Basic Psychiatry

Third Edition - 2020.

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Preface to the third edition

This edition is the third edition of my book *Basic Psychiatry*, which is a relatively concise textbook for medical students. The entire text has been reviewed in the light of recent advancements in the field of Psychiatry and the requirement of the SaudiMED framework and the Education & Training Evaluation Commission (EEC) of the Kingdom of Saudi Arabia (KSA). The EEC requires university programs to have the following five domains integrated into their courses: knowledge, cognitive skills, interpersonal skills and responsibility, communication, and psychomotor skills. The SaudiMED framework was created in light of a shift toward competency-based medical education in Saudi Arabia. It represents a national standard for Saudi medical graduates and is intended to ensure that they have attained the competencies necessary to be a successful physician. Some competencies in the SaudiMED are much linked to psychiatry and behavior sciences: for example, competencies number 10 (Effective communication with others), number 11 (Teamwork collaboration), and number 15 (Commitment to personal development).

Basic Psychiatry provides a quick reference for practicing physicians, whatever their specialty, and for those preparing for the Saudi Medical Licensing Examination (SMLE) and the United States Medical Licensing Examination (USMLE).

I am grateful to colleagues, medical students, psychiatry residents, and others who have provided me with feedback that has helped shape this edition of the book.

Introduction, Diagnosis, Classification, & Etiology in Psychiatry

Objectives On completion of this chapter, the student should be able to:

1- Know what Psychiatry is and why it is important.
2- Know the prerequisites and the main learning objectives (LOs) of Psychiatry clerkship.
3- Understand the purposes of diagnosis and classification in Psychiatry.
4- Know the difference between primary and secondary psychiatric disorders.
5- Understand the difference between psychotic and non-psychotic disorders.
6- Be familiar with multifaceted approach to etiology and management of psychiatric disorders.

What Psychiatry is and why it is important.

Psychiatry *is a medical field studying mental disorders* (etiology, epidemiology, features, assessment, treatment, and prevention). Psychiatry provides physicians with knowledge and skills required for recognizing and dealing with mental illnesses in their patients regardless of their field of medical practice. Many medications prescribed by physicians have significant mental side effects and many psychotropic medications have physical side effects. Moreover, training in psychiatry will expand your understanding of the spectrum of human perception, thinking, emotion, and behavior that will serve you well in self-awareness, interpersonal relationships, and patients' care. Furthermore, physicians are very vulnerable to a wide range of mental illnesses (e.g., anxiety, depression, insomnia) that require early recognition and intervention. Psychiatry is an intersecting discipline between psychology, medicine, and sociology. Whatever specialty you choose in the future, training in psychiatry will upgrade your clinical skills in:

- Recognizing the patient's state of mind.
- Understanding the patient's suffering.
- Expressing empathy for the patient's suffering.
- Establishing good rapport with your patient.
- Putting the patient at ease.

Prerequisites and learning objectives of Psychiatry clerkship

Prerequisites: Neuroanatomy, neurophysiology, neuropharmacology and clinical psychology.
(See Appendix-A: Review of basic sciences relevant to Psychiatry).

Learning objectives
Attitude: To adopt positive attitude toward Psychiatry field, mentally ill patients, and psychotropic medications.
Knowledge: To know psychiatric disorders (types, features, etiology, epidemiology, course, treatment, and prognosis).
Skills: To be able to practice psychiatric history, mental state examination, and interview skills.

Diagnosis and Classification in Psychiatry

A 78-year-old man seen at the emergency department with three days history of confusion, dysarthria, and disturbed behavior. His son asked the treating physician " *what kind of ilness my father has*?"
How would you answer him?

Purposes of diagnosis and classification in Psychiatry

- To distinguish one diagnosis from another.
- To bring order to the variety of mental disorders.
- To enable clinicians to communicate with one another about their patients' symptoms, treatment, and prognosis.
- To ensure that psychiatric research can be conducted with comparable groups of patients.

Classification of psychiatric disorders: There are two main classifications of mental disorders.

The International Classification of Diseases (ICD)	The Diagnostic and Statistical Manual (DSM)
Developed by the World Health Organization (WHO) to be used in most countries of the world for clinical purposes. It has been translated into all the widely spoken languages of the world. The last version is ICD-11.	Developed by the American Psychiatric Association (APA), to be used in the USA and Canada. Hwoever, the last version (DSM-5) was designed to correspond to ICD to ensure uniform reporting of international health statistics and for billing codes for reimbursemen.

All categories used in DSM-5 are found in ICD-10, but not all ICD-10 categories are in DSM-5. Although designed for use in the United States, DSM-5 is employed in some other countries**.**

The main categories of mental disorders in the DSM-5	
▪ Depressive Disorders. ▪ Bipolar and Related Disorders. ▪ Schizophrenia and Other Psychotic Disorders. ▪ Neurocognitive Disorders. ▪ Substance-Related and Addictive Disorders. ▪ Anxiety Disorders. ▪ Obsessive-Compulsive and Related Disorders. ▪ Trauma- and Stressor-Related Disorders.	▪ Somatic Symptom and Related Disorders. ▪ Dissociative Disorders. ▪ Personality Disorders. ▪ Neurodevelopmental Disorders. ▪ Feeding and Eating Disorders /Elimination Disorders. ▪ Sleep-Wake Disorders. ▪ Sexual Dysfunctions/Gender Dysphoria/Paraphilic Disorders.

Primary vs. Secondary Mental Disorders Etiology-based approach.

Primary Mental Disorders	Secondary Mental disorders
Disorders without any underlying physical etiology. Sometimes called functional or non-organic disorders. E.g., Schizophrenia, panic disorder, adjustment disorders**.**	Disorders with underlying primary physical (organic) etiology. E.g., mental disorders induced by a physical disease, medication, or substance abuse.

Features suggestive of secondary mental disorders: *History:* old age/physical diseases/medications/history of substance abuse, stroke or head trauma. *Physical examination:* fever/impaired consciousness/neurological signs. *Mental state examination:* cognitive deficit (attention, concentration, orientation or memory)/ perseveration (see signs & symptoms)/visual hallucinations. *Lab results:* electrolyte disturbances/hypoglycemia/abnormal TFT….etc.

Psychotic vs. Non-Psychotic Disorders Symptom-based approach.

Psychotic disorders	Non-Psychotic Disorders
Mental disorders with impaired insight and reality testing manifesting as delusions, hallucinations, or severe disorganization of thought/speech/behavior.	Mental disorders with intact insight and reality testing. No delusions, hallucinations, or severe disorganization of thought/speech/behavior.

Psychotic disorders can be due to a secondary physical cause (e.g., substance-induced psychosis.) or primary illnesses (e.g., schizophrenia).

	Primary Mental disorders	Secondary Mental Disorders
Psychotic Disorders	Brief Psychosis. Schizophreniform disorder. Schizophrenia. Schizoaffective disorder. Delusional disorders. Major depressive disorder *with* psychotic features. Others.	Delirium. Medical condition-induced psychosis (e.g., SLE). Medication-induced psychosis (e.g., steroids). Substance-induced psychosis (e.g., amphetamine). Others.
Non-Psychotic Disorders	Major depressive disorder *without* psychotic features. Generalized anxiety disorder (GAD). Panic disorder. Phobia. Adjustment disorders. Obsessive-Compulsive disorder (OCD). Post-traumatic stress disorder (PTSD). Others.	Depressive disorder induced by medications (e.g., interferon). Anxiety induced by a physical disease (e.g., anemia or hyperthyroidism). Panic attacks induced by substance abuse. Others.

Etiology of psychiatric disorders

Etiology is important in Psychiatry

- To understand the variety of contriputing factors of psychiatric and some medical illnesses.
- To manage individual cases according to their etiology.
- To allow primary prevention for those who are at-risk.

The Complexity of etiology in Psychiatry

- *Time factor*: causes may be remote in time from the effect they produce.
- *A single cause may lead to several psychological effects,* e.g., deprivation from parental affection may lead to depression or conduct disorder in children and adolescents.
- *A single effect may arise from several causes*, e.g., depression may be due to an accumulation of several causes like endocrinopathies, psychosocial stresses, and side effects of some drugs.

Classification of Causes

A. Based on time factor	B. Based on the nature of the cause (bio-psycho-social model)	C. Based on the effect
Long-term factors, e.g., childhood psychological distress. *Med-term factors*, e.g., abnormal personality traits. *Immediate factors*, e.g., recent head trauma.	*Biological factors*, e.g., genetic, hormonal, metabolic, …etc. *Psychological factors*, e.g., behavioral, cognitive (distortions in thinking), psychodynamic conflicts. *Social factors*, e.g., divorce, financial stresses, cultural conflicts.	*Predisposing factors*, e.g., genetic, disturbed family relationships. *Precipitating factors*, e.g., infection. *Aggravating factors*, e.g., a death of a close relative. *Maintaining factors*, e.g., financial stresses.

Bio-Psycho-Social Approach [Engel 1977]:

A multifaceted approach not only to the etiological factors but also to a multidisciplinary management of psychiatric disorders.

	Predisposing Factors	Precipitating Factors	Aggravating Factors	Maintaining Factors
Bio	E.g., Genetics in panic disorder.	E.g., Cannabis inducing a panic attack.	E.g., Further abuse of cannabis.	E.g., Continuation of cannabis abuse.
Psycho	E.g., Abnormal personally traits in adjustment disorders.	E.g., Failure in exam.	E.g., Further psychological stresses.	E.g., Continuation of such stresses.
Social	E.g., Parental separation in separation anxiety disorder.	E.g., Marriage.	E.g., Marital conflict	E.g., continuation of marital problems.

Supernatural causal attributions; Although many cultures view black magic (sorcery), evil eye, and devil possession as hidden causes of mental diseases, it is impossible to subject such supernatural matters to empirical research.

Self-assessment (learning objectives-oriented)

1- Mention a concise definition of Psychiatry and explain why Psychiatry is important to physicians.
2- Mention the purposes of diagnosis and classification in Psychiatry.
3- Compare and contrast primary and secondary psychiatric disorders.
4- Compare and contrast psychotic and non-psychotic disorders.
5- With examples, explain the etiology-based vs. the symptom-based approaches of psychiatric disorders.
6- Explain the bio-psycho-social approach of psychiatric disorders.

Exercise: Within your community, talk about the importance of adopting positive attitude toward Psychiatry, mentally ill patients, and psychotropic medications.

Assessment in Psychiatry (History, MSE, & Others)

A 43-year-old man, became increasingly oversuspicious, believed that other men at his place of employment were circulating slanderous stories concerning him. He heard voices calling his name several times.
How would you assess him?

Objectives
On completion of this chapter, the student should be able to:

1- Know the psychiatric history and be able to practice it.
2- Know the mental state examination (MSE) and be able to practice it.
3- Understand the basics of psychiatric interview.
4- Know the diagnostic aids in Psychiatry.

The Psychiatric History: The history is obtained not only from the patient but also from other informants, especially in psychotic cases. However, the reliability of both the patient and the other informant should be considered.

Item	Content
Identification data	Name, age, sex, marital status, occupation, education, nationality, residency and religion. Note that, in other branches of medicine this part of history is usually called *personal history*.
Referral source	Brief statement of how patient was referred to psychiatry and the expectations of the consultation.
Chief complaint	Exactly why the patient came to the psychiatrist, preferably in the patient's own words (a verbatim statement). Note whether the chief complaint differs significantly from the reports of those who accompany patient (other informants).
History of present illness	Onset, nature, course, severity, duration, effects on patient's life. Screening of relevant problems, symptoms not mentioned by patient (e.g. sleep, appetite …), and treatment taken so far (nature and effect).
Past psychiatric history	Any previous psychiatric illness (features, duration, treatment, outcome and patient's reaction and attitude).
Personal history	***Birth*:** any known obstetric or prenatal difficulties? ***Early development*:** developmental milestones (motor and language), early childhood attitudes and relationships with parents, siblings and others, any emotional or behavioral difficulties. ***School*:** age at starting and end of school life, approximate academic ability, specific difficulties, attitudes and relationships with teachers and pupils and highest grade attained. ***Puberty:*** age at onset, knowledge, attitude and practice of sex. **Adolescence:** attitude to growing up, to peers, to family and authority figures, and emotional or behavioral problems. ***Occupations*:** age at starting work, jobs held, reasons for change, satisfaction in work, relationships with workmates and with supervisors. ***Marital history*:** age at marriage, relationships within the marriage, number of children and attitude toward them. ***Current social situation*:** social environment and social relationships, financial circumstances and social difficulties. **Tobacco and substance abuse, and legal (forensic) problems.**
Family history	Mother and father: current age (if died mention age and cause of death, and patient's age at that time), relationship with each other and with patient. Siblings: list, in order of age, brothers and sisters, education, occupation, marital status, major illnesses and relationship with patient. Ask about mental illnesses in second-degree relatives (grandparents, uncles, aunts, nephews, & nieces). Family history is important in psychiatry for several reasons: 1- Family atmosphere has an effect on the patient's psychological condition. 2- Some psychiatric disorders run in families and have an important genetic contribution. 3- Events happening currently to a family member may act as a stressor to patient.
Medical history	Medical diseases (nature, extent, dates, treatment, outcome, and patient's reaction and attitude). Women should be asked about menstrual, perinatal, and menopausal difficulties when appropriate.
Personality traits	It is important to obtain adequate information (from a variety of sources) about patient's personality traits (before the illness) that distinguish him as an individual. Patient's personality usually interacts with his illness and should be separated from episodes of illness. Elicit information about the following: Attitude to self (self-appraisal, performance, satisfaction, past achievements and failures, future.) Prevailing mood and emotions. Reaction to stress (ability to tolerate frustration and disappointments, pattern of coping strategies). Interpersonal relationships (width & depth). Personal interests, habits, hobbies and leisure activities.

The psychiatric history does not include the patient's present mental condition during the interview (feelings; thoughts, perception, and behavior) because these items are part of mental state examination.

Mental State Examination (MSE): Assessment of the mental functioning *at the time of interview*. MSE is analogous to performing a physical exam in medicine. It serves as a baseline for future comparison and follow-up of the progress of the patient.

Item	Content
Appearance	Body built, self-care, grooming, facial expressions, and eye contact.
Behavior	Level of activity, posture, and unusual movements (e.g., tics, tremor).
Attitude	Cooperative/uncooperative, interested/bored, submissive/assertive/aggressive, or sarcastic.
Speech	Amount of speech, flow, tone, coherence, continuity, speech impairments (stuttering, dysarthria…).
Affect	**Subjective affect:** patient's verbal expression of his feelings. **Objective affect:** examiner's evaluation of patient's nonverbal expression of feelings. Note any abnormality in the *nature* of feeling (e.g. euthymic, anxious, depressed, elated), the *variability* of feelings (e.g., normal, constricted, labile), and whether feeling *is appropriate* to the thought content and the setting of the interview.
Perception	Ask patient about unusual perceptions (auditory, visual, olfactory, gustatory, tactile and somatic). Ascertain whether the disturbances are **illusions** (misperceptions of real external stimuli), **hallucinations** (perceptions without external stimuli) or **pseudo-hallucinations** (sensory deceptions perceived as emanating from within the mind).
Thoughts &Thinking	Through speech, note stream, link, & content of ideas **(**see abnormalities in thoughts later). Test the ability to understand the non-literal meaning and to make appropriate inferences from sentences (abstraction). **1. *Proverbs:*** ask patient to interpret one or two proverbs e.g., "Mr. X has two faces" this means Mr. X has hypocritical double-dealing behavior (abstract thinking). Some patients may give a concrete answer (e.g., Mr. X has two real combined faces). **2. *Similarities & difference:*** e.g., tell me the similarity between "car and train" or the difference between "book and notebook".
Cognitive Functions See MoCA Mini-MSE & CANTAB in Neurocognitive disorders	**Attention:** (*The ability to focus on the matter in the hand)*. It is assessed by asking patient to spell a word backward (e.g. World), to mention 5 words with the same letter, or by the digit span test (see memory below). **Concentration:** (*The ability to sustain attention*). Concentration is tested by naming the months of the year in a reverse order or by subtracting serial 7s from 100 (serial 7s test): patient is asked to subtract 7 from 100 then to take 7 from the remainder repeatedly until it is less than seven. Serial 3s test can be used if patient lacks skill in arithmetic. **Orientation to time, place and person**. **Time**: note whether patient identifies the day correctly (e.g. Monday), time of the day (e.g. afternoon) and the approximate date (day, month, and year). **Place**: note whether patient knows where he or she is (city- area-building). **Person**: note whether patient knows other people in the same place (e.g. relatives, hospital staff). It usually appears in this order: time - place -person, and clears in the reverse order: person - place - time. Disorientation is an important feature of a neuropsychiatric illness.
Judgment	Test the predicted response and behavior in imaginary situations e.g., what would you do if you smelled smoke in a crowded place? If you heard a loud scream coming from your neighbor' house?
Insight	Assess the degree of patient's awareness of his/her mental illness. 1. Do you believe that you have abnormal *experiences*? If the answer is "No", the patient has total lack of insight. 2. Do you believe that your abnormal experiences are *symptoms of illness*? 3. Do you believe that the illness is *mental*? 4. Do you believe that psychiatric *treatment* might benefit you?

For history and mental state assessment of the most important and common psychiatric disorders, see Appendix – B

Psychiatric Interview

A thorough assessment of a psychiatric patient consists of a psychiatric history, mental status examination, physical examination, and certain relevant laboratory and psychological tests. The psychiatric history and mental status examination are usually obtained during the initial psychiatric interview.

Greet the patient by name; introduce yourself; arrange for a comfortable private setting; put the patient at ease ; appropriately tell the purpose of the meeting, and be supportive, attentive, nonjudgmental, and encouraging. Avoid excessive note-taking, and observe the patient's nonverbal behavior.

Interview Techniques:

1- **Facilitation:** Encouraging patient to talk through verbal and nonverbal cues.
2- **Obstruction:** Blocking a very talkative patient through verbal and nonverbal cues.
3- **Getting clarification:** Enquiring about nonclear statements.
4- **Direction/redirection:** Using focused statements and questions to maintain the proper track of the interview.
5- **Reflection:** Telling a patient what he has said to make sure that he has been correctly understood.
6- **Summation:** Summarization of what has been said during the interview so far.
7- **Silence**: Keeping quiet to allow patients to ventilate emotions (e.g. weeping) and to contemplate.

Physical Examination in Psychiatry

Patient's medical status should be considered at the outset of a psychiatric evaluation, particularly when the patient has physical symptoms, such as palpitation, headache, and numbness. The psychiatrist should be able to distinguish physical diseases that mimic psychiatric disorders and vice versa. He also should be able to recognize the symptoms of some physical diseases that have psychiatric manifestations. It should be determined what physical examination is relevant.

The psychiatrist is most likely to be concerned with the examination of the central nervous system and the endocrine system. If the patient's problem is apparently limited to the social sphere, there may be no indication for physical examination.

Diagnostic Aids in Psychiatry

Neurosciences have been accumulating evidence for subtle neurophysiological dysfunctions in many psychiatric disorders, and an effort is being made to quantify some of these abnormalities. However, No psychiatric diagnosis can be based exclusively on a laboratory test.

Laboratory test has many functions in Psychiatry: 1. To screen for medical illness in the psychiatric patient. 2. To help establish a diagnosis. 3. To determine whether a treatment can be given. 4. To check for substance abuse. 5. To evaluate toxic and therapeutic effects of a drug.

Screening tests commonly used in psychiatric practice include: 1. Complete blood count (CBC) with ESR. 2. Liver function tests and lipids. 3. Renal function tests (urea, creatinine) and electrolytes. 4. Thyroid function tests (TFT). 5. Blood sugar level. 6. Vitamins D, B-12 and folate levels. 7. ECG. 8. Drug screening.

Supplementary Tests: When the commonly used tests are negative, and a physical cause is suspected, other tests can be used.

- Computed Tomography (CT): For detection of suspected structural brain abnormality, e.g., tumor, stroke, abscess, subdural hematoma.
- Magnetic Resonance Imaging (MRI): Detection of demyelination diseases. Detection of lesions in the brain stem, temporal areas and posterior fossa (better than C.T.). Detection of suspected small structural abnormalities, that may not be detected by CT-Scan. Functional MRI (fMRI): Helpful in investigating patients with cognitive and other disorders. It detects blood flow and tissue perfusion without radioactive substances, a great advantage over SPECT and PET.
- Single Photon Emission Computed Tomography (SPECT): For a more accurate anatomical location of the functional abnormalities.
- Positron Emission Tomography (PET): The most powerful currently available brain image technique for detecting functional abnormalities. It gives information specifically about neuronal metabolism.
- Electroencephalography (EEG): Assists in the diagnosis of epilepsy (especially complex partial seizure) and in detecting organic causes of psychiatric problems, e.g., hydrocephalus, space occupying lesion.
- Cerebro-Spinal Fluid (CSF) Examination.
- Anti-Nuclear Antibodies (ANA): Autoimmune diseases, e.g., SLE
- Skin Tests for Tuberculosis (T.B.)
- Serum Caeruloplasmin (low in Wilson's disease).
- Drug Levels: Mainly used for lithium, carbamazepine and sodium valproate (drugs commonly used in mood disorders & require therapeutic and toxicity ranges).

Learning objectives-oriented self-assessment

1- Compare and contrast identification data, personal history, and personality traits.
2- Why personality traits are important to know?
3- Mention the items of mental state examination.
4- Mention three functions of laboratory tests in Psychiatry.

Exercise: Within your community, talk about the assessment methods in Psychiatry and their role in the diagnosis and management of psychiatric disorders.

Symptoms and Signs (Psychopathology) in Psychiatry

A 24-year-old female brought to psychiatry clinic by her family because she believes that everyone was talking about her. She refused to go to the bathroom, saying that a man was looking in the window at her. She now claims to "hear voices" telling her what must be done.
What psychiatric signs dose this patient have?

Objectives
On completion of this chapter, the student should be able to:

1- Know and classify the common psychiatric symptoms and signs.
2- Understand what psychosis means and detect signs of psychosis.
3- Link symptoms and signs with psychiatric disorders.

This chapter provides a concise description of the most common symptoms and signs of psychiatric disorders and their differential diagnosis. Following chapters, however, will clarify how to organize symptoms and signs into diagnostic categories. For simplification, symptoms and signs in psychiatry are grouped into abnormalities of the mental functions to match the mental state examination: Behavior and Movements – Mood/Emotion – Speech – Thoughts/Thinking – Perception - Cognitive functions - Judgment – and Insight.

Abnormalities of Appearance and Behavior

Agitation: Persistent pacing and restlessness to relief psychological distess . Patient may not be aware of his agitation and does not complain of it. Differential diagnosis (**DDx**): Psychosis (primary or secondary), major depressive episode, manic episode, delirium.

Akathisia: Unwanted distressing restlessness. Patient is aware of his restlessness and complains of it. **DDx**: Side effect of antidopaminergic medications.

Psychomotor Retardation: Slow psychological activities (e.g., delayed answers), and physical activities (e.g., slow movement). It ranges from hypokinesia/bradykinesia to akinesia (no movement). **DDx**: Depression, Parkinson disease, Parkinsonism (extrapyramidal side effects of antidopaminergic medication), and catatonic schizophrenia.

Stupor: A state of akinesia (no movement), mutism, and unresponsiveness to stimuli despite full consciousness. **DDx**: A primary physical disease (e.g., heat stroke) or a psychiatric disorder (e.g., severe depression, schizophrenia).

Catatonic Stupor: Stupor with rigid muscles and posturing. **DDx**: Catatonic schizophrenia.

Catalepsy/Waxy Flexibility: Passive induction of a posture held against gravity, patient's limbs may be moved like wax, holding a position for an extended period before returning to the previous position. **DDx**: Catatonic schizophrenia.
Negativism: Opposition to instructions. **DDx**: Opposional deviant disorder and catatonic schizophrenia.
Dystonia: Acute sustained painful muscle spasm. **DDx**: Side effect of antidopaminergic medications.

Tardive Dyskinesia: Restless movement of a group of muscles, mainly in the orofacial and hands muscles. **DDx**: Side effect of antidopaminergic medications.

Torticollis: Dystonia of neck muscles, tilting the head to one side. **DDx**: Side effect of antidopaminergic medications.

Tics: Sudden, repeated involuntary muscle twisting, e.g., repeated blinking, grimacing. **DDx**: Tic disorder and anxiety.

Compulsions: Repetitive coercive actions associated with obsessions, e.g., compulsive hand washing. **DDx**: Obsessive compulsive disorder (OCD).

Automatisms: Spontaneous involuntary movements that occur during an altered state of consciousness. **DDx**: Seizures.

Mannerism: Semi-purposeful odd movements, e.g., repeated hand movement resembling a military salute. **DDx:** Schizophrenia.

Stereotypies: Excessive, uncontrollable, purposeless, repetitive, involuntary movements, e.g., foot tapping, thigh rocking. **DDx:** Schizophrenia.

Abnormalities of Emotion, Affect, and Mood

Anhedonia: Lack of pleasure in acts which are usually pleasurable. **DDx:** Depressive disorders.

Euphoria: Excessive happiness associated self-satisfaction. **DDx:** manic epidode (primary or secondary to medications or substance abuse).

Anxiety: Excessive worries, apprehension, and negative expectations accompanied by physical symptoms of sympathetic system arousal (such as palpitation, tremor, and sweating). **DDx:** Anxiety disorders.

Panic attacks: Acute, short-lived intense anxiety associated with overwhelming dread. **DDx:** Panic disorder, agoraphobia, specific phobia, generalized anxiety disorder, secondary to medications, meical illness, or substance abuse.

Phobia: Irrational exaggerated fear and avoidance of a particular object, situation, or activity. **DDx**: Specific phobia, agoraphobia, and social phobia.

Constricted Affect: Significantly reduced emotional reactivity. **DDx**: Schizophrenia.

Flat Affect: lack of emotions even when discussing happy or sad moments. **DDx**: Schizophrenia.

Apathy: Total lack of emotional reactivity associated with detachment and concern. **DDx**: Schizophrenia.

Inappropriate Affect: Mismatching between emotion and the thought or behavior accompanying it. **DDx**: Schizophrenia.

Abnormalities of Speech

Mutism: Total lack of speech despite the ability to talk. **DDx:** Selective mutism, schizophrenia, and depression.

Stuttering: Excessive repetition of part of words. **DDx**: Speech disorders.

Poverty of Speech: Limited amount of speech. **DDx**: Schizophrenia and depression.

Pressure of Speech: Excessive, rapid, and uninterrupted speech. **DDx:** Manic epidode (primary or secondary to medications or substance abuse).

Rhyming (clang associations): Irrational use of words similar in sound but not in meaning (e.g., deep, keep, sleep). **DDx:** Manic epidode (primary or secondary to medications or substance abuse).

Punning: Irrational playing upon words, by using a word of more than one meaning (e.g., ant, aunt). **DDx:** Manic epidode (primary or secondary to medications or substance abuse).

Echolalia: Purposeless repetition of words made by others. **DDx**: Intellectual disability, autistic disorder, schizophrenia, and some secondary mental disorders.

Abnormalities of Thoughts/Thinking (observable in patients' spoken or written language)

A. Stream	B. Form/Link	C. Content
▪ Poverty of thoughts. ▪ Pressure of thoughts. ▪ Thought block.	▪ Flight of ideas. ▪ Thought perseveration. ▪ Verbigeration. ▪ Circumstantiality. ▪ Tangentiality. ▪ Loose association/Derailment. ▪ Neologisms. ▪ Incoherence/ word salad.	▪ Overvalued ideas. ▪ Obsessions. ▪ Delusions.

A. Stream abnormalities

Poverty of Thoughts: Few, unvaried thoughts associated with poverty of speech. **DDx:** Schizophrenia and depression.
Pressure of Thoughts: Rapid abundant varying thoughts associated with pressure of speech and flight of ideas **DDx:** Manic epidode (primary or secondary to medications or substance abuse).

Thought Block: Sudden cessation of thought flow with complete emptying of the mind, not caused by an external influence. **DDx:** Schizophrenia. Because loss of thoughts link, some references consider it as a formal thought disorder.

B. Form/Link abnormalities (Formal thought disorders)

Flight of ideas: Excessive rapidly shifting incomplete ideas but with a clear link. **DDx:** Manic epidode (primary or secondary to medications or substance abuse).

Thought perseveration: Repeating the same sequence of thoughts persistently and inappropriately in response to a stimulus. DDx: Neurocognitive disorders (e.g., dementia).
Verbigeration: Continual repetition of words or phrases without a stimulus. **DDx:** Intellectual disability and schizophrenia.
Circumstantiality: Excessive unnecessary details and irrelevant remarks causing a delay in getting to the point but often comes back to the point. **DDx:** Seen in normal individuals but when excessive it may indicate obsessive-compulsive personality traits or disorder.
Tangentiality: Erratical divergince from a previous line of thought and usually never returns to the original point. **DDx:** Intellectual disability, neurocognitive disorders, and schizophrenia.
Loosening of associations: Disjointed speech with an illogic connection between phrases. The patient may shift idiosyncratically from one frame of reference to another. It is also called *derailment* because the ideas slip off the track onto another that is completely unrelated or obliquely related. **DDx:** Schizophrenia.
Neologism: A new word or phrase, often consisting of a combination of other words, that is understood only by the speaker. **DDx:** Schizophrenia.
Incoherence/Word salad: Meaningless mixture of words. **DDX:** Chronic schizophrenia and intellectual disability.

C. Content abnormalities

Obsessions: Insistent, repetitive ideas, images, or urges entering person's mind despite resistance. They are unwanted, distressful and recognized as senseless and irrational. **DDx:** Obsessive-compulsive disorder (OCD).
Overvalued ideas: Exaggerated false but shakable beliefs (e.g., a patient believes that his wife may be unfaithful to him). **DDx:** Some otherwise healty people, prodromal phase of psychosis, and psychosis in remission.
Delusions: Fixed unshakable false beliefs out of keeping with the person's cultural background, not arrived at through logic thinking, and not amenable to reasoning. **DDx:** Psychosis (primary or secondary).

Types of delusions:

1. *Grandiose delusion*: Delusion of exaggerated self-importance in power or identity. DDx: Manic episode (primary or secondary), schizophrenia, and other disorders.
2. *Persecutory/paranoid delusion*: Delusion of being persecuted (cheated, mistreated, harassed, followed for harm, etc.). **DDx:** Schizophrenia, substance-induced psychosis, and other disorders.

3. *Delusion of reference*: Delusion that some events and others' behavior (e.g., TV news) refer to oneself in particular. **DDx:** Schizophrenia, substance-induced psychosis, and other disorders.
4. *Delusion of influence and control (passivity phenomena)*:
   Delusion that person's actions, feelings, or thoughts are controlled by outside forces. **DDx:** Schizophrenia, substance-induced psychosis, and other disorders. *Thought control* (also called *thought alienation*) is a kind of delusion of control concerning patient's thoughts. Thought alienation could be**:**

- *Thought insertion*: Delusion that some of the person's thoughts were put into his mind against his will at a distance by external forces (other people, a certain agency).
- *Thought withdrawal/broadcasting*: Delusion that some of the person's thoughts were taken out of his mind against his will (withdrawal) at a distance and being broadcast on the air, radio, TV, newspapers or some other unusual way.
- *Thought reading*: Delusion that some body can know the person's hidden thoughts at a distance against his will.

5. *Delusion of jealousy/infidelity*: Delusion that a loved person (wife/husband) is unfaithful. Seen in many psychotic disorders. However, it should be differentiated from overvalued ideas of jealousy (see above).
6. *Erotomanic delusion*: Delusion that someone, (usually inaccessible, high social class person) is deeply in love with the patient, seen in delusional disorders.
7. *Delusion of self-accusation*: Delusion that a patient has done something sinful, with excessive pathological feeling of remorse and guilt. **DDx:** Severe depressive disorder with psychotic features.
8. *Nihilistic delusion*: Delusion of nonexistence of part of the body, belongings, self, others or the world, seen in some patients suffering from major depressive disorder with psychotic features. **DDx:** Severe depressive disorder with psychotic features.
9. *Somatic delusion*: Delusion of an odd abnormality in body organ(s) or function (e.g., an implanted device in the head by a persecuting agency). **DDx:** Severe depressive disorder with psychotic features and schizophrenia.

Delusion can be either:

Mood-Congruent	Mood-Incongruent (indicates schizophrenia)
Delusional content is compatible with mood. For example: Delusion of guilt with depressed mood. Delusion of grandiosity with euphoric mood.	Delusional content is incompatible with mood. For example: Delusion of guilt with euphoric mood. Delusion of grandiosity with depressed mood

Delusional perception: A true perception followed by a false delusional interpretation. For example, a patient who saw a car on TV, became convinced that he was, therefore, about to be a king. It is thinking rather than a perceptual abnormality. **DDx:** Prodromal phase of schizophrenia.

Concrete thinking: Inability to understand the non-literal meaning and to make appropriate inferences from sentences. **DDx**: Normal children, intellectual disability, and psychosis (primary and secondary).

Abnormalities of Perception

Illusions: Misperception of a real external sensory stimulus (visual, auditory, olfactory, gustatory, or tactile). E.g., shadows may be misperceived as frightening figures. Illusions are common in normal children (in dim light) and may occur in normal exhausted or frightened adult. In psychiatric patients, illusions are nonspecific signs, found in many psychiatric cases. **DDx:** Delirium, substance abuse, and others.

Hallucinations: Perception in the absence of a real external stimulus; experienced as real perception coming from the external world (not within the mind). **DDx:** Psychosis (primary or secondary). E.g., hearing a voice of someone when actually nobody is speaking within the hearing distance.

Auditory hallucinations (voice, sound, noise).

Second-person hallucinations: Voice of one person or more, speaking *to* the person addressing him as "you". **DDx:**
Schizophrenia (usually giving orders or self-depreciating words. Patient does not accept the content and feels terrified).
Severe depression with psychotic features (usually self-depreciating words. Patient accepts the content with guilt feeling).
Manic episode (primary or secondary) (usually self-appreciating words. Patient accepts the content with pride).
Third-person hallucinations: voice talking *about* the person as "he" or "she".

Visual hallucinations (images/sights). **DDx:** A neurocognitive disorder but can be found in primary psychosis.
Olfactory hallucinations (smell/odor). **DDx:** Psychosis (primary or secondary).
Gustatory hallucinations (taste). **DDx:** Psychosis (primary or secondary).
Tactile hallucinations (touch/surface sensations). **DDx:** Psychosis (primary or secondary).
Somatic hallucinations (visceral and other internal sensations). Compared to somatic delusion (abnormality in thinking), somatic hallucinations are abnormality of perception. **DDx:** Psychosis (primary or secondary).
Certain kinds of hallucinations occur in normal people: Hypnagogic hallucinations (when falling asleep) and hypnopompic hallucinations (when waking from sleep).
Pseudo-Hallucinations: Normal sensory deceptions (as if perception) perceived as within the mind. E.g., when listening to an audiotape for an extended time, the same heard material can be re-experienced after removal of the source, as if still existing in the external reality. Pseudo-Hallucinations are common during the initial period of bereavement.
Thought echo: Hearing one's own subvocal self-dialogue spoken aloud in the head with echo. **DDx:** Schizophrenia.

Abnormalities of Self and Environment Awareness

The following abnormalities may occur in normal people (mental exhaustion/sleep deprivation). In patients, they are found in many psychiatric cases, like severe anxiety, complex partial seizures, substance abuse, and depersonalization syndrome. They are distressing to the patient and can not be reported to the clinicians easily.

Derealization: Awareness of changed environment (unreal environment) as if a person in a dream although he is fully awake.

Depersonalization: Awareness of changed body parts strange or detached.

Déjà vu: false awareness of familiarity so that a new situation is incorrectly regarded as a repetition of a previous memory. It is recognition distortion related to timing events.

Jamais vu: False awareness of unfamiliarity so that a previously known situation is incorrectly regarded as a new one. It is recognition distortion related to timing events.

Fugue: Assuming a new identity with amnesia for the original identity and wandering to a new environment, found in dissociative disorders.

Abnormalities of Judgment

Impaired judgment: Diminished ability to assess and correctly understand a situation and to act appropriately. **DDx**: Psychosis (primary and secondary), intellectual disability, traumatic brain injury.

Abnormalities of Insight

Total lack of insight: Complete denial of illness. **DDx**: Psychosis (primary and secondary.

Partial insight: Diminished awareness of being mentally ill. *Being aware of*:

- Abnormal experiences *but* denying being mentally ill.
- Mental illness *but* attributing it to an imagined external force (e.g., persecutors).
- Mental illness *but* denying the need of psychiatric treatment.
- Mental illness and the need of psychiatric treatment *but* not motivated to be treated.

DDx: Prodromal phase of psychosis (primary and secondary) and psychosis in remission.

Learning objectives-oriented self-assessment

1- A 53-year-old man seen at the emergency department has slowed body movements and delayed answers.

What is this psychopathology?

a. Akathisia.
b. Dyskinesia.
c. Dystonia.
d. Psychomotor retardation.

2- A 46-year-old man seen at the emergency department showed restlessness with inner tension. He does not want to settle.

What is this psychopathology?

a. Agitation.
b. Akathisia.
c. Dyskinesia.
d. Dystonia.

3- A 28-year-old schizophrenic male patient on medications seen at the emergency department because of painful neck spasm and tongue protrusion for 2 hours.

What is this psychopathology?

a. Dyskinesia.
b. Dystonia.
c. Parkinsonism.
d. Stupor.

4- A 53-year-old woman on antipsychotic medications for several years complains of repeated slow movements of her lips and tongue.

What is this psychopathology?

a. Akathisia.
b. Dystonia.
c. Parkinsonism.
d. Tardive Dyskinesia.

5- A 25-year-old man came to outpatient psychiatry clinic because of recurrent intrusive mental images that he cannot eliminate.
What is this psychopathology?

a. Delusion.
b. Hallucinations.
c. Illusions.
b. Obsessions.

6- While evaluating a 26-year-old woman, she indicated that she feels as if she heard voices of her relatives inside her head without their presence.
What is this psychopathology?

a. Derealization.
b. Hallucinations.
c. Illusions.
d. Pseudo-hallucinations.

7- A 26-year-old male seen at intensive care unit referred to psychiatry because he misperceived wallpapers as frightening figures.
What is this psychopathology?

a. Delusions.
b. Hallucinations.
c. Illusions.
d. Obsessions.

8- A 45-year-old male seen at the outpatient psychiatry clinic has an abrupt interruption in train of thinking before a thought is finished.
What is this psychopathology?

a. Flight of ideas.
b. Loose association.
c. Perseveration.
d. Thought block.

9- A 29-year-old woman said: *"I am sure that the news anchor on the TV talks about me in particular"*. What is the most likely psychopathology in this case?

a. Delusion of influence.
b. Delusion of reference.
c. Grandiose delusion.
d. Somatic delusion.

10- A 28-year-old woman said: *"I am sure that actors on the TV can read and change my thoughts"*. What is the most likely psychopathology in this case?

a. Delusion of influence.
b. Delusion of reference.
c. Hallucinations.
d. Illusions.

Answers

1	2	3	4	5	6	7	8	9	10
d	a	b	d	d	d	c	d	b	a

A 43-year-old woman was brought to the hospital with a 3-months history of feelings of worthlessness, decreased interest in and enjoyment of activities she normally found pleasurable. What would be your approach to reach the diagnosis?

Objectives

On completion of this chapter, the student should be able to:

7- Understand the differences between normal and abnormal sadness.
8- Know the various types of depressive disorders.
9- Know how to detect various depressive disorders in patients and treat them.

Depressive Disorders

1- Disruptive mood dysregulation disorder.
2- Major depressive disorder (including major depressive episode).
3- Persistent depressive disorder (dysthymia).
4- Premenstrual dysphoric disorder.
5- Substance/medication-induced depressive disorder.
6- Depressive disorder due to another medical condition.
7- Other specified depressive disorder.
8- Unspecified depressive disorder.

The common feature of all of these disorders is the presence of marked *low mood* or *anhedonia* (diminished interest or pleasure). However, some depressed patients complain mainly of feeling tense or irritable rather than being sad. What differs among depressive disorders are factors of onset, duration, associated features, severity, or etiology.

1- Disruptive mood dysregulation disorder (DMDD)

(see Child & Adolescent Disorders).

2- Major Depressive Disorder (MDD)

Major Depressive Disorder (MDD), Single Episode: One major depressive episode (MDE) not preceded by major depressive, hypomanic, or manic episodes.

Major Depressive Disorder (MDD), Recurrent: At least **2** MDEs separated by at least **2** months during which a patient has no significant symptoms of depression and not preceded by hypomanic or manic episodes.

Note that MDD is a unipolar disorder in which the patient has only MDEs. In *bipolar disorder*, the patient may have MDEs along with manic or hypomanic episodes (see bipolar disorders). Many bipolar disorders begin with one or more MDEs, especially in individuals with a family history of bipolar illness, onset of the illness in adolescence, and those with psychotic features.

Diagnostic criteria for Major Depressive Episode (MDE) (DSM-5)

A. At least a 2-week period of ≥ 5 of the following 9 symptoms (at least one of the symptoms is either (1) depressed mood or (2) diminished interest or pleasure.
   1. *Depressed mood* most of the day.
   2. *Anhedonia* in most of the previously pleasurable activities.
   3. *Marked changes in appetite/weight* (decrease or increase).
   4. *Marked changes in sleep* (insomnia or hypersomnia).
   5. *Psychomotor changes* (slowness or agitation).
   6. Fatigability.
   7. *Feelings of excessive guilt or worthlessness.*
   8. *Diminished ability to think, concentrate or make decisions.*
   9. Recurrent *death wishes/suicidal ideation.*

B. Significant *distress* or *funtioning impairment.*

C. Not induced by substance or medication.

D. The occurrence of the major depressive episode is not better explained by other psychotic disorders.

E. There has never been a manic episode or a hypomanie episode.

Other features of MDE include

Appearance: Neglected dress and grooming, facial appearance of sadness (inclined head, down cast gaze, tendency to shed tears, and reduced rate of blinking). *Pessimistic thoughts* about present, past, and future (Beck's triad). Severly depressed patients may develop *catatonic features* (very slow movement, muteness, soiling) or *psychotic features* like delusions and hallucinations the content of which is usually consistent with a depressed mood. MDE may present with *peripartum* onset

(symptoms occur during pregnancy or in the 4 weeks following delivery). *Physical features*: Reduced sexual desire, constipation, and amenorrhea in females. Masked depression is a term used when the patient is complaining primarily of physical features so troubling and interfering with his usual life. The full depressive syndrome is not immediately obvious (masked) because the patient does not report a depressed mood. Masked depression is very common in primary care settings. Usually, physical complaints tend to disappear when the masked depression is treated. Making it clear that they were secondary to a depressive episode.

Severity of MDE:

Mild: Few and less intense symptoms with minor functional impairment. *Severe:* Multiple and severe symptoms with marked functional impairment. *Moderate:* The number of symptoms, intensity of symptoms, and/or functional impairment are between those specified for "mild" and "severe."

Comorbidity: panic attacks, phobic features, OCD, eating disorders, suicidal attempts and substance abuse. In children, separation anxiety may occur. In elderly, neurocognitive impairment resembling dementia (pseudodementia) may occur.

Epidemiology: Women > men. MDD has the highest lifetime prevalence (5-17%) of any psychiatric disorder. Onset of MDE may first appear at any age. The incidence is increasing among adolescents. Mean age at onset is 40 years.

Etiology: *Genetic Factors:* The concordance rate is 70-90% in the monozygotic twins compared with 16-25% the dizygotic twins (defect in 5HT transporter). However, genes explain about 60% of the predisposition etiology and other uninheritable factors explain the remainder (40%). *Psychosocial factors:* Predisposing factors (e.g., losing a parent in childhood, loss of a spouse, unemployment, presence of personality disorder). Precipitating factors (e.g., recent stressful events reflecting negatively on the patient's self-esteem). Adverse uncontrollable events that result in a loss of self-esteem. Depressogenic schema (thinking distortions about self, people, life events, the world, and the future).

Differential diagnosis:

1. Depressive disorder due to a *physical disease* (e.g., hypothyroidism, stroke, Parkinson's disease, SLE, multiple sclerosis, cancer).
2. Depressive disorder due to *medications* (e.g., antihypertensive drugs, steroids, bromocriptine, L-dopa, indomethacin, isotretinoin, progestin-containing contraceptives (compared to estrogen-containing contraceptives, which can reduce depression risk), tamoxifen (estrogen-receptor antagonist used in breast cancer; it may induce depression that can be difficult to treat with antidepressants), chemotherapy agents e.g. vincristine, interferon (may induce severe depression with suicidal ideas), and antipsychotics.
3. Depressive disorder due to *substance abuse*.
4. Persistent depressive disorder (dysthymia).
5. Adjustment disorder with depressed mood.
6. Bipolar disorder (past history of manic or hypomanic episode).
7. Schizoaffective disorder.
8. Schizophrenia.
9. Premenstrual dysphoric disorder.
10. Bereavement.

Complications: *Suicidal risk* (thus, suicide should be carefully evaluated in any depressed patient). *Interpersonal problems and poor performance* at home, school, or work. *Decreased sexual* interest may lead to marital discord. *Physical problems* (depression increases risk of DM, hypertension, stroke, MI, peptic ulcer, and substance abuse).

Course and prognosis: *Onset* is either sudden or gradual (weeks). *Duration* is variable from weeks to months. *Recovery* (without treatment) within 3 months of onset of MDE is 40% and within one year is 80% of cases. Early treatment and a recent onset increases the likelihood of near-term recovery. *Recurrence* is lower as the duration of remission increases with or without treatment. Some patients experience many years with no symptoms between MDEs, while others rarely experience periods of full remission. The persistence of depressive symptoms during recovery is a predictor of recurrence. Many bipolar disorders begin with MDEs. Some patients given a diagnosis of MDD had past episodes of manic episodes that have gone undetected. Some MDD patients with psychotic features develop schizoaffective disorder or schizophrenia.

Investigations: No laboratory test is used as a diagnostic tool for MDE. However, some investigations are required to exclude possible underlying physical causes.

Management

Hospitalization is indicated in the following conditions: High suicidal risk, medication-resistance, presence of catatonic or psychotic features. *Antidepressants +/- electroconvulsive therapy (ECT)*. The effect of ECT is best seen in severe depression especially with marked biological (neurovegetative) features, