Global Mental Health

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

FIRST

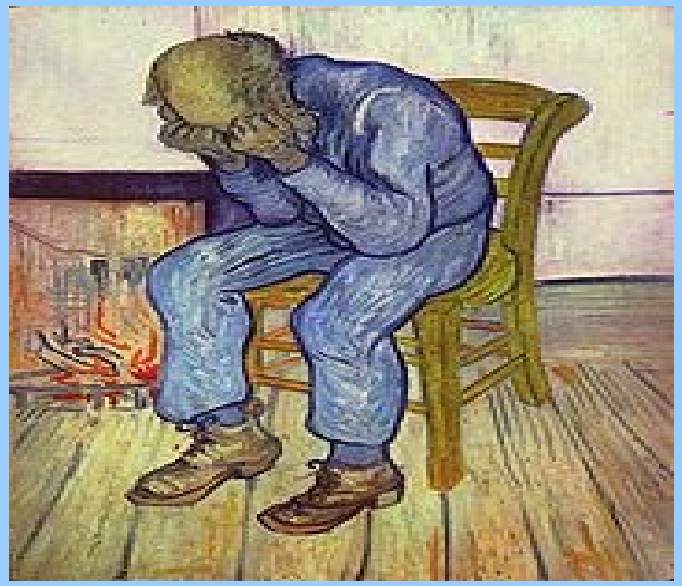
Almost 300 million people suffer from mental disorders. Many more have mental problems. Mental disorders are much more common among the poor and they, in turn, increase poverty.

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

MENTAL HEALTH IN 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

FIFTH

Children not receiving enough iodized salt develop intellectual disability. About half of mental disorders begin before the age of 14.

Mental Health should be a Global Health Priority

a compelling Moral Argument


MENTAL HEALTH FOR ALL?

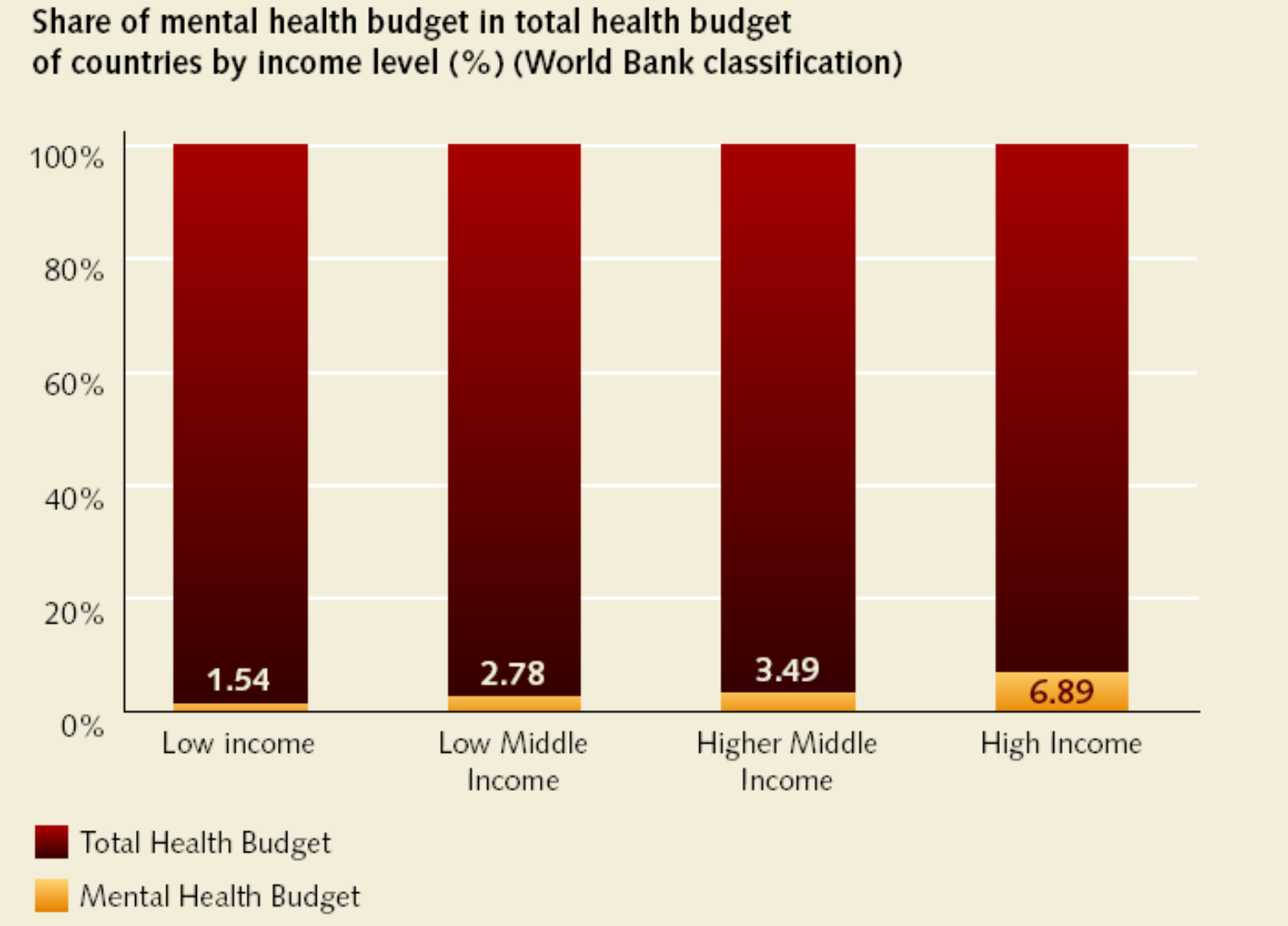
Mental Health “Reforms” world -wide

- 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

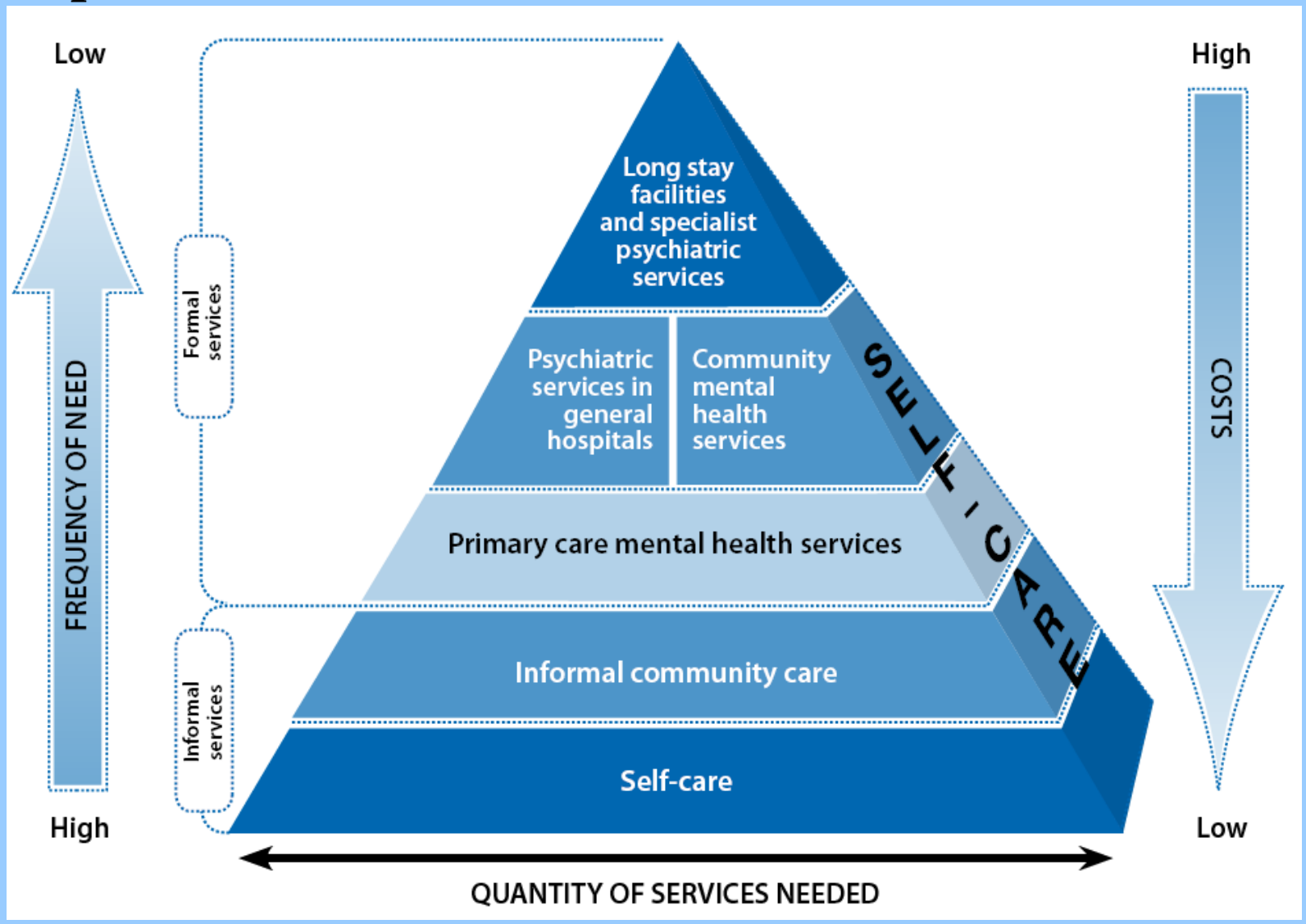


Organization of services

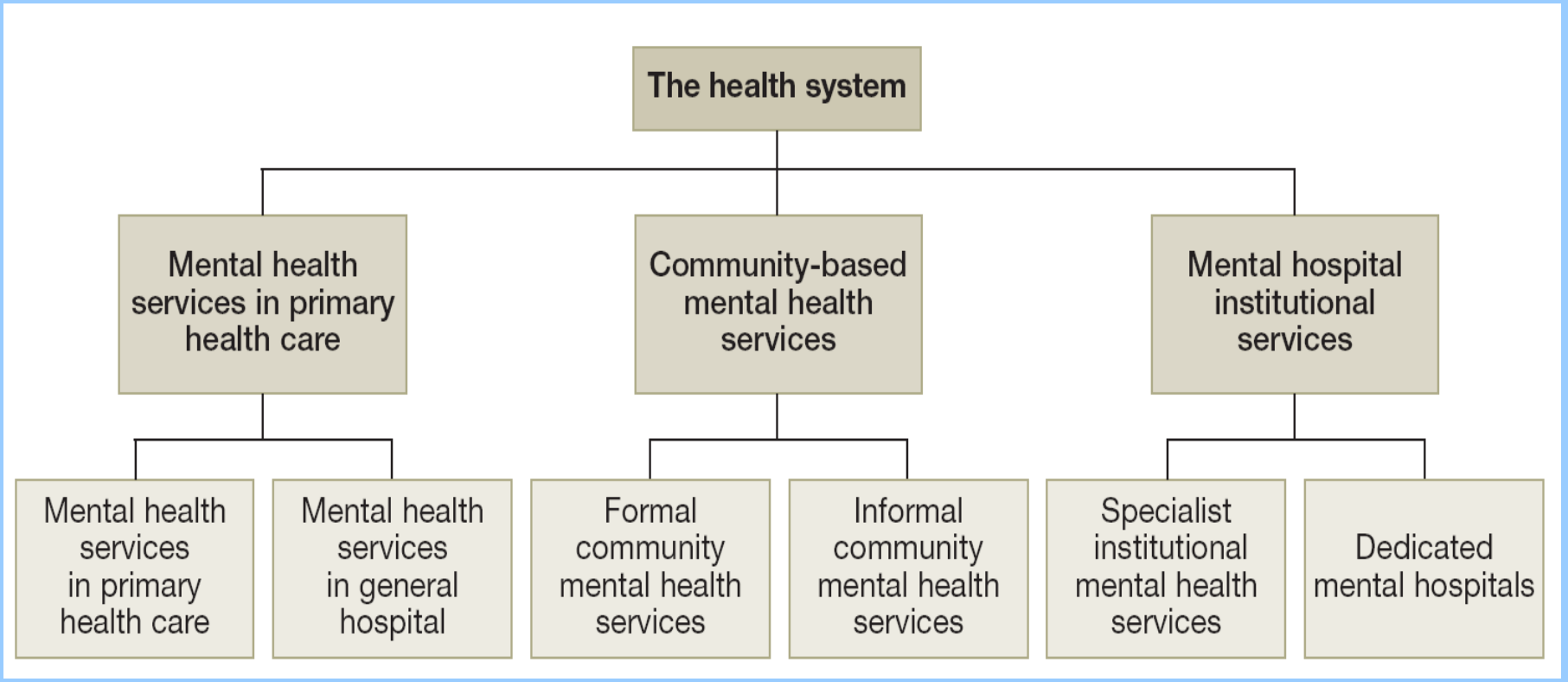
Magnitude of mental disorders

- 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

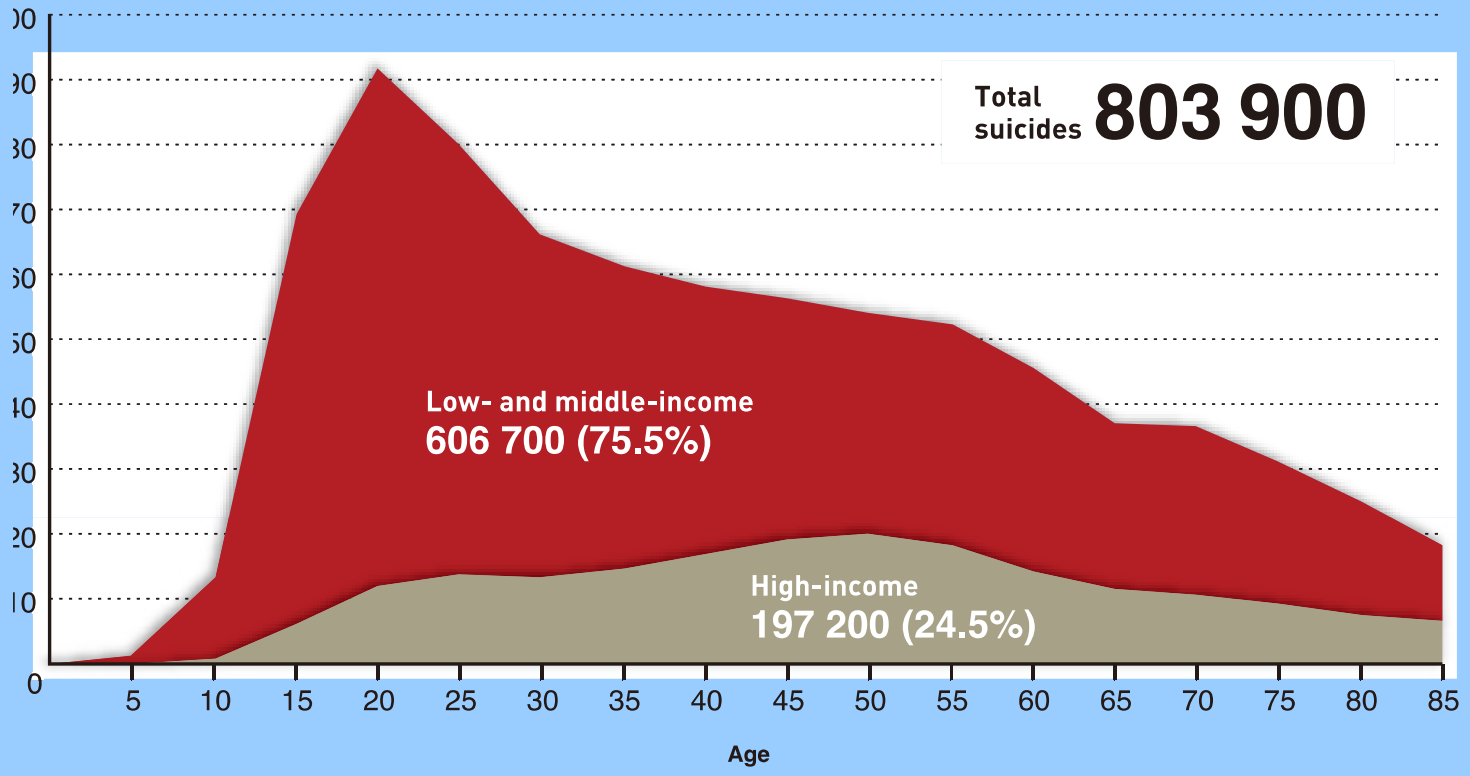


SUICIDE (WHO evidence):

- 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**



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.

- 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**

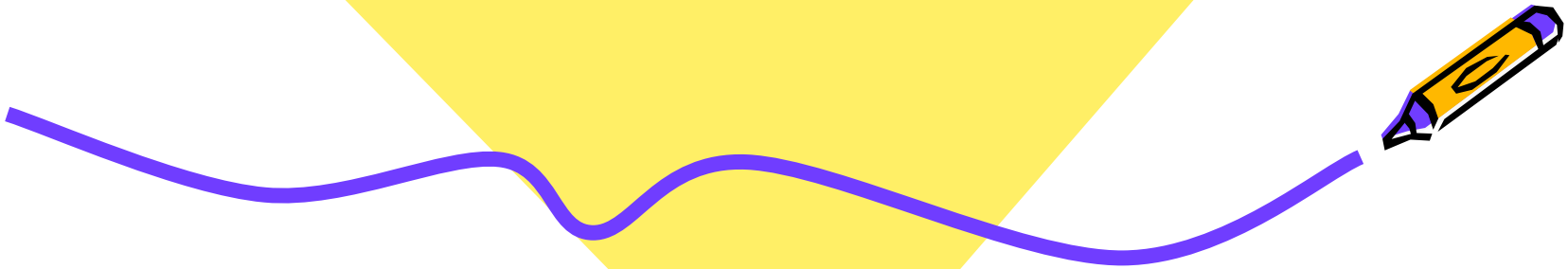
- Buss-Perry Aggression Questionnaire (AGQ)
- Hare Psychopathy Checklist
- Minnesota Multiphasic Personality Inventory
- Narcissistic Personality Inventory

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)

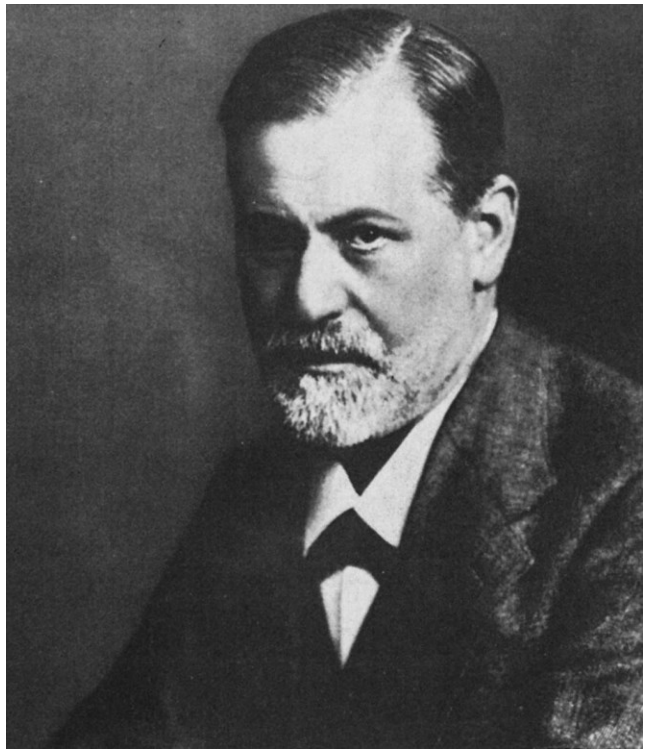
Psychosocial Theories and Therapy

Jana CHIHAI



Psychoanalytic Theories

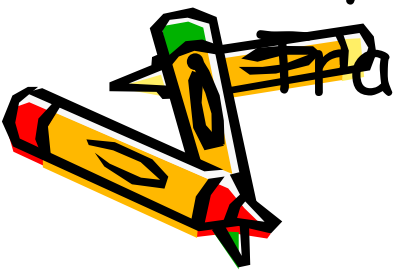
- Pioneered by *Sigmund Freud* (1856-1939) in Vienna



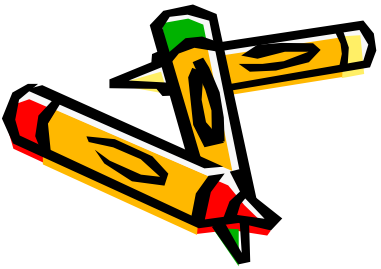
- **Father of Psychoanalysis**
  - "Your behavior today is directly or indirectly affected by your childhood days or experiences.

  - 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

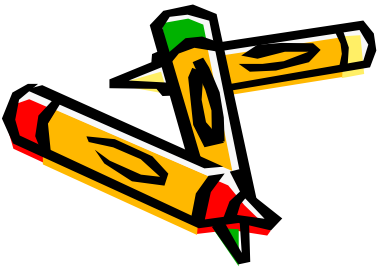


Psychoanalysis focuses on discovering the causes of the client's unconscious and repressed thoughts, feelings, and conflicts believed to cause anxiety and helping the client to gain insight into and resolve these conflicts and anxieties.

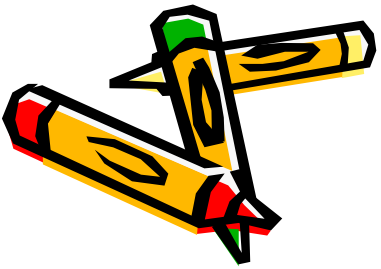


Personality Structure

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

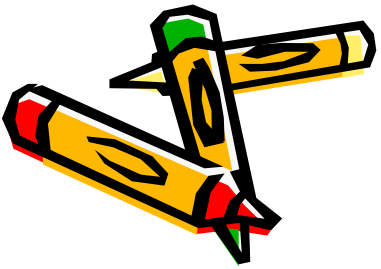


- EGO
  - Executive
  - REALITY PRINCIPLE
  - Conscious
  - Competencies
  - Decision Maker; Problem-Solving; Critical and Creative thinking



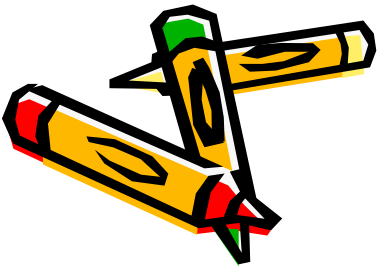
- SUPEREGO

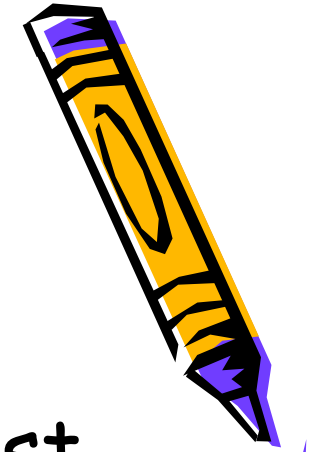
  - Should not
  - Small voice of GOD
  - Set norms, standards and values
  - MORAL PRINCIPLE
  - Conscience



Erik Erickson

Psychosocial Theory of Development





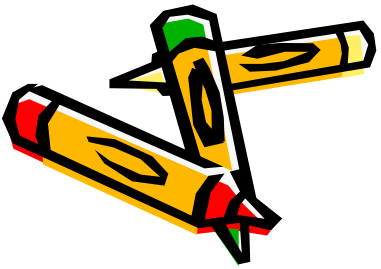
0-18 mos. **T**rust vs. **M**istrust

-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

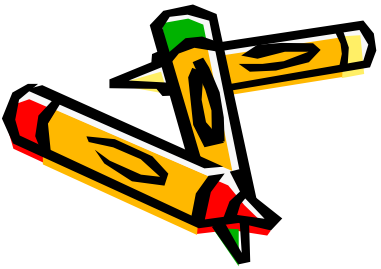
- Gaining some basic control of self and environment
- Conflict: independence-fear conflict, severe feelings of self-doubt



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

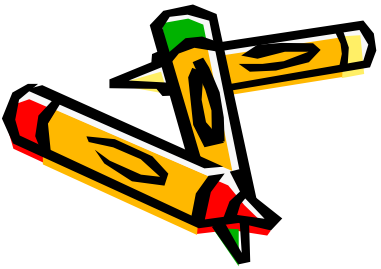
-becoming purposeful and directive

-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

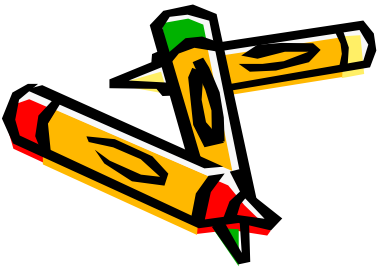


- 12 yrs – 20 yrs Identity vs. Role Diffusion
- Making transition from childhood to adulthood; developing a sense of identity
- Conflict: confusion of who one is, identity submerged in relationships or group memberships

21 yrs – 35 yrs Intimacy vs. Isolation

-establishing intimate bonds of love and friendship

-conflict: emotional isolation

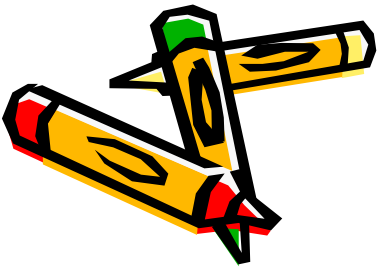


35 yrs – 55 yrs Generativity vs. Stagnation

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

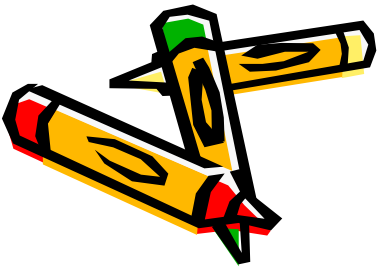
-conflict: self-absorption. Inability to grow as a person

- 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



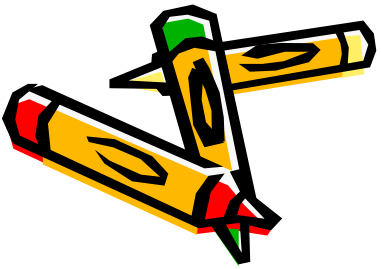
Jean Piaget

Cognitive Theory of Development



Jean Piaget (1896-1980)

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



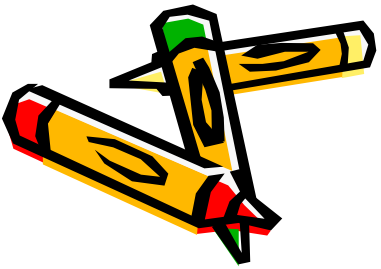
Humanistic Theories

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

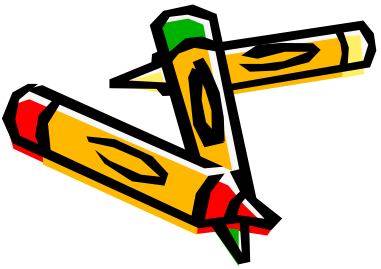
- ***Logotherapy***: life must have meaning and therapy is the search for that meaning

Frederick "Fritz" Perls

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

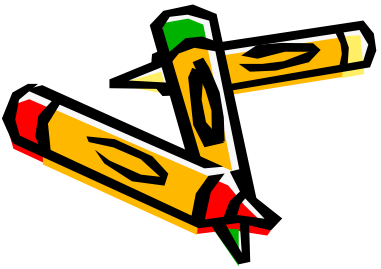
Existential theorists believe that deviations occur when the person is out of touch with self or environment; thus, the goal of therapy is to return the person to an authentic sense of self.

Treatment Modalities



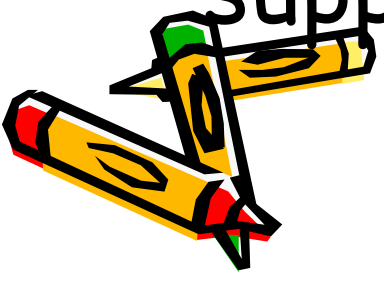
Community (outpatient) mental health treatment

- 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

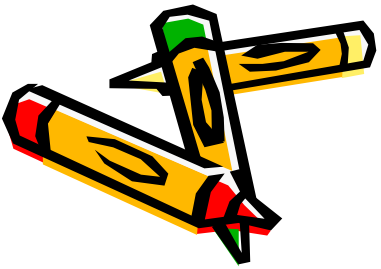


Psychotherapy

- **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**

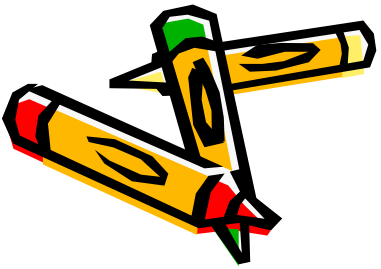
Psychotherapy

- **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**

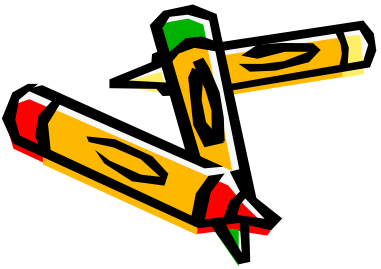


Classification of Psychotherapy

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

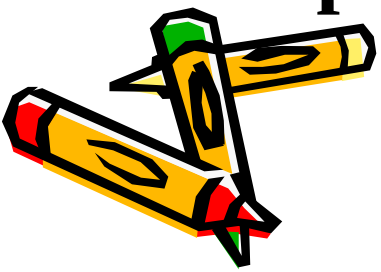
Characteristics common for all psychotherapies

- **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**



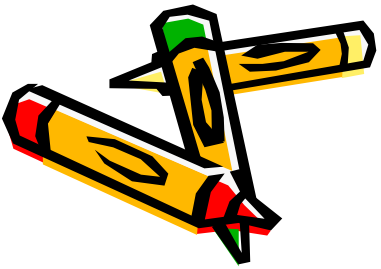
Characteristics common for all psychotherapies

- 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



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

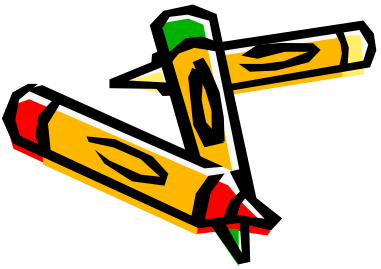
5. COGNITIVE PSYCHOTHERAPY

- 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

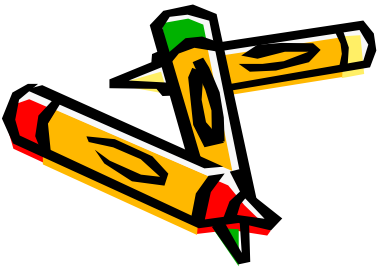


6. BEHAVIORAL THERAPY

- 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



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:
  - 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
  - Solve family problems

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

UNF 10-2. Assertive communication

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

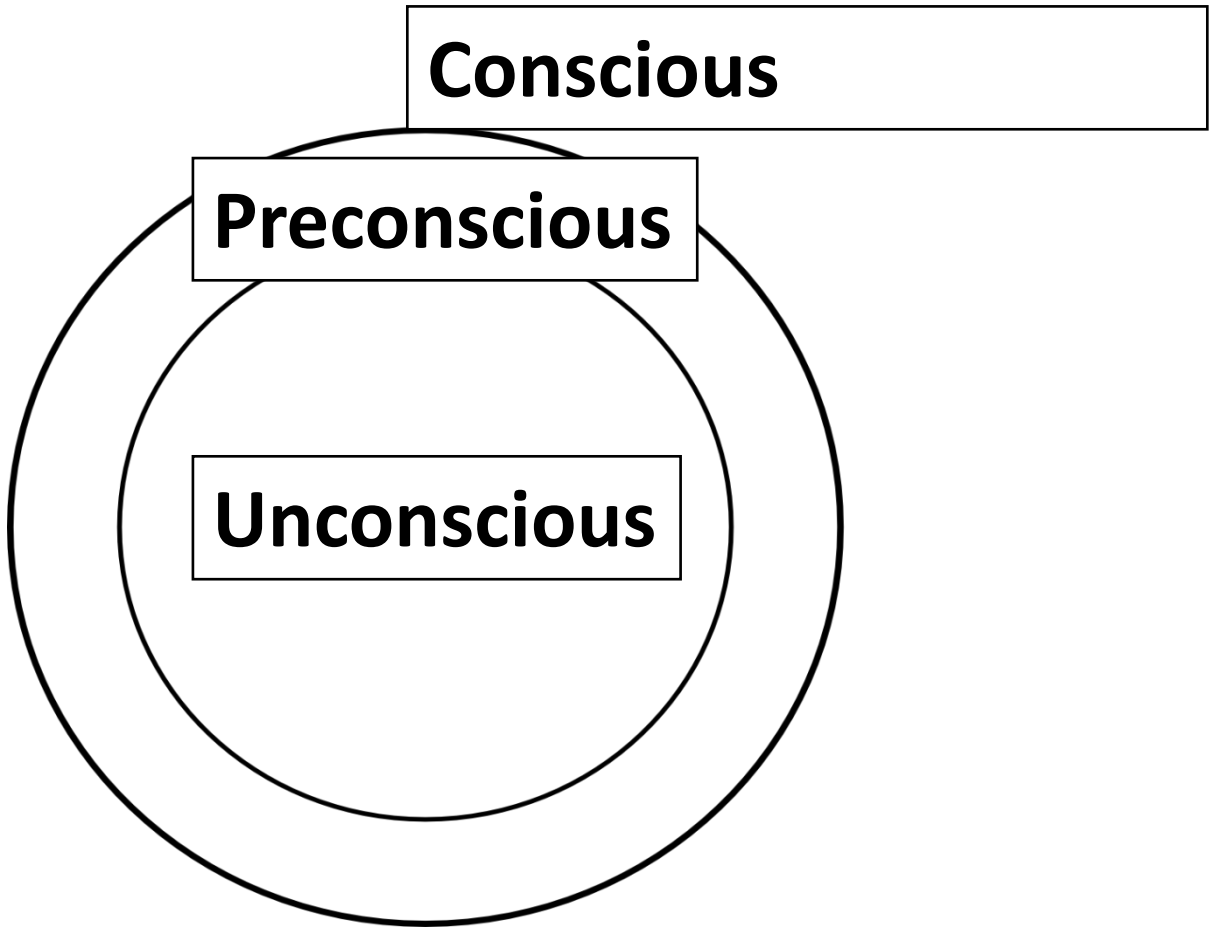
The Dynamics and Development of Personality

- 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.

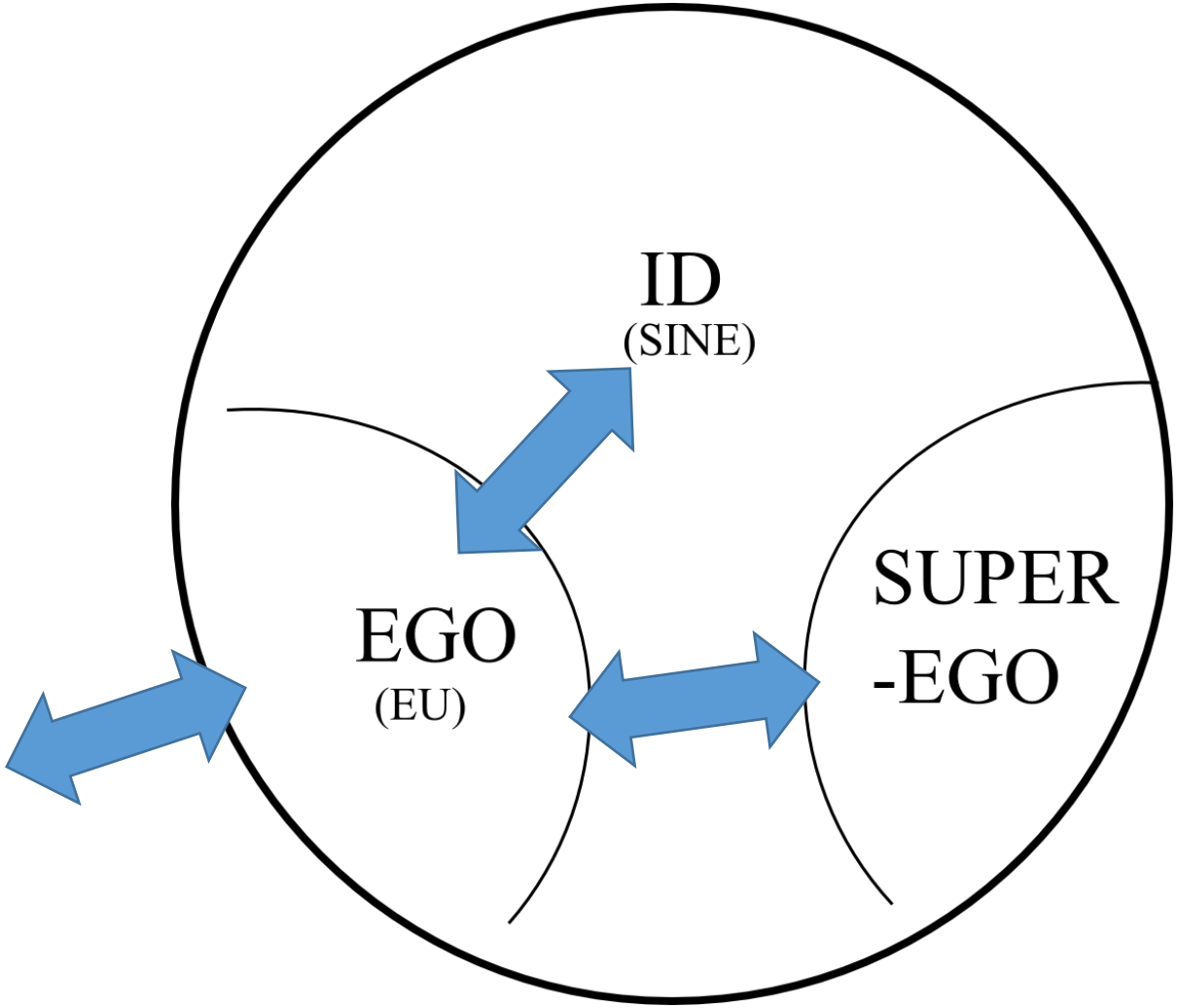
The Structural Model: Id, Ego, & Superego

- **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.

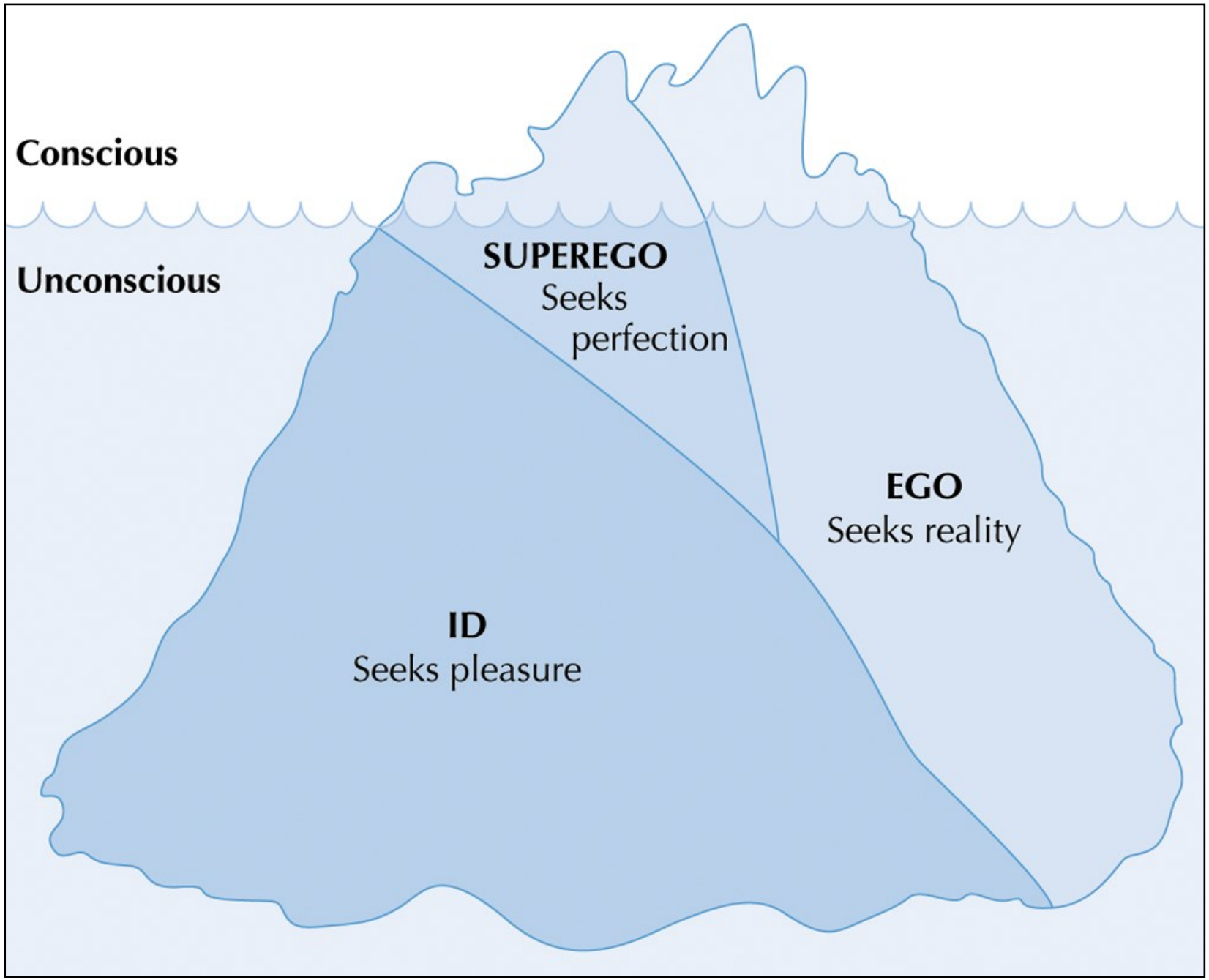
The Structural Model: Id, Ego, & Superego

- **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

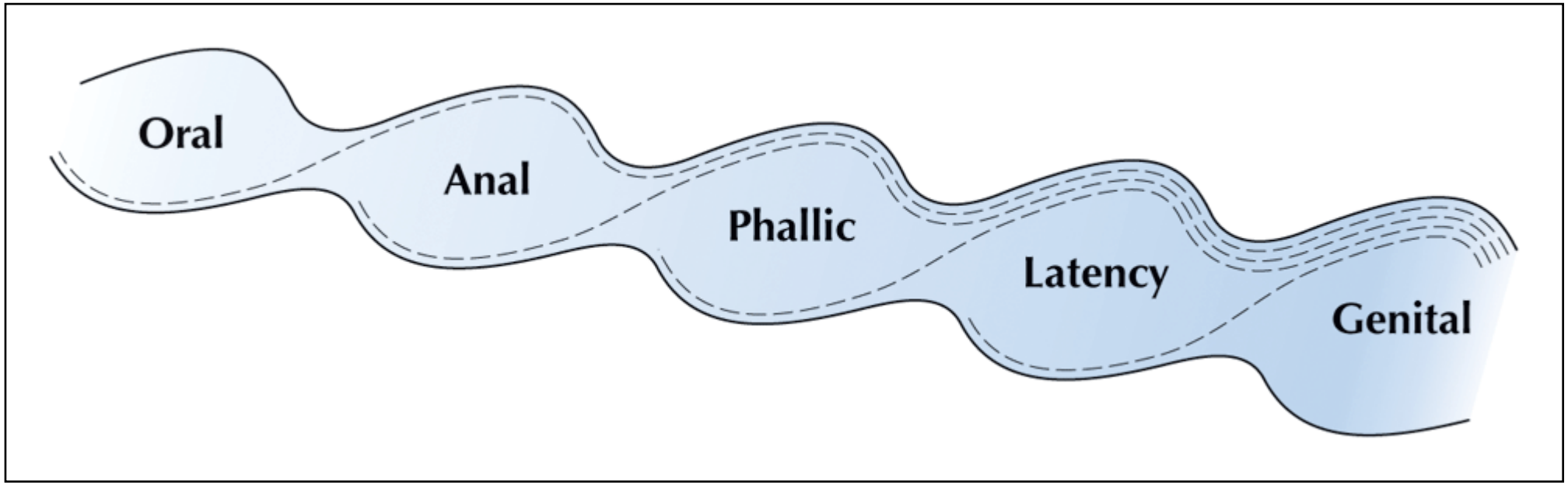
Instincts: Libido & Thanatos

- **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



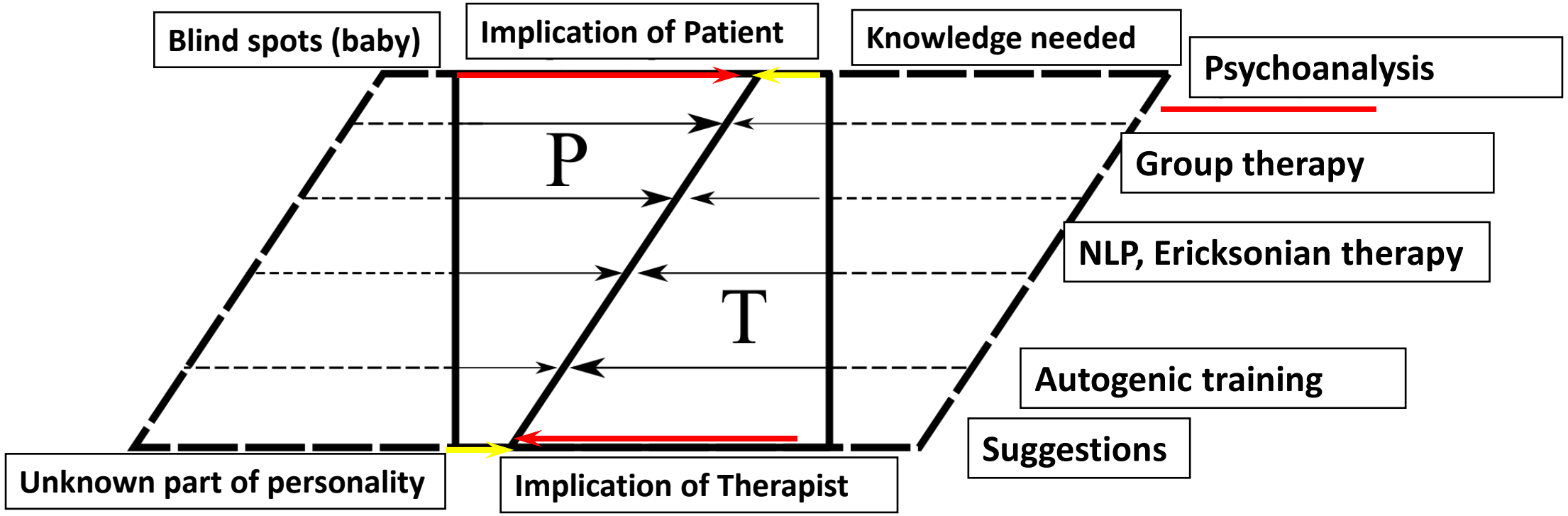
Freud's Psychosexual Stages

- 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

- The ego's way of dealing with unwanted thoughts and desires; wants to resolve tension.
    - **Repression –** active effort of the ego to push threatening material out of consciousness or to keep such material from ever reaching consciousness. This is a constant, active process.
    - **Sublimation –** the ego channels threatening unconscious impulses into socially acceptable actions.
        - **Ex:** Aggressive id impulses are channeled into competitive sports.

Defense Mechanisms

- **Displacement –** involves channeling our impulses to non-threatening objects; do not lead to social rewards.
  - **Ex:** If someone is angry at the boss, he or she may take that anger out on the children at home.
- **Denial –** refusing to accept that certain facts exist; insisting that something is not true.
- **Reaction Formation –** hiding from a threatening unconscious idea or urge by acting in a manner opposite to our unconscious desires.
  - **Ex:** People obsessed with religious values.

Defense Mechanisms

- **Intellectualization –** ego handles threatening material by removing the emotional content from the thought before allowing it into awareness; by considering something strictly intellectual, previously difficult thoughts are allowed into awareness without anxiety.

- **Projection –** attributing an unconscious impulse to other people instead of ourselves; we free ourselves from the perception that we are the only ones that have that thought.

Defense Mechanisms

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- **Projection –** attributing an unconscious impulse to other people instead of ourselves; we free ourselves from the perception that we are the only ones that have that thought.

