 1 to 5: 1.
- The last decades have been characterized by an increase in the number of ASDs

New statistics occurred in the case of the incidence of autism spectrum disorder, statistics in the Republic of Moldova

- According to letter 01-1 / 613 from 10.04.2014 and according to the data presented by the MHLSP Specialty Commission in the field of psychiatry, at the end of 2013, there were **220 patients with autism, including 191 children** in the supervision of psychiatrists in the country.
- A worrying increase was observed:
 - for boys 1 to 56 (according to the 2007 study)
1 to 31 (according to the 2012 study)
 - for girls 1 to 204 (according to the 2007 study)
1 to 143 (according to the 2012 study)

Autism rate

Children 8 years old

Before 1990	1 out of 2,000
2007	1 out of 150
2012	1 out of 88
2014, 2016	1 out of 68
2018	1 out of 59 [Birth rate in 2006]

- Why has there been an increase in autism?
- Answer:
 - Better awareness
 - More persons diagnosed, both young and old
 - A real boost – why?

There is no genetic or
biochemical marker

There is a clinical marker:

Interaction Disorders

Multifactorial etiopathogenesis

GENETICS

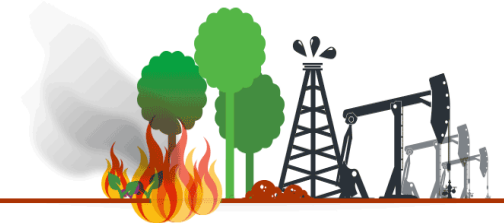
There are only genetic forms, even if to a lesser extent, 20% of cases

EPIGENETICS

The encounter between a genetic predisposition and the environment

Environment

There are environmental factors that can cause autism



Causes - Genetics

Canadian study, 2015

- 85 families with two or more children with autism were examined
- There were investigated 100 variations of genes considered likely to contribute to autism
- 69% of siblings in the spectrum had various autism-related mutations
- 31% overlaps in genetic mutations

Causes - Epigenetics

Stanford University Study, 2011

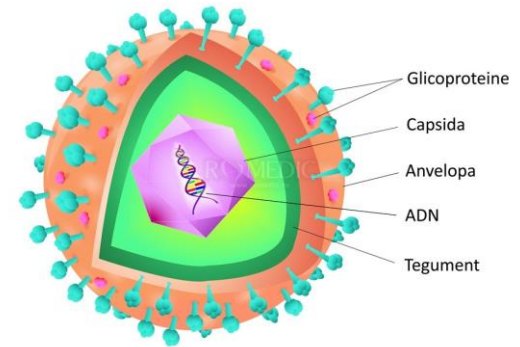
- 192 twins with autism were examined
- The environment contributes 58%
- Genes contribute 38%



Causes – Environment

Virus – pre- or postnatal

- Measles, congenital rubella, herpes simplex virus, mumps, chicken pox and cytomegalovirus.

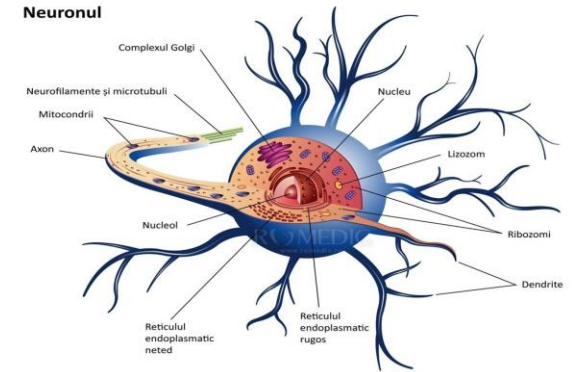


Toxins from food, water and air

- Pesticides
- Exhaust gases



Brain



- Large brain size
 - Too many neurons
 - More severe autism
- Fewer long neurons to connect different areas of the brain

Men versus women

- Before 1990
 - 3 men versus 1 woman
- After 1990
 - 4 (or 5) men versus 1 woman
- Women have a more severe form of autism - this observation is currently debatable.
- **In the last 5 years, I have realized that many women are under-diagnosed.**
 - Possibly, the criteria for autism were developed to diagnose men, not women.
 - Women are more social and many of their "autistic" symptoms are more subtle
 - "Insistence on uniformity" can be interpreted as obsessive-compulsive.
 - "Selective eating" can be interpreted as anorexia.

Frequent medical problems

- **Gastrointestinal**
 - Constipation
 - Chronic diarrhea
 - Bloating , excessive gas
- **Possible causes**
 - Lack of diversity of beneficial bacteria
 - Poor diet, especially in selective eating
 - Low water consumption
- **Immune system**
 - Sinuses – pollen from the air
 - Skin - eczema
 - Food allergies - nausea, headaches
- **Causes**
 - An estimated 30% have a compromised immune system
 - Genetics, toxins

Screening

The screening will be performed if any of the specific symptoms for ASD are found:

- Lack of pronunciation of sounds and syllables up to 12 months of age
- Lack of gestures up to 12 months of age
- Lack of speech up to 16 months of age
- Lack of construction of at least two spontaneous words up to 24 months of age
- Any regression of speech and social skills at any age
- Insufficient social skills for his/her age

For family doctors:

M-CHAT-R test. It contains 20 questions and it is intended for children between **16 and 30 months of age**.



ICD-10 DIAGNOSTIC CRITERIA

1. Qualitative disorders of social interaction:

- inability to use gaze, facial reactions, gestures and posture for communication purposes;
- inability to form interaction with peers based on common interests, emotions, activities;
- inability, despite the present formal premises, to establish age-appropriate communication norms;
- inability to respond emotionally to the social environment, lack of response or deviant response to the feelings of others, unstable integration of social, emotional and communication behaviors;
- inability to spontaneously experience joy, interests, or activity with others.

2. Qualitative changes in communication:

- Delay or complete interruption of the oral speech development, unaccompanied by compensatory facial expressions, gestures, as an alternative form of communication;
- the relative or complete inability to initiate communication or support verbal contact at the appropriate level with other people;
- verbal stereotypes or inappropriate use of words and expressions, the absence of symbolic games at an early age, games with social content.

ICD-10 DIAGNOSTIC CRITERIA

3. Limited and repetitive stereotypical patterns in behavior, interests, and activities

- orientation towards one or more stereotypical interests, abnormal in content, focusing on non-specific, non-functional behavioral forms or on ritual actions, stereotypical movements in the upper limbs or complex movements with the whole body;
- predominant concern for separate objects or non-functional elements of the game material.

4. Non-specific problems

- fears, phobias, arousal, sleep and eating disorders, outbursts of anger, aggression, self-harm.

Differential diagnosis

- Specific chromosomal or genetic syndromes (Rett, fragile X, Angelman, Down, Cornelia de Lange, Cri-du-chat etc)
- Intellectual disability without autism spectrum disorder
- Somatic syndromes (paralysis, deafness, blindness, etc.)
- Obsessive compulsive disorder
- Language disorder and social communication disorder (pragmatic)
- Total change in psychological development (child psychosis)
- Attention Deficit Hyperactivity Disorder (ADHD)
- Early depression
- Attachment disorders
- Dissociative Identity Disorder
- Selective mutism
- Schizophrenia

ASD comorbidities

- About 30% of those diagnosed with ASD suffer from anxiety at the same time.
- Attention Deficit Hyperactivity Disorder (ADHD) (21-72%)
- Obsessive compulsive disorder
- Oppositional behavior disorder
- Developmental coordination disorders
- Avoidant restrictive food intake disorder
- Gastrointestinal disorders 70% of children
- Sleep disorders (40-80%)
- Epilepsy

In the general population only 1-2% of children develop epilepsy,
The prevalence of this disease in those with **ASD** is between 5 and 38%.

Data from the literature:

- *those who have only autism, the risk of 2% up to 5 years and 10% up to 10 years;*
- *those with autism and severe impairment of intellect and development, the risk 5% at 1 year, 15% at 5 years and 25% at 10 years;*
- *those with autism and cerebral palsy have a 20% risk at 1 year, 35% at 5 years and 65% at 10 years.*

ASD comorbidities

- Intellectual disability 8%-27.9%
- Fragile X syndrome 24%-60%
- Tuberous sclerosis 36%-79%
- Neonatal encephalopathy / Epileptic encephalopathy / Infantile spasms 4% - 14%
- Cerebral palsy 15%
- Down syndrome 6%-15%
- Muscular dystrophy 3%-37%
- Neurofibromatosis 4%-8%

How is Autism Spectrum Disorder Treated?

The main goal of treatment is to improve the child's overall ability to function and reach his or her full potential by:

- minimizing the basic symptoms of autism
- facilitating development and learning
- promoting socialization
- reducing maladaptive behaviors
- family support and education

Treatment

- Specific treatment is unknown.
- Autistic children usually require special schooling or residential schooling although attempts of integration are also started.
- Special techniques for teaching autistic children and psychotherapeutic approaches were developed.
- Sometimes antipsychotic drugs and antidepressants are used to cope with aggressive behavior and depression.

The educational intervention includes behavioral therapies:

- **ABA** (Applied Behavioral Analysis),
- **TEACCH** program (Treatment and Education of Autistic and related Communication handicapped Children),
- **PECS** (Picture Exchange Communication System (occupational and physical therapy, communication therapy)).

There are no drugs to cure autism!

Specialists may prescribe drugs for the treatment of coexisting manifestations with autism, such as:

- anxiety,
- depression,
- obsessive-compulsive disorder.

Treatment for gastrointestinal problems

- Fecal transfer – Microbiotherapy treatment
 - Improvements in gastrointestinal problems and behavior
 - It lasts at least 2 years
- Gluten-free diet / without casein
- Probiotics
- Digestive enzymes
- Water consumption
 - Don't feel thirsty

F84.1 Atypical Autism

- A type of pervasive developmental disorder that differs from childhood autism either in age of onset or in failing to fulfill all diagnostic criteria.
- Abnormal and impaired development manifests after age 3 years or there are impairments in communication and stereotyped behavior is present, but emotional response to caregivers is not affected.
- Atypical autism is diagnosed often in profoundly retarded individuals.
 - Atypical childhood psychosis
 - Mental retardation with autistic features

Symptoms and syndromes (Diagnosis)

Diagnostic
criteria for
AA:
deepening
autistic
isolation to
"extremely
severe"
autism

the regression of the higher psychological functions takes place:

- speech,
- motricity,
- care skills,
- game,
- the emotional sphere is not developed,
- catatonic motor stereotypes are present,
- there are stereotypic hand movements such as washing, wiping, are common: slaps on the chin and fluttering hands,
- the child's mental development stops,
- the speech is not formed, echolalia is possible,
- thinking remains concrete,
- the oligophrenic defect develops,
- delirium and hallucinations in childhood are missing.

Differential diagnosis

- Schizophrenia
- Intellectual Disability (ID)
- Auditory organs defect (sensory)
- Disorders in development of speech
- The negative evolution of the disease and the increase of the cognitive deficit allow the establishment of the diagnosis of infantile malignant schizophrenia (F20.8xx3)
- Psychotic forms of atypical autism with decreased intellect (F84.11, F70)
- Non-psychotic forms of AA (F84.11, F70), comorbidities with ID are attested in genetic syndromes (Martin-Bell, Down, Williams, Angelman, Aotos, etc.) and diseases of metabolic origin (phenylketonuria, tuberous sclerosis, etc.)

F84.2 Rett's Syndrome (Described by Rett 1964)

- Rett syndrome (RS) is a neurodegenerative developmental disorder associated with the X chromosome, linked to mutations in the MECP2 gene, occurs mainly in female patients.
- Normal early development is followed by partial or complete loss of speech and of skills in locomotion and use of hands, together with deceleration in head growth.
- In most cases onset is between 7 and 24 months of age.
- Loss of purposive hand movements, hand-wringing stereotypies and hyperventilation.
- Social interaction is poor in early childhood, but can develop later.
- Motor functioning is more affected in middle childhood, muscles are hypotonic, kyphoscoliosis and rigid spasticity in the lower limbs occurs in majority of cases.
- Aggressive behaviour and self injury are rather rare, the antipsychotic drugs for the control of challenging behaviour is not often needed.

Risk factors and epidemiology

- RS is found at 1:10000 - 1:15000 girls (Hagberg, Hagberg, 1997) [3], in particular cases it may be present in boys.
- Mutations were detected in 80-95% of cases of classical RS. At 99.5%, RS occurs due to the pathology of the MECP2 gene, or its inheritance from one of the parents with mosaicism.
- If the mother of the sick child has a pathological MECP2 gene, then the risk of getting sick in sibs is 50%.

Evolution

Stage I:

- regression (stagnation) (6–18 months) in the development of motor skills and head growth rates, lack of interest in play, loss or lack of eye contact; muscular hypotonia; twisting hands; unusual calm; breath-holding with sound production.

Stage II:

- regression in neuropsychic development (1- 4 years): autism-like behavior, irritability, agitation, stereotypical hand movements; apnea alternating with hyperventilation; seizures and the emission of sounds reminiscent of convulsive equivalents are possible, the child stops talking; sleep disorders, periodic strabismus.

Evolution

Stage III:

- pseudo-stagnation (2-10 years): It is characterized by improved behavior. The emotional and eye contact appears, use of hands, the sleep improves. There is mental retardation, mental disorders, stereotypical hand movements, extrapyramidal disorders, intensified stiffness, bruxism, ataxia, hyperkinesia. These conditions are accompanied by motor dysfunction, scoliosis and possibly seizures. Respiratory difficulties are possible; a small weight gain in terms of a good appetite;

Stadiul IV:

- progression of motor disorders (> 10 years). The eye contact is maintained. Seizures become rarer, emotional communication is possible. But there is a sharp reduction in motor activity, loss of walking ability. Growth retardation occurs without delay in sexual maturation.

