TOPIC 1: HUMAN ATTACHMENT AND DEVELOPMENTAL PSYCHOLOGY

What is medical psychology?

- It investigates various phenomena influencing our health and the development / process of diseases /disorders through the central nervous system (CNS), including internal and external factors, interpersonal relationships etc.
- Two main fields:
  - 1. Health psychology:
    - psychological and physiological components of health promotion and prevention
  - 2. Behavioural medicine:
    - role of psychological factors in diseases
    - psychotherapeutic methods in medical practice (e.g. LIPI)
    - psychology of suffering and healing
    - doctor-patient relationship

What is developmental psychology?

- Definition: applied part of psychology which investigates the physical, cognitive, emotional, behavioural, and social changes through the lifespan
- Aim: to define, describe, and explain certain developmental stages + comparison to others
- **Why is it important**:
  - age-related needs, conflicts, and changes shape the patient's behaviour → knowing these personality features can foster efficient help
  - it can help us understand how and why childhood experiences influence adult behaviour and psychological symptoms

STUDY TIP

After reading *Topic 1: Human Attachment and Developmental Psychology*, and while exploring a group of mental illnesses (e.g., personality disorders, depression, etc.), you can ask yourself:

'How might a person's development contribute to this disorder, according to the main theoretical approaches?'

For example:

- *According to biological and attachment theories, why might abuse and neglect lead to personality disorders?*
- *According to cognitive theory, how can classical and operant conditioning contribute to the development of anxiety?*

In some cases, you'll find the answers in your study materials or lecture slides. In others, you may need to form your own hypotheses and explore further—by researching online or in the library. This process can help you make meaningful connections between topics and deepen your understanding of how mental illnesses develop.

Main theoretical approaches in developmental psychology:

1. Biological theories
2. Attachment theory
3. Psychoanalytic/psychodynamic theories
- Sigmund Freud: stages of the psychosexual development

4. Learning theories
- our behaviour and personality are shaped by the interaction between us and the environment (Stimulus – Organism – Response)
- learning processes include e.g. classical conditioning, operant conditioning and social learning

5. Cognitive theories:
- emphasize the information processing
- the previous experience determines the personal meaning of a situation
- development of mental processes, skills, abilities, e.g.
- Piaget's theory of cognitive development

6. Psychosocial theories
- Erikson's psychosocial development

1. Biological theories

- Development of perception:
  - first, infants cannot distinguish stimuli from the mother and from their own body, visceral sensation dominates → bodily contact and tactile sensations are important for the dominance of exteroception
  - early interactions are crucial to distinguish the self from the environment and for the development of the nervous system
  - sensations of warmth, pain or comfort can serve as the primary basis of good and bad experiences according to the intensity of the stimuli
  - body contact increases the secretion of endogenous opiates + the oxytocin hormon → analgesic effects + stress-reduction
  - the motivation to be in contact with social others is maintained even in the case of pain and punishment

(Why are Caregivers Important? – The Harlow Studies (Video: https://www.youtube.com/watch?v=-Qi7txH1KzY)

- The effect of separation and the importance of contact comfort (monkey experiments)
  - infant monkeys reared in isolation: Harlow raised monkeys and isolated them from birth, with no contact, for 3-12 months -> separated monkeys engaged in bizarre behaviour such as clutching their own bodies and rocking compulsively.
  - infant monkeys reared with surrogate mothers: monkeys were separated from their mothers and placed in cages with access to two surrogate mothers - one made of wire and one covered in soft fur-like cloth - the infants spent >80% of the time with the cloth mother to have a safe refuge and calm them with contact comfort
  - Effects:
    - after a union with other monkeys, they failed to form attachment
    - withdrawal or aggression, inappropriate sexual reactions

        - female monkeys became deficient mothers: mishandling or neglecting their cubs
        - when contemporary interactions were present in the first 6 month, they became normal adult monkeys
        - the length of separation matters!
- Experience of separation in human:
    - three phases of the reaction to separation:
        1. Protest: strong demand to see the other, who have left. Crying, motoric and psychological agitation, problems with eating and sleeping.
        2. Despair and anger: fading trust in the reunion. Less crying, slower motor tempo, apathy.
        3. Acceptance: the child gives up the emotional bond with the attachment figure. „Acceptance" of a carer; dependent features and emotional difficulties can remain.
    - Hospitalism: a pediatric diagnosis used to describe infants who wasted away in a hospital = retarded physical development, disruption of perceptual-motor skills and language, caused by the lack of social contact between the infant and its caregivers.
- Separation anxiety disorder (SAD)
    - characterized by developmentally inappropriate and excessive anxiety concerning separation from the home or those to whom the child is attached
    - one of the most prevalent anxiety disorders in childhood - 1.8% to 12.9% in community samples and 15% to 35% in samples of children with anxiety disorders
    - tends to be more common in younger children than adolescents
    - symptoms are influenced by an interaction between the child's tendency for anxiety and an effort to reallocate parental time from the other children in the family. Family changes can cause a disruption in the security of the child's attachment bond.
- The Separation-Individuation Process in Infants (normal developmental path)
    - stages of Mahler
        - Normal autistic stage (0-1 month): *a newborn infant is unaware of anything but its own needs; the mother needs to be available to meet the baby's needs and introduce tender, caring interaction*
        - Symbiotic stage (2-4 month): *babies begin to learn about their world and develop their very first human bond with their mothers; positive stimuli (cuddling, smiling, engaged attention) and relief of discomfort (feeding promptly when hungry, changing of soiled nappies, providing an appropriate sleep environment) all help the infant to develop a trust that their needs will be met, building a basis for security and confidence*
        - Differentiation of the body-schema (5-10 months): *the baby develops an increased interest in both the mother and the outside world; first outward signs of separation anxiety during this time as the baby continually "checks back," looking at other things but then looking for the mother as a reassurance that she is still present; consistent access to the mother aids the baby's emotional well-being and while it first appears about this time*
        - Practicing stage (10-16 months): *children's mobility increases, they are able to explore their environment; still not ready for extended separation from their mothers: choose to separate briefly from their mums, but will typically return quickly for assurance and comfort; some independent play time is enjoyed, but often the baby is*

only comfortable to play on their own when the mother is within the line of sight; child beginning to have a basic sense of self not directly connected to the mother.
        - Re-approach to the mother (16-24 months): *toddlers' „ambitendency": sometimes running from their mothers, refusing her attention or wishes, and the next they are anxiously clinging to her – caused by the toddler's sometimes opposing desires and needs; t*oddlers continue to take pleasure in exploring their environment, but during this phase, much of their growth comes from socialisation: imitation of others, want the things that others have, etc.
        - Consolidation and object constancy (24 to 36 months): *children begin to be more comfortable separating from their mothers, knowing that they will return (object constancy); this ability makes it possible for two-year-olds to accept that they are unique from their mothers without anxiety, allowing the child to engage substitutes for the mother when she is absent.*
    - exploration, individuation and the sense of a competent self is also important!

2. Attachment theories

- Definition of attachment:
    - early attachment is the primary bond between the infant and its caretaker
    - an instinct to build a close relationship with a caretaker
    - Bowlby:
        - attachment is an evolutionarily grounded, motivational-behavioural system that serves the infant's physical and psychological safety
        - contains elementary representations of the self and significant others (neuroimaging techniques have also reinforced the neural representations of attachment systems)
- Characteristics of attachment bonds:
    - attachment bonds are persistent, and involve a specific figure who is not interchangeable
    - the relationship within the dyad is emotionally significant
    - the individual wishes to maintain proximity to or contact with the attachment figure
    - the individual feels distress at involuntary separation from the attachment figure
    - the individual seeks security and comfort in the relationship with the attachment figure
- 4 main functions of attachment
    - in children:
        - maintenance of proximity with the attachment figure
        - safe haven/refuge to seek comfort of safety
        - separation anxiety when attachment figure is not present
        - safe base of exploration
    - in adults:
        - safe haven/refuge to seek comfort of safety
        - separation anxiety when attachment figure is not present
- Internal Working Models:
    - early attachment interactions with the primary caretaker are in interaction with the child's biological temper and cognitive filters → these shape the development of Internal Working Models: these are dyadic mental representations of the self and an important object (person).

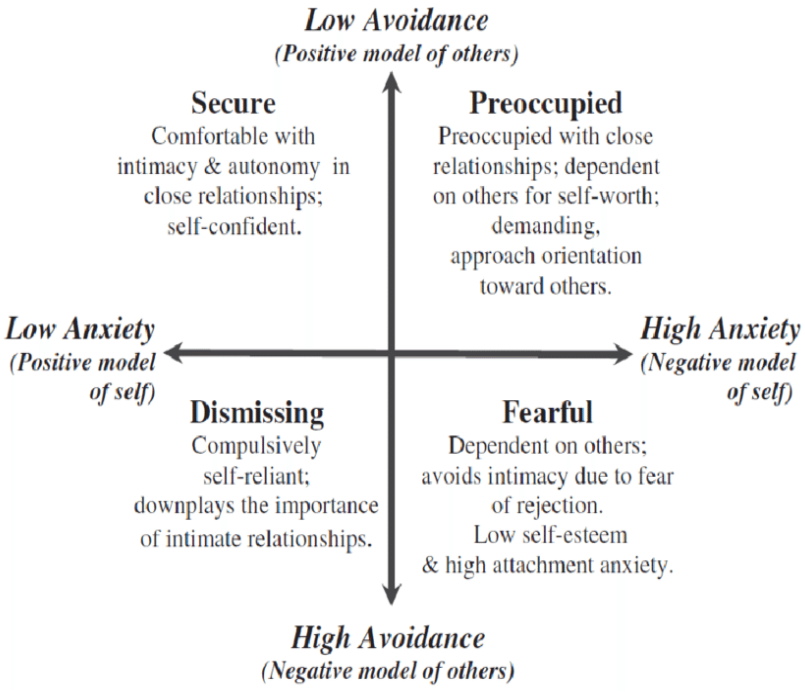
- Internal Working Models are organized hierarchically → general pattern (attachment style) → categorical patterns → single individuals.
- elementary experiences of attachment interactions are stored as schemas in the child's associative memory
  - these schemas can be generalized to the father, grandparents, siblings, or later on, to the intimate partner
  - they serve as a basis for implicit knowledge of interpersonal relationships, and a concept of ourselves → they influence, how we perceive, interprete or react in social interactions

- Interaction between the child's innate temper and the parenting style
  - warm-restrictive → care and acceptance with well-defined boundaries (best way)
  - warm-indulgent → too much space → impulsive, aggressive child
  - cold-restrictive → when we win, they are broken → high compliance, low self-esteem, high anxiety
  - cold-indulgent → aggressive child with low self-esteem
- Main concepts in Attachment Theory
  - Attachment behaviour: the primary need to maintain an emotional bond and physical contact with a caretaker → seeking of attention and proximity
  - Primary object: a significant other person, who ensures the child's safety
  - Significant others: permanent attachment can be formed exclusively with certain people such as the mother, father, grandparents or siblings
  - Caregiving system: the signs of the child's needs or danger trigger the mother's caregiving responses → this works simultaneously and complementary with the attachment system
  - Proximity: a main function of attachment is shaping the appropriate distance between the child and its primary caretaker
- The balance of attachment and exploration
  - when the attachment system is active, the exploration system is inactive; with the activation of exploration, the attachment behaviour decreases (in this sense, attachment is a primary regulatory system)
  - Attachment Styles in Childhood (Ainsworth, 1985) – „The Strange Situation"
    (Strange situation experiment: mother and infant are introduced to a laboratory playroom, where they are later joined by an unfamiliar woman. While the stranger plays with the baby, the mother leaves briefly and then return. A second separation ensues during which the baby is completely alone. Finally, the stranger and then the mother return - I sent the videos in email)
  - Ainsworth (1989) and Main and Solomon (1990) distinguished 3+1 attachment styles = the Early Attachment Styles:

Attachment type	*Caregiver Behaviour*	*Child Behaviour*
Secure	• reacts quickly and positively to child's needs • responsive to child's needs	• distressed when caregiver leaves • happy when caregivers return • seek comfort from caregiver when scared or sad
Insecure-avoidant	• unresponsive, uncaring	• no distress when caregivers

	• dismissive	leave • does not acknowledge return of caregiver • does not seek or make contact with the caregiver
Insecure-ambivalent	• responds to child inconsistently	• distress when caregiver leaves • not comforted by return of caregiver
Insecure-disorganized	• abusive or neglectful • responds in frightening or frightened way	• no attaching behaviour • often appeared dazed, confused, or apprehensive in presence of caregiver

- Adult attachment
  - How can Early and Adult Attachment relate to each other?
    - Revisionist perspective: attachment traits can be modified by crucial later life events, reflective processes and experiences with significant others
    - Prototype perspective: early attachment patterns can influence perceptions, emotions, cognitions, and behaviour in interpersonal contexts, serving as a relatively stable prototype for relationship dynamics throughout the lifespan
    - early and adult attachment styles are the same in 70% of the cases - however, we can relate differently to distinct individuals; and change our attachment functioning
  - adult attachment = the attachment style or functioning in our primary relationships as adults, e.g. with our partner
    - this can be conceptualized as a result of the entire attachment history
    - adult attachment consists of a positive or negative concepts of the self and the object; and can be derived from two primary attachment dimensions, namely anxiety or avoidance
  - The Four-Category Model of Adult attachment (Bartholomew & Horowitz)



- Attachment and the risk of diseases
  - Insecure attachment may increases the risk of disease through 4 mechanisms:
    - Increased susceptibility to stress (e.g., a tendency to perceive more stress and more extreme physiological responses to stress);
    - Altered emotion regulation: ones with dismissive attachment deactivate their emotions; ones with preoccupied respond with an excessive activation of emotions to conflicts
    - Increased use of maladaptive external methods of regulating affect (e.g., substance use and food consumption);
    - Altered help-seeking (e.g., lower levels of social support seeking during distress, high levels of symptom reporting, and non-adherence to treatment recommendations → potential influence of attachment on relationships with primary healthcare providers!
- Attachment and Doctor-Patient Relationship - healthcare providers fulfil attachment functions:
  - Availability of the doctor: 'This person might see me at a time when I am in pain or feel worried, anxious or upset';
  - Safe haven: 'This is a person who I count on for advice';
  - Secure base: 'This person makes me feel more confident about my health'. (especially true in chronic diseases, life-threatening conditions, psychotherapies and for GPs or family physicians)

How can we relate to patients with different attachment styles?

Preoccupied (self – others +)	Higher levels of dependence, compulsive seek for help, even intensifying the symptoms, control is at the doctor	Shorter visits, more often, more reinforcement, handling anxiety, supporting patient's responsibility and internal control
Avoidant / dismissive (self + others -)	Less emotions, mistrust, minimalization of need for help, denying or reducing symptoms Keeps distance and often avoid the controls, low compliance	Confirmation of appointments, more health education, building up trust is important, showing evidences and clear process
Fearful attachment (self – others -)	Double bind: asking for help, but in the same time rejecting it Confused, unpredictable, higher possibility of crises	Definition of boundaries, definition of patient's roles and responsibilities, setting real expectations, accurate and clear processes, support of stress-regulation

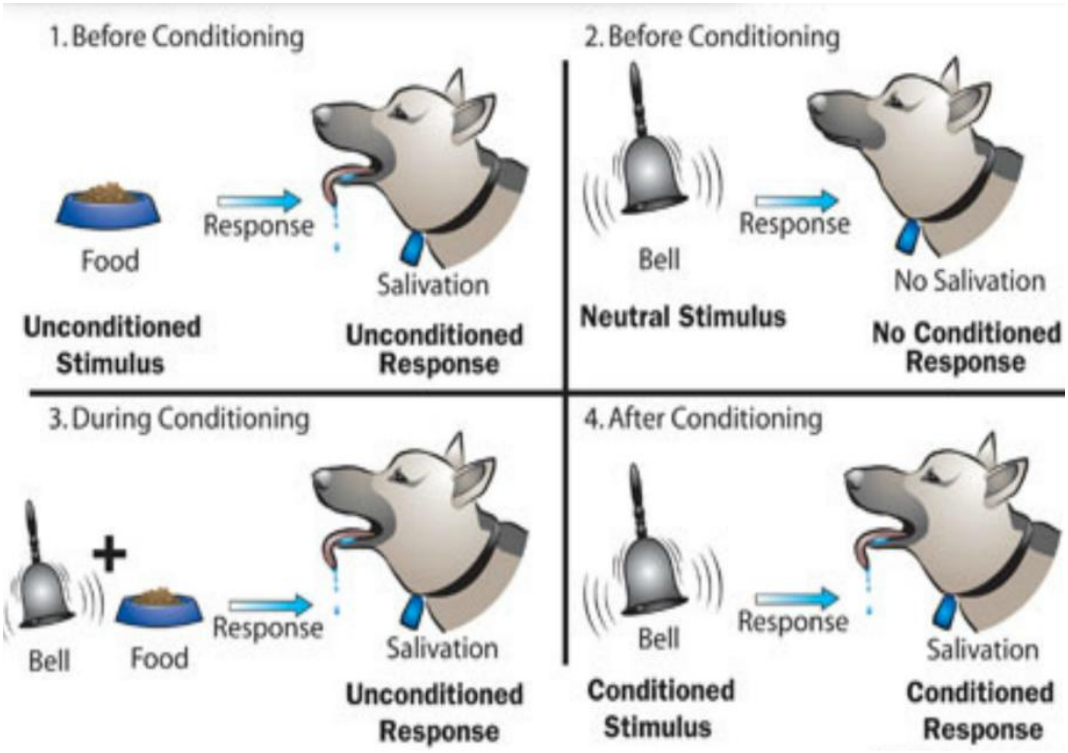
3. Psychoanalytic/dynamic theories (Sigmund Freud): Stages of the psychosexual development