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, PLEGOMAZIN, 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

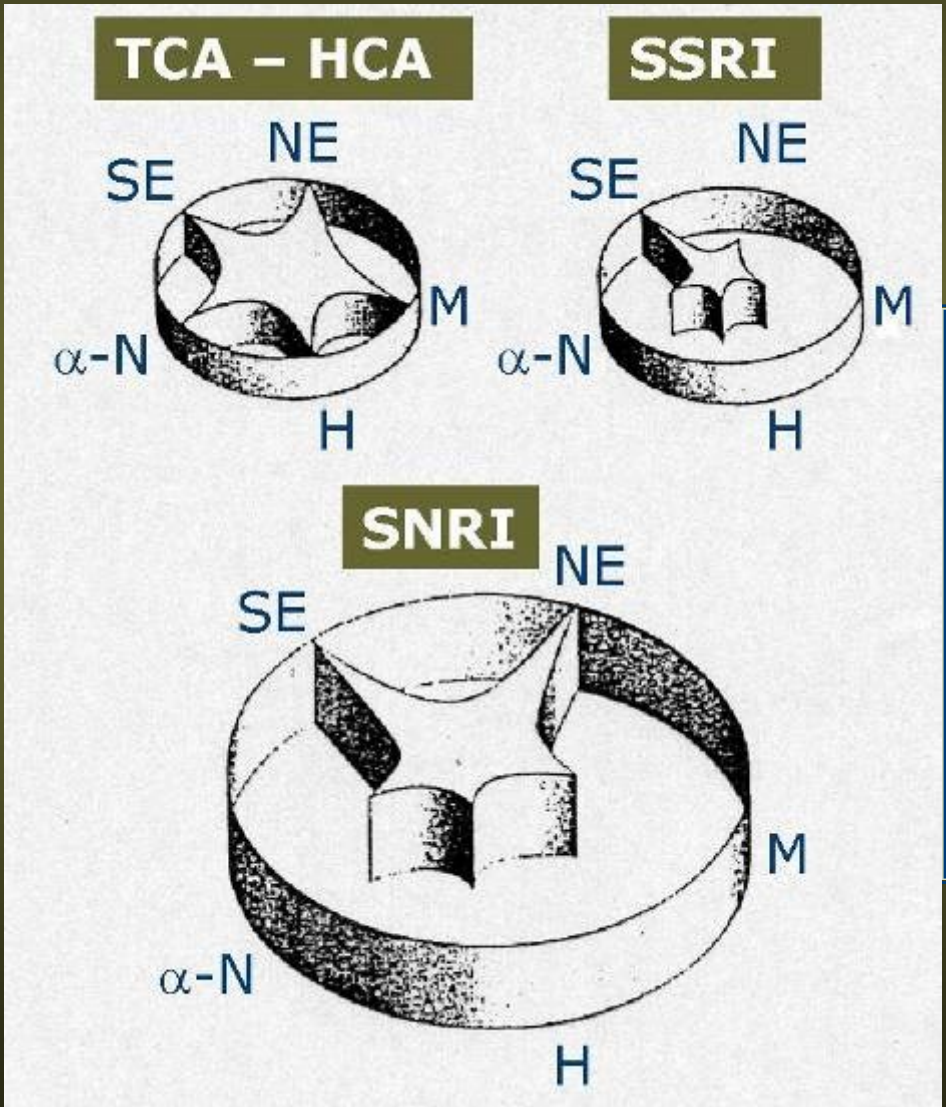
Rapid Tranquilizers

	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 relesase)	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

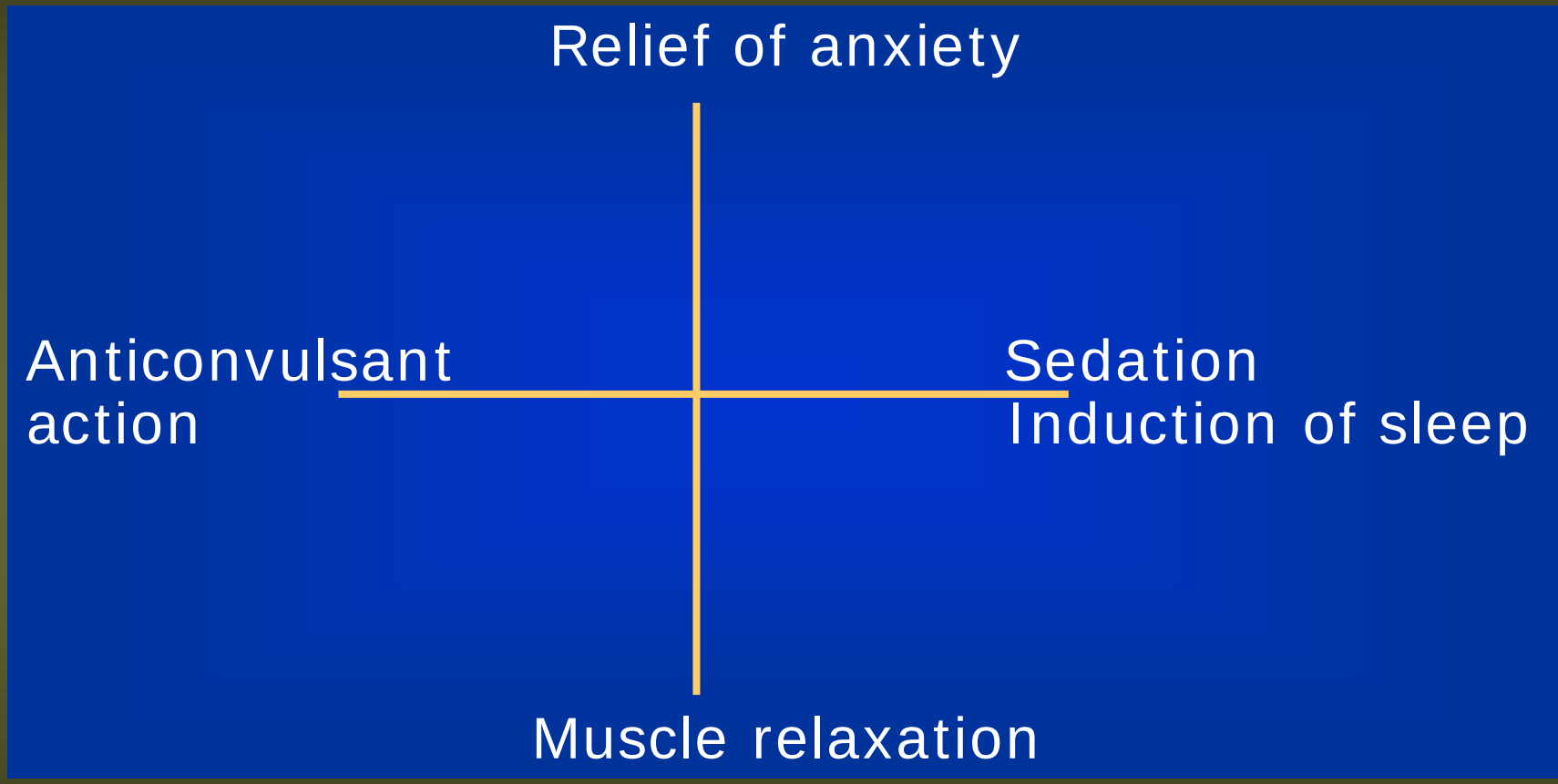
Other Psychotropics with Antidepressant Effect

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)

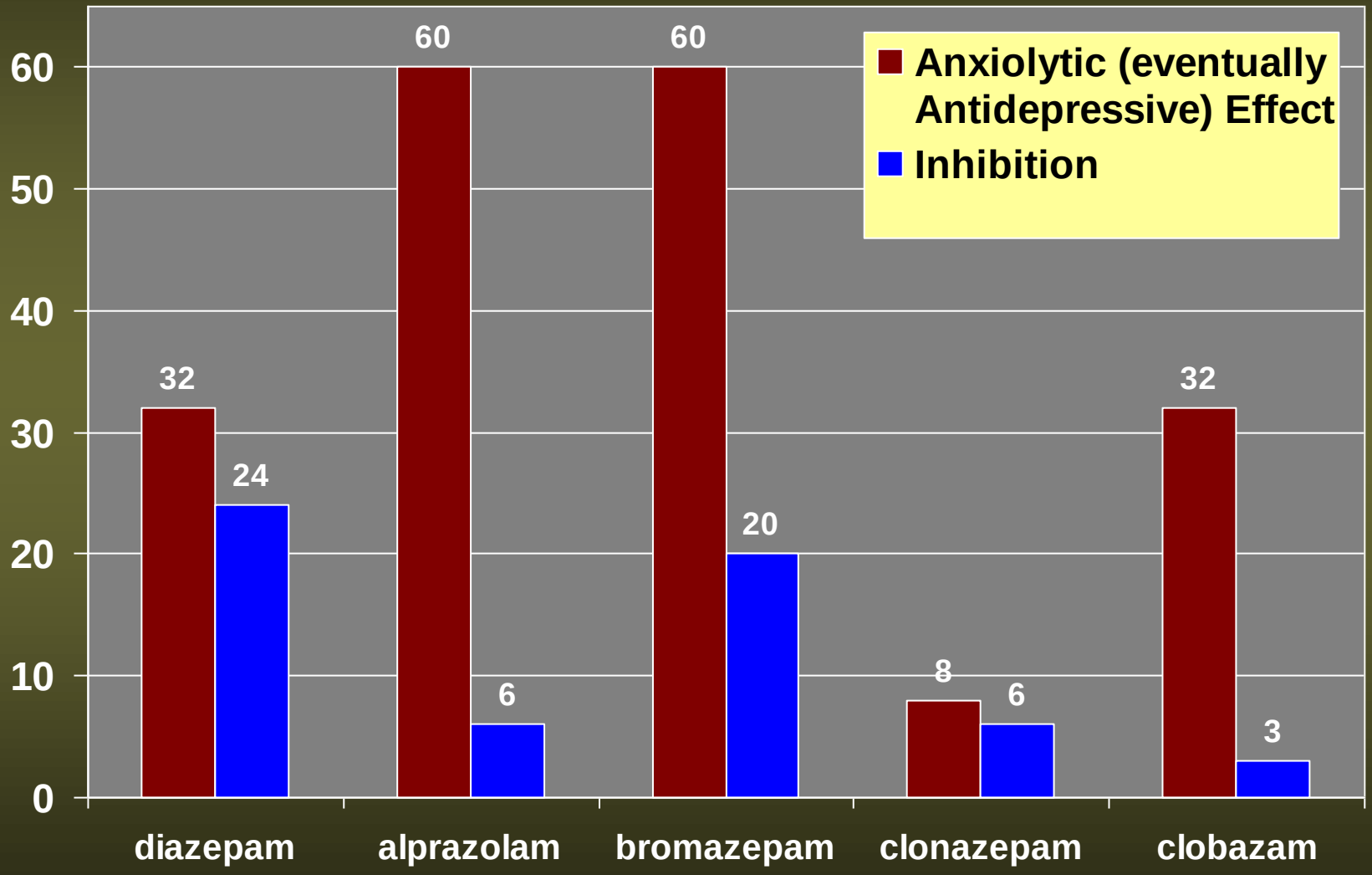
Anxiolytics

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, HYPNOGEN, 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

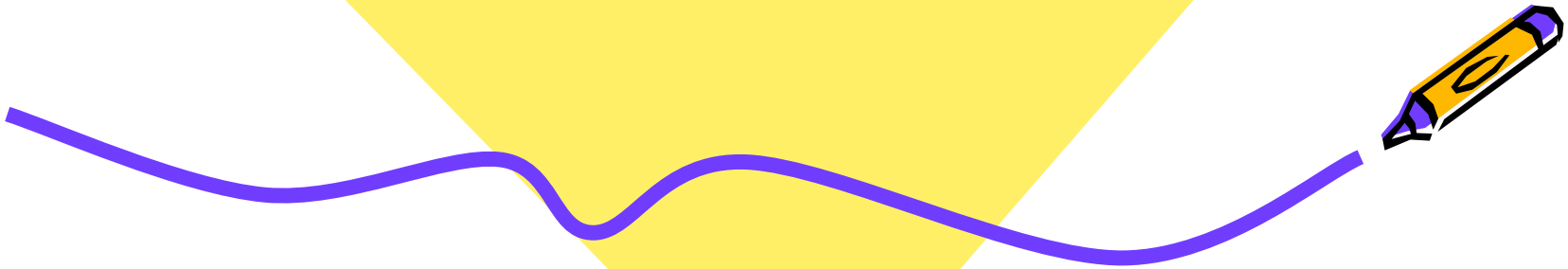
Nootropics

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

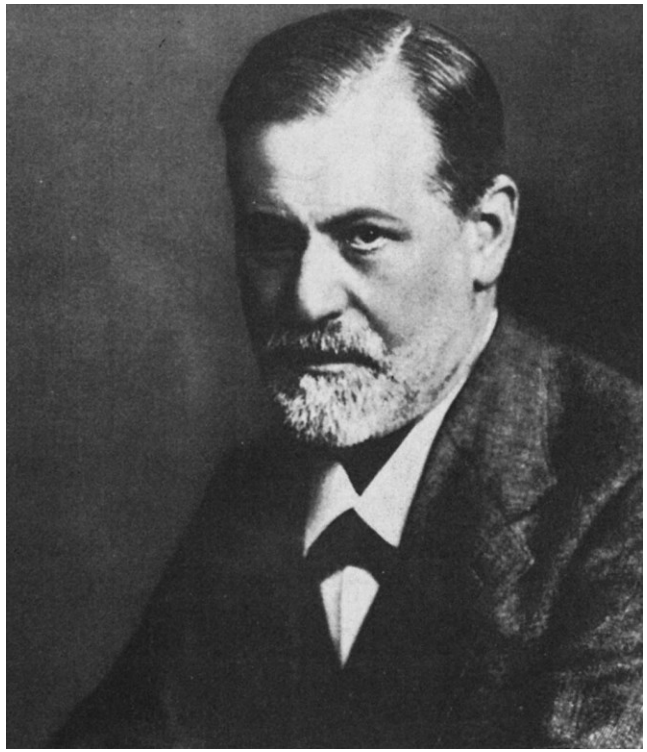
Generic Name	*Trade Mark*	*Doses (mg)*
amphetamine	PSYCHOTON, ADDERAL	5 – 50
dexamphetamine	DEXEDRON	5 – 30
ephedrine	EPHEDRIN	12,5 – 50
mezocarb	SYDNOCARB	5 – 50
methylphenidate	RITALIN, CENTEDRIN	10 – 40
modafinil	VIGIL, PROVIGIL	200 – 400

Psychosocial Theories and Therapy



Psychoanalytic Theories

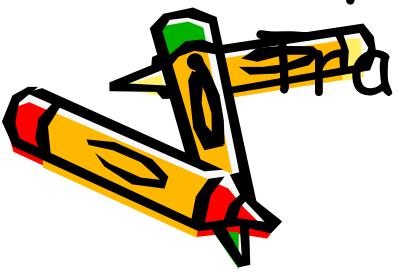
- Pioneered by *Sigmund Freud* (1856-1939) in Vienna



- **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

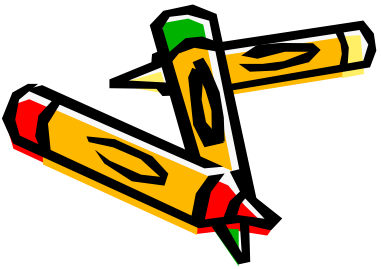


Psychoanalysis focuses on discovering the causes of the client's unconscious and repressed thoughts, feelings, and conflicts believed to cause anxiety and helping the client to gain insight into and resolve these conflicts and anxieties.

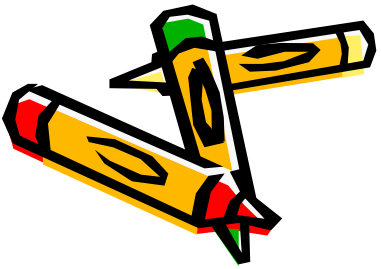
Psychoanalysis is lengthy, expensive, and practiced on a limited basis today; however, Freud's defense mechanisms remain current.

Personality Structure

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

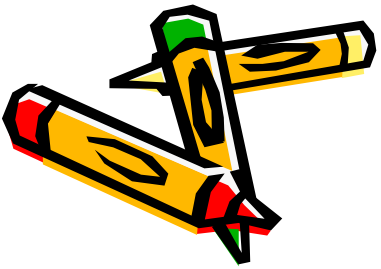


- EGO
  - Executive
  - REALITY PRINCIPLE
  - Conscious
  - Competencies
  - Decision Maker; Problem-Solving; Critical and Creative thinking



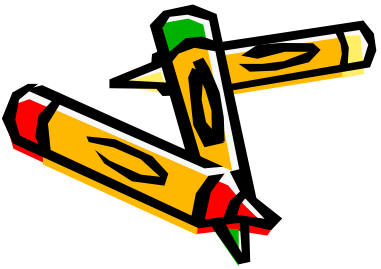
- SUPEREGO

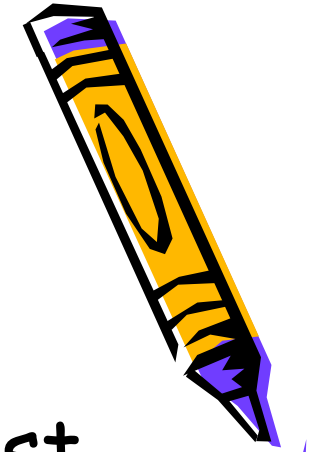
  - Should not
  - Small voice of GOD
  - Set norms, standards and values
  - MORAL PRINCIPLE
  - Conscience



Erik Erickson

Psychosocial Theory of Development





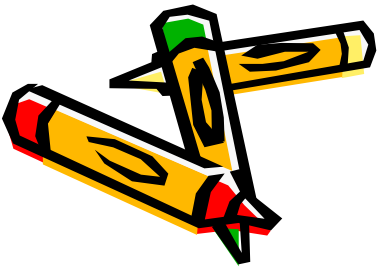
0-18 mos. **T**rust vs. **M**istrust

-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

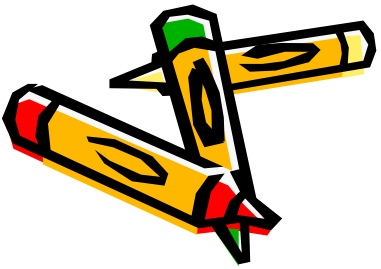
- Gaining some basic control of self and environment
- Conflict: independence-fear conflict, severe feelings of self-doubt



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

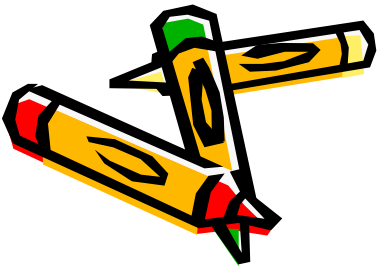
-becoming purposeful and directive

-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

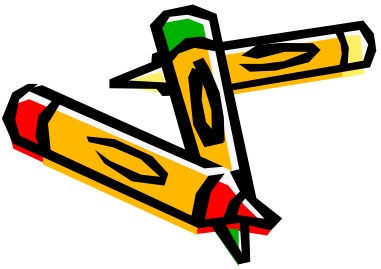


- 12 yrs – 20 yrs Identity vs. Role Diffusion
- Making transition from childhood to adulthood; developing a sense of identity
- Conflict: confusion of who one is, identity submerged in relationships or group memberships

21 yrs – 35 yrs Intimacy vs. Isolation

-establishing intimate bonds of love and friendship

-conflict: emotional isolation

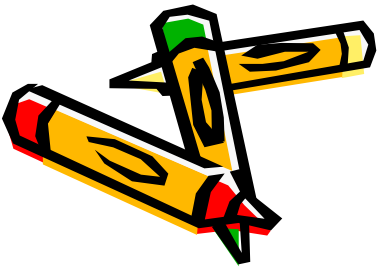


35 yrs – 55 yrs Generativity vs. Stagnation

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

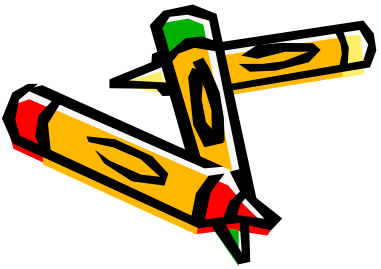
-conflict: self-absorption. Inability to grow as a person

- 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



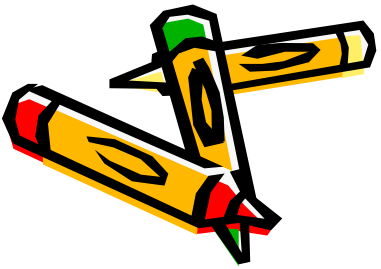
Jean Piaget

Cognitive Theory of Development



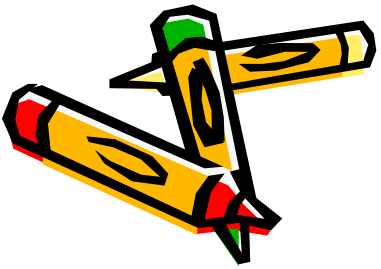
Jean Piaget (1896-1980)

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

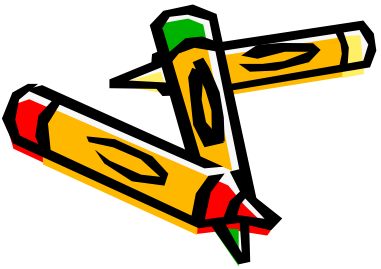
Humanistic Theories

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

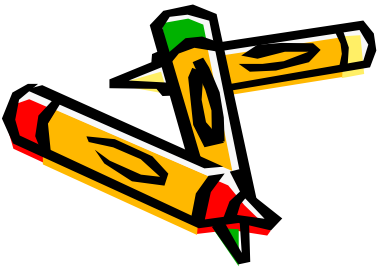
- ***Gestalt therapy*** emphasizes self-awareness and identifying thoughts and feelings in the here and now

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

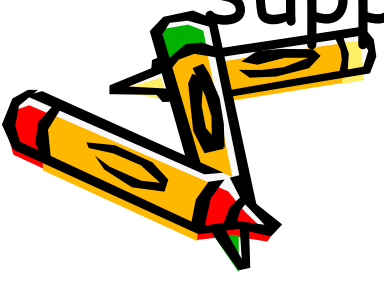


Community (outpatient) mental health treatment

- 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

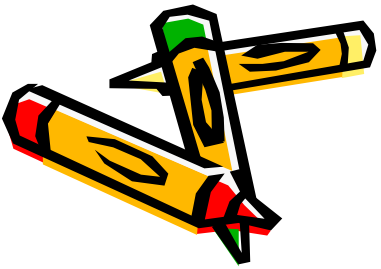


Psychotherapy

- **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**

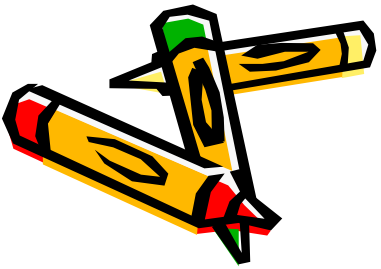
Psychotherapy

- **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**

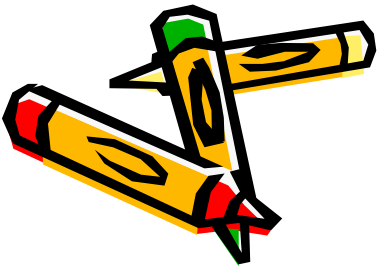


Classification of Psychotherapy

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

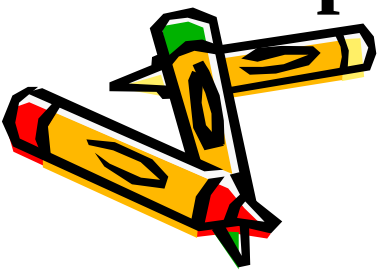
Characteristics common for all psychotherapies

- **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**



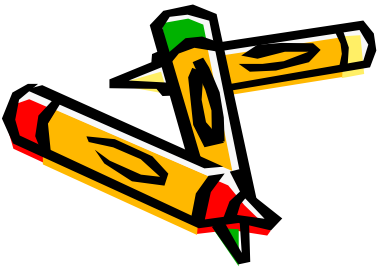
Characteristics common for all psychotherapies

- 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

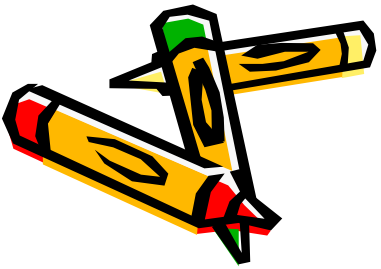
5. COGNITIVE PSYCHOTHERAPY

- 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

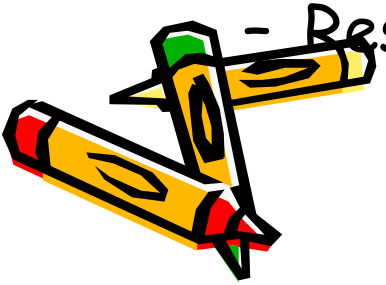
- *Group therapy* involves a therapist or leader and a group of clients sharing a common purpose; members contribute to the group and expect to benefit from it.
- Types of groups include:
- Psychotherapy groups, family therapy, family education, support groups, self-help groups, education groups

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

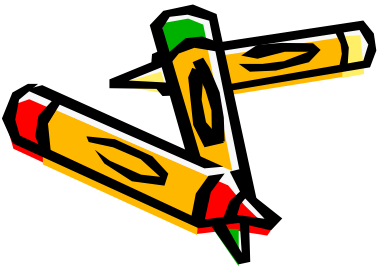
- Client: **Whole family**
- Concepts:
  - The family is the most fundamental unit of the society.
  - Adaptive or maladaptive patterns of behavior are learned from the family
  - **Dysfunction in the family = dysfunction in the individual**
- Purpose
  - Improve relationships among family members
 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

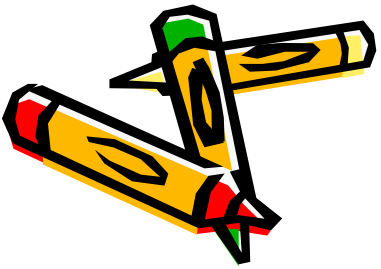
A. shortens the hospitalization and follow-up periods

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

C. decreases the need for medication and psychotherapy

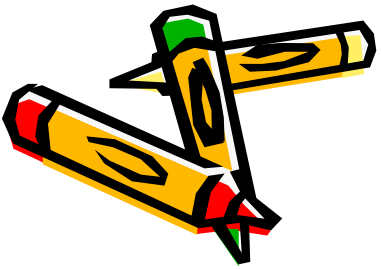
D. enable the client to terminate psychiatric treatment

- 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

UNF 10-2. Assertive communication


Schizophrenia
MENTAL DISORDER

The Tragedy of Schizophrenia

- A catastrophic illness
- Tends to persist chronically
- 10% suicide rate
- Very common -- 0.5-1% of population
- The “cancer of mental illness”

Epidemiology

- Incidence – 15-20/ 100,000/year
- Prevalence – 0.5 – 1%
- Schizophrenia occurs with regular frequency nearly everywhere in the world in **1 %** of population and **begins mainly in young age** (mostly around 16 to 25 years).
- Relative risk for schizophrenia is around:
  - 1% for normal population
  - 5.6% for parents
  - 10.1% for siblings

Epidemiology

- Age – 15 -45 years
- Sex – Male : Female 1 : 1
- Onset is earlier in men

DEFINITION(S)

- Schizophrenia is a disorder characterized by disturbances, for at least 6 months, in the thought content and form, perception, affect, sense of self, volition, interpersonal relationships, and psychomotor behaviour.

