ANXIETY DISORDERS

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http://psychiatry.pote.hu

Anxiety is abnormal fear that is out of proportion to any external stimulus, which is an unpleasant and unjustified sense of apprehension often accompanied by physiological symptoms.

What is anxiety?

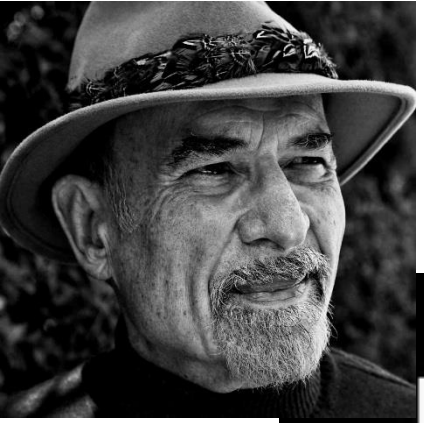
Anxiety is a state of apprehension, tension, or uneasiness that occurs in anticipation of internal or external danger

The anxiety syndrome includes motor tension, autonomic hyperactivity, apprehensive expectation, and heightened vigilance

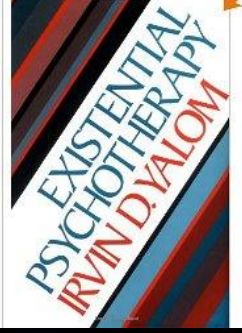
Anxiety occurs in a variety of neurological and medical disorders and can be precipitated by drugs

Normal and pathological

- Difference between pathological anxiety and anxiety as a normal or adaptive response
- /Classic flight and fight response...or feeling anxiety before exam, can be adaptive – e.g. in coping with stress/
- Pathological anxiety – in content and seriousness, can not be controlled - phobias, panic, ocd, ptsd....sense of fearfulness, terror, apprehension and vegetative symptoms



Heidegger, Kierkegaard in philosophy - the existential anxiety



ANXIETY AS A CONDITION OF LIVING

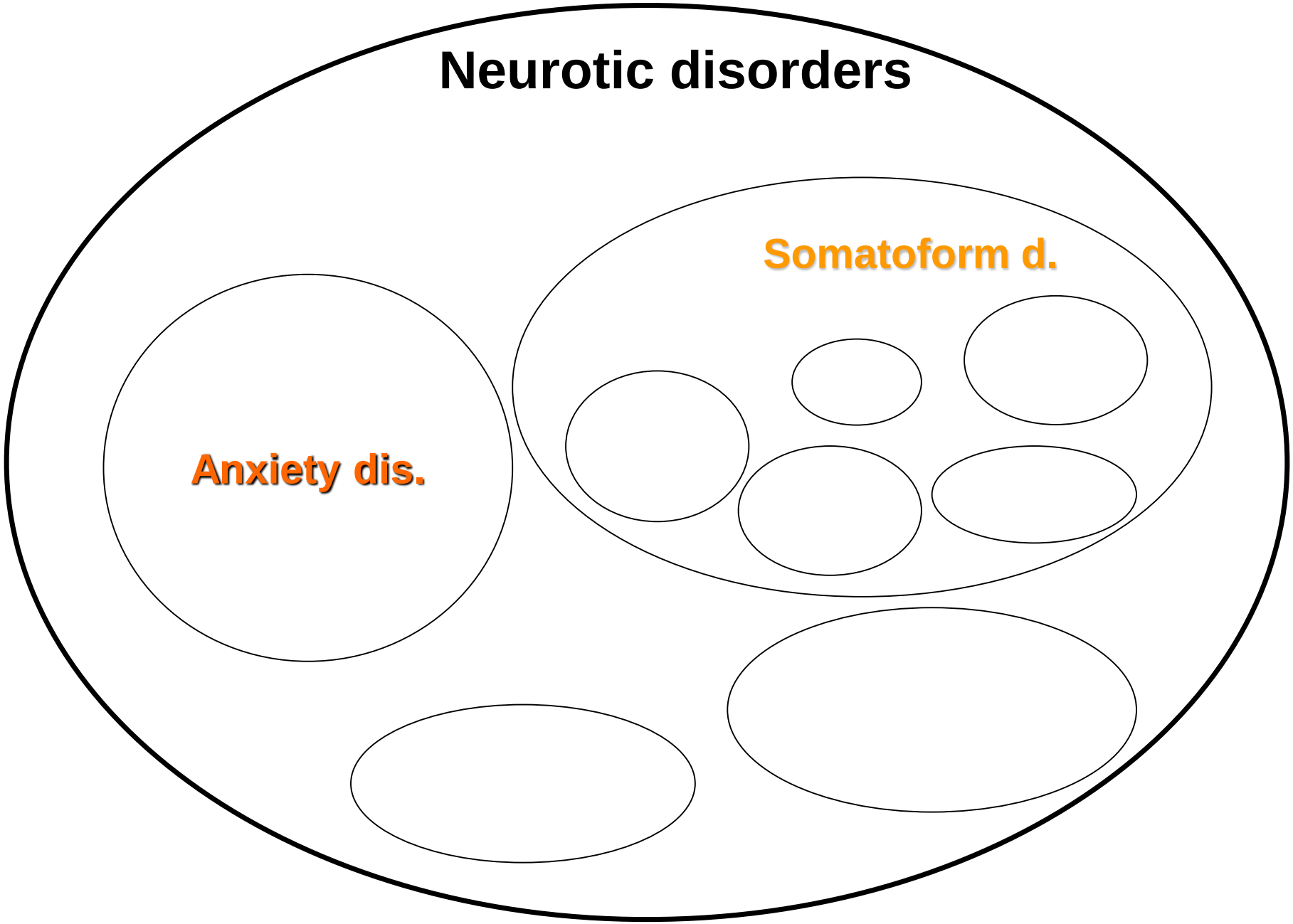
- **Existential anxiety** is the unavoidable result of being confronted with the "givens of existence"- death, freedom, choice, isolation, and meaninglessness. It arises as we recognize the realities of our mortality, our confrontation with pain and suffering, our need to struggle for survival, and our basic fallibility.
- **Normal anxiety** is an appropriate response to an event being faced. It is not a therapeutic goal to eliminate normal anxiety because it can be used as a motivation to change.
- **Neurotic anxiety** is anxiety about concrete things that is out of proportion to the situation. It is typically our of awareness, and it tends to immobilize the person.

