Mental Health

The essence of mental health

Ideally, healthy people:

- 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 end less 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.

Mental Health should be a Global Health Priority: a compelling Public Health Argument

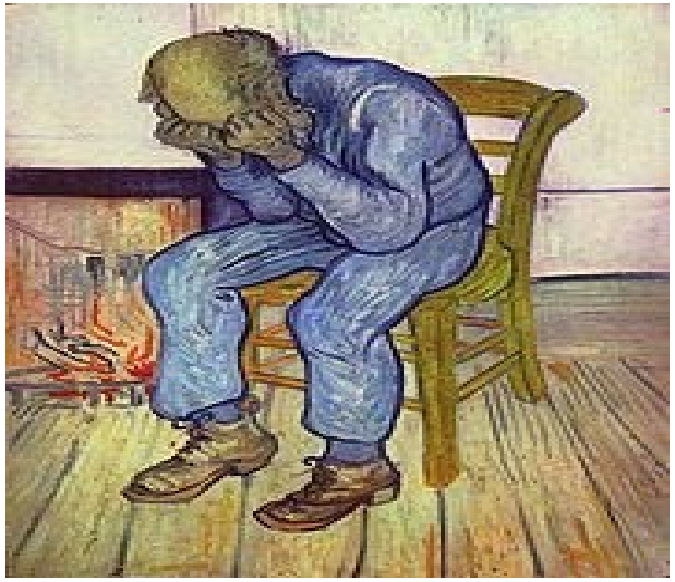
FIRST

Almost 300 million people suffer from mental disorders. Many more have mental problems. Mental disorders are much more common among the poor and they, in turn, increase poverty.

SECOND

Refugees,displaced and people exposed to complex emergencies suffer from a broad range of mental disorders.

Rates of mental disorder tend to double after emergencies



THIRD

People exposed to major economic transitions are at risk for demoralization, alcohol, substance use and suicide. On average about 800 000 people commit suicide every year. According to the WHO suicide is among the three leading causes of death among 15-45 year olds (men and women). The numbers of suicides has increased by 60% over a 45 year period.

FOURTH

Mental Disorders can also contribute to unintentional and intentional injury like traffic accidents due to Alcohol intoxication or domestic violence

Mental Health should be a Global Health Priority

a compelling Moral Argument


MENTAL HEALTH FOR ALL?

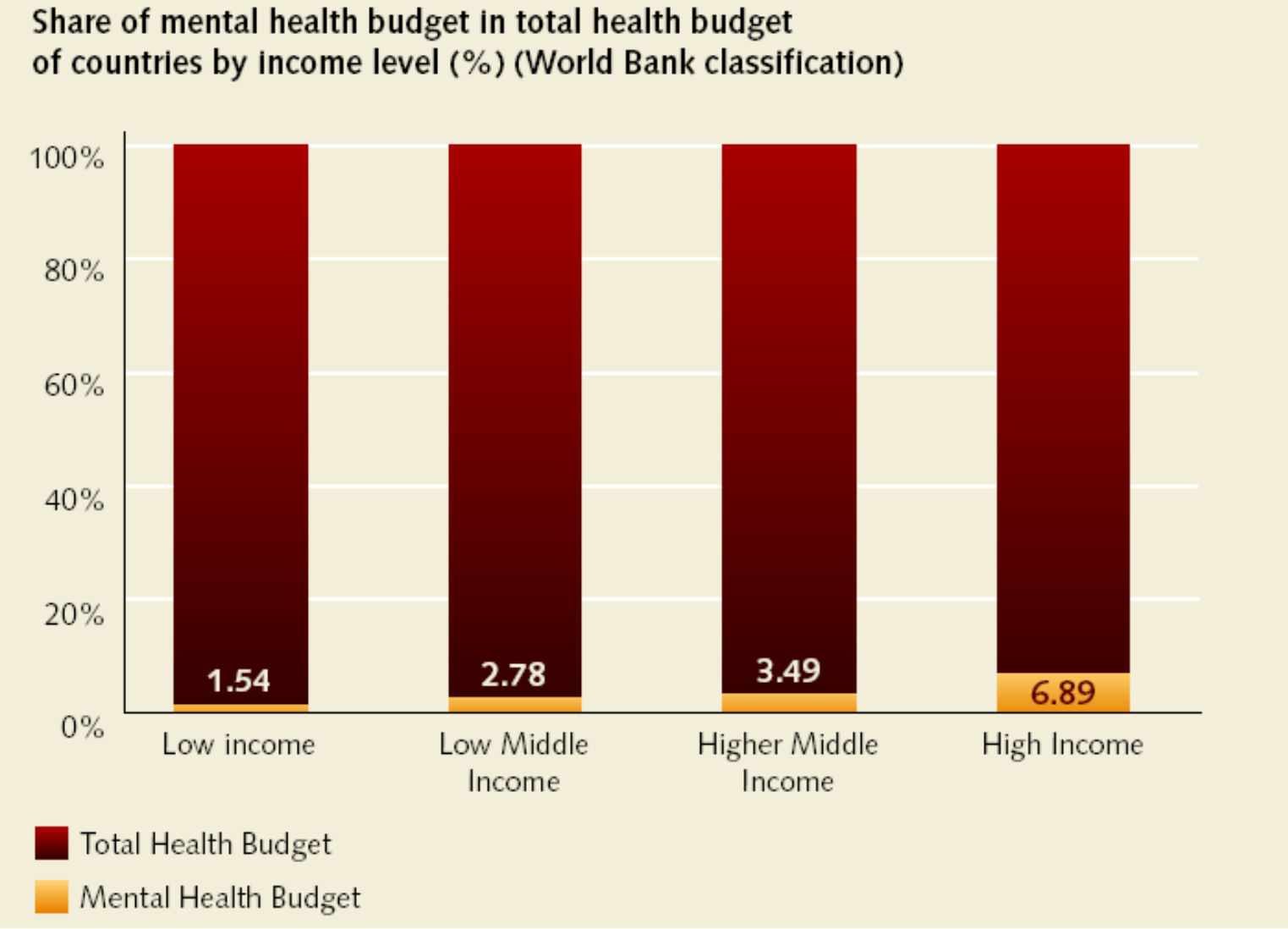
Mental Health “Reforms” world -wide

- 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

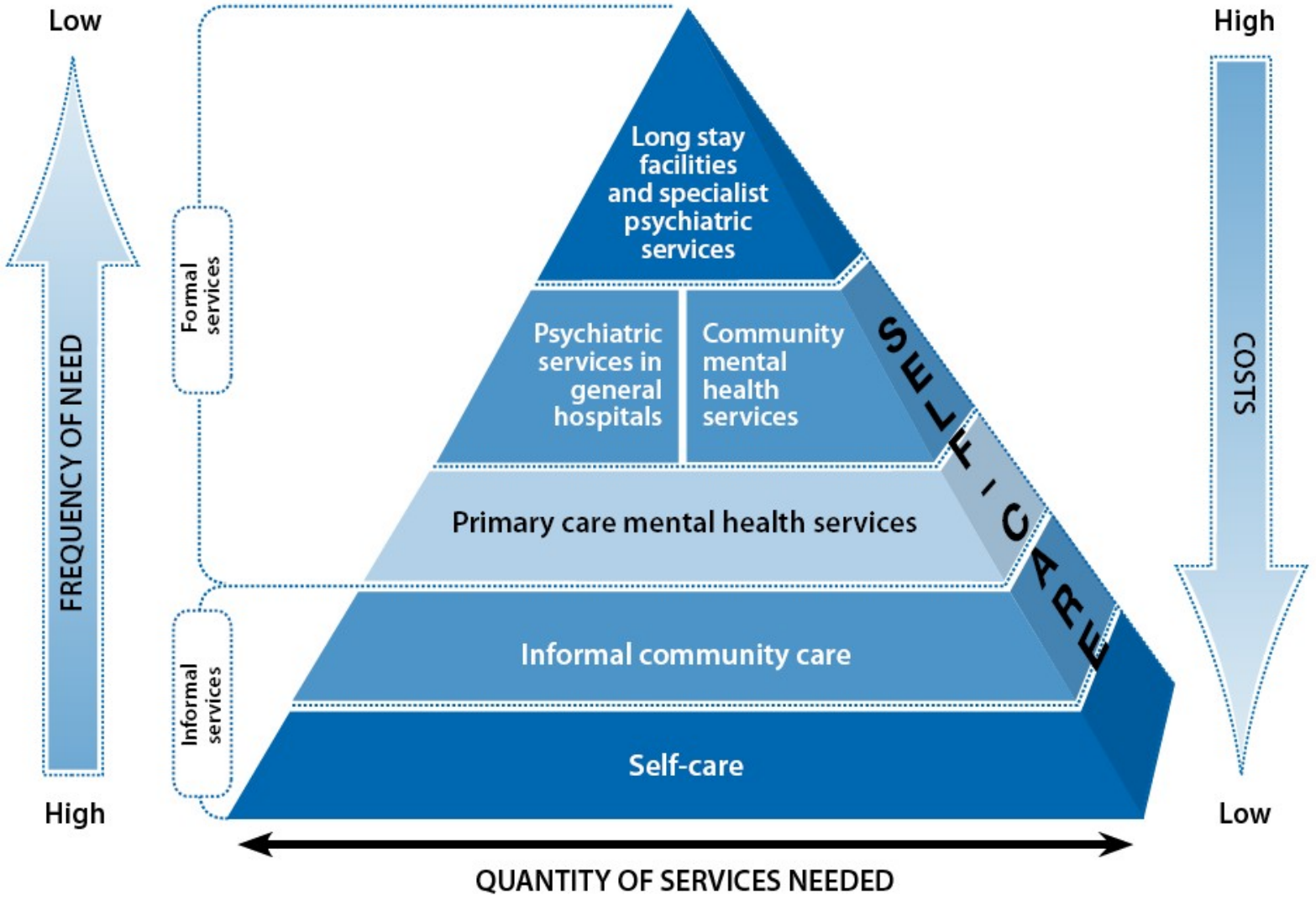


Organization of services

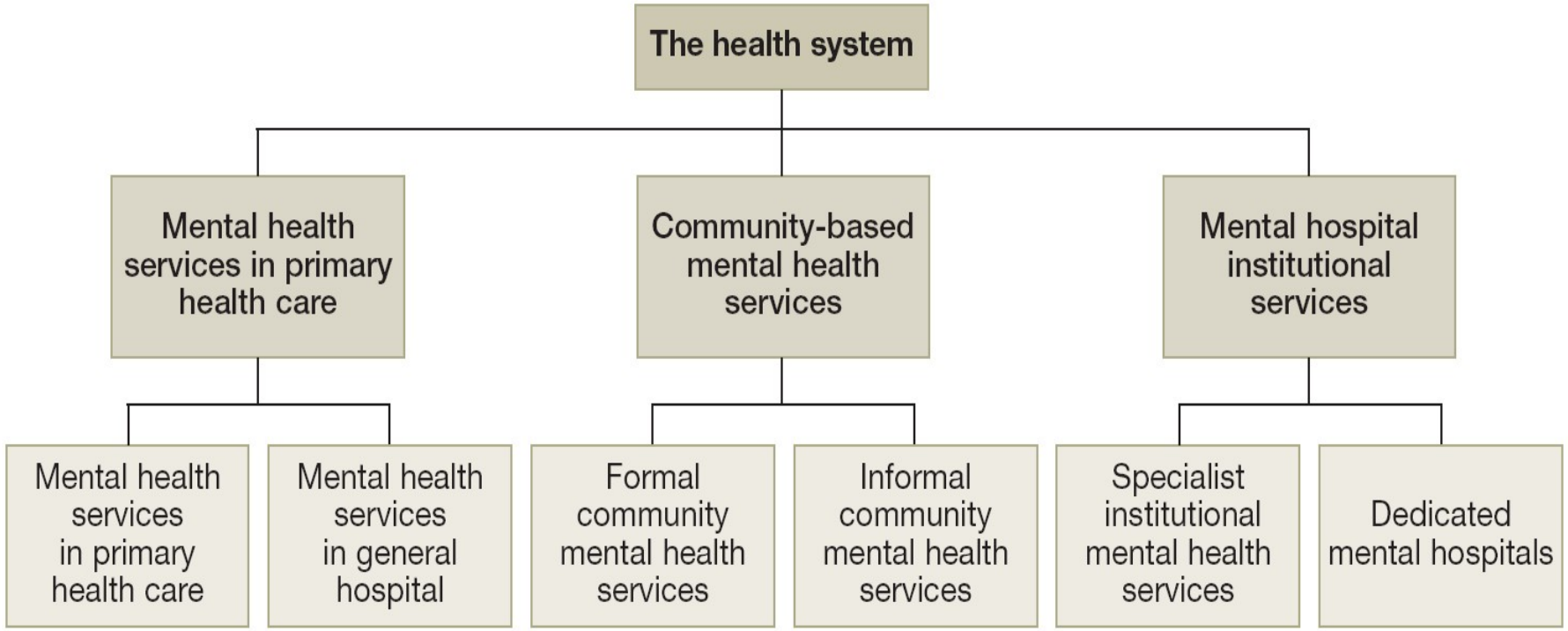
Magnitude of mental disorders

- 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

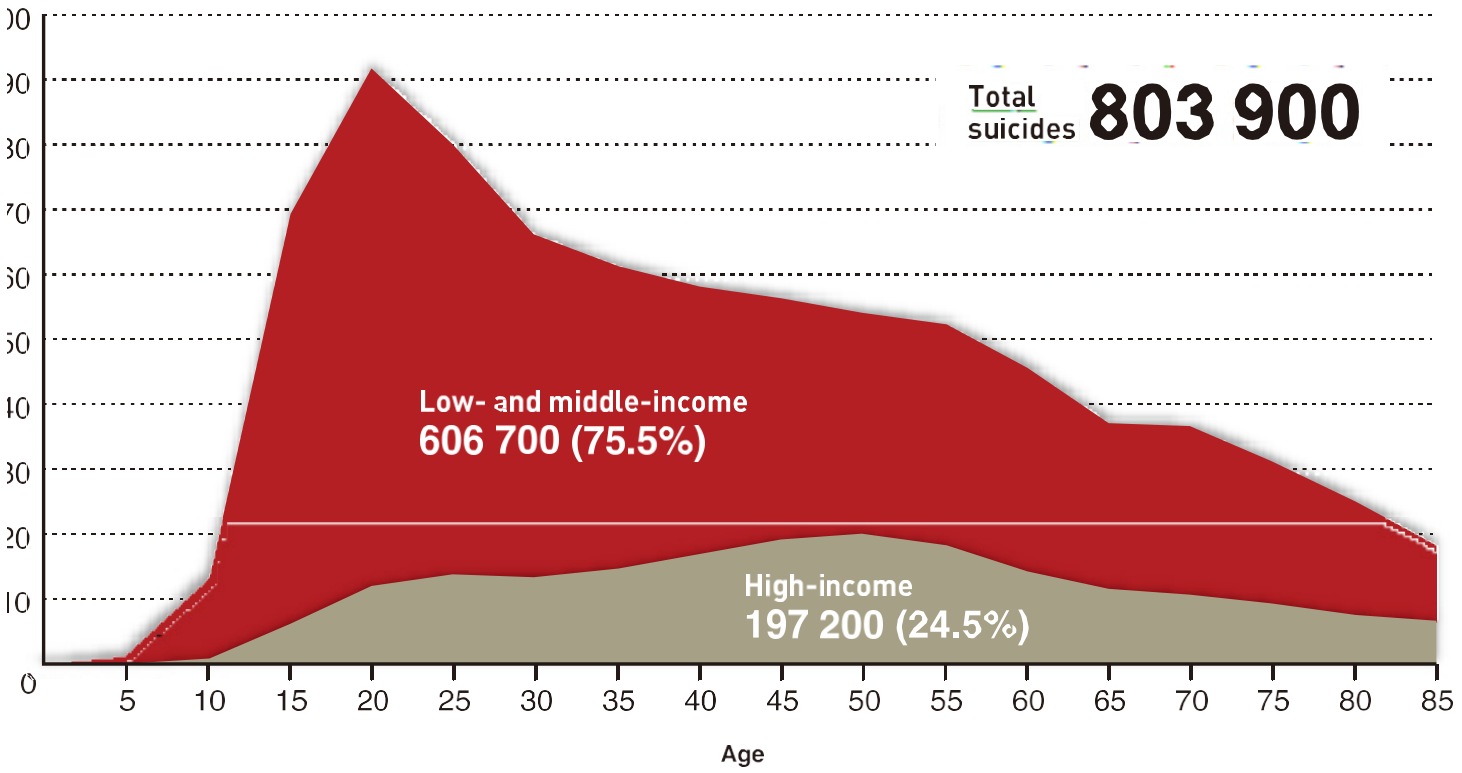


SUICIDE (WHO evidence):

- Each suicide is a personal tragedy that prematurely takes the life of an individual and has a continuing ripple effect, dramatically affecting the lives of families, friends and communities.
- Every year, more than 800 000 people die by suicide
- one person every 40 seconds.
- It is a public health issue that affects communities, provinces and entire countries.

- Young people are among those most affected;
- suicide is now the second leading cause of death for those between the ages of 15 and 29 years globally.
- The numbers differ between countries, but it is the low- and middle-income countries that bear most of the global suicide burden, with an estimated 75% of all suicides occurring in these countries.

e 2. **Global suicides by age and income level of country, 2012**



-Illness is not something separated from the body, but a way the body reacted in relation to the action of an agent.

-Any disruptive agent addresses the whole body, even if the disease is local manifestation.

-Mental illness is occurring in the visceral response and the disease apparently "strictly somatic" has psychological implications.

Life stressors that may precede a psychosomatic disorder

1. Death of husband / wife.
2. Divorce.
3. Death of a close family member.
4. Marital separation.
5. Severe personal injury or illness.
6. Loss of service.
7. Prison sentence.
8. Death of a close friend.
9. Pregnancy.
10. Readjustment in business.

The main points from individual history that should be explored

- Hereditary constitution;
- Obstetric trauma,
- diseases of the childhood;
-Physical injury or traumatic from childhood;
- Childhood emotional accidents;
- Family emotional environment;
- Specific features of parents and peers;
- Physical trauma later;
-Future interpersonal and professional relationships.

Basic psychosomatic symptoms - spasm, vertigo, nausea acute condition.

F. Alexander and school
in Chicago have isolated seven main psychosomatic diseases: duodenal ulcer, asthma, rheumatoid
arthritis, ulcerative colitis,
hypertension, neuro dermatitis and thyrotoxicosis.

High blood pressure /arterial hypertension (160/95 mmHg)

For these patients is specific depression and even suicidal tendencies.

Anxiety can sometimes dominate the patient's psychology and ideas , and can appear obsessive ideas or phobias, especially fear of death, stroke.

These hypertensive patients have a compulsive personality structure . Personality of one is calm on the outside, and inside is hostile.

The patient is always insecure, feels threatened, but not trigger aggression.

Neurotic form increases with perfectionism tendencies. Being anxious, they avoid aggressive conflict and treatment.

They are not freely able to express aggression. Meet this ambition retained in fear of aggression so that they are always tense, fearful and possessed a repressed anger.

This inhibited their anger causes a feeling of guilt about hostile impulses. "Being restless, troubled business, politics, finance", "always under time pressure." They mastered nerves interior life, but pay tribute to this domination by cardiac and vasomotor intense reactions and a rapid organic wear.

Asthma

Personality of patients with asthma may be characterized by irritability, lack of confidence, anxiety, and addiction to the mother. The crisis can be seen as a symbolic protest against the separation of mother and the desire to restore these relations by crying (stewed), fear of losing the love of a mother. It is well known that anger, fear, loss and jealousy may precede crisis. This release meets psychogenic crisis at 50% of asthmatic patients, regardless of age. Asthmatic children, who had crisis at home, had not crisis in another home or at school. Many patients are characterized by poor adaptation and relationship difficulties due to introversion, self-centered, timidity and excessive sensitivity. Others present in the foreground suspicion and hostility, guilt. Mother of asthmatic children is dominant and father - deleted, auxiliary, nonautoritar, unable to correct the imbalance between mother and child.

These patients have as well:

- Fear of water and drowning (anxiety the likelihood of drowning in his own fluids secreted during asthma attacks).
- A negative and anxious accreditation of sleep - 40% of crisis occur during sleep and when they wake up.

Duodenal ulcer

Ulcer patients are hyper excitable personalities, not easily bond, with a strong emotional tension, with strong reactions of anger and frustration, intolerance, alarms hypochondriacs, phobia of cancer character. These patients have an unconscious conflict. In this sense, the desire to be fed in childhood manifests in adult life by a desire to be loved, and supported. It is a fixation of the patient depending on situations typical for early stages of mental development. This desire of the patient dependency, specific for early childhood has conflicts with adult Ego, whose characteristics are independence and self-assertion. Obviously, the adult ego represses them. The person is often active, ambitious, which ignores the rest and relaxation, expressing contempt for the weak and forcing others into submission. But the secret desire increases to be depend on others ,to get them care and affection. When this is done, there is a psychological regression in the original form of dependence (feeding) associated with hyper secretion.

Ulcerative colitis

Some people are emotionally immature, especially attached to the mother, having difficult conflict (divorced or unmarried), where the mother tries to maintain control over the child after they became adult. Fathers are described by patients as good, gentle, passive and ineffective, unable to protect children from aggressive spirit and ruler of the mother. Patient's personality traits are illustrated by the tendency of order, punctuality, diligence, cleanliness, thoroughness, rigid attitudes towards morality, tendency towards elevated standards of behavior, worry, obsessions, shyness, intellectualized attitude and lack of humor, so prone to seek performance in the intellectual sphere (literature, science), strict control of affective manifestations, tendency to remain lonely, proud. Under the facade of ambition, energy and efficiency are feelings of inferiority, uncertainty and insecurity. Psychoanalytic therapy is detected during an imaginary abandonment of the mother at the age of 2 and a half years old sphincters education. Ulcerative colitis is a way of "symbolic expulsion" or reaction to issue an "object" tense which was the source of disappointment, loss.

Rheumatoid arthritis

These patients are shy, honest, conscientious, with a spirit of sacrifice and self-awareness strict, rigid, moralistic, marked by feelings of inferiority and depressed mood, with a high degree of social consciousness, an exaggerated sense of responsibility towards the social obligations and moral. In addition, they have a tight control on expression of anger and hostility which it represses. Even in childhood, had fear of the mother, who was cold, aggressive, and therefore hostile to them, but they could not express it because of its dependence. This protest against the repressed mother will be transferred later on men and family members. Becoming mothers, they reversed the situation and begin to control their children just as then, when they were controlled by their mothers. They have a rigorous control of emotional events tend to control the entourage, the husband and children. Usually they are demanding a lot from their children, but on the other hand, take good care of them. They show opened repulsion to female role. They acquire some manners men, fight them and refuse to submit them. It is interesting to note that these women choose a passive man. Many husbands had even some physical defects. During disease progression, men assumed the role of careers. They often are engaged in intense physical activities (sports and manual labor), which is interpreted as a favorite means of aggression and hostility download.

Neurodermatitis

This pathology often occurs after the death of a loved one and after an angry repressed. Trends observed in these subjects exhibitionists, sadomasochist, manifestations of narcissism. Patients demonstrate body aiming at gaining attention, love. Exhibitionism is used as a weapon in this competition and inevitably lead to feelings of guilt. According to the talion law, the punishment must match the crime, the skin, which serves as an instrument of exhibitionism, is suffering morbid place. For some forms of pruritus, an important psychodynamic factor suppress sexual excitation. In these situations it is the source of conscious erotic wish and presented as equivalent of masturbation. The location of these events can sometimes be related to the conflict: the face and hair when it is emotional or family conflict, the arms and legs, when the conflict is professional, financial, thighs and genital, when the conflict is sexual.

Thyrotoxicosis

It can be caused by many factors, but most important would be acute psychological trauma and emotional conflict. Patients are highly dependent on the mother and have fear of losing her support. Often these people have lost their mother at birth. But apart from this problem there are others - unhappy marriage of parents, parent's personal instability, parental revulsion, the birth of a new child in large families and as a result, older children removed from parental affection. For these reasons, these people try an early attempt to identify with one parent, usually the mother ("If it is not together, then I would have to become like her if I could do without her."). This early identification is far more than their physiological and psychological possibilities and leads to a permanent struggle. Even her childhood trying to assign responsibility, to be useful, accepting default function, so they become a second mother to brothers and sisters, even wanting to become pregnant, although they fear pregnancy.

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

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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

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 sprit 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.

During this period, the researchers discovered all current classes of psychotropic drugs, including two of the anxiolytics –

meprobamate (1950) and

chlordiazepoxide (1955), also

iproniazid (1951), from the IMAO group and

imipramine (1951), a tricyclic antidepressant.

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

In 1960 CBZ, 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

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 percepted 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
  - Pseudoreminescence

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 remorseand 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)

Psychoanalysis

Sigmund Freud

- Born in Moravia in 1856 to a Jewish family
- His mother was very loving and protective; his father was stern and authoritarian
- Moved to Vienna as a young child
- Established a practice as a clinical neurologist in 1881
- Published *The Interpretation of Dreams* in 1900

The Origins of Psychoanalysis

- Psychoanalysis began with the case history of Joseph Breuer's patient, Anna O.
- Anna O. experienced conversion disorder (called hysteria at the time)
- Breuer used hypnosis and "talking method"
- After talking about her father's illness and death, Anna O.'s symptoms were relieved

The Origins of Psychoanalysis

- Freud used the “talking method” to assist his patients in remembering past traumatic events
- Resistance – force that prevented the patient from becoming aware of events and kept them in the unconscious
- Repression – blocking of a wish or desire from the consciousness
- An emotion that is prevented from being expressed normally may be expressed through a neurotic symptom

The Origins of Psychoanalysis

- The psychoanalytic method of assessment and research included two primary procedures:
  - Free association was used to help patients recover repressed ideas. It involved having the patient verbalize whatever comes to mind and then reflecting on those associations.
  - Interpretation of dreams and slips involves free association with the dream or slip.
    - Manifest meaning
    - Latent meaning

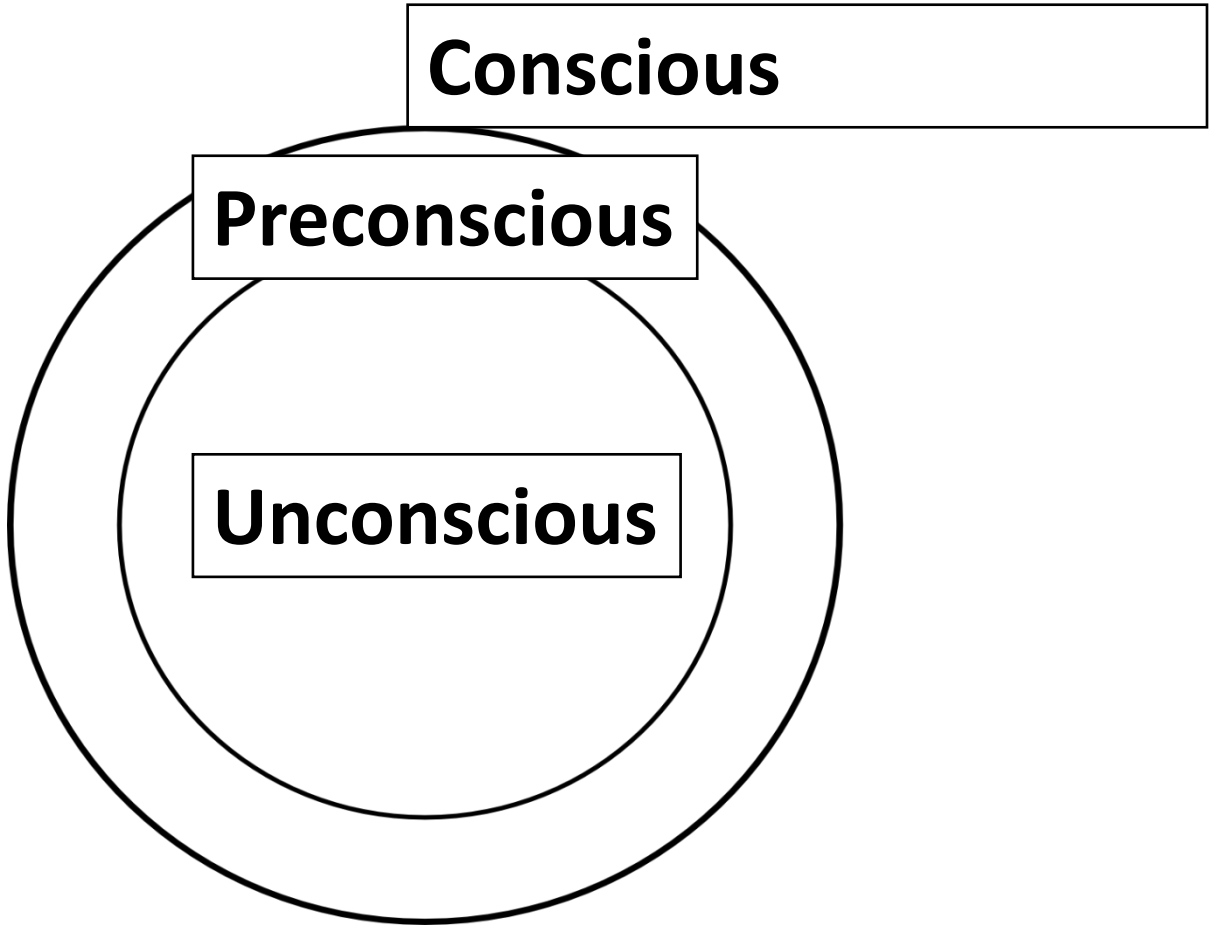
The Dynamics and Development of Personality

- The importance of sexuality
  - The nature of repressed wishes and desires is sexual
  - Freud suggested the primary motivation for sexuality is pleasure seeking
  - Libido – emotional and psychic energy derived from the biological drive or sexuality
  - Drive – psychological or mental representation of an inner bodily source of excitement
    - Eros – life impulses or drives
    - Thanatos – death impulses or drives

The Topographic Model: Levels of Awareness

- **Conscious –** contains the thoughts you are currently aware of.
- **Preconscious –** large body of retrievable information.
- **Unconscious –** the material that we have no immediate access to.

The Topographic Model: Levels of Awareness



The Structural Model: Id, Ego, & Superego

- **Id –** present at birth; selfish part of you, concerned with satisfying your desires.
  - **Pleasure principle –** only concerned with what brings immediate personal satisfaction regardless of physical or social implications.
    - Id impulses tend to be socially unacceptable.
  - **Wish-fulfillment –** used to satisfy needs that cannot immediately be met; can imagine, which temporarily satisfies the need.
  - Completely buried in the unconscious.

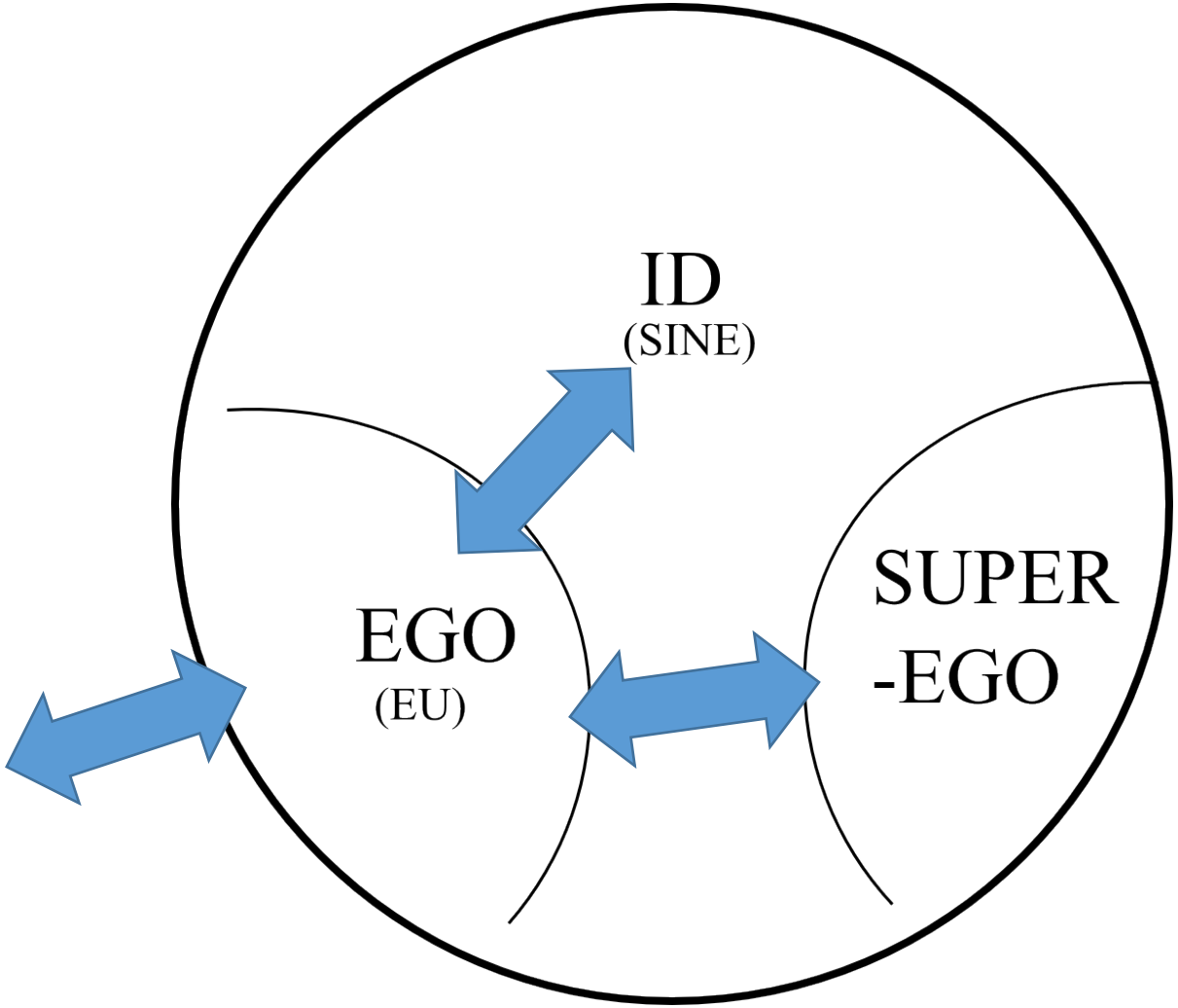
The Structural Model: Id, Ego, & Superego

- **Superego –** develops by the time the child is 5 years old; represents society's and parent's values and standards.
- **Conscience –** right and wrong.
  - Can be weak – little inward restraint.
  - Super moral – impossible ideals of perfection.
    - **Moral anxiety –** ever-present feeling of shame or guilt.

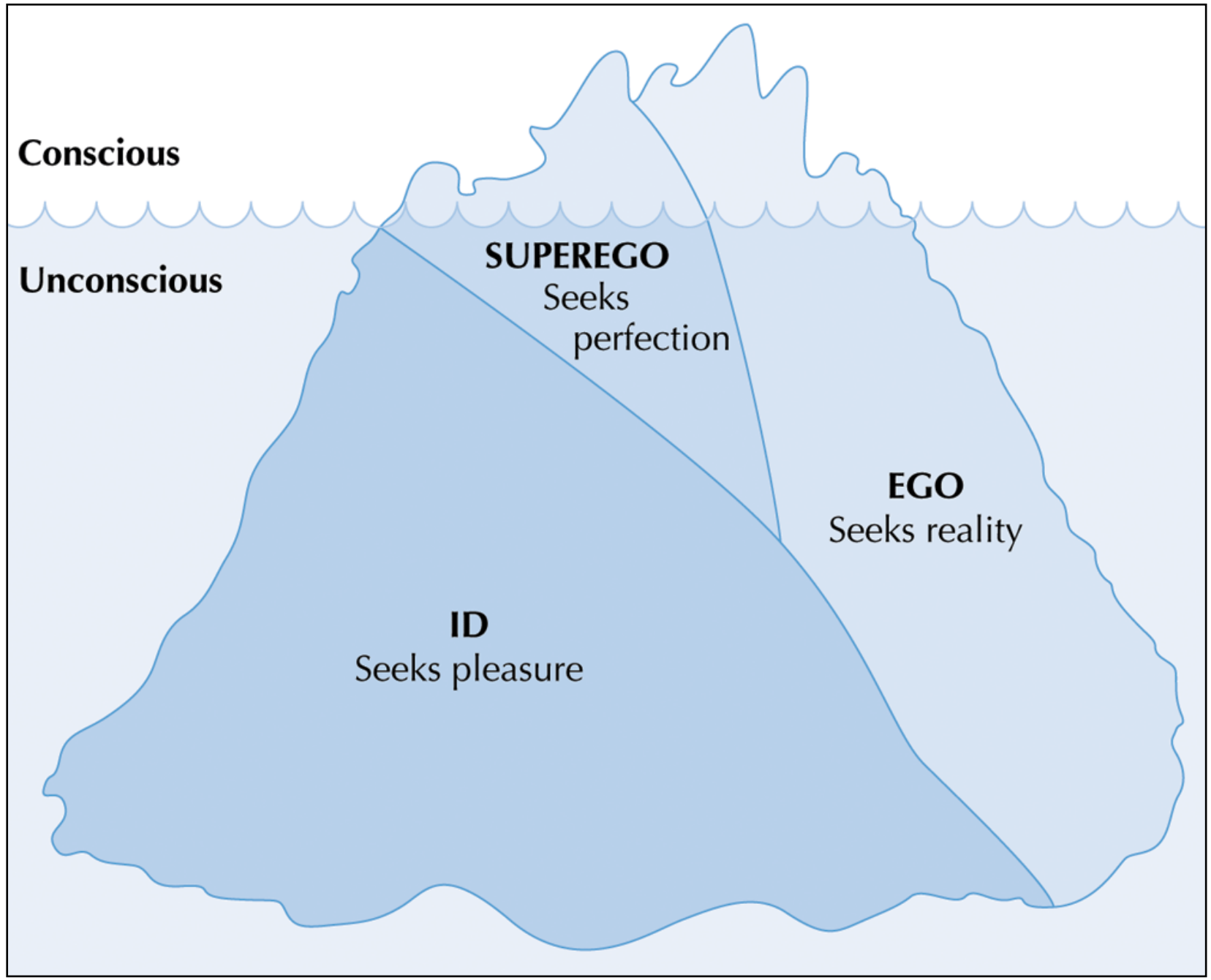
The Structural Model: Id, Ego, & Superego

- **Ego –** develops during the first two years of life; primary job is to satisfy the id impulses in an appropriate manner by taking consequences into consideration.
    - **Reduces tension.**
    - **Moves freely among the conscious, preconscious, and unconscious parts of the mind.**

The Structural Model: Id, Ego, & Superego



Society


Conscious
Unconscious
SUPEREGO
Seeks
perfection
EGO
Seeks reality
ID
Seeks pleasure

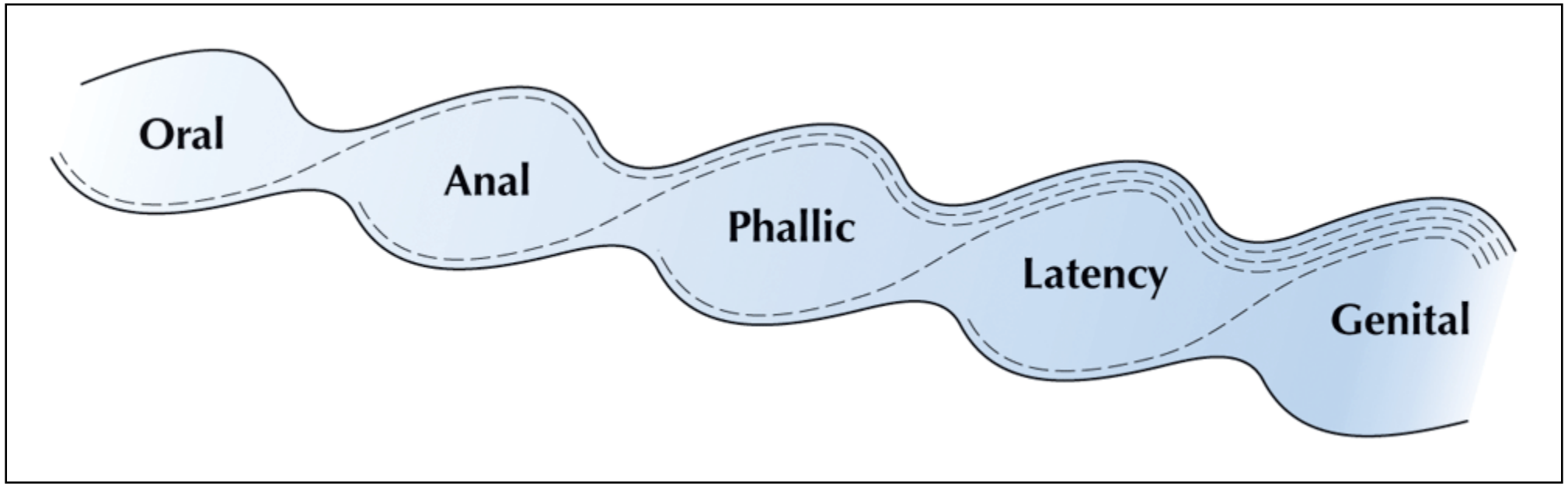
Instincts: Libido & Thanatos

- **Libido –** the life or sexual instinct.
    - Sexually motivated behaviors not only include those with blatant erotic content, but every action aimed at receiving pleasure.
- **Thanatos –** death or aggressive instinct.
    - The unconscious desire we all have to die and return to the earth.
    - Death instinct is turned outward and expressed as aggression toward others.

The Dynamics and Development of Personality

- The psychosexual stages of development – libido invests itself in various erogenous zones as we age
  - Oral stage (birth to one and a half year old)
  - Anal stage (one and a half to three years old)
  - Phallic stage (three to six years old)
    - Oedipus complex – castration anxiety - resolution
    - Electra complex – penis envy
  - Latency (seven years old till puberty)
  - Genital stage (puberty through adulthood)

Freud's Psychosexual Stages



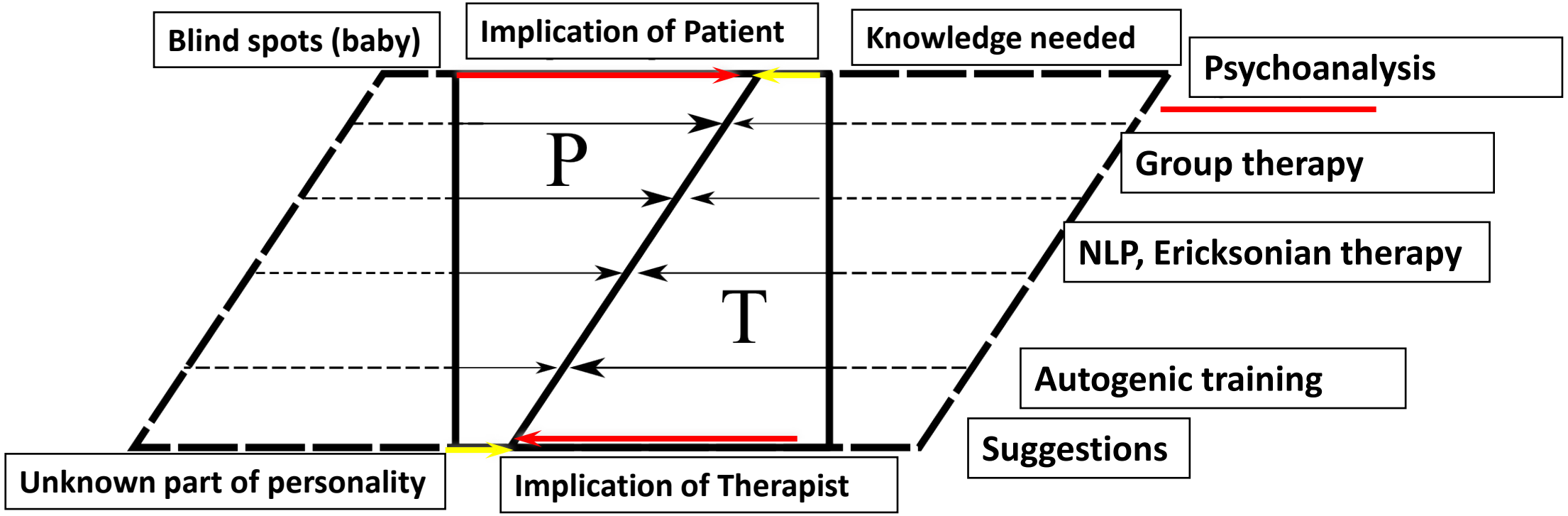
Freud's Psychosexual Stages

- The effects of the psychosexual stages – lingering effects revealed in adult traits and disorders
- If libido is frustrated or overindulged during a stage, it can become fixated at the particular stage
- Fixation creates excessive needs characteristic of an earlier stage

With what Psychoanalytic works with

- Transference – patient transfers to the analyst emotional attitudes felt as a child toward significant persons
  - Positive
  - Negative
- Sleeps/ Accidents
- Dreams
- Interpretations / Constructions
- Analytic process – allows patients to rework important relationships to a more satisfactory resolution

Comparison of different therapies



- 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 defenses (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 on this level are almost always severely pathological. These defences, in conjunction, permit one effectively to rearrange external experiences to eliminate the need to cope with reality. Pathological users of these mechanisms frequently appear irrational or insane to others. These are the "pathological" defences, common in overt psychosis. However, they are normally found in dreams and throughout childhood as well. They include:
- **Delusional projection:** Delusions about external reality, usually of a persecutory nature
- **Denial:** Refusal to accept external reality because it is too threatening; arguing against an anxiety-provoking stimulus by stating it does not exist; resolution of emotional conflict and reduction of anxiety by refusing to perceive or consciously acknowledge the more unpleasant aspects of external reality
- **Distortion:** A gross reshaping of external reality to meet internal needs

Defense Mechanisms - Level 2: immature

These mechanisms are often present in adults. These mechanisms lessen distress and anxiety produced by threatening people or by 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 the 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 wish or impulse in action, without conscious awareness of the emotion that drives the expressive behavior
- **Hypochondriasis:** An excessive preoccupation or worry about having 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 the undesirable impulses or desires without becoming consciously aware of them; attributing one's own unacknowledged, unacceptable, or unwanted thoughts and emotions to another; includes severe prejudice and jealousy, hypervigilance to external danger, and "injustice collecting", all with the aim of shifting one's unacceptable thoughts, feelings and impulses onto someone else, such that those same thoughts, feelings, beliefs and motivations are perceived as being possessed by the other.
- **Schizoid fantasy:** Tendency to retreat into fantasy in order to resolve inner and outer conflicts

Defense Mechanisms - Level 3: neurotic

These mechanisms are considered neurotic, but fairly common in adults. Such defenses have short-term advantages in coping, but can often cause long-term problems in relationships, work and in enjoying life when used as one's 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 emotion to a safer outlet; separation of emotion from its real object and redirection of the intense emotion toward someone or something that is less offensive or threatening in order to avoid dealing directly with what is frightening or threatening.
- **Dissociation:** Temporary drastic modification of one's personal identity or character to avoid emotional distress; separation or postponement of a feeling that normally would accompany a situation or thought.

Defense Mechanisms - Level 3: neurotic

- **Intellectualization:** A form of isolation; concentrating on the intellectual components of a situation so as to distance oneself from the associated anxiety-provoking emotions; separation of emotion from ideas; thinking about wishes in formal, affectively bland terms and not acting on them; avoiding unacceptable emotions by focusing on the intellectual aspects (solitude, rationalization, ritual, undoing, compensation, and magical thinking)
- **Reaction formation:** Converting unconscious wishes or impulses that are perceived to be dangerous or unacceptable into their opposites; behaviour that is completely the opposite of what one really wants or feels; taking the opposite belief because the true belief causes anxiety
- **Repression:** The process of attempting to repel desires towards pleasurable instincts, caused by a threat of suffering if the desire is satisfied; the desire is moved to the unconscious in the attempt to prevent it from entering consciousness; seemingly unexplainable naivety, memory lapse or lack of awareness of one's own situation and condition; the emotion is conscious, but the idea behind it is absent

Defense Mechanisms - Level 4: mature

These are commonly found among emotionally healthy adults and are considered mature, even though many have their origins in an immature stage of development. They are conscious processes, adapted through the years in order to optimize success in human society and relationships. The use of these defenses enhances pleasure and feelings of control. These defenses help to integrate conflicting emotions and thoughts, whilst still remaining effective. Those who use these mechanisms are usually considered virtuous.

Mature defenses include:

- **Altruism:** Constructive service to others that brings pleasure and personal satisfaction
- **Anticipation:** Realistic planning for future discomfort
- **Humor:** Overt 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 a portion of their innate distress, but they are "skirted around" by witticism, for example, self-deprecation.

Defense Mechanisms - Level 4: mature

- **Sublimation:** Transformation of unhelpful emotions or instincts into healthy actions, behaviours, or emotions, for example, playing a heavy contact sport such as football or rugby can transform aggression into a game
- **Suppression:** The conscious decision to delay paying attention to a thought, emotion, or need in order to cope with the present reality; making it possible later to access uncomfortable or distressing emotions whilst accepting them

Defense Mechanisms

MECHANISM	CHARACTERISTIC	EXAMPLE
Repression	Blocking a wish or desire from conscious expression	Being unaware of deep-seated hostilities toward one's parents
Denial	Refusing to believe a reality	Refusing to believe that one has AIDS or a terminal cancer
Projection	Attributing an unconscious impulse, attitude, or behavior to another	Blaming another for your act or thinking that someone is out to get you
Reaction formation	Expressing an impulse by its opposite	Treating someone whom you intensely dislike in a friendly manner
Regression	Returning to an earlier form of expressing an impulse	Resuming bedwetting after one has long since stopped
Rationalization	Dealing with an emotion intellectually to avoid emotional concern	Arguing that "Everybody else does it, so I don't have to feel guilty."
Identification	Modeling behavior after someone else	Imitating one's mother or father
Displacement	Satisfying an impulse with a substitute object	Scapegoating
Sublimation	Rechanneling an impulse into a more socially desirable outlet	Satisfying sexual curiosity by researching sexual behaviors

Psychopharmacology

Main Psychopharmacological Drugs

- Antipsychotics
- Antidepresants
- Anxiolytics
- Hypnotics
- Cognitives
- Psychostimulants

Overview of Antipsychotics

Conventional Antipsychotics Pure D2 antaganists			
Chem. Group	*Generic Name*	*Trade Mark*	*Dose (mg)*
Phenothiazines	chlorpromazine	CHLORPROMAZIN, LARGACTIL, PLEGOMAZİN, MEGAPHEN, THORAZIN AMINAZIN	200-800
	levomepromazine	TISERCIN, NOZINAN	50-400
	thioridazine	THIORIDAZIN, MELLERIL	100-600
	periciazine	NEULEPTIL	10-40
Thioxanthes	chlorprothixene	CHLORPROTHIXEN, TRUXAL	100-600
	clopenthixol	CISORDINOL,	20-100

Overview of Antipsychotics

Conventional Antipsychotics			
Chem. Group	*Generic Name*	*Trade Mark*	*Dose (mg)*
Phenothiazines	perfenazine	PERFENAZIN, TRILAFON, PERATSIN	16-24
	prochlorperazine	PROCHLORPERAZIN, STEMETIL	20-80
	flufenazine	MODITEN	2-16
	trifluoperazine	STELAZIN	10-50
Thioxanthenes	flupenthixol	FLUANXOL	6-18
Butyrophenones	haloperidol	HALOPERIDOL, HALDOL, APO-HALOPERIDOL	2,5-10
	melperone	BURONIL	50-300
Diphenylbutyl piperidines	pimozide	ORAP	2-10
	fluspirilen	IMAP	2-10
	penfluridol	SEMAP	2-60
Perathiepines	oxyprothepin	MECLOPIN	5-20

Antipsychotics of the 2nd Generation

Generic Name	*Trade Mark*	*Dose (mg)*
D2, D3 selective antagonists		
sulpiride	DOGMATIL, PROSULPIN	50-1200
amisulpride	SOLIAN, DENIBAN	50-1200
SDA		
risperidone	RISPERDAL, RISPEN, RISPERDAL QUICKLET	4-8
ziprasidone	ZELDOX	40-160
sertindole	SERDOLECT	12-20
D2, D4, 5 HT2		
clozapine	LEPONEX	200-600
olanzapine	ZYPREXA i.m. inj. 10 mg	5-20
quetiapine	SEROQUEL	300-600
zotepine	ZOLEPTIL	75-300

Antipsychotics of the 2nd Generation

Efficacy

1. Positive symptoms are influenced significantly better than placebo, and equally or more then by the classical antidopaminergic neuroleptics.
2. Negative symptoms are reduced significantly better than by placebo or classical antidopaminergic neuroleptics.
3. Affective symptoms are influenced better than by placebo or classical antidopaminergic neuroleptics.
4. They significantly reduce or prevent the cognitive impairment. The reduction is higher in comparison to classical antidopaminergic neuroleptics.
5. The treatment resistant patients with schizophrenia are improved significantly better than by placebo and at least equally as by clozapine.
6. Maintenance treatment is more effective than maintenance on placebo and at least as effective as maintenance on classical neuroleptics.