- Schizophrenia is a mental disorder characterized by abnormalities in the perception or expression of reality. It most commonly manifests as auditory hallucinations, paranoid or bizarre delusions, or disorganized speech and thinking with significant social or occupational dysfunction.

Definition

The schizophrenic disorders are characterized in general by fundamental and characteristic distortions

- of thinking
- and perception,
- and affects that are inappropriate
- or blunted.

Clear consciousness and intellectual capacity are usually maintained although certain cognitive deficits may evolve in the course of time.

DSM-5 Criteria for Schizophrenia

Criteria A, B, and C must be fulfilled and other causes of symptoms excluded.

Two or more of the following symptoms must be present for a 1-month period or longer, and at least 1 of them must be item 1, 2, or 3:

1. Delusions
2. Hallucinations
3. Disorganized speech
4. Grossly disorganized or catatonic behavior
5. Negative symptoms, such as diminished emotional expression

Impairment in 1 of the major areas of functioning (work, interpersonal relations, or self care) for a substantial period since the onset of the disturbance.

DSM-5 Criteria for Schizophrenia

Some signs of the disorder must last for a continuous period of at least 6 months.

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

During residual periods, only negative symptoms may be present.

The following are negative prognosis factors:

- An significant familial and **genetic load;**
- **Problems during pregnancy** or childbirth;
- Reduced social support network;
- Schizoid personality (schizotypal);
- **Onset at a young age;**
- **Long prodromal period**;
- **Long duration of first episode** (over 6 months, from onset until remission)
- The predominance of **negative symptoms;**
- The presence of a sizeable deficit in terms of energy, relationships and pragmatic performance (possibly, alongside **residual symptoms**) after **the first episode**;
- Family members with high EE (expressed emotion = e.e.) or other relational distortions (= rejection, indifference, lack of understanding and poor support capacity);
- Poor premorbid functioning;
- **Non-compliance to treatment;**

The following are positive prognosis factors:

- **Onset at an older age;**
- **Acute onset type;**
- Paranoid clinical type;
- **Affective elements**;
- Good premorbid functioning;
- **Absence of genetic load**;
- Adequate social support network;
- **A short duration of the first episode**.

Etiology of Schizophrenia

- The etiology and pathogenesis of schizophrenia is not known
- many psychiatric disorders are multifactorial (caused by the interaction of external and genetic factors) and from the genetic point of view very often polygenically determined.

Genetics of Schizophrenia

- It is accepted, that schizophrenia is „the group of schizophrenias“ which origin is multifactorial:
  - internal factors – genetic, inborn, biochemical
  - external factors – trauma, infection of CNS, stress

Aetiology- Multifactorial

Variable Phenotypic Expression

Hereditary

40% of the Pts have a family history

In Jaffna – 63 %

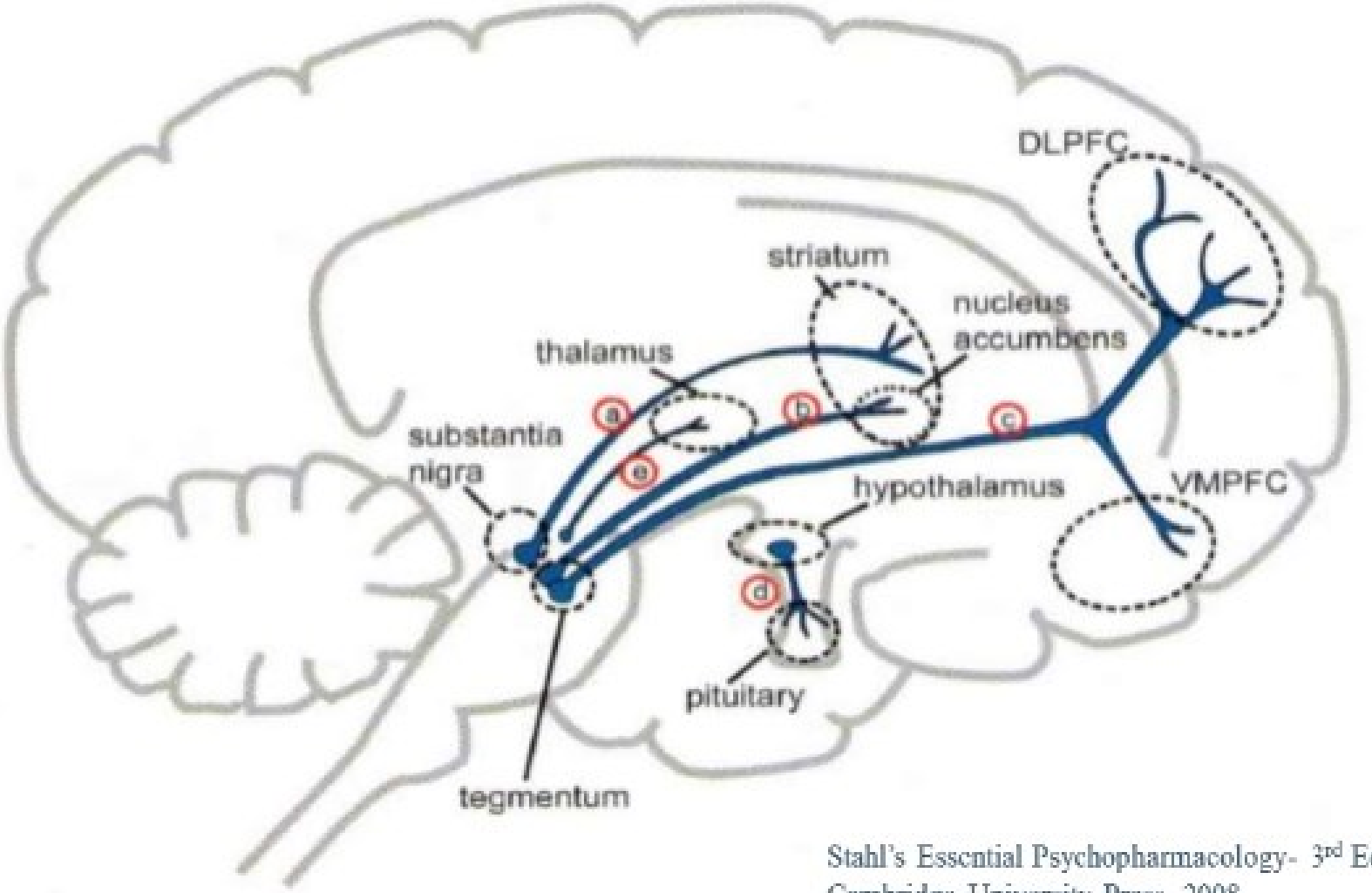
Relationship	Likelihood of dev. Sch.
Both parents	46%
One parent	15%
One sibling	10 – 14%
MZ twin	42%
DZ twin	10 – 14%
2nd degree relatives	2 -3 %
Not related	1%

Genetic Markers- Molecular Genetics: COMT gene

Neurotransmitters in Schizophrenia

- Dopamine Hypothesis
  - Dopamine Hyperactivity in Mesolimbic pathways
    Hypofunction in Mesocortical pathways
- Glutamate Hypothesis
  - NMDA hypofunction
- The role of Serotonin
  - Dysfunction in DA release

DA Pathways in Schizophrenia



Stahl's Essential Psychopharmacology- 3rd Edition, Cambridge University Press, 2008

DLPFC: dorsolateral prefrontal cortex. VMPFC: ventromedial prefrontal cortex.

Dopamine Pathways

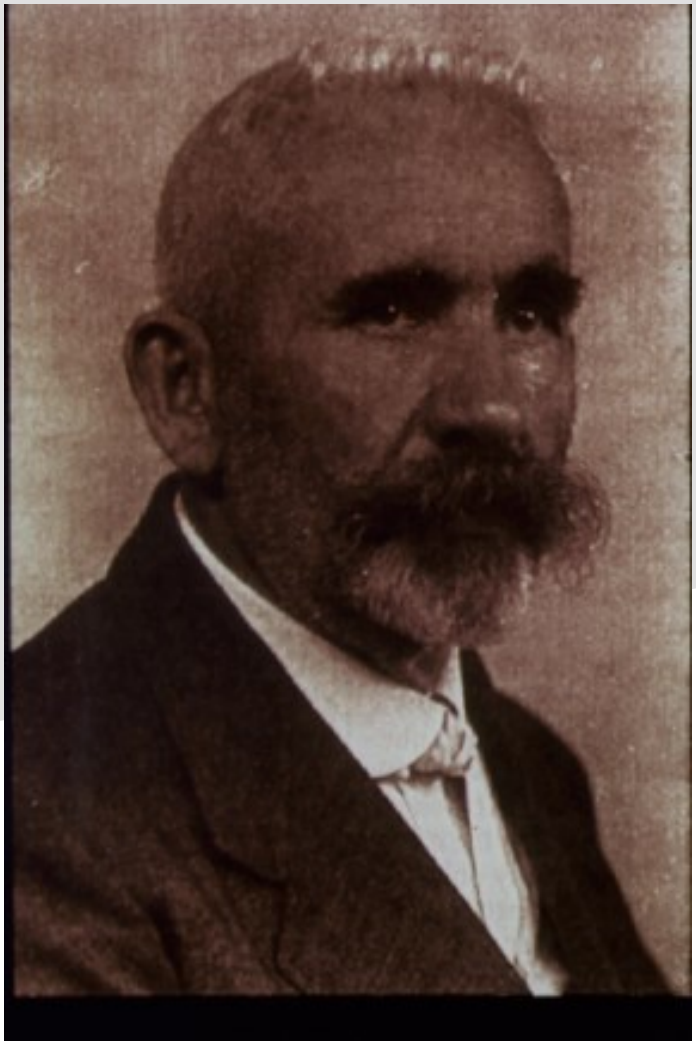
PATHWAY	FUNCTION	EFFECT OF DOPAMINE BLOCKADE
1. Nigrostriatal	Sensory stimuli and movement	Extrapyramidal symptoms
2. Mesolimbic	Emotion, reward, hallucinations, delusions	Reduction of positive symptoms
3. Mesocortical	Cognitive and emotional behaviour	Reduction of negative symptoms (? & limited)
4. Tubero-infundibular	Control of the hypothalamic-pituitary endocrine system	Increased prolactin secretion

Drugs That May Induce Psychosis

- Amphetamines
- Marijuana
- Hallucinogens
- Cocaine

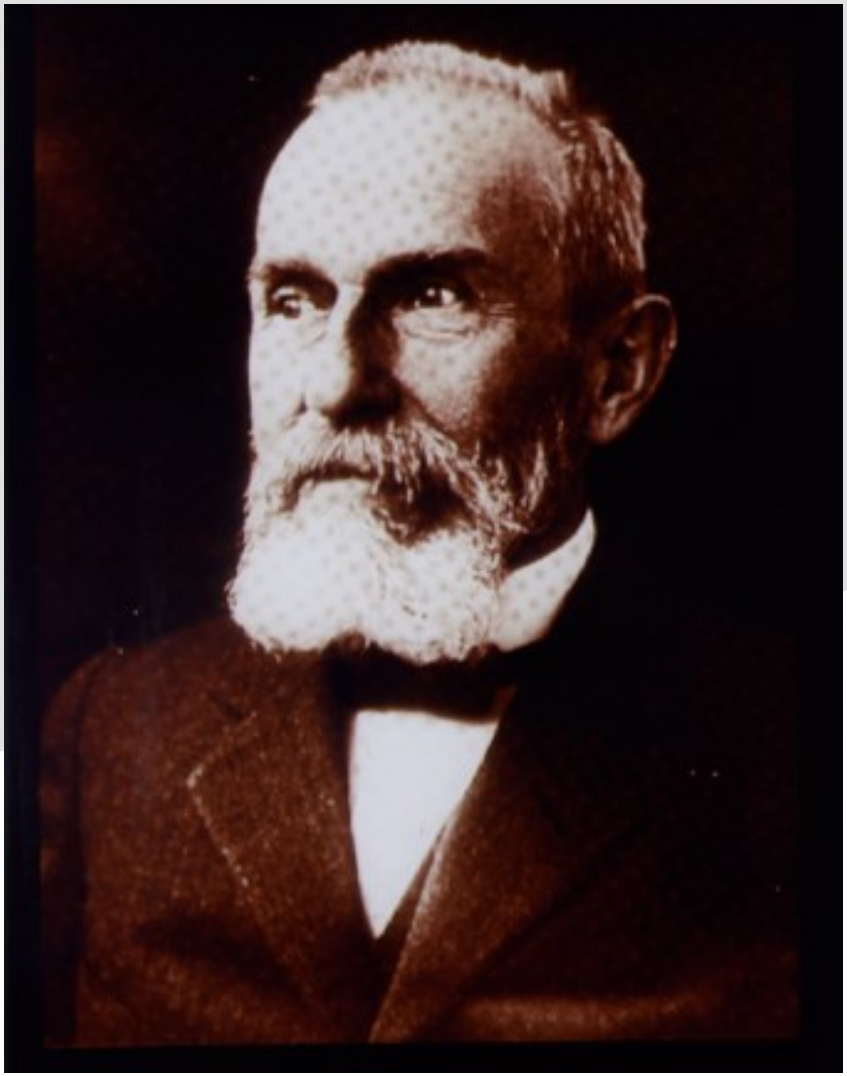
History

Emil Kraepelin: Dementia Praecox



This illness develops relatively early in life, and its course is likely deteriorating and chronic; deterioration reminded dementia („Dementia praecox“), but was not followed by any organic changes of the brain, detectable at that time.

Eugen Bleuler: Loosening of Associations



He renamed Kraepelin's dementia praecox as schizophrenia (1911); he recognized the cognitive impairment in this illness, which he named as a „splitting" of mind.

Bleuler coined the term schizophrenia

Kurt Schneider

Kurt Schneider, 1887–1967

He emphasized the role of psychotic symptoms, as hallucinations, delusions and gave them the privilege of „the first rank symptoms" even in the concept of the diagnosis of schizophrenia.

Bleuler's Fundamental Symptoms

- Associations
- Affective Blunting
- Avolition
- Autism
- Ambivalence
- Attention

The most important psychopathological phenomena include

- thought echo
- thought insertion or withdrawal
- thought broadcasting
- delusional perception and delusions of control
- influence or passivity
- hallucinatory voices commenting or discussing the patient in the third person
- thought disorders and negative symptoms.

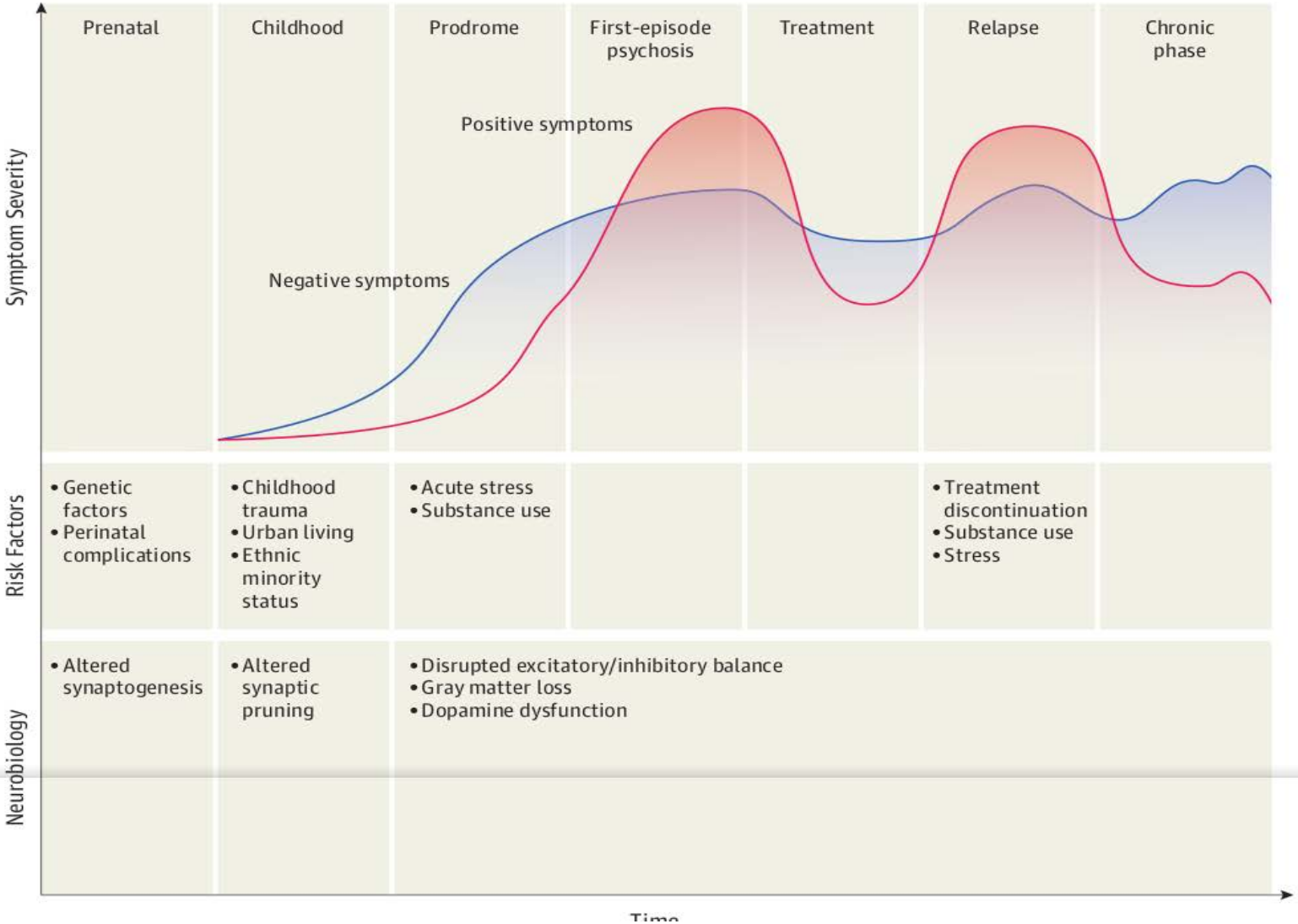
Course of Illness

- **Course of schizophrenia:**
  - **continuous without temporary improvement**
  - **episodic with progressive or stable deficit**
  - **episodic with complete or incomplete remission**
- **Continuous**
- **Remission**
- **Recurrent**
- **Extended**

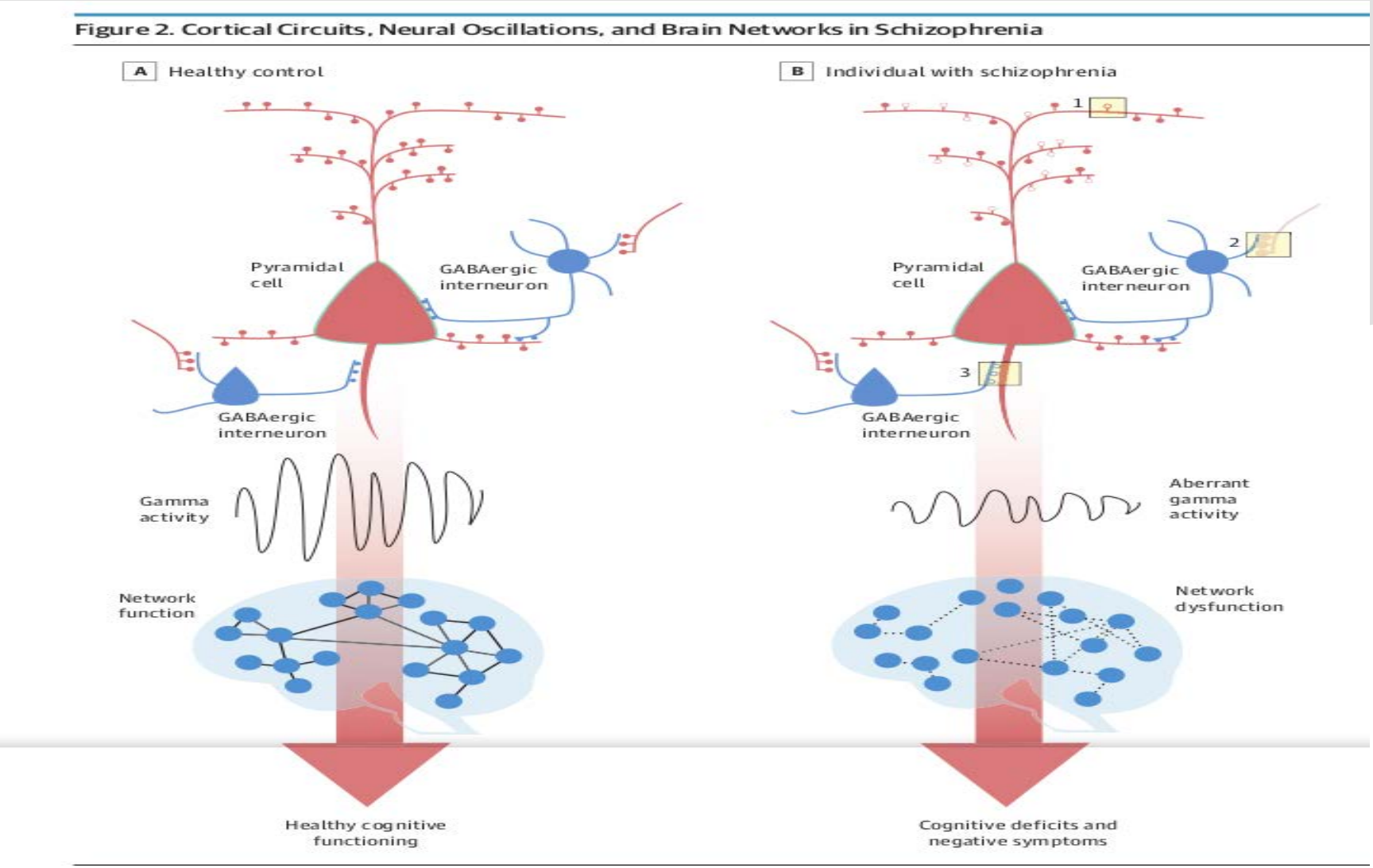
- **Typical stages of schizophrenia:**

The Clinical Course of Schizophrenia

Figure 1. The Clinical Course of Schizophrenia



Cortical Circuits, Neural Oscillations, and Brain Networks in Schizophrenia



Clinical Picture

- Diagnostic manuals:
  - **lCD-10** („International Classification of Disease“
  - **DSM-V** („Diagnostic and Statistical Manual“,)

- Clinical picture of schizophrenia is according to lCD-10, defined from the point of view of the presence and expression of primary and/or secondary symptoms (at present covered by the terms negative and positive symptoms):
  - 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
  - the positive symptom are characterized by the presence of hallucinations and delusions
  - the division is not quite strict and lesser or greater mixture of symptoms from these two groups are possible

Schizohrenia is defined by

- a group of characteristic positive and negative symptoms
- deterioration in social, occupational, or interpersonal relationships
- continuous signs of the disturbance for at least 6 months

Positive and Negative Symptoms

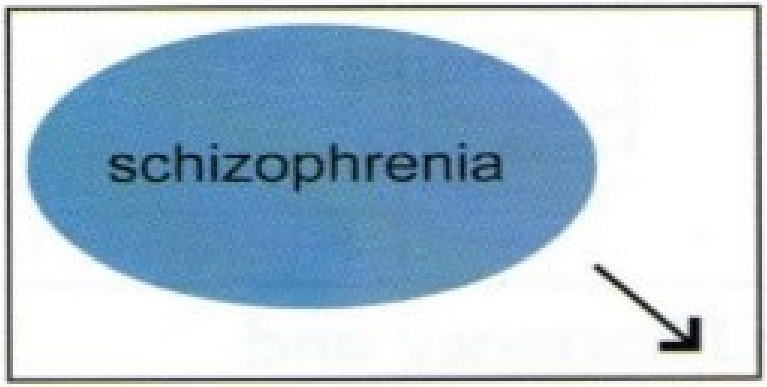
Negative	Positive
Alogia	Hallucinations
Affective flattening	Delusions
Avolition-apathy	Bizarre behaviour
Anhedonia-asociality	Positive formal thought disorder
Attentional impairment	

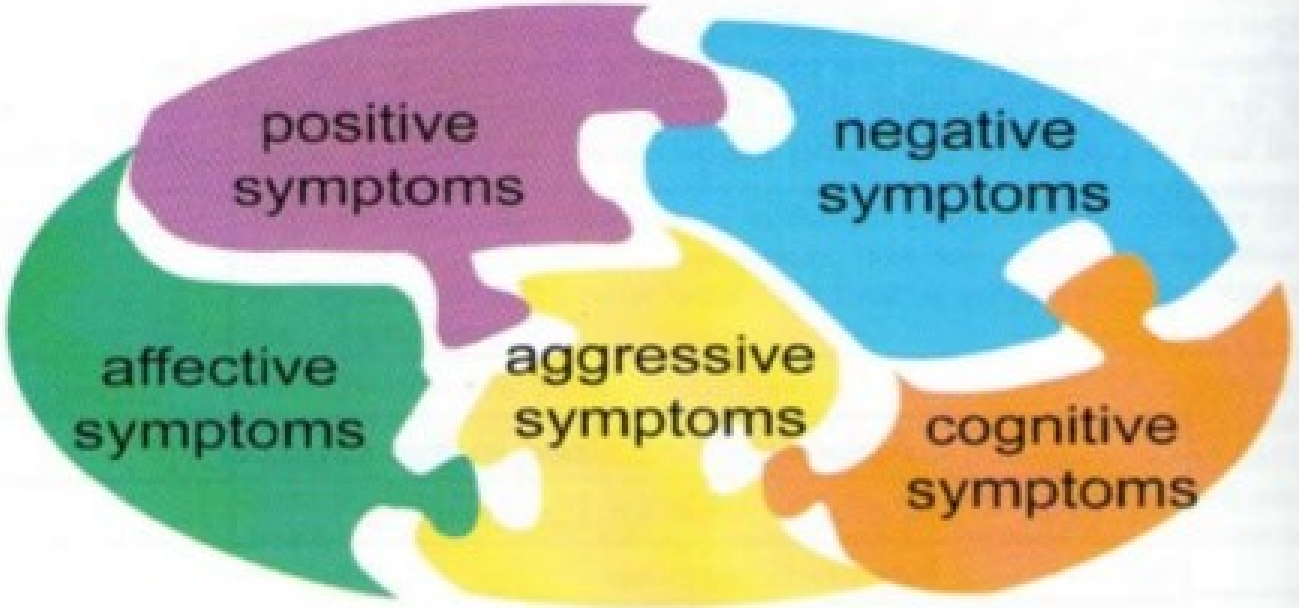
Andreasen N.C., Roy M.-A., Flaum M.: Positive and negative symptoms. In: Schizophrenia, Hirsch S.R. and Weinberger D.R., eds., Blackwell Science, pp. 28-45, 1995

Symptoms of Schizophrnia

- Positive Symptoms
  - Hallucinations
  - Delusions
  - Passivity
- Negative symptoms
  - Apathy
  - Amotivation / Avolition
  - Asocialization
- Disorganization
  - Thoughts
  - Emotions

The Puzzle of Schizophrenia





The Criteria of Diagnosis

For the **diagnosis of schizophrenia** is necessary

- presence of one very clear symptom - from point a) to d)
- or the presence of the symptoms from at least two groups - from point e) to h)

for one month or more:

a) the hearing of own thoughts, the feelings of thought withdrawal, thought insertion, or thought broadcasting

b) the delusions of control, outside manipulation and influence, or the feelings of passivity, which are connected with the movements of the body or extremities, specific thoughts, acting or feelings, delusional perception

c) hallucinated voices, which are commenting permanently the behavior of the patient or they talk about him between themselves, or the other types of hallucinatory voices, coming from different parts of body

d) permanent delusions of different kind, which are inappropriate and unacceptable in given culture

The Criteria of Diagnosis

e) the lasting hallucination of every form

f) blocks or intrusion of thoughts into the flow of thinking and resulting incoherence and irrelevance of speach, or neologisms

g) catatonic behavior

h) „the negative symptoms", for instance the expressed apathy, poor speech, blunting and inappropriatness of emotional reactions

i) expressed and conspicuous qualitative changes in patient's behavior, the loss of interests, hobbies, aimlesness, inactivity, the loss of relations to others and social withdrawal

- Diagnosis of acute schizophorm disorder (F23.2) – if the conditions for diagnosis of schizophrenia are fulfilled, but lasting less than one month
- Diagnosis of schizoaffective disorder (F25) - if the schizophrenic and affective symptoms are developing together at the same time

Early signs of relapse

- Insomnia
- Irritability
- Decline in work performance
- Aggressive outbursts
- Withdrawal
- Neglects self-care
- Refusal of drugs
- Recurrence of psychotic symptoms

The most frequent symptoms of acute schizophrenia

Symptoms	*Frequency*
• Lack of insight	97%
• Auditory hallucination	74%
• Ideas of reference	70%
• Suspiciousness	66%
• Flatness of affect	66%
• Voices speaking to the patient	65%
• Delusional mood	64%
• Delusional perception	64%

F20-F29 Schizophrenia, Schizotypal and Delusional Disorders

- F20 Schizophrenia
- F20.0 Paranoid schizophrenia
- F20.1 Hebephrenic schizophrenia
- F20.2 Catatonic schizophrenia
- F20.3 Undifferentiated schizophrenia

F20.4 Post-schizophrenic depression

F20.5 Residual schizophrenia

- F20.6 Simple schizophrenia

F20.8 Other schizophrenia

F20.9 Schizophrenia, unspecified

F20-F29 Schizophrenia, Schizotypal and Delusional Disorders

F21 Schizotypal disorder

F22 Persistent delusional disorders

F22.0 Delusional disorder

F22.8 Other persistent delusional disorders

F22.9 Persistent delusional disorder, unspecified

F23 Acute and transient psychotic disorders

F23.1 Acute polymorphic psychotic disorder with symptoms of schizophrenia

F23.2 Acute schizophrenia-like psychotic disorder

F23.3 Other acute predominantly delusional psychotic disorders

F23.8 Other acute and transient psychotic disorders

F23.9 Acute and transient psychotic disorder, unspecified

F20-F29 Schizophrenia, Schizotypal and Delusional Disorders

F24 Induced delusional disorder

F25 Schizoaffective disorders
F25.0 Schizoaffective disorder, manic type
F25.1 Schizoaffective disorder, depressive type
F25.2 Schizoaffective disorder, mixed type
F25.8 Other schizoaffective disorders
F25.9 Schizoaffective disorder, unspecified

F28 Other nonorganic psychotic disorders

F29 Unspecified nonorganic psychosis

F20.0 Paranoid Schizophrenia

- Paranoid schizophrenia is characterized mainly by delusions of persecution,
- feelings of passive or active control,
- feelings of intrusion,
- and often by megalomanic tendencies also. The delusions are not usually systemized too much, without tight logical connections and are often combined with hallucinations of different senses, mostly with hearing voices.
- Disturbances of affect, volition and speech, and catatonic symptoms, are either absent or relatively inconspicuous.

F20.1 Hebephrenic Schizophrenia

Hebephrenic 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. Hebephrenia should normally be diagnosed only in adolescents or young adults.

- Denoted also as disorganized schizophrenia

F20.2 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. Treatment by neuroleptics or by electroconvulsive therapy.
- stuporose form — characterized by general inhibition of patient's behavior or at least by retardation and slowness, followed often by mutism, negativism, fexibilitas cerea or by stupor. The consciousness is not absent.

F20.3 Undifferentiated Schizophrenia

- Psychotic conditions meeting the general diagnostic criteria for schizophrenia but not conforming to any of the subtypes in F20.0-F20.2, or exhibiting the features of more than one of them without a clear predominance of a particular set of diagnostic characteristics.

- This subgroup represents also the former diagnosis of atypical schizophrenia.

F20.4 Postschizophrenic Depression

- A depressive episode, which may be prolonged, arising in the aftermath of a schizophrenic illness. Some schizophrenic symptoms, either „positive“ or „negative“, must still be present but they no longer dominate the clinical picture.
- These depressive states are associated with an increased risk of suicide.

F 21.0 Schizotypal disorder

A disorder characterized by

- eccentric behaviour and
- anomalies of thinking and
- affect which resemble those seen in schizophrenia,
- though no definite and characteristic schizophrenic anomalies occur at any stage.

Schizotypal disorder

Latent schizophrenic reaction

Schizophrenia:

- · borderline
- · latent
- · prepsychotic
- · prodromal
- · pseudoneurotic
- · pseudopsychopathic
- Schizotypal personality disorder

  Excludes: Asperger's syndrome (F84.5)
  schizoid personality disorder (F60.1)

Differential diagnosis

- **Medical**
  - Epilepsy
  - Cerebro vascular disorders
  - Cerebral neoplasms
  - Head injury
  - Infections
    - Encepalitis, AIDS, Systemic infections,
  - Substances
    - Amphetamines, Hallucinogens, alcohol
- **Psychiatric**
  - Brief/Reactive psychosis
  - Schiz. Affective dis.
  - Affective disorder
  - Delusional disorder
  - Dissociative conditions
  - Possession
  - PD
  - OCD

F22 Persistent Delusional Disorders

- Includes a variety of disorders in which long-standing delusions constitute the only, or the most conspicuous, clinical characteristic and which cannot be classified as organic, schizophrenic or affective.

- Their origin is probably heterogeneous, but it seems, that there is some relation to schizophrenia.

F 22.0. Delusional disorder

- A disorder characterized by the development either of a **single delusion** or **of a set of related delusions that are usually persistent and sometimes lifelong.**

Delusional Disorder

- Paranoia
- Paranoid: psychosis and state
- Paraphrenia (late)
- Sensitiver Beziehungswahn

Excludes:

- paranoid:
  - personality disorder (F60.0)
  - psychosis, psychogenic (F23.3)
  - reaction (F23.3)
  - schizophrenia (F20.0)

Paranoia

- It can be considered the basic prototype of persistent delusional disorders
- The clinical picture is characterized by the presence of a well-organized, seemingly logical, systematized delusion that is at the center of the patient's existence and behavior.
- There are no hallucinations, thought transparency-influence phenomena, schizo-negative series or disorganizing disorders.

Paraphrenia

It is similar with paranoid schizophrenia:

- with a fantastic delusion and hallucinations,
- but with fewer thought disorders,
- with better preservation of affectivity,
- with less impairment of personality and
- with a better preservation of volition.

F23 Acute and Transient Psychotic Disorders

- The criteria should be the following features:
  - acute beginning (to two weeks)
  - presence of typical symptoms (quickly changing "polymorphic symptoms")
  - presence of typical schizophrenic symptoms.

- Complete recovery usually occurs within a few months, often within a few weeks or even days.

- The disorder may or may not be associated with acute stress, defined as usually stressful events preceding the onset by one to two weeks.

F25 Schizoaffective Disorders

- Episodic disorders in which both affective and schizophrenic symptoms are prominent (during the same episode of the illness or at least during few days) but which do not justify a diagnosis of either schizophrenia or depressive or manic episodes.
- Patients suffering from periodic schizoaffective disorders, especially with manic symptoms, have usually good prognosis with full remissions without any remaining defects.
- They are divided in different subgroups:
  - F25.0 Schizoaffective disorder, manic type
  - F25.1 Schizoaffective disorder, depressive type
  - F25.2 Schizoaffective disorder, mixed type
  - F25.8 Other schizoaffective disorders
  - F25.9 Schizoaffective disorder, unspecified

Childhood-Onset Schizophrenia

- **Compared to autism:**
  - onset is later, intelligence is less impaired, social deficits are less severe, language deficits less severe
  - hallucinations and delusions are present, there are periods of remission and relapse
- **Compared to adult schizophrenia**:
  - onset more insidious, child not distressed by symptoms, outcome poorer
- Diagnosis:
  - hallucinations, esp. auditory hallucinations
  - delusions, disorganized speech, disorganized or catatonic behavior
  - Comorbid with depression and conduct/oppositional disorder

Biological Treatments for schizophrenia

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, chlorprotixene, clopenthixole, levopromazine, periciazine, thioridazine
	droperidole, flupentixol, fluphenazine, fluspirilene, haloperidol, melperone, oxyprothepine, penfluridol, perphenazine, pimozide, prochlorperazine, trifluoperazine
atypical antipsychotics	amisulpiride, clozapine, olanzapine, quetiapine, risperidone, sertindole, sulpiride

Side effects are many, the most important being:

- 1. **Anticholinergic effects**:
  - dryness of mucous membranes,
  - midriasis,
  - constipation, and
  - urinary retention
- 2. **Antihistaminic effects**:
  - sedation,
  - weight gain
- 3. **Antiadrenergic effects**:
  - hypotension,
  - ejaculatory dysfunction
- 4. **Amenorrhea-galactorrhea syndrome**
- 5. **Cognitive dysfunction with emphasis on negative symptoms**
- 6. **Extrapyramidal effects**:
- acute dystonia,
- akathisia,
- parkinsonian syndrome and
- tardive dyskinesia
- 7. **Neuroleptic malignant syndrome**, which may lead to deat

New generation neuroleptics (atypical):

- **Risperidone -** possible side effects:
  - galactorrhea,
  - extrapyramidal symptoms
- **Olanzapine** – possible metabolic side effects
- **Quetiapine -** possible sedative side effects
- **Ziprasidone -** side effects:
  - cardiac function - can increase QTc interval
- **Aripiprazole -** side effects:
  - extrapyramidal symptoms

Depot neuroleptics (slow release of the drug in the body):

- Haloperidol decanoate: 1 ampoule/2 weeks
- Flupentixol: 1 ampoule/2 weeks
- Risperidone (25 mg, 37.5 mg, 50 mg): 1 ampoule/2 weeks
- Olanzapine (210 mg, 300 mg, 405 mg): 1 ampoule/2 weeks, 1 ampoule/month
- Paliperidon: (157 mg, 100 mg): 1 ampoule|4 weeks

Effectiveness of ECT

- **Champattana (2007)** – Drug resistant patients given ECT either on its own in combination with antipsychotics. Found a reduction in positive symptoms, especially when used with drug treatment. However, ECT produced no effect or worsening in regard to negative symptoms.
- **Tharyan (2002)** meta analysis of 26 studies – effect of ECT on positive symptoms was short term only.

Psychological treatments

Psychotherapy treatment

- Psychotherapy **requires to be initiated early**, due to the tendency of the patient toward isolation and non-communication (some neuroleptics may even exacerbate these tendencies), and is considered complementary to medication.
- Interpersonal and social contact is favoured, and patients' attendance in club activities, gymnastics and sports, occupational therapy and cultural and artistic activities is stimulated.
- There are several psychotherapeutic interventions that can be applied:
- cognitive behavioral therapy,
- family therapy,
- psycho-education.


Thanks

Mood (Affective) Disorders.
Mental Retardation.
Psychiatric disorders in epilepsy.

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.

Age.

The age of the onset for bipolar I disorder is usually about age 30. Howwever, 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, requiring the lifetime experience of at least one episode of major depression and at least one hypomanic episode, 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 (i.e., purposeless non-goal-directed activity).
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.

Prevalence of Cyclothymic disorder.

The lifetime prevalence of cyclothymic disorder is approximately 0.4%-l%.

Prevalence in mood disorders clinics may range from 3% to 5%.

In the general population, cyclothymic disorder is apparently equally common in males and females.

In clinical settings, females with cyclothymic disorder may be more likely to present for treatment than males.

Development and Course of Cyclothymic disorder.

Cyclothymic disorder usually begins in adolescence or early adult life.

Cyclothymic disorder usually has an insidious onset and a persistent course.

There is a 15%-50% risk that an individual with cyclothymic disorder will subsequently develop bipolar I disorder or bipolar II disorder.

Among children with cyclothymic disorder, the mean age at onset of symptoms is 6.5 years of age.

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 (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:

- lithium (0.6—1.2 mEq/L),
- carbamazepine (6—12 mg/L),
- valproate (50—125 mg/L).

Anticonvulsants:

- Gabapentine,
- Topiramate,
- Lamotrigine,

Agitated or psychotic patient – coadministration of

- antipsychotics of second generation (olanzapine, risperidone, aripiprazol, clozapine),
- 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.

Mental retardation

Intellectual disability is a generalized disorder appearing before adulthood, characterized by significantly impaired cognitive functioning and deficits in two or more adaptive behaviors.

MR was historically defined as an intelligence quotient score under 70 - „**Intelligence quotient**” form („mental age” divided by chronological age, multiplied by 100).

Children with mental retardation may learn to sit up, to crawl, or to walk later than other children, or they may learn to talk later.

Both adults and children may also exhibit some or all of the following characteristics:

- Delays in oral language development,
- Deficits in memory skills,
- Difficulty learning social rules,
- Difficulty with problem solving skills
- Delays in the development of adaptive behaviors such as self-help or self-care skills,
- Lack of social inhibitors.

Epidemiology of Mental retardation.

Occurs in 1% of the population.

The male-to-female ratio is 1.5:1.

Etiology of Mental retardation.

About a quarter of cases are caused by a genetic disorder.

1. Genetic.

a. Inborn errors of metabolism (e.g. phenylketonuria).

b. Presense of three of chromosome 21 (Down syndrome [trysomy 21]).

c. A mutation on the X chromosome (Fragile X syndrome).

d. A small deletion involving chromosome 15 (Prader-Willi syndrome).

e. Rett s disordrer.

f. A deficiency of an enzyme involved in purine metabolism (Lesch-Nyhan syndrome).

2. Psychosocial.

Mild MR may be caused by chronic lack of intellectual stimulation.

3. Other.

Sequelae of intection, toxin, or brain trauma sustained prenatally, perinatally, or later (congenital rubella or fetal alcohol syndrome).

Mild mental retardation (IQ 50–69)

In early childhood, **mild mental retardation** may not be obvious, and may not be identified until children begin school.

Even when poor academic performance is recognized, it may take expert assessment to distinguish mild mental retardation from learning disability or emotional/behavioral disorders.

People with mild intellectual disability are capable of learning reading and mathematics skills to approximately the level of a typical child aged nine to twelve.

They can learn self-care and practical skills, such as cooking.

Moderate mental retardation (IQ 35–49)

Moderate mental retardation is nearly always apparent within the first years of life.

Speech delays are particularly common signs of moderate MR.

People with moderate mental retardation need considerable supports in school, at home, and in the community in order to participate fully.

While their academic potential is limited, they can learn simple health and safety skills and to participate in simple activities.

As adults they may live with their parents, in a supportive group home, or even semi-independently with significant supportive services to help them, for example, manage their finances.

Severe (IQ 20–34) or **profound** (IQ <20) **mental retardation**

A person with severe or profound mental retardation will need more intensive support and supervision his or her entire life.

They may learn some activities of daily living.

Some will require full-time care by an attendant.

Treatment

The primary goal of treatment is to develop the person's potential to the fullest.

Special education and training may begin as early as infancy.

This includes social skills to help the person function as normally as possible.

It is important for a specialist to evaluate the person for other affective disorders and treat those disorders.

Behavioral approaches are important for people with mental retardation.

A concomitant mental disoder, such as ADHD or depression, may require treatment with stimulants or antidepressants, respectively.

Agitation, aggression, and tantrums often respond to antipsychotics.

Atypical antipsychotics (e.g., risperidone, olanzepine) are preferred because they are less likely to cause extrapyramidal symptoms and dyskinesia.

Many institutionalized MD patients are poorly monitored on medication.

Lithium is useful for agressive or self-abusive behavioors.

Carbamazepine, valproate can be tried for aggresive or self-abusive behaviors.

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*).

Pathogenesis.

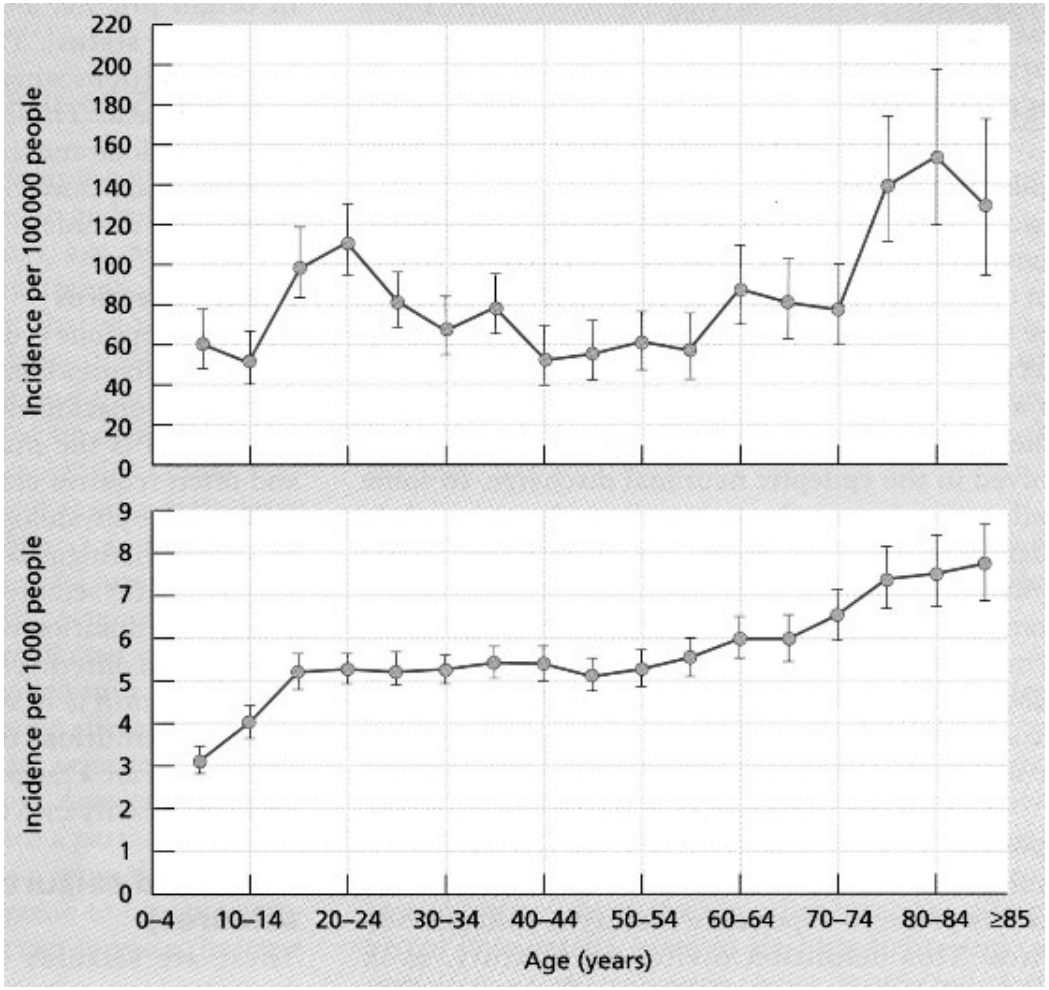
In epilepsy, there is an increase in **glutamate** and a decrease in **gamma-aminobutyric acid (GABA)**.

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.

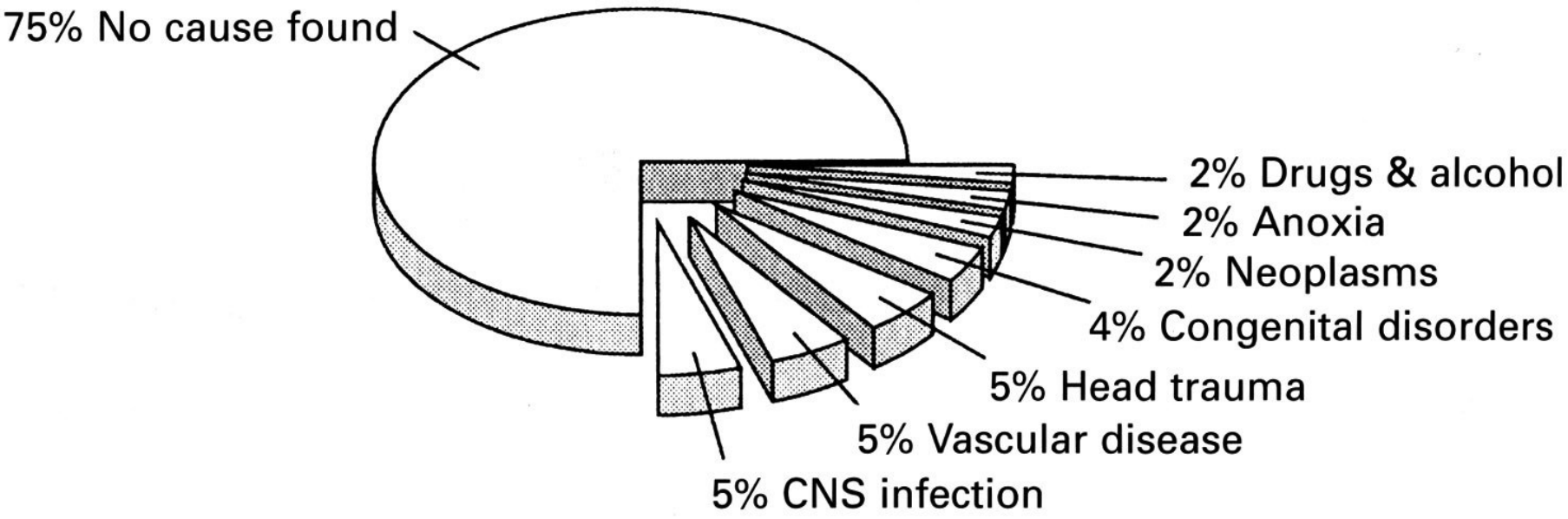
There are no significant differences in the frequency of epilepsy in men and women.

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

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

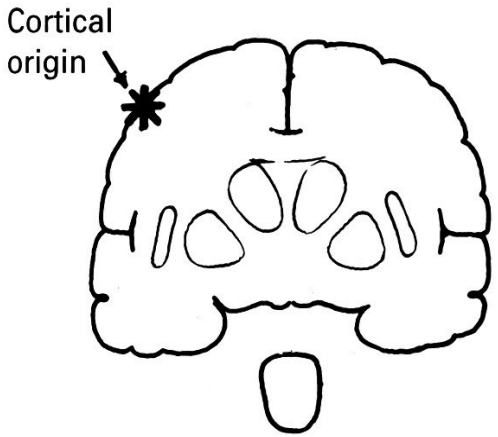
Causes.

The majority of sufferers the cause remains unclear despite careful history taking, examination and investigation!



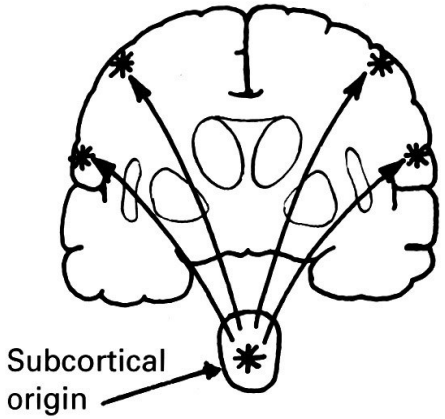
Classification.

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



- Generalized seizures

- Unclassified seizures

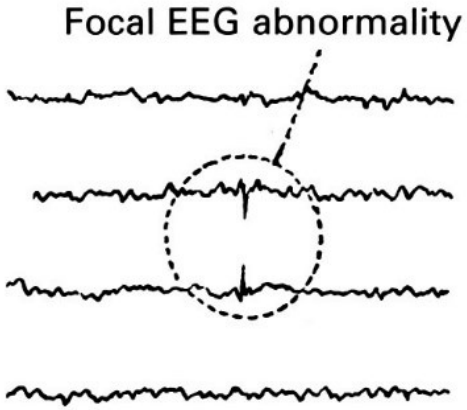


Focal (partial) seizures.

Simple partial seizures.

Motor, sensory, vegetative or psychic symptomatology

Typically consciousness is preserved.

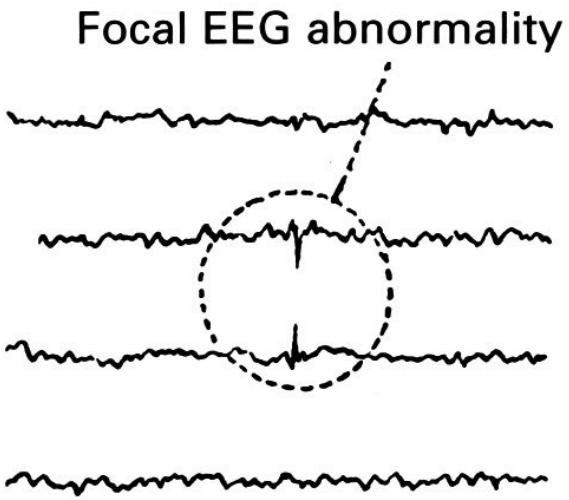


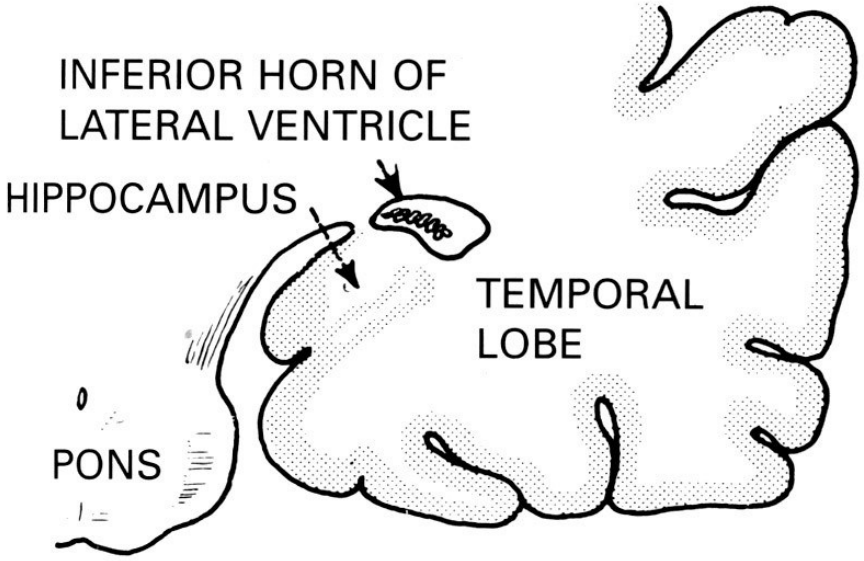
Focal (partial) seizures.

- Complex partial seizures (= psychomotor seizures)

  Initial subjective feeling (aura), loss of consciousness, abnormal behavior (perioral and hand automatisms)

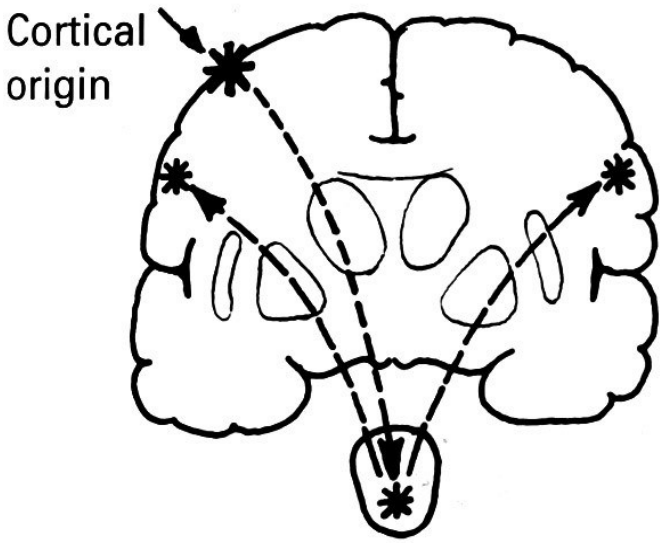
Usually originates in TL

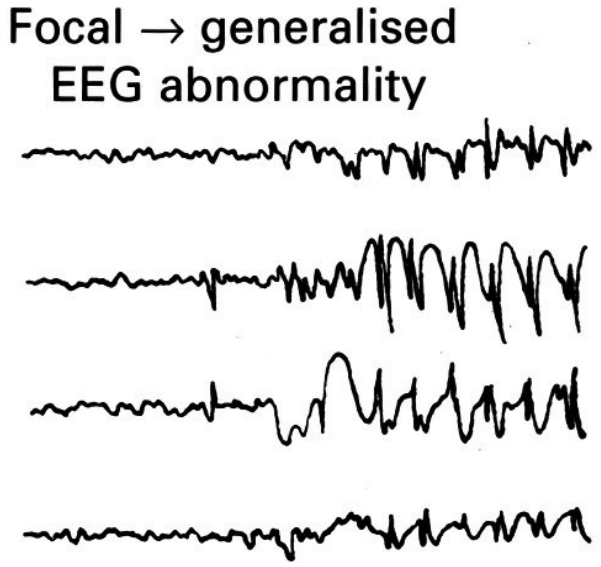




Focal (partial) seizures.

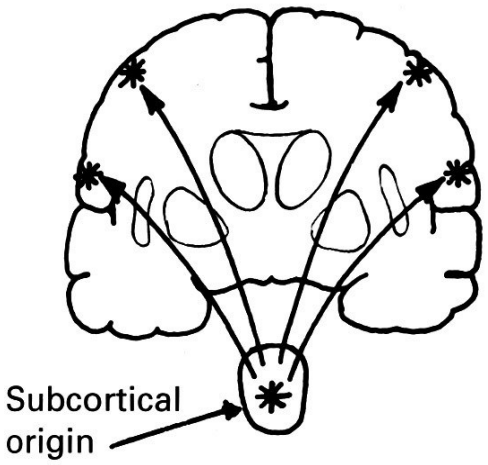
- Partial seizures evolving to tonic/clonic convulsions – secondary generalised tonic/clonic seizures (sGTCS)

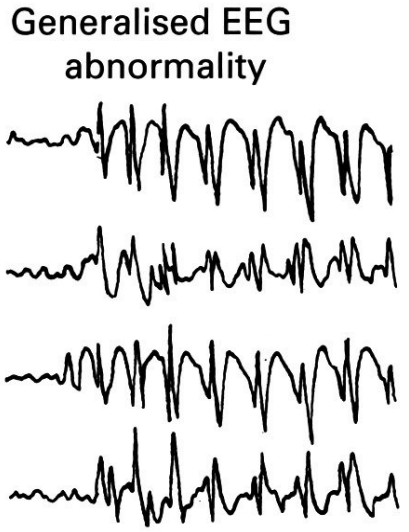




Generalized seizures.
(convulsive or non-convulsive)

- Absences
- Myoclonic seizures
- Clonic seizures
- Tonic seizures
- Atonic 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:** Hematology, 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.
- **Specialized 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 disorders

Definition:

Anxiety is a syndrome with psychological and physiological symptoms

Mixtures of symptoms, especially anxiety and depressive ones are common in these disorders

About one fourth of the population in developed countries will suffer from neurotic disorders during its lifetime course.

With the exception of social phobia

Psychological symptoms

- Uneasy feelings (worry, apprehension)
- Hypervigilance
- Restlessness
- Difficulty concentrating
- Sleep disturbances

Physiological Symptoms

- Autonomic hyperactivity (shortness of breath, diaphoresis, dry mouth, etc)
- Motor tension (palpitation, tremor, quavering voice)

Risk Factors and Etiology

Psychodynamic Theory

(Freudian)

Anxiety occurs when instinctual drives are thwarted.

Continued

Behavioral Theory

(Learned response)

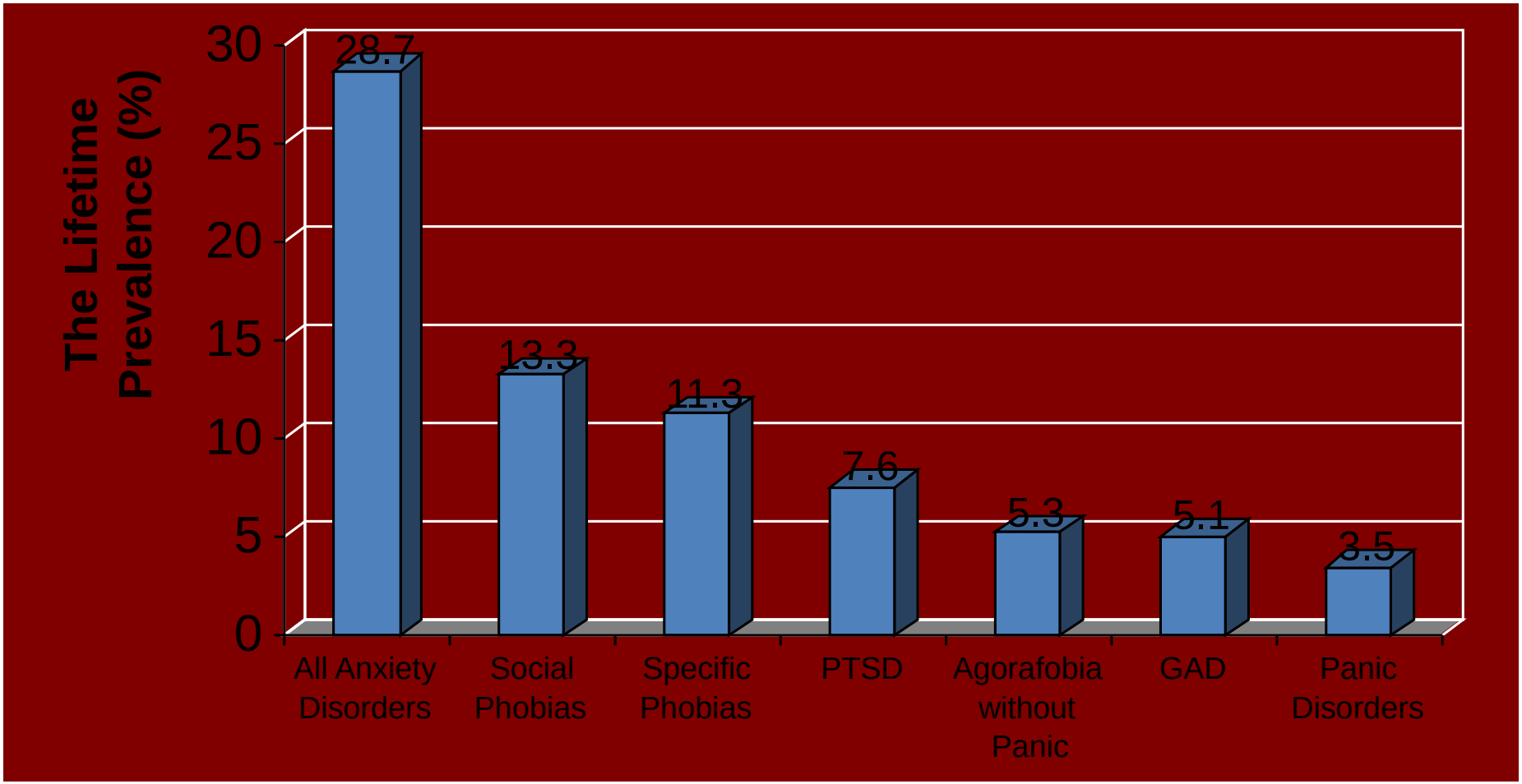
Anxiety is a conditioned response to environmental stimuli, originally paired with a feared situation

Continued

Biological Theory

Various neurotransmitters (norepinephrine, serotonin, GABA) and various CNS structures (locus cerelus, raphe nucleus) are involved

Epidemiology



Kessler et al., 1995

Treatment

- SSRI – fluoxetine, paroxetine
- SNRI – venlafaxine, duloxetine
- TCA, TeCA – amitriptyline, trazodone
- BDZ - tofisopam

Anxiety disorders include:

- Panic Disorder
- Phobic Disorder
- OCD
- PTSD
- GAD

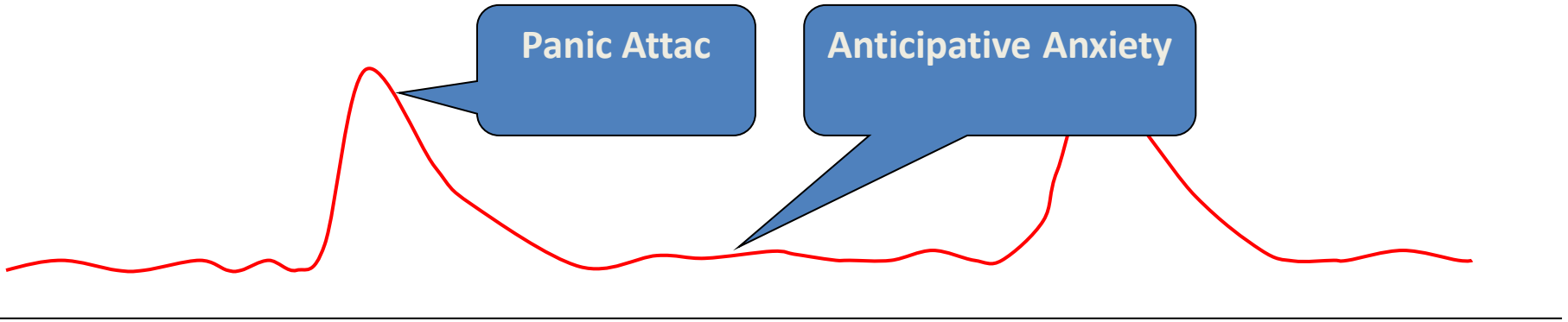
Panic Disorder

- Recurrent unexpected panic attacks. Typically **occur out of the blue** and cause intense distress
- Lasting up to 30 mins
- Include intense anxiety associated with physical symptoms: tachycardia, nausea, chestpain, numbness in extremities

Panic Disorder

- The essential features are recurrent attacks of severe anxiety (panic attacks) which are not restricted to any particular situation or set of circumstances.
- Typical symptoms are palpitations, chest pain, choking sensations, dizziness, and feelings of unreality (depersonalisation or derealization).
- Individual attacks usually last for minutes only. The frequency of attacks varies substantially.
- Frequent and predictable panic attacks produce fear of being alone or going into public places.
- The afflicted persons used to think that they got a serious somatic disease.
- The course of panic disorder is long-lasting and is complicated with various comorbidities, in half of the cases with agoraphobia.
- The estimation of lifetime prevalence moves between 1-3%.

Panic Disorder



Risk Factors/Etiology

- “Panicogens” (alcohol, caffeine, flumazenil)
- Separations in childhood
- Genetic load

- Prevalence: 2% of the population; 1:2 male to female
- Onset: 20’s
- Course: severity of symptoms may decrease and be associated with:
    - Agoraphobia
    - Depression
    - Substance abuse

Treatment

- Pharmacological (more than 6 months)
  - SSRIs (disorder), BDZs (attack)
- Psychotherapeutic
  - Relaxation training, guided imagery, behavioral techniques
  - Systematic desensitization

Phobic Disorder

- Irrational fear and avoidance of objects and situations
- When confronted with the feared object, typically experience anxiety

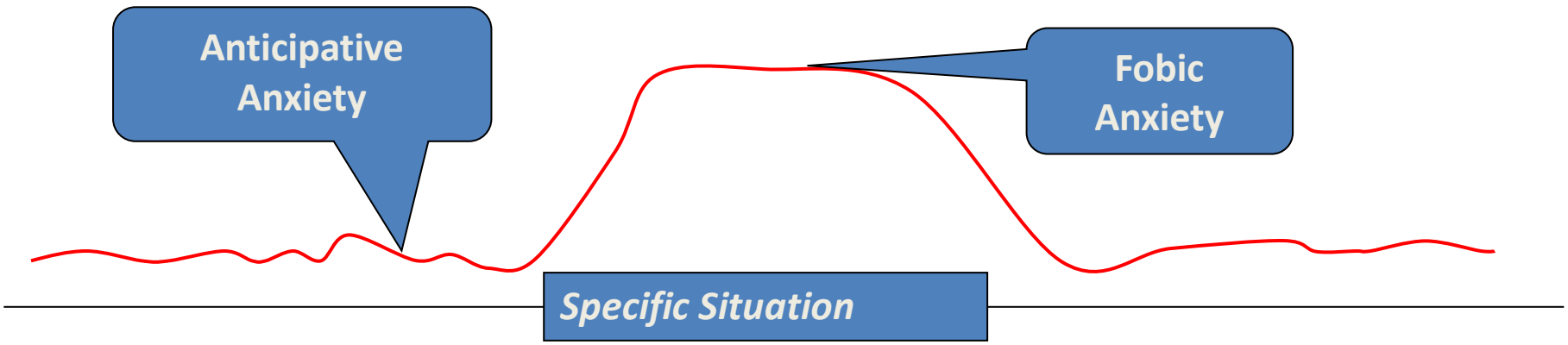
Types of phobias

- Agoraphobia: fear and avoidance of open spaces. Patients are homebound.
- Specific phobias: water, heights, elevators, illness (usually learned)
- Social phobia: fear of humiliation or embarrassment in social situations (may be associated with avoidant personality)

Agoraphobia

- „Agoraphobia" - the fear from marketplace.
- Agoraphobia includes various phobias embracing fears of leaving home: fears of entering shops, crowds, and public places, or of traveling alone in trains, buses, underground or planes.
- The lack of an immediately available exit is one of the key features of many agoraphobic situations.
- The avoidance behaviour causes sometimes that the sufferer becomes completely housebound.
- Most sufferers are women. Onset - early adult life.
- The lifetime prevalence - between 5—7%.
- High co-morbidity with panic disorder; depressive and obsessional symptoms and social phobias may be also present.

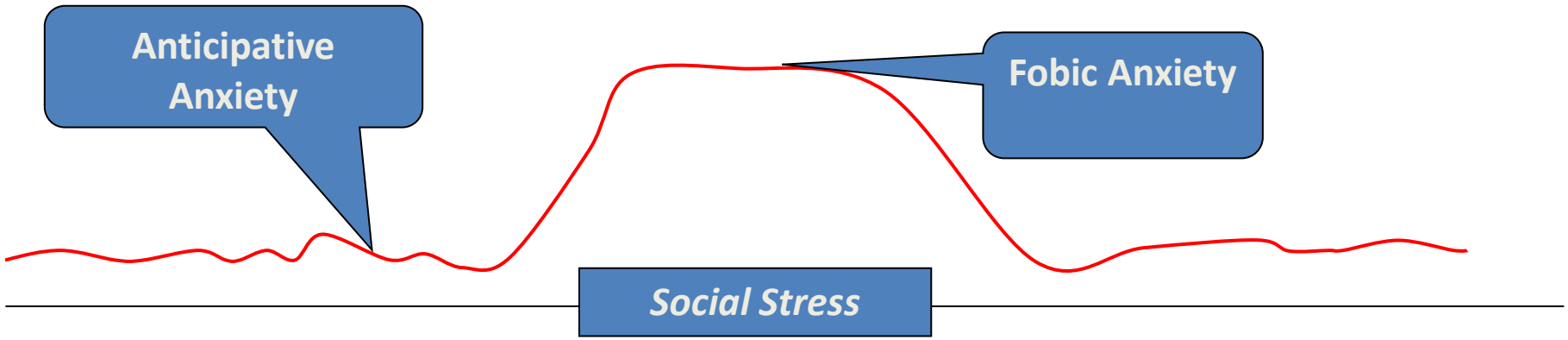
Agoraphobia



Social Phobias

- Clinical picture - fear of scrutiny by other people in comparatively small groups leading to avoidance of social situations
- The fears may be
  - discrete - restricted to eating in public, to be introduced to other people, to public speaking, or to encounters with the opposite sex
  - diffuse - social situations outside the family circle.
- Direct eye-to-eye confrontation may be stressful.
- Low self-esteem and fear of criticism.
- Symptoms may progress to panic attacks.
- Avoidance - almost complete social isolation.
- Usually start in childhood or adolescence.
- Estimation of lifetime prevalence - between 10-13 %.
- It is equally common in both sexes.
- Secondary alcoholism.

Social Phobias



Specific (Isolated) Phobias

1. Fears of proximity to particular animals
   - spiders (arachnophobia)
   - insects (entomophobia)
   - snakes (ophidiophobia)
2. Fears of specific situations such as
   - heights (acrophobia)
   - thunder (keraunophobia)
   - darkness (nyctophobia)
   - closed spaces (claustrophobia)
3. Fears of diseases, injuries or medical examinations
   - visiting a dentist
   - the sight of blood (hemophobia) or injury (pain — odynophobia)
   - the fear of exposure to venereal diseases (syphilidophobia) or AIDS-phobia.

- Usually arise in childhood or early adult life and can persist for decades if they remain untreated.
- Lifetime prevalence - between 10-20%.

Obsessive Compulsive Disorder (OCD)

Obsessions

Anxiety-provoking intrusive thoughts which tend to be repetitive, senseless, and usually related to: contamination, doubt, guilt, aggression, sex, etc

Compulsions

Peculiar behaviors that tend to be repetitive and time consuming and reduce anxiety: hand washing, organizing, checking, counting, etc

EGO-dystonic

Risk factors/Etiology/Symptoms

- Abnormalities of serotonin metabolism
- Prevalence: 2%, 1:1 women to men
- Onset: insidious, adolescence or early adulthood
- Course: usually chronic, symptoms worsen with stress
- Associated with: depression, substance abuse

Obsessive-Compulsive Disorder (OCD)

- Obsessional thought are ideas, images or impulses that enter the individual's mind again and again in a stereotyped form.
- They are recognized as the individual's own thoughts, even though they are involuntary and often repugnant. Common obsessions include fears of contamination, of harming other persons or sinning against God.
- Compulsions are repetitive, purposeful, and intentional behaviours or mental acts performed in response to obsessions or according to certain rule that must be applied rigidly. Compulsions are meant to neutralize or reduce discomfort or to prevent a dreaded event or situation.
- Autonomic anxiety symptoms are often present.
- There is very frequent comorbidity with depression (about 80%) - suicidal thoughts. Obsessive-compulsory symptoms may appear in early stages of schizophrenia.
- The life time prevalence: 2 - 3%. Equally common in men and women. The course is variable and more likely to be chronic.

Etiology of OCD

- The neurobiological model. OCD occurs more often in persons who have various neurological disorders, including cases of head trauma, epilepsy, Sydenham's and Huntington's chorea.
- OCD has also been linked to birth injury, abnormal EEG findings, and abnormalities in neuropsychological test results.
- The most widely studied biochemical model has focused on the neurotransmitter serotonin because SRIs are effective in treating patients with OCD.
- Brain imaging studies have provided some evidence of basal ganglia involvement in persons with OCD.

Clinical Management

- The treatment of OCD has traditionally been viewed as difficult and unsatisfactory. Recent developments have changed this picture substantially.

- Pharmacotherapy
  - antidepressants influencing the central serotoninergic system (clomipramine and SSRIs); higher doses of the drugs are required to treat OCD than depression, and response is often delayed.
- Cognitive-behaviour therapy
- Behavioral therapy: relaxation training, guided imagery, exposure and response prevention
- Family therapy
- Patient support groups
- Psychosurgery (e.g. stereotactic cingulotomy)

Acute stress disorder (ASD) and Post Traumatic Stress Disorder (PTSD)

- ASD and PTSD are characterized by severe anxiety symptoms and follow a threatening event that caused feelings of fear, helplessness or horror.
- ASD: anxiety lasts < 1 month, but > 2 days
- PTSD: anxiety lasts > 1 month

Risk factors/Etiology

- Traumatic events
- Premorbid factors such as substance abuse, personality disorders, external locus of control, etc

Presenting symptoms ASD

- Onset: any age, but more likely among young or elderly. About 50% of cases resolve within 3 months.
- Course: symptoms usually begin immediately after trauma (ASD), but can occur months or years later (PTSD)
- Not all people exposed to the same stressful event develop the disorder.
- The symptoms: an initial state of „daze”, with some constriction of the field of consciousness and narrowing of attention, inability to comprehend stimuli, and disorientation. This state may be followed either by further withdrawal from the surrounding situation (extreme variant - dissociative stupor), or by agitation and overactivity.
- Autonomic signs - tachycardia, sweating or flushing, as well as other anxiety or depressive symptoms.

PTSD Presenting Symptoms

- The three major elements of PTSD include

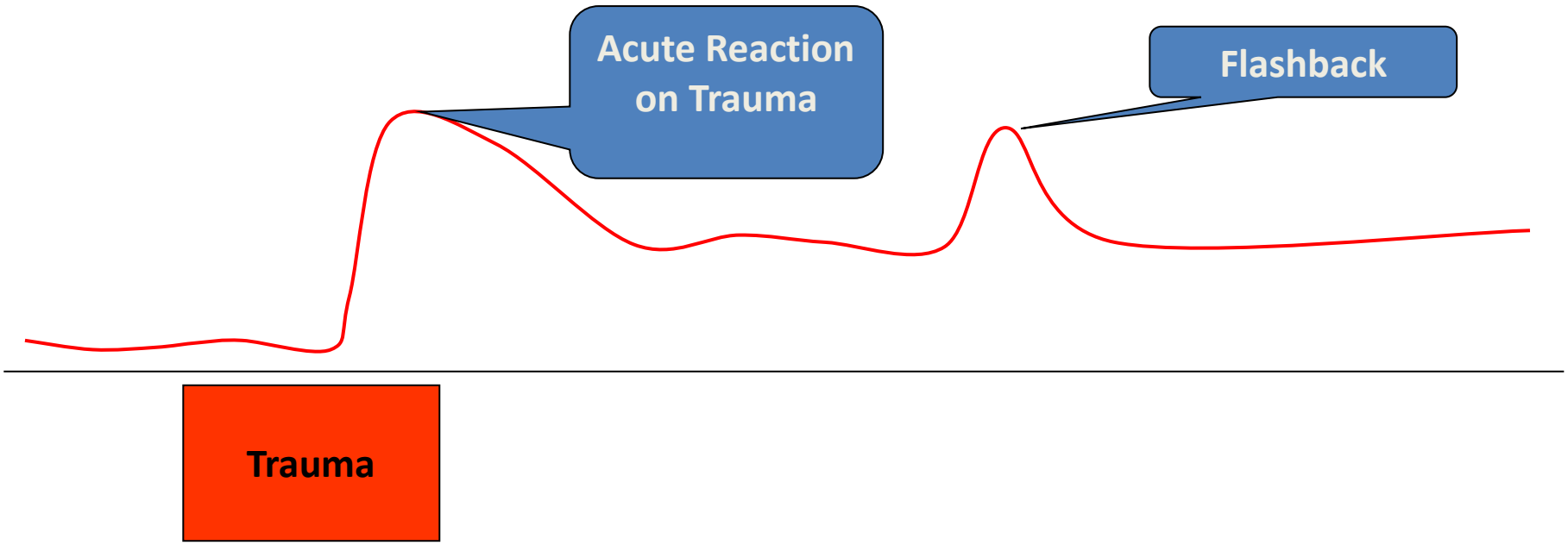
1. Re-experiencing of the traumatic event (nightmares, flashbacks or intrusive recollections)

2. Avoidance of stimuli associated with the trauma (phobic avoidance)

3. Increased arousal, such as increased anxiety, sleep disturbances and hypervigilance, insomnia

- The onset follows the trauma with a latency period, which may range from several weeks to months, but rarely more than half a year.
- The lifetime prevalence is estimated at about 0.5% in men and 1.2% in women.

Post-traumatic Stress Disorder (PTSD)



PTSD treatment

- Counseling – the earlier, the better
- Group psychotherapy with other survivors
- Pharmacotherapy: SSRIs, BDZ

Clinical Management

- Pharmacological approach:
  - antidepressant medication
  - short-term benzodiazepines trials
  - mood stabilizers (carbamazepine, valproate)
  - antipsychotics
- Psychotherapy is also of importance - CBT using education and exposure techniques
- Group therapy, family therapy and self-help groups are widely recommended.

Generalized Anxiety Disorder

- Excessive, poorly controlled anxiety about circumstances that continues for longer than 6 months
- Psychological and physiological symptoms present

General Anxiety Disorder

- The essential feature is anxiety lasting more than 6 months, which is generalized and persistent but not restricted to, or even strongly predominating in, any particular environmental circumstances.
- Symptoms: continuous feelings of nervousness, trembling, muscular tension, sweating, lightheadedness, palpitations, dizziness, and epigastric discomfort.
- Fears that the patient or a relative will shortly become ill or have an accident are often expressed, together with a variety of other worries and forebodings.
- The estimation of lifetime prevalence moves between 4-6 %.
- This disorder is more common in women, and often related to chronic environmental stress.
- Its course uses to be fluctuating and chronic connected with symptoms of frustration, sadness and complicated with abuse of alcohol and other illicit drugs.

Risk factors/Etiology/Symptoms

- about 5% of the population, 2:3 men to women
- Occurs mainly during childhood
- Chronic, symptoms worsen with stress
- Associated with depression, substance abuse

Treatment

- Pharmacotherapy: SSRIs, buspirone, BDZ,
- Behavioral Psychotherapy: relaxation techniques

Somatoform disorders

- Group of disorders characterized by the presentation of physical symptoms with no medical explanations. The symptoms are severe enough to interfere with the patient's ability to function in social or occupational activities.

Somatization disorder

- Consisting of multiple symptoms affecting multiple organs
- Affects more women than men
- Usually inversely related to SES
- Male relatives tend to have antisocial personality disorder
- Female relatives tend to have histrionic personality disorder

Diagnosis

- Must have at least 4 complaints: 2 GI, 1 sexual, 1 pseudoneurological

Treatment

- Single identified physician as primary caretaker
- Patient should be seen during regularly scheduled brief monthly visits
- Should increase patient's awareness of possibility that symptoms are psychological
- Individual psychotherapy

Conversion disorder

- A disorder in which the individual experiences one ore more neurologic symptoms that cannot be explained by any medical or neurologic disorder (sensory, voluntary muscle)
- Symptoms typically precipitated by stress

Presenting symptoms

- **Primary gain:** keeps internal conflicts outside patient's awareness
- **Secondary gain**: benefits received from being "sick"
- **La belle indifference:** patients seems unconcerned about impairment
- **Identification:** patients usually model their behavior on someone who is important to them

Clinical Management

- Psychotherapy is a method of choice of treatment of dissociative disorders (e.g. psychodynamic programs, hypnosis).
- Medications have no proven value with exception of sodium amobarbital interview.

Hypochondriasis

- Despite constant reassurance are convinced that they have an illness
- The disorder is characterized by a persistent preoccupation and a fear of developing or having one or more serious and progressive physical disorders.
- Patients persistently complain of physical problems or are persistently preoccupied with their physical appearance.
- The fear is based on the misinterpretation of physical signs and sensations.

Disorders Due to Psychoactive Substances

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

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

- 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)

Eevidence of Substance Abuse

Maladaptive pattern of substance us occurring within a 12 month period that leads to significant impairment or distress

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

Alcohol use

- is the fourth leading cause of preventable death in the United States (after smoking, high blood pressure, and obesity).

- 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.

What Predisposes to Addiction ?…

- Biological Factors
- Psychological Factors
- Sociocultural Factors

Biological Factors

- -Genetics
- -Biochemical

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.

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

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 definitions: substance dependence

- Heavy and prolonged substance use);
- Tolerance (need for increase amounts; diminished effect of the same amount)
- Withdrawal (certain symptoms when stop substance use, alcohol cures the syndrome)
- Persistent desire or unsuccessful efforts to cut down substance use

Withdrawal

Physiological and psychological changes that occur when an individual stops using

Tolerance

Using more and more to achieve its desired effects

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.

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

F1x.1 Harmful Use

- The damage may be physical and/or mental.
- Socially negative consequences are not evidence (neither acute intoxication or hangover).

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

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.

Alcohol Withdrawal Syndrome Uncomplicated

- Nausea and vomiting
- Diaphoresis
- Agitation and anxiety
- Headache
- Tremor
- Seizures
- Visual and auditory hallucinations:
- Many patients who are not disoriented—and who therefore do not have delirium tremens—have hallucinations

Alcohol Withdrawal Delirium

- Disorientation
- Fluctuating consciousness
- Vivid hallucinations
- Agitation
- Mild hyperpyrexia
- Onset 48-72hours after the last drink (up to 7 days)
- Mortality: 10-15% (untreated)

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

Symptoms:

- Hallucinations
- Clear conunsciousness, kept orientation
- Severe anxiety
- Persecutory delusions
- Delusions of reference
- Altered behaviour by the psychotic contents
- 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.

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.

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

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.

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

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

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

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 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

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

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.

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.

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

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

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

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

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.

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

- The course of treatment of alcoholic dependence includes behavioural therapy;
- aversion to alcohol is achieved by Teturam (Esperal) or with the help of hypnotherapy.
- For psychological correction methods of provocative psychotherapy, group methods in the clubs of anonymous alcoholics are applied.
- Taking into account that alcoholic dependence may only serve as a cover of the developing depression, it is necessary to administer average doses of antidepressants (Amitriptyline, Melipramin, Remeron).

Alcoholism treatment

Disulfiram - Known as Antabuse, used in the treatment of alcoholism that inhibits aldehyde dehydrogenase (ALDH) and causes severe physical reactions when combined with alcohol

Acamprosate - reduces the risk of relapse by reducing the individual's urge to drink and thereby reducing the drive to use alcohol as a way of reducing anxiety and other negative psychological

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.

Geriatric Psychiatry. Dementing disorders. Delirium.

Introduction (I).

Old age is not a disease.

It is a phase of the life cycle characterized by its own developmental issues, many of which are concerned with loss of physical agility and mental acuity, friends and loved ones, and status and power.

However, there are elderly persons with mental or physical disorders. or both, that impair their ability to function or even survive, known as the sick-old.

Geriatric psychiatry is concerned with:

- preventing,
- diagnosing, and
- treating psychological disorders in older adults and promoting longevity.

  Persons with a healthy mental adaptation to life have been found to live longer than those stressed with emotional problems.

Introduction (II).

Late adulthood or **old age** is considered to begin at age 65.

Divided into:

- young-old, ages 65 to 74:
- old-old, ages 75 to 84;
- and oldest-old, age 85 and beyond.

Also divided into:

- **well-old** (those who are healthy) and
- **sick-old** (persons with an infirmity that interferes with daily functioning and that requires medical or psychiatric care).

The **life expectancy** in the United States is approaching 80 years, with an average of **74 for men** and **81 for women**.

Women outlive men by about 7 years.

People at least 85 years old now constitute 10% of those 65 and older and is the most rapidly growing segment of the older population.

Introduction (III).

Prevalence data for mental disorders in elderly persons vary widely, but a conservatively estimated 25% have significant psychiatric symptoms.

The most common disorders of old age are:

- depressive disorder,
- cognitive disorders (dementia),
- phobic disorders, and
- alcohol use disorders.

Older adults (over age 75) also have one of the highest **risks for suicide**.

Many mental disorders of old age can be prevented, ameliorated, or even reversed.

Of special importance are the reversible causes of delirium and dementia; if not diagnosed accurately and treated in a timely fashion.

These conditions can progress to an irreversible state requiring a patient's institutionalization.

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: **aphasia,**

- **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.

Treatment of Dementia
Pharmacotherapy of cognitive symptoms

ACETYLCHOLINESTERASE INBITORS		
rivastigmine	EXELON	8 -12 mg
donepezil	ARICEPT	5 - 10 mg
galantamine	REMINYL	8 - 24 mg

Treatment of Dementia
Pharmacotherapy of cognitive symptoms

1. **Cholinesterase inhibitors** - (fysostigmin, donepezil, rivastigmin, galantamin) + **lecitin**
2. **Cholinesterase inhibitors** - (fysostigmin, donepezil, rivastigmin, galantamin) + **nootropic agents** (**Gingko biloba extr., vitamine E**)
3. Agonists of muscarinic (M_1, M_3) and nicotinic acetylcholine receptors (**nicotine**)
4. Nootropic agents + antiinflammatory agents (**acetylosalicylic acid, ibuprofen, indometacine**)
5. Nerve growth factors (**cerebrolysin**)

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
pentoxiphyline		
xanthinol		
Ergot Alkaloids		
nicergoline		

Hypnotics (in case of insomnia)

	Generic Name	*Trade Mark*	*Form*	*Mean Doses (mg)*
3rd Generation	**zolpidem**	STILNOX, HYPNOGEN, EANOX	tbl. 10 mg	10 - 20
	zopiclone	IMOVANE	tbl. 7.5 mg	3.75 – 7.5
	zaleptone	SONATA	tbl. 10 mg	5 – 10

Anxiolytics (in case of anxiety)

Generic Name	*Trade Mark*	*Form*	*Mean Doses (mg)*
• Propandiol Derivates			
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

Treatment of Dementia
Pharmacotherapy of non-cognitive symptoms
(Psychosis)

1. High-potency typical antipsychotics, such as haloperidol or fluphenazine, can be effective at very low doses.
2. Atypical antipsychotics are also effective, often at much lower doses than used in patients with primary psychosis.
3. Dosage increases should proceed with caution.
4. The elderly are prone to adverse effects due to serum level accumulation including oversedation and hypotension.

Treatment of Dementia
Pharmacotherapy of non-cognitive symptoms
(Psychotic + confusional states)

Conventional Antipsychotics			
Chem. Group	*Generic Name*	*Trade Mark*	*Dose (mg)*
Phenothiazines			
	levomepromazine	TISERCIN, NOZINAN	50-200
	thioridazine	THIORIDAZIN, MELLERIL	100-200
	periciazine	NEULEPTIL	10-40
Thioxanthes			
	clopenthixol	CISORDINOL, CLOPIXOL	20-100

Conventional Antipsychotics

Chem. Group	*Generic Name*	*Trade Mark*	*Dose (mg)*
Phenothiazines			
	flufenazine	MODITEN	2-16
	trifluoperazine	STELAZIN	10-20
Thioxanthenes	flupenthixol	FLUANXOL	6-18
Butyrophenones	haloperidol	HALOPERIDOL, HALDOL, APO-HALOPERIDOL	2,5-10

Antipsychotics of the 2nd Generation

Generic Name	*Trade Mark*	*Dose (mg)*
D2, D3 selective antagonists		
sulpiride	DOGMATIL, PROSULPIN	50-200
amisulpride	SOLIAN, DENIBAN	50-200
SDA		
risperidone	RISPERDAL, RISPEN, RISPERDAL QUICKLET	4-8
ziprasidone	ZELDOX	40-160
MARTA		
clozapine	LEPONEX	50-100
olanzapine	ZYPREXA i.m. inj. 10 mg	5-20
quetiapine	SEROQUEL	50-200

Treatment of Dementia

Pharmacotherapy of non-cognitive symptoms

Depression

Generic Name	*Trade Mark*	*Mean Doses (mg)*	*Mechanism*
SSRI			
fluvoxamine	FEVARIN	100-200	Selective Serotonin Reuptake Inhibition
fluoxetine	DEPREX, DEPRENON, PROZAC, PORTAL, FLOXET, FLUXONIL, MAGRILAN	20-40	
citalopram	SEROPRAM, CITALEC, CEROTER, PRAM	20-40	
escitalopram	CIPRALEX	10-20	
paroxetine	SEROXAT, PAROLEX, APO-PAROX, REMOD	20-40	
sertraline	ZOLOFT, SERLIFT, ASENTRA, STIMULOTON	50-200	

4th Generation of Antidepressants
Dual acting antidepressants
Mixed reuptake inhibitors (if SSRIs are ineffective)

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

Tricyclic antidepressants should be avoided in patients with dementia because of their cardiovascular and anticholinergic effects.

1st Generation of Antidepressants (TCA, TeCA)			
Generic Name	*Trade Mark*	*Doses (mg)*	*Mechanism of Efficacy*
amitriptyline	AMITRIPTYLIN	75-150	Inhibition of Serotonin and/or Norepinephrine Reuptake Followed by Increase of their Concentrations in Synaptic Cleft
nortriptyline	NORTRILEN	50-150	
imipramine	MELIPRAMIN	75-150	
clomipramine	ANAFRANIL, HYDIPHEN	75-155	
maprotiline	LUDIOMIL, MAPROTILINE	75-150	

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

Generic Name	*Trade Mark*	*Mean Doses (mg)*	*Mechanism*
Blockade of α_2-adrenoceptors			
mianserin	LERIVON, MIABENE	30-60	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	

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. .

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

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

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

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

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.

Child Psychiatry

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

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

Eating disorders

- **F50.0 Anorexia nervosa**
- A disorder characterized by deliberate weight loss, induced and sustained by the patient. It occurs most commonly in adolescent girls and young women, but adolescent boys and young men may also be affected, as may children approaching puberty and older women up to the menopause. The disorder is associated with a specific psychopathology whereby a dread of fatness and flabbiness of body contour persists as an intrusive overvalued idea, and the patients impose a low weight threshold on themselves. There is usually undernutrition of varying severity with secondary endocrine and metabolic changes and disturbances of bodily function. The symptoms include restricted dietary choice, excessive exercise, induced vomiting and purgation, and use of appetite suppressants and diuretics.

- **F50.0 Anorexia nervosa - criteria**

A. There is weight loss or, in children, a lack of weight gain, leading to a body weight at least 15% below the normal or expected weight for age and height.
B. The weight loss is self-induced by avoidance of “fattening foods.”
C. There is self-perception of being too fat, with an intrusive dread of fatness, which leads to a self-imposed low weight threshold.
D. A widespread endocrine disorder involving the hypothalamicpituitary-gonadal axis is manifest in women as amenorrhea and in men as a loss of sexual interest and potency. (An apparent exception is the persistence of vaginal bleeds in anorexic women who are on replacement hormonal therapy, most commonly taken as a contraceptive pill.)
E. The disorder does not meet Criteria A and B for bulimia nervosa.

- **Comments**
- The following features support the diagnosis but are not essential elements: Self-induced vomiting, self-induced purging, excessive exercise, and use of appetite suppressants or diuretics.
- If onset is prepubertal, the sequence of pubertal events is delayed or even arrested (growth ceases—in girls, the breasts do not develop and there is a primary amenorrhea; in boys, the genitals remain juvenile). With recovery, puberty is often completed normally, but the menarche is late.

Eating disorders

- **F50.2 Bulimia nervosa**
- A syndrome characterized by repeated bouts of overeating and an excessive preoccupation with the control of body weight, leading to a pattern of overeating followed by vomiting or use of purgatives. This disorder shares many psychological features with anorexia nervosa, including an overconcern with body shape and weight. Repeated vomiting is likely to give rise to disturbances of body electrolytes and physical complications. There is often, but not always, a history of an earlier episode of anorexia nervosa, the interval ranging from a few months to several years.

- **F50.2 Bulimia nervosa - criteria**
- There are recurrent episodes of overeating (at least twice a week over a period of 3 months) in which large amounts of food are consumed in short periods.
- There is persistent preoccupation with eating and a strong desire or a sense of compulsion to eat (craving).
- The patient attempts to counteract the “fattening” effects of food by one or more of the following:
- self-induced vomiting
- self-induced purging
- alternating periods of starvation
- use of drugs such as appetite suppressants, thyroid preparations, or diuretics; when bulimia occurs in diabetic patients, they may choose to neglect their insulin treatment
- There is self-perception of being too fat, with an intrusive dread of fatness (usually leading to underweight).

The core treatment goals for all eating disorders are straightforward and transdiagnostic:

(1) attaining and maintaining a normal, healthy, individualized, stable body weight;

(2) stopping all abnormal eating behaviors, such as food restricting, binge eating, or purging, and associated abnormal behaviors, especially compulsive exercise;

(3) dismantling the core overvalued beliefs and unhealthy cognitive "schemas" of automatic cognitive distortions, replacing them with healthy, balanced views of self (not primarily dependent on body weight or shape) and the capacity for emotional and behavioral self-regulation;

(4) treating the comorbid conditions, psychiatric and medical;

(5) planning for ongoing relapse prevention for approximately 5 years after acute improvement.

Sleep disorders

F51 Nonorganic sleep disorders

- **F51.0 Nonorganic insomnia**
- **F51.1 Nonorganic hypersomnia**
- **F51.2 Nonorganic disorder of the sleep-wake schedule**
- **F51.3 Sleepwalking [somnambulism]**
- **F51.4 Sleep terrors [night terrors]**
- **F51.5 Nightmares**
- **F51.8 Other nonorganic sleep disorders**
- **F51.9 Nonorganic sleep disorder, unspecified**

F51.0 **Nonorganic insomnia**

- A condition of unsatisfactory quantity and/or quality of sleep, which persists for a considerable period of time, including difficulty falling asleep, difficulty staying asleep, or early final wakening. Insomnia is a common symptom of many mental and physical disorders, and should be classified here in addition to the basic disorder only if it dominates the clinical picture

F51.1 Nonorganic Nonorganic hypersomnia

- Hypersomnia is defined as a condition of either excessive daytime sleepiness and sleep attacks (not accounted for by an inadequate amount of sleep) or prolonged transition to the fully aroused state upon awakening. In the absence of an organic factor for the occurrence of hypersomnia, this condition is usually associated with mental disorders.

F51.3 Sleepwalking [somnambulism]

- A state of altered consciousness in which phenomena of sleep and wakefulness are combined. During a sleepwalking episode the individual arises from bed, usually during the first third of nocturnal sleep, and walks about, exhibiting low levels of awareness, reactivity, and motor skill. Upon awakening, there is usually no recall of the event.

F51.4 Sleep terrors [night terrors]

- Nocturnal episodes of extreme terror and panic associated with intense vocalization, motility, and high levels of autonomic discharge. The individual sits up or gets up, usually during the first third of nocturnal sleep, with a panicky scream. Quite often he or she rushes to the door as if trying to escape, although very seldom leaves the room. Recall of the event, if any, is very limited (usually to one or two fragmentary mental images).

F51.5 Nightmares

- Dream experiences loaded with anxiety or fear. There is very detailed recall of the dream content. The dream experience is very vivid and usually includes themes involving threats to survival, security, or self-esteem. Quite often there is a recurrence of the same or similar frightening nightmare themes. During a typical episode there is a degree of autonomic discharge but no appreciable vocalization or body motility. Upon awakening the individual rapidly becomes alert and oriented.
- Dream anxiety disorder

- **Pharmacological Treatment(1)**
- For many years, benzodiazepines were far and away the most commonly prescribed sedative–hypnotic medications for treating insomnia. Benzodiazepine-receptor agonists represent the current standard for sedative–hypnotic medications used to treat insomnia. Nonetheless, a variety of over-the-counter (OTC) sleep aids are available. Nonprescription formulas include sedating antihistamines, protein precursors, and other substances. L-Tryptophan was popular and readily available at health food stores until an outbreak of eosinophilia led to its being pulled off the shelves. Melatonin is a leader among self-administered food additives believed by some to alleviate sleeplessness. The melatonin-receptor agonist ramelteon (Rozerem) has also been approved for treating sleep-onset insomnia. Finally, sedating antidepressants are also frequently prescribed as sleep aids.

- **Pharmacological Treatment(2)**
- Prescription medicines are rigorously tested in clinical trials; therefore, they hold an advantage over the virtually untested OTCs. To attain U.S. Food and Drug Administration (FDA) approval as a hypnotic, a medication must be safe and effective. Most hypnotic medications are approved for short-, not long-term, use. Exceptions include zolpidem (Ambien) modified release, eszopiclone, and ramelteon, all of which are approved for long-term therapy. When properly used, hypnotics can provide immediate and adequate relief from sleeplessness. Insomnia, however, usually returns on discontinuation of dosing.