- Freud's main ideas focus on the role of unconscious mind, childhood experiences

- concept of libido (a fundamental pleasure-seeking drive which unconsciously motivates us from the moment of our birth)
- development occurs in psychosexual stages:
    - oral (birt-y1) – libido is gratified from stimulation of mucus membrane (e.g. sucking)
    - anal (y2-3) – libido is gratified from anus by the experience of excretion or retention
    - phallic (y3-4) - libido is gratified from erotic pleasures from genitals
    - latency/forgetful (y5-puberty) – psychosexual desires are inactive
    - genital – development of normal sexual behaviour
- critics of Freud's theory: focuses on male development, hard to test scientifically, future predictions are too vague, based on case studies not on empirical research

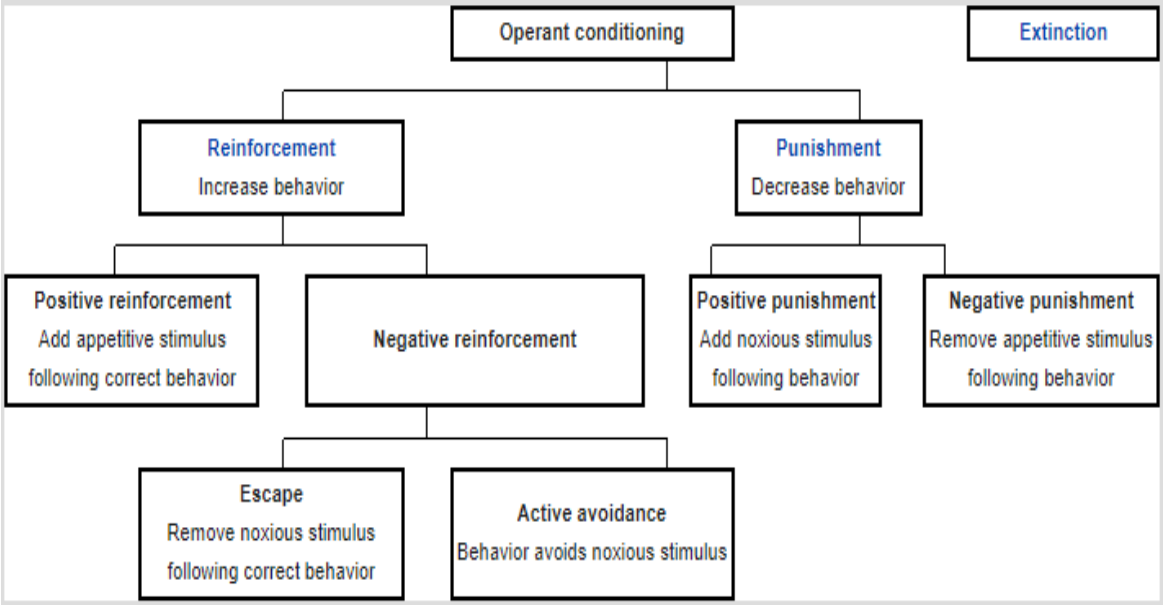
4. Learning theories

- Classical conditioning: we pair/associate stimuli
    - Automatic process
    - Can appear across various mental disorders, e.g. phobias, panic attacks

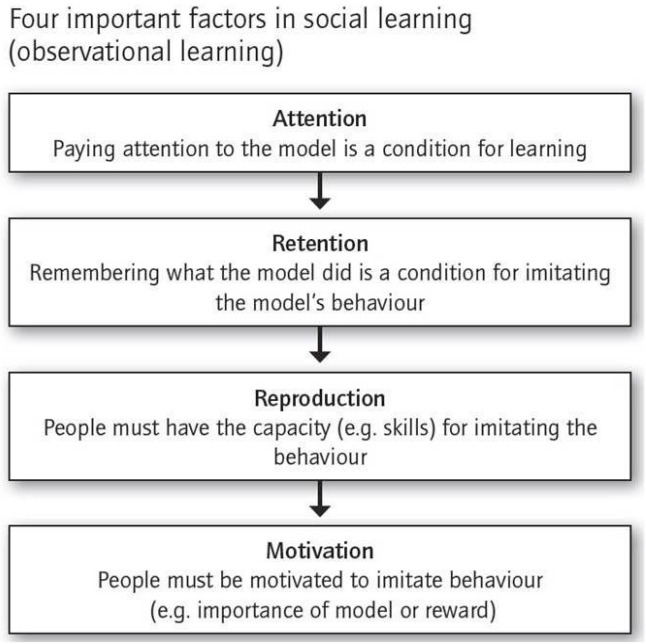


- Operant conditioning (also called instrumental conditioning):
    - type of associative learning process through which the strength of a behaviour is modified by its own consequences

- rewards increase, punishment decreases the (occurrence) of the behaviour, e.g. parenting behaviour, school system, addictions etc.



- Social learning theory: learning through the observation of social others
  - video: Bandura's Bobo doll experiment (https://www.youtube.com/watch?v=dmBqwWlJg8U)



5. Cognitive theories:

- Piaget & Cognitive development – stages of Piaget:
  - sensory motory (birth-y2) – recognizes self as agent of action->act intentionally, achieves object permanence
  - pre-operational (y2-y7) – learns to use language, thinking is still egocentric, classifies objects by single features - **v**ideo: egocentrism (I sent in email)

- concrete operational (y7-y11) – logical thinking, conservation of numbers, classifies object by several features
- formal operation (11) – can think logically about abstract propositions and test hypothesis, becomes concerned with the future and ideological problems

- Adolescence (it's a transitive developmental stage)
  - periods:
    - pre-puberty 10 –13 years
    - puberty 13 – 17 years
    - adolescence 17-20-24 years
  - 3 developmental platforms: biological, psychological, sociological
  - 3 main aims:
    - emotional separation from parents
    - internalisation of sexual role into the personality
    - finding a future role in the society
- James Marcia: the Identity Status model

	Experienced crisis	Not in crisis
Committed	Identity achievement (undergone a crisis and made a commitment)	Identity foreclosure (not undergone a crisis but made a commitment, e.g. picked up parents' values without question)
Not committed	Identity moratorium (undergone a crisis but failed to commit a value)	Identity diffusion (neither crisis nor commitment has been made)

6. Psychosocial theories (Erikson)

Erikson's Stage Theory in its Final Version			
Age	*Conflict*	*Resolution or "Virtue"*	*Culmination in old age*
Infancy (0-1 year)	Basic trust vs. mistrust	Hope	Appreciation of interdependence and relatedness
Early childhood (1-3 years)	Autonomy vs. shame	Will	Acceptance of the cycle of life, from integration to disintegration
Play age (3-6 years)	Initiative vs. guilt	Purpose	Humor; empathy; resilience
School age (6-12 years)	Industry vs. Inferiority	Competence	Humility; acceptance of the course of one's life and unfulfilled hopes
Adolescence (12-19 years)	Identity vs. Confusion	Fidelity	Sense of complexity of life; merging of sensory, logical and aesthetic perception
Early adulthood (20-25 years)	Intimacy vs. Isolation	Love	Sense of the complexity of relationships; value of tenderness and loving freely
Adulthood (26-64 years)	Generativity vs. stagnation	Care	Caritas, caring for others, and agape, empathy and concern
Old age (65-death)	Integrity vs. Despair	Wisdom	Existential identity; a sense of integrity strong enough to withstand physical disintegration

TOPIC 2: PERSONALITY THEORIES

1. Basics

- definition of personality:
  - dynamic, but relatively stable and organized pattern of one's characteristics, thoughts, feelings and behaviours that distinguishes the person from another, and persists over time and situations
  - Strongly influences one's perceptions, cognitions, expectations, motivations, values, attitudes as well as concepts of the self and others throughout the life span
  - the word "personality" originates from the word of persona = mask
- two ways to study it (Allport)
  - nomothetic (seeks general regularities, common features that can be applied to many different people, such as extraversion - *What could be common traits in us?*)
  - idiographic (attempt to understand the unique aspects of a particular individual – *What is the difference between us?*)
- healthy vs unhealthy personality

healthy	*unhealthy – 4D*
Adequate perception of reality	Deviance
Self-knowledge, reflective skills	Dysfunction
Intentional control of behaviour	Distress
Self-esteem and acceptance	Danger
Ability to form emotional relationships	
Creativity / motivation	

- relevance of personality in medical practice
  - coping with stress
  - maladaptive risk behaviours
  - development of psychosomatic and mental disorders
  - perception of physical symptoms
  - doctor-patient relationship such as difficult patients etc.
  - sickness behaviour e.g. acceptance of the patient status

- **In summary: Why is it important and useful to study personality?**

  When an individual comes to therapy, it's usually because they are suffering
  → we begin by observing their behavior, thoughts, and emotions, and exploring their symptoms
  → drawing on our knowledge—such as what we've learned in this seminar—about what is considered healthy or unhealthy functioning, we ask ourselves: "*In what ways does this person deviate from typical patterns of thinking, feeling, and behaving? Is there any pattern that seems persistent and unhelpful (= is there any personality-rooted problem)? And through which mechanisms might these deviations contribute to their suffering?"* - for example, we might consider how they cope with stress, whether they engage in maladaptive risk behaviours, or how they interpret physical symptoms, etc.
  → we may use personality assessments to help evaluate these factors.
  → based on the results, we choose the most appropriate form of treatment.

STUDY TIP

Think of major personality theories as "theoretical frameworks" for understanding the abstract concept of personality. Their aim is to understand, describe, and explain individual differences in patterns of thinking, feeling, and behaving.

These theories help us:

- Explore the origins and development of personality over time
- Understand how personality influences behavior in different situations
- Provide structured approaches for assessing personality
- Inform psychological treatment and intervention strategies

In your future work, you may draw on more than one theoretical framework, depending on the patient's specific issues. These frameworks are valuable not only for clinicians but also for helping patients better understand their own difficulties: by incorporating elements of psychoeducation into therapy, we can use these theories to support insight and change.

It's important, however, to ensure that the frameworks we apply are valid and evidence-based (e.g. modern psychodynamic theories and cognitive behaviour theories, learn more about evidence-based approaches on APA's website), and that we study them in greater depth before using them in practice. For example, you can look for accredited organizations or associations in your country that offer training in these approaches.

2. Major personality theories

a. Biological
   - neuropsychological research (EEG)
   - brain imaging techniques (MRI, PET)
   - Amygdala's role: fear-processing circuits
   - ventral tegmental area (VTA) - nucleus accumbens - prefrontal cortex = reward pathway

b. Type approaches
   - Hippocrates & Galen, BC 400: choleric, melancholic, sanguine, phlegmatic
   - W. Sheldon, somatotypes: endomorph, mesomorph, ectomorph
   - Type A personality (hostility, impatience, high achievers; higher risk for cardiovascular diseases)

c. Trait approaches (~dimensions)
   - traits are used to help define people as a whole, relatively stable over time, differ among individuals, influence behaviour
   - Eysenck: extraversion, neuroticism (=emotional instability), psychoticism
   - BIG5: OCEAN (openness to experience, conscientiousness, extraversion, agreeableness, neuroticism)
   - criticism: too descriptive, oversimplified

d. Psychoanalytic of psychodynamic (Freud)
   - foundation of modern psychology
   - main ideas:

        - early years of development make a critical contribution to the adult psyche
        - children also experience a „primitive" form of sexual desire, referred as the „Libido"
        - development occurs through series of psychosexual stages
        - focus is on the unconscious part of the personality
    - topographical model (=iceberg model):
        - conscious (what we are aware of),
        - preconscious (ordinary memory),
        - unconscious (not directly accessible to awareness- urges, feelings and ideas that are tied to anxiety, conflict and pain - they influence our actions and our conscious awareness)
          + dreams are royal way to unconscious
    - structural model:
        - ID (instincts, desires)
        - Ego (mediates between desires, morals, and external world)
        - Superego (morals, values, social norms)
            ➔ in healthy personality, these are balanced
    - anxiety: Ego is threatened by ID or Superego impulses (anxiety can be realistic, moral, neurotic, traumatic)
    - defence mechanisms: Ego is defending itself from anxiety (unconscious); examples: repression, denial, projection, displacement, regression, sublimation, etc.

e. Behaviourism – or learning theories, social learning perspective
    - Watson, 1920: patterns of behaviour are shaped by experience (Stimulus – Organism – Response)
    - classical conditioning (pairing stimuli), habituation (getting used to a stimuli), generalization (according to one or a few examples, a more universal behaviour develop), discrimination (differentiation between similar stimuli)
    - Bandura: Social learning theory (learning by observing others, Bobo doll experiment)

f. Cognitive theories (e.g. Beck)
    - schemas (information organised into patterns, about the world and about us), dysfunctional attitudes, negative automatic thoughts, cognitive distortions (9 types)

All-or-nothing thinking	Also called black-and-white, polarized, or dichotomous thinking. You view a situation in only two categories instead of on a continuum.	Example: "If I'm not a total success, I'm a failure."
Catastrophizing (fortune-telling)	Also called fortune-telling. You predict the future negatively without considering other, more likely outcomes.	Example: "I'll be so upset, I won't be able to function at all."
Disqualifying or discounting the positive	You unreasonably tell yourself that positive experiences, deeds, or qualities do not count.	Example: "I did that project well, but that doesn't mean I'm competent; I just got lucky."

Emotional reasoning	You think something must be true because you "feel" (actually, believe) it so strongly, ignoring or discounting evidence to the contrary.	Example: "I know I do a lot of things okay at work, but I still feel like I'm a failure."
Labeling	You put a fixed, global label on yourself or others without considering that the evidence might more reasonably lead to a less extreme conclusion.	Examples: "I'm a loser"; "He's no good."
Magnification/ minimization	When you evaluate yourself, another person, or a situation, you unreasonably magnify the negative and/or minimize the positive.	Example: "Getting a mediocre evaluation proves how inadequate I am. Getting high marks doesn't mean I'm smart."
Mental filter	Also called selective abstraction. You pay undue attention to one negative detail instead of seeing the whole picture.	Example: "Because I got one low rating on my evaluation [which also contained several high ratings], it means I'm doing a lousy job."
Mind reading	You believe you know what others are thinking, failing to consider other, more likely possibilities.	Example: "He's thinking that I don't know the first thing about this project."
Overgeneralization	You make a sweeping negative conclusion that goes far beyond the current situation.	Example: "Because I felt uncomfortable at the meeting, I don't have what it takes to make friends."

- cognitive restructuring: evaluate & modify thoughts

g. Humanistic approach (e.g. Rogers, Maslow)
   - emphasis: personal worth and growth of the individual with human values
   - self-actualization (all people have a constant tendency toward growth) – there is a gap between ideal self and actual self, self-actualization helps to become our ideal self (=being congruent)
   - therapist should have self-congruence (~harmony in personality) + empathy + acceptance
   - Maslow: hierarchy/pyramid of needs

h. Evolutionary, etc.

3. Personality assessment:

- Observation
- Physiological examinations
- Experiments
- Interviews
  - can be structured, semi-structured, unstructured
  - can be admission, first interview, anamnestic, hetero-anamnestic, etc.
  - Argerlander's first interview (unstructured), 3 types of information:

        - Objective information: data, biographical details, etc.
        - Subjective: meaning attached by the patient
        - Scenic / situational: what the patient does during the examination
        - techniques can be: mirroring, reflecting emotions (with questions), summarizing, reframing (meaning or situation), repeat, highlighting thoughts / emotions, questions to clarify the meaning, or for exploration, concretizing, paraphrasing, asking for examples
    - Tests
        - standardized instrument designed to reveal aspects of an individual's character or psychological makeup
        - types of psychological tests:
            - personality tests (questionnaires like MMPI or projective methods like Rorschach)
            - achievement or IQ tests (e.g. WAIS, MAWI)
            - tests for symptom assessment (e.g. BDI, BAI, STAI, etc.)