The most common clinical signs

- Stereotypical hand movements, qualified as the most characteristic signs of Rett syndrome.
- Ataxia and apraxia.
- Microcephaly.
- Cognitive activity is extremely limited, patients have extremely limited intellectual, speech and adaptive abilities.
- Breathing problems (hyperventilation, apnea).
- Scoliosis.
- Seizures in 50-80% of cases.

RS is classified in 2 types:

- classic
- atypical

Differential diagnosis

- Angelman syndrome,
- Prader-Willi syndrome,
- Patau syndrome,
- Landau Kleffner syndrome,
- Lennox-Gastaut syndrome,
- fetal alcohol syndrome,
- cerebral palsy,
- metachromatic leukodystrophy,
- neuronal ceroid lipofuscinosis,
- ornithine transcarbamylase deficiency,
- phenylketonuria,
- spastic ataxia,
- tuberous sclerosis,
- ASD,
- encephalitis.

Treatment

Non-drug therapy:

- optimization of individual capabilities,
- intense verbal and physical therapy,
- therapeutic gymnastics,
- hippotherapy, hydrotherapy,
- alternative communication methods (computer technologies and programs), music therapy.

Drug therapy:

- symptomatic treatment (seizures, agitation, sleep disturbances, apnea, stereotypical hand movements, gastrointestinal disorders),
- various groups of drugs are used: L-carnitine, magnesium, melatonin, zaleplone, zolpidem, propranolol, metoclopramide, antiepileptic preparations (carbamazepine, valproic acid, topiramate, lamotrigine).

F84.5 Asperger's Syndrome

- Described by Asperger as autistic psychopathy in 1944.
- Characterized by the same kind of impairment of social activities and stereotyped features of behavior as is described in autistic children. There is no delay of speech and cognitive development. The condition occurs predominantly in boys (8:1).
- Often associated with marked clumsiness.
- There is a strong tendency for the abnormalities to persist into adolescence and adult life.
- Psychotic episodes occasionally occur in early adult life.
 - Autistic psychopathy
 - Schizoid disorder of childhood

Symptoms and syndromes (Diagnosis)

- Difficulties in social connections, emotional coldness,
- Disorders of communication skills (body language is misinterpreted, gestures are restricted and often erroneous),
- Speech and hearing disorders (pedantic speech, strange aspects in height, intonation, speech rhythm, incorrect understanding of the subtleties of language, auditory dissonance),
- Pathology of sensory sensitivity (abnormal sensitivity to sound, sense, taste, sight, smell, temperature, extreme or reduced sensitivity to pain, food sensitivity).
- *Clinical picture in AS can be:*
 - with/without manifested intellectual disorders
 - with/without language disorders
 - with neuropsychotic or behavioral disorder
 - with catatonia.
- In the clinical picture may be present:
 - pathology of hand movements and imitation of movements (modified writing, disorder of ball playing skills)

Differential diagnosis

- adrenal hypoplasia,
- the consequences of birth trauma,
- cognitive deficit,
- intellectual insufficiency,
- educational disorders,
- dissociative identity syndrome,
- generalized anxiety syndrome,
- obsessive-compulsive disorder, Rett's syndrome,
- fetal alcohol syndrome,
- chromosome X fragile,
- trisomy X,
- hearing disorders.
- dyslexia, hyperlexia, identity disorders,
- speech and language disorders, injury or dysfunction of the right hemisphere of the brain, sensory integration disorder, collagenosis.

Treatment

Non-drug therapy:

- Communication and language strategies
- learning social skills
- family psychoeducational therapy
- speech therapy
- occupational therapy,
- physiotherapy and behavioral therapy
- applied behavioral analysis (ABA)

Drug therapy:

- symptomatic treatment (depression, dysthymia, bipolar disorder, Tourette's syndrome, anorexia nervosa and schizophrenia, obsessive-compulsive disorder or generalized anxiety disorder)
- The FDA has approved the application of risperidone and aripiprazole in children in the treatment of irritability, aggression, stereotypes.
- Children with ASD often have sleep disorders that can be alleviated with melatonin.

F84.3 Other Childhood Disintegrative Disorder

- These are very rare developmental disorders with a short period of normal development before onset. The child loses his acquired skills within few months.
- General loss of interest in the environment, stereotyped, repetitive motor mannerisms, and autistic-like abnormalities in social interaction and communication.
- These children usually remain without speech and are unable to lead independent lives.
 - Dementia infantilis
 - Disintegrative psychosis
 - Heller's syndrome
 - Symbiotic psychosis

Behavioural and Emotional Disorders with Onset Usually Occurring in Childhood and Adolescence (F90-F98)

- F90 Hyperkinetic disorders
- F91 Conduct disorders
- F92 Mixed disorders of conduct and emotions
- F93 Emotional disorders with onset specific to childhood
- F94 Disorders of social functioning with onset specific to childhood and adolescence
- F95 Tic disorders
- F98 Other behavioural and emotional disorders with onset usually occurring in childhood and adolescence

F90 Hyperkinetic Disorders

- F90 Hyperkinetic disorders
- F90.0 Disturbance of activity and attention
- F90.1 Hyperkinetic conduct disorder
- F90.8 Other hyperkinetic disorders
- F90.9 Hyperkinetic disorder, unspecified

F90 Hyperkinetic Disorders

- **Hyperkinetic disorders** occur mostly in the first five years of life, and they are several times more frequent in boys than in girls
- The main marks of the syndrome are:
 - *inattention*
 - *impulsivity*
 - *hyperactivity*
- Population studies suggest that ADHD occurs in approximately 5% of children and 2.5% of adults.
- ADHD is a common condition among young people (children and adolescents), with a prevalence rate of about 3.4% (95% BI 2.6-4.5).
- The prevalence rate among adults is less obvious and is estimated between 2.5-5%, and among the elderly (over 65 years) - it is over 3%.

Etiology

- genetic predisposition, maternal deprivation, environmental toxins or intrauterine or postnatal brain damage
- About 50% of children with the hyperkinetic syndrome have so-called “soft signs” and minor abnormalities in EEG
- IQ: from subnormal to high intelligence
- Specific learning disabilities often coexist with the hyperkinetic syndrome
- Types of hyperactivity syndrome:
 - disturbance of activity and attention
 - hyperkinetic conduct disorder

Risk factors

Temperament factors:

- low level of control inhibition and behavioral restriction;
- negative emotion and / or with a high level of search for the new.

Environmental factors:

- Very low birth weight (less than 1500 grams);
- A small number of cases may be associated with reactions to dietary issues;
- There may be a history of child abuse, neglect, and frequent change of orphanages;
- exposure to neurotoxins (e.g., lead), infections (e.g., encephalitis), or alcohol exposure in utero.

Genetic and physiological factors:

- increased prevalence among first-degree relatives of individuals with ADHD.
- Possible influences on ADHD symptoms can be considered visual and auditory disorders, metabolic abnormalities, sleep disorders, nutritional deficiencies and epilepsy.
- ADHD is not associated with specific physical features, although some minor physical abnormalities may have a relatively high frequency (e.g., hypertelorism, ogival-arch palatal, low-set ears).
- Subtle motor delays and other mild neurological signs may occur.