Some historical data

- ..unlike depression,a syndrome recognized for centuries,the syndrom of anxiety has been recognized only in the relative recent times
- DaCosta –irritable heart 1871
- Freud's conceptualisation brought the patient's inner subjective feeling to the forefront,empahsizing the sense of fearfulness, terror panic

Neurotic symptoms

- **Symptoms cause worrying and suffering for the patients**
- **Could not explained by organic abnormalities**
- **Chronic and recurrent (may be in other form)**
- **Not limited only external stresses**
- **Reality testing is intact**
- **Symptoms are not under intentional control**
- **The origin of symptoms is in the past history of personality**
- **The patient awares the illness – behaves like other patients, who suffers in somatic disorder**


Neurotic disorders
Somatoform d.
Anxiety dis.

ANXIETY DISORDERS

- panic disorder
- agoraphobia
- generalised anxiety disorder
- phobias (specific, social)
- obsessive-compulsive disorder posttraumatic stress disorder
- acute stress disorder

Anxiety disorders – diff.diagnosis
the steps of decision tree

1. **General medical conditions**
2. **Substance abuse**
3. **Response to stress? (acute stress disorder, PTSD, adjustment disorder)**
4. **FORMS - DURATION - CONTEXT**

Discrete, sudden anxiety attack ---- panic

5. **Next steps – depending on the content of anxiety**

The source of anxiety, what situations avoided? (fear from the next panic attack, fear from a social adjustment, from a infection, contagion, e.g)

--- GAD - residual category, the hard to be controlled chronic anxiety

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Table 10–8. Differential diagnosis of anxiety

Medical illness

- Angina
- Cardiac arrhythmias
- Congestive heart failure
- Hypoglycemia
- Hypoxia
- Pulmonary embolism
- Severe pain
- Thyrotoxicosis
- Carcinoid
- Pheochromocytoma
- Menière's disease

Psychiatric illness

- Schizophrenia
- Mood disorders
- Personality disorders
- Adjustment disorder with anxious mood

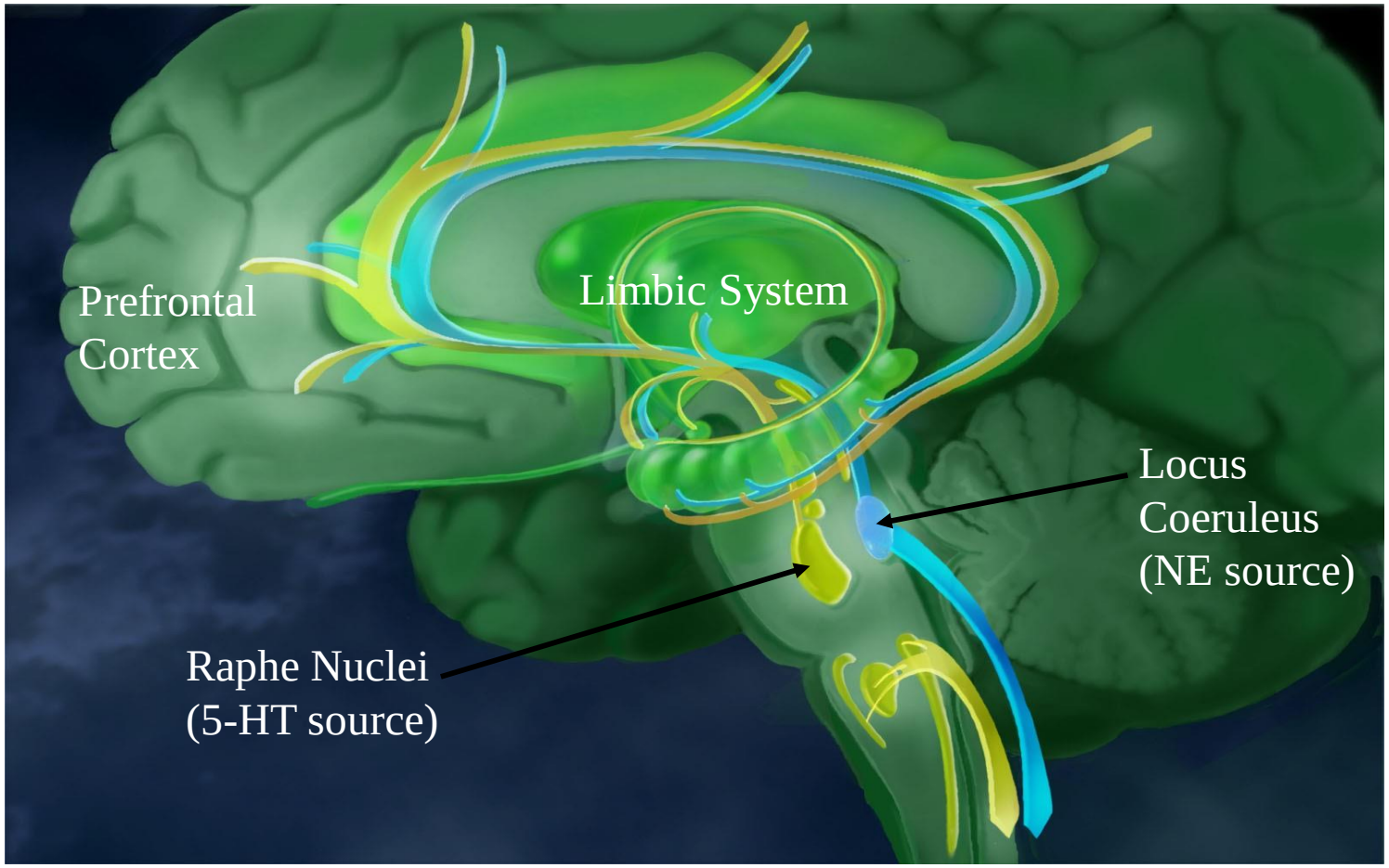
Drugs

- Caffeine
- Aminophylline and related compounds
- Sympathomimetic agents (e.g., decongestants and diet pills)
- Monosodium glutamate
- Psychostimulants and hallucinogens
- Alcohol withdrawal
- Withdrawal from benzodiazepines and other sedative-hypnotics
- Thyroid hormones
- Antipsychotic medication