Disorders of Psychological Development (F80-F89)

F80	Specific developmental disorders of speech and language
F81	Specific developmental disorders of scholastic skills
F82	Specific developmental disorder of motor function
F83	Mixed specific developmental disorders
F84	Pervasive developmental disorders
F88	Other disorders of psychological development
F89	Unspecified disorder of psychological development

F80 Specific Developmental Disorders of Speech and Language

F80	Specific developmental disorders of speech and language
F80.0	Specific speech articulation disorder
F80.1	Expressive language disorder
F80.2	Receptive language disorder
F80.3	Acquired aphasia with epilepsy (Landau-Kleffner)
F80.8	Other developmental disorders of speech and language
F80.9	Developmental disorder of speech and language, unspecified

F80.0 Specific Speech Articulation Disorder

- A specific developmental disorder in which the child's use of speech sounds is below the appropriate level for its mental age, but in which there is a normal level of language skills.
- The articulation abnormalities are not caused by a neurological abnormality and nonverbal intelligence is within normal range.

- Developmental:
  - phonological disorder
  - speech articulation disorder
- Dyslalia
- Functional speech articulation disorder
- Lalling

F80.1 Expressive Language Disorder

- A specific developmental disorder in which the child's ability to use expressive spoken language is markedly below the appropriate level for its mental age, but in which language comprehension is within normal limits.
- There may or may not be abnormalities in articulation.

- Developmental dysphasia or aphasia, expressive type

F80.2 Receptive Language Disorder

- A specific developmental disorder in which the child's understanding of language is below the appropriate level for its mental age, particularly in more subtle aspects of language - grammatical structures, tone of voice.
- The social reciprocity and make- believe play is normal and severe hearing disturbances are not present.

- Developmental:
  - dysphasia or aphasia, receptive type
  - Wernicke's aphasia
- Word deafness

F80.3 Acquired Aphasia with Epilepsy (Landau-Kleffner)

- The child loses receptive and expressive language skills after previous period of normal language development. The paroxysmal abnormalities on the EEG are present and in the majority of cases epileptic seizures occur as well.
- Some children become mute in a period of few months.
- Usually the onset is between the ages of three and seven years, with skills being lost over days or weeks.
- An inflammatory encephalitic process has been suggested as a possible cause of this disorder.
- About two-thirds of patients are left with a more or less severe receptive language deficit.

Treatment

- Cooperation of neurologist and speech therapist is very important.
- Psychiatric treatment is necessary if the child has secondary psychic problems, for example in relationship with other children or family.
- Nootropic drugs, psychotherapy and special education are useful.

F81 Specific Developmental Disorders of Scholastic Skills

Disorders in which the normal patterns of skill acquisition are disturbed from the early stages of development.

F81	Specific developmental disorders of scholastic skills
F81.0	Specific reading disorder
F81.1	Specific spelling disorder
F81.2	Specific disorder of arithmetical skills
F81.3	Mixed disorder of scholastic skills
F81.8	Other developmental disorders of scholastic skills
F81.9	Developmental disorder of scholastic skills, unspecified

F81.0 Specific Reading Disorder

- The child's reading performance is below his level of mental age. Poor schooling, mental or visual impairment is not the cause of the delay.
- The child has difficulties in reciting the alphabet, there are omissions of words, distortions of the content of the facts from material read and rate of reading is very slow.
- Associated emotional and behavioural disturbances are common during the school age period.

  - "Backward reading"
  - Developmental dyslexia
  - Specific reading retardation

F81.1 Specific Spelling Disorder

- Specific and significant impairment in the development of spelling skills in the absence of a history of specific reading disorder, which is not solely accounted for by low mental age, visual acuity problems, or inadequate schooling.
- The ability to spell orally and to write out words correctly are both affected.

  - Specific spelling retardation (without reading disorder)

F81.2 Specific Disorder of Arithmetical Skills

- The arithmetical performance is significantly below the level of the general intelligence, reading and spelling skills are within normal rage.
- The deficit concerns mastery of basic computational skills of addition, subtraction, multiplication, and division rather than of the more abstract mathematical skills involved in algebra, trigonometry, geometry, or calculus.

Developmental:

- acalculia
- arithmetical disorder
- Gerstmann's syndrome

F81.3 Mixed Disorder of Scholastic Skills

- The child can suffer from all previously described specific developmental disorder of scholastic skills (both arithmetical and reading or spelling skills are significantly impaired)
- Disorder is not solely explicable in terms of general mental retardation or of inadequate schooling

F82 Specific Developmental Disorder of Motor Function

- Serious impairment in the development of motor coordination that is not solely explicable in terms of general intellectual retardation or of any specific congenital or acquired neurological disorder
- The child is generally clumsy in fine and gross movements; there are difficulties in learning to tie shoe laces, to run, to throw the balls. Drawing skills are usually also poor
- In most cases - marked neurodevelopmental immaturities
  - Clumsy child syndrome
  - Developmental:
    - coordination disorder
    - dyspraxia

Treatment

- The family and the school have to be properly informed about the child's disorder.
- Special educational training is necessary, nootropic drugs are useful.
- For children with coordination difficulties special physical education programs may be help to enhance the child's self-esteem and ability to interact with peers.

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.

F84	Pervasive developmental disorders
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 1943 as infantile autisms
- Autisms are severe impairment of developmental disorder which presents before age of 3 years. The abnormal functioning manifest in the area of social interaction, communication and repetitive behaviour
- There are typical features of clinical picture:
  - Inability to relate
  - Disorders in development of speech
  - Cognitive abnormalities
  - Stereotyped behaviour

F84.0 Childhood Autism

- The cause of childhood autism is unknown, studies of twins suggest genetic etiology
- The deficits continue through whole life; great impact on his abilities to socialize and communicate with other people
- 60-80% of autistic children are unable to lead independent life
- IQ level can be normal
- 30-40 cases per 100 000 children; more common in boys than in girls

  - Autistic disorder
    - Infantile:
    - autism
    - psychosis
  - Kanner's syndrome

Treatment

- Specific treatment is unknown.
- Autistic children usually require special schooling or residential schooling although attempts of integrations are also started.
- Special techniques for teaching autistic children and special psychotherapeutic approaches were developed.
- Sometimes antipsychotic drugs and antidepressants are used to cope with aggressive behaviour and depression.

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 behaviour 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

F84.2 Rett's Syndrome (Described by Rett 1964)

- The syndrome was described only in girls
- 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.

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 behaviour 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

F84.3 Other Childhood Disintegrative Disorder

- These are very rare developmental disorders with a short period of normal development before onset. The child looses 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 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 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
- ADHD: Attention-Deficit Hyperactivity Disorder (formerly MBD: minimal brain dysfunction)
- Prevalence is from 3% to 10% of elementary-school children

F90 Hyperkinetic Disorders

- Etiology: genetic predisposition, maternal deprivation, environmental toxins or intrauterine or postnatal brain damage
- About 50% of children with hyperkinetic syndrome have so called „soft signs” and minor abnormalities in EEG
- IQ: from subnormal to high intelligence
- Specific learning disabilities often coexist with hyperkinetic syndrome
- Types of hyperactivity syndrome:
  - disturbance of activity and attention
  - hyperkinetic conduct disorder

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 behaviour 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

F91.0 Conduct Disorder Confined to the Family Context

- The dissocial or aggressive behaviour is intent on family members and occurs mostly at home or immediate household. Stealing from home and destruction of beloved property of particular family members is typical. Social relationships outside the family are within the normal range.

F91.1 Unsocialized Conduct Disorder

- Aggressive and dissocial behaviour is connected with the child's poor relationships with other children and peers groups.
- There is a lack of close friends, rejection by other children, unpopularity in the school and hostile feelings toward adults.

F91.2 Socialized Conduct Disorder

- The diagnosis is applied when the child is showing aggressive and dissocial behaviour, but relationship with children of the same age is adequate.

F91.3 Oppositional Defiant Disorder

- Children under age of 9 to 10 years, showing persistently negativistic, provocative and disruptive behaviour.
- The more aggressive conduct disorders are not present, general law and rights of other people are respected.
- This type of behaviour is often directed towards a new member of the family - i.e. step father.

Treatment

- Family situation should be consider and its relation to the child's disorder. The family therapy is necessary to enhance emotional support and understanding.
- In the cases of dysfunctional families, abused or neglected children, an adoptive homes, foster care or supervised residence is recommended.
- Court intervention is required for the placement.

F92 Mixed Disorders of Conduct and Emotions

- A group of disorders characterized by the combination of persistently aggressive, dissocial or defiant behaviour with overt and marked symptoms of depression, anxiety or other emotional upsets
- Mood disorders in children are often expressed by a challenging behaviour or somatic symptoms

F92 Mixed disorders of conduct and emotions

F92.0 Depressive conduct disorder

F92.8 Other mixed disorders of conduct and emotions

F92.9 Mixed disorder of conduct and emotions, unspecified

F93 Emotional Disorders with Onset Specific to Childhood

F93	Emotional disorders with onset specific to childhood
F93.0	Separation anxiety disorder of childhood
F93.1	Phobic anxiety disorder of childhood
F93.2	Social anxiety disorder of childhood
F93.3	Sibling rivalry disorder
F93.8	Other childhood emotional disorders
F93.9	Childhood emotional disorder, unspecified

F93.0 Separation Anxiety Disorder of Childhood

- The child is showing anxiety when being separated from persons who are for him emotionally important - parents, family members. Developmental stage should be considered
- School refusal is often a symptom of separation anxiety disorders

- Treatment:
  - in the case of school refusal the child should be returned to school immediately and strict limits should be established
  - the treatment is focused on family structure and recommendation in the ways of upbringing.
  - in severe cases use of antidepressants is necessary

F93.1 Phobic Anxiety Disorder of Childhood

- The phobic states most commonly encountered in children involve fear of animals, insects, dark and school. Animal and insect phobias usually start at the age of 5 years and almost none start in adult life. Some phobias start in the late adolescence - i.e. agoraphobia

- Treatment:
  - psychotherapy and a sensible parental handling is recommended
  - the anxiety reducing techniques are useful, i.e. desensitization

F93.2 Social Anxiety Disorder of Childhood

- There is a wariness of strangers and social apprehension or anxiety when encountering new, strange, or socially threatening situations. This category should be used only where such fears arise during the early years, and are both unusual in degree and accompanied by problems in social functioning.
- A fear of social encounters is associated with avoidance behaviour, which produces problems in functioning in a peers group and in the school performance as well.
- The social acceptance of the child can be very difficult and can have impact on his or hers further personal development.

- Treatment:
  - psychotherapy
  - anxiolytic drugs

F93.3 Sibling Rivalry Disorder

- Some degree of emotional disturbance usually following the birth of an immediately younger sibling is shown by a majority of young children.
- Sibling rivalry disorder should be diagnosed only if the degree or persistence of the disturbance is both statistically unusual and associated with abnormalities of social interaction.
- The children with sibling rivalry disorder are acting with serious hatred to the new born, in severe cases they are showing physical harming behaviour and persistent competition to gain parents attention.
- Treatment:
  - psychotherapy dealing with family structure
  - prevention

F94 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

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

Treatment

- Mild restriction of fluids before bedtime
- Waking for the toilet during the night
- Rewarding success and not to focus attention on failure
- Antidepressants

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.

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

F98.4 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

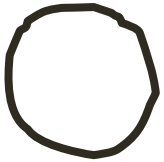
Child Abuse

- 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

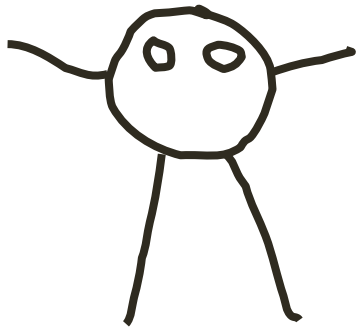
Development of Drawing

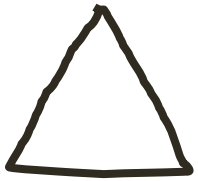
clew

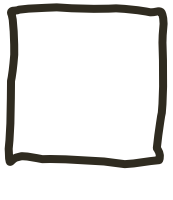


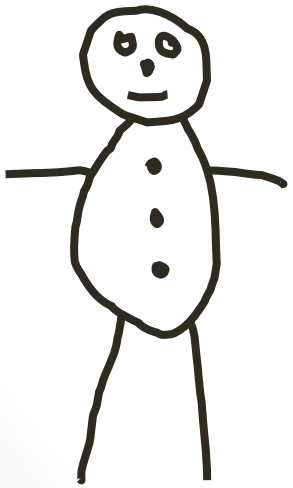
3 years old

4 years old

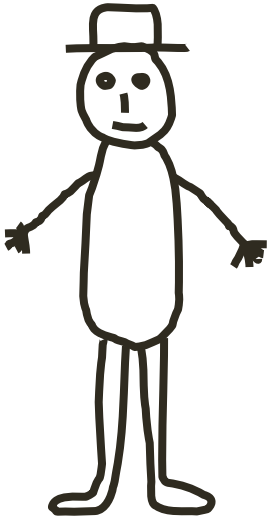








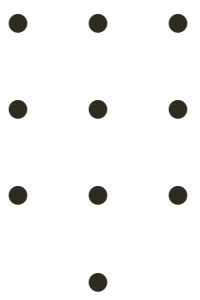
5 years old



6 years old

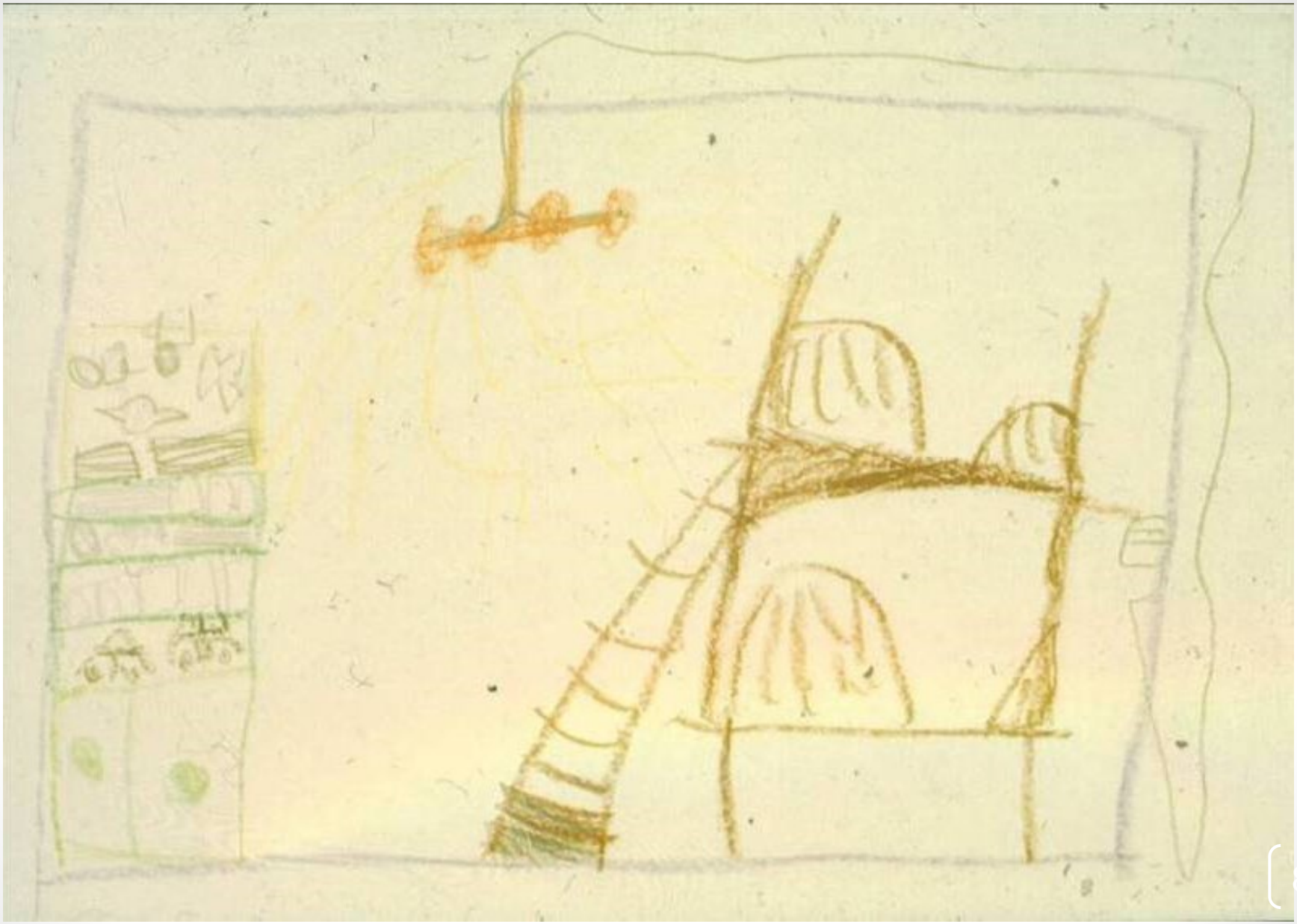
<u>Test of maturity</u>:

Eva is here.

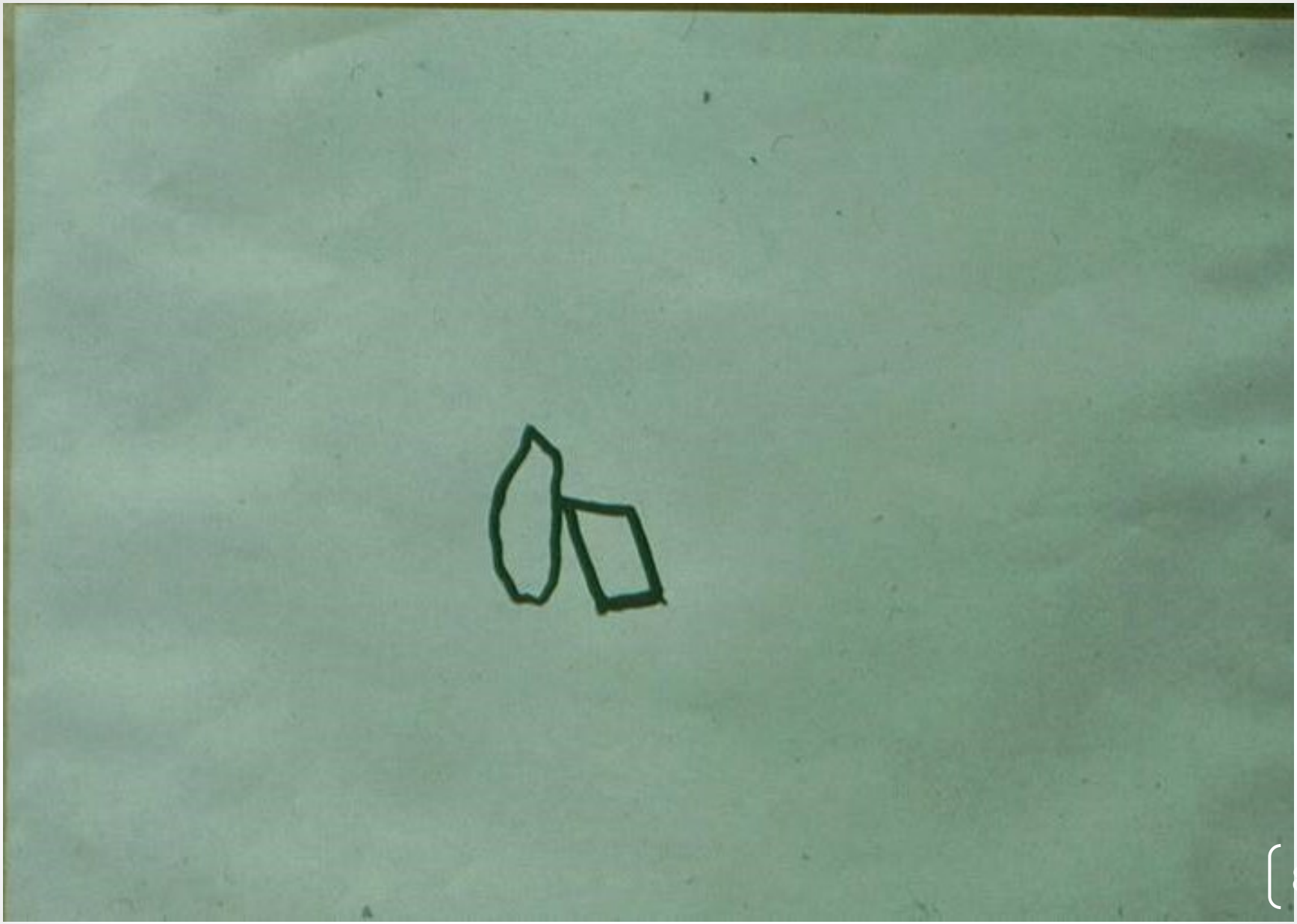


Drawing of healthy child 4 year old: „Mama“

Drawing of twins 4 years old:
left – mental retardation, right - healthy



Drawing of a boy 6 years old suffering from schizophrenic disorder



Drawing of a boy 16 years old suffering from catatonic schizophrenia

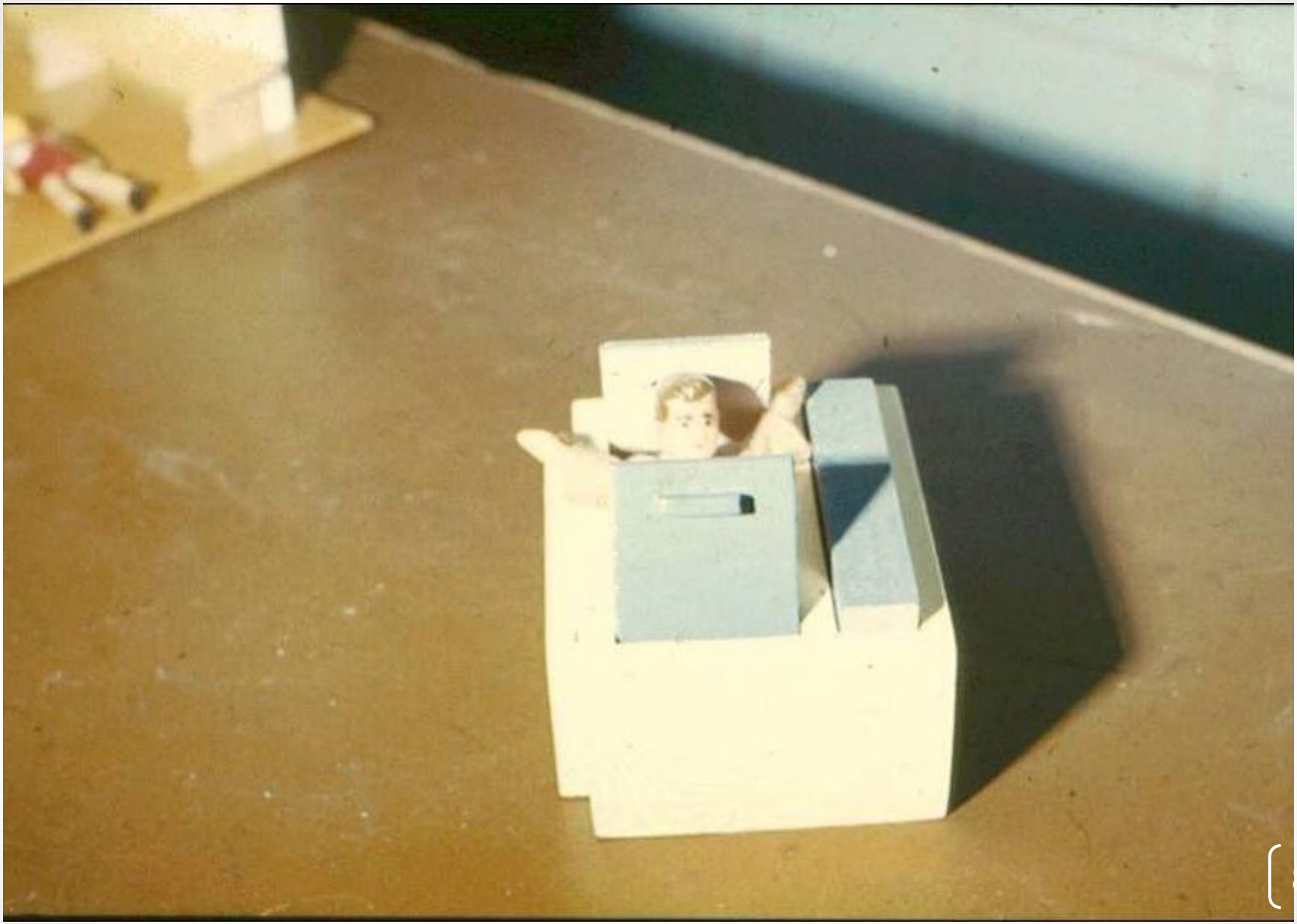
Drawing of a boy 10 years old suffering from conduct disorder: „Satanic court“

Drawing of a girl 10 years old suffering from dysgraphia: „Figure“

Drawing of a boy 14 years old suffering from mental anorexia

Performance therapy at a boy 9 years old in adoptive family

Performance therapy at a boy 10 years old suffering from relation disorders



Performance therapy at a boy 7 years old with confrontation to father