Screening

- Clinical interview
- Behavior assessment scales according to ICD-10 and DSM-5 criteria and according to evaluation scales
- Assessing the level of intelligence and performance
- Family context assessment
- Neuropsychological evaluation

Diagnosis

- Symptoms must have been present before the age of 12 years.
- There were several symptoms of inattention or hyperactive-impulsive in two or more situations (for example, at home, school or work; with friends or relatives; in other activities).
- In adulthood, some symptoms decrease (especially observable hyperactivity), but 60% of symptoms remain present, and most (90%) suffer from dysfunction in adulthood.
- ADHD is present when symptoms occur in multiple contexts and limit functioning.

Types of ADHD:

- combined,
- with attention deficit,
- hyperactive / impulsive.

Severity:

- mild,
- moderate,
- severe.

Diagnosis

Inattention:

A. 6 (or more) of the following symptoms:

- *Often fails to pay close attention to detail or makes mistakes through negligence at school, work, or other activities.*
- *Often has difficulty maintaining his/her focus on tasks or play activities.*
- *Often does not seem to listen when spoken to directly.*
- *Often fails to follow instructions and fails to complete homework, household chores or duties at work.*
- *Often has difficulty organizing tasks and activities.*
- *Often avoids, dislikes or is reluctant to get involved in tasks that require sustained mental effort.*
- *Often misses things needed for tasks or activities.*
- *Is often easily distracted by external stimuli.*
- *Often forgets some things in his/her daily activities.*

B. Persists for at least 6 months, being of a grade that is not in line with the level of development and has a direct negative impact on social and academic / occupational activities.

Diagnostic

Hyperactivity and impulsivity:

A. 6 (or more) of the following symptoms:

- *Often fidgets with hands or feet or squirms when in his or her seat.*
- *Often gets up from his seat in situations where he/she has to sit still.*
- *Often runs and climbs somewhere in situations when it is not appropriate to do so.*
- *Often cannot play or cannot be involved quietly in leisure activities.*
- *Is often "in motion", acting as if "driven by an engine", other people may find him/her anxious or difficult to keep up with them.*
- *Often talks excessively.*
- *Often blurts out an answer before the question is over.*
- *Often has difficulty waiting for his or her turn.*
- *Often interrupts or bothers others.*
- *Start using other people's things without asking or getting permission.*

B. Persists for at least 6 months, being of a grade that is not in line with the level of development and has a direct negative impact on social and academic / occupational activities.

Treatment

- Parents and teachers have to be advised how to cope with hyperactive children.
- Nootropic drugs and mild doses of antipsychotics are sometimes prescribed.
- Stimulant drugs as methylphenidate sometimes have the paradoxical effect, according to theory, that stimulants act by reducing the excessive, poorly synchronized variability in the various dimensions of arousal and reactivity seen in ADHD.
- Stimulants are the drugs of first choice.

treatment

- Behavioral interventions
- first-line therapy for preschool-aged children and adjunct therapies for school-aged children and adults
- Medication
- Stimulants, amphetamine derivatives
- Drugs: Methylphenidate, dextroamphetamine, methamphetamine, lisdexamfetamine
- Indication
- ADHD: first-line therapy for patients ≥ 6 years of age
- narcolepsy, binge eating disorder
- Mechanism of action: indirect and central sympathomimetic activity \rightarrow increased release and blocked reuptake of norepinephrine and dopamine (minor effect on serotonin) \rightarrow increased concentration in the synaptic cleft
- Effect
- Increased mental performance: improved concentration, cognition
- Side effects
- Adverse sympathomimetic effects
- Anxiety, agitation, restlessness, bruxism, tics
- Difficulties falling asleep (insomnia)
- Reduced appetite; weight loss
- Increased arterial blood pressure, tachycardia
- reduces the threshold for seizures and tics

- Atomoxetine (nonstimulant)
- Substance class: selective norepinephrine reuptake inhibitor (NRI)
- Indications
- Second-line therapy for patients with ADHD \geq 6 years of age

!!Atomoxetine increases the risk of suicidal actions in children and adolescents, therefore, close monitoring (especially at the beginning of the therapy) is indicated.

Other:

clonidine, guanfacine, bupropion

Prognosis:

- In 35–65% of patients, symptoms of ADHD and their associated functional impairment will persist into adulthood.



F90-F98 Behavioral & Emotional Disorders with onset usually occurring in Childhood & Adolescence

F90- Hyperkinetic Disorder

F91- Conduct Disorders

F92- Mixed Disorders of Conduct & Emotions

F93- Emotional Disorders with onset specific to childhood

F94- Disorders of social functioning with onset specific to childhood & adolescence

F95- Tic Disorders

F98- Other Behavioral & Emotional disorders with onset usually occurring in childhood & adolescence

F99- Unspecified Mental Disorder

F91 Conduct Disorders

Conduct disorders are diagnosed when the child is showing persistent and serious dissocial or aggressive behavior patterns, such as excessive fighting or bullying, cruelty to animals or other people, destructiveness to property, stealing, lying, and truancy from school, and running away from home.

F91	Conduct disorders
F91.0	Conduct disorder confined to the family context
F91.1	Unsocialized conduct disorder
F91.2	Socialized conduct disorder
F91.3	Oppositional defiant disorder
F91.8	Other conduct disorders
F91.9	Conduct disorder, unspecified.

F91.3 Oppositional defiant disorder

- Children under the age of 9 to 10 years, showing persistently negativistic, provocative and disruptive behavior.
- The more aggressive conduct disorders are not present, general law and rights of other people are respected.
- This type of behavior is often directed towards a new member of the family - i.e. stepfather.

Treatment

- The family situation should be considered and its relation to the child's disorder. Family therapy is necessary to enhance emotional support and understanding.
- In the cases of dysfunctional families, abused or neglected children, adoptive homes, foster care or supervised residence is recommended.
- Court intervention is required for the placement.
- Unanimously accepted consensus - early intervention with prevention programs carried out in the living environment of these children.
- Drugs – ISRS (Sertraline, Paroxetine), antipsychotics (**Risperidone**, Aripiprazole, Haloperidol), thymostabilizers (**Carbamazepine**, Sodium Valproate).

Tic disorders

ADHD

Fragments of normal movements

Generally increased motor activity

Circumscribed functional muscle groups

General motor hyperactivity

Suddenly occurring (independent of waiting situation)

Slowly increasing (intensified by waiting situation)

Fixed pattern of quick actions

Disorganised, tempo change

Badly modulated

Badly modulated

Uniformly repeated (often in bouts)

Temporally irregular-intermittent (changing intensity)

1Mental retardation.

2. Disorders of social functioning with onset in childhood and adolescence - elective mutism.

--Tick disorders.

-Eating disorders.

-Nonorganic enuresis.

-Nonorganic encopresis

Child and Adolescent Psychiatry

Differences of Child psychiatry from adult psychiatry:

- The child's existence and emotional development depends on the family or care givers - cooperation with family members; sometimes written consent
- The developmental stages are very important assessment of the diagnosis
- Use of psychopharmacotherapy is less common in comparison to adult psychiatry
- Children are less able to express themselves in words
- The child who suffers by psychiatric problems in childhood can be an emotionally stable person in adulthood, but some of the psychic disturbances can change a whole life of the child and his family

1. Intellectual disability (mental retardation)

Intellectual disability refers to a developmental disability presenting in infancy or the early childhood years, although in some cases it cannot be diagnosed until the child is older than **5 years** of age, when standardized measures of developmental skills become more reliable and valid ([Moeschler *et al.*, 2014](#)).

Epidemiology of intellectual disability

Level of IQ is a key criterion in defining intellectual disability, with IQ tests designed to be normally distributed with a mean of 100 and a standard deviation of 15.

In DSM-5 intellectual disability is considered to be approximately two standard deviations or more below the population, which equals an IQ score of about 70 or below, approximately 2.3% of the population ([Simonoff et al., 2015](#))

Epidemiology of intellectual disability

Placing the diagnostic criteria on both IQ and adaptive functioning allows for considerable individual differences in presentation and diagnosis, as these differences can be within syndromes and dependent on family functioning and levels of engagement with activities of daily living; therefore the boundaries between the categories of **mild, moderate, and severe intellectual disability** are not firmly fixed.

A current estimate for the UK is 9–14 in 1000 children, and 3–8 in 1000 adults ([Cooper and Smiley, 2009](#)).

Etiology of intellectual disability

In a classic study of the 1280 mentally retarded people, [Penrose \(1938\)](#) found that most cases were due not to a single cause but to a hypothesized interaction of multiple genetic and environmental factors.

This conclusion still broadly applies, especially for mild intellectual disability.

Conversely, a specific cause for severe intellectual disability is increasingly often found. [Table 1](#) lists the main categories of intellectual disability etiology, and some examples of each.

The types of causes of intellectual disability

Tabel 1

Genetic category

Chromosomal disorders

Trisomies

Down's syndrome, Edward's syndrome

Other aneuploidies

Turner's syndrome (XO), Klinefelter's syndrome (XXY)

X-linked

Fragile X syndrome, Coffin–Lowry syndrome

Copy number variation

Angelman syndrome (some cases), velocardiofacial syndrome, cri du chat

The types of causes of intellectual disability

Tabel 1

Genetic category

Single gene disorders

Autosomal dominant	Neurofibromatosis, tuberous sclerosis
Autosomal recessive	Phenylketonuria, Tay–Sachs disease, Hurler’s syndrome
X-linked	Rett syndrome

The types of causes of intellectual disability

Tabel 1

Genetic category

Mitochondrial disorders

Complex (non-Mendelian) disorders

The types of causes of intellectual disability

Tabel1

Environmental causes

Prenatal	
Infection	Rubella, toxoplasmosis, syphilis
Toxins	Fetal alcohol syndrome, lead poisoning
Maternal	Pre-eclampsia, placental insufficiency
Nutritional	Iodine deficiency, severe malnutrition

The types of causes of intellectual disability

Tabel1

Environmental causes

Perinatal	
Obstetric complications	Brain injury, cerebral palsy
Obstetric complications	

The types of causes of intellectual disability

Tabel 1 Environmental causes

Postnatal

Infection

Injury

Impoverished
environment

Miscellaneous

Hydrocephalus

Microcephaly

Spina bifida

Inborn
errors of
metabolism

Mucopolysaccharidoses, Lesch–Nyhan
syndrom

Intellectual Disability (Intellectual developmental disorder)

The DSM-5 Criteria states that an individual must have deficits in the following main areas, which are:

1. Skills required for intellectual functioning.

Impairments in development of intellectual functioning must be confirmed by means of standardized psychometric testing

2. Skills required for independent social living, such as having the ability to handle activities of daily living independently.

Intellectual Disability (Intellectual developmental disorder)

The DSM-5 Criteria specified that the onset of these deficits must be within the developmental period of any individual.

Intellectual disability has been further subclassified within the DSM-5 as Profound, Severe, Moderate and Mild types.

The current terminology of Intellectual disability corresponds to the ICD-10 terminology of intellectual developmental disorders.

It is crucial to take note that the classification of subtypes is based on the levels of support an individual requires with regards to independent social living, and not in accordance to the psychometric scores achieved on psychometric testing.

Clinical features of intellectual disability

The most frequent manifestation of intellectual disability is uniformly low performance on all kinds of intellectual tasks, including

- ❖ learning,
- ❖ short-term memory,
- ❖ the use of concepts,
- ❖ and problem-solving.

Specific abnormalities may lead to particular difficulties.

Clinical features of intellectual disability

For example, lack of visuospatial skills may cause practical difficulties, such as inability to dress, or there may be disproportionate difficulties with language or social interaction, both of which are strongly associated with behaviour disorders.

Clinical features of intellectual disability

Among children with intellectual disability, the common behaviour problems of childhood tend to occur when they are older and more physically developed than children in the general population, and the problems last for longer.

Such behaviour problems usually improve slowly as the child grows older, but may be replaced by problems that start in adulthood.

Mild intellectual disability (IQ 50–70)

People with mild learning disability account for about 85% of those with learning disability.

Usually their appearance is unremarkable and any sensory or motor deficits are slight.

Most people in this group develop more or less normal language abilities and social behaviour during the preschool years, and their learning disability may never be formally identified.

Mild intellectual disability (IQ 50–70)

In adulthood, most people with mild learning disability can live independently in ordinary surroundings, although they may need help in parenting and coping with family responsibilities, housing, and employment, or when under unusual stress.

Moderate intellectual disability (IQ 35–49)

People in this group account for about 10% of those with learning disability.

Many have better receptive than expressive language skills, which is a potent cause of frustration and behaviour problems.

Speech is usually relatively simple, and is often better understood by people who know the patient well.

Many make use of simplified signing systems such as Makaton sign language.

Moderate intellectual disability (IQ 35–49)

Activities of daily living such as dressing, feeding, and attention to hygiene can be acquired over time, but other activities of daily living, such as the use of money and road sense, generally require support. Similarly, supported employment and residential provision are the rule.

Severe intellectual disability (IQ 20–34)

is difficult to estimate IQ accurately when the score is below 34 because of the difficulty in administering the tests in a valid manner to individuals in this group.

Estimates suggest that people with severe learning disability account for about 3–4% of the learning disabled.

In the preschool years their development is usually greatly slowed.

Severe intellectual disability (IQ 20–34)

Eventually many people can be helped to look after themselves under close supervision, and to communicate in a simple way—for example, by using objects of reference.

As adults they can undertake simple tasks and engage in limited social activities, but they need supervision and a clear structure to their lives.

Profound intellectual disability (IQ below 20)

People in this group account for 1–2% of those with intellectual disability.