Antipsychotics of the 3rd generation

D2, D4, 5HT2

Generic Name název	*Trade Mark*	*Dose (mg)*	*Mechanism of Efficacy*
aripiprazol	ABILIFY	15-30	Dopamine-serotonin stabiliser Parcial agonist of D2 and 5-HT_{1A} receptors Antagonist of 5-HT_{2A} receptors

Depot Antipsychotics

Generic Name	*Trade Mark*	*Mean Dose (mg)*	*Interval*
flufenazin	MODITEN DEPOT	25	14-28 days
oxyprothepin	MECLOPIN	25	
haloperidol	HALDOL DEPOT	100	
flupenthixol	FLUANXOL DEPOT	40	
zuclopenthixol	CISORDINOL DEPOT	200	
fluspirilen	IMAP	6	7 days !!
risperidone	RISPERDAL CONSTA	20-30	14 days

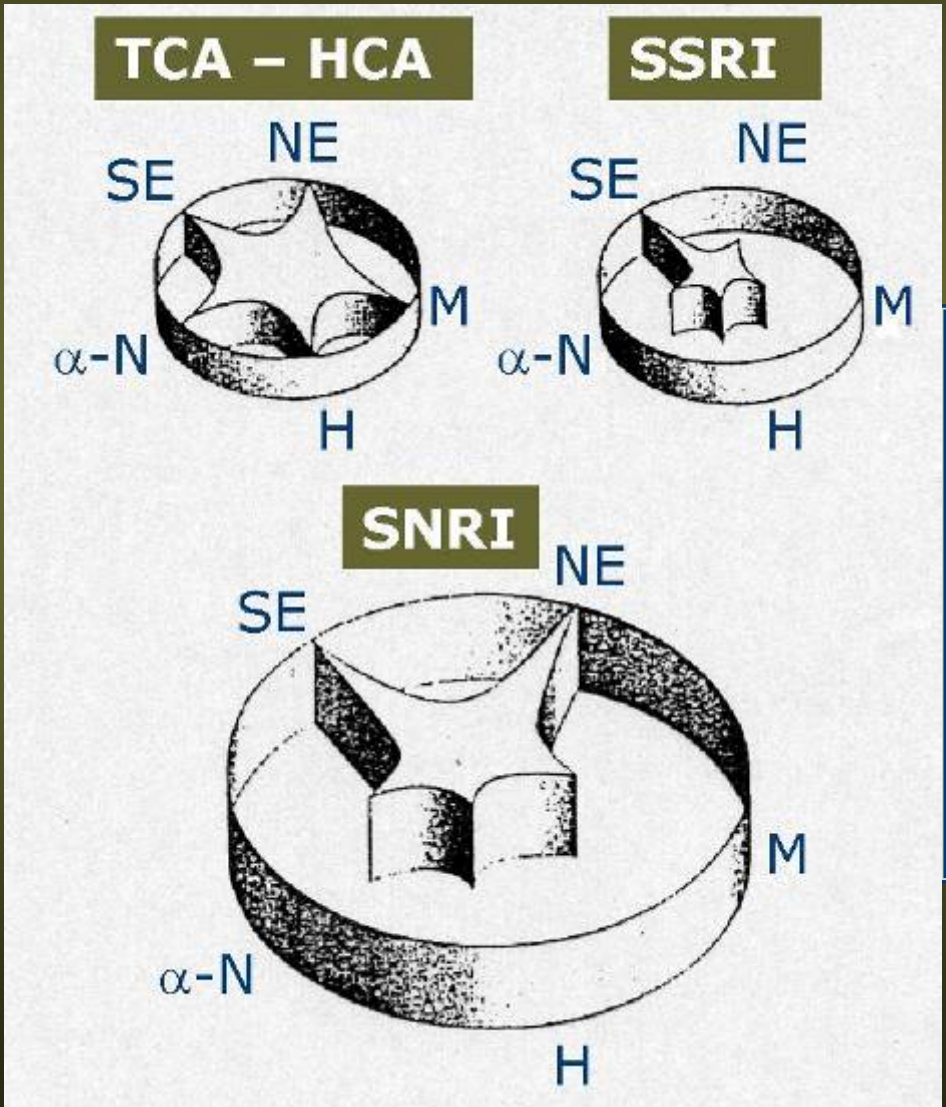
Rapid Tranquilizers

	pro dosi (mg)	*pro die (mg)*
chlorpromazin	100-200	800-1200
levopromazin (TISERCIN)	50-100	500-600
haloperidol	5-10	40-100
chlorprothixen	100-150	500-600
zuclopenthixol (CISORDINOL ACUTARD)	50-150	(24-72 hours)
tiapride (TIAPRIDAL)		600-1200

Indication of Antidepressants

- Depressive Disturbances
- Affective Disorders
- Obsessive-Compulsive Disorders
- Panic Disorders
- Eating Disorders
- Psychosomatic Disorders
- Posttraumatic Stress Disorder
- Alcohol and Drugs Withdrawal Symptoms
- Pain Syndromes
- Enuresis
- Narcolepsy

Neurotransmitter Reuptake Inhibition and Binding Affinity to Receptors



Receptors:

SE Serotonergic

NE Noradrenergic

M Muscarinic

H Histaminic

α-N alpha noradrenergic

Antidepressants: Monoamine Reuptake Inhibitors

1st Generation of Antidepressants (TCA, TeCA)			
Generic Name	*Trade Mark*	*Doses (mg)*	*Mechanism of Efficacy*
amitriptyline	AMITRIPTYLIN	75-200	Inhibition of Serotonin and/or Norepinephrine Reuptake Followed by Increase of their Concentrations in Synaptic Cleft
nortriptyline	NORTRILEN	50-150	
imipramine	MELIPRAMIN	75-250	
clomipramine	ANAFRANIL, HYDIPHEN	75-225	
dosulepin	PROTHIADEN	100-300	
dibenzepine	NOVERIL	240-720	
maprotiline	LUDIOMIL, MAPROTILINE	75-150	

1st Generation of Antidepressants

Mechanism of action:

- Blockade of muscarine receptors
- Histamine H1 receptors
- Alpha 1 Adrenergic Receptors
- Alpha 2 Adrenergic Receptors

Many Side Effects

- Danger of Intoxication
- Many Interactions
- Prolonged Effect (after 3-6 Weeks)

2nd Generation of Antidepressants

2nd Generation of Antidepressants			
Generic Name	*Trade Mark*	*Mean Doses (mg)*	*Mechanism*
viloxazine	VIVALAN	100-300	Norepinephrine Reuptake Inhibition

3rd Generation of Antidepressants

Generic Name	*Trade Mark*	*Mean Doses (mg)*	*Mechanism*
SSRI			
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	

3rd Generation of Antidepressants

Generic Name	*Trade Mark*	*Mean Doses (mg)*	*Mechanism*
SARI Antidepressants with Doubled Serotonergic Efficacy			
trazodone	TRITTICO AC	4-8	Double Serotonergic Efficacy
nefazodone	SERZONE, DUTONIN	100-300	
NARI			
reboxetine	EDRONAX	4-8	Norepinephrine Reuptake Inhibition
tianeptine	COAXIL	75	Increasing of Serotonin Reuptake

4th Generation of Antidepressants

Dual acting antidepressants
Mixed reuptake inhibitors

Generic Name	*Trade Mark*	*Mean Doses (mg)*	*Mechanism*
SNRI			
venlafaxine	EFECTIN	75-375	Serotonin and Norepinephrine Reuptake Inhibition
venlafaxine ER (extended releasase)	EFECTIN ER	75-225	
milnaciprane	IXEL, DALCIPRAN	50-100	
DNRI			
bupropione	WELLBUTRIN ZYBAN	150-300	Dopamine and Norepinephrine Reuptake Inhibition

4th Generation of Antidepressants

Generic Name	*Trade Mark*	*Mean Doses (mg)*	*Mechanism*
Blockade of α_2-adrenoceptors			
mianserin	LERIVON, MIABENE	60-90	Increasing Synthesis and Releasing of Norepinephrine, Blockade Alpha-2 Adrenoceptors on Serotonergic Neurons and Increasing Production and Releasing of Serotonin
mirtazapine	REMERON, ESPRITAL, REMERON sol. tab.	15-45	
Other Monoamine Reuptake Inhibitors			
hypericum perforatum	JARSIN	900	Weak Inhibitor of NA, 5-HT, DA

MAO Inhibitors

Non Selective and Irreversible: (IMAO A, IMAO B)		
phenelzine		NARDIL
isocarboxazid		MARPLAN
nialamide		NIAMID, NUREDAL
tranylcypromine		PARNATE
Selective and Reversible		
MAO A	**moclobemide**	AURORIX
	brofaromine	CONSONAR
	toloxatone	HUMORYL
MAO B	**selegiline (L-deprenyl)**	SEPATREM, JUMEX

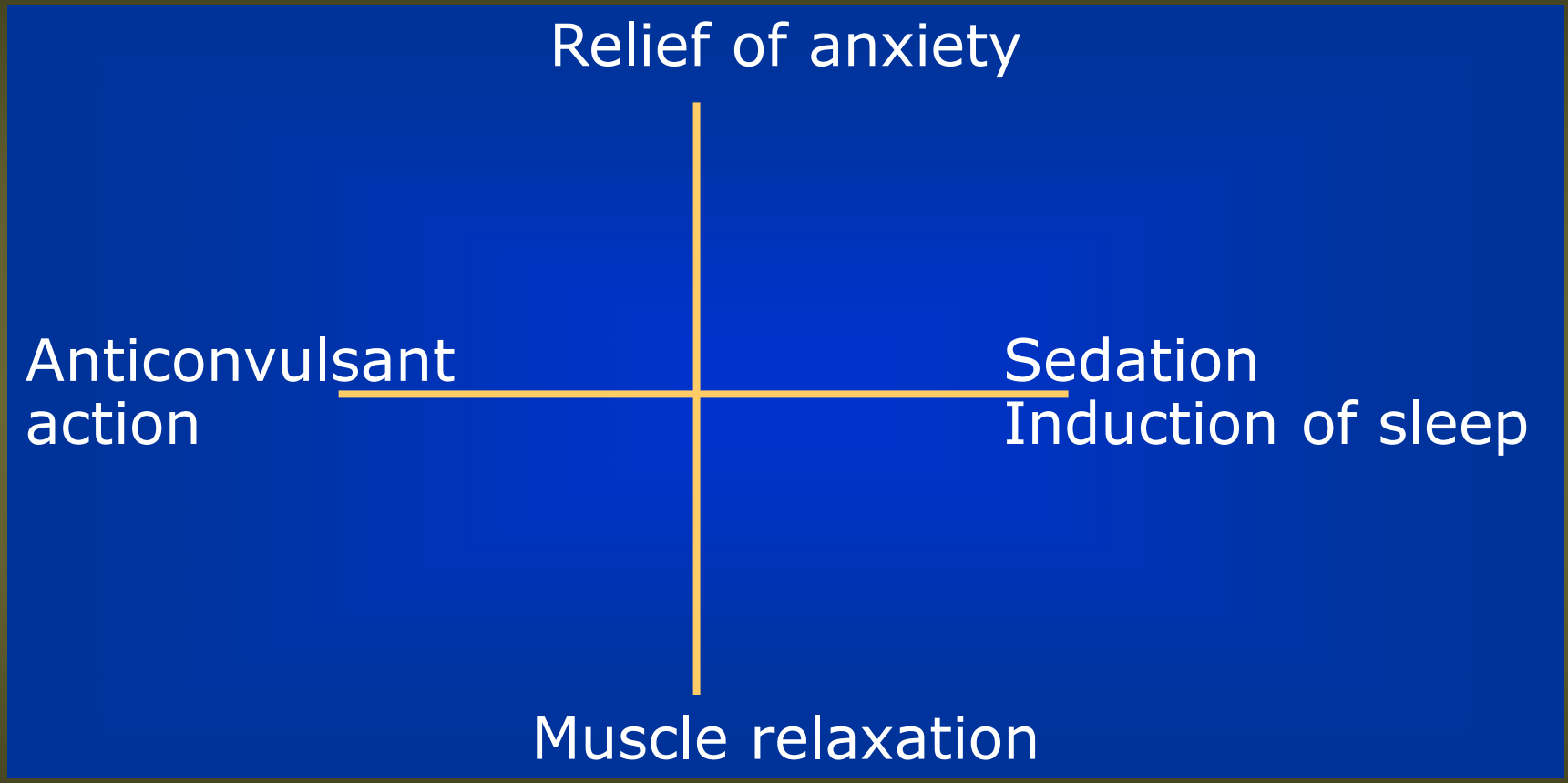
Other Psychotropics with Antidepressant Effect

Thymoprophylactics		
	lithium	LITHIUM CARBONICUM, CONTEMNOL
Antiepileptics of 2nd Generation	carbamazepine	BISTON, TEGRETOL, FINLEPSIN, TIMONIL
	salts of valproic acid	EVERIDEN, CONVULEX, ORFIRIL, DEPAMID
Antiepileptics of 3rd Generation	lamotrigine	LAMICTAL
	gabapentine	GABAPENTIN, NEURONTIN
	topiramate	TOPAMAX
Atypical Antipsychotics - SDA		
	clozapine	LEPONEX, CLOZARIL, ALEMOXAN
	olanzapine	ZYPREXA
	quetiapine	SEROQUEL

Thymoprophylactics

Generic Name	*Trade Mark*	*Doses (mg)*	*Blood Serum Concentration*
lithium 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

Action Profiles of Benzodiazepines



Ansseau, M., Doumont, A., Diricq, S.: Methodology required to show clinical differences between benzodiazepines. *Curr Med Res Opin 8*, Suppl. 4, 108-114 (1984). (Except <Dormicum> and <Dalmadorm>)

Benzodiazepine Anxiolytics

Indication:

- States of Anxiety
- Sleeplessness
- Withdrawal Symptoms
- Depressive States
- Epilepsy
- Convulsions
- Tetanus Neonatorum
- Extrapyramidal Undesirable Side Effects of Antipsychotics
- Premedication in Anaestesiology
- Panic States (Alprazolam, Bromazepam, Clonazepam in High Doses)
- Algidic Syndromes (Stomatodynie, Neuralgie Trigemini, Cephalgia)

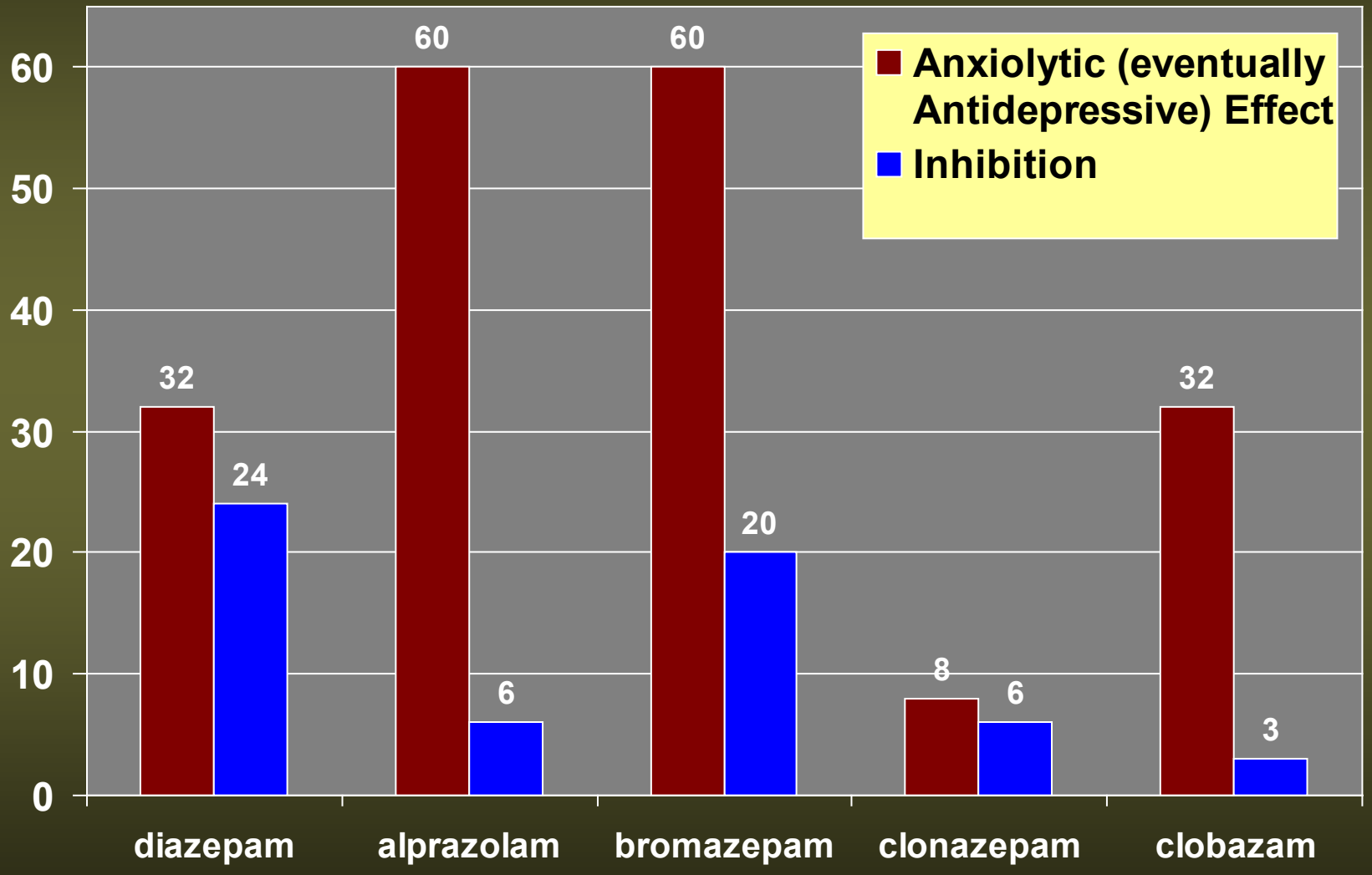
Anxiolytics

Generic Name	*Trade Mark*	*Form*	*Mean Doses (mg)*
■ Propandiol Derivates			
guaiphenesine	GUAJACURAN	drg. 200,400mg inj. 1 g	400 - 3000
Mephenoxalone	DORSIFLEX, DIMEXOL	tbl. 200 mg	400 - 1200
meprobamate	MEPROBAMAT LÉČIVA	tbl. 400 mg	800 - 2400
■ Piperazin Derivates			
hydroxyzine	ATARAX	tbl. 10, 25 mg inj. 100 mg sir.	20 – 100 300 - 400
■ Azapiron Derivates			
buspirone	ANXIRON, BUSPIRON-EGIS	tbl. 5, 10 mg	15-30

Anxiolytics (Benzodiazepine Derivates)

Generic Name	*Trade Mark*	*Form*	*Mean Doses (mg)*
diazepam	DIAZEPAM SLOVAKOFARMA APO-DIAZEPAM APAURIN, SEDUXEN DIAZEPAM DESITIN DIAZEPAM DESITIN SUPP.	tbl. 2.5; 10 mg inj. 10 mg supp. 5 mg	10 - 60
chlordiazepoxide	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
lorazepam	TAVOR	tbl. 1; 2,5 mg	2
clobazam	FRISIUM	tbl. 10 mg	20 - 60
prazepam	DEMETRIN	tbl. 10 mg	20 - 40
clonazepam	RIVOTRIL ANTELEPSIN	tbl. 0.5 ; 2 mg gttae 10-25 mg/ml inj. 1 mg tbl. 0.25; 1 mg	1 - 4

Anxiolytics



Hypnotics

	Generic Name	*Trade Mark*	*Form*	*Mean Doses (mg)*
1st Generation	**barbiturates**			
	chloralhydrate	CHLORALOURAT		500 – 1000
	glutethimide	NOXYRON	tbl. 250 mg	250 - 500
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
	triazolam	HALCION	tbl. 0.125 mg	0.125 – 0.5
	midazolam	DORMICUM	tbl. 7.5 a 15 mg inj. 5 mg	7.5 – 15
	cinolazepam	GERODORM	tbl. 40 mg	20 – 40
3rd Generation	**zolpidem**	STILNOX, HYPNOGÉN, EANOX	tbl. 10 mg	10 - 20
	zopiclone	IMOVANE	tbl. 7.5 mg	3.75 – 7.5
	zaleptone	SONATA	tbl. 10 mg	5 – 10
Other Drugs with Hypnotic Efficacy	**Antihistaminics (promethazine – PROTHAZIN)**			
	Antidepressants (mirtazapine, trazodone)			
	Antipsychotics			
	Melatonins			

Cognitives

ACETYLCHOLINESTERASE INBITORS		
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

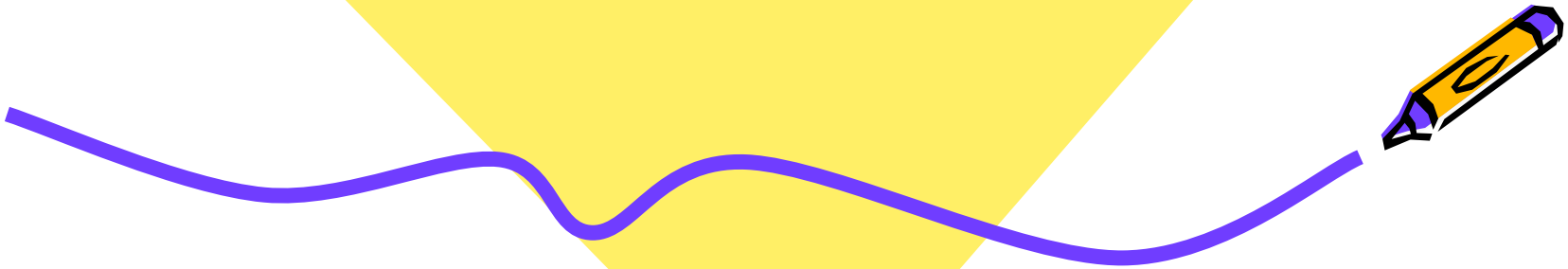
Nootropics

Indication: Organic Disturbances of Memory and Intellect, Primary States, Efficacy after 2-3 Months		
pyritinol	ENERBOL ENCEPHABOL	300 - 900
piracetam	NOOTROPIL, PYRAMEM, KALICOR	3000 - 9000
Nootropics and Vasodilators (Improve Rheologic Blood Quality and Cerebral Perfusion)		
cinarizine	STUGERON	50-100
vinpocetine	CAVINTON	15- 30
flunarizine	SIBELIUM	10
natridrofuryl	ENELBIN DUSODRIL	200-300
pentoxiphyline		
xanthinol		
Ergot Alkaloids		
dihydroergotoxine	SECATOXIN	
nicergoline		

Psychostimulants

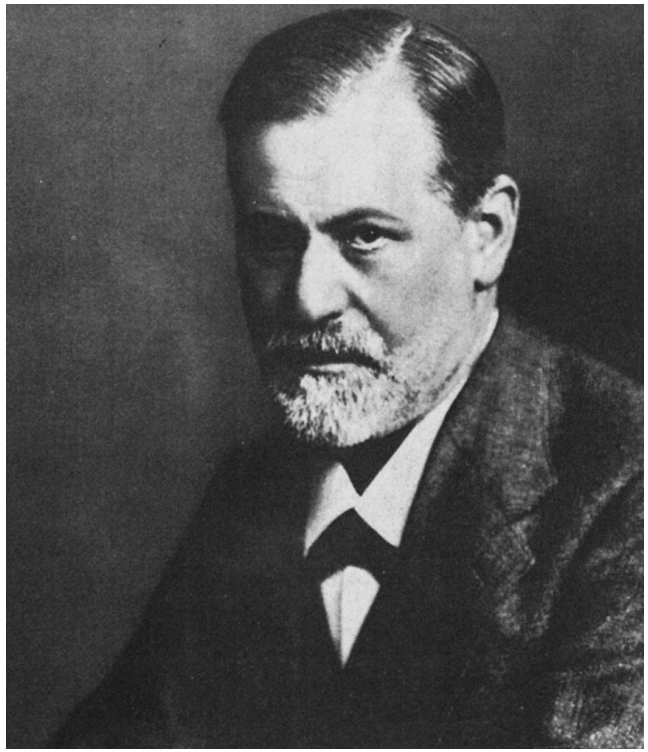
Generic Name	*Trade Mark*	*Doses (mg)*
amphetamine	PSYCHOTON, ADDERAL	5 – 50
dexamphetamine	DEXEDRON	5 – 30
ephedrine	EPHEDRIN	12,5 – 50
mezocarb	SYDNOCARB	5 – 50
methylphenidate	RITALIN, CENTEDRIN	10 – 40
modafinil	VIGIL, PROVIGIL	200 – 400

Psychosocial Theories and Therapy



Psychoanalytic Theories

- Pioneered by *Sigmund Freud* (1856-1939) in Vienna

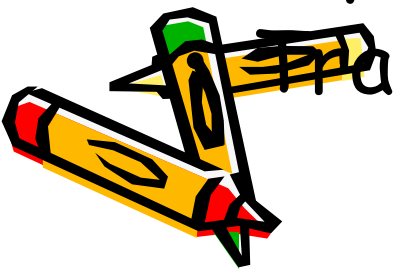


- **Father of Psychoanalysis**

  - "Your behavior today is directly or indirectly affected by your childhood days or experiences.

  - STRUCTURE – *Personality Structure*

- All human behavior is caused and can be explained
- Personality components conceptualized as id, ego, and superego
- Behavior motivated by subconscious thoughts and feelings; treatment involving analysis of dreams and free association
- Ego defense mechanisms
- Psychosexual stages of development
- Transference and countertransference

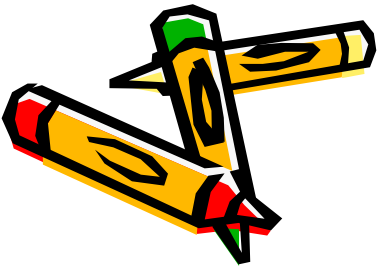


Psychoanalysis focuses on discovering the causes of the client's unconscious and repressed thoughts, feelings, and conflicts believed to cause anxiety and helping the client to gain insight into and resolve these conflicts and anxieties.

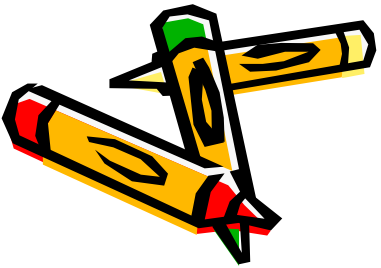
Psychoanalysis is lengthy, expensive, and practiced on a limited basis today; however, Freud's defense mechanisms remain current.

Personality Structure

- ID (4-5MONTHS)
  - Impulsive / Instinctual drive
  - I want to… PLEASURE PRINCIPLE
  - I want to… PHYSIOLOGIC NEEDS
  - I want to… PRIMARY PROCESS

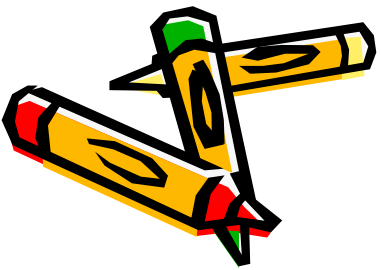


- EGO
  - Executive
  - REALITY PRINCIPLE
  - Conscious
  - Competencies
  - Decision Maker; Problem-Solving; Critical and Creative thinking



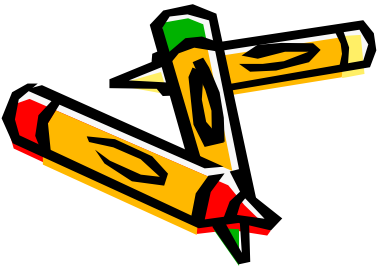
- SUPEREGO

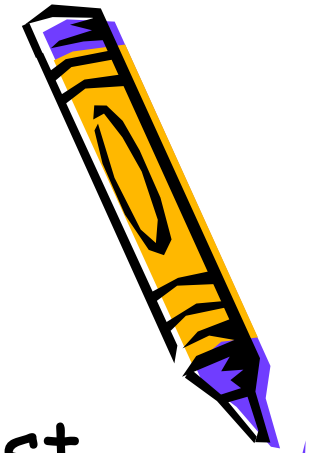
  - Should not
  - Small voice of GOD
  - Set norms, standards and values
  - MORAL PRINCIPLE
  - Conscience



Erik Erickson

Psychosocial Theory of Development





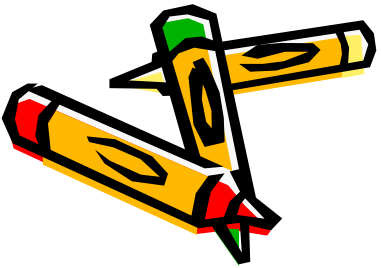
0-18 mos. **T**rust vs. **M**istrust

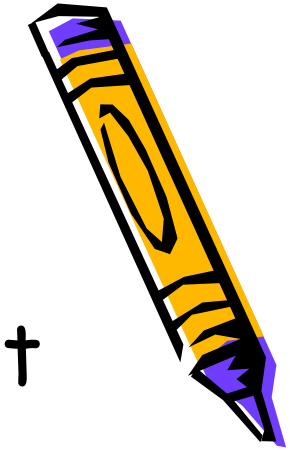
-attachment to mother which lays foundations for later trust in others

-conflict: general difficulties relating to others. suspicion, fear of the future

- 18 mOs – 3 yrs **A**utonomy vs. **S**hame/Doubt

- Gaining some basic control of self and environment
- Conflict: independence-fear conflict, severe feelings of self-doubt

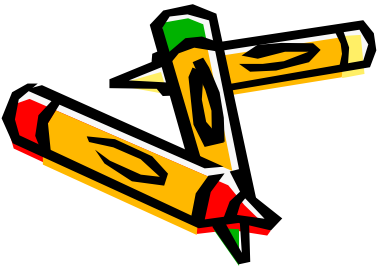




3 yrs – 6 yrs **I**nitiative vs. **G**uilt

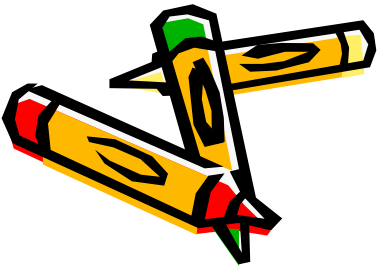
-becoming purposeful and directive

-conflict: aggression-fear conflict; sense of inadequacy and guilt



6 yrs – 12 yrs Industry vs. Inferiority

- Developing social, physical and school skills, competence
- Conflict: sense of inferiority; difficulty learning and working

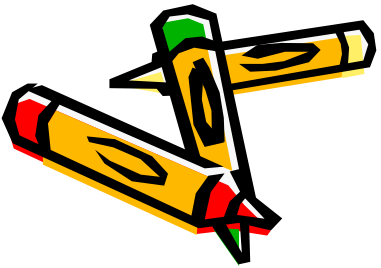


- 12 yrs – 20 yrs Identity vs. Role Diffusion
- Making transition from childhood to adulthood; developing a sense of identity
- Conflict: confusion of who one is, identity submerged in relationships or group memberships

21 yrs – 35 yrs Intimacy vs. Isolation

-establishing intimate bonds of love and friendship

-conflict: emotional isolation

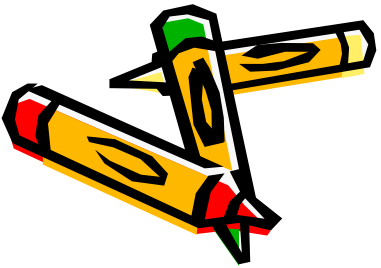


35 yrs – 55 yrs Generativity vs. Stagnation

-fulfilling life's goals that involve family, career and society, developing concerns that embrace future generations