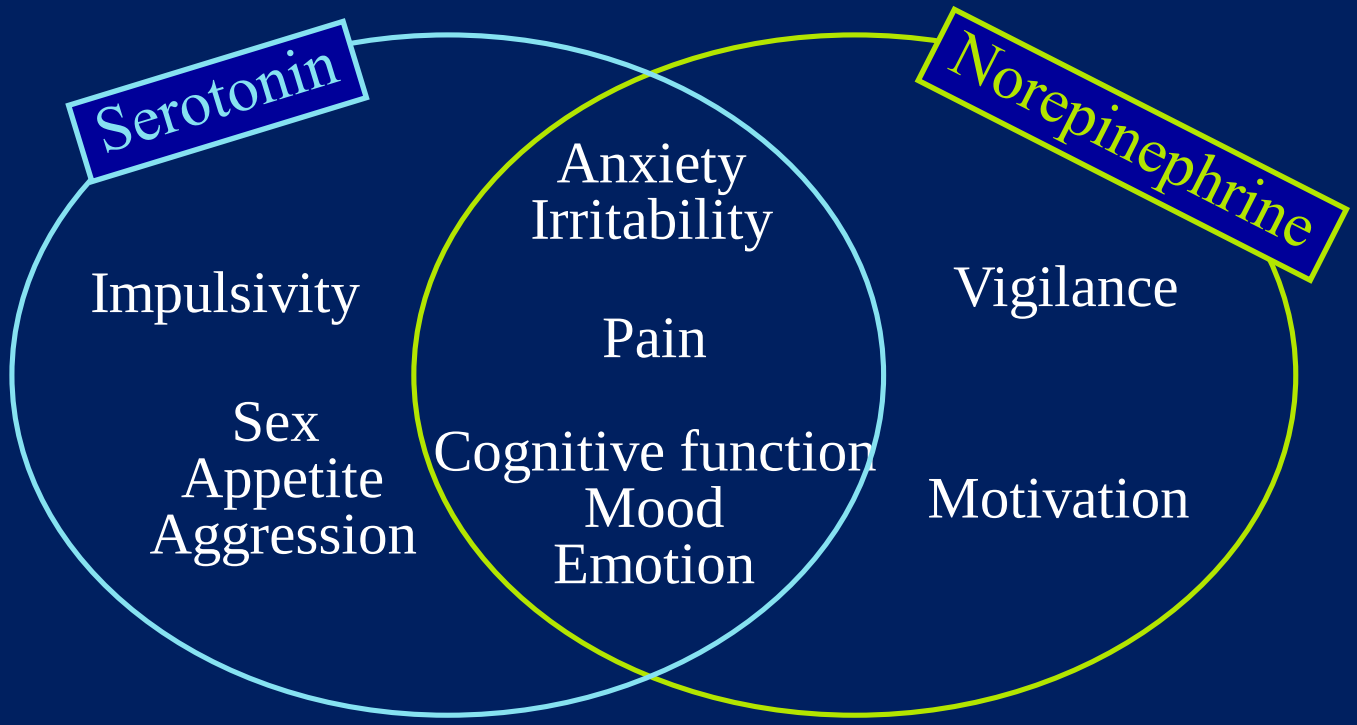
Etiological formulations I.

- Genetic - aggregation within family
  SERT and other polymorphisms
  Neurobiological -limbic system /amygdala, prefrontal cortex, hippocampus (fear responses, „limbic alert”) volumetric measures
- Biochemical - role of 5HT and NE system, GABA and glutaminergic system,
- Dysregulation of CRF and HPA axis - excessive secretion of cortisol („stress hormone”)

Serotonin and Norepinephrine pathways



Serotonin and Norepinephrine: Effect on Symptoms



- Dual action agents may provide the broadest spectrum of therapeutic effect across the full range of emotional and physical symptoms of depression

Delgado, unpublished.

Etiological Formulation II.

- Physical, psychiatric disorders with
  anxiety, substance induced,
  or based on „general medical condition…”
- Psychosocial - learned response, conditioned in anxiety provoking situation
- Psychoanalitic, dynamic - related to unresolved unconscious conflicts

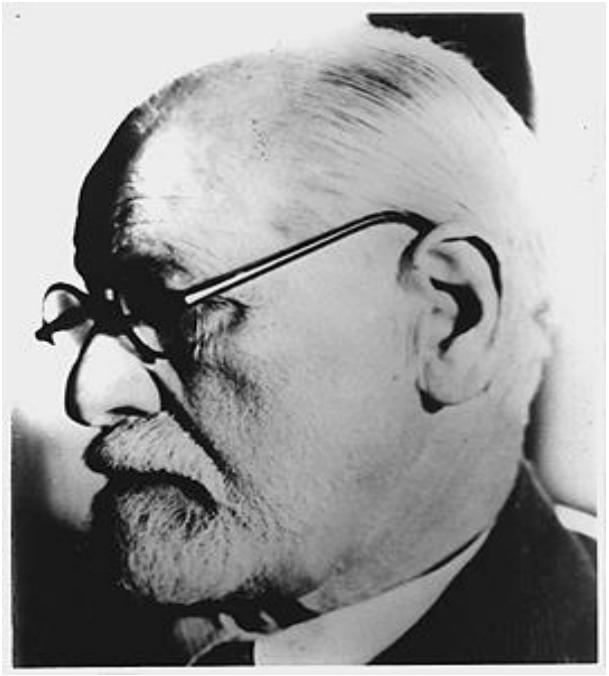
Etiology III. - Psychological approaches

1. Psychoanalytic

Freud - signal anxiety

developemental hierarchy:

- desintegrational anxiety
- paranoid
- separation
- castration "
- superego "



2. behavioral

- Learning theory
- Social learning
- Cognitive approach

3. Existential

ANXIETY DISORDERS

- panic disorder
- agoraphobia
- specific and social phobia
- obsessive-compulsive disorder posttraumatic stress disorder
- acute stress disorder
- generalised anxiety disorder

- **PANIC DISORDER** with/without **AGORAPHOBIA**

  recurrent panic attacks (discrete periods of intense fear and discomfort)

  symptoms of panic attack: dispnoea; dizziness; palpitation; trembling/shaking; sweating; choking; nausea; depersonalization/derealization; paresthesias; chest pain/discomfort; fear of dying; fear of going crazy; - mitral valve prolapse may be

- **AGORAPHOBIA**

  fear of being in places or situtations from which escape might nobtbe available **(outside the** home alone, in a crowd, open place, bridge, in a bus, train or car)

- **SOCIAL PHOBIA**

  a persistent fear of one or more social situations (speaking in public; eating in front of others; unable to urinate in public lavatory; saying foolish things)

- **SIMPLE PHOBIA**

  specific phobias: animals (dogs), snakes, insects, mice, blood, closed place (claustrophobia), heights (agoraphobia) knife (aichmophobia), air travel

  such stimuli provoke anxiety reponse and avoidance behavior

OBSESSIVE-COMPULSIVE DISORDER

- recurrent obsessions and compulsions
  - ideas, thoughts, impulses
  - or actions (violence, contamination, doubt; stereotyped acts: hand-washing, counting, checking, touching)