Development across a range of domains tends to be around the level expected of a 12-month-old infant. Accordingly, people with profound intellectual disability are a highly vulnerable group who require considerable support and supervision, even for simple activities of daily living.

2. Disorders of Social Functioning with Onset Specific to Childhood and Adolescence

This group of disorders is characterized by abnormalities in social functioning which are not associated with severe deficit and social incapacity found in pervasive developmental disorders.

F94 Disorders of social functioning with onset specific to childhood and adolescence

F94.0 Elective mutism

F94.1 Reactive attachment disorder of childhood

F94.2 Disinhibited attachment disorder of childhood

F94.8 Other childhood disorders of social functioning

F94.9 Childhood disorder of social functioning, unspecified

F94.0 Elective Mutism

- Characterized by a marked, emotionally determined selectivity in speaking, such that the child demonstrates a language competence in some situations but fails to speak in other (definable) situations
- These children show specific personality features as social anxiety and oversensitivity.
- Treatment:
 - psychotherapy
 - in severe cases anxiolytic drugs

In this condition, sometimes called *elective mutism*, a child consistently refuses to speak in certain social situations, although they do so normally in others. Usually speech is normal in the home but lacking at school. There is evidence that, although these children are able to speak in some situations, they do have lower scores on standardized measures of language than their peers.

These children often have a comorbid anxiety disorder, usually social phobia, and so in DSM-5 this condition has now been placed with the anxiety disorders.

The condition usually begins between 3 and 5 years of age, after *normal speech has been acquired*. Although reluctance to speak is not uncommon among children starting school, clinically significant elective mutism is rare, probably occurring in about 1 per 1000 children.

Assessment is difficult because the child often refuses to speak to the psychiatrist, so that diagnosis depends to a large extent on the parents' and other informant accounts. When questioning the parents, it is important to ask whether speech and comprehension are normal at home. Treatment approaches aim to lower the anxiety that a child has for speaking in certain situations and increase the contexts in which the child may speak comfortably.

In general behavioural treatments, cognitive behaviour therapy and/or play therapy will be the first choice of intervention. Selective mutism is persistent, with a remission rate of only 58% 13 years after first referral and high rates of phobia and social anxiety, as well as increased risk for depression and substance misuse in unresolved cases (Norbury *et al.*, 2015).

F94.1 Reactive Attachment Disorder of Childhood

- ❖ Characterized by abnormal social responses of the child to the care givers that develop before age of 5 years.
- ❖ The disorder is often an outcome of a parental neglect, abuse or mishandling and deprivation in institutional care.
- ❖ The child shows fearfulness, poor social interaction with peers, aggressive responses and self injurious behaviour.

F94.1 Reactive Attachment Disorder of Childhood

- ❖ The language development could also be delayed and impaired physical growth can occur.
- ❖ Treatment:
 - ❖ avoidance of mishandling in institutional care
 - ❖ good foster homes and adoption policy
 - ❖ social vigilance to inept parenting

F94.2 Disinhibited Attachment Disorder of Childhood

- ❖ Abnormal social functioning develops during first 5 years in children who have no opportunity of emotionally stable relationship with care givers.
- ❖ The disturbance can be recognized in children growing from infancy in institutions or experiencing extremely frequent changes in care givers.
- ❖ To avoid this developmental disturbance good adoption policy is necessary. Non - attachment institutional care should be excluded from praxis.

F95 Tic Disorders

- ❖ A tic is an involuntary, rapid, recurrent, nonrhythmic motor movement (usually involving circumscribed muscle groups) or vocal production that is of sudden onset and that serves no apparent purpose
- ❖ Tics are experienced as irresistible, but can be suppressed for shorter periods of time
- ❖ Conditions of diagnosis are also a lack of neurological disorder, repetitiveness, disappearance during sleep, lack of rhythmicity, and lack of purpose

F95 Tic Disorders

- Simple motor tics: eye-blinking, neck-jerking, shoulder-shrugging, facial grimacing
- Simple vocal tics: throat clearing, barking, sniffing, hissing
- Complex motor tics: jumping and hopping
- Complex vocal tics: repetition of particular words or sentences, and sometimes the use of socially unacceptable (often obscene) words (coprolalia), and the repetition of one's own sounds or words (palilalia)

Classification of Tic Disorders

F95 Tic disorders

F95.0 Transient tic disorder

F95.2 Combined vocal and multiple motor tic disorder (de la Tourette)

F95.8 Other tic disorders

F95.9 Tic disorder, unspecified

Treatment

- Sleep therapy
- Hypnotherapy
- Hydrotherapy
- Neurosurgery
- Shock therapy

- Antipsychotic drugs
- Antidepressants
- Nootropic drugs

- Behavioural and cognitive therapy
- Cooperation with the family is important.

F98 Other Behavioural and Emotional Disorders with Onset Usually Occurring in Childhood and Adolescence

- F98** Other behavioural and emotional disorders with onset usually occurring in childhood and adolescence
- F98.0 Nonorganic enuresis
- F98.1 Nonorganic encopresis
- F98.2 Feeding disorder of infancy and childhood
- F98.3 Pica of infancy and childhood
- F98.4 Stereotyped movement disorders
- F98.5 Stuttering (stammering)
- F98.6 Cluttering
- F98.8 Other specified behavioural and emotional disorders with onset usually occurring in
- F98.9 Unspecified behavioural and emotional disorders with onset usually occurring in childhood and adolescence

F98.0 Nonorganic Enuresis

- The child is not able of voluntary bladder control during the day (enuresis diurnal) or during the night (enuresis nocturnal)
- The enuresis may be present from birth (enuresis primaria), or it may occur after a period of time of acquired bladder control (enuresis secundaria)
- There is no neurological disorder or structural abnormality of urinary system, or lack of bladder control is not due to epileptic attacks or cystitis or diabetic polyuria
- Enuresis is not diagnosed in a child less than 4 years of mental age
- Emotional problems may arise as a secondary consequence of enuresis

Epidemiology

Estimates of prevalence vary, depending on the definition and method of assessment. In the UK, the prevalence of nocturnal enuresis occurring once a week or more is about 10% at 5 years of age, 4% at 8 years, and 1% at 14 years.

Epidemiology

Similar figures have been reported from the USA. Nocturnal enuresis occurs more frequently in boys. Daytime enuresis has a lower prevalence and is more common in girls than in boys. More than 50% of daytime wetters also wet their beds at night (Butler, 2008).

Aetiology

- ❖ Nocturnal enuresis occasionally results from physical conditions, but more often appears to be caused by delay in the maturation of the nervous system, either alone or in combination with environmental stressors.
- ❖ There is some evidence for a *genetic contribution*; about 70% of children with enuresis have a first-degree relative who has been enuretic.

Aetiology

Also, concordance rates for enuresis are twice as high in monozygotic as in dizygotic twins (Butler, 2008).

Some family influences include exposure to family adversity and stress in early childhood, parenting style, and difficulties in toilet training— either due to child temperamental factors, parental factors, or a combination of both.