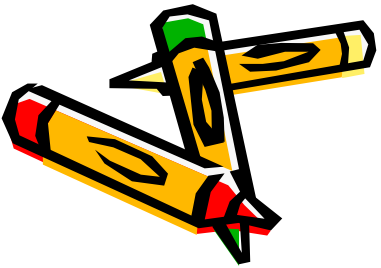
-conflict: self-absorption. Inability to grow as a person

- 55 yrs – above Integrity vs. Despair
- Looking back into one's life and accepting its meaning
- Conflict: dissatisfaction with life, denial of or despair over prospect of death



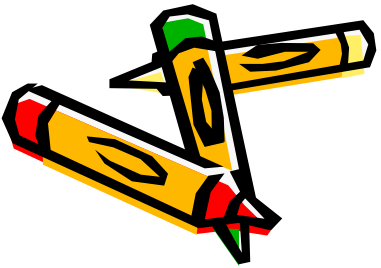
Jean Piaget

Cognitive Theory of Development



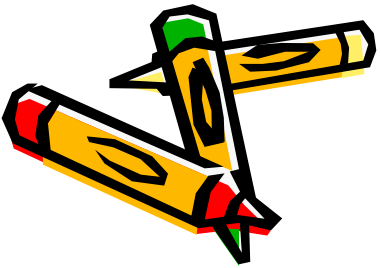
Jean Piaget (1896-1980)

Described *cognitive and intellectual development* in children in four stages: sensorimotor, preoperational, concrete operations, formal operations



- SENSORIMOTOR STAGE-**development proceeds from reflex activity to representation and sensorimotor solutions to problems**
  - 0 to 18 months

- PRE-OPERATIONAL STAGE-**development proceeds from sensorimotor representation to prelogical thought and solutions to problems**
- **can use these representational skills only to view the world from their own perspective.**
- **Understand the meaning of symbolic gestures**
  - 2 to 7 years



- CONCRETE OPERATIONAL-development proceeds from prelogical thought to logical solutions to concrete problems
- understand concrete problems
- cannot yet contemplate or solve abstract problems
  - 7 to 12 years

- FORMAL OPERATIONAL-development proceeds from logical solutions to concrete problems to logical solutions to all classes of problems
- cannot yet contemplate or solve abstract problems
- can also reason theoretically
  - 12 and above

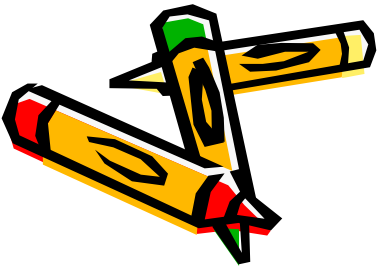
Humanistic Theories

Abraham Maslow (1921-1970)

- *Hierarchy of needs*: basic physiologic needs, safety and security needs, love and belonging needs, esteem needs, self-actualization

Carl Rogers (1902-1987)

- ***Client-centered therapy***
- Concepts of unconditional positive regard, genuineness, and empathetic understanding



Behavioral Theories

Ivan Pavlov (1849–1936)

B. F. Skinner (1904–1990)

- *Behaviorism* focuses on behaviors and behavior changes rather than on explaining how the mind works
- All behavior is learned
- Behavior has consequences (reward or punishment)
- Rewarded behavior tends to recur

- Positive reinforcement increases the frequency of behavior
- Removal of negative reinforcers increases the frequency of behavior
- Continuous reinforcement is the fastest way to increase behavior; random intermittent reinforcement increases behavior more slowly but with longer-lasting effect
- Treatment modalities based on behaviorism include ***behavior modification, token economy, and systematic desensitization***

Existential Theories

- ***Cognitive therapy*** focuses on immediate thought processing and is used by most existential therapists

Albert Ellis

- ***Rational emotive therapy***: people make themselves unhappy through "irrational beliefs and automatic thinking"—the basis for the technique of changing or stopping thoughts

Viktor Frankl

- ***Logotherapy***: life must have meaning and therapy is the search for that meaning

Frederick "Fritz" Perls

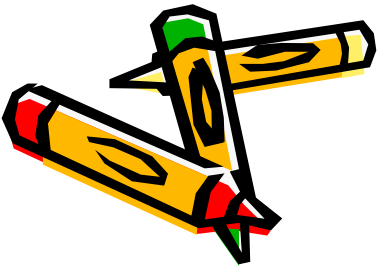
- ***Gestalt therapy*** emphasizes self-awareness and identifying thoughts and feelings in the here and now

William Glasser

- ***Reality therapy*** focuses on the person's behavior and how that behavior keeps the person from achieving life goals

Existential theorists believe that deviations occur when the person is out of touch with self or environment; thus, the goal of therapy is to return the person to an authentic sense of self.

Treatment Modalities

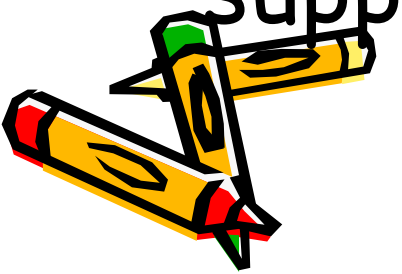


Community (outpatient) mental health treatment

- The client can often continue to work and can stay connected with family, friends, and other support systems while participating in therapy
- Personality or behavior patterns gradually develop over the course of a lifetime and cannot be changed in a relatively short inpatient course of treatment

Hospital (inpatient) treatment

- Severely depressed and suicidal
- Severely psychotic
- Experiencing alcohol or drug withdrawal
- Exhibiting behaviors that require close supervision in a safe, supportive environment

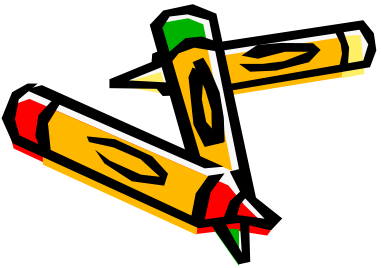


Psychotherapy

- Includes those means by which a therapist attemps to provide new interpersonal experience for another human being
- These experiences are designed to enhance one ability to manage subjective distress

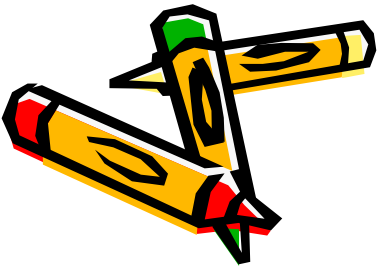
Psychotherapy

- **It can not alter the problem of world in which patient lives**
- **But it can enhance self acceptance, empower the patient to make life changes and help patient to cope with enviroment more effectively**



Classification of Psychotherapy

- according to who is involved in the treatment
- an individual
- a group
- a couple
- a family therapy

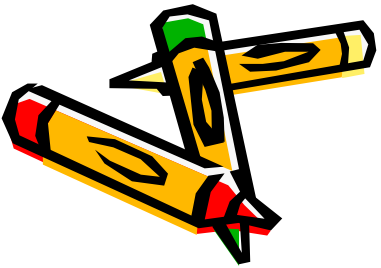


Classification of Psychotherapy

- according to the content and methods used
- analytic
- interpersonal
- cognitive, behavioral, cognitive – behavioral (CBT)
- All psychotherapies are aimed at changing aspects of the patient

Characteristics common for all psychotherapies

- Based on interpersonal relationship
- used verbal communication between two or more people as healing element
- specific expertise on the part of the therapist in using communication and relationshop in healing way

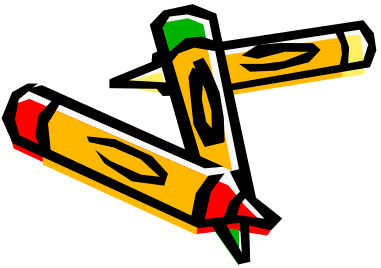


Characteristics common for all psychotherapies

- based on rationale or conceptual structure that is used to understand the patient problem
- use of the specific procedure in the relationship that is linked to rationale
- structure relationship
- expectation of improvement

Individual Psychotherapy

SEVEN SUBTYPES



1.CLASSICAL PSYCHOANALYSIS

- Based on Freud's theory
- To uncover unconscious feelings and thoughts that interfere with the client's living a fuller life
- **Free association-** client is encouraged to say anything that comes to mind, without censoring thoughts or feelings
- **Dream analysis**
- Working through (**transference**)-process of repeated interpretation to the person of his or her unconscious processes has the effect of bringing about change

2. PSYCHOANALYTICAL PSYCHOTHERAPY

- Uses **DREAM ANALYSIS, TRANSFERENCE and FREE ASSOCIATION AND COUNTERTRANSFERENCE**
- Therapist is much more involved and interacts with the client more freely
- Done through **intimate professional** relationship between the nurse/therapist and the client over a period of time (introductory, working and termination phase)

3. SHORT TERM DYNAMIC PSYCHOTHERAPY

- Indication-persons with specific symptom or interpersonal problem that he/she wants to work on
- Therapist directs the content
- Use of **transference and dream analysis, NO FREE ASSOCIATION**
- Weekly sessions (total number-12 to 30)
- Successful for highly motivated individuals who have insight and with positive relationship with the therapist

4. TRANSACTIONAL ANALYSIS

- Eric Berne
- Each person has three ego states and change from one to another frequently
- **Parent**-concepts of standards of behavior and how things should be done e.g. "Go and take out the garbage."
- **Adult**-rational thinking and data analyzing part of the personality e.g. "Would you please take out the garbage"
- **Child**- feelings associated with persons, things or incidents represent the need-gratifying aspects of the personality. E.g. "Is that why you married me?To be your garbage man?"
- For group, family and individual
- Client to identify ego states for each given situation
- Rewarding of positive or negative behaviors with **strokes**
- Client work through these behaviors

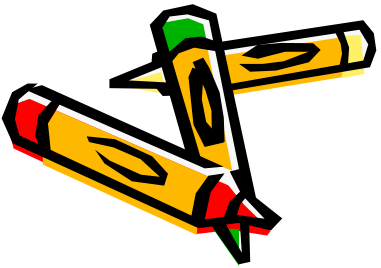
5. COGNITIVE PSYCHOTHERAPY

- Restructuring or changing ways in which people think about themselves

  3 steps:

1. Thought stopping
2. Positive self-talk
3. Decatastrophizing

- Therapists help patients identify these thoughts



6. BEHAVIORAL THERAPY

- Changes in maladapted behavior can occur without insight into the underlying cause
- Based on learning theory (B.F.Skinner, Pavlov)
- **Modeling**
- **Operant conditioning**
- **Self-control therapy-** combination of cognitive & behavioral approaches "talking to self"
- **Systematic desensitization**
- **Aversion therapy**
- **Token economy**

7. GESTALT THERAPY

- Emphasis on the "**here and now**"
- Only present behavior can be changed, not history
- Uncover repressed feelings and needs
- Techniques: have a person behave the opposite of the way he/she feels, presuming that a person can then come in contact with a submerged part of the self; in dreams, person is ask to play the roles of persons in the dream to get in touch with different repressed feelings

Group Therapy

- *Group therapy* involves a therapist or leader and a group of clients sharing a common purpose; members contribute to the group and expect to benefit from it.
- Types of groups include:
- Psychotherapy groups, family therapy, family education, support groups, self-help groups, education groups

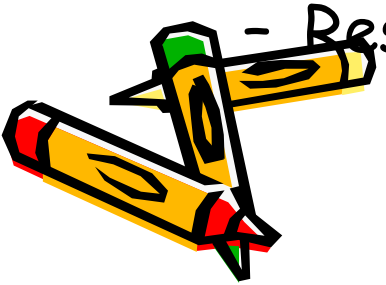
Psychosocial Interventions

Psychosocial interventions are nursing activities that enhance the client's social and psychological functioning and promote social skills, interpersonal relationships, and communication.

These interventions are used in mental health and other practice areas.

Assumption of Family Therapy

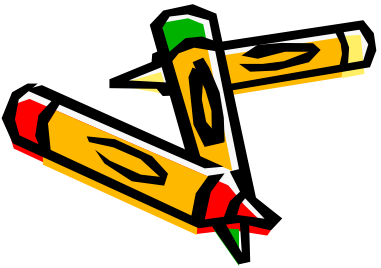
- Client: **Whole family**
- Concepts:
  - The family is the most fundamental unit of the society.
  - Adaptive or maladaptive patterns of behavior are learned from the family
  - **Dysfunction in the family = dysfunction in the individual**
- Purpose
  - Improve relationships among family members
  - Promote family function
  - Resolve family problems



ATTITUDE THERAPY

1. Paranoid – Passive Friendliness
2. Withdrawn – Active Friendliness
3. Depressed / Anorexia – Kind Firmness
4. Manipulative – Matter of Fact
5. Assaultive – No Demand
6. Anti-social – Firm, consistent

PSYCHOSOMATIC THERAPY



Electroconvulsive Therapy

One of the chief benefits of ECT is that it:

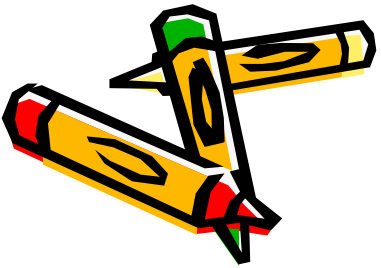
A. shortens the hospitalization and follow-up periods

B. often serves as an adjunct to psychotherapy and other treatment

C. decreases the need for medication and psychotherapy

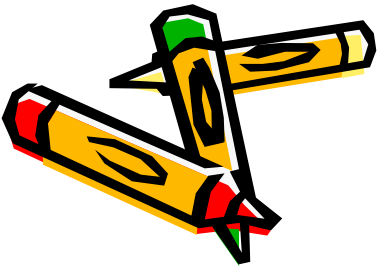
D. enable the client to terminate psychiatric treatment

- Effective in most affective disorders
- The induction of a grandmal seizure in the brain.
- Abnormal firing of neurons in the brain causes an increase in neurotransmitters
- Number of Treatments: 6-12 ,3 times a week, about .5-2seconds
- Unilateral or bitemporal



Indications:

- Patients who require rapid response
- Patients who cannot tolerate pharmacotherapy or cannot be exposed to pharmacotherapy
- Patients who are depressed but have not responded to multiple and adequate trials of medication

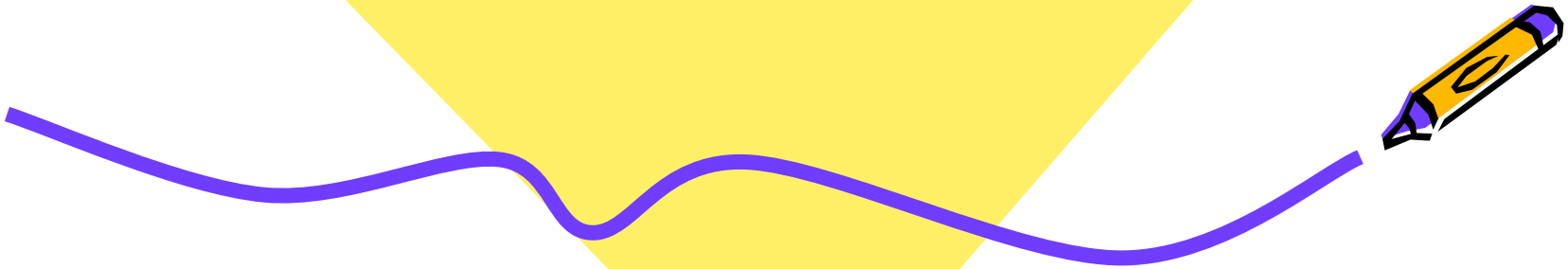


Community-Based Care

- Regular follow-up appointments, compliance with prescribed medication, and participation in community support programs help the client to achieve stability
- Anger management groups are available to help client express their feelings and learn problem-solving and conflict-resolution techniq

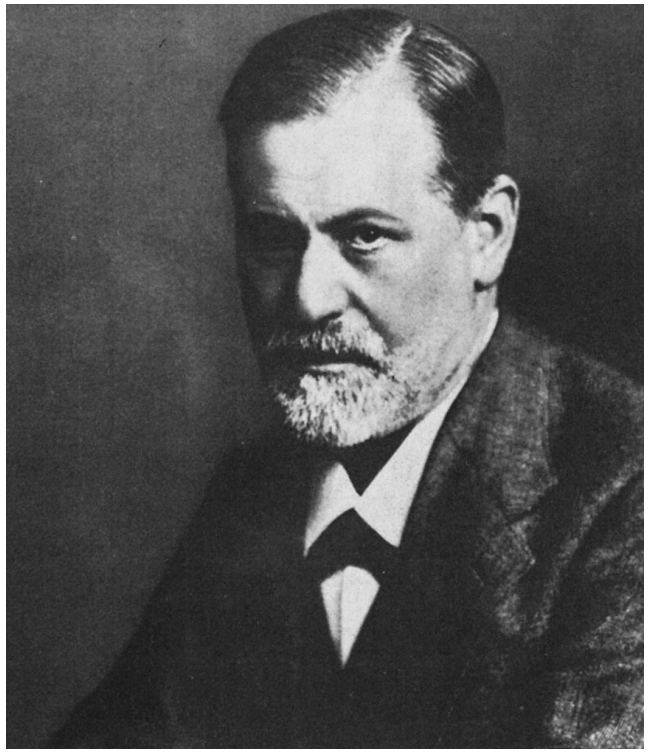
Psychosocial Theories and Therapy

Jana CHIHAI



Psychoanalytic Theories

- Pioneered by *Sigmund Freud* (1856-1939) in Vienna

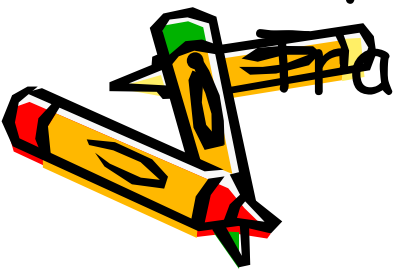


- **Father of Psychoanalysis**

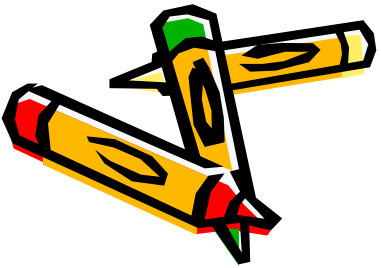
  - "Your behavior today is directly or indirectly affected by your childhood days or experiences.

  - STRUCTURE – *Personality Structure*

- All human behavior is caused and can be explained
- Personality components conceptualized as id, ego, and superego
- Behavior motivated by subconscious thoughts and feelings; treatment involving analysis of dreams and free association
- Ego defense mechanisms
- Psychosexual stages of development
- Transference and countertransference

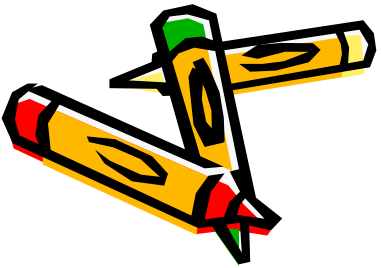


Psychoanalysis focuses on discovering the causes of the client's unconscious and repressed thoughts, feelings, and conflicts believed to cause anxiety and helping the client to gain insight into and resolve these conflicts and anxieties.

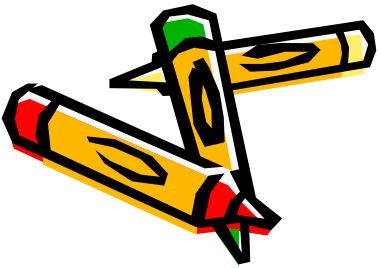


Personality Structure

- ID (4-5MONTHS)
  - Impulsive / Instinctual drive
  - I want to… PLEASURE PRINCIPLE
  - I want to… PHYSIOLOGIC NEEDS
  - I want to… PRIMARY PROCESS

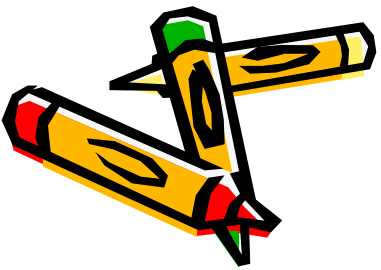


- EGO
  - Executive
  - REALITY PRINCIPLE
  - Conscious
  - Competencies
  - Decision Maker; Problem-Solving; Critical and Creative thinking



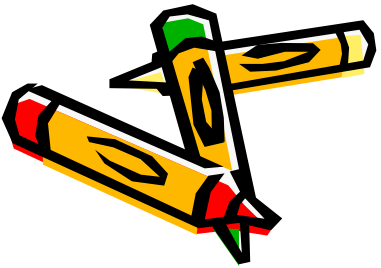
- SUPEREGO

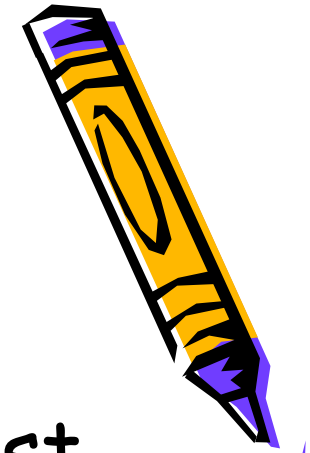
  - Should not
  - Small voice of GOD
  - Set norms, standards and values
  - MORAL PRINCIPLE
  - Conscience



Erik Erickson

Psychosocial Theory of Development





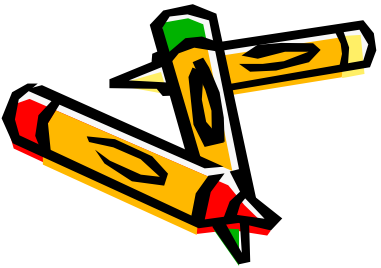
0-18 mos. **T**rust vs. **M**istrust

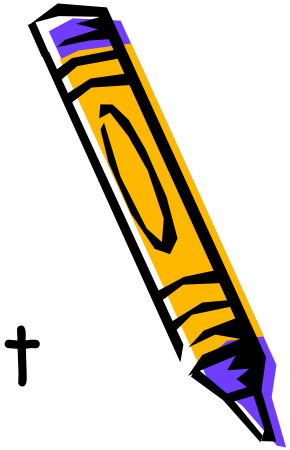
-attachment to mother which lays foundations for later trust in others

-conflict: general difficulties relating to others. suspicion, fear of the future

- 18 mOs – 3 yrs **A**utonomy vs. **S**hame/Doubt

- Gaining some basic control of self and environment
- Conflict: independence-fear conflict, severe feelings of self-doubt

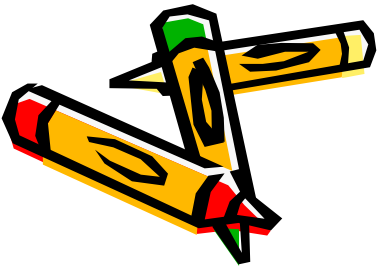




3 yrs – 6 yrs **I**nitiative vs. **G**uilt

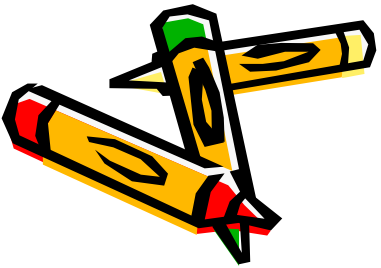
-becoming purposeful and directive

-conflict: aggression-fear conflict; sense of inadequacy and guilt



6 yrs – 12 yrs Industry vs. Inferiority

- Developing social, physical and school skills, competence
- Conflict: sense of inferiority; difficulty learning and working

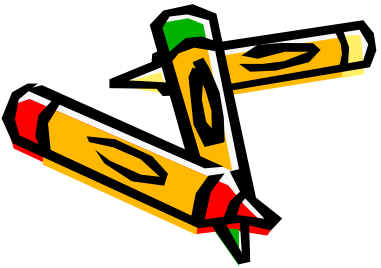


- 12 yrs – 20 yrs Identity vs. Role Diffusion
- Making transition from childhood to adulthood; developing a sense of identity
- Conflict: confusion of who one is, identity submerged in relationships or group memberships

21 yrs – 35 yrs Intimacy vs. Isolation

-establishing intimate bonds of love and friendship

-conflict: emotional isolation

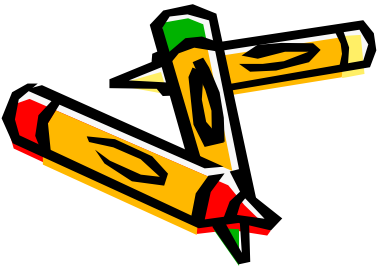


35 yrs – 55 yrs Generativity vs. Stagnation

-fulfilling life's goals that involve family, career and society, developing concerns that embrace future generations

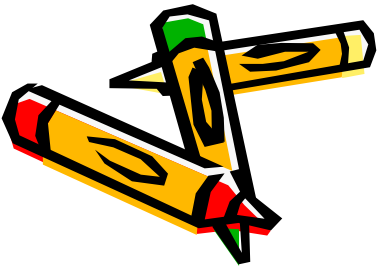
-conflict: self-absorption. Inability to grow as a person

- 55 yrs – above Integrity vs. Despair
- Looking back into one's life and accepting its meaning
- Conflict: dissatisfaction with life, denial of or despair over prospect of death



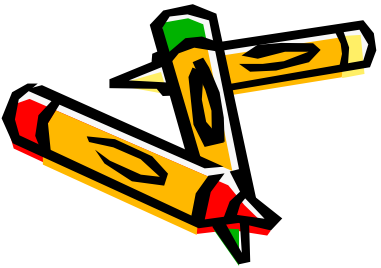
Jean Piaget

Cognitive Theory of Development



Jean Piaget (1896-1980)

Described *cognitive and intellectual development* in children in four stages: sensorimotor, preoperational, concrete operations, formal operations



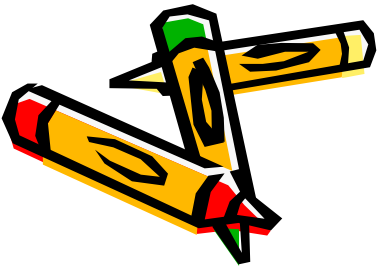
Humanistic Theories

Abraham Maslow (1921-1970)

- *Hierarchy of needs*: basic physiologic needs, safety and security needs, love and belonging needs, esteem needs, self-actualization

Carl Rogers (1902-1987)

- ***Client-centered therapy***
- Concepts of unconditional positive regard, genuineness, and empathetic understanding



Behavioral Theories

Ivan Pavlov (1849–1936)

B. F. Skinner (1904–1990)

- *Behaviorism* focuses on behaviors and behavior changes rather than on explaining how the mind works
- All behavior is learned
- Behavior has consequences (reward or punishment)
- Rewarded behavior tends to recur

Existential Theories

- ***Cognitive therapy*** focuses on immediate thought processing and is used by most existential therapists

Albert Ellis

- ***Rational emotive therapy***: people make themselves unhappy through "irrational beliefs and automatic thinking"—the basis for the technique of changing or stopping thoughts

Viktor Frankl

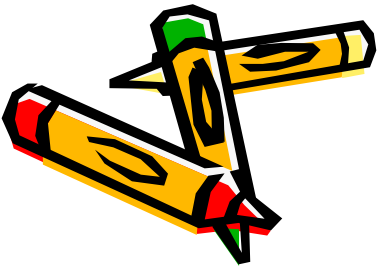
- ***Logotherapy***: life must have meaning and therapy is the search for that meaning

Frederick "Fritz" Perls

- ***Gestalt therapy*** emphasizes self-awareness and identifying thoughts and feelings in the here and now

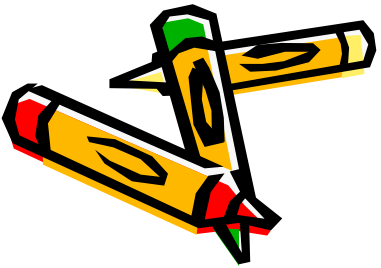
Existential theorists believe that deviations occur when the person is out of touch with self or environment; thus, the goal of therapy is to return the person to an authentic sense of self.

Treatment Modalities



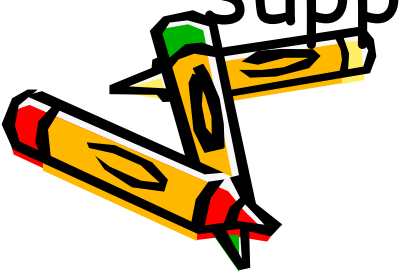
Community (outpatient) mental health treatment

- The client can often continue to work and can stay connected with family, friends, and other support systems while participating in therapy



Hospital (inpatient) treatment

- Severely depressed and suicidal
- Severely psychotic
- Experiencing alcohol or drug withdrawal
- Exhibiting behaviors that require close supervision in a safe, supportive environment

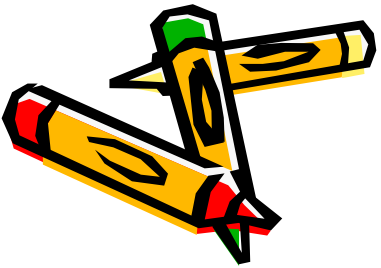


Psychotherapy

- Includes those means by which a therapist attemps to provide new interpersonal experience for another human being
- These experiences are designed to enhance one ability to manage subjective distress

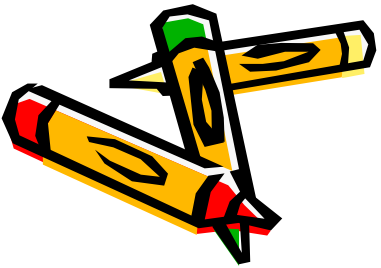
Psychotherapy

- **It can enhance self acceptance, empower the patient to make life changes and help patient to cope with enviroment more effectively**



Classification of Psychotherapy

- according to who is involved in the treatment
- an individual
- a group
- a couple
- a family therapy

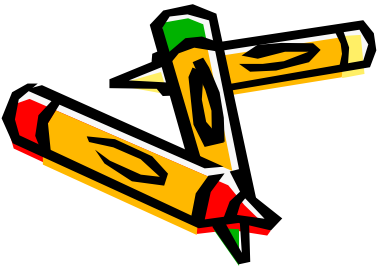


Classification of Psychotherapy

- according to the content and methods used
- analytic
- interpersonal
- cognitive, behavioral, cognitive – behavioral (CBT)
- All psychotherapies are aimed at changing aspects of the patient

Characteristics common for all psychotherapies

- Based on interpersonal relationship
- used verbal communication between two or more people as healing element
- specific expertise on the part of the therapist in using communication and relationshop in healing way



Characteristics common for all psychotherapies

- based on rationale or conceptual structure that is used to understand the patient problem
- use of the specific procedure in the relationship that is linked to rationale
- structure relationship
- expectation of improvement

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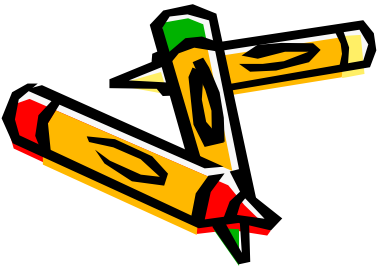

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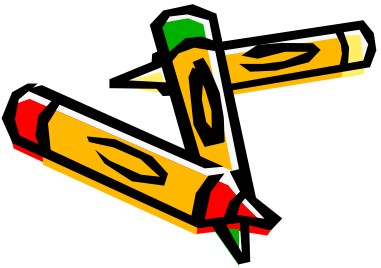

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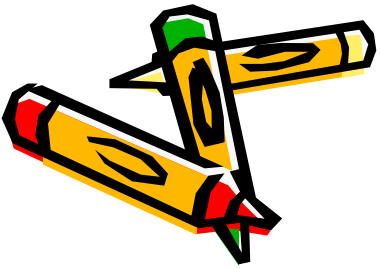

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DE MEDICINĂ ȘI FARMACIE
„NICOLAE TESTEMIȚANU”
din REPUBLICA MOLDOVA

Schizophrenia Spectrum and Other Psychotic Disorders.
Bipolar and Related Disorders.
Depressive Disorders.
Psychiatric disorders in epilepsy.

Schizophrenia spectrum and other psychotic disorders

Schizophrenia spectrum and ***other psychotic disorders*** include:

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

They are defined by abnormalities in one or more of the following five domains:

- delusions,
- hallucinations,
- disorganized thinking (speech),
- grossly disorganized or abnormal motor behavior (including catatonia), and
- negative symptoms.

Schizophrenia

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.

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.

Morel s description-demence precoce

Kahlbaum-catatonia

Hecker-hebefrenia

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 example, 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.

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.

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.

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.

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 and delusions;
- the **negative symptoms** are represented by cognitive disorders, having its origin probably in the disorders of associations of thoughts, combined with emotional blunting and small or missing production of hallucinations and delusions.

Clinical features

Thought and Speech Disorders.

- Autistic thinking,
- Loosening of associations (incoherence),
- Thought blocking,
- Neologisms,
- Mutism,
- Echolalia,
- Thought insertion,
- Thought withdrawal,
- Made feeling,
- Delusions.

Disorders of Perception

- Hallucinations (perception without stimuli),
- Auditory hallucinations (voices commenting or discussing the patient in the third person),
- Visual hallucinations,
- Tactile hallucinations,
- Gustatory hallucinations,
- Olfactory hallucinations.

Schizophrenia types

- Paranoid schizophrenia,
- Hebephrenic schizophrenia,
- Catatonic schizophrenia,
- Simple schizophrenia,
- Undifferentiated schizophrenia.

Paranoid schizophrenia

1. Caracterized mainly by the presence of delusions of persecution or grandeur.
2. Frequent auditory hallucinations related to a single theme, usually persecutory.
3. Patients typically are tense, suspicious, guarded, reserved and somtimes hostile or aggressive.
4. None of the following: incoherence, loosening of associations, flat of grossly innappropriate affect, catatonic behavior, grossly disorganized behavior. Intelligence remains intact.
5. Age of onset later than catatonic or disorganized type, and the later the onset, the better the prognosis.

Delusional Sd's

- Paranoial (primary delusions);
- Paranoid or Hallucinator-paranoid (variant sd. Kandinsky-Clerambault)– with secondary delusions;
- Parafrenic (megalomanic, expansive delusions).

Paraphrenia

Sometimes used as a synonym for paranoid schizoprenia.

The term also is used for either a progressively deteriorating course of illness or the presence of a well-systematized delusional system.

These multiple meanings have reduced the usefulness of the term.

Hebephrenic Schizophrenia

Hebephrenic (disorganized) schizophrenia is characterized by disorganized thinking with blunted and inappropriate emotions.

It begins mostly in adolescent age, the behavior is often bizarre.

There could appear mannerisms, grimacing, inappropriate laugh and joking, pseudophilosophical brooding and sudden impulsive reactions without external stimulation.

There is a tendency to social isolation.

Usually the prognosis is poor because of the rapid development of „negative” symptoms, particularly flattening of affect and loss of volition.

Catatonic Schizophrenia

Catatonic schizophrenia is characterized mainly by motoric activity, which might be strongly increased (hypekinesis) or decreased (stupor), or automatic obedience and negativism.

We recognize two forms:

- ***productive form***—which shows catatonic excitement, extreme and often aggressive activity; stereotypes, mannerisms, echo-signs: echolalia,
  echopraxia,
  echomimia
- ***stuporose form*** — characterized by general inhibition of patient's behavior or at least by retardation and slowness, followed often by mutism, negativism, flexibilitas cerea or by stupor.

  The consciousness is not absent.

Simple Schizophrenia

Simple schizophrenia is characterized by early and slowly developing initial stage with growing social isolation, withdrawal, small activity, passivity, avolition and dependence on the others.

The patients are indifferent, without any initiative and volition.

There is not expressed the presence of hallucinations and delusions.

Undifferentiated (atypical) Schizophrenia

Psychotic conditions meeting the general diagnostic criteria for schizophrenia, but not conforming to any of the subtypes, or exhibiting the features of more than one of them without a clear predominance of a particular set of diagnostic characteristics.

Schizotypal disorder

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

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.

A diagnosis of delusional disorder is not given if the individual has ever had a symptom presentation that met Criterion A for schizophrenia.

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.

Delusional Disorder

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.

Treatment of Schizophrenia

The acute psychotic schizophrenic patients will respond usually to antipsychotic medication.

According to current consensus we use in the first line therapy the newer atypical antipsychotics, because their use is not complicated by appearance of extrapyramidal side-effects, or these are much lower than with classical antipsychotics.

conventional antipsychotics (classical neuroleptics)	chlorpromazine, levomepromazine, thioridazine
	haloperidol, trifluoperazine
atypical antipsychotics	amisulpride, clozapine, olanzapine, quetiapine, risperidone, sulpiride, aripiprazole, ziprasidone

Depot Antipsychotics

Generic Name	*Trade Mark*	*Mean Dose (mg)*	*Interval*
flufenazin	MODITEN DEPOT	25	14-28 days
oxyprothepin	MECLOPIN	25	
haloperidol	HALDOL DEPOT	100	
flupenthixol	FLUANXOL DEPOT	40	
zuclopenthixol	CISORDINOL DEPOT	200	
fluspirilen	IMAP	6	7 days !!
risperidone	RISPERDAL CONSTA	20-30	14 days

Rapid Tranquilizers

	pro dosi (mg)	*pro die (mg)*
chlorpromazin	100-200	800-1200
levopromazin (TISERCIN)	50-100	500-600
haloperidol	5-10	40-100
chlorprothixen	100-150	500-600
zuclopenthixol (CISORDINOL ACUTARD)	50-150	(24-72 hours)
tiapride (TIAPRIDAL)		600-1200

Mood Disorders

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.

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

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.

Socio-cultural.

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

No correlation with socio-economic status.

No diffrence between races or religious groups.

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

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.**

The mood disorders may be subdivided into **unipolar** and **bipolar** types:

1. those that are characterized by **depression only**
2. 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.

The are **two types** of bipolar disorder:

bipolar I characterized by the occurence 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.

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 by individuals with bipolar II disorder is typically accompanied by serious impairment in work and social functioning.

Manic Episode

For a diagnosis of bipolar I disorder, it is necessary to meet the following criteria for a manic episode.

The manic episode may have been preceded by and may be followed by hypomanic or major depressive episodes.

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**).

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).

Hypomanic Episode

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.

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).

Major Depressive Episode

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.
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.

Prevalence of Major Depressive Episode.

Twelve-month prevalence of major depressive disorder in the United States is approximately 7%, with marked differences by age group such that the prevalence in 18- to 29-year-old individuals is threefold higher than the prevalence in individuals age 60 years or older.

Females experience 1.5- to 3-fold higher rates than males beginning in early adolescence.

Development and Course of Major Depressive Episode.

Major depressive disorder may first appear at any age, but the likelihood of onset increases markedly with puberty.

In the United States, incidence appears to peak in the 20s; however, first onset in late life is not uncommon.

The course of major depressive disorder is quite variable, such that some individuals rarely, if ever, experience remission (a period of 2 or more months with no symptoms, or only one or two symptoms to no more than a mild degree), while others experience many years with few or no symptoms between discrete episodes.

Cyclothymic disorder.

The diagnosis of cyclothymic disorder is given to adults who experience at least 2 years (for children, a full year) of both hypomanic and depressive periods without ever fulfilling the criteria for an episode of mania, hypomania, or major depression.

Diagnostic Features for **Cyclothymic Disorder.**

The **essential feature** of cyclothymic disorder is a chronic, fluctuating mood disturbance involving numerous periods of hypomanic symptoms and periods of depressive symptoms that are distinct from each other.

The hypomanic symptoms are of insufficient number, severity, pervasiveness, or duration to meet full criteria for a hypomanic episode, and the depressive symptoms are of insufficient number, severity, pervasiveness, or duration to meet full criteria for a major depressive episode.

During the initial 2-year period (1 year for children or adolescents), the symptoms must be persistent (present more days than not), and any symptom-free intervals last no longer than 2 months.

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 lifetime prevalence - about 10-20 *%;* women: men 2:1.

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

Dysthymic disorder (previously known as *depressive neurosis*) is less severe than major depressive disorder.

Dysthimia 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
(Persistent Depressive Disorder)

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.

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 thefirst 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 dysthimic 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.

Test Methods

- **Self-reported scales**:
  - Young Mania Rating Scale (YMRS)
  - Beck scale (depression)
  - Zung scale (depression)

- **Interview with physician**:
  - Hamilton scale (HAMD)
  - Montgomery and Asberg scale (MADRS)

Treatment of Mania

Mood stabilizers and Anticonvulsants:

- lithium (0.6—1.2 mEq/L)
- carbamazepine (6—12 mg/L)
- valproate (50—125 mg/L)
- gabapentine
- topiramate
- lamotrigine

Agitated or psychotic patient – coadministration of:

- antipsychotics of second generation (olanzapine, risperidone)
- benzodiazepines (lorazepam, clonazepam)

ECT.

Treatment of Depression

Various antidepressants altering levels of central neurotransmitters are available to treat depression.

Their overall effectiveness: 65-70%

Mild to moderate depressive episode: SSRIs.

Severe depression: antidepressants with broader spectrum of effects, like SNRI or TCA.

Patients with insomnia or anorexia may do better with more sedating medication (mirtazapine, trazodone).

Patients with lethargy, hypersomnia, weight gain and lower levels of tension and anxiety may prefer the less sedating medications such as bupropion, reboxetine or stimulating SSRIs.

IMAOs should be tried in refractory patients or patients with atypical depression.

Treatment of Depression

- Drug trials should last 4 to 8 weeks.
- No response within 4 weeks of treatment - the dose should be increased or the patient should be switched to another drug.
- In partial responders - augmentation strategy; coadministration of lithium carbonate or trijodthyronine.
- Psychotic patient - adding on neuroleptics.
- Anxious or agitated patients (also to improve the sleep quality) - benzodiazepine coadministration for a short period of time.
- Lithium prophylaxis is an option to antidepressants.
- Supportive psychotherapy.

Treatment of Depression

First episode of depression - the drug should be continued for another 16-20 weeks after the patient is thought to be well (continuation treatment to prevent recurrence).

The medication should be tapered gradually because many patients experience some mild withdrawal effects.

Patients with recurrent depression need long-term maintenance therapy to prevent relapses.

Electroconvulsive therapy (ECT) is the treatment of choice for some patients with very severe depression, with high potential for suicide or other selfdestroying behaviour and for pregnant women.

Psychiatric disorders in epilepsy.

Definition

Epilepsy is a chronic disease characterized by convulsive and non-convulsive paroxysmal disorders, typical personality changes and the possibility of developing acute and chronic psychoses at distant stages of the disease.

Introduction.

The clinical picture of epilepsy is a complex set of mental, neurological and somatic manifestations.

„**Epilepsia**” in translation from *Greek* - to suddenly fall, to suddenly be covered.

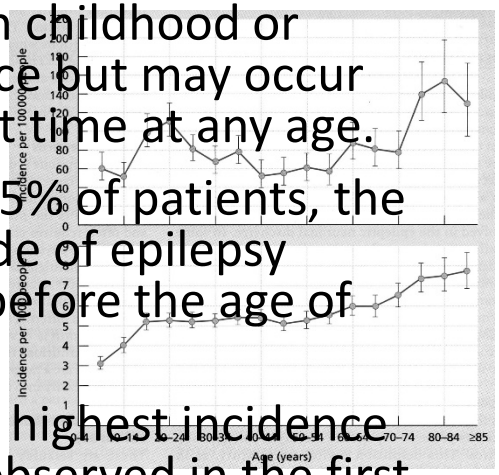
Synonyms are also:

- morbus sacer, morbus divinus - „**sacred disease**”,
- morbus lunaticus - „**moon disease**” (translated from *Egyptian*).

Epidemiology.

Epilepsy usually presents in childhood or adolescence but may occur for the first time at any age.

In 75% of patients, the first episode of epilepsy develops before the age of 18.



The highest incidence rates are observed in the first year of life, the minimum - between 30-40 years and then at a later age they again increase.

Epidemiology and course.

Epilepsy is a common disease.

In the world, up to 40 million people suffer from this disease.

5% of the population suffer a single sz at some time.

0.5-1% of the population have recurrent sz = EPILEPSY.

The morbidity rate is 0.63%, and the annual incidence rate is 0.05%.

In 12-20% of cases, convulsive paroxysms are hereditary.

Of all patients, about 8-10% are hospitalized annually.

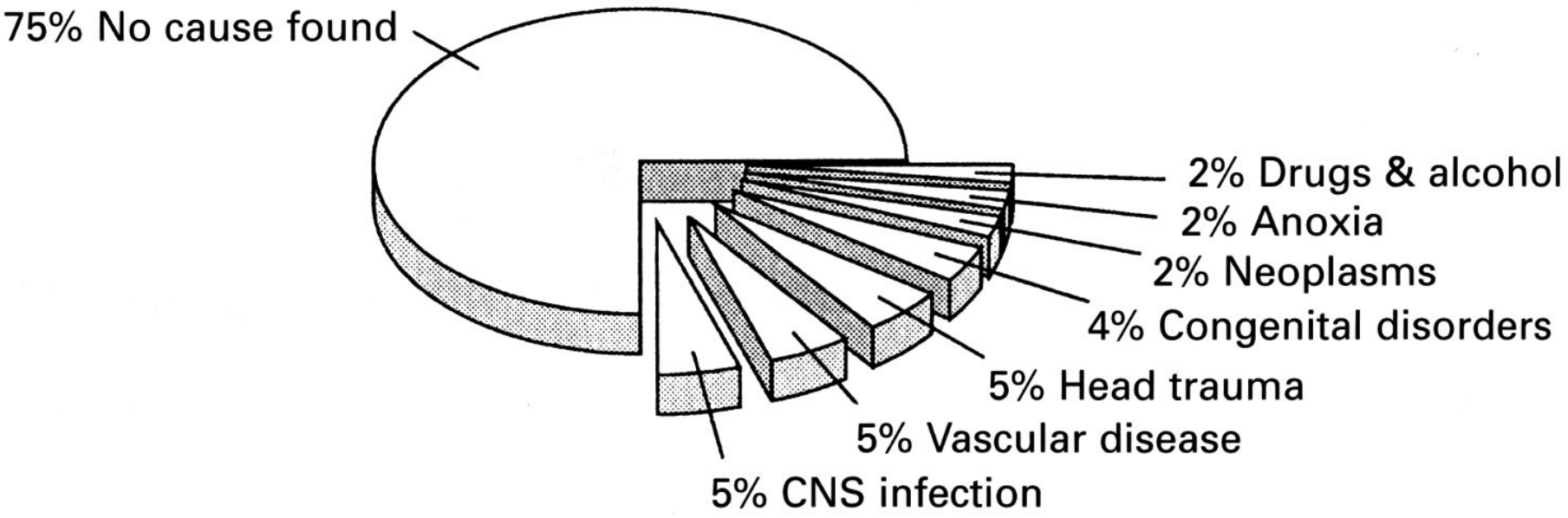
There are no significant differences in the frequency of epilepsy in men and women.

70% = well controlled with drugs (**prolonged remissions**);

30% epilepsy at least partially resistant to drug treatments = **INTRACTABLE EPILEPSY.**

Epilepsy

is a symptom of numerous disorders, but in the majority of sufferers the **cause** remains unclear despite careful history taking, examination and investigation!

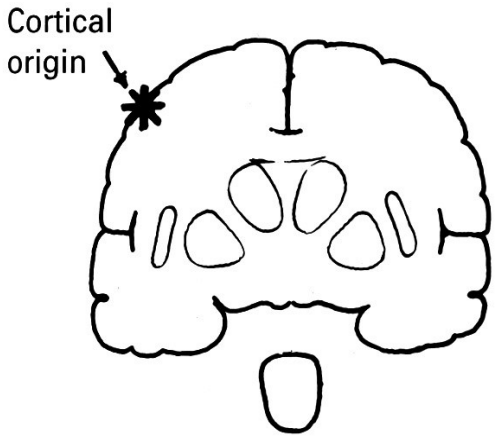


Pathogenesis.

In epilepsy, there is an increase in **glutamate** and a decrease in **gamma-aminobutyric acid (GABA)**.

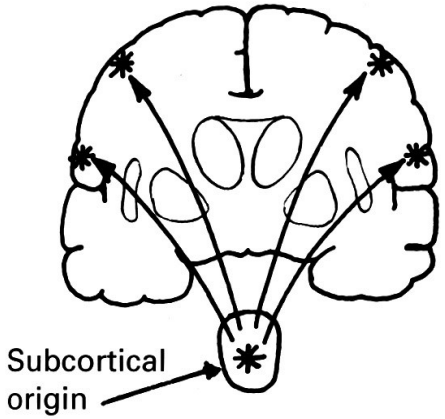
Classification

- Focal seizures – *account for 80% of adult epilepsies*
- Simple partial seizures
- Complex partial seizures
- Partial seizures secondarily generalized



- Generalized seizures

- Unclassified seizures



Prevalence of **psychosis in epilepsy** is 7%.

Lifetime prevalence of psychosis in patients of epilepsy is 10%.

Temporal lobe epilepsy (TLE) is the most likely type produce psychiatric symptoms.

Psychiatric symptoms in epilepsy are very difficult to differentiate from those in schizophrenia.

Temporal Lobe Epilepsy is a common medical condition associated with olfactory hallucinations.

Focal seizures in the temporal lobe involve small areas of the lobe such as the **amygdala** and **hippocampus**.

The stereotyped and uncontrollable nature of the attacks is characteristic of epilepsy.

During ictal and postictal epilepsy, confusional syndromes are observed.

In temporal lobe epilepsy, a **focal seizure** usually causes abnormal sensations only.

These may be:

- Sensations such as déjà vu („already seen”- a feeling of familiarity), jamais vu („never seen”- a feeling of unfamiliarity),
- Amnesia; or a single memory or set of memories,
- A sudden sense of unprovoked fear and anxiety,
- Nausea,
- Auditory, visual, olfactory, gustatory, or tactile hallucinations,
- Visual distortions such as macropsia and micropsia,
- Dissociation or derealisation,
- Dysphoric or euphoric feelings, fear, anger, and other emotions may also occur. **Often, the patient cannot describe the sensations.**
- Olfactory hallucinations often seem indescribable to patients beyond „pleasant” or „unpleasant”.
- Focal aware seizures are often called „auras” when they serve as a warning sign of a subsequent seizure.

Focal impaired awareness seizures are seizures which impair consciousness to some extent: they alter the person's ability to interact normally with their environment.

They usually begin with a focal aware seizure, then spread to a larger portion of the temporal lobe, resulting in impaired consciousness.

They may include psychic features present in focal aware seizures.

Signs may include:

- Confusion and disorientation,
- Altered ability to respond to others, unusual speech,
- Transient aphasia (losing ability to speak, read, or comprehend spoken word),

These seizures tend to have a aura before they occur, and when they occur they generally tend to last only 1–2 minutes.

It is not uncommon for an individual to be tired or confused for up to 15 minutes after a seizure has occurred, although postictal confusion can last for hours or even days.

Though they may not seem harmful, due to the fact that the individual does not normally seize, they can be extremely harmful if the individual is left alone around dangerous objects.

For example, if a person with complex partial seizures is driving alone, this can cause them to run into the ditch, or worse, cause an accident involving multiple people.

With this type, some people do not even realize they are having a seizure and most of the time their memory from right before or after the seizure is wiped.

Complications of Temporal lobe epilepsy (TLE)

Depression.

Individuals with temporal lobe epilepsy have a higher prevalence of depression than the general population.

Memory.

The temporal lobe and particularly the hippocampus play an important role in memory processing. Declarative memory (memories which can be consciously recalled) is formed in the area of the hippocampus called the dentate gyrus.

Temporal lobe epilepsy is associated with memory disorders and loss of memory. Verbal memory deficit correlates with pyramidal cell loss in TLE. This is more so on the left in verbal memory loss. Neuronal loss on the right is more prominent in non-verbal (visuospatial memory loss).

Personality (Geschwind syndrome).

The effect of temporal lobe epilepsy on personality is a historical observation dating to the 1800s. Personality and behavioural change in temporal lobe epilepsy is seen as a chronic condition when it persists for more than three months.

Geschwind syndrome is a set of behavioural phenomena seen in some people with TLE.

Documented by Norman Geschwind, signs include:

- **hypergraphia** (compulsion to write (or draw) excessively),
- **hyperreligiosity** (intense religious or philosophical experiences or interests),
- **hyposexuality** (reduced sexual interest or drive),
- **circumstantiality** (result of a non-linear thought pattern, talks at length about irrelevant and trivial details).

Investigation

- **Routine investigation:** Haematology, biochemistry (electrolytes, urea and calcium), chest X-ray, electroencephalogram (EEG).

  Neuroimaging (CT/MRI) should be performed in all persons aged 25 or more presenting with first seizure and in those pts. with focal epilepsy irrespective of age.
- **Specialised neurophysiological investigations:** Sleep deprived EEG, video-EEG monitoring.
- **Advanced investigations** (in pts. with intractable focal epilepsy where surgery is considered): Neuropsychology, Semiinvasive or invasive EEG recordings, MR Spectroscopy, Positron emission tomography (PET) and ictal Single photon emission computed tomography (SPECT)

Treatment.

Basic **rules** for drug treatment:

- Drug treatment should be simple,
- Preferably using one anticonvulsant (monotherapy).
- Polytherapy is to be avoided especially as drug interactions occur between major anticonvulsants.
- „**Start low, increase slow**“.

Anticonvulsants (I).

The majority of pts respond to drug therapy (anticonvulsants).

In intractable cases surgery may be necessary.

Many anticonvulsant oral medications are available for the management of temporal lobe seizures.

Most anticonvulsants function by decreasing the excitation of neurons, for example, by blocking fast or slow sodium channels or by modulating calcium channels; or by enhancing the inhibition of neurons, for example by potentiating the effects of inhibitory neurotransmitters like GABA.

In TLE, the most commonly used older medications are:

- phenytoin,
- carbamazepine,
- primidone,
- valproate, and
- phenobarbital.

Anticonvulsants (II).

Newer drugs, such as:

- gabapentin,
- topiramate,
- levetiracetam,
- lamotrigine,
- pregabalin,
- tiagabine,
- lacosamide, and
- zonisamide promise similar effectiveness, with possibly fewer side-effects.

Felbamate and vigabatrin are newer, but can have serious adverse effects so they are not considered as first-line treatments.

Surgical interventions.

Up to one third of patients with medial temporal lobe epilepsy will not have adequate seizure control with medication alone.

For patients with medial TLE whose seizures remain uncontrolled after trials of several types of anticonvulsants (that is, the epilepsy is intractable), surgical excision of the affected temporal lobe may be considered.

Epilepsy surgery has been performed since the 1860s and doctors have observed that it is highly effective in producing freedom from seizures.

However, it was not until 2001 that a scientifically sound study was carried out to examine the effectiveness of temporal lobectomy.

Temporal lobe surgery can be complicated by decreased cognitive function.

However, after temporal lobectomy, memory function is supported by the opposite temporal lobe; and recruitment of the frontal lobe.

Cognitive rehabilitation may also help.

Other treatments.

Where surgery is not recommended, further management options include new anticonvulsants, and vagus nerve stimulation.

The ketogenic diet is also recommended for children, and some adults.

Other options include brain cortex responsive neural stimulators, deep brain stimulation, stereotactic radiosurgery, such as the gamma knife, and laser ablation.

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. Conversion disorder. Dissociative disorders. Somatoform disorders. Neurasthenia. The clinical picture, the treatment.

Dr. Jana Chihai, Associate Professor,
Psychiatry, Narcology and Medical Psychology Chair

What is ANXIETY?

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).

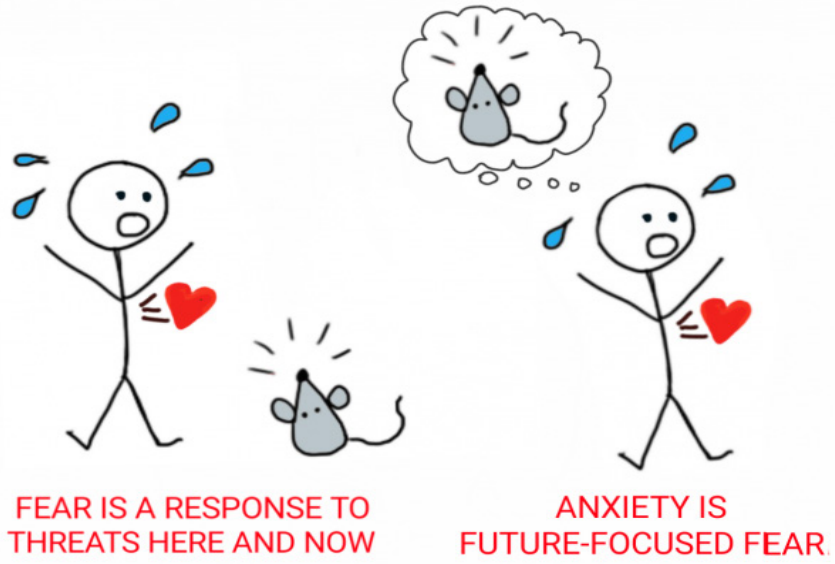
Anxiety

- 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 ≈ **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 (≈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.