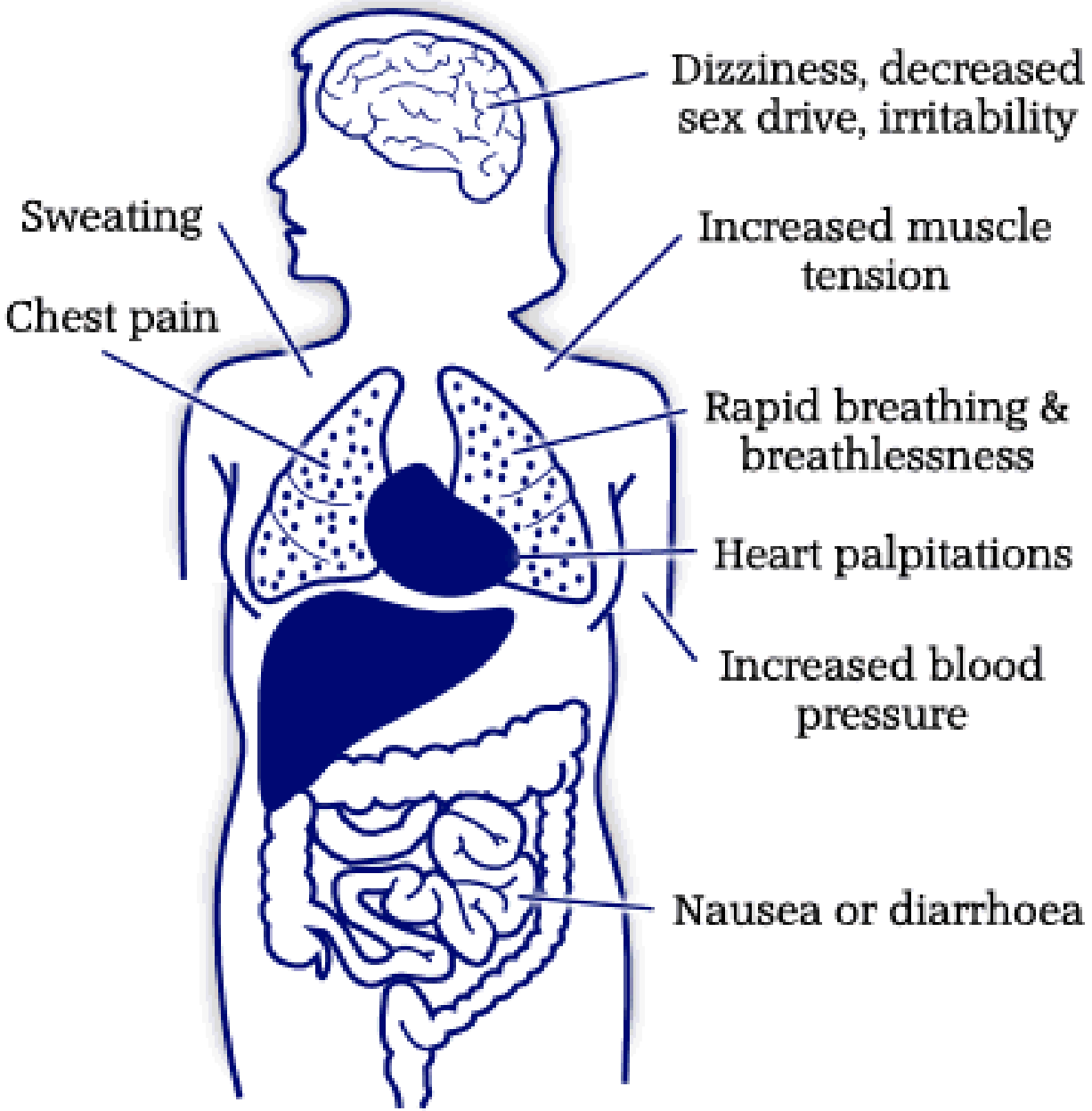
POST-TRAUMATIC STRESS DISORDER

- unusual, uncommon stressors (serious threat to life or physical integrity; sudden destruction of home, serious accident, violence, torture, kidnapping etc);
- natural disasters /= traumatic events/ provoke fear, terror, helplessness, re-experience and avoidance of the event

GENERALIZED ANXIETY DISORDER

- unrealistic or excessive anxiety and worry about two or more life circumstances / possible misfortune to one's child; worry about financial problems for no good reason

Physical Effects of Anxiety Disorders



Prevalence of the anxiety disorders (NCS)

	LIFETIME PREVALENCE	*1 MONTH PREVALENCE*
PANIC		
USA	**3,5 %**	**2,3%**
	5 – 2%	**3 - 1%**
AGORAPHOBIA		
USA	**1-5%**	**5,3%**
	7 – 3,5%	**4 – 1,7%**
SOC. PHOBIA		
USA	**13,3%**	**7,9%**
	15 –11%	**9 –6,6%**
GAD		
USA	**5,1%**	**3,1%**
	6,6 – 3,6%	4 –2%

Table 10–2. DSM-IV criteria for a panic attack

A discrete period of intense fear or discomfort, in which four (or more) of the following symptoms developed abruptly and reached a peak within 10 minutes:

1. Palpitations, pounding heart, or accelerated heart rate
2. Sweating
3. Trembling or shaking
4. Sensations of shortness of breath or smothering
5. Feeling of choking
6. Chest pain or discomfort
7. Nausea or abdominal distress
8. Feeling dizzy, unsteady, light-headed, or faint
9. Derealization (feelings of unreality) or depersonalization (being detached from oneself)
10. Fear of losing control or going crazy
11. Fear of dying
12. Paresthesias (numbness or tingling sensations)
13. Chills or hot flushes

- **1. <u>Psychological symptoms:</u>**
- **apprehension, worry, fear, anticipation of misfortune sense of doom, or panic hypervigilance, irritability**
- **fatigue**
- **insomnia**
- **derealization, depersonalization**
- **difficulty concentrating**

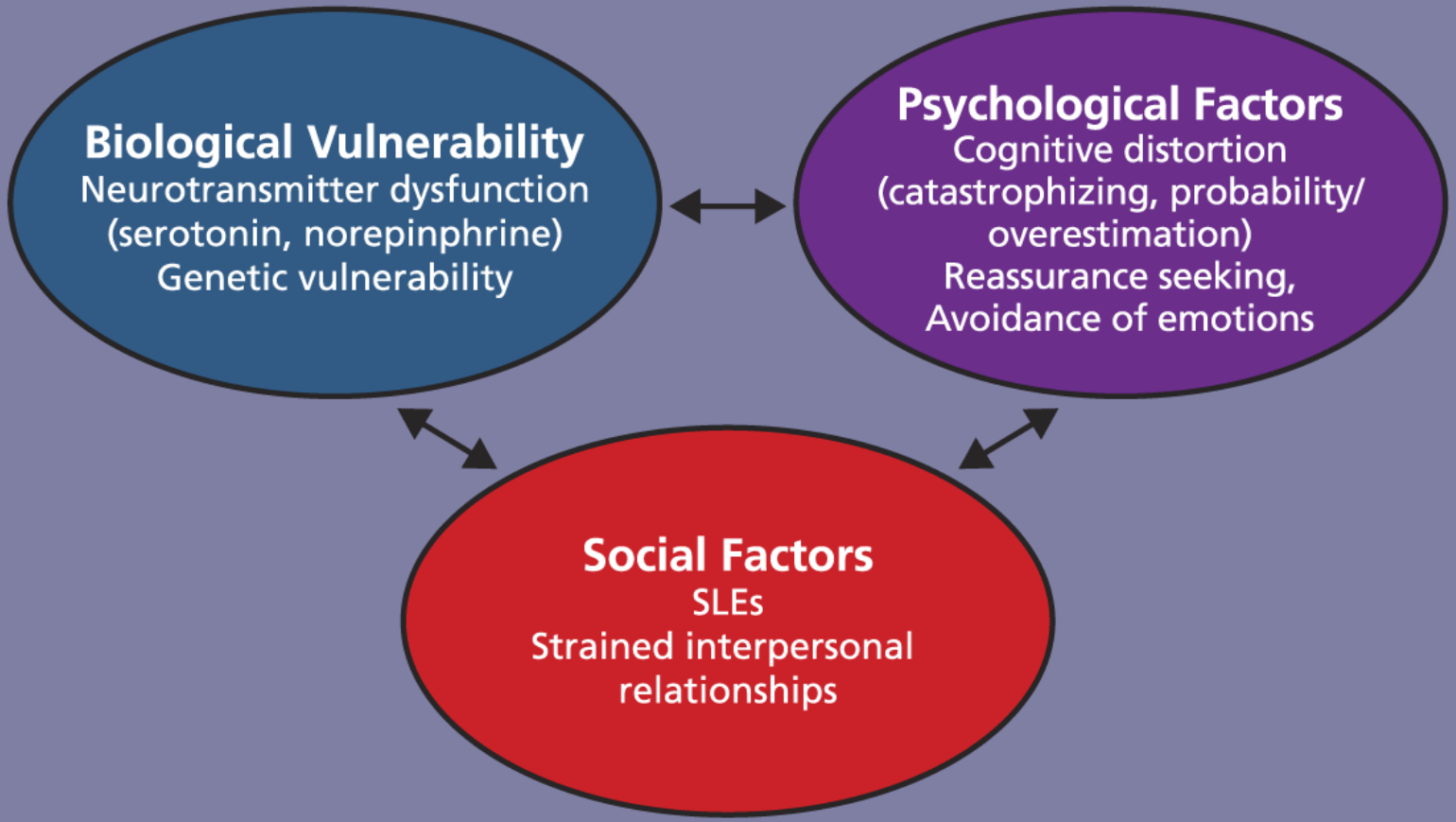
- **2. <u>Somatic complaints, Physical signs :</u>**
- **Headache dizziness and lightheadedness**
- **palpitation and chest pain**
- **upset stomach and diarrhea**
- **frequent urination**
- **lump in the throat**
- **motor tension and restlessness**
- **shortness of breath**
- **Paresthesias, dry mouth**
- **cool, clammy skin**
- **tachycardia and arrhythmias**
- **flushing and pallor**
- **trembling, easy startling, and fidgeting, hyperreflexia**

Symptoms of GAD

- Excessive, ongoing worry and tension
- An unrealistic view of problems
- Restlessness or a feeling of being "edgy"
- Irritability
- Muscle tension
- Headaches
- Sweating
- Difficulty concentrating
- Nausea
- The need to go to the bathroom frequently
- Tiredness
- Trouble falling or staying asleep
- Trembling
- Being easily startled

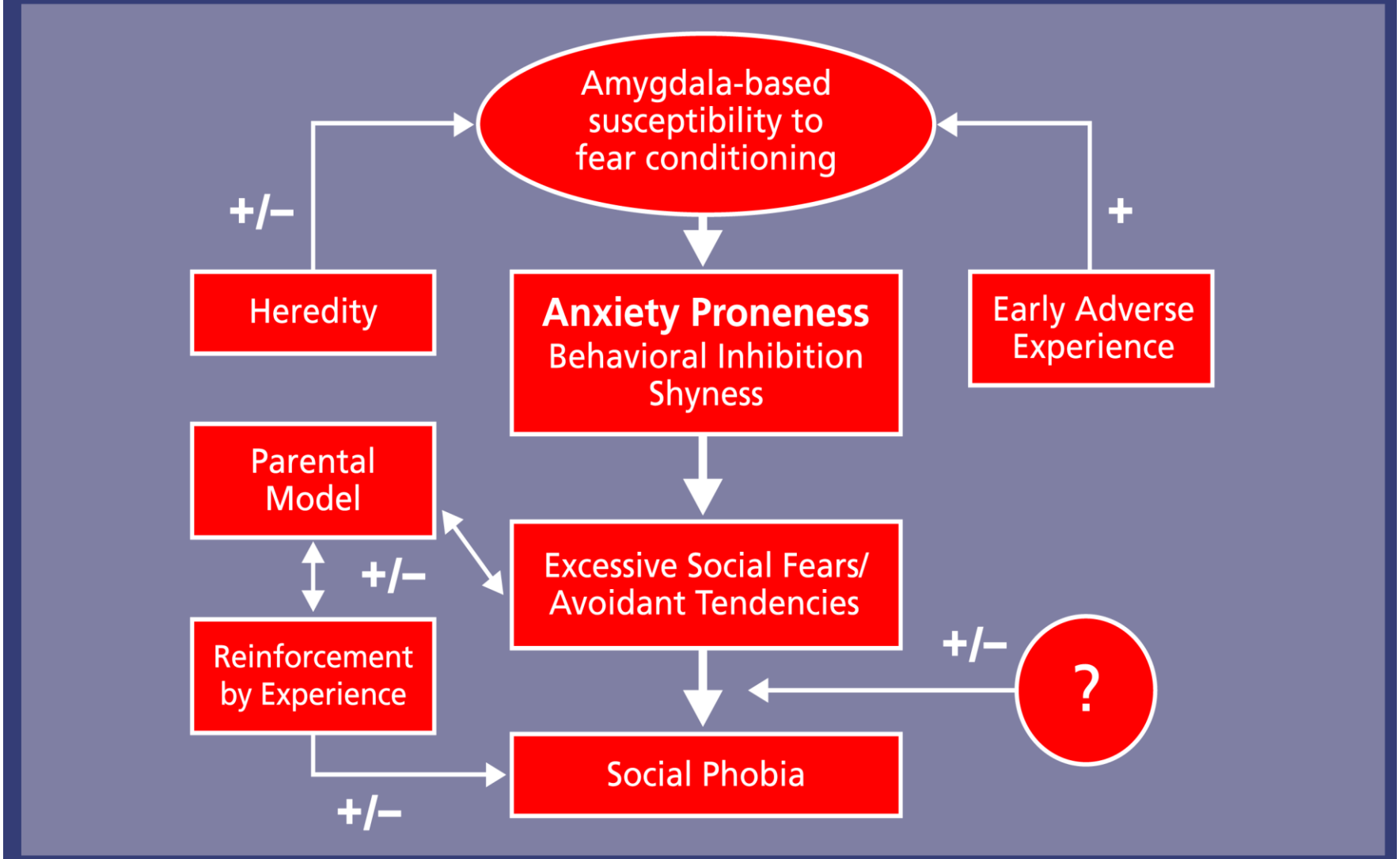
Slide 11

Biopsychosocial Model of Generalized Anxiety Disorder



SLEs=stressful life events.

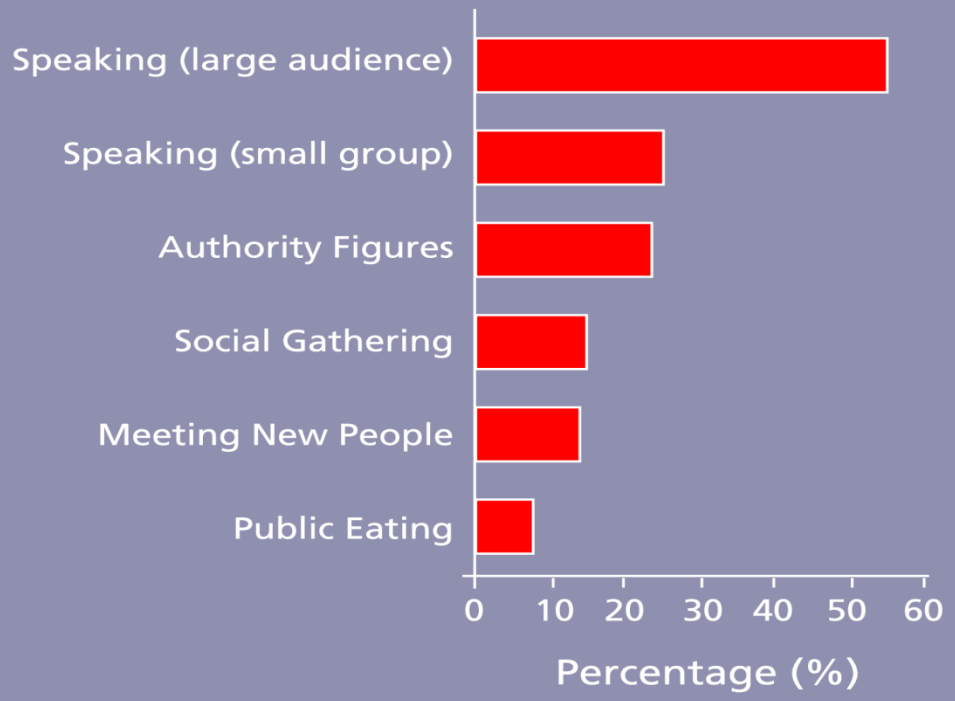
Impact of Genetics and Environment on Social Anxiety Disorder



Stein MB. *Biol Psychiatry.* 1998;44(12):1277-1285.

Slide 1

Common Fears of Patients With Social Anxiety Disorder



- Incidence of social anxiety disorder in this population was 7%
- Most common fears expressed by social phobics
  - Public speaking
  - Speaking with strangers
  - Meeting new people
  - Dealing with authority figures
  - Eating or writing in public

Stein MB, Walker JR, Forde DR. *Am J Psychiatry,* 1994;51:408-412.