Aetiology

- ❖ Although most enuretic children are free from psychiatric disorder, the proportion with psychiatric disorder is greater than that of other children and it can be associated with low self-esteem if prolonged.
- ❖ There is evidence that early childhood difficult temperament (problems adapting to change, high intensity, and negative mood) and behaviour problems (conduct problems ,hyperactivity, and low levels of prosocial behaviour) are risk factors for later bedwetting ([Joinson *et al.*, 2015](#)).

Aetiology

- ❖ Enuresis is more frequent in large families living in overcrowded conditions.
- ❖ Stressful events are associated with the onset of secondary enuresis.
- ❖ Rigid or other particular kinds of training have not been shown to improve outcomes.

Treatment

- ❖ Mild restriction of fluids before bedtime
- ❖ Waking for the toilet during the night
- ❖ Rewarding success and not to focus attention on failure
- ❖ Antidepressants

Treatment

- ❖ **Enuresis alarms.** Children who do not improve with these simple measures may be treated with an *enuresis alarm* with high reported success rates.
- ❖ **Medication.** The synthetic antidiuretic hormone *desamino-D-arginine vasopressin (desmopressin)* has been used in the treatment of nocturnal enuresis in children over 5 years of age.
- ❖ It can be administered as a tablet or in a nasal spray.
- ❖ In one clinical trial, about 50% of the enuretic children treated with intranasal hormone became dry, and good results have been reported for an oral preparation.

Treatment

Medication.

However, patients relapse when treatment is stopped. Side effects of the oral preparation include rhinitis and nasal pain; other side effects are nausea and abdominal pain. For this reason it is often used for temporary relief at important times—for example, during an overnight stay with friends.

It is also possible to use desmopressin in conjunction with the enuresis alarm to speed the acquisition of bladder control.

Imipramine and anticholinergic agents have also been used.

F98.1 Nonorganic Encopresis

- ❖ The diagnosis involves repeated intended or unintended passage of faeces in places not appropriate for that purpose.
- ❖ The etiology:
 - ❖ result of inappropriate toilet training
 - ❖ the child is able of bowel control, but because of different reasons is refusing to defecate in appropriate places
 - ❖ physiological problems or emotional problems
- ❖ Encopresis can be accompanied by smearing of faeces over the body or environment or is a part of anal masturbation. It occurs in children with emotional or behavioural disturbances or mentally retarded persons

Aetiology

Faecal soiling has several causes.

- **Constipation with overflow is a common cause.**

Constipation has many causes, but common ones are a low-fibre diet, pain on defaecation (due, for example, to an anal fissure), or refusal to pass faeces as a form of rebellion.

Hirschsprung's disease is an uncommon but important cause.

Soiling results when, after prolonged constipation, liquid faeces leak round the plug of hard faeces in the rectum.

- **Fear of using the toilet.**

Occasionally children who have no pain on passing faeces fear sitting on the toilet for other reasons—for example, because they believe that some harmful creature lives there.

Shy or bullied children may fear going to the toilet at school.

Aetiology

Faecal soiling has several causes.

- *Failure to learn bowel control.* This can occur in children with intellectual disability or children of normal intelligence whose training has been inconsistent or inadequate.
- *Stress-induced regression.* Children who have recently learned control may lose it as a result of a highly stressful experience, such as sexual abuse.

Aetiology

Faecal soiling has several causes.

● *Rebellion.* Some children appear to defaecate deliberately in inappropriate places, and some children smear faeces on walls or elsewhere.

Usually the family has many social problems, and often the child has other emotional or behavioural difficulties.

The act appears to be a form of aggression towards the parents/carers, although this intention is usually denied by the child.

Treatment

- Psychotherapy
 - to reward success
 - the child is taught to establish more normal bowel habit, for example by sitting on the toilet regularly after the meals
- Anxiolytics or antidepressants

F98.2 Feeding Disorder of Infancy and Childhood

- Feeding disorder generally involves food refusal and extreme faddiness in the presence of an adequate food supply, a reasonably competent caregiver, and the absence of organic disease.
- Can be associated with rumination (repeated regurgitation without nausea)
- Occurs often in children in institutional care or mentally retarded

F98.3 Pica of Infancy and Childhood

- Persistent eating of non - nutritive substances (soil, wall paint)
- Common in mentally retarded children or very young children with normal intelligence level

F98.3 Pica of Infancy and Childhood

Pica is the repeated eating of non-nutritional, 'non-food' substances. A wide range of substances may be ingested, such as hair, paper, or stones. In some cases, the ingested substance may be correcting a mineral deficiency. Pica is particularly common in people with intellectual disability, and is also seen in several other psychiatric disorders, including autism and schizophrenia. It is also associated with pregnancy and iron deficiency. In each of these is sufficiently persistent or severe to require clinical attention.

Pica can lead to medical or surgical emergencies due to poisoning, obstruction, nutritional deficiencies, or parasitosis. The differential diagnosis includes anorexia nervosa, factitious disorder, and personality disorder.

Behavioural approaches are usually used; SSRIs or atypical antipsychotics are sometimes tried in refractory cases.

Eating disorders

- **F50.0 Anorexia nervosa**
- **F50.1 Atypical anorexia nervosa**
- **F50.2 Bulimia nervosa**
- **F50.3 Atypical bulimia nervosa**
- **F50.4 Overeating associated with other psychological disturbances**
- **F50.5 Vomiting associated with other psychological disturbances**
- **F50.8 Other eating disorders**
- **F50.9 Eating disorder, unspecified**

Anorexia nervosa

The main features of anorexia nervosa are:

- Very low body weight (defined as being 15% below the standard weight, or body mass index (BMI) of less than 17.5 kg/m²), which is maintained by restriction of energy intake.
- Extreme concern about weight and shape, characterized by an intense fear of gaining weight and becoming fat and a strong desire to be thin.
- An undue influence of body weight or shape on self-evaluation.
- Lack of recognition of the seriousness of low body weight.
- ICD-10, but not DSM-5, includes amenorrhoea as a criterion in women.

Most patients are young women. The condition usually begins in adolescence, although childhood-onset and older-onset cases are encountered. It generally begins with ordinary efforts at dieting, which then get out of control. **The central psychological features are the characteristic overvalued ideas about body shape and weight.** The *pursuit of thinness* may take several forms. Patients generally eat little and set themselves very low daily calorie limits (often between 600 and 1000 kcal). Some try to achieve weight loss by inducing vomiting, exercising excessively, and misusing laxatives (*purging*). Patients are often preoccupied with thoughts of food, and sometimes enjoy cooking elaborate meals for other people. Some patients with anorexia nervosa admit to stealing food, either by shoplifting or in other ways.

Anorexia nervosa

Anorexia nervosa

Other symptoms. Depressive, anxiety, and obsessional symptoms, lability of mood, and social withdrawal are all common. Three-quarters of patients report a lifetime history of major depressive disorder. Lack of sexual interest is usual.

Anorexia nervosa

Aetiology

Genetics

Anorexia nervosa is strongly familial, with a reported heritability of 28–74%, suggesting that much of the familiarity reflects genetic predisposition. A proportion of the genetic risk is shared with other psychiatric disorders, including obsessive–compulsive disorder and, perhaps more surprisingly, schizophrenia.

Anorexia nervosa

Aetiology

Genetics

However, no individual risk genes for anorexia nervosa have yet been identified by genome-wide association studies, in part because of their insufficient sample size. The genetic risk may also vary with age of onset, with a lesser heritability of eating disorder symptoms in preadolescent and early adolescent cases.

Anorexia nervosa

Neurobiology

There have been many brain imaging and other neurobiological studies of anorexia nervosa, and a range of structural, functional, and biochemical abnormalities reported.

These include reductions in brain volume, and alterations in the 5-HT (serotonin) system.

However, it is often difficult to determine whether abnormalities are causal, or are the result of starvation and weight loss.

Nevertheless, some findings are of interest:

Neurobiology Anorexia nervosa

- Cognitively, there are difficulties in switching between tasks, and relative impairment of strategic planning compared to detailed focusing on tasks.
- Structurally, grey matter volume is increased in the orbitofrontal cortex and insula, regions known to be involved in assessing reward and in introspection, respectively.
- Functional neuroimaging also indicates involvement of brain regions involved in responses to food rewards.

Anorexia nervosa

Neurobiology

Linking neuroimaging with neurochemistry, one theory is that the restrictive eating of anorexia nervosa is a maladaptive attempt to reduce the negative affect caused by an imbalance between the aversive (serotonergic) and reward (dopaminergic) systems of the brain (Kaye *et al.*, 2013).

NICE (2004) guidelines for anorexia nervosa

Most people with anorexia nervosa should be managed on an outpatient basis, with psychological treatment and monitoring of their physical condition.

● Psychological therapies for anorexia nervosa include cognitive analytic therapy (CAT), cognitive behaviour therapy (CBT), interpersonal psychotherapy (IPT), focal psychodynamic therapy, and family interventions focused explicitly on eating disorders.

NICE (2004) guidelines for anorexia nervosa

- Outpatient psychological treatment for anorexia nervosa should normally be of at least 6 months' duration.

Failure to improve or deterioration should lead to more intensive forms of treatment (e.g. amove from individual therapy to combined individual and family work, or day care, or inpatient care).

Dietary counselling should not be provided as the sole treatment for anorexia nervosa.

NICE (2004) guidelines for anorexia nervosa

- For inpatients with anorexia nervosa it is important to monitor the patient's physical status during re-feeding.

Psychological treatment should be provided that has a focus both on eating behaviour and attitudes to body weight and shape, and on wider psychosocial issues with the expectation of weight gain.

Rigid inpatient behaviour modification programmes should not be used in the management of anorexia nervosa.

NICE (2004) guidelines for anorexia nervosa

● For inpatients with anorexia nervosa it is important to monitor the patient's physical status during re-feeding. Psychological treatment should be provided that has a focus both on eating behaviour and attitudes to body weight and shape, and on wider psychosocial issues with the expectation of weight gain. Rigid inpatient behaviour modification programmes should not be used in the management of anorexia nervosa.

NICE (2004) guidelines for anorexia nervosa

- Following inpatient weight restoration, people with anorexia nervosa should be offered outpatient psychological treatment that focuses both on eating behaviour and attitudes to body weight and shape, and on wider psychosocial issues, with regular monitoring of both physical and psychological risk.

Bulimia nervosa

The central features of bulimia nervosa are as follows:

- A preoccupation with eating, with an irresistible and recurrent urge to overeat, manifesting in repeated ‘binges’ when large amounts of food are consumed in a short time, accompanied by a sense of loss of control.
- The use of extreme measures to control body weight, especially self-induced vomiting and use of laxatives, as well as periods of starvation or excessive exercise.
- Overvalued ideas concerning shape and weight, of the type seen in anorexia nervosa.

Bulimia nervosa

Epidemiology

As with anorexia nervosa, the prevalence and incidence of bulimia nervosa are uncertain. In the community, the prevalence is around 1% among women aged between 16 and 40 years in western societies. It is at least 10 times less common in men. The dramatic increase in presentation and diagnosis seen in the UK in the early 1990s has been followed by stability or a modest decline.

Bulimia nervosa

Like anorexia nervosa, bulimia nervosa appears to be the result of exposure to general risk factors for psychiatric disorder, including a family history (in part, reflecting a genetic predisposition), especially depression and substance misuse, and a range of adverse childhood experiences. No risk genes have been identified. It was thought that childhood sexual abuse was especially common, but the evidence suggests that the rate is no higher than among those who develop other types of psychiatric disorder (Fairburn, 1999).

Bulimia nervosa

Epidemiological studies also suggest that, unlike those with anorexia nervosa, patients with bulimia nervosa have increased exposure to factors that specifically promote dieting, such as childhood obesity, parental obesity, and early menarche. Perfectionism appears to be less of a risk factor than in anorexia nervosa (Fairburn, 1999).

The neurobiological mechanisms appear to be broadly similar to those described above for anorexia nervosa (Kaye *et al.*, 2013). There are also recent models of bingeing, which conceptualize it as ‘food addiction’ (Smith and Robbins, 2013), or note its similarities to impulsive/compulsive behaviours (Pearson *et al.*, 2015), but these remain speculative.

Medication

Both antidepressants and antipsychotics are used in anorexia nervosa, with antidepressants sometimes prescribed in high dosage. However, systematic reviews show no clear effect of antidepressants on weight gain, maintenance, or psychological symptoms during re-feeding. Small trials have suggested possible benefit from olanzapine, but overall the evidence is similarly negative for the use of antipsychotics and they are not recommended. Antidepressants are also used to treat depression in anorexia nervosa. The evidence for their effectiveness in this situation is weak, and guidelines suggest that antidepressants should not be used until it is apparent that the symptoms are not merely due to starvation, and that they persist during restoration of weight. Particular care in prescribing is required in patients under 18 years old, and because of the high risks of medical complications and side effects in underweight patients.

F98.4 Stereotyped Movement Disorders

- Voluntary, repetitive, stereotyped, nonfunctional (and often rhythmic) movements that do not form part of any recognized psychiatric or neurological condition.
- The non self-injurious movements:
 - body-rocking
 - head-rocking
 - hair-plucking
 - hair-twisting
 - finger-flicking mannerisms
 - hand-flapping
- Stereotyped self-injurious behaviour:
 - repetitive head-banging
 - face-slapping
 - eye-poking
 - biting of hands, lips or other body parts
- In mentally retarded children, or in some children with visual impairment.

F98.5 Stuttering (Stammering)

- Frequent repetition or prolongation of sounds or syllables or words
- Could be transient phase in early childhood or persistent speech failure until adult life

F98.6 Cluttering

- A rapid rate of speech with breakdown in fluency, but no repetitions or hesitations, of a severity to give rise to diminished speech intelligibility.
- Speech is erratic and dysrhythmic, with rapid jerky spurts that usually involve faulty phrasing patterns