Risk factors for developing anxiety

1. Personal

- genetic background (family history)
- personality (introverted, perfectionist, addicted, low self-esteem)
- health (health problems, psychiatric co-morbidities, psychoactive substance use and some medication)

2. Environmental

-strained social relations in different environments
-low social support
-poverty, unemployment, discrimination, human rights violation
-sick life partner

3. Life events

-traumatic youth (sexual abuse, psychological/physical violence);
-psychological trauma in adulthood (e.g. refugees, migrants);
-divorce (especially in women) or health-related (especially in the elderly);
-migration (discrimination, problems of integration and acceptance, homesickness).

Anxiety disorders

- The course of anxiety disorders is chronic and without proper treatment people suffer considerable long-term costs, such as :

- *increased risk for somatic diseases*
- *high comorbidity with other mental health problems (e.g. depression, alcohol or other substance abuse),*
- *increased disability rate*
- *academic failure*
- *unemployment or poor job performance.*

- People often do not present anxiety as their primary problem, but they present connected somatic symptoms;

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

Vegetative

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

Muscular

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

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).

Clinical anxiety can take many manifestations, with a wide variety of symptoms between people, cultures, genders, ages.

The most common categories of anxiety disorders are described in ICD-10 and DSM-V

Classification of anxiety disorders

DSM-V	ICD-10 CHAPTER V (F)
Panic disorder with/without agoraphobia 300.01	Panic disorder (episodic paroxysmal anxiety) F41 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 reac F43.22
Generalized anxiety disorder (GAD) 300.02	Generalized anxiety disorder F41.1
Anxiety disorder due to a general medical	Organic anxiety disorder F06.4

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

Panic disorder (PD) with or without agoraphobia

- most common in the 25-44 age group
- 5% lifetime prevalence
- there is a possibility of a genetic predisposition
- unforeseen attacks
- spontaneous
- intense fear of losing control,
- intense fear of going mad or dying,
- somato-vegetative symptoms, as well as concern about further attacks and their consequences.

Typical symptoms of panic attack

Panic attack - a distinct period of intense fear or discomfort in which at least 4 of the following symptoms occur suddenly and reach maximum intensity within 10 minutes:

1.Palpitations;

2.Sweating;

3.Whole-body tremor;

4.Shortness of breath or suffocation feeling;

5.Chest pain or discomfort;

6.Nausea or abdominal discomfort;

7.Feeling dizzy, unsteady;

8.Feeling of unreality or detachment from one's self;

9.Fear of death; fear of going mad

10.Paresthesia and cold flashes or hot flashes

When it lasts longer than 1 hour, another cause shall be sought!!!

Diagnostic criteria

For a definite diagnosis, several severe attacks must occur over a period of about **one month** :

- In circumstances where there is no objective danger;
- Attacks cannot be due to familiar or foreseeable circumstances;
- There should be intervals without anxiety symptoms between the attacks (although anticipatory anxiety is common).

Agoraphobia

The fear of being in open places, alone outside the home or in a crowd, with concomitant fear and/or avoidance of situations where it seems difficult (or embarrassing, or inaccessible) to get help if the patient feels unwell or in the event of a panic attack or panic-like symptoms.

All the criteria listed below shall be met for a definite diagnosis:

- *The psychological or vegetative symptoms must be primary manifestations of anxiety and shall not be secondary to other symptoms, such as delusions or obsessive thoughts;*
- *Anxiety should be limited to (or it occurs particularly in...) at least two of the following situations: crowds, public places, walking outside the home and traveling alone;*
- *Avoidance of the phobic situation is or has been a prominent feature.*

Generalized anxiety disorder (GAD)

- Recurrent nervous feelings, excessive worry about real circumstances, events or conflicts, associated with symptoms of fatigue, concentration and/or sleep problems.
- 6% lifetime prevalence.

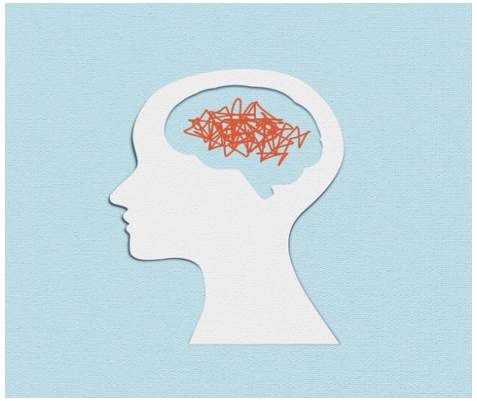
Diagnostic criteria

(A). Excessive worry anxiety, present most days for at least ***6 months.***

(B). It's difficult for the individual to control his/her worries.

(C) Anxiety and worries are associated with three (or more) of the following six symptoms :

1. Worry or feeling of impatience or of being to the limit.
2. Tiredness.
3. Difficulty concentrating or feeling of "empty" mind.
4. Irritability.
5. Muscle tension.
6. Sleep disturbances (difficulty falling or staying asleep, or restlessness, unsatisfactory sleep).



Note: **Only one symptom is required in children.**

Generalized anxiety disorder (GAD)

Diagnostic criteria

(D). The anxiety, the worries or the somatic symptoms cause clinically significant discomfort or impairment in important areas of functioning.

(E). The disturbance cannot be assigned to the physiological effects of a substance or of a medical condition (hyperthyroidism).

(F). The disturbance is not better explained by another mental disorder (e.g., anxiety or worry about triggering panic attacks in panic disorder, contamination or other obsessions in obsessive-compulsive disorder, memories of traumatic events in post-traumatic stress disorder, or content of delusional ideation in schizophrenia or delusional disorder).

Specific phobia

- An abnormal, intense, persistent, intense fear triggered by the presence or the anticipation of a specific object, phenomenon or situation (e.g., heights).
- Awareness that the fear is irrational
- The prevalence of 11,25%
- Usually occurs in adolescence or adulthood
- Phobic situations are usually avoided, or, if not, are overcome with anxiety or intense distress
- They are twice more frequent in women.
- Zoophobia is the most common specific phobia.

Diagnostic criteria

A. Intense fear or anxiety about a particular object or situation

B. The phobic object or situation almost always causes immediate fear or anxiety.

C. The phobic object or situation is consciously avoided or faced with intense fear or anxiety.

D. The fear or anxiety is disproportionate to the real danger posed by the respective object or situation and to the social-cultural context.

E. The fear, anxiety or the avoidance behaviour is persistent, usually lasting for at least *6 months*.

F. The fear, anxiety or the avoidant behaviour causes a clinically significant discomfort or impairment in important areas of functioning.

G. The disturbance does not better correspond to the symptoms of other mental disorders, such as: obsession-related objects or situations (like in obsessive-compulsive disorder) or fear of social situations (like in social anxiety disorder) etc.

Specific phobia

1. Fear of mirrors or of seeing oneself in a mirror (**Eisoptrophobia**);
2. Fear of dolls (**Pediophobia**);
3. Fear of love (**Philophobia**);
4. Fear of clowns (**Coulrophobia**);
5. Fear of being burried alive (**Taphophobia**);
6. Fear of nudity (**Gymnophobia**);
7. Fear of beautiful women (**Venustraphobia**);
8. Fear of writing (**Graphophobia**);
9. Fear of sleep (**Somniphobia**);
10. Fear of money (**Chrometophobia**);

11.Penteraphobia – Fear of the mother-in-law;

12. Scriptophobia – Fear of writing in public;

13. Omfalophobia – Fear of the navels;

14. **Tetraphobia** – Fear of number 4;

15. **Hylophobia** – Fear of forests and trees;

16. Anthophobia – Fear of flowers;

17. Turophobia – Fear of cheese;

18. Myrmecophobia – Fear of ants;

19. Xanthophobia – Fear of the colour yellow;

20. Ephebiphobia – Fear of youth;

21. Anemophobia – Fear of wind;

Specific phobia

23. Triskaidekaphobia – Fear of the number 13;
24. **Paraskavedekatriaphobia** – Fear of Friday the 13th;
25. **Arachibutyrophobia** – Fear of peanut butter sticking to the roof of the mouth;
26. **Emetophobia** – Fear of vomitting;
27. **Ergophobia** – Fear of work;
28. **Chrometophobia** – Fear of money;
29. **Genuphobia** – Fear of knees;
30. **Lipophobia** – Fear of fat in food;
31. **Hippopotomonstrosesquippedaliophobia** – Fear of long words;
32. **Pogonophobia** – Fear of beards;
33. **Trypophobia** – Fear of holes;
34. **Geniophobia** – Fear of chins;
35. **Ombrophobia** – Fear of rain;
36. **Globophobia** –Fear of balloon popping;
37. **Barophobia** – Fear of gravity;
38. **Genophobia** – Fear of sexual intercourse;
39. **Plutophobia** – Fear of wealth;
40. **Dextrophobia** – Fear of objects on the right side of the body.

Social phobia (Social anxiety disorder)

Abnormal, persistent and irrational fear of one or more social or performance situations that is disproportionate to the actual threat.

- Irrational fear of public situations;
- The most common anxiety disorder
- Lifetime prevalence - 10-16%;
- Persistent (excessive) anxiety about social or performance situations which are usually avoided (fear of public speaking, of eating in public, etc.);
- Fear of being humiliated, of being embarrassed in front of the public;
- Feeling of inferiority, low self-esteem.

Diagnostic criteria

A. Intense fear or anxiety about one or more social situations in which the individual may be exposed to evaluation by others.

B. The individual fears that he/she will be negatively assessed because of acting in a way or after the anxiety symptoms may be obvious

C. Social situations almost always cause fear or anxiety.

D. Social situations are avoided or faced with fear or intense anxiety.

E. Fear or anxiety is disproportionate to the threat posed by the social situation and to the socio-cultural context.

F. Fear, anxiety or avoidance is persistent, and usually lasts for *at least 6 months*.

G. Fear, anxiety or avoidance causes discomfort or clinically significant impairment in the social, professional or other important areas of functioning.

H. Fear, anxiety or avoidance cannot be explained by the physiological effects of a substance (drug, medication) or of a medical condition.

I. Fear, anxiety or avoidance is no better explained by the symptoms of another mental disorder, such as panic disorder, body dysmorphic disorder or autism spectrum disorders.

J. If another medical condition is present (Parkinson's disease, obesity), fear, anxiety or avoidance should be obviously unrelated to the condition or should be excessive.

Obsessive- compulsive disorder (OCD)

Ideas, images, ruminations, impulses, recurrent intrusive thoughts (obsessions) or repetitive patterns of behaviour or action (compulsions, rituals) which are intrusive to the ego and produce anxiety.

- They dominate the subject's consciousness;
- They affect everyday life extremely unpleasantly;
- The individual admits that they are useless, but is not able to control them;
- There are no differences in gender distribution, as opposed to other anxiety disorders, which are more common in women.
- Onset in childhood, adolescence or at the beginning of adulthood, but most often in adolescence;
- Depressive or anxiety symptoms are also present;
- Worldwide prevalence - 2-3%.

Obssesive- compulsive disorder (OCD)

Obsessions:

•Recurrent and persistent thoughts, impulses or images, which are felt at some point during the disturbance as intrusive and unwanted, and which cause marked anxiety or discomfort for most individuals. The individual tries to ignore or suppress such thoughts, impulses or images or to neutralize them by another thought or affection (by performing a compulsion).

Compulsions:

•Repetitive behaviours or mental actions that the individual feels compelled to perform in response to an obsession or according to rules that must be applied rigidly. Behaviours or mental acts aim to prevent or reduce anxiety or discomfort, or to prevent an event or situation that causes fear.

Diagnostic criteria

A. Presence of obsessions, compulsions or of both.

B. Obsessions or compulsions are time-consuming or cause clinically significant discomfort or impairment in social, occupational or other important areas of functioning.

C. Obsessive-compulsive symptoms cannot be explained by the psychological effects of a substance (drug, medication) or of a medical condition.

D. The disturbance cannot be better explained by the symptoms of another mental disorder (excessive worry, as in *generalized anxiety disorder*; difficulty in getting rid of or detaching from personal thnigs, as in *compulsive hoarding disorder*; sexual urges or fantasies, as in *paraphilic disorders*; insertion of delusional thoughts or concerns, as in *schizophrenia spectrum disorders* and *other psychotic disorders*; or repetitive behaviour patterns, as in *autism spectrum disorders*.

Acute stress reaction

- It is a transient disorder of significant severity that develops in an individual without any other apparent mental disorder in response to an exceptional physical and/or mental stress
- Psycho-social stress can precipitate the onset
- It is manifested by inhibition or agitation and hyperactivity, preceded by a state of perplexity
- It usually disappears after several hours or days
- Initial stage of perplexity, with narrowing of the field of consciousness and attention, inability to understand the external stimuli and disorientation
- Vegetative signs of anxiety
- Partial or total amnesia may be present during that episode
- The individual vulnerability and the ability to cope with the events play an important role for the occurrence and the severity of acute stress reactions

Diagnostic criteria

- There must be a temporal, immediate and clear link between the contact with an emotional stressor and the onset of symptoms, they usually occur within minutes, if not immediately
- Mixed picture, usually changing, in addition to the initial state of perplexity, depression, anxiety, anger, despair, hyperactivity and withdrawal can be seen, but no symptoms predominate for a long time.
- They remit rapidly when moving away from the stressful environment is possible, if the stress continues or cannot be removed, the symptoms, by their nature, start to reduce after 24-48 hours and they are usually minimal after 3
- Sudden exacerbations of symptoms shall be excluded in individuals who already show symptoms that meet the criteria for any other mental disorder, except those with personality disorders.

Post-traumatic stress disorder (PTSD)

A disorder caused by an extraordinary or extremely threatening stressful event or situation, characterized by symptoms of anxiety, reliving, flashbacks and/or nightmares and, memory avoidance behavior.

- Repeated reliving of a trauma as daytime memories or nightmares during the night;
- Feelings of fear and avoidance of the situations reminiscent of the event;
- It is often associated with depression and suicidal ideation may occur;
- They appear a few weeks or months after the event and are variable;
- Onset at the age of 25-30;
- The lifetime prevalence is 6-9%.

Diagnostic criteria

A. The person was exposed to a traumatic event in which both of the following were present:

(1) the person has experienced, witnessed or been confronted with an event or events which involved actual death, death threat or serious injury or endangering one's own bodily integrity or that of others;

(2) the person's response involved intense fear, helplessness or horror.

B. The traumatic event is persistently re-experienced in one (or more) of the following ways:

(1) recurring and intrusive memories of the event

(2) recurring dreams of the event

(3) actions and feelings, as if the traumatic event had been recurrent

(4) intense psychological distress when exposed to internal or external stimuli that symbolize or resemble an aspect of the traumatic event ;

(5) physiological reactivity when exposed to internal or external stimuli that symbolize or resemble an aspect of the traumatic event.

Diagnostic criteria

C. Persistent avoidance of trauma-associated stimuli and paralysis of the general reactivity (which was not present before the trauma), as indicated by three (or more) of the following :

(1) efforts to avoid trauma-associated thoughts, feelings or conversations;

(2) efforts to avoid activities, places or persons which awake memories of the trauma;

(3) inability to evoke an important aspect of trauma;

(4) marked decrease in interest or participation in significant activities;

(5) feeling of detachment or alienation from others;

(6) narrow range of affect (e.g., unable to have feelings of love) ;

(7) “narrowed” feeling of the future (e.g., does not hope to make a career, to get married, to have children or a normal life).

Diagnostic criteria

D. Persistent symptoms of increased arousal (which were not present before the trauma), as indicated by two (or more) of the following :

(1) difficulty in falling asleep or staying asleep;

(2) irritability or anger attacks;

(3) difficulty concentrating;

(4) hyper-vigilence;

(5) excessive startle response.

E. The disturbance (symptoms corresponding to criteria B, C and D) lasts for more than one month.

F. The disturbance causes a clinically significant distress or impairment in the social, professional or other important areas of functioning.

The adjustment disorder

States of subjective suffering and emotional impairment, usually interfering with the performance and social functioning and giving rise during the period of adaptation to a significant change of life or as a consequence of a stressful event of life (severe physical illness).

- Individual predisposition or vulnerability play a greater role in the risk of occurrence
- Depressive mood, anxiety, worries or a combination thereof
- Feeling of inability to cope, to plan
- Different degrees of impairment in the performance of everyday routine
- It usually occurs up to one month after the stressful event
- The duration of the symptoms does not exceed 6 months
- The adjustment disorder can be: acute or prolonged with mixed, anxiety and depressive reaction

A differential diagnosis of anxiety shall be done with :

- Angina pectoris ;
- Myocardial infarction (MI);
- Hyperventilation syndrome ;
- Hypoglycemia ;
- Hyperthyroidism ;
- Carcinoid syndrome ;
- Substance-induced mood disorder;
- Avoidance, anankastic, dependent anxiety personality disorders;
- Schizoaffective disorder ;
- Non-organic sleep disorders;
- Schizophrenia ;
- Bipolar affective disorder ;
- Adjustment disorder (acute or chronic) with mixed anxiety and depressed mood (F43.22).

KEY QUESTIONS

Over the past two weeks, have you….

•*Felt nervous, anxious or at the limit?*

• *Been unable to stop or control your worries?*

*If answer is **YES** to one of the questions above – **the full spectrum of anxiety symptoms shall be assessed.***

Scale for generalized anxiety disorder (TAG 7)

Over the past 2 weeks, how often have you felt disturbed by the following problems?	Never	Several days	More than half of the days	Nearly every day
1. Feeling nervous, anxious or at the limit	0	1	2	3
2. Unable to stop or control the worries	0	1	2	3
3. Excessive worries about different things	0	1	2	3
4. Difficulty in relaxing	0	1	2	3
5. Being so agitated that you could hardly stand still	0	1	2	3
6. Getting easily nervous and irritated	0	1	2	3
7. Feeling afraid that something terrible might happen	0	1	2	3

Assistance in anxiety disorders

Primary healthcatre

- Evaluation of people who present *risk factors for triggering an anxiety disorder (environmental, personality factors, etc.)*;
- Screening of people with symptoms of anxiety with/without a chronic somatic pathology using TAG-7 ;
- Education about anxiety;
- If mild or moderate anxiety is detected, a psychotherapeutic intervention is needed, in case of inefficiency – a psychopharmacological intervention;
- If moderate anxiety is detected, psychopharmacological and psychotherapeutic treatment shall be administered, and if a severe anxiety is detected – the individual shall be referred to a CMHC;
- Prevention of relapces by monitoring the physical health of treated patients, including in CMHCs.

Assistance in anxiety disorders

CMHC (Community Mental Health Centre)

•Consultations, prescription of medical and psycho-social recovery services.

•Active crisis intervention and, in case of inefficiency, referral to the psychiatric ward of a general hospital in the respective catchment area.

•Start and maintenance of pharmacological treatment, high intensity psychological / psychotherapeutic interventions (cognitive-behavioral psychotherapy).

•Services in CMHCs are provided by multidisciplinary teams :

•Outreach/community-oriented: the user shall be visited at home or at his/her place of residence.

•Intensive and assertive guidance is possible for users who have become unstable or are at risk of getting into a crisis.

•The team works closely with other social service providers. The family and the network are also involved. The user receives care for as long as needed.

Assistance in anxiety disorders

Psychiatric wards of general hospitals

- Admission of patients at risk of suicide referred by CMHC.
- Referring the patient in remission to the CMHC.

The criteria for (mandatory) admission in specialized facilities

- Risk of suicide.
- Psychotic anxiety.
- Lack of response or insufficient response to treatment after 8-12 weeks, or lack of response or insufficient response to treatment given in (two) basic or first-level interventions.

Initial interventions in case of mild anxiety :

GP explains and informs about the symptoms and the prognosis in anxiety:

- Patient education/bibliography;
- Structuring of the day
- Physical activity

GP may use patient leaflets, links to relevant websites or patient groups;

They are performed by GP, the nurse, the psychologist, the psychiatrist.

Short-term psychological interventions

- Up to 4 weeks;
- *Guided support (combined with Internet applications) ;*
- *Problem-solving treatment ;*
- *Cognitive-behavioural therapy (CBT), based on exposure.*

Such interventions can be provided by GPs, mental health nurses or social workers, as well as by a psychologist.

Psycho-therapeutic treatment

- Cognitive- behavioural therapy (CBT)
- Interpersonal therapy
- Eye movement desensitization and reprocessing (EMDR) ;
- Behavioural activation;
- Stress management;
- Applied relaxation;
- Developing social skills.

Provided by a psychologist or using various applications (paxonline.ro)

Pharmacological treatment of anxiety disorders

- Symptoms of anxiety – usually no medication is needed; other interventions (first-line) are preferable ;
- Only if the condition does not improve after the previous (psychological) interventions or if suffering or the impairment in daily functioning is (very) severe.

Recommendations for pharmacological treatment of anxiety

- Usual and long-term use of treatment with benzodiazepines shall be avoided;
- Preferable use of new antidepressants is recommended
- The medication used to treat the anxiety disorders shall not significantly affect cognition (benzodiazepines – discognitive effect, tricyclic antidepressants – anticholinergic effect)
- Medication-related decisions shall be always discussed with the patient;
- The following issues shall be considered: side effects, costs, relapce prevention, comorbidity.

Medication

In the acute phase of anxiety, the goal of the treatment is to :

a. Reach the symptom remission.

b. Reduce the relapces, refall and recurrence of anxiety;

c. Regain the previous level of occupational and psychosocial functions.

Treatment of anxiety

Anxiety symptoms	Anxiety disorder	Anxiety with severe social dysfunction, suffering or psychiatric co-morbidity
Patient education Day structuring Scheduling activities	Patient education, bibliotherapy Day structuring and scheduling activities Physical activities Self-support (bibliotherapy/mental health) Short psychological intervention	Patient education Day structuring and scheduling activities 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.

The course of anxiety disorders

The course of anxiety disorders is chronic and, in the absence of proper treatment, people have major long-term costs, such as:

- increased risk of somatic diseases and high comorbidity with other mental health problems (eg. depression, alcohol or other substance abuse),
- high disability rate ,
- academic failure
- unemployment or low performance at work.

F45 Somatoform disorders

F45.0 Somatization disorder
F45.1 Undifferentiated somatoform disorder
F45.2 Hypochondria
F45.3 Somatoform vegetative dysfunction
F45.4 Persistent somatoform pain disorder
F45.8 Other somatoform disorders
F45.9 Unspecified somatoform disorder

F45 Somatoform disorders

- The common element of somatoform disorders is the presence of **somatic symptoms** which suggest a general medical condition, but which cannot be fully explained by a general medical condition, by the direct effects of a substance or of another mental disorder
- A medical history of multiple contacts with primary care and specialized health services is typically present before the patient is referred to psychiatric care.

- **The characteristics of somatoform disorders :**
  1. somatic complaints of many medical diseases which are not associated with serious demonstrable disorders of peripheral organs
  2. psychological problems and conflicts that are important for the emergence, exacerbation and maintenance of the disorder
  3. symptoms must cause clinically significant distress or impairment in the social, professional field or in other important areas of functioning

Etiopathogenesis

Some studies opt for a family history, which would suggest a genetically or culturally influenced etiopathogenesis by learning certain stress-response behaviours.

- Biological theory
- Psychosocial theory
- Behavioural theory
- Interpersonal theory
- Psycho-dynamic theory

F45.0 Somatization disorder

A polysymptomatic disorder with the onset before the age of 30, which lasts for years and is characterized by a combination of gastrointestinal, sexual and pseudoneurological pain and symptoms.

- The lifetime prevalence of the somatization disorder in the general population is 0.1-0.5%.
- It affects more women than men (1-2% of women).
- It is more common in less educated people and those with a low social-economic status.
- The onset is in adolescence and in young adulthood.

Diagnostic criteria

A. A history of many somatic complaints before the age of 30 that occur for a period of many years and result in requests for treatment or in a significant impairment in the social, professional or other important areas of functioning.

B. Each of the following criteria must have been met, with individual symptoms occurring at any time during the disturbance :

•(1) four pain symptoms: a history of pain in at least four different locations or functions

•(2) two gastrointestinal symptoms: a history of at least two gastrointestinal symptoms other than pain

•(3) one sexual symptom: a history of at least one sexual or reproductive symptom other than

•(4) a pseudoneurological symptom: a history of at least one symptom or impairment suggesting an neurological condition which is not limited to pain

Diagnostic criteria

C. Either (1), or (2):

- (1) after proper investigation, none of the symptoms in criterion B can be fully explained by a known general medical condition or by the direct effects of a substance (eg., drug abuse, a medicine) ;
- (2) if a similar general medical condition is present, the resulting somatic complaints or social or professional impairment are in excess of what could be expected from the history, the somatic examination or the laboratory data.

D. The symptoms are not intentionally produced or invented (as in the factitious or simulated disorder).

F45.2 Hypochondriasis

- The disorder is characterized by a persistent concern and fear of developing or having one or more serious and progressive physical disorders.
- Hypochondriasis has a prevalence of 10% of all medical patients.
- It equally affects men and women.
- It occurs at any age, with peaks between 30-39 years of age in men and between 40-49 - in women.
- Patients constantly complain about physical problems or are constantly concerned about their physical appearance.
- Fear is based on misinterpretation of physical signs and feelings.
- The physical examination performed by the doctor does not reveal any physical illness, but fear and complaints persist despite reassurance.

Diagnostic criteria

A. The subject's concern of having or even the idea of having a severe illness, based on his/her misinterpretation of bodily symptoms.

B. The concern persists in contempt of proper medical evaluation and of the reassurance about the contrary.

C. The belief in criterion A does not have a delusional intensity and is not limited to a concern limited to the appearance.

D. The concern causes a clinically significant distress or impairment in the social, professional field or in other important areas of functioning.

E. The disturbance lasts for at least 6 months.

F. The concern is not better explained by generalized anxiety, obsessive-compulsive disorder, panic, a major depressive episode, separation anxiety or another somatoform disorder.

F45.3 Somatoform vegetative dysfunction

Symptoms are presented as a physical disorder of the system or organ which is largely or completely uncontrolled by vegetative innervation, namely the cardiovascular, gastrointestinal or respiratory system and some aspects of the genitourinary system.

- There are usually two types of symptoms:
  1. complaints based on the objective signs of vegetative arousal (palpitations, sweating, reddening of the face, tremor)
  2. idiosyncratic, subjective, nonspecific (transient pain, burning, weight, feeling of constriction, feeling bloated or dilated)

- Patients relate these symptoms to a particular organ or system.
- In many cases, there is evidence of psychological stress or current problems related to the disorder.

F45.4 Persistent somatoform pain disorder

- The predominant symptom is severe and persistent pain, which cannot be fully explained by a physiological process of physical illnesses.
- Pain occurs in association with emotional conflicts or psychosocial problems.
- The chronic pain expression can vary depending on different personalities and cultures.
- Acute – lasts for less than 6 months
- Chronic – lasts for 6 months or more
- The patient does not simulate and the complaints about the intensity of the pain must be believed.

Diagnostic criteria

- A. Pain in one or more anatomical sites is the predominant element of the clinical picture and it is severe enough to justify a clinical attention.
- B. Pain causes clinically significant distress or impairment in the social, professional or other important areas of functioning.
- C. Psychological factors are considered to play an important role in the onset, severity, exacerbation or persistence of pain.
- D. The symptom or impairment is not intentionally produced or simulated (as in the factitious or simulated disorder).
- E. Pain is not better explained by an affective, anxiety or psychotic disorder and does not meet the criteria for dyspareunia.

Differential diagnostic of somatoform disorders

- The main task is to differentiate from a disorder with an organic substrate.
- It is necessary to exclude the general medical conditions characterized by vague, multiple and confusing somatic symptoms
- Other mental disorders that frequently include unexplained somatic complaints shall also be excluded:

- major depressive disorder,
- anxiety disorders,
- adjustment disorder,
- sexual dysfunction,
- somatic delusional disorder,
- schizophrenia,
- factitious and simulated disorders.

The course

- Somatoform disorders have a chronic course.
- Fluctuating, rarely remit completely.
- The course and the prognosis are unpredictable.
- Exacerbations are usually associated with an identifiable stress in life.
- Another mental disorder or medical condition is often diagnosed.
- Good prognosis is associated with a premorbid personality with minimal disorders, the unfavorable prognosis – with a history of or overlapping somatic disorders.

The treatment

- **Psychotherapy**– awareness-raising or long-term support psychotherapy is needed to provide understanding of the dynamics, support in overcoming the stressful life events or both, as well as preventing substance abuse, doctor-to-doctor consultations, the therapeutic procedures or the required diagnostic tests.
- **Pharmacological therapy**– psychotropics shall be avoided, except for the periods of depression and anxiety with suicidal behavior, because patients tend to become addicted to psychotropics. Antidepressant drugs are useful, having demonstratd an improvement by effective reduction of symptoms.

Other neurotic disorders

F48	Other neurotic disorders
F48.0	Neurasthenia
F48.1	Depersonalization syndrome – losing contact with reality
F48.8	Other specifed neurotic disorders
F48.9	Unspecified neurotic disorders

Conversion disorder

- The characteristic element is represented by neurological symptoms, which are incompatible with neurological pathophysiology, a fact proven by neurological evaluation, which does not have an identified structural cause.
- Multifactorial disorder
- Stressful life events, both recent and in childhood, can be risk factors
- Conversion disorders are also called functional neurological symptoms, as they emphasize a change in the functioning of the nervous system, rather than a change in its structure
- Patients with conversion disorder have no control over some or all of the symptoms. The patient does not consciously produce these symptoms
- The estimated incidence of persistent individual conversion symptoms is 2-5/100,000 per year. The incidence of conversion disorder in general hospitals is 5-14%, and in psychiatric hospitals - 5-25%.
- Conversion disorder is two to three times more common in women. Up to 33% of subjects report a history of sexual abuse, and up to 50% - a history of physical abuse

Diagnostic criteria

DSM-5 **diagnostic criteria**:

- A. One or more symptoms of impaired voluntary motor or sensory function.
- B. Clinical signs provide evidence of incompatibility between symptoms and known neurological or medical conditions.
- C. The symptom or the impairment is not better explained by another medical or mental illness.
- D. The symptom or the impairment causes clinically significant discomfort or dysfunction in the social, professional or other important areas of functioning, or justify a medical evaluation.

Conversion disorder

(F44.4) With weakness or paralysis

(F44.4) With abnormal movement (e.g., tremor, dystonic movements, myoclonus, gait disorder)

(F44.4) With swallowing disorders

(F44.4) With speech disorders (e.g., dysphonia, slurred speech)

(F44.5) With seizures or convulsions

(F44.6) With anesthesia or loss of sensitivity

(F44.6) With specific sensory symptoms (e.g., visual, olfactory or auditory disorders)

(F44.7) With mixed symptoms

Differential diagnostic

- Neurological illness
- Somatic symptom disorder
- Factitious and simulated disorder
- Dissociative disorders
- Body dysmorphic disorder
- Depressive disorders
- Panic disorder

The treatment

- Psychological therapy:
- Analytical psychotherapy
- Suggestive psychotherapy
- Hypnosis
- CBT
- Supportive psychotherapy
- Family psychotherapy
- Pharmacological therapy:
- anxiolytics
- antidepressants
- tranquilizers

F44 Dissociative disorders

F44.0 Dissociative amnesia

F44.1 Dissociative fugue

F44.2 Dissociative stupor

F44.3 Trance and possesion disorders

F44.4 Dissociative motor disorders

F44.5 Dissociative convulsions

F44.6 Dissociative anesthesia and sensory loss

F44.7 Mixed dissociative (conversion) disorders

F44.8 Other dissociative (conversion) disorders

F44.9 Unspecified dissociative (conversion) disorder

Dissociative disorders

- The common point shared by dissociative disorders is the partial or complete loss of normal integration between past memories, identity awareness and immediate sensations, as well as control of body movements. There is normally a considerable degree of conscious control over memories and sensations that can be selected for immediate attention and movements to be performed.
- The term "conversion hysteria" should be avoided, as it is confusing and stigmatising.
- The prevalence is not known exactly (up to 10%).
- Sudden onset and cessation of the dissociative state.
- There are several forms of dissociative syndromes.

Dissociative amnesia

- The main feature is loss of memories, usually of recent important events, which is not due to organic mental disorder and is too extensive to be explained by ordinary forgetfulness or fatigue.
- Amnesia is usually centered on traumatic events, such as accidents, combat experiences or unexpected mourning, and can be partial and selective.
- Amnesia typically develops suddenly and can last from a few minutes to a few days.
- The differential diagnosis is complicated, it is necessary to exclude all organic brain disorders, as well as various intoxications. The most difficult differentiation to be done is between conscious simulation – malingering.

Dissociative stupor

- The individual suffers from the reduction or absence of voluntary movement and normal responsiveness to external stimuli, such as light, noise, and touch.
- The person is lying down or sitting still for long periods of time.
- Spontaneous and purposeful speech and movement are completely absent.
- Muscle tone, posture, breathing, and sometimes eye opening and coordinated eye movements are such that it is clear that the individual is neither asleep, nor unconscious.
- There is positive evidence of psychogenic causality, such as either recent stressful events or prominent interpersonal or social problems.

Trance and possession disorder

- The temporary loss of both the sense of personal identity and of full awareness of surroundings. The individual may act as if taken over by another personality, spirit, deity or 'force'. Repeated sets of extraordinary movements, working postures and utterances can be noticed.

Dissociative disorders of movement and sensation

- The loss of interference with movements or loss of sensation (usually cutaneous). Mild and transient types of these disorders are often seen in adolescence, especially in girls, but the chronic types are usually seen in young adults.
- Dissociative motor disorders
- Dissociative seizures
- Dissociative anaesthesia
- Ganser's syndrome – "approximate“ or extremely incorrect answers
- Multiple personality disorder means an apparent existence of two or more distinct personalities within an individual, with only one of them being obvious at any one time (Mr Jekyl and Mr Hyde). Each personality is complete, with its own memories, behaviours and preferences, but does not have access to the memories of the second personality and both are almost always unaware of the existence of the other. The switch from one personality to the other is, in the first instance, usually sudden and closely associated with traumatic events.

Clinical management

- Psychotherapy is a method of choice for the treatment of dissociative disorders (e.g. psychodynamic programmes, hypnosis).
- The drugs have no proven value, except for amobarbital sodium interview.

Adjustment disorders

- The adjustment disorder includes subjective stress states and emotional disturbances which occur during the adjustment to a significant life change or to the consequences of a stressful life event, such as a serious physical illness, death or separation, migration or refugee status.
- The clinical picture: depressed mood, anxiety, worry, a sense of inability to cope, plan ahead or continue in the current situation, and some degree of impairment in carrying out routine daily activities.
- Onset – within 1 month; duration – less than 6 months.
- More common in women, unmarried and young people.

- Psychotherapy is the primary treatment of this disorder. Symptomatic treatment may include a brief period of administration of hypnotics or benzodiazepines.

Factitious disorders

- In factitious disorders, patients deliberately produce somatic or psychological symptoms in order to take the role of a sick person.
- In these disorders, patients intentionally produce signs of medical or mental illnesses and present their history and symptoms differently than they actually are.
- Hospitalisation is often a primary goal and a way of life.
- The disorders are compulsive, but the behaviours are deliberate and voluntary, even if they cannot be controlled.

Diagnostic, signs and symptoms

With predominantly somatic signs and symptoms.

- Also known as *Münchhausen syndrome*. Intentionally producing physical symptoms – nausea, vomiting, pain, convulsions.
- Patients may intentionally put blood in their feces or urine, artificially increase their body temperature, take insulin to lower their blood sugar.

With predominantly psychological signs and symptoms.

- Intentionally producing psychiatric symptoms – hallucinations, delusions, depression, weird behaviour.
- To explain the symptoms, the patients may invent a story that they have suffered a major life stress.
- *Pseudologia fantastica* consists of making up extravagant lies that the patient believes.
- In both types of disorder, substance abuse is common, especially opioid abuse.

Simulation

- **A. Definition.** Voluntarily producing somatic or mental symptoms in order to achieve a specific purpose (e.g., obtaining insurance compensations, avoiding imprisonment or punishment).

- **B. Diagnostic, signs and symptoms.** Patients have many vague or poorly localized complaints, which are presented in great detail; they are easily annoyed, if the doctor is skeptical about their narration.

Neuroasthenia

- According to psychoanalytic theory, neurosis is a psychogenic disorder in which the symptoms are the symbolic expression of a psychic conflict, rooted in the subject's childhood history and making compromises between desire and defence.
- Neurasthenia is now considered one of the fundamental forms of neurosis
- Neurasthenia is more commonly caused by persistent conflict situations, leading to prolonged emotional overload
- Patients declare that they suffer from "everything", that is why they are overwhelmed by multiple diets, they undergo multiple explorations and, in general, they are very explored patients, great consumers of medication and psychotherapy sessions.

Neuroasthenia

The clinical forms of neurasthenia, based on the predominant symptom are :

- *Anxious*
- *Depressive*
- *Cenesthopathic*

Kraindler's triad:

- irritability
- hyperesthesia
- fatigability

THANK YOU FOR YOUR ATTENTION!!!

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din REPUBLICA MOLDOVA

Dementing disorders.
Delirium.
Mental disorders due to a general medical condition.
Postpartum mental disorders.

Dementing disorders.

About 5% of persons in the United States older than age 65 years have severe dementia and 15% have mild dementia.

Of persons older than age 80, about 20% have severe dementia.

Known **risk factors** for dementia are age, family history, and female sex.

Characteristic changes of dementia involve:

cognition, memory, 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.

Delusions and hallucinations occur during the course of the dementias in nearly 75% of patients.

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

Definition.

Dementia 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.

Epidemiology

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.

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,
- Frontotemporal 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.

Diagnosis, signs, and symptoms.

The major defects in dementia involve:

- orientation,
- memory,
- perception,
- intellectual functioning, and
- reasoning.

Marked changes in personality, affect, and behavior can occur.

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.

Dementia of the Alzheimer's type

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

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.**

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

Epidemiology.

DAT accounts for 50% to 60% of all dementias.

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.

I. DAD with **Early Onset - before the age of 65,**

II. DAD 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 I to 20 years.

DAT patients can be impulsively violent.

If agitation is present, be prepared or such events.

Vascular (Multi-infarct) Dementia

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

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.

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.

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.

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

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.

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.

Delirium

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.

Questions must be repeated because the individual's attention wanders, or the individual may perseverate with an answer to a previous question rather than appropriately 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

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. There is evidence from the history, physical examination, or laboratory findings that 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.

The etiology should be coded according to the etiologically appropriate subtype (i.e., substance or medication intoxication, substance withdrawal, another medical condition, or multiple etiologies).

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

Diagnostic Features (III).

There is an accompanying change in at least one other area that may include memory and learning (particularly recent memory), disorientation (particularly to time and place), alteration in language, or perceptual distortion or a perceptual-motor disturbance.

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.

Normal attention/arousal, delirium, and coma lie on a continuum, with coma defined as the lack of any response to verbal stimuli.

The ability to evaluate cognition to diagnose delirium depends on there being a level of arousal sufficient for response to verbal stimulation; hence, delirium should not be diagnosed in the context of coma.

Delirium

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.

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

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

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.

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.

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.

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.

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.

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.

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Psychotic Disorder Due to a General Medical Condition.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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 MS 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.

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.

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.

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 symptombased 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.

Most women experience postpartum emotional lability.
Clears spontaneously.
No evidence of psychotic thinking.

Postpartum psychosis.

Definition.

Syndrome occuring after childbirth and characterized by severe depression and delusions.

Most data suggest a close relation between postpartum psychosis and mood disorders.

Diagnosis, signs and symptoms.

Most cases occur 2 to 3 days postpartum.

Initial complains of insomnia, restlesaness and emotional lability progress to confusion, irrationality, delusions and obsessive concerns about the infant.

Thoughts of wanting to harm the baby or self are characteristic.

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.

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

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

Addiction

Diagnosis of dependence should be made if three or more of the following have been experienced or exhibited at some time during the last year:

1) A strong desire or sense of compulsion to take the substance

(2) Difficulties in controlling substance taking behaviour in terms of its onset, termination, or levels of use

(3) Physiological withdrawal state when substance use has ceased or been reduced, as evidenced by either of the following:

- the characteristic withdrawal syndrome for the substance, *or*
- use of the same (or closely related) substance with the intention of relieving or avoiding withdrawal symptoms

Basic conceptions

Addiction

Diagnosis of dependence should be made if three or more of the following have been experienced or exhibited at some time during the last year:

4) Evidence of tolerance, such that increased doses of the psychoactive substance are required to achieve effects originally produced by lower doses

(5) Progressive neglect of alternative pleasures or interests because of psychoactive substance use and increased amount of time necessary to obtain or take the substance or to recover from its effects

(6) Persisting with substance use despite clear evidence of overtly harmful

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)

The basic characteristics of the syndrome of dependence is the desire to take a psychoactive substance.

- In physiological sense (physical dependence) **the necessity to take substance** is caused by the experience of somatic well-being which may be achieved only under this condition.
- The behavioural and cognitive necessity (mental dependence) is caused by t**he fact that the patient is incapable** to think, work, relieve strain, anxiety without taking this substance.

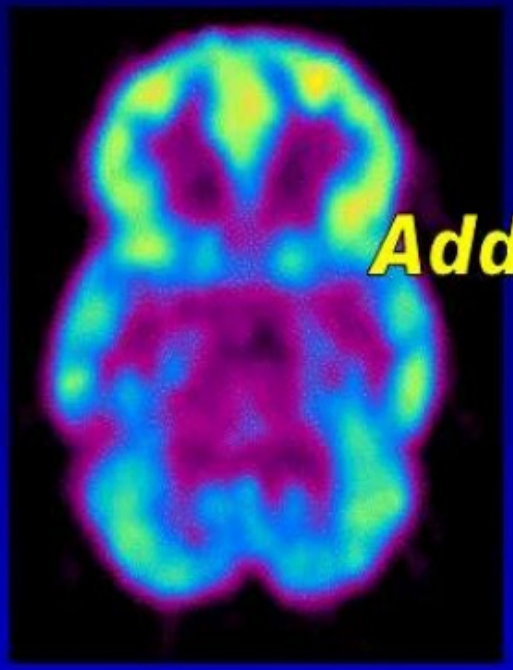
What Are Substance Use Disorders?

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.

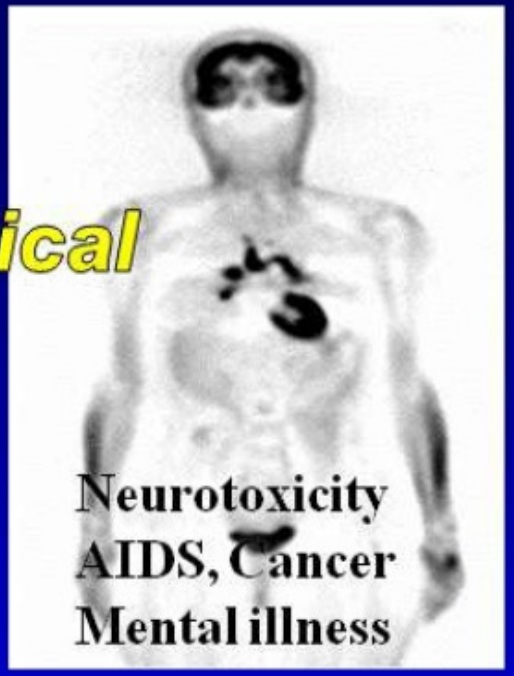
Abused Psychoactive Substances ICD-X

- 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)



Addiction

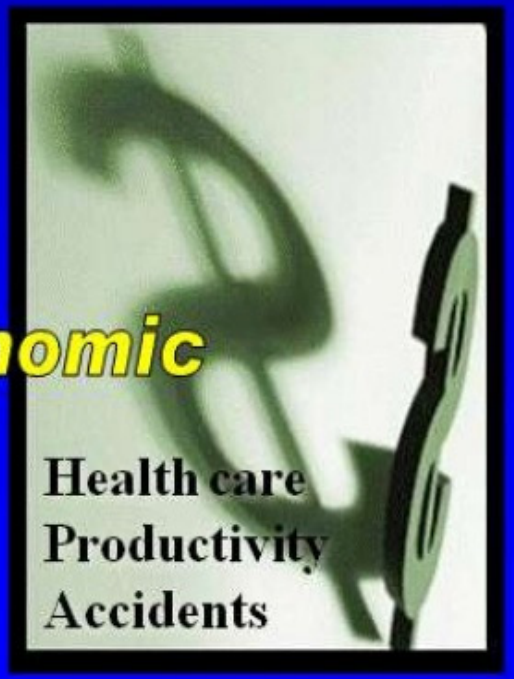
Medical



DRUGS

Social

Economic



Social environment

The risk of drug misuse is greater in societies that condone drug use of one kind or another.

Within the immediate group, there may be social pressures for a young person to take drugs to achieve status.

Thus drug use by individuals is influenced by substance use by their peers or parents.

There are also links between drug misuse and indices of social deprivation, such as unemployment and homelessness

Social costs of drug misuse

Users: premature death, physical and mental illness, low educational achievement, unemployment

Families: adverse effect on children, poverty, and deprivation

Others: victims of dangerous driving, victims of crime, victims of assault

Community: criminal activity related to drug dealing, environmental impoverishment, health and crime risks to community

Industry: sickness absence, theft in the workplace, productivity losses, costs of security

Public sector: health care expenditure, criminal justice expenditure, social services care and benefits

- The harmful use of alcohol results in 3.3 million deaths each year.
- Some 31 million persons have drug use disorders.
- Almost 11 million people inject drugs, of which 1.3 million are living with HIV, 5.5 million with hepatitis C, and 1 million with both HIV and hepatitis C.

- Alcohol consumption can have a negative impact on people other than the drinker.
- Harm to others includes economic costs, violence, road traffic accidents, property damage, sexual harm, drink-driving and child abuse and neglect.

Alcohol-related harm

- Alcohol use is an important risk factors for disease.
- Alcohol is a component cause of more than 200 health conditions.
- The highest proportion of deaths attributable to alcohol is among men aged 20–39 years.

Alcohol use

- According to a 2018 report from the WHO, in 2016 the harmful use of alcohol resulted in about 3 million deaths, or 5.3% of all deaths around the world, with most of these occurring among men.

- The economic costs of excessive alcohol consumption in 2010 were estimated at $249 billion, or $2.05 a drink.

Nervous system

Alcohol use

Alcohol also damages the nervous system. Neuropsychiatric complications are described later; other neurological conditions include **peripheral neuropathy, epilepsy, and cerebellar degeneration.**

The last of these is characterized by unsteadiness of stance and gait, with less effect on arm movements or speech.

Rare complications are **optic atrophy, central pontine myelinolysis,** and **Marchiafava–Bignami syndrome.**

Alcohol use

The latter condition results from widespread demyelination of the corpus callosum, optic tracts, and cerebellar peduncles.

Its main features are dysarthria, ataxia, epilepsy, and marked impairment of consciousness; in the more prolonged forms, dementia and limb paralysis occur.

Head injury is also common in alcohol dependent people**.**

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

What Predisposes to Addiction ?…

- Biological Factors
- Psychological Factors
- Sociocultural Factors

Presumably this is a consequence of interactions between the pharmacological properties of the drug, the biological disposition and personality of the user, and the social environment.

Biological Factors

- -Genetics
- -Biochemical

Biological Factors

Neurobiological mechanisms

An important neurobiological substrate that mediates reinforcing effects is the midbrain dopamine system, the cell bodies of which originate in the ventral tegmental area and innervate the forebrain, particularly the ventral striatum.

It has been proposed that these dopamine pathways form part of **a physiological reward system** and it is of interest therefore that at least some drugs of abuse, particularly stimulants and alcohol, increase dopamine release in the ventral striatum.

This suggests that activation of midbrain dopamine pathways may be a important property of some drugs that have a propensity to be used and misused.

Biochemical

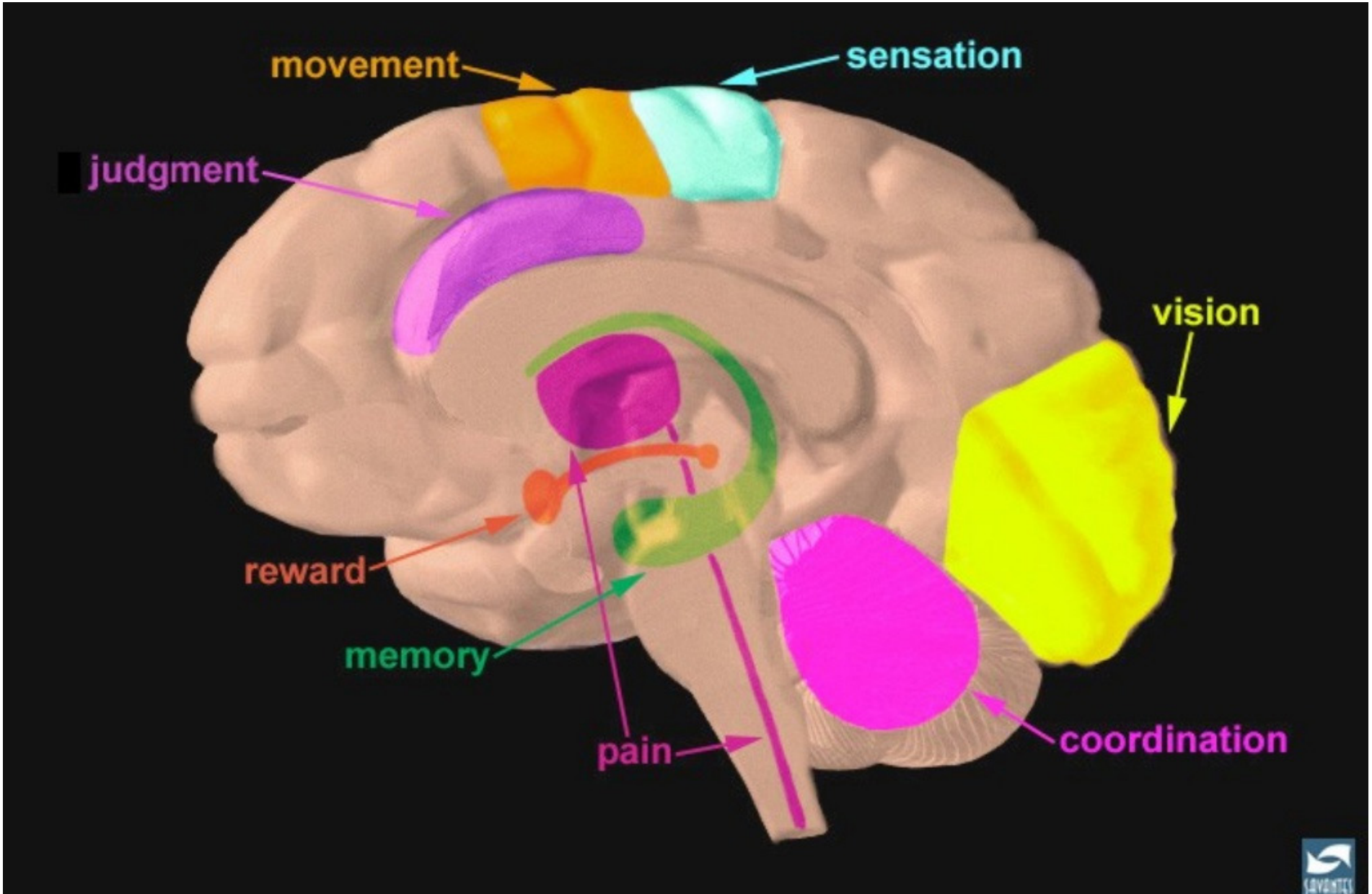
- **There is good evidence that changes in brain structure and brain neurochemistry occur in the process of developing addiction**, but whether these changes wholly explain etiology remains controversial.
- **Neurotransmitters believed to be involved in substance abuse include opioid, catecholamine (especially dopamine), and gamma-aminobutyric acid (GABA) systems.**
- **Neuronal pathways that are responsible for sensing pleasure** and reward, once activated, are believed to be responsible for pleasurable sensations associated with these drugs as well as creating a "memory" that triggers desire for repeated use of the drug.

Biochemical

Current neurobiological formulations of drug dependence suggest that the switch from controlled drug taking to compulsive use (misuse and dependence) is associated with a lessening of **prefrontal 'reflective' processes** and a corresponding increase in **striatal activity** which underpins more habitual behaviours.

These changes might explain the ability of repeated drug administration in some people to 'hijack' executive behaviour almost exclusively to serve the needs of the drug habit, and the poor judgement and decision-making shown by people with substance dependence.

The Reward Pathway & Addiction



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 $5\text{-}HT_{2A}$ 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, t**he 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.

Wernicke's Encephalopathy

Wernicke's encephalopathy represents the most serious form of thiamine deficiency in alcoholics.

Symptoms include:

- paralysis of the ocular muscles,
- diplopia,
- ataxia,
- somnolence, and
- stupor.

If thiamine replacement therapy is not undertaken quickly, death will ensue.

Korsakoff's psychosis

- The amnestic syndrome at alcoholism is manifested in the structure of Korsakoff's psychosis, Wernicke's encephalopathy, hepatic encephalopathy.
- Korsakoff's psychosis is characterized by
- fixation amnesia,
- retroanterograde amnesia,
- confabulations and pseudoreminiscences that are combined
- with polyneuropathy. Unsteadiness of gait and polyneuropathy may precede the amnestic disorders.

Korsakoff's Psychosis

Korsakoff's psychosis is identified by:

- a syndrome of confusion,
- loss of recent memory, and
- confabulation in alcoholics.

It is frequently encountered in clients recovering from Wernicke's encephalopathy.

In the United States, the two disorders are usually considered together and are called Wernicke-Korsakoff syndrome.

Treatment is with parenteral or oral thiamine replacement.

Symptoms of delirium

- Psychic, vegetative, somatic symptoms
- Disturbance consciousness,
- Disorientation
- Hallucinations (visual, tactile etc.)
- Psychomotor agitation
- Trembling
- sweating
- Hypertension,
- fever
- Increased pulse rate,
- inversion of sleeping
- Epileptic attacks

Delirium tremens

The cardinal feature of delirium is disturbed consciousness.

It is manifested as drowsiness, decreased awareness of one's surroundings, disorientation in time and place, and distractibility.

At its most severe the patient may be unresponsive (stuporose), but more commonly the impaired consciousness is quite subtle. Indeed, the first clue to the presence of delirium is often one of its other features, which include mental slowness, distractibility, perceptual anomalies, and disorganization of the sleep–wake cycle.

Delirium tremens

Tactile and auditory hallucinations also occur.

Anxiety, depression, and emotional lability are common.

The patient may be frightened, or perplexed.

Experiences of depersonalization and derealization are sometimes described.

Attention and registration are particularly impaired, and on recovery there is usually amnesia for the period of the delirium

Delirium tremens

Symptoms and signs vary widely between patients, and in the same patient at different times of day, typically being worse at night.

For example, some patients are hyperactive, restless, irritable, and have psychotic symptoms, while others are hypoactive, with retardation and perseveration.

Repetitive, purposeless movements are common in both forms. Thinking is slow and muddled, but often rich in content (‘dream-like’).

Ideas of reference and delusions (often persecutory) are common, but are usually transient and poorly elaborated.

Visual perception is often distorted, with illusions, misinterpretations, and visual hallucinations, sometimes with fantastic content.

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.

Delírium tremens

Vegetative and somatic symptoms

- Autonomic hyperactivity: tremulousness, hyperhydrosis, 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 conunsciousness, 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 delusive 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 intelelctual 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

At 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 amnestic 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:

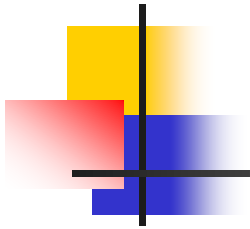
- **Benzodiazepines**

- **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 Intoxication

- Euphoria immediately after use, then apathy and psychomotor retardation
- Miosis
- Slow regular respiration
- Slurred speech
- Impairment of judgment, attention, concentration, memory
- analgesia

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

Medical Complications of Opioid Abuse/addiction

Mental: depression, dementia, personality dis.

Physical:

- illness of dirty needles: abscesses, lymphadenopathy, osteomyelitis, endocarditis, glomerulonephritis, septicemia, memingitis, septic emboli
- Infective diseases: hepatitis (C,B,A), AIDS, tbc, syphilis
- Pneumonia, pulmonary hypertension
- Consequences of overdoses (paralysis, dementia, blindness, acute transverse myelitis)
- Consequences of analgesia (peritonitis, osteomyelitis etc)

F14.x,15.x Mental Disorders Due to Use of Stimulants

- Cocaine, amphetamine, metamphetamine (pervitine), phenmetrazine, methyphenidate, MDMA (ecstasy, methylenedioxymetamphetamine)
- 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 complication*s* include miscarriage, premature labour, and placental abruption

F14.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 cannabinols 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.

Acute health effects of cannabis use

- **Cannabis impairs cognitive development** (capabilities of learning), including associative processes; free recall of previously learned items is often impaired when cannabis is used both during learning and recall periods;
- **Cannabis impairs psychomotor performance** in a wide variety of tasks, such as motor coordination, divided attention, and operative tasks of many types; human performance on complex machinery can be impaired for as long as 24 hours after smoking as little as 20 mg of THC in cannabis; there is an increased risk of motor vehicle accidents among persons who drive when intoxicated by cannabis

Chronic health effects of cannabis use

- selective impairment of cognitive functioning which include the organization and integration of complex information involving various mechanisms of attention and memory processes;
- prolonged use may lead to greater impairment, which may not recover with cessation of use, and which could affect daily life functions;
- development of a cannabis dependence syndrome characterized by a loss of control over cannabis use is likely in chronic users;
- cannabis use **can exacerbate schizophrenia in affected individuals;**
- epithetial injury of the trachea and major bronchi is caused by long-term cannabis smoking;

- airway injury, lung inflammation, and impaired pulmonary deffence against infection from persistent cannabis consumption over prolonged periods;
- development of a cannabis dependence syndrome characterized by a loss of control over cannabis use is likely in chronic users;
- cannabis use can exacerbate schizophrenia in affected individuals;
- epithetial injury of the trachea and major bronchi is caused by long-term cannabis smoking;

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-HT2A receptors.

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: psyhosocial 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 electrolite ballance
- High calorie, high carbohydrate diet suplemented 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

Carbamazepine has also been found to be effective in the treatment of alcohol withdrawal, and although not often used in the UK, it is a good alternative to the use of a benzodiazepine.

Clomethiazole was frequently used in the management of alcohol withdrawal in the past, but is no longer recommended because of its toxicity when combined with alcohol and its danger in overdose.

It is occasionally used for the most severe withdrawal states, where intensive inpatient medical monitoring is available, but there is no clear advantage compared with adequate doses of a benzodiazepine.

Alcoholism treatment

- At acute intoxication B1 and other vitamins of group B are injected, disintoxication is carried out. For disintoxication the abundant introduction of liquid is applied (drinking, intravenous injecting of solutions of glucose with small doses of insulin and cardiacs, vitaminized physiological solutions, haemodes, polyglucin), diuretic drugs.
- Nootropics and preparations improving the work of the liver (Heptral) are also used. The correction of behaviour is carried out by benzodiazepines.
- To come out of coma, Naloxon or Antaxon are used.
- At syndrome of alcohol cancellation benzodiazepine, small doses of Haldol and antispasmodic preparations, sometimes beta-blockers (Atenolol, Propranolol) are administered. Similar actions are undertaken at treatment of psychoses.

Alcoholism treatment

Antipsychotic drugs lower the seizure threshold and are less effective than benzodiazepines in preventing delirium. They are sometimes used to reduce agitation during alcohol withdrawal.

Antipsychotic drugs may be required occasionally, however, in patients with delusions that do not respond to benzodiazepines.

In these circumstances, combination of antipsychotic treatment with benzodiazepines would be expected to attenuate the proconvulsive effects of the antipsychotic drug.

Vitamin supplements, particularly thiamine, should also be given to prevent the Wernicke–Korsakoff syndrome. Parenteral thiamine should be given to patients at high risk.

In the treatment of delirium tremens or Wernicke's encephalopathy, thiamine treatment should always precede glucose administration.

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

Antidepressant medication may be useful in patients who experience persistent symptoms of major depression after detoxification. However,

tricyclic antidepressants are not recommended because of potentially serious adverse reactions, including cardiotoxicity and death following overdose.

There is no evidence that antidepressants are helpful in patients with alcohol use disorders who are not depressed.

Indeed, selective serotonin reuptake inhibitors (SSRIs) appear to worsen the outcome in Cloninger type 2 alcohol dependence (early age of onset, positive family history, impulsive/antisocial personality traits)

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.

Alcoholism treatment

Topiramate is an anticonvulsant drug which in randomized trials has been shown to benefit drinking outcomes in terms of reductions in days of heavy drinking and harmful drinking consequences, as well as improving quality of life

The therapy of acute overdosage of opiates

- The therapy of acute overdosage 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 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 nicotine dependence

- behavioural therapy,
- group therapy
- and psychotherapy;
- Nicotin-substitutive therapy — nicotinic chewing gums and transdermal nicotinic plasters,
- Clonidine.

Personality Disorders Habit and Impulse Disorders

Disorders of Adult Personality and Behaviour (F60-F69)

- F60 Specific personality disorders
- F61 Mixed and other personality disorders
- F62 Enduring personality changes, not attributable to brain damage and disease
- F63 Habit and impulse disorders
- F64 Gender identity disorders
- F65 Disorders of sexual preference
- F66 Psychological and behavioural disorders associated with sexual development and orientation
- F68 Other disorders of adult personality and behaviour
- F69 Unspecified disorder of adult personality and behaviour

F60 Specific Personality Disorders

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

F60 Specific Personality Disorders

- **Specific personality disorders**
  - severe disturbances in the personality and behavioural tendencies of the individual
  - not directly resulting from disease, damage, or other insult to the brain, or from another psychiatric disorder
  - usually involving several areas of the personality
  - nearly always associated with considerable personal distress and social disruption
  - usually manifest since childhood or adolescence and continuing throughout adulthood.

F60 Specific Personality Disorders

- Personality disorder is persistent and appears already within late childhood and adolescence being fully manifested in adulthood (diagnosing after the age of 16-17 years)
- The disorder is usually associated with significant problems in occupational and social performance
- Causes of personality disorders are mostly genetic though the influence of upbringing, parent-child relationship and social environment play also their roles.

F60.0 Paranoid Personality Disorder

- **Paranoid personality disorder** - characterized by excessive sensitiveness to setbacks, persistent refusal to forgive insults and slights, suspiciousness, tendencies to misconstrue the neutral or friendly actions of others as hostile or contemptuous, suspiciousness concerning fidelity of sexual partner, tendencies to experience excessive self-importance and preoccupation with unsubstantiated conspiratorial explanations of events.

- Personality (disorder):
  - expansive paranoid
  - fanatic
  - querulant
  - paranoid
  - sensitive paranoid

F60.1 Schizoid Personality Disorder

- **Schizoid personality disorder** - few activities provide pleasure, emotional coldness, limited capacity to express either warm or hostile feelings with indifference to either praise or criticism, little interest in having sexual experiences with another person, preference for solitary activities, excessive preoccupation with fantasy and introspection, lack of close friends and marked insensitivity to prevailing social norms and conventions.

F60.2 Dissocial Personality Disorder

- **Dissocial personality disorder**:
  - gross disparity between behaviour and the prevailing social norms
  - a callous disregard for the feelings of others, incapacity to maintain enduring relationships, gross attitude of irresponsibility
  - very low tolerance to frustration, a low threshold for discharge of aggression and violence
  - incapacity to experience guilt and to profit from experience including punishment
  - a tendency to blame others, or to offer plausible rationalizations for the behaviour bringing the patient into conflict with society

- Personality (disorder):
  - amoral
  - antisocial
  - asocial
  - psychopathic
  - sociopathic

F60.3 Emotionally Unstable Personality Disorder

- **Emotionally unstable personality disorder:**
  - characterized by a definite tendency to act impulsively without consideration of the consequences, together with affective instability
  - outbursts of anger may lead to violence, particularly in response to criticism (impulsive type)
- Two types may be distinguished:
  - impulsive type - characterized predominantly by emotional instability and lack of impulse control,
  - borderline type - characterized in addition by disturbances in self-image, aims, and internal preferences, by chronic feelings of emptiness, by intense and unstable interpersonal relationships, and by a tendency to self-destructive behaviour, including suicide gestures and attempts

- Personality (disorder):
  - aggressive
  - borderline
  - explosive

F60.4 Histrionic Personality Disorder

- **Histrionic personality disorder**:
  - self-dramatization, pseudologia phantastica, exaggerated expression of emotions, enhanced suggestibility, shallow and labile affectivity, continual seeking for excitement, appreciation by others, and activities in which the patient is the centre of attention, over-concern with physical attractiveness together with inappropriate seductiveness, egocentricity, manipulative behaviour

- Personality (disorder):
  - hysterical
  - psychoinfantile

F60.5 Anankastic Personality Disorder

- **Anankastic personality disorder:**
  - characterised by feelings of excessive doubts, preoccupation with details, perfectionism interfering with task completion, excessive conscientiousness and pedantry, rigidity
  - intrusion of insistent and unwelcome thoughts or impulses that do not attain the severity of an obsessive-compulsive disorder

- Personality (disorder):
  - compulsive
  - obsessional
  - obsessive-compulsive

F60.6 Anxious (Avoidant) Personality Disorder

- **Anxious (avoidant) personality disorder:**
  - characterized by persistent and pervasive feelings of tension and apprehension, preoccupation with being criticized or rejected by others, avoidance of social or occupational activities because of fears of disapproval or rejection

F60.7 Dependent Personality Disorder

- **Dependent personality disorder:**
  - characterized by pervasive passive reliance on other people to make one's major and minor life decisions, great fear of abandonment, feelings of helplessness and incompetence, passive compliance with the wishes of elders and others, and a weak response to the demands of daily life
  - lack of vigour may show itself in the intellectual or emotional spheres
  - there is often a tendency to transfer responsibility to others.

- Personality (disorder):
  - asthenic
  - inadequate
  - passive
  - self-defeating

F62 Enduring Personality Changes, not Attributable to Brain Damage and Disease

F62	Enduring personality changes, not attributable to brain damage and disease
F62.0	Enduring personality change after catastrophic experience
F62.1	Enduring personality change after psychiatric illness
F62.8	Other enduring personality changes
F62.9	Enduring personality change, unspecified

F62.0 Enduring Personality Change after Catastrophic Experience

- **Enduring personality change after catastrophic experience:**
  - present for at least two years, following exposure to catastrophic stress
  - characterized by a hostile or distrustful attitude toward the world, social withdrawal, feelings of emptiness or hopelessness, a chronic feeling of "being on edge" as if constantly threatened, and estrangement.
  - enduring personality change after psychiatric illness (mostly schizophrenia) may appear due to the traumatic experience of suffering from a severe psychiatric illness

- Personality change after:
  - concentration camp experiences
  - disasters
  - prolonged:
    - captivity with an imminent possibility of being killed
    - exposure to life-threatening situations such as being a victim of terrorism
  - torture

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 thymoprofylactics (carbamazepin, valproic acid) reduces mood fluctuation and aggressive tendencies

F63 Habit and Impulse Disorders

F63	Habit and impulse disorders
F63.0	Pathological gambling
F63.1	Pathological fire-setting (pyromania)
F63.2	Pathological stealing (kleptomania)
F63.3	Trichotillomania
F63.8	Other habit and impulse disorders
F63.9	Habit and impulse disorder, unspecified

F63.0 Pathological Gambling

- **Pathological gambling:**
  - consists of frequent, repeating episodes of gambling which dominate patient's life leading to social, occupational, material and family detriment
  - it means an intense urge to gamble and preoccupation with ideas of the act of gambling which finally leads to large debts, criminal acting, loss of job and family
- Psychotherapy and regime therapy is alike the treatment of alcoholism (group psychotherapy — Anonymous gamblers, 12-steps psychotherapy, family therapy, etc.).

F63.1 Pathological Fire-Setting (Pyromania)

- **Pyromania:**
  - characterized by attempts at, or acts of setting fire to property or objects without any apparent motive
  - connected with an intense interest in watching fires burn and feelings of increasing tension before the act, and intense excitement immediately after it has been carried out

F63.2 Pathological Stealing (Kleptomania)

- **Kleptomania - pathological stealing:**
  - means that the patient suffers from intense impulses to steal objects that are not acquired for personal use or monetary gain
  - this disturbance may appear within the symptomatology of eating disorders

F63.3 Trichotillomania

- **Trichotillomania:**
  - characterized by noticeable hair loss due to a recurrent failure to resist impulses to pull out hairs

F64 Gender Identity Disorders

F64	Gender identity disorders
F64.0	Transsexualism
F64.1	Dual-role transvestism
F64.2	Gender identity disorder of childhood
F64.8	Other gender identity disorders
F64.9	Gender identity disorder, unspecified

For details see lecture Paraphilias.

F65 Disorders of Sexual Preference

F65	Disorders of sexual preference
F65.0	Fetishism
F65.1	Fetishistic transvestism
F65.2	Exhibitionism
F65.3	Voyeurism
F65.4	Paedophilia
F65.5	Sadomasochism
F65.6	Multiple disorders of sexual preference
F65.8	Other disorders of sexual preference
F65.9	Disorder of sexual preference, unspecified

For details see lecture Paraphilias.

F66 Psychological and behavioural disorders associated with sexual development and orientation
F66.0 Sexual maturation disorder
F66.1 Egodystonic sexual orientation
F66.2 Sexual relationship disorder
F66.8 Other psychosexual development disorders
F66.9 Psychosexual development disorder, unspecified

F68 Other disorders of adult personality and behaviour
F68.0 Elaboration of physical symptoms for psychological reasons
F68.1 Intentional production or feigning of symptoms or disabilities, either physical or psychological (factitious disorder)
F68.8 Other specified disorders of adult personality and behaviour

F69 Unspecified disorder of adult personality and behaviour

For details see lecture Paraphilias.

PERSONALITY DISORDERS

Personality Disorder Clusters

There are three clusters: A B C

- **CLASTER A**
  - Patient is eccentric and/or fears social relationships
  - **Includes:**
    - Paranoid personality disorder
    - Schizoid personality disorder
    - Schizotypal personality disorder

2. CLUSTER B

- Patient is emotional, erratic, and/or dramatic
- **Includes:**
  - **Histrionic personality disorder**
  - **Narcissistic personality disorder**
  - **Antisocial personality disorder**
  - **Borderline personality disorder**

3. CLUSTER C

- Patient is fearful and/or anxious
- **Includes:**
  - **Avoidant personality disorder**
  - **Obsessive-compulsive personality disorder**
  - **Dependent personality disorder**

Epidemiology

- Personality disorder is prevalent in 1% of population
- Symptoms must be present by early adulthood for diagnosis

PDs Characteristics

- Presence of long-standing, rigid, unsuitable pattern of relating to others
- Presence of personality characteristics that cause social and occupational impairment
- Lack of insight
- Failure to seek psychological help unless compelled by others
- Absence of frank psychosis

- The patients with pds have excessive use of maladaptive or inappropriate defense mechanisms
- Prognosis for these patients is that the disease is chronic and lifelong
- Medication for these patients are not useful except in borderline personality disorder
- Medication is usually for symptoms associated with depression and anxiety
- It is important to remember that PD patients have a high potential for addiction

- **Relatives of patients with personality disorders may have other psychiatric disorders:**
  1. Schizoid, Schizotypal and Parannoid – schizophrenia
  2. Paranoid - delusional disorder (persecutory type)
  3. Antisocial – substance abuse and somatization disorders
  4. Borderline -- Mood disorders, substance abuse and antisocial personality disorder
  5. Avoidant -- anxiety disorder

Personality Disorders

F60 Specific personality disorders

F60.0 Paranoid personality disorder

F60.1 Schizoid personality disorder

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F60.6 Anxious (avoidant) personality disorder

F60.7 Dependent personality disorder

F60.8 Other specific personality disorders

F60.9 Personality disorder, unspecified

Paranoid personality disorder

- **Patient with this disorder are:**
  - Suspicious
  - Mistrustful
  - Litigious
  - Attributes responsibilty for problems to others
- **Defense mechanism used are**
  - Projection
  - Denial

Schizoid Personality Disorder

- These patients have a life long pattern of voluntary social withdrawal
- Similar to delusional disorder and schizophrenia but without frank psychotic symptoms
- In the young can be mistaken for mild autistic disorder

Histrionic personality disorder

- **These patients are:**
  - **Extroverted**
  - **Emotional**
  - **Dramatic**
  - **Sexuality provocative (life of the party)**
  - **Inability to maintain intimate relationships**
  - **“Don juan” behavior in men**

Narcissistic personality disorder

- These patients are:
  - Grandiose
  - Envious
  - Has sense of special entitlement
  - Lack empathy
- Defense Mechanism:
  - Denial
  - Displacement
  - Poor ego functioning

Antisocial personality disorder

- **These patients are:**
  - Also known as sociopaths or psychopath
  - Unwilling to conform to social norms
  - Fail to learn from experiences
  - Associated with conduct disorder in childhood
  - Criminality in adulthood

Borderline personality disorder

- **These patients are**:
  - Unstable behavior and mood
  - Boredom, emptiness
  - Feelings of aloneness
  - Impulsiveness
  - Suicide attempts
  - Brief period of loss of contact with reality (mini – psychotic episodes)
  - Often comorbid with mood disorder

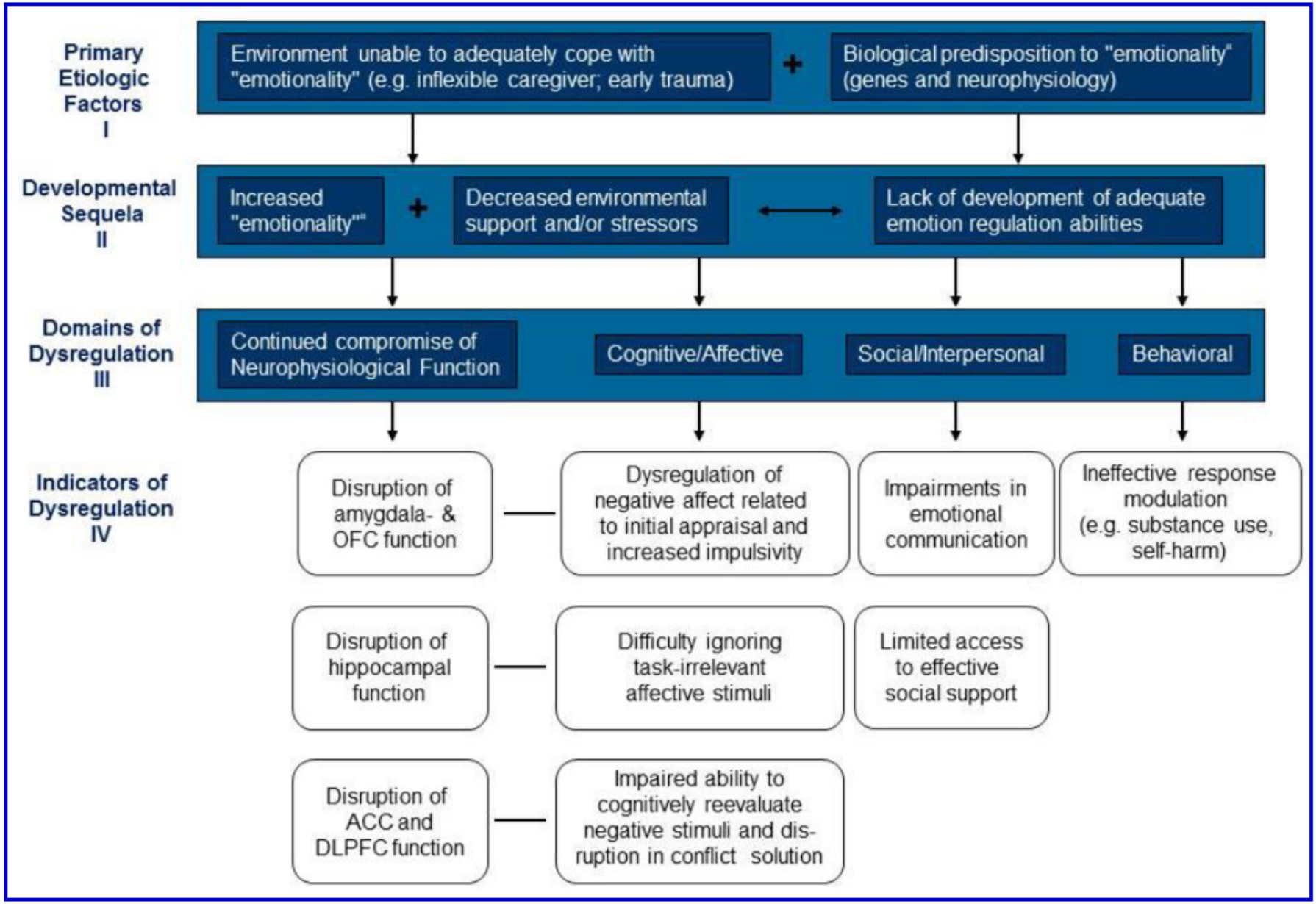


FIGURE 1. A developmental psychopathology model of borderline personality disorder. From Putnam KM, Silk KR: Emotion dysregulation and the development of borderline personality disorder. *Dev Psychopathol* 17:899-925, 2005

Note. OFC, orbitofrontal cortex; ACC, anterior cingulate cortex; DLPFC, dorsolateral prefrontal cortex

Avoidant personality disorder

- **These patients are:**
  - **Shy**
  - Sensitive to rejection
  - Socially withdrawn
  - Has inferiority complex
- **Defense mechanism:**
  - Avoidance
  - Regression

Obsessive – compulsive personality disorder

- **These patients are:**
  - Perfectionistic
  - Orderly
  - Stubborn
  - Indecisive
- **Defense mechanism**
  - Isolation of affect
  - Rationalization
  - Intellectualization
  - Undoing

Dependent personality disorder

- **These patients are:**
  - Lacks self – confidence
  - Lets others assume their responsibilities

- **Defense mechanism**
  - Regression
  - Avoidance

Passive – aggressive personality disorder

- **These patients are:**
  - Stubborn
  - Inefficient
  - Procrastinates
  - Seems compliant but are defiant
  - No longer a DSM IV diagnosis

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

Treatment of Personality Disorders

- **Pharmacotherapy** helps in emotional disorders
  - anxiolytics and SSRI antidepressants suppress anxiety and depressive symptoms
  - lithium and other thymoprofylactics (carbamazepin, valproic acid) reduces mood fluctuation and aggressive tendencies

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 - Doctor of Medicine, 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)

Source: http://www.cdc.gov

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

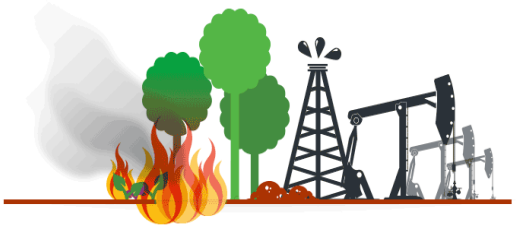
Multifactorial etiopathogenesis

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

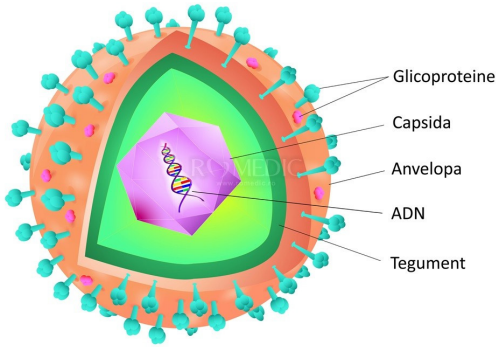
- 85 families with two or more children with autism were examined
- There were investigated 100 variations of genes considered likely to contribute to autism
- 69% of siblings in the spectrum had various autism-related mutations
- 31% overlaps in genetic mutations

Causes - Epigenetics

Stanford University Study, 2011

- 192 twins with autism were examined
- The environment contributes 58%
- Genes contribute 38%

Causes – Environment



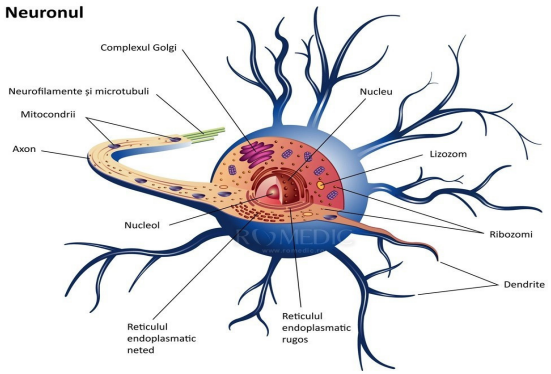
Virus – pre- or postnatal

- 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 ani). 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, propanolol, 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.

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).

Child Psychiatry (part II)

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

1Retardarea mintală.

2. Tulburări de funcționare socială cu debut

în copilărie și adolescență- mutismul electiv.
-Tulburări de ticuri.
-Tulburări de comportament alimentar.
-Enuresis nonorganic.
-Encopresis nonorganic

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 ofdaily 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 living in the Colchester Asylum, 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
Idiopathic	

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.

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.

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.

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

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.

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.
- 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 ofassessment. 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. 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.

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).

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 alarm*s*. 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 *des-amino-D-arginine vasopressin (desmopressin)* has been used in the treatment of nocturn al enuresis in children over 5 years of age.

It can be administered as a tablet orin 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:
  a) result of inappropriate toilet training
  b) the child is able of bowel control, but because of different reasons is refusing to defecate in appropriate places
  c) 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.
- *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 familiality reflects genetic predisposition. A proportion of the genetic risk is shared with other psychiatric disorders, including obsessive–compulsive disorder and, perhaps more surprisingly, schizophrenia. 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.

Neurobiology

Anorexia nervosa

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:

- 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.

Linking neuroimaging with neurochemistry, one theory is that the restrictive eating of anorexia nervosa is a maladaptive attempt to reduce the negative

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.
- 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.
- 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 selfinduced 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).

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.

Bulimia nervosa

Psychotherapy

Both CBT and interpersonal therapy are effective in bulimia nervosa. Of those who complete treatment (about 20% drop out), 60% will have stopped binge eating, and there is an 80% reduction overall. Psychological aspects improve in parallel. Early response is a strong predictor of outcome. The effect is maintained, with low relapse rates seen over 12 months

Medication

Antidepressants are effective, producing a reduction of about 50% in the frequency of binge eating, and cessation in 20% of cases. The onset is more rapid than in depression, but a higher dose may be needed (e.g. fluoxetine 60 mg daily). However, long-term data are less encouraging and show poor
compliance. Antidepressants should be used rarely, and viewed as second line treatment and only if an effective psychological treatment is unavailable or unsuccessful. Topiramate is effective in suppressing binge eating, but side effects limit its usefulness and its use in bulimia nervosa is not advocated.

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 of 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

F98.8 Other Specified Behavioural and Emotional Disorders with Onset Usually Occurring in Childhood and Adolescence

- Attention deficit disorder without hyperactivity
- Excessive masturbation
- Nail — biting
- Nose — picking
- Thumb — sucking

Psychic Disorders that Usually Occur in Adulthood but Can Have Early Onset in Childhood or Adolescence

- Schizophrenic disorders with early onset in childhood occur, but they are very rare and the prognosis is poor, because of influence on psychic development. Treatment quite often includes antipsychotic drugs and residential care
- Manic-depressive disorder is rare before puberty, but increases in incidence during adolescence
- Treatment resembles that of adults, only electroconvulsive therapy is not applied before adolescence

schizophrenia

It is highlighted in DSM-5 that, if other communication disorders of childhood are present where disorganized speech and negative symptoms are also present, a diagnosis of schizophrenia should be made only if prominent hallucinations or delusions are also present for at least 1 month.

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schizophrenia

Schizophrenia in adolescence is more common in boys than in girls.

Before symptoms of schizophrenia appear, many of these children experience nonspecific behavioural changes, social withdrawal, and declining school performance.

The prognosis may be good for a single acute episode with florid symptoms, but for the majority, early-onset schizophrenia runs a chronic course and is especially poor when the onset is insidious.

Child Abuse

- The term child abuse is used to indicate physical abuse, sexual abuse, or emotional abuse and child neglect.

- Child care after divorce:
  - some parents are not able to reach consent about child care after divorce period, so child psychiatrist is asked by the court to give an advice on the best solution for the children
  - after divorce disagreements are traumatic for the children and the child psychiatrist's statements should be very carefully expressed, to protect the well being and future development of the child
  - the parental rights of both parents - mother and father should be respected and protected
  - cooperation with child psychologist and social workers is necessary