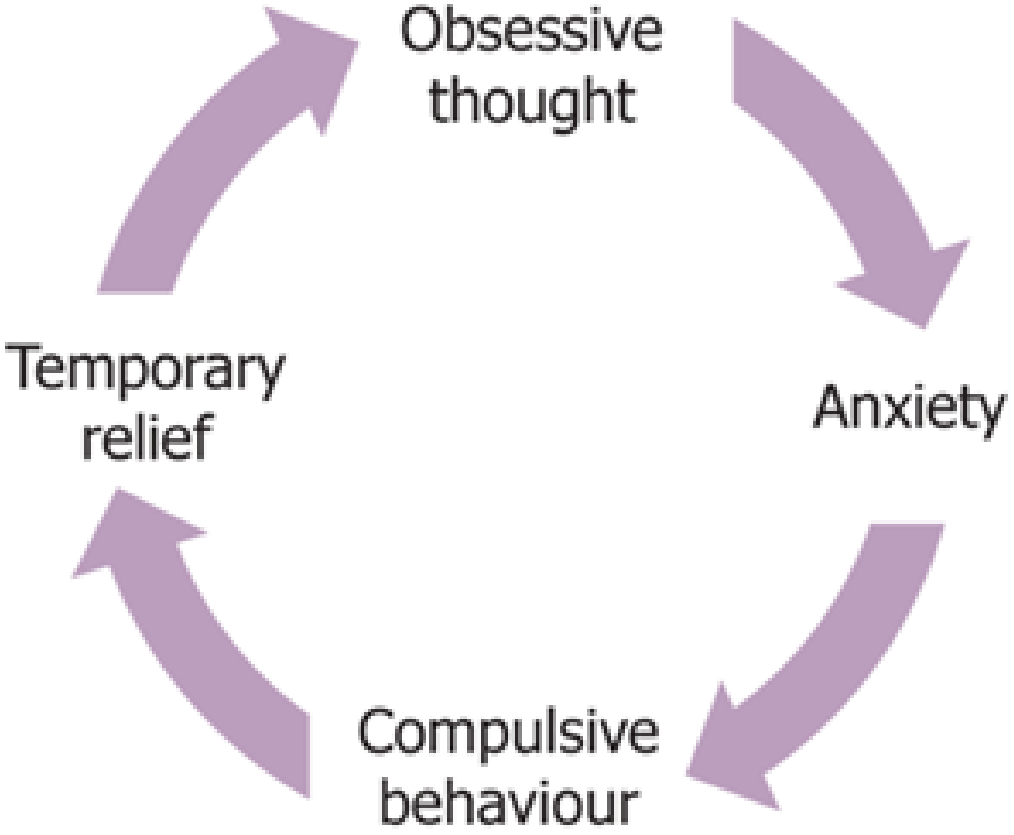

Obsessive thought
Anxiety
Compulsive behaviour
Temporary relief

Table 1 - DSM-IV diagnostic criteria for OCD

The person exhibits either obsessions or compulsions
The person recognizes that the obsessions or compulsions are excessive or unreasonable*
The obsessions or compulsions cause marked distress, are time consuming (take more than 1 hour a day), or significantly interfere with the person's normal routine, occupational/ academic functioning
If another axis I disorder is present, the content of the obsessions or compulsions is not restricted to it (e.g., eating disorder)

* Specify as poor insight; do not consider in children.

The most important symptoms of OCD

Obsessions

- Contamination themes
- Harm to self or others
- Aggressive themes
- Sexual themes
- Scrupulosity/religiosity
- Forbidden thoughts
- Symmetry urges
- Need to tell, ask, confess

Compulsions

- Washing or cleaning
- Repeating
- Checking
- Touching
- Counting
- Ordering/arranging
- Hoarding
- Praying

The main steps of diagnosis

- Anamnesis
  - Somatic disorders and treatment
  - Mental disorders – comorbidity: drugabuse, personality dis., affective dis., suicidality
- Careful physical and neurological examination – laboratory tests
- Psychiatric examination – interview – anxiety in the focus
- Development of the personality – coping mechanism, life circumstances

Diagnostic Tests

Evaluate the severity and follow up the treatment

Self ratings

- Beck Anxiety questionnaire
- Spielberger, State and Trait q.
- Yale Brown OCD scale /Y BOCS/

Rating by an evaluator

- Hamilton Anxiety Scale

General principles of therapy

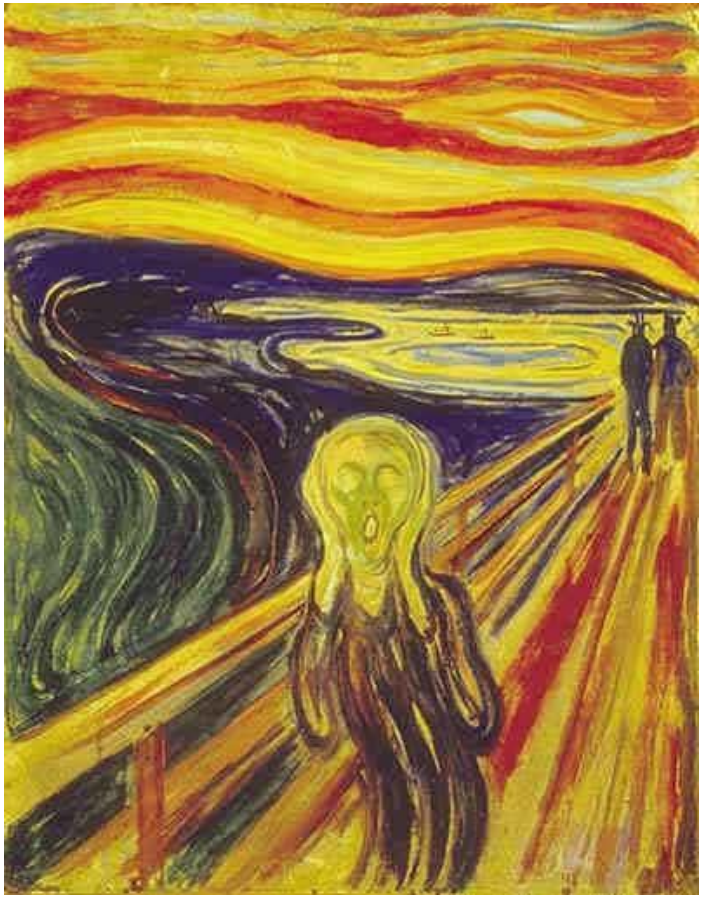
- Generally outpatient therapy
- Psychiatric hospitalisation needed:
  - Serious functional damage (comorbidity!)
  - Behavioural disturbance
  - Suicide ideation
- Pharmaco- and psychotherapy
- Follow up care
- Relapse prevention
- GP treatment - psychiatric consultation

The neurobiological basis of the effective treatment

- GABA-A RECEPTORCOMPLEX (omega 1-6)
  - benzodiazepine-agonists decrease anxiety
- SEROTONERGIC SYSTEM (dorsal raphe nucleus) 5-HT antagonists decrease anxiety
- NORADRENERGIC SYSTEM (locus coruleus)
  - autoreceptor stimulants (clonidin) decrease anxiety,
- Dopaminergic system's role is also likely

The viewpoints of ideal anxiolitic medication?

- Effective in broad spectrum
- No sedation
- No effect on cognitive functions
- No tolerance - dependence
- No withdrawal symptoms and rebound anxiety
- Overdose is not life threatening



ANXIETY DISORDERS DRUG THERAPY

- BENZODIAZEPINES
- SEROTONERGIC (5-HT_{1A}) RECEPTOR PARTIAL AGONISTS
- ANTIDEPRESSANTS
- NORADRENERGIC DRUGS (beta-receptor blockers)

Modern antidepressants

α2- antagonist + 5 HT2 antagonism:

- Remeron

RIMA:

- moclobemide

5-HT reuptake inhibition + 5-HT2 antagonism:

- trazodone
- nefazodone

SSRI's:

- paroxetine
- fluoxetine
- sertraline
- Citalopram and escitalopram
- fluvoxamine

SNRI's, dual action

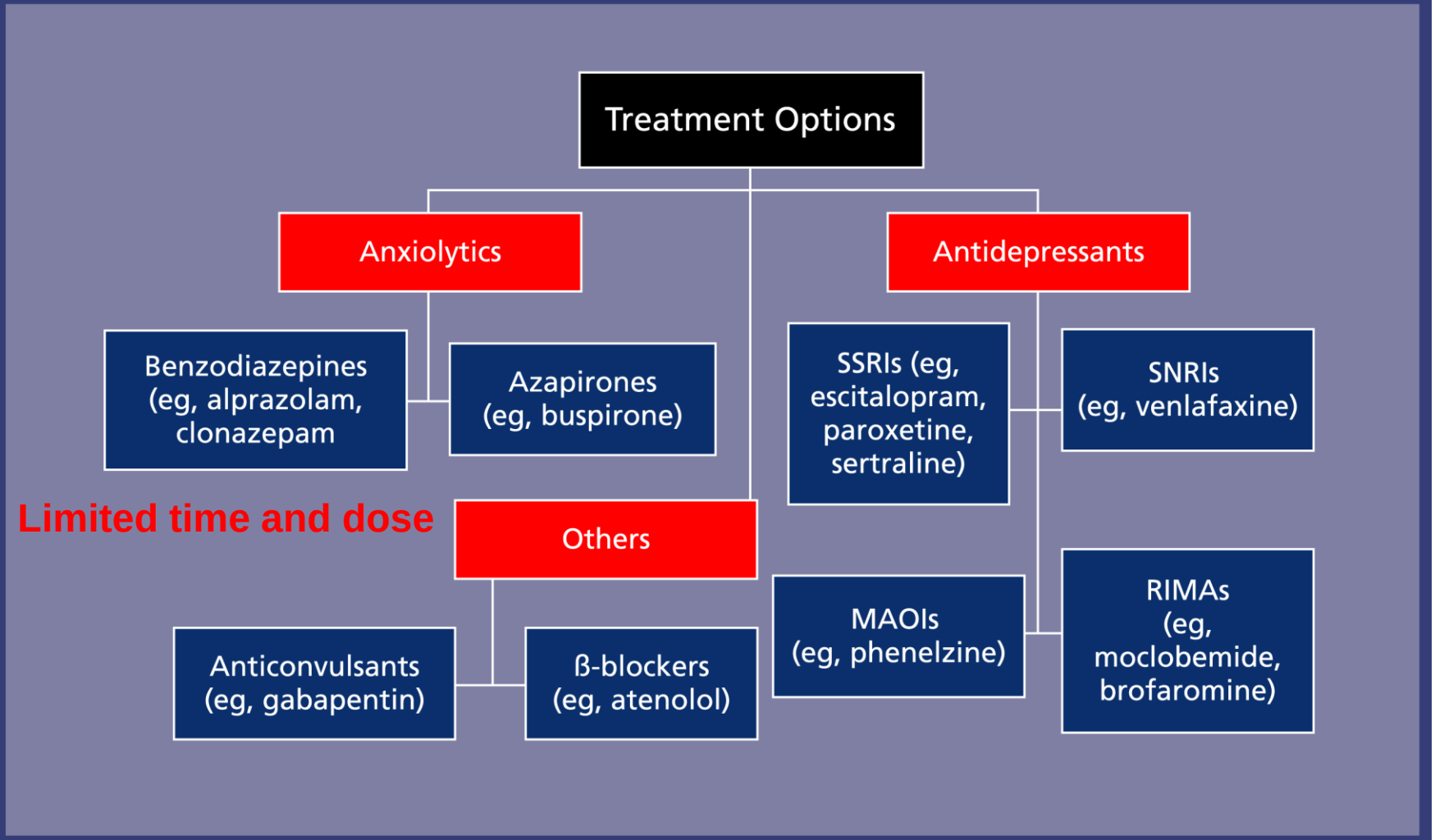
venlafaxin, reboxetine, duloxetine

Table 2. Summary of SSRIs and SNRIs

Generic Name	Brand Name	Approved Use
SSRIs		
Citalopram	Celexa	Depression
Escitalopram	Lexapro	Depression, GAD
Fluoxetine	Prozac, Sarafem, Selfemra	Bulimia nervosa, depression, OCD, panic disorder, PMDD
Fluvoxamine	Luvox	OCD, social phobia
Paroxetine	Paxil, Pexeva	Depression, GAD, OCD, panic disorder, PTSD, PMDD, social phobia
Sertraline	Zoloft	Depression, OCD, panic disorder, PTSD, PMDD, social phobia
Vilazodone	Viibryd	MDD
SNRIs		
Duloxetine	Cymbalta	Depression, diabetic neuropathy, fibromyalgia, GAD, musculoskeletal pain, osteoarthritis
Venlafaxine	Effexor	Depression, GAD, panic disorder, social phobia
Desvenlafaxine	Pristiq	Depression
Levomilnacipran	Fetzima	Depression

GAD: generalized anxiety disorder; OCD: obsessive-compulsive disorder; MDD: major depressive disorder; PMDD: premenstrual dysphoric disorder; PTSD: posttraumatic stress disorder; SNRI: serotonin-

Pharmacologic Treatments for Social Anxiety Disorder



Blanco C, Raza MS, Schneir FR, et al. *Int J Neuropsychopharmacol.* 2003;6:427-442.

PSYCHOTERAPEUTIC THERAPIES

- Supportive psychoterapy
- Cognitive and behavioural therapies - (systematic desensitisation) correcting false schemas and cognitive distortions
- Relaxation-meditation
- Psychodynamic psychoterapies - /working through losses, traumas, repressed aggression/
- Group-therapies, family-therapies

- In general, anxiety illnesses, particularly those that are persistent and recurrent, will require medication
- Psychotherapies that research has shown helpful for some forms of anxiety are interpersonal and cognitive/behavioral therapies.
- Interpersonal/family therapists focus on the patient's disturbed personal relationships that both cause and exacerbate (or increase) the anxiety
- Cognitive/behavioral therapists help patients change the negative styles of thinking and behaving often associated with anxiety
- Psychodynamic therapies which are sometimes used to treat anxious persons, focus on resolving the patient's conflicted feelings

Recommendations for treatment of anxiety disorders

1. Mild cases of panic may respond to behavioral interventions, but many patients will need medication (e.g., tricyclic antidepressants [TCAs], monoamine oxidase inhibitors [MAOIs], alprazolam).
2. The agoraphobic patient should be gently encouraged to get out and explore the world.
   - Progress will not occur unless the phobic patient confronts the feared places or situations.
3. Behavioral techniques (i.e., exposure, flooding, desensitization) will help most persons with specific and social phobias.
   - Some people with social phobias respond well to medication (e.g., TCAs, MAOIs, serotonin reuptake inhibitors, alprazolam).
4. Generalized anxiety may respond to simple behavioral techniques (e.g., relaxation training), but many patients will need medication (e.g., benzodiazepines).
   - Be sure that the benzodiazepine is prescribed for a limited time only (e.g., weeks or months).
5. Posttraumatic stress disorder tends to be chronic, but many patients will benefit from the support available in group therapy.
   - Group therapy has become especially popular with Vietnam veterans, and most veteran organizations can offer help in finding a group.