TOPIC 3: HUMAN SEXUALITY

1. Basics

- patients and professionals often find it difficult to talk about sexual problems
    - anamnesis: name, contact info, marital status, occupation (of the couple), description of the problem, therapies so far, motivation, erection/masturbation, background question about sexuality, medical anamnesis, other questions (sexual orientation, extramarital relationships)
    - useful tips to talk about sexuality:
        - use the 'communication funnel principle': start with broader topics and gradually ask more specific questions
        - ask permission: “Could I ask a few questions regarding sexuality?” / “Could we talk about how sexual intercourse happen between you and your partner?”
        - after the patient gives permission, ask questions that are brief, direct and easy to understand
        - use neutral language
        - be neutral and professional, don’t judge
        - PLISSIT model can be used:
            - permission,
            - limited information (gather psychiatric, medial, social history to help assess sexual dysfunction),
            - specific suggestions (define what kind of sexual disorder is present and what factors contribute to it),
            - intensive therapy (referral to the right professional)
- chronic diseases can have an impact on sexual life (e.g. arthritis, diabetes, cancer, obesity, hypertension, renal diseases, multiple sclerosis, benign prostatic hyperplasia, degenerative disc disease, etc.)
- sexuality with chronic diseases/disabilities is possible
- difference between paraphilias and paraphilic disorders: paraphilias are not harmful to others, but paraphilic disorders are (in paraphilic disorders, people hurt others to get pleasure)

2. Sexual dysfunctions (DSM 5)

category of dysfunction	*diagnosed in woman*	*diagnosed in men*
sexual interest, desire or arousal	➢ Female interest /arousal disorder (*absent/reduced interest/arousal related to sexual activities, thoughts, encounters, cues, etc.)*	➢ Male hypoactive sexual desire disorder (*persistent deficient or absent sexual thoughts, fantasies or desires, lasting more than 6 months*)
intercourse	➢ Genito pelvic pain / penetration disorder (*ddifficulties with a vaginal penetration during intercourse: pain during intercourse, fear or anxiety about pain or penetration, contraction of pelvic floor muscles during sex, lasting more than 6 months)*	➢ Erectile disorder* *(failure to obtain or maintain erection during partnered sexual activities)*
orgasm	➢ Female orgasmic disorder *(delay, infrequency or absence of orgasm or reduced intensity of orgasm sensations, lasting more than 6 months)*	➢ Premature (early) ejaculation disorder *(persistent or recurrent pattern of ejaculation during partnered sexual activity within 1 minute following penetration or before individual wishes it, lasting more than 6 months)* ➢ Delayed ejaculation disorder* (*a marked difficulty or inability to achieve desired ejaculation during partnered sexual activities, lasting more than 6 months)*

**more common in men over 50*

- possible causes:
  - organic illnesses (genital infection, peripheric neuropathy, arteriosclerosis, diabetes, hormonal disorders, etc.)
  - mental illnesses (depression, anxiety disorders, psychosomatic disorders, psychosis, posttraumatic stress disorder, etc.)
  - side effect of medication (antidepressants, anti-hypertensive medication, hormonal medications, diuretics, etc.)
  - relationship problems (communication issues, alienation, etc.)
  - other psychological problems (performance anxiety, inadequate expectations about your own or others' performance, guilt, past negative experiences, negative self-image, etc.)
- possible low intensity psychological interventions:

- education and supporting open communication (*many people who suffer from sexual dysfunctions have inadequate knowledge about sexuality, so we should first clarify some topics, preferably with both partners present*)
  - sexual needs and preferences (which can vary between individuals and change over time).
  - personal differences in sexual activity based on the time of day.
  - the importance of open communication and willingness to compromise.
  - how men and women view the significance of orgasm differently.
  - differences between everyday sexuality and the sexuality portrayed in the media.
  - natural changes that come with age.
  - importance of learning: emphasizing the open observation of experiences
- circular questioning
- sensual focus exercise
- recommending Kegel exercise (can strengthen the pelvic floor muscles, which support the bladder and bowel and affect sexual function)
- couple therapy

3. Paraphilias (DSM 5)

- Exhibitionistic disorder ("Flashing" genitals is leading to sexual arousal)
- Voyeuristic disorder ("Peeping Tom", secretly watching others during sexual intercourse is leading to sexual arousal)
- Fetishist disorder (fetish object, e.g. shoes)
- Transvestic disorder (dressing up in clothes of opposite gender leading to sexual arousal)
- Frotteuristic disorder (rubbing genitals to others e.g. on public transport is leading to sexual arousal)
- Pedophilic disorder
- Sexual masochism disorder
- Sexual sadism disorder

TOPIC 4: DEPRESSION

1. Depressive disorders in DSM 5 (depressed/low mood phases only)

- Disruptive Mood Disregulation Disorder
- <u>Major Depressive Disorder*</u>
  - single
  - recurrent
- Persistent depressive Disorder (dysthimia)
- Premenstrual Dysphoric Disorder
- Depressive Disorder due to another Medical Condition
- Other Specified Depressive Disorder
- Unspecified Depressive Disorder

a.) Unipolar depression = Major depressive disorder)

- prevalence: 5%, women:men 2:1
- underdiagnosed: low awareness in medical practice

- comorbid disorders can be: substance abuse, medical illness, other psychiatric disorder, abnormal grief
- causes: psychosocial and biological aspects are influencing each other

	Psychosocial aspects	Neurobiological aspects
Vulnerability	e.g. negative life experience, personality	e.g. genetical factors
Triggers	e.g. acute psychosocial burden, stress	e.g. hyperactivity of the axis of stress hormones
Depressive condition	depressive symptoms (experience and conduct)	e.g. neurochemical dysfunctions, hyperactivity of the axis of stress hormones
Therapy	psychotherapy	pharmacotherapy

- Symptoms: *five or more of the following symptoms should be present, at least one of which is either depressed mood/loss of interest or pleasure, for at least 2 weeks*
    - Affective: sadness/depressed mood, loss of interest in activities that were enjoyed before
    - Cognitive: thinking that oneself is worthless/low self-esteem/excess guilty, thoughts about death/suicide, poor memory and concentration
    - Behavioural: social withdrawal (don't want to mix with/see other people), psychomotor changes (e.g. moving slowly)
    - Physical functioning: changes in appetite (both over & under eating can happen), sleep disturbances (both difficulty falling asleep or problems getting out of bed), low energy levels/fatigue, psychomotor agitation/retardation

  \+ symptoms must be distressing and stop the person from functioning normally
  \+ symptoms are not because of other mental/somatic illness or substance abuse

- vicious circle of depression:

The vicious circle of depression

Our thoughts, feelings, bodily responses, and behaviours are all connected. How we behave affects what we think, how we feel emotionally and our bodily responses. What we think affects how we feel, behave and our bodily responses.

It is almost impossible to automatically change our feelings and bodily responses but if we can change the way we think and the way we behave this can alter how we feel.

2. Bipolar and related disorders in DSM 5 (depressed/low mood phases and manic/hypomanic phases also)

- Bipolar I Disorder (mania** and depression)
- Bipolar II Disorder (hypomania and depression)
- Cyclothymic Disorder (hypomania and mild depression)
- Substance/Medication-Induced Bipolar and Related Disorder
- Bipolar and Related Disorder Due to Another Medical Condition
- Other Specified Bipolar and Related Disorder
- Unspecified Bipolar and Related Disorder

a.) Manic episode**

- prevalence of bipolar disorder: 1%, women:men 1:1
- symptoms of mania: five or more of the following symptoms should be present, at least one of which is either elevated/irritable mood, for at least 1 week
    - Affective: elevated/irritable mood
    - Cognitive: Inflated self-esteem (e.g. belief that one has special talents, powers and abilities); distractibility (attention easily diverted); Flight of ideas/subjective impression
      that thoughts are racing
    - Behavioural: Unusual talkativeness, rapid speech; Increase in activity level: at work, socially or sexually or agitation; Excessive involvement in activities that have a high potential for painful consequences (e.g.: buying sprees, foolish businesses)
    - Physiological: Less than usual amount of sleep needed

+ The symptoms must be distressing and stop the person from functioning normally
+ Not because of other mental/somatic illness or substance abuse

3. Treatment

- Pharmacotherapy (antidepressants and mood stabilizers)
- Psychotherapy (Cognitive behavioural therapy and Interpersonal Therapy with best evidence base)

    - Seligman: learned helplessness (main point: people suffering from depression because they learnt that they are not in control of their lives)
    - Aaron Beck: cognitive triad (negative view about the world, the future, oneself), cognitive distortions (10 types)
    - Albert Ellis: ABC model (underlying irrational beliefs, A (action) is affected by B (beliefs) resulting in C (consequence)
    - low intensity psychological interventions based on these approaches:
        - behaviour activation
        - focusing on positive experiences
        - regular exercises
        - successive problem solving methods
        - identification of negative automatic thoughts + restructuring with „standard questions
- Additional treatment options (if needed)
    - light therapy (seasonal affective disorders)
    - sleep deprivation
    - ECT (electroconvulsive therapy in cases of treatment resistant depression)
- Background causes, triggers, conditions – help us defining the treatment)

TOPIC 5: ANXIETY

1. Basics

- fear vs anxiety: fear is momentary reaction to a perceived threat vs anxiety is a more general fear occurring without a specific and immediate threat
- Pros of anxiety:
    - facilitates coping with adverse or unexpected situations
    - At the optimal level, it enhances achievement (Yerkes-Dodson law: performance improves up to a threshold, and then falls off)
- Anxiety is a problem, when:
    - it occurs in the absence of identifiable danger or out of proportion to the actual danger
    - chronic, irrational and interferes with normal life
    - causes avoidant behaviour, incessant worry and difficulties in concentration and memory
    - specific manifestations of this are called anxiety disorders
- risk factors: biological (genetics, changes in brain biochem. etc.) and psychological (poor coping, impulsivity, etc.)
- prevalence: 6-10% approx.

2. Anxiety disorders in DSM 5

- Selective mutism: failure to speak in certain social situations, not because lack of language skills)
- Separation anxiety: separated from attachment figure, to an extent that is inappropriate for the person's stage of development; starts in childhood, extend to adulthood
- Specific phobia: fear or anxiety about, or avoiding particular objects or situations
    - evolutionary origin sometimes, but mostly learnt

    - good treatment option: exposure therapy (CBT method, teaching patients relaxation techniques + exposure gradually; e.g. snake phobia: pictures, videos, imagination, real life snake)
- Social anxiety: causes avoidance of social situations, not because of fear of being humiliated/rejected
- Panic disorder: recurrent panic attacks, persistent concern about future panic attacks + significant maladaptive change in behaviour
    - symptoms of a panic attack (at least four):
        - palpitations, pounding heart, or accelerated heart rate
        - sweating
        - trembling or shaking
        - sensations of shortness of breath or smothering
        - feeling of choking
        - chest pain or discomfort
        - nausea or abdominal distress
        - feeling dizzy, unsteady, lightheaded, or faint
        - chills or heat sensations
        - paresthesias (numbness or tingling sensations)
        - derealization (feelings of unreality) or depersonalization (being detached from oneself)
        - fear of losing control or going crazy
        - fear of dying
    - panic thinking: catastrophization, enhanced self-observation, attaching importance to insignificant symptoms
    - treatment: CBT (realistic meaning of symptoms=beating catastrophization + overcome avoidance), antidepressants, self-help
- Agoraphobia: anxiety in certain public spaces, e.g. public transport, open spaces, etc. + avoidance
    - treatment: very similar as for panic disorder
- Generalized anxiety disorder: excessive and persistent worry, mostly about everyday things, disrupting normal functioning and causing physical symptoms
    - for diagnosis, at least three of these: restlessness or feeling keyed up or on edge
        - being easily fatigued
        - difficulty concentrating or mind going blank
        - irritability
        - muscle tension
        - sleep disturbance (difficulty falling or staying asleep, or restless unsatisfying sleep)
    - treatment:
        - relaxation
        - psychotherapy
        - drug treatment
        - long-term support
- Substance/medication induced anxiety disorder
- Anxiety disorder due to another medical condition (certain endocrine, cardiovascular, respiratory, metabolic, B12 df, neurological illnesses)

3. OCD – obsessive compulsive disorder (no longer classified as anxiety disorder in DSM-5)

- Obsessions: recurring intrusive thoughts that cause anxiety (can be repeated doubts e.g. worrying about whether one has done something – locked the door, turned off the TV; worries about becoming dirty or contaminated; fears that one may injure someone; fear of blasphemous, inappropriate thoughts; magical thinking e.g. terrible consequences of stepping on a crack)
- Compulsions: repetitive behaviours or rituals to neutralise the anxiety caused by obsessive thoughts (cleaning, checking, repeating, slowness, being excessively careful and methodical, hoarding)
- Therapy:
    - cognitive behavioural therapy
        - exposure and response prevention
        - deliberate exposure to the source of the obsession, while avoiding the compulsive behaviour
        - finding more effective responses to obsessive thoughts other than the usual compulsive behaviour
    - family therapy
    - group therapy
    - drug treatment
    - in most severe cases, psycho-surgery

4. Post-traumatic stress disorder

- Re-experiencing a traumatic event that threatens the person's safety or makes him feel helpless
- Symptoms (for more than one month and are not due to a substance or other medical condition):
    - persistent re-experiencing of event (intrusive memories, flashbacks, nightmares, intense distress and physical reactions when reminded of event)
    - avoidance and numbing (avoiding event-associated places, thoughts, feelings, people; feeling detached and emotionally empty)
    - negative alterations in cognitions (not remembering important aspects of event; distorted ideas about the cause or consequences of the event)
    - alterations in arousal and reactivity – irritability, self-destructive behaviour
- Treatment:
    - trauma-focused cognitive behavioural therapy (gradual exposure to thoughts, feelings and situations that remind the person of the trauma; correcting distorted and irrational thoughts)
    - family therapy
    - medication (only to relieve secondary depression or anxiety)

TOPIC 6: EATING DISORDERS

1. Basics

- importance: high prevalence, high mortality (especially in anorexia), high comorbidity (both somatic and mental illnesses
- onset: anorexia at age 12-18, bulimia at age 17-25
- males:females – 1:9
- 9 truth about eating disorders:
  1. Many people with eating disorders can look healthy, yet may be extremely ill.
  2. Families are not to blame, and can be the patients' and providers' best allies in treatment.
  3. An eating disorder diagnosis is a health crisis that disrupts personal and family functioning
  4. Eating disorders are not choices, but serious biologically influenced illnesses
  5. Eating disorders affect people of all genders, ages, races, ethnicities, body shapes and weights, sexual orientations, and socioeconomic status
  6. Eating disorders carry an increased risk for both suicide and medical complications
  7. Genes and environment both play important role in the development of eating disorders
  8. Genes alone do not predict who will develop eating disorders.
  9. Full recovery from an eating disorder is possible. Early detection and intervention are important

2. Diagnoses of eating disorders according to DSM 5

a.) Anorexia nervosa

- symptoms
  - significantly low body weight, BMI<18,5
  - fear of gaining weight or becoming fat, even though underweight
  - body image disorder
- subtypes (we should specify)
  - restricting type: no binge-eating or purging behaviour (i.e., self-induced vomiting or the misuse of laxatives, diuretics, or enemas)
  - binge-eating/purging type: regularly engaged in binge-eating or purging behaviour
- health complications
  - amenorrhea (not a diagnostic criteria any more)
    abnormally slow and/or irregular heartbeat (if under 45/minute, hospital)
  - low blood pressure (if systolic under 85, hospital)
  - anaemia
  - poor circulation in hands and feet (if body temperature under 35.5 hospital)
  - muscle loss and weakness – fatigue
  - dehydration/kidney failure - send them for lab test
  - memory loss/disorientation
  - chronic constipation, symptoms that resemble IBS
  - dry skin, lanugo hair
  - bone density loss/Osteoporosis
- SCOFF questionnaire can be useful for measure the symptoms

b.) Bulimia nervosa

- Symptoms:
  - recurrent episodes of binge eating:

        - eating, in a discrete period of time, an amount of food that is definitely larger than most people would eat during a similar period of time and under similar circumstances
        - a sense of lack of control over eating during the episode
    - recurrent inappropriate compensatory behaviour in order to prevent weight gain
    - the binge eating and inappropriate compensatory behaviours both occur, on average, at least once a week for 3 months
    - body image disorder
    - the disturbance does not occur exclusively during episodes of anorexia nervosa
- former types of bulimia (from DSM 4)
    - purging type: self-induced vomiting or the misuse of laxatives, diuretics, or enemas
    - nonpurging type: the person has used other inappropriate compensatory behaviours, such as fasting or excessive exercise
    - multiimpulsive forms: bulimia + drog abuse, alcoholism, suicide, self-harm behaviour, promiscuity
- health complications
    - anaemia
    - irregular heartbeat
    - constipation / diarrhea
    - irregular period
    - depression
    - swelling cheeks
    - cavities
    - irritated throat
    - stomach ulcers or ruptures
    - abrasion on skin (Russell's sign)

c.) binge eating disorder

- 3,5% of women, 2% of men (most common ED in USA)
- symptoms
    - recurring episodes of eating significantly more food in a short period of time than most people would eat under similar circumstances
    - lacking control
    - no compensatory behaviour
    - causing distress
    - at least once a week over three months

c.) orthorexia

- obsession of healthy or righteous eating (may come from a number of sources such as family habits, society trends, economic problems, recent illness etc.) - the individual fixates on the "right" foods, that can be safely eaten they will spend too much time and energy with thinking about food and eating (OCD spectrum)
- often eat their own food, because they do not trust in the proper preparation of others' dishes
- can morph into anorexia

d.) feeding or eating disorders not elsewhere classified

- disturbances in eating behaviour that do not necessarily fall into the specific category of anorexia, bulimia, or binge eating disorder
- the most common eating disorder diagnosis: 4.7%

- atypical anorexia nervosa, Bulimia nervosa of low frequency and/or limited duration, Binge-eating disorder (of low frequency and/or limited duration)

e.) purging disorder (recurrent purging behaviour with no binge eating)
f.) laxative abuse (what the name suggests, to control weight)
g.) night eating disorder (recurrent episodes of night eating, as manifested by eating after awakening from sleep or by excessive food consumption after the evening meal; there is awareness and recall of the eating)
h.) body dysmorphic disorder

- preoccupied with 1 or more perceived defects or flaws in physical appearance that are not observable by or appear slight to others
- repetitive behaviours (e.g. mirror checking, excessive grooming, skin picking, or reassurance seeking) or mental acts (e.g. comparing his or her appearance with that of others) in response to the appearance concerns
- the preoccupation causes clinically significant distress or impairment in social, occupational functioning
- the appearance preoccupation cannot be better explained by concerns with body fat or weight in an individual whose symptoms meet diagnostic criteria for an eating disorder

A central symptom in most of eating disorders: body dissatisfaction/body image distortion (false perception only of their own body, perception of others is not disturbed, strong wish to alter the body shape or size)

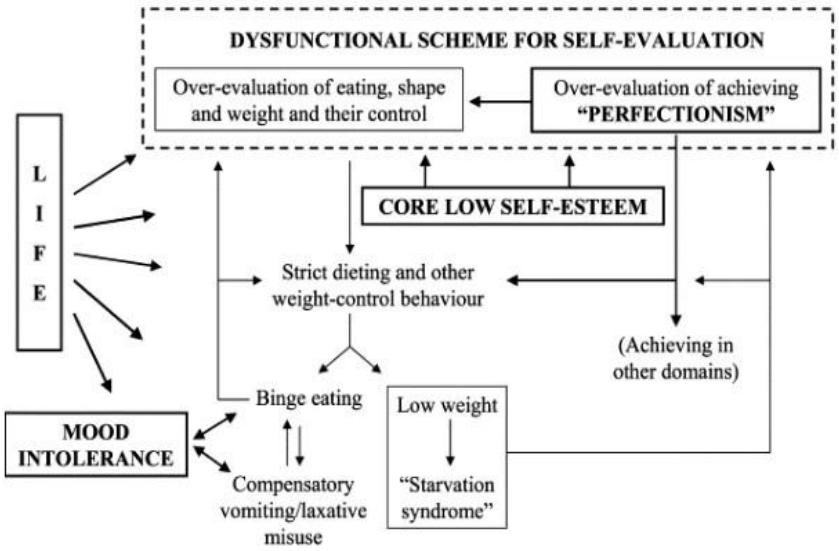
3. Etiopathogenesis of eating disorders

- Eating disorders are complex psychosomatic disorders: there are biological, psychological, and sociocultural components

+ Multidimensional models differentiate: predisposing, precipitating, and maintaining factors

	biological	*psychological*	*sociocultural*
predisposing	genetics, neurotransmitters, etc. , premorbid obesity	a.) individual risk factors: disorders of self perception, special personality characteristics, sexual or physical abuse b.) family risk factors: eating disorder / diet of family members, affective disorder or alcoholism in the family, special family relationships, magnification of cultural values	cultural norms, slimness ideal
precipitating		different stressors which cause dieting: life events	
maintaining	effects of malnutrition	cognitive and family reinforcements, lack of social skills, isolation, depression, change in the family structure etc.	cultural norms, slimness ideal

- transdiagnostic theory of the maintenance of eating disorders (infographic):



4. Treatment of eating disorders

- Pharmacotherapy
  - cannot be an exclusive treatment form - combination of pharmacotherapy and psychotherapy may be more effective
  - AN, BN: antidepressants (SSRIs) - drug dose may be higher as than depression (e.g. 60 mg fluoxetine)
  - short term abstinence rate in the pharmacotherapy of BN is about 30%, the symptom reduction is about 70%, but relapse rate is high (30-45%) + high drop-out rate
- Nutritive rehabilitation
  - secondary approach for stabilization: normalization of food intake, establishing healthier eating behaviours
  - components:
    - intake assessment (present and past dietary history, food records, dietary recalls, diet histories, food frequency questionnaires, biochemical indices + psychosocial data, sociological data, activity level)
    - dietary modification: may include supplemental nutrition, parenteral nutrition, and enteral nutrition)
    - patient education
    - aftercare: dietary guidance evaluated periodically to monitor effectiveness
- Psychotherapy options
  - Psychodynamic therapies
    - hidden, unconscious conflicts in the background e.g., fears from sexuality
    - sexual abuse in the history: about 25-30% of the patients (it is non-specific factor)
    - postponing of the adulthood (evolutionary theories)
  - Cognitive-behavioural therapies
    - researches proved the effectivity of CBT for EDs (particularly for BN and BED)
      - there are more types of CBT that can be applied, e.g. Dialectic Behaviour Therapy (DBT), rational emotive, multimodal, etc.
    - focuses on problematic thinking and behaviours that sustain ED symptoms
    - effective for comorbid disorders (e.g. addictions, mood disorders, personality disorders, anxiety) + educational components + meal plan
      - self-help recovery guidelines
      - food diary

            - normalization of daily meals
            - reducing dietary restraint
            - reducing over-evaluation of eating, shape and weight control
            - avoidance of body checking
            - modifying maladaptive thoughts related to eating
        - can help underlying psychological issues in EDs, e.g. anger issues, low self-esteem + in physical health problems linked to EDs, such as pain or fatigue
        - can be applied individually, in group settings, and can adapted for self-help
    - Interpersonal psychotherapy
    - Family therapy
        - researches proved the effectivity of family therapy for EDs
        - for teenagers it's the number 1 therapy method (especially for young patients with AN)
        - dysfunctional aspects of psychosomatic families (Minuchin, 1974) – families in which EDs are more frequent:
            - enmeshment
            - overprotection
            - rigidity
            - avoidance of conflicts
            - involvement of the child into parental conflicts
    - Group therapies
    - Body oriented therapy
    - Hypnotherapy
    - Integrative programmes (stepped care)
        - 1. step: generally self-help groups or psychoeducation
        - later: pharmacotherapy, outpatient group therapy
        - + outpatient psychotherapy, family therapy, intensive inpatient therapy
    - Psychoeducation and self-help
- treatment outcome
    - high mortality in an: about 8% after 10 years, 20% after 20 years

rough estimation at follow-up: 50% is symptom-free, 25% improves with remaining sypmtoms, 25% does not change

TOPIC 7: PSYCHOSOMATIC THEORIES AND DISORDERS

1. Basics

- definition of „psychosomatic": unity and interdependence of biological and psychosocial aspects of human existence
    - psychosomatic medicine: holistic, biopsychosocial approach in understanding and treating patients' individual symptomology
    - psychosomatic disorders: disorders that significantly incorporate psychological factors
- somatization: patient's tendency to experience and communicate psychological distress in form of somatic symptoms + to seek medical help for them
    - = the existence of physical/bodily complaints in the absence of a known medical condition
    - present in 25% of GP counselling
- two main fields in psychosomatics:
    - Behavioural medicine:
        - interdisciplinary science - integrates biomedical + behavioural knowledge + practice into prevention, diagnosis, rehabilitation
        - broad field of research, education, clinical practice - analyses the role of psychological regulation
        - biopsychosocial models of diseases, built on a circular causality of predisposing, precipitating, maintaining factors
    - Health psychology
        - psychology of promotion and maintenance of health, prevention, treatment of diseases
            - by highlighting psychological factors in health and diseases; and promoting adaptive behavioural patterns (conflict resolution, coping)
- 3 classic cluster of psychosomatic disorders
    - Conversions: motor or sensory symptoms (e.g. deficits, seizures), which cannot be explained by physical condition or psychoactive substance use
        - the psychological conflict is expressed in a somatic response, which has a symbolic meaning (e.g. Freud: case of Anna O.)
    - Functional disorders: complaints without organic alterations in their background, but the functioning of organs is altered, and is influenced by psychological factors, such as stress (e.g. IBS)
        - symptoms do not have a symbolic meaning, they are consequences of disturbed bodily functions
    - Psychosomatoses: organic alterations/tissue lesions and conflicting experiences can be detected behind their formation, onset and fluctuation of symptoms
        - psychosomatic disorders in their narrower sense

2. Related diagnoses – DSM 5

- category and central features of *somatic symptom and related disorders* (broader category than the one in ICD 10)*:*
    - conditions with no medical explanation;
    - conditions where there is some underlying pathology but an exaggerated response
    - instead of the earlier negative criterion, namely that the symptoms should be medically unexplained, a positive criterion appears:

        - distressing somatic symptoms, abnormal thoughts, feelings, and behaviours in response to these symptoms can be observed
        - they cause substantially more severe distress and impairment than expected.
        - the emphasis is on the interpretation or reaction to symptoms (APA, 2013).
- Somatic Symptom disorder
    - one or more somatic symptoms that are distressing or result in significant disruption of daily life
    - excessive thoughts, feelings, or behaviour related to the somatic symptoms or associated health concerns as manifested by at least one of the following:
        - disproportionate and persistent thoughts about the seriousness of one's symptoms
        - persistently high level of anxiety about health or symptoms
        - excessive time and energy devoted to these symptoms or health concerns
    - although a somatic symptom may not be continuously present, the state of being symptomatic is persistent (typically more than 6 months)
    - specify if:
        - with predominant pain (previously pain disorder): this specifier is for individuals whose somatic symptoms predominantly involve pain
        - persistent: a persistent course is characterized by severe symptoms, marked impairment, and long duration (more than 6 months)
        - mild: nly one of the symptoms specified in Criterion B is fulfilled
        - moderate: two or more of the symptoms specified in Criterion B are fulfilled
        - severe: two or more of the symptoms specified in Criterion B are fulfilled, plus there are multiple somatic complaints (or one very severe somatic symptom)
- Illness Anxiety Disorder (=hypochondria)
    - preoccupation with having or acquiring a serious illness
    - somatic symptoms are not present or if present, are only mild in intensity. If another medical condition is present or there is a risk for developing a medical, the preoccupation is clearly excessive or disproportionate
    - there is high level of anxiety about health, and the individual is easily alarmed about personal health status
    - the individual performs excessive health-related behaviours (e.g., repeatedly checks his or her body for signs of illness) or exhibits maladaptive avoidance (e.g, avoids doctor appointments and hospitals)
    - illness preoccupation has been present for at least 6 months, but the specific illness that is feared may change over that period
    - the illness-related preoccupation is not better explained by another mental disorder
    - two types:
        - care-seeking type: medical care, visits, tests, procedures are frequently used
        - care-avoidant type: medical care is rarely used
- Conversion Disorder (=Functional Neurological Symptom Disorder)
    - one or more symptoms of altered voluntary motor or sensory function
    - clinical findings provide evidence of incompatibility between the symptom and recognized neurological or medical conditions
    - the symptom or deficit is not better explained by another medical or mental disorder
    - the symptom or deficit causes clinically significant distress or impairment in social, occupational, or other important areas of functioning or warrants medical evaluation

    - can appear with or without a psychological stressor, it can be acute or chronic
- Psychological Factors Affecting Other Medical Conditions
    - a medical symptom or condition (other than a mental disorder) is present
    - psychological or behavioural factors adversely affect the medical condition in one of the following ways:
        - the factors have influenced the course of the medical condition as shown by a close temporal association between the psychological factors and the development or exacerbation of, or delayed recovery from, the medical condition.
        - the factors interfere with the treatment (e.g., poor adherence)
        - the factors constitute additional well-established health risks
        - the factors influence the underlying pathophysiology, precipitating or exacerbating symptoms or necessitating medical attention
    - the psychological and behavioural factors in Criterion B are not better explained by another mental disorder.
- Factitious Disorder
    - two types:

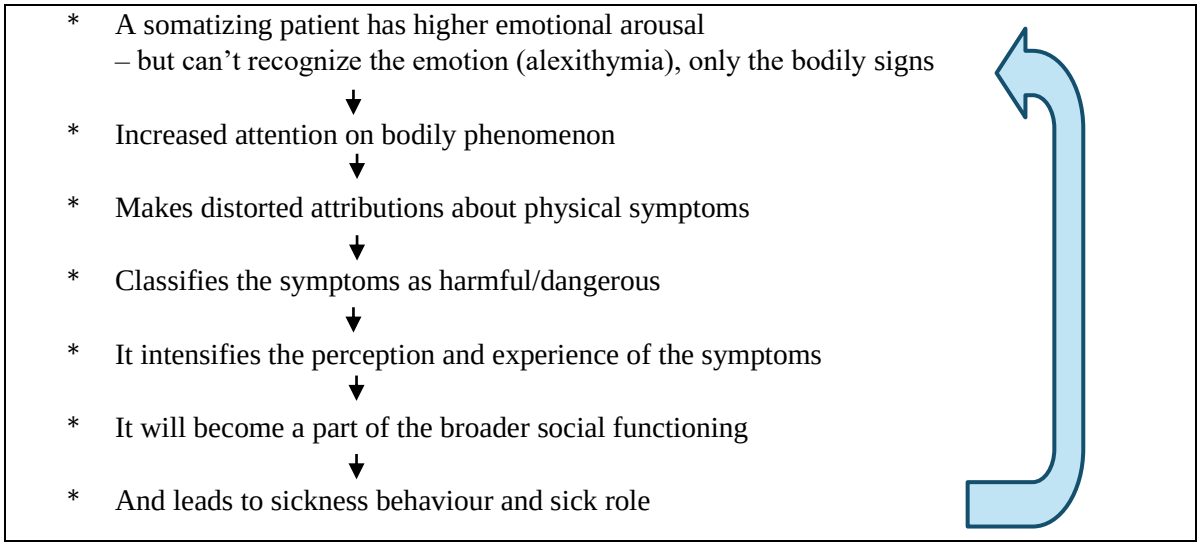
    1. Imposed on Self:
    - falsification of physical or psychological signs or symptoms, or induction of injury or disease, associated with identified deception
    - the individual presents himself or herself to others as ill, impaired, or injured
    - the deceptive behaviour is evident even in the absence of obvious external rewards
    - the behaviour is not better explained by another mental disorder, such as delusional disorder or another psychotic disorder
    - can be single episode or recurrent

    2. Imposed on Another (By proxy form)
    - falsification of physical or psychological signs or symptoms, or induction of injury or disease, in another, associated with identified deception
    - the individual presents another individual (victim) to others as ill, impaired, or injured
    - the deceptive behaviour is evident even in the absence of obvious external rewards
    - the behaviour is not better explained by another mental disorder, such as delusional disorder or another psychotic disorder
    - the perpetrator, not the victim, receives this diagnosis
    - can be single episode or recurrent
- Other Specified Somatic Symptom and Related Disorder
    - This category applies to cases in which symptoms cause clinically significant distress or impairment, but do not meet the full criteria for any of the disorders in the somatic symptom and related disorders, e.g.
        - Brief somatic symptom disorder: duration of symptoms is less than 6 months
        - Brief illness anxiety disorder: duration of symptoms is less than 6 months
        - Illness anxiety disorder without excessive health-related behaviours: criterion D for illness anxiety disorder is not met.
        - Pseudocyesis: a false belief of being pregnant that is associated with objective signs and reported symptoms of pregnancy

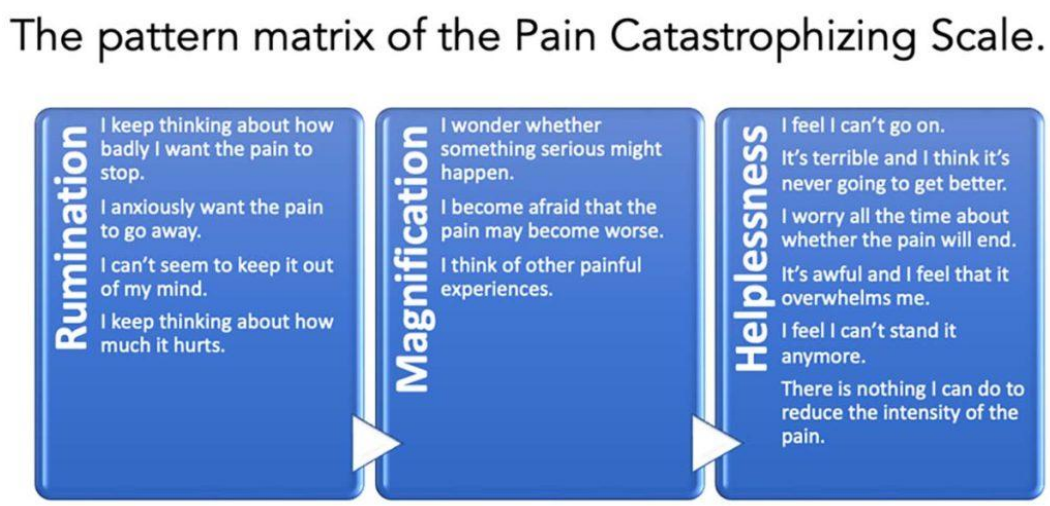
How to distinguish between subtypes of Somatic Symptom and Related Disorders?
Involuntary experience of symptoms: * *Physical symptoms? Somatic symptom disorder* * *Neurological symptoms? Conversion disorder* * *Preoccupation with symptoms? Illness anxiety disorder (hypochondria)* *Voluntary experience of symptoms:* * *Wants sick role? Factitious disorder* * *For someone else? Factitious disorder imposed on another* * *Wants secondary gain? Malingering (simulating symptoms)*

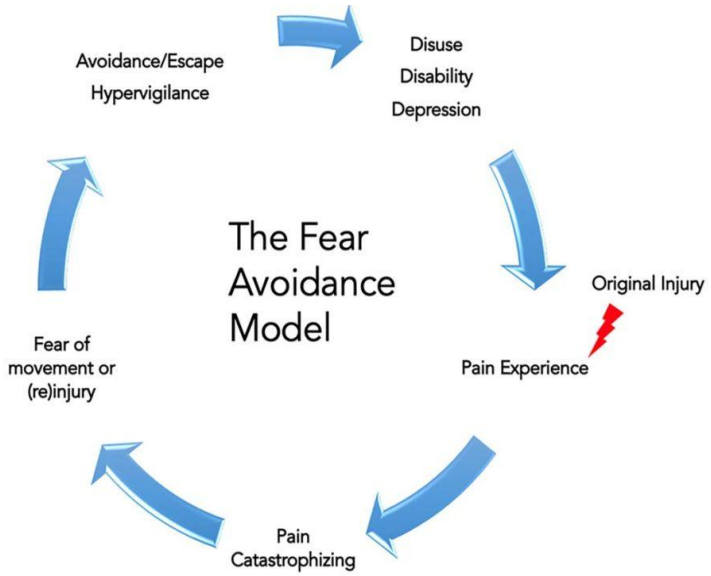
3. Theories on the causes of somatization

- interoception and catastrophization
  - these people have heightened sensitivity to internal physical sensations and pain
  - perception of our organs is called interoception (reminder from medical communication: sensitiser and repressor patients)
  - biological sensitivity to somatic feelings could predispose a person to developing somatization disorder
  - the person's body might develop increased sensitivity of nerves associated with pain and pain perception, as a result of chronic exposure to stressors
  - neuroimaging evidence
    - a recent review of the cognitive–affective neuroscience of somatization suggested that catastrophization in patients with somatization disorders tends to present a greater vulnerability to pain
    - the relevant brain regions include the dorsolateral prefrontal, insular, rostral anterior cingulate, premotor, and parietal cortices
- The vicious circle of somatisation (Kirmayer and Young, 1998)



Example:





- Mind the following psychosocial variables affecting the symptoms:
  - there may be a temporal relationship between life events and symptom onset or relapse;
    - the presence of grief reactions, including the loss of a body part or bodily function;
    - the perception by a person of an environment as exceeding his/her resources (i.e. allostatic load/overload).;
  - patients may deny a relationship between their allostatic load and symptomatology, since they are unaware of the latency between stress accumulation and symptom onset: *„I had bowel symptoms yesterday, which was an easy day at work, and not the previous days, which were awful"*;
  - interpersonal relationships providing a buffering role for stress, and psychological assets and well-being.

- Main approaches in psychosomatic medicine (*extra slides at the end*)
  - Psychophysiological approach:
    - physiological and emotional processes correlate with our behaviour (Pavlov: affects are conditioned with unconditional reflexes, e.g. guinea pig study: sound stimuli were conditioned with histamine and antigen intake -> asthma attack induced)
    - stress theory by Hans Selye:
      - physiological or biological stress is the organism's response to a threatening internal or external condition or stimulus - sympathetic nervous system's activation - body cannot keep this state for long time -parasympathetic system returns the body's physiological conditions to normal homeostasis
      - constant stress leads to exhaustion -> immune-suppression through cortisol hormone -> increase the possibility for physical diseases -> may serve as the central psychosomatic pathway
    - General adaptation syndrome (3 phases):
      - alarm
      - resistance
      - exhaustion
    - two components of diseases:
      - specific symptoms of a disease
      - non-specific, independent response to protect the organism
  - Psychodynamic theories
    - Freud's conversion model - psychic forces behind the somatic symptoms
      - psychological conflicts can be observed behind the aetiology, pathogenesis and cease of the disease - physical symptoms are the symbolic representation of the psychological conflict (=somatization)
      - lack of appropriate defence mechanisms can lead to the somatic conversion
      - hydraulic principle: unlaboured/unreleased psychic tension (e.g. anxiety, aggression) causes somatic symptoms
      - primary and secondary advances of the disease (can be subconscious)
    - The psychodynamic psychosomatic theory of Franz Alexander
      - every healthy and pathological human functions are psychosomatic
      - emotions implicate an activation pattern, expressed by the nervous system and the organ, that is innerved by the nervous system
      - specific emotions are accompanied by specific vegetative reactions
      - the unexpressed, repressed emotions cause chronic tension and increase the vegetative innervation
      - this leads to functional disturbances, which can cause organic and morphologic changes
      - „the holy seven psychosomatic diseases": peptic ulcer, bronchial asthma, rheumatoid arthritis, ulcerative colitis, essential hypertension, neurodermatitis, thyrotoxicosis
  - Psychosomatic personality concepts:
    - Type „A" behaviour:
      - three major symptoms: 1. free-floating hostility, which can be triggered by even minor incidents; 2. time urgency/impatience → causes

irritation; 3. strong competitive drive → stress and an achievement-driven mentality
        - ➢ relatively constant sympathetic over-activation → risk for cardiovascular disorders
    - Alexithymia = deficit of emotion identification and expression – can lead to bodily expression, instead of verbal expression of emotions
- System approach and attachment theories: the family-perspective of psychosomatic disorders
    - dysfunctions of psychosomatic families (Minuchin, 1974): enmeshment, overprotection, rigidity, avoidance of conflicts, involvement of the child into parental conflicts
    - communication: no sender or no receiver, sender speaks in someone else's name, indirect / obscure / hidden messages, double bind (underlying message is the opposite than the expressed message)
    - sensitivity and ambivalence
    - structural problems**:** no/too strict rules, boundaries and hierarchy
    - attachment problems:
        - ➢ causes disturbances in arousal and recovery within physiological systems that respond to stress
        - ➢ physiological links between the mediators of social relationships, stress, and immunity
        - ➢ influences health and sickness behaviour
        - ➢ influences psychological well-being + the „psychological immune system" (sense of control, coherence, resilience, optimism, positive self-image etc.)
- Sociopsychosomatics: The role of social circumstances and effects in the susceptibility to disease (e.g. SES and hierarchie, learned helplessness)

4. Treatment options

- integrative therapeutical approach needed - treatment for somatic symptom disorders shall combine different strategies for managing the patient's symptoms, including:
    - psychoeducation,
    - regularly scheduled outpatient visits,
    - psychosocial interventions (joint meetings with family members),
    - treatment of prominent comorbid symptoms of anxiety or depression, including their psychotherapy, or the use of antidepressants.
- therapy should be patient centred not illness centred: compliance is a basic component
- mind placebo and nocebo effects (*placebo: a psychological factor that can lead to a beneficial effect on health; nocebo, on the other hand, is the opposite: it describes a psychological factor that causes a harmful effect on health, for example, negative expectations about a treatment can reduce its effectiveness or decrease patient compliance*)
- Levels of intervention may range from reassurance and effective communication to the integration of specific psychotherapeutic and psychopharmacological treatments.
- Nonspecific therapeutic ingredients include:

Full availability of the therapist for specific times	Attention
Opportunity for the patient to ventilate thoughts and feelings	Disclosure
An emotionally charged, confiding relationship with a helping person	High arousal
A plausible explanation of the symptoms	Interpretation
The active participation of patient and therapist in a ritual or procedure that is believed by both to be the means of restoring patient health	Rituals

How would you explore your patient's somatizing symptoms?

- *What are your exact symptoms?*
- *What reduces/increases them?*
- *Under what circumstances does it occur the most often?*
- *What do you do to reduce the symptom?*
- *What do you do if they persist?*
- *What is a typical day like?*
- *Are there exceptions, exceptional days, and if yes, what happens then?*
- *When did the symptoms first appear?*
- *Why do you think the problem occurred?*
- *Why did you just turn to a specialist?*
- *What +/- consequences does the condition have?*
- *How does it affect your work?*
- *How does the environment react to the symptoms, how does it affect your relationships?*
- *Ask him to keep a log of his symptoms.*

- Basics of patient education:
    - from the first moment of the examination, we inform the patient that although we will examine him/her very carefully, because it is important to close out dangerous causes, it is not at all certain that we will find an organic change, and that is something to be happy about
    - this is because complaints can be caused by a number of less specific things, most commonly stress.
    - we shall avoid referring to a "psychic" background, as this causes resistance from many patient - a stress-related complaint (as an interpretation) is more accepted
    - factors increasing pain perception and sensitivity to the symptoms:
        - increased self-monitoring and searching for symptoms
        - overestimation of symptoms (assuming that they are dangerous)
        - the time spent dealing with the symptoms (e.g. surfing the Internet about the symptoms)
        - increased passivity in other areas of life (work, private life, hobbies, entertainment, sports).
        - an increase in symptom-related anxiety and catastrophizing
- Cognitive behaviour therapy:
    - identifying the processes by which behaviour has been learned via association, reward or observation
    - modifying behaviour using methods such as systematic desensitization, selective reinforcement and positive modelling
    - incorrect symptom attributions (over- or under-playing their significance) giving rise to suboptimal medication use
    - identification and constructive management of damaging thoughts
    - perceptions of helplessness or inappropriate fear of somatic symptoms that can trigger episodes
    - behavioural techniques to change negative thoughts mediating health behaviour
    - systematic relaxation techniques to extinguish fear responses associated with psychosocial triggers

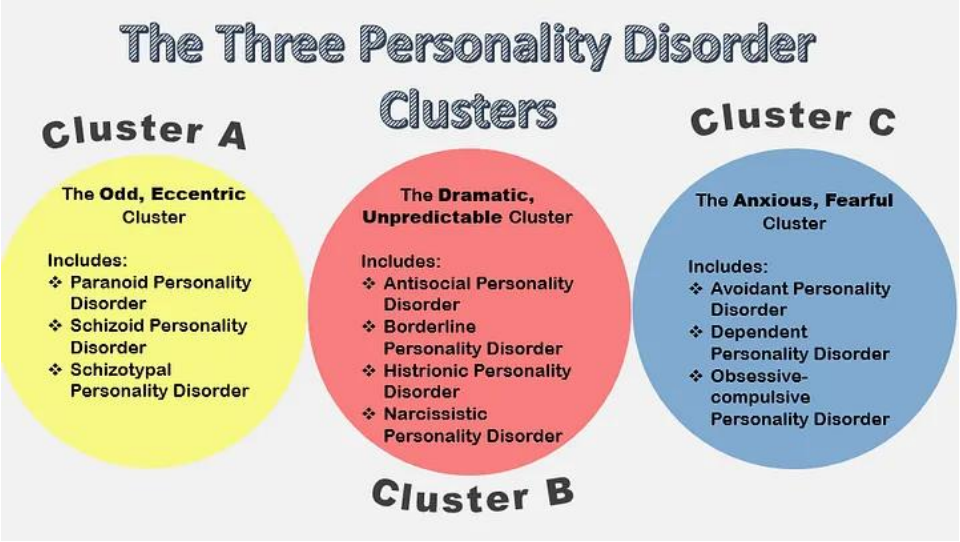
- Relaxation techniques
    - designed to control stress & anxiety - e.g. in asthma, may reduce panic or fear & improve breathing and respiratory function
    - approaches include
        - progressive relaxation (systematically creating tension and release in different parts of the body and/or via guided mental imagery);
        - autogenic training (focuses on attending to bodily feelings and mentally controlling them);
        - and biofeedback (feedback of biological indicators, such as tracheal noise, which the subject must control via relaxation
- Implications for clinical practice
    - macroanalysis in medical settings may provide the ground for incorporating psychosocial strategies in specific clinical situations:
        - the presence of psychological disturbances in psychiatric illness (e.g. major depression, panic disorder);
        - lifestyle modifications guided by physicians;
        - the presence of abnormal illness behaviour (from hypochondriasis to illness denial) interfering with treatment;
        - impaired quality of life and functioning not entirely justified by the medical condition
    - daily life, productivity, social roles, intellectual capacity, emotional stability, and well-being has emerged as a crucial part of clinical practice

TOPIC 8: PERSONALITY DISORDERS

1. Basics

- Personality = an enduring pattern of thinking (=ways of looking at self, others, the world), feeling, relating, behaving, across many situations
- personality traits/types are not the same as personality disorders!
- in personality disorders, personality is:
    - deviates markedly from the expectations of the culture (in cognition, affect, interpersonal functioning, impulse control)
    - are inflexible, maladaptive, and pervasive across many situations
    - cause serious problems, distress and impairment of functioning in personal, social, and/or occupational situations
    - stable of long duration/traced back to adolescence
    - not better accounted by another mental disorder, substance use, medical condition

2. Criteria of personality disorders



- paranoid personality disorder: pervasive distrust and suspiciousness of others
    - suspects exploitation or deception of others
    - jealous and envious
    - hypersensitive (reads hidden demeaning or threatening meanings into benign remarks or events)
    - rigidity
    - persistently bears grudges (i.e. unforgiving of insults, injuries, or slights)
- schizoid personality disorder: pattern of detachment from social relationships and a restricted range of expressions of emotions (cool, aloof, doesn't react)
    - neither desires nor enjoys close relationships (including being part of a family)
    - almost always chooses solitary activities
    - has little interest in sexual encounters
    - takes pleasure in few, if any activities
    - appears indifferent to praise or criticism of others
    - shows emotional coldness and detachment
- schizotypal personality disorder: demonstrates many symptoms related to those of schizophrenia but of less severe nature, eccentric/odd behaviour
    - tends to be a loner; excessive social anxiety

    - appearance is odd, eccentric, or peculiar
    - unusual pattern of talking that is vague and abstract
    - usually demonstrates "emotional poverty" (lack of emotions), but when emotions are shown, they often do not match content of a discussion and seem inappropriate for the circumstance (ex. laughs upon hearing serious information)
    - preoccupied by thoughts of a magical nature (superstitious, belief in clairvoyance, telepathy, or "sixth sense", bizarre fantasies)
- antisocial personality disorder: disregard for and violation of rights of others
    - unlawful behaviour despite potential for arrest
    - deceitfulness (repeated lying, use of aliases, conning others for personal profit or pleasure)
    - repeated physical fights or assaults
    - reckless disregard for safety of self or others
    - irresponsible
    - lack of remorse
    - criteria for diagnosis includes: evidence of this behaviour before 15 years of age
    - (abnormal amygdala and prefrontal cortex function)
- borderline personality disorder: demonstrates unpredictability of self-image in relationships and emotions
    - frantic efforts to avoid real or imagined abandonment
    - pattern of intense and unstable interpersonal relationships (idealization and devaluation)
    - persistently unstable self-image and sense of self
    - impulsivity that is potentially self-damaging (e.g. spending, sex, substance abuse, reckless driving, binge eating)
    - recurrent suicidal behaviour, gestures, threats, or self-mutilating behaviour
    - chronic feelings of emptiness
    - difficulty controlling anger, frequent displays of temper
- histrionic personality disorder: excessive but shallow emotions and attention seeking
    - always wants to be center of attention
    - inappropriate sexually seductive or provocative behaviour
    - rapidly shifting and shallow expression of emotions
    - uses physical appearance to draw attention to self
    - speech is dramatic and exaggerated with emotion
    - is easily influenced by others or circumstances
    - considers relationships to be more intimate than they actually are
- narcissistic personality disorder: attitude that the world exists to meet his/her needs, lack of empathy
    - sense of self-importance (e.g. exaggerates achievements and talents, expects to be recognized as superior)
    - preoccupied with fantasies of unlimited success, power, brilliance, beauty, or ideal love
    - believes he/she is "special"
    - requires excessive admiration
    - has sense of entitlement
    - takes advantage of others to achieve own ends (manipulation)
    - lacks empathy
    - often envious of others or believes that others are envious of him/her

    - arrogant, haughty behaviour or attitude
    - there are covert and grandiose type (in covert type, introversion, lack of empathy, passive-aggression, high sensitivity to criticism, manipulation of others are present)
- avoidant personality disorder: demonstrates pattern of social inhibition, feelings of inadequacy, and hypersensitivity to negative situations
    - avoids occupational and social activities that involve interpersonal contact (fears of criticism, disapproval, or rejection)
    - unwilling to get involved with people unless certain of being liked
    - shows restraint within intimate relationships because of fear of being ridiculed
    - inhibited in new interpersonal situations
    - views self as socially inept, personally unappealing, or inferior
    - reluctant to take personal risks or engage in new activities
- dependent personality disorder: excessive need to be taken care of that leads to submissive and clinging behaviour and fears of separation
    - difficulty making decisions without advice and reassurance
    - needs others to assume responsibility for most major areas of life
    - difficulty expressing disagreement with others (fear of loss of support or approval)
    - difficulty initiating projects or doing things on own
    - goes to excessive lengths to obtain nurturance and support (volunteers to do things that are unpleasant)
    - feels uncomfortable or helpless when alone
- obsessive-compulsive personality disorder: preoccupation with orderliness and perfectionism
    - preoccupied with details, rules, lists, order, organization, or schedules to extent that major point of activity is lost
    - shows perfectionism that interferes with task completion
    - excessively devoted to work to exclusion of leisure activities and friendships
    - reluctant to delegate tasks
    - over conscientious, scrupulous, inflexible about matters f morality, ethics, or values
    - unable to discard worn-out worthless objects
    - adopts miserly spending style
    - rigid and stubborn

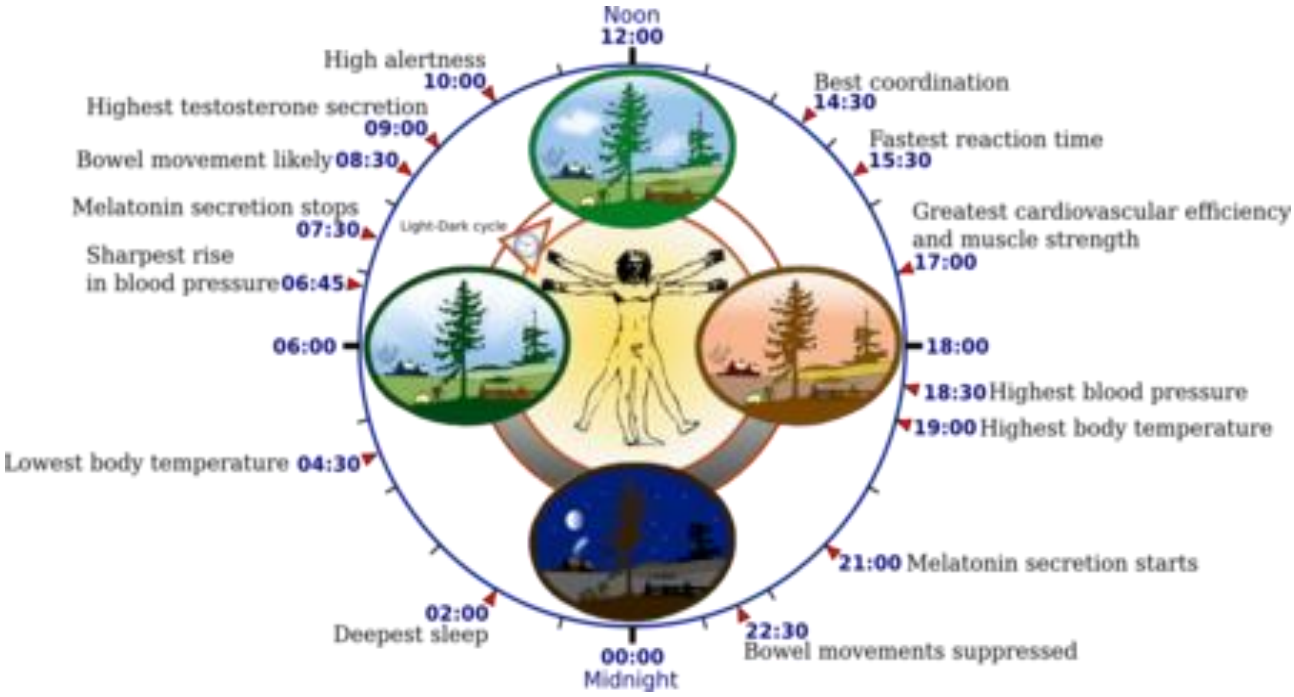
3. Risk factors and treatment options

- risk factors:
    - a history of childhood verbal, physical or sexual abuse
    - a family history of schizophrenia
    - a family history of personality disorders
    - a childhood head injury
    - an unstable family life
- treatment: combination of psychotherapy and medications
    - psychotherapy options:
        - Psychodynamic psychotherapy: can help recognize how they are responsible for the turmoil in their lives, learn healthier ways of reacting (can be individual, group and family therapy)
        - Cognitive behaviour therapy: involves actively retraining the way they think about problems, which in turn improves your emotions and behaviours
    - medications: antidepressants, anticonvulsants, antipsychotics, etc.

TOPIC 9: SLEEPING DISORDERS

1. Basics

- sleep = a particular state of consciousness:
  - very active biological process
  - consists of processes with widely differing functions and mechanisms
  - has restorative effects on all aspects of functioning
  - is essential to life
- the human biological clock:
  - sleep timing is controlled by the circadian clock, sleep-wake homeostasis, and in humans, within certain bounds, willed behavior
  - the circadian element causes the release of the hormone melatonin and a gradual decrease in core body temperature.
  - disturbed sleep is associated with many common diseases: type 2 diabetes, depression, coronary heart disease, hypertension, hormonal disorders, pain and most mental disorders (e.g. depression, anxiety, psychotic disorders).
  - the therapy of sleep disorder is advised, regardless of co-morbidity.



- Macrostructure of sleep:
  - circadian rhythm: regulated by internal and external mechanisms → light, habits such as exercise, social interacitons, eating schedule and getting up from bed is important.
  - circasemidian rhythm: a second sleepy-time in the afternoon (post-lunch dip)
  - ultradian-component: NREM/REM cycles, 1.5-2 hours
    - the ultradian rhythm doesn't stop when we are awake: Every 1.5-2 hours we tend to drift away, daydream, not concentrate
- Sleep cycles, sleep stages (based on EEG activity):

Stage	*EEG*	*Physiological response*
Alpha stage	alpha waves	feelings of being relaxed and drowsy

Non-REM 1 (1-7 min)	theta waves	transition from wakefulness to sleep: easy to wake
Non-REM 2	high-frequency bursts of activity known as "sleep spindles"	first stage of real sleep: muscle tension, heart rate and body temperature gradually decrease and the person becomes more difficult to wake
Non-REM 3 & 4 (starts after 30-40 min, last for 90 min)	delta rythm	stage 4 is the deepest heart rate, respiration, temperature and blood flow to the brain decrease, growth hormone is released, physical growth and brain development controlling levels of metabolism hard to wake
REM stage	Brain activity is very similar to that when you are awake	The main dreaming stage About 90% of people awakened report long, complex dreams (only 10% in case of non-REM sleep) Physiological responses increase, but movement is paralysed in neck and limbs (this prevents accidents during violent dreams)

NREM and REM occur in alternating cycles, each lasting approx. 90-100 minutes, with a total of 4-6 cycles

- the ontogenesis of sleep:
  - first 6 months:
    - 18 h sleep, 50% REM (adults: 20%)
    - sleep starts with REM!
  - Later: ↓REM, ↑Slow wave sleep (until 7-8 y. old), ↓Slow wave sleep (after this until death)

- functions of sleep stages

Non REM	*REM*
○ development ○ reconstruction ○ energy production (ATP) ○ immune regulation ○ memory consolidation	○ memory consolidation and learning ○ psychological wellbeing ○ emotional learning ○ motivation ○ coping with stress

	○ mood regulation

- sleep deprivation:
    - awake for more than 18 hours: impaired reaction speed, memory, decision-making capacity, cognitive speed, spatial orientation (1/5 of road accidents in USA caused by sleepy drivers)
    - sleep deficit (sleeping less than 8 hours for more days):
        - hormonal changes → increased appetite, blood sugar irregularities
        - after four or five days of 4 hours a night, a person is in a state equivalent to drunkenness, and one beer is equivalent to six
        - In those with restricted sleep, numerous genes, including some related to metabolism, became less active - the effects may be long lasting
- role of melatonin (sleep hormone):
    - light and dark affects the secretion (produced by the pineal gland, controlled by the suprachiasmatic nucleus)
        - even a short period of light at night can suppress melatonin secretion use red night light!
    - also an antioxidant and affects the immune system
        - strong cancer prevention effect
        - large proportion of breast and prostate cancer cannot be explained by usual risk factors, and these may be linked to decreased melatonin level
    - secretion is adversely affected by caffeine

2. Sleeping disorders

- Three main categories:
    1. <u>Dyssomnias</u> (can be intrinsic: internal cause, problems with sleep regulation e.g. narcolepsia, insomnia, hypersomnia, sleep apnoe, restless leg syndrome, periodic leg movement syndrome; and extrinsic: external causes (bad sleeping habits, bad environment, substance abuse), disorders of the circadian rhythm)
        - Primary psychophysiological insomnia
            - ➢ definition: inability to fall asleep or sleep through the night or waking up tired + the insufficient sleep is not (only) related to co-morbid disorders, but to lifestyle factors (irregularity, disrupted circadian rhythm, stress, lack of exercise, sleep-related worries)
            - ➢ clinical symptoms: increased activity before sleep, nervousness, anxiety, increased muscle tone + heart rate
            - ➢ reasons: „hyperarousal theory" – somatized internal tension, negative thoughts and associations -> emotions and thoughts lead to anxiety and physiological arousal
            - ➢ therapy: after excluding potential background factors and treating co-morbidities, the guidelines recommend mainly psychological methods (sleep related education) as the first treatment of choice, benzodiazepine medication (anxiolithic, sedative) is only recommended for maximum one month
            - ➢ causes can be psychiatric (e.g. depression, mood disorder, drug abuse, etc.), somatic (heart failure, reflux, hyperthyroidism, pain), psycho-

physiological (e.g. inappropriate lifestyle, lack of exercise, alcohol, caffeine, nicotine, jetlag, stress)

- psychological intervention techniques of insomnia:
  - Sleep education and sleep hygiene advices (sleep hygiene= sleep habits, how, when and where we sleep)
    - *the need for sleep is individual*
    - *the quality of sleep is more important than the quantity of sleep.*
    - *whether sleep is satisfactory must be judged on the basis of daytime symptoms.*
    - *falling asleep (and falling back asleep) is a process – a few nighttime awakenings are normal.*
    - *Zeitgebers: eating regularly, exercising and enjoying social time helps to set the biological rhythm.*
    - *taking a nap during the day reduces the chance of falling asleep in the evening (exception: siesta).*
    - *the role* of chronotype in lifestyle
    - *good sleep hygiene: cold, quiet and dar room, warm blanket, regular sleep patterns, no heavy meals before etc.*
    - *bad sleep hygiene: falling asleep on books or in front of the television, irregular sleeping patterns, noisy rooms etc.*
    - *adhering to the recommendations is extremely important for the long-term efficacy of treatment (at least two weeks)!*
    - *basic recommendations: strict daily routine (fixed times for waking up and going to bed); active exercise, but not less than 3-4 hours before going to bed; no heavy food before sleeping; cool room, warm blanket; relaxation exercises; bedroom should only be used for sleeping, relaxing and sex; avoid looking at the clock when awake at night*
  - Prevention of maladaptive compensatory behaviors – ask „What do you do (differently), if you are sleepy?" – maladaptive copings:
    - *passivity, avoiding social gatherings due to fatigue*
    - *lack of moving/exercise*
    - *looking for opportunities to sleep*
    - *irregular napping during the day, which confuses the biorhythm*
    - *going to bed too early (it is not yet time to fall asleep)*
    - *an increase in time spent in bed, more and more activities in bed (sleeping position in more and more other things)*
    - *overuse* of stimulants during the day
  - Sleep monitoring (diary)

- The method of constructive worries – *You have 10 minutes allotted for worrying in the same period each day + You shall make notes and think about your worries by thinking through the following questions:*
  - *What can I do to solve my concern tomorrow?*
  - *What can I do to resolve my concern within a week?*
  - *What can I do to resolve my concern within a month?*
  - *What external help can I involve in order to find a solution?*
  - *by regularly practicing constructive worrying (over a period of about a month), it is possible to ensure that worries are mostly activated only during this period*
- Sleep restriction
  - one of the most important methods in the treatment of insomnia complaints - temporarily shortening sleep time increase the homeostatic sleep drive, stabilize the circadian rhythm
  - basic rules:
    - *sleep time cannot be reduced to less than 4.5 hours,*
    - *during the sleep restriction, activities involving the risk of accidents cannot be performed (it is best to start on the weekend),*
    - *daytime insomnia symptoms should not be compensated,*
    - *go to bed 1.5–2 hours later than usual, with the same awakening time,*
    - *in the case of an 80% subjective improvement of sleep quality, bedtime can be brought forward by 30 minutes every day as long as daytime insomnia symptoms persist*
  - this reveals 1) exactly how many hours do you needs to sleep, 2) what is the optimal bedtime for you
- Behavioral experiments
  - *Pretend the next day that you don't have a sleep disorder and that you're not sleepless, so stop all copensatory behavior against your insomnia (e.g. rests, more coffee). Check, if your performance really was as bad as you thought, and if you can fall asleep more easily?*
  - *Go to bed, but try to stay awake and pay attention to your surroundings!*
  - *Avoid all sleep-promoting behaviors in the evening (using earplugs, going to bed early, controlling environmental factors, etc.), and check you sleep quality!*
- Decatastrophization worksheet
- Relaxation methods
  - reduce the level of alertness, help to focus attention inward and help in physical relaxation

        - their effectiveness is limited because they do not affect the factors that basically maintain sleep complaints: 1) not-sleep-friendly lifestyle, 2) sleep-related anxious thoughts and performance-centricity, 3) co-morbid disorders - however, they can be useful in combination with the other methods
        - Examples: Jacobson's progressive relaxation (systematically tense and relax muscles, repeat a few times); Breathing control – deep and slow breaths; Listening to music (quiet and soft); Mindfulness
    - + Relapse prevention
- Primary hypersomnias
    - Definition: daytime sleepiness, sleep attacks, somnolence (much more rare than insomnia)
    - Primary idiopathic hypersomnia: increased sleepiness for unknown reasons. Not because of a psychiatric problem (E.g. depression) or somatic problem (E.g. brain injury). Typically before 25 y. old.
    - Kleine-Levin syndrome: recurring episodes of hypersomnia. Accompanied by behavior change and hypersexuality. Typically before 20 y. old. Rare, cause is unknown, only lithium has a very mild therapeutic effect. Also called „sleeping beauty syndrome" because of the dramatic personality changes and young age of the subjects.
- Sleep apnoea
    - airways collapse during sleep, patients gasps for air and wakes up in the struggle
    - these short awakenings disturb sleep
    - daytime sleepiness, chronic diseases (respiratory, cardiac and cognitive) due to poor regeneration in sleep due to bad sleep quality.
    - OSAS is a typical corollary of metabolic syndrome.
    - a typical OSAS sufferer will be at least middle-aged, obese and in poor general health and fitness.
    - obstruction of the airways – partially because of excess weight – leads to frequent awakenings which disturb sleep.
    - treatment: operations, medication, life and nutritional counseling
- Narcolepsy
    - genetic disorder
    - REM disorder (hypnagogic hallucations, cataplexy)
        - in narcolepsy the control of REM episodes is poor so they reoccur during the day (=sleep attacks consist of REM sleep) -> patient may „drift off" or just fall asleep, even when walking or driving = somnolence and sleep attacks during the day
        - total loss of muscle tension results in falls and other dramatic manifestations.
    - superficial night sleep
    - 0,2-0,6 % of the population is affected
    - treatment: psychoeducation, stimulant medications (phenetylamines e.g. Ritalin)
- Restless legs syndrome:

        - when falling asleep, legs hurt and/or involuntarily move - causes poor sleep quality and insomnia;
        - treatment is with dopaminergic medication (L-dopa), similar to Parkinson's and other hypermotility diseases;
        - may be treated by long-term pharmacological therapies, including dopamine agonists
    - Periodic Limb Movements in Sleep (PLMS):
        - slow flexion of the limbs in short 1-1.5 min episodes, typically in shallow sleep
        - causes: stress, alcohol or benzidiazepine withdrawal. Treatment (L-dopa) is symptomatic
    - Circadian rhythm disorders
        - Jet lag (can be treated with light therapy or melatonine)
        - Shift work (irregularly shifting between two or three 12 or 8 hour shifts - is extremely dangerous: the increase in cancer indicence due to shift work is comparable to the effect of smoking! The effect is not because of the night shift, but because workers have to rotate shifts leading to a constantly changing sleep-wake cycle)
        - Delayed/advanced sleep phase syndrome (staying up too late, not being able to wake up - reasons: overstimulation [cell phones in bed, late night conversations], blue light from screens disrupts the circadian rhythm)
2. <u>Parasomnias – sleep abnormalities</u> (e.g. sleepwalking, nightmares – parasomnias occur when states of consciousness are poorly separated (they mix), which is frequently a frightening experience)
    - Sleepwalking: occurs in stage 3 or 4; sleepwalkers have poor coordination but can get through obstacles like doors; have no memory of the event; does not always require treatment
    - Sleep terrors: affects about 3-7% of young children: they wake up from deep sleep -stages 3 or 4- and scream in fright, but have no later memory of the experience; does not require treatment for children
    - Nightmares: experienced by about 25-70% of children aged 3-6 and 47% of college students; occur during REM sleep; can be treated by anxiety-reduction techniques
    - REM sleep behaviour disorder: mainly in older people; absence of muscle atonic during REM can mean that people "act out" their dreams; treated with medication
3. <u>Medical-psychiatric sleep disorders</u>
    - Associated with mental disorders, e.g. psychoses, mood disorders, anxiety disorders, alcoholism
    - Associated with neurological disorders, e.g. dementia, Parkinsonism
    - Associated with other medical disorders, e.g. asthma, acid reflux, peptic ulcers

TOPIC 10: ADDICTIONS - SUBSTANCE AND BEHAVIOURAL ADDICTIONS

1. Basics

- Concepts of addiction
  - Addiction = compulsive engagement in a rewarding behaviour (typically with adverse consequences)
    - biological reasons: inherited susceptibility of the brain, altered individual physiology, altered functioning of cerebral reward systems, increased incidence in certain families, genetic regulation
    - sociological factors: addictive behaviour in the family, addiction subculture, ambivalent relationship with social norms, underdeveloped social structure (poorly functioning families, schools, social institutions) cultural and historic traditions
  - Dependence (physical and psychological) = withdrawal symptoms if a substance/behaviour is removed
    - Criteria of dependence - at least three of the following, over the course of one year:
      - tolerance (increased dosage is needed for the same effect)
      - withdrawal symptoms
      - craving (inability to quit)
      - limited life goals (all activity is centered around getting the substance)
      - isolation (giving up goals, habits and relationships to engage more in substance use and/or drug subculture)
      - self-harm (continued use despite negative consequences)
    -
  - Tolerance = an increased quantity of the object of addiction is required for the same effect
  - Abuse = the addictive behaviour leads to significant damage over the course of one year in at least one of the following areas:
    - employment (reduced productivity or loss of the job, failure to appear to work)
    - physical health (adverse effects on health or repeated engagement in risky behaviour from which only luck saved the patient, e.g. being saved from a drug overdose)
    - conflict with the law (arrests, convictions or committing crimes)
    - social relationships (alienation from friends, harming relatives)

2. Specific substances, legal and illegal

- Some addictive substances
  - Legal: alcohol, nicotine, caffeine, prescription medications, organic solvents, designer drugs (legal because the law can't follow the ever changing molecules fast enough)
  - Illegal: opioids, cocaine, LSD, amphetamine, hash, marijuana PCP (phencyclidin)
- Addictive behaviours:
  - gambling
  - obsessive-compulsive disorders (OCD, OCPD)
  - eating disorders (anorexia nervosa, bulimia etc.)
  - impulse control disorders (cleptomania, pyromania)
  - paraphilias (sexual aberrations)
  - „workaholism" (obsession with work performance)
  - internet addiction

- Cannabis
    - very common: 20% European adults
    - effects: euphoric, socialiser, “laughmaker”
    - side effects: memory deficits, decline of social ambitions and other secondary damages to social life
    - low addictive potential but risk of criminalisation
- Synthetic drugs: stimulants and hallucinogenic drugs
    - amphetamine: pure stimulant; extreme motoric drive, awake, active, superficial mind
    - ecstasy: content varies, tablets, mostly MDMA (somewhat hallucinogenic)
    - recreational, party culture, relative safety
    - LSD: low prevalence
    - Other hallucinogenic drugs: magic (psyiocybin-containing) mushrooms, peyote cactuses, ayahuasca
    - In rare instances: plants (belladonna, datura) or medicine (Tylenol) containing tropane alkaloids (very unpleasant and dangerous)
    - risk of criminalization
- Cocaine
    - coca plant – South America
    - euphoric, stimulant, aggression increases, sexual effects
    - high addictive potential, particularly ‘crack’
- Opioids
    - poppy plant - alcaloid
    - morphine (medical drug), opium, heroine
    - strong physical and psychological dependency - massive withdrawal syndromes
    - solitary use or small groups, hidden
    - variety of somatic complications - medical involvement
    - criminalisation
    - rehabilitation centres
- Designer drugs
    - psychoactive substances (white powder) with a novel chemical composition - composition is designed/changed to avoid banning laws
    - increasingly common, „bath salts”
    - cheap and often legal
    - extreme effects, high toxicity, bad sideeffects
- Ethyl alcohol (simple, organic, often found in nature)
    - third highest mortality rate after cardiovascular disorders and cancer
    - C_2H_5OH (from $C_6H_{12}O_6$ and CO_2) – metabolism: CH_3-COH with alcohol- dehydrogenase (liver), then further
    - prime effect on GABA system
    - cultural attitudes to ethyl alcohol varies (prohibition, ambivalent, permissive Mediterranean type, permissive Eastern European type)
    - problematic use: frequent, excessive quantity but not dependent – background: impulse control disorder, social anxiety sometimes
    - alcohol related direct health problems: dependency, abuse, intoxication, alcohol related acquired brain deficiencies, alcohol induced and alcohol connected mental disorders, connection to other substance abuse and behavioural addictions, alcohol related somatic medical diseases
    - alcohol addiction: result of long term daily use - withdrawal syndrome: delirium tremens (dangerous)
    - criteria of withdrawal syndrome (after several hours or few days without alcohol in case of alcohol dependent individuals):
        - autonomic hyperactivity (e.g. sweating, high pulse)

        - hand tremor
        - insomnia
        - nausea or vomiting
        - hallucinations or illusions
        - psychomotor agitation
        - anxiety
        - generalized clonic-tonic seizures
    - alcohol intoxication: emergency services - seriously drunk state: about 0.3-0.4 % blood alcohol, respiratoric paralysis between 0.4-0.8% b. a.
    - alcohol related acquired brain deficiencies: brain damage, Korsakoff's syndrome, Wernicke's encephalopathy, dementia
    - alcohol induced and alcohol connected mental disorders: mood disorders, anxiety disorders, sleep disorders, psychotic disorders
    - alcohol related somatic diseases: cirrhosis, fatty liver, hepatitis, cancer, gastric bleeding, other gastrointestinal conditions, cardiomiopathia, infections, dermato-, endocrino-, and many other problems

3. Treatment options

- Basic concepts of modern addictology - intervention guidelines
    - in substance users, substance use is not the only problem, just the tip of the iceberg - the true reasons for using are complex: intrapersonal and external reasons
    - basis of intervention: individual responsibility+ external support
    - strategic goal: constructively altering the behaviour
    - tactical goal: restoring physical and mental health, mending work and family relationships, ensuring abstinence by professional means
- Treatment of alcohol problems
    - adjusted to the problem in question
    - role of a physician: early detecting, prevention, defining competence
    - demedicalisation = assistance other professionals and services (psychologists, social workers, etc.) + special group rehabilitation programmes like Anonym Alcoholics

4. DMS 5 categories and criteria (these are criteria ***in general***, specific ones can be found in the slides)

- 'X' <u>use disorders</u>, where 'X' can be any substance with addictive potential (e.g. alcohol, cannabis, etc.) = problematic pattern of X use leading to clinically significant impairment or distress, as manifested by at least two of the following, occurring within a 12-months period:
    - taken in larger amounts or over a longer period than was intended
    - persistent desire or unsuccessful efforts to cut down or control usage
    - lot of time spent in activities necessary to obtain X, use it, or recover from its effects
    - craving or a strong desire or urge
    - resulting in a failure to fulfil major role obligations at work, school, or home
    - recurrent use in situation when it is physically hazardous
    - usage is continued despite knowledge of having persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by it
    - tolerance, as defined by either of these:
        - need for markedly increased amounts of X to achieve intoxication or desired effect
        - markedly diminished effect with continued use of the same amount of it
    - withdrawal, as manifested by either of the following:
        - characteristics of withdrawal syndrome for X

        - X or closely related substance
- 'X' intoxication disorder, where 'X' can be any substance with addictive potential (e.g. alcohol, cannabis, etc.)
    - recent ingestion of X
    - problematic behavioural or psychological changes that developed during or shortly after ingestion
    - one or more of substance specific signs (specific ones can be found in the slides)
    - symptoms are not the result of another medical condition, mental disorder, or other substance
- 'X' withdrawal, where 'X' can be any substance with addictive potential (e.g. alcohol, cannabis, etc.)
    - reduction in X use that has been heavy and prolonged
    - two or more of withdrawal symptoms (specific ones can be found in the slides, and I put criteria of alcohol withdrawal in the 'ethyl alcohol' chapter – topic10, point 2, ethyl alcohol)
    - withdrawal symptoms cause clinically significant distress or impairment in important areas of life
    - symptoms are not the result of another medical condition, mental disorder, or other substance

TOPIC 11: SUICIDE, CRISIS INTERVENTION

1. Basics

- definition: suicide is an action of killing oneself intentionally
    - attempted suicide is a potentially self-injurious act committed with at least some intent to die as a result of the act
    - individuals of all races, creeds, incomes, and educational levels can die by suicide
- prevalence: 1.000.000 suicides/ year in the world, 150.000 suicide/year in Europe, 10-20 x more attempts
    - gender paradox: lethal suicides: 2-3 times more frequent by males, but attempts: 3 times more common by females
- main methods of lethal suicides:
    - self-strangulation,
    - self-poisoning,
    - jumping from a high place,
    - jumping or lying before moving object,
    - handgun,
    - sharp object,
    - drowning
- risk factors:
    - Primary, psychiatric risk factors:
        - psychiatric disorder (90%):
            - major depression (45-87%),
            - schizophrenia,
            - substance dependence and/or abuse,
            - personality disorder,
            - anxiety disorders

        - previous suicide attempt
        - communication of suicidal intent („cry for help”),
        - family history of suicide,
        - decreased serotonin activity.
    - Secondary, psychosocial risk factors*:*
        - childhood trauma / losses
        - aggression, impulsivity
        - isolation,
        - negative life events
        - smoking
    - Tertiary, demografic risk factors*:*
        - male gender
        - adolescence, midlife and older age (65+)
        - vulnerable periods: Spring and early summer, birthday, pre- and perimenstrual period, morning hours, Mondays
- protective factors:
    - good family/social/medical support
    - children
    - pregnancy
    - religiosity
    - lack of lethal means
    - regular physical activity
    - hypersomnia
- precipitating factors
    - interpersonal conflicts (>50%) (break up, divorce, disappointment, bullying)
    - financial difficulties
    - bereavement
    - job loss
    - physical illness, enduring pain
    - loneliness
    - shame
- suicide originates from a crisis:
    - overwhelming situation (cannot be avoided)
    - individual feels that he/she is not able to cope with the situation
    - coping mechanisms from everyday life are not effective
    - extreme solutions occur
    - behaviour is disorganized
- cry for help - there are warning sign in almost all cases:
    - communication of suicide intent: „It would be better to die”. „There is no sense in my life”.
    - indirect signs are also common (suicidal notes, collecting pills, risk taking behaviour)
    - represents the ambivalence of the suicidal patient
    - if there is no appropriate help from the environment, presucide syndrom can evoke
    - take it seriously!
- presuicidal syndrome - Ringel
    - situative and affective narrowing (focus only on the actual problem)
    - aggression directed „backwards”, towards the self

    - suicidal thoughts, intense phantasies about one's death, funeral
    - ambivalence!
- types of suicide
    - active: individual takes concrete actions
    - passive: refuse those actions that would be necessary for living (refuse eating or life-saving treatment)
    - ambivalent: the intention of suicide is not obvious (overdose of drogs, …)
- types of suicide attempt
    - deliberate self-harm – release psychological pain
    - parasuicide pause/ temporary rest
    - parasuicide gesture (manipulation)
    - serious suicide attempt (intent to die)
- Werther effect: imitative or copycat suicide – Goethe: The sorrows of young Werther (1774) - striking increase in railway suicides after the suicide of German goalkeeper Robert Enke in 2009
- Youth suicide: 15-24 and 25-34 leading cause of death in Hungary
    - youth specific risk factors
        - divorce or separation of parents
        - sexual identity crisis
        - easy access to lethal methods, especially guns
        - school or family crisis
        - isolation, disappointment
        - genetic predisposition (serotonin depletion)
        - feelings of isolation or being cut off from others
        - ineffective coping mechanisms, problem solving skills
        - cultural and/or religious beliefs (e.g., belief that suicide is a noble or acceptable solution to a personal dilemma)
        - exposure to suicide and/or family history of suicide
    - warning signs for youth suicide
        - suicide threats
        - suicide plan/method/access
        - sudden changes in physical habits and appearance
        - preoccupation with death and suicide themes
        - increased inability to concentrate or think clearly
        - loss of interest in previously pleasurable activities
        - symptoms of depression
        - alcohol and/or drugs
        - hopelessness
        - rage, anger
        - reckless behaviour or activities
        - anxiety and agitation
        - sleep difficulties, especially insomnia
        - dramatic changes in mood
        - no reason for living
        - no sense of purpose in life
        - sense of being a burden
        - profound sense of loneliness, alienation and isolation
        - sense of fearlessness

2. Intervention options

- what to do:
  - increase receptiveness for help!
  - supportive, empathetic behaviour
  - keep distance - don't be involved (helps avoid getting overwhelmed)
  - clarify what is going on in the client (confused)
  - try to stay neutral - irrealistic, impulsive plans, fantasies can be hard to hear (anger, confusion on the therapist side is quite common, be aware of those emotions)
  - do not increase their guilt!
  - refer to adequate therapy
- crisis intervention
  - try to widen the patient's perspective
  - recall:
    - supportive relationships, friends, relatives
    - job, creative tasks
    - previous successful problem solving
    - personal strengths
    - positive traits
  - crisis plan is useful
- intervention: 3 basic step
  - 1. Show you care
    - take ALL talk of suicide seriously
    - if you are concerned that someone may take their life, trust your judgment.
    - listen carefully
    - reflect what you hear
    - use language appropriate for the age of the person involved
    - be genuine
    - ask about treatment: "Do you have a therapist/doctor? / Are you seeing him/her? / Are you taking your medications?"
  - 2. Ask about suicide
  - 3. Get help
    - do not leave the person alone
    - know referral resources
    - reassure the person
    - encourage the person to participate in the helping process
    - encourage the suicidal person to identify other people in their lives who can also help

3. Other useful information

Myth	*Fact*
People who talk about suicide don't die by suicide.	Many people who die by suicide have given definite warnings to family and friends of their intentions. Always take any comment about suicide seriously
Suicide happens without warning	Most suicidal people give many clues and warning signs regarding their suicidal intention.

People who are suicidal are fully intent on dying.	Most suicidal people are undecided about living or dying – which is called suicidal ambivalence.
Males are more likely to be suicidal.	Men die by suicide more often than women. However, women attempt suicide three times more often than men.
Asking a depressed person about suicide will push him/her to kill themselves.	Studies have shown that patients with depression have these ideas and talking about them does not increase the risk of them taking their own life.
Improvement following a suicide attempt or crisis means that the risk is over.	Most suicides occur within days or weeks of "improvement" when the individual has the energy and motivation to actually follow through with his/her suicidal thoughts.
Once a person attempts suicide the pain and shame will keep them from trying again.	The most common psychiatric illness that ends in suicide is major depression, a recurring illness. Every time a patient gets depressed, the risk of suicide returns.

- 10 most common errors during a suicide intervention

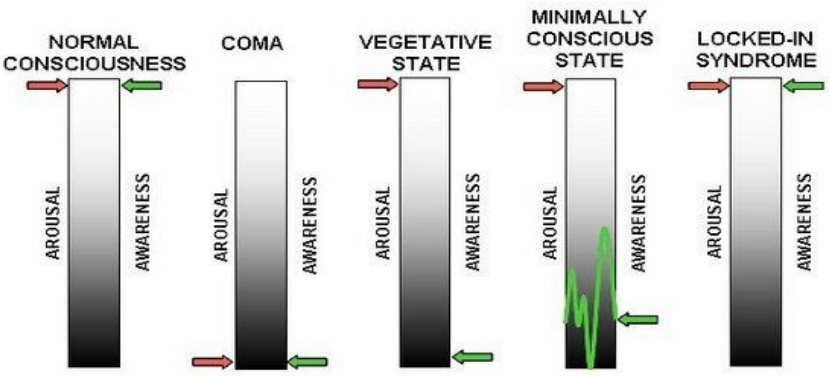
Error	*Example*
#1: Superficial Reassurance	"Come on now. Things can't be that bad."
#2: Avoidance of Strong Feelings	When faced with intense depression, grief, or fear don't retreat into professionalism, advice giving, or passivity
#3: Professionalism	„You can tell me. I've been trained to be objective."
#4: Inadequate Assessment of Suicidal Intent	"You say you're suicidal, but what's really bothering you?"
#5: Failure to Identify the Precipitating Event	"It sounds like everything collapsed when your brother died three years ago, but what has happened recently to make you feel even worse? That dying is the only way out?"
#6: Passivity	"Go on. I'm here to listen."
#7: Insufficient Directness	„If you keep feeling suicidal remember you can call back."
#8: Advice Giving	"Try not to worry about it." "Remember, focus on the positive."
#9: Stereotypic Response	"She's a borderline, attention seeking female."

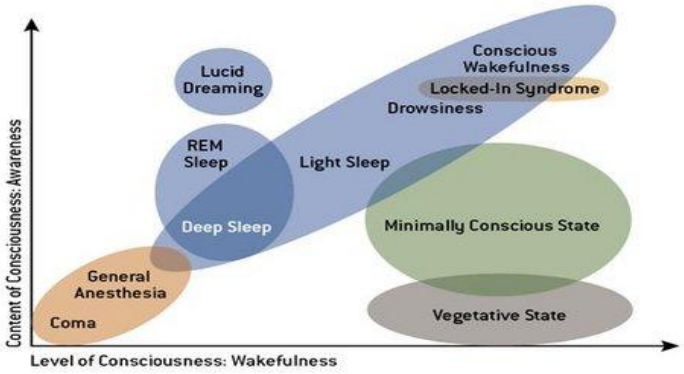
#10: Defensiveness	If a patient says “How could you ever help me, have you ever tried to kill yourself?” and the doctors goes like „Do you want help, or not?”
instead of these errors, use genuine reassurance, empathy skills, ask about key incidents, be active and encouraging, treat every patient as an individual, and try to stay calm and understanding even if the patient is hostile/aggressive	

TOPIC 12: DEATH, DYING, GRIEF

- What is death?
  - WHO, 2012: death occurs when there is permanent loss of capacity for consciousness and loss of all brainstem functions. This may result from permanent cessation of circulation and/or after catastrophic brain injury.
  - In the context of death determination, ‘permanent’ refers to loss of function that cannot resume spontaneously and will not be restored through intervention.
- Criteria for establishing death:
  - unreceptivity and unresponsiveness even to intensely painful stimuli
  - no movement or spontaneous respiration for 3 minutes after being removed from respirator
  - complete absence of reflexes, both deep tendon and central
  - a flat electroencephalogram (EEG) for at least 10 minutes of technically adequate recording, without response to noise or painful stimuli
  - all of above tests repeated in 24 hours with no change
  - no history of hypothermia or use of central nervous system depressants before onset of coma
- Unconscious states other than brain death
  - Coma: a state of unarousable unresponsiveness with no awareness of self and surroundings. Eye opening never occurs
  - Vegetative state: “wakefulness without awareness of self and environment”, accompanied by reflexive motor activity only, no voluntary interaction
  - Minimally conscious state: inconsistent but reproducible behavioral evidence of awareness of self or environment.
  - Locked in syndrome: awake and conscious but have no means of producing speech, limb, or facial movements

- **Levels and content of consciousness**

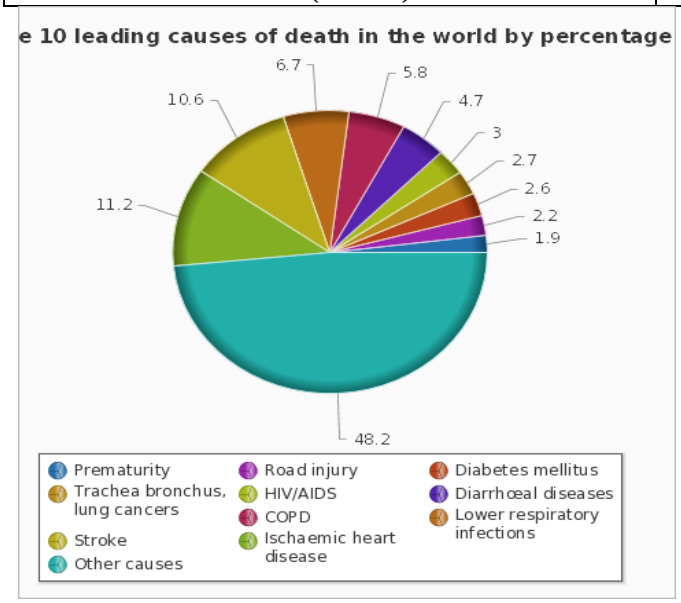


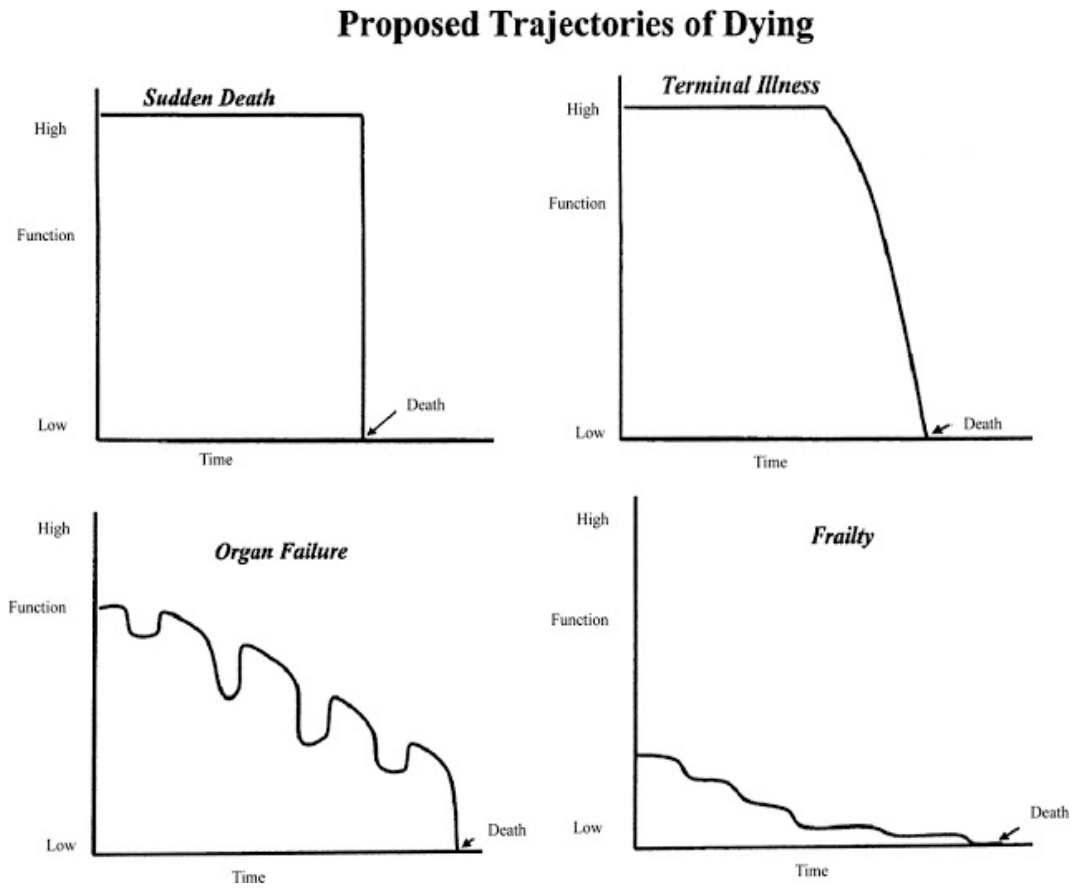


(PET scanning has shown preserved metabolic cerebral functioning in a locked-in syndrome when compared to those in a vegetative state or minimally conscious state)

Causes of death – has changed a lot during the last century:

in 1900	in 1998
• influenza • pneumonia • tuberculosis • gastroenteritis • (all above: 31.4%) • cardiovascular (14.2%)	• cardiovascular disease (31%) • cancer (23%) • stroke (7%)





- Thoughts and fears about death
  - impersonal, death of a stranger
  - interpersonal, someone who matters
  - intrapersonal, death anxiety is significantly higher in those who choose a career in medicine
- The dying process - Elizabeth Kübler-Ross: Stages of dying (1969)
  - Denial
    - reactions: „I am fine", „There has been a mix up", „These are not my test results"
    - multiple doctors
  - Anger
    - the point when the person accepts that they are going to die so denial cannot continue
    - responses: Why me? Its not fair! How can this happen to me…Who is to blame
    - projection of anger onto environment
  - Bargaining
    - responses: „I will give my life savings for a cure", „ I will take healthy food and exercise.."
    - some even find faith and start to pray
  - Depression
    - responses: „what is the point I'll be dead soon", „no point going on, when I miss my loved ones"
    - some may not leave their room, or remain silent for a while

        - this allows for disconnection from love and affection and move forward to acceptance
        - supporting but not trying to cheer up
    - Acceptance
        - begin to come to terms with their mortality of a tragic event
        - responses: „It's okay", „We don't live forever"
        - peace making with loved ones
        - helping them to come to terms

Elisabeth Kubler-Ross - Speaks to a dying patient, Nova Interview, 1983
http://www.youtube.com/watch?v=tIZ97OALEfE

- Grief & Mourning
    - Mourning: psychological process that leads to eventual resolution of bereavement – restore ability to enjoy life after any serious loss
        - grief
            - normal: somatic distress, preoccupation with deceased, guilt, hostility, loss of conduct (normal only within 4-6 weeks)
            - pathological: absence of grief, dysfunctional denial, manic escape ("merry widow"), dysfunctional hostility, clinical depression
        - protest
            - spontaneous reaction of disbelief focused on the deceased
        - despair
            - intuitive realization that deceased person is indeed lost
        - detachment
            - emotions that previously focused on deceased reoriented toward other people and activities
- The dying adult – fear and grief - encourage sharing!
- never assume that we know what people with terminal illness fear – causes of fear in people with life threatening illness
    - fear of separation from loved people, homes, jobs etc.
    - fear of becoming a burden to others
    - fear of losing control
    - fear for dependents
    - fear of pain or other worsening symptoms
    - fear of being unable to complete life tasks or responsibilities
    - fear of dying
    - fear of being dead
    - fear of the fears of others (reflected fear)
- most patients will benefit if we make it secure enough for them to share their fears
    - not to be afraid to speak about "death" or „terminal illness"
    - but not to be pushing to face facts that they are not ready to face
    - reassurance, emotional support
- fear can aggravate pain, and pain fear
    - insight and understanding helps
    - regular meetings with doctors
    - tranquilizer occasionally
    - reach out to the family involved

- patients with life threatening illnesses experience a series of losses as the illness progresses
    - loss of security
    - loss of physical functions
    - loss of body image
    - loss of power or strength
    - loss independence
    - loss of self esteem
    - loss of the respect of others
    - loss of future
    - stepwise progression of disease (initially it might be just an operation or chemotherapy and then optimism), but it's still important to talk about losses (body change , hair loss, security in life)
- grief is natural and needs to be acknowledged and expressed
    - if people have been helped to express grief at an early stage they get a better chance to effectively cope later
- Critics of the Kübler-Ross modell
    - illnesses might progress in an unpredictable way
    - some people never accept the situation
    - lots will oscillate between insight and fight for acceptance and unrealistic optimism and hope
    - role of personality and coping styles
- The doctor's grief: it is a sign of maturity to know when to ask for help, and the wise doctor will have worked out systems of support to meet a range of needs
- Communicating the bad news
    1. Getting started
        a. plan about the discussed material
        b. conductive environment
        c. child patient – first with the parents
        d. who would the patient like to be present?
    2. What does the patient know?
        a. information
        b. checking the ability to comprehend the bad news
        c. how would you describe your medical situation?
        d. have you been worried about your illness or symptoms?
        e. what did other doctors tell you about your condition or any procedures that you have had?
        f. when you first had symptom x, what did you think it might be?
        g. what if the patient remains silent or unable to go on?
    3. How much does the patient want to know?
        a. different information processing
        b. right to decline receiving information or designate someone else to communicate
            - *would you like me to tell you the full details of your condition? if not, is there somebody else you would like me to talk to?*
            - *some people really do no want to be told what is wrong with them, but would rather their families be told instead. what do you prefer?*
            - *do you want me to go over the test results now, and explain exactly what i think is wrong?*
        c. advanced preparations

    d. when family says : „do not tell!" (child?)
4. Sharing the information
    a. sensitive, straightforward manner
    b. small bits of information
    c. avoid technical jargon
    d. check for understanding
    e. silence and body language helps
    f. do not minimize the severity
        - *the report is back, and its not as we had hoped, it showed that there is cancer in your colon.*
        - *I'm afraid I have bad news. the bone marrow biopsy shows your daughter has leukemia.*
5. Responding to patient, family feelings
    a. variety of responses in emotions: anger, sadness, anxiety, relief, disbelief, guilt, shame or Intellectualizing the situation
    b. extreme responses: fight or flight
    c. be supportive: *You appear to be angry. Can you tell me what you are feeling? Does this news frighten you? Tell me more about how you are feeling about what I just said. What worries you most? What does this news mean to you? I wish the news were different. Is there anyone you would like for me to call?*
6. Planning and follow-up
    a. further plans about treatment
    b. emotional or practical support – referrals
    c. support for family members e.g. parents or siblings
    d. ensure the patient does not leave alone/ is not suicidal…
    e. future visits

TOPIC 13: BEHAVIOURAL CHANGE AND PSYCHOTHERAPIES

- Behavioral Therapy:
  - Fundamental aspects of BT in ancient philosophical tradition - Stoicism
  - Based upon the principles of classical conditioning (I. Pavlov) and operant conditioning (B.F. Skinner)
  - Classical conditioning:
    - Aversion (e.g. placing unpleasant-tasting substances on the fingernails to discourage nail-chewing)
    - Flooding (actual exposure to the feared stimulus)
    - Systematic desensitization (overcoming fear by confronting the hierarchy of fears)
  - Operant conditioning:
    - Reinforcement
    - Punishment
    - Extinction
  - focuses on behaviour changing unwanted behaviours through rewards, reinforcements, desensitization
  - Desensitization: process of confronting something that arouses anxiety, discomfort or fear and overcoming the unwanted responses.
  - behavioural therapy often involves the cooperation of others, especially family and close friends, to reinforce a desired behaviour.
- Cognitive therapy (Beck):
  - aims to identify and correct distorted thinking patterns that can lead to feelings and behaviours
  - the therapy leads to more fulfilling and productive behaviour.
  - Cognitive behavioural therapy: combination of cognitive and behavioural therapies, this approach helps people change negative thought patterns
- Rational Emotive Therapy (Albert Ellis):
  - individual's capacity for creating emotions;
  - ability to change and overcome the past by focusing on the present;
  - power to choose and implement satisfying alternatives to current patterns
  - one form of CBT
  - Humanistic, action oriented approach to emotional growth
- Psychoanalysis
  - this approach focuses on past conflicts as the underpinnings to current emotional and behavioural problems.
  - long term and intensive therapy: an individual meets three to five a week using free association to explore unconscious motivation and earlier, unproductive patterns of resolving issues.
- Psychodynamic psychotherapy
  - based on psychoanalysis: less intense, tends to occur once or twice a week, and spans a shorter time
  - this approach recognizes the significant influence that emotions and unconscious motivation can have on human behaviour
  - more directive than psychoanalsis
- Client-centered therapy (Rogers)
  - individual is an expert on his/her own life, and that human nature is inherently constructive and social
  - without diagnoses and treatment plans, the counsellor enables the individual to sort through thoughts, feelings, ideas, and choices creatively with the help of attentive, non-judgmental and honest listening

    - unconditional positive regard, empathy, trust.
- Couples counselling
    - discussions and problem solving sessions facilitate by a therapist sometimes with the couple or entire family, sometimes with the individual
    - therapy can help couples and family members improve their understanding of
    - family therapy may be very useful with children and adolescent who are experiencing problems
    - help educate the individuals about nature of the disorder and teach them skills to cope better the effects of having a family member with a mental illness (anger or guilt)
- Family therapy
    - discussions and problem solving sessions facilitate by a therapist sometimes with the couple or entire family, sometimes with the individual
    - can help couples and family members improve their understanding
    - may be very useful with children and adolescent who are experiencing problems
    - help educate the individuals about nature of the disorder and teach them skills to cope better the effects of having a family member with a mental illness (anger or guilt)
- Dialectic behaviour therapy (DBT), Linehan
    - DBT is a combination of behavioural and cognitive therapy originally designed for the treatment of borderline personality disorder.
    - it is used with adolescents and adults who exhibit impulsive an inappropriate acting out behaviours (self-injury, eating disorders, suicidal tendencies, drug dependence)
    - integrates individual and groups therapies
- Electroconvulsive therapy (ECT)
    - highly controversial technique uses low voltage electrical stimulation of the brain to treat some forms of major depression, acute mania, and some forms of schizophrenia
    - life-saving technique (only when other therapies have failed), when a person is seriously medically ill and/or unable to take medication
- Biomedical treatment
    - medication alone or combination with psychotherapy for treatment of emotional, behavioural and mental disorders
- Expressive therapies
    - Art Therapy: drawing, painting, and sculpting help many people to reconcile inner conflicts, release deeply repressed emotions and foster self-awareness as well as personal growth.
    - Dance/Movement Therapy: Those who are recovering from physical, sexual, or emotional these techniques helpful for gaining a sense of ease with their own bodies. (person integrate emotional, physical and cognitive facets of self)
    - Music/Sound Therapy has been used to treat disorders such as stress, grief, depression, schizophrenia, autism in children.
- Group therapy (Yalom's influence)
    - focus on learning from the experiences of others
    - involves groups of usually 4 to 12 people
    - people with similar problems who meet regularly with a therapist
    - the therapist uses the emotional interactions of the group members to help them get relief from distress and possibly modify their behaviour
- Holistic medicine
    - the art and science of healing that addressed the whole person-body mind and spirit
    - integrates conventional and alternatives therapies (such as acupressure, yoga, energy medicine) to prevent and treat disease
    - unlimited and unimpeded free flow of life force energy through body, mind and spir-

it

- Interpersonal therapy (Sullivan)
    - interpersonal processes rather than intrapsychic processes
    - focuses on patient's current life and relationships within the family and work environment
    - the goal is to identify and resolve the problems with insight, as well as build on strengths
- Light therapy
    - seasonal affective disorder (SAD) is a form of depression that appears related to fluctuations in the exposure to natural light.
    - people who have SAD can be helped with the symptoms of their illness if they spend blocks of time bathed in light from a special full-spectrum light source, called a light box.
- other interventions
    - Pastoral counselling: some people prefer to seek help for mental health problems from their pastor, rabbi, or priest rather than a therapist (prayers and spirituality).
    - Play therapy: uses variety of activities such as painting, puppets to establish a communication with the therapist. Plays allows the child to express emotions and problems that would be too difficult to discuss with another person
- Relaxation and stress reduction techniques
    - Biofeedback: Learning to control muscle tension and involuntary body function (heart rate, skin temperature) It is used in combination with, or as an alternative to medication to treat disorders (anxiety, panic, phobias)
    - Guided Imagery or visualization: Going into a state of deep relaxation and creating a mental image of recovery and wellness.
    - Massage Therapy: Rubbing, kneading, brushing and tapping a person's muscles can help release tension and pent emotion (treat trauma related depression)
- Self-help groups:
    - involve people who have similar needs
    - are facilitated by a consumer, survivor, or other layperson
    - assist people to deal with life-disrupting events such as death, abuse, serious accident, addiction, diagnosis of a physical, emotional, or mental disability for oneself or a relative
    - are operated on an informal, free of charge, and nonprofit basis
    - provide support and education
    - are voluntary, anonymous, and confidential

TOPIC 14: BURNOUT PREVENTION AND TREATMENT with BALINT GROUP

- inventors: Michael and Enid Balint, GPs and psychoanalists
- functions of a Balint group:
    - to provide a safe place for emotional reflection on troubling cases
    - to help presenter consider other understandings about the case
    - to look at blind spots, assumptions
    - to help members feel less isolated, less shame, more open to learn
    - to help members grow and develop

- benefits for clinicians
    - explore difficult or troubling situations
    - refine crucially important patient-doctor relationship skills
    - hear and learn from others' cases
    - connect with others
    - experience the power of a group
    - remember what matters about our work
    - avoid burnout, increase engagement and resilience
- participants:
    - 8-12 professional – group members, function:
        - explore doctor-patient relationship
        - look inward, be imaginative, creative, look for less conscious aspects
        - attend to and share thoughts, images, fantasies, associations, hypotheses
        - differentiate one's own experience from presenter's
        - further empathic understandings
    - 1 group leader, 1 co-leader – function:
        - create and maintain a safe space
        - structure and hold the group over time
        - protect presenter and group members
        - encourage reflection, empathy and compassion
        - attend to group development
        - debrief together after each group
- format:
    - „does anyone have a case?"
    - clarifying questions
    - group 'holds' the case
    - presenter invited back
    - (60-90 minutes long sessions)
- What is a good case to present?
    - presentations are spontaneous
    - patients we have ongoing relationships with
    - patients who we feel conflicted or strongly about
    - patients that leave us feeling unfinished
    - patients who we "take home" with us
    - patients that bubble up in the moment
- ground rules
    - avoid advice
    - respect
    - confidentiality
    - ownership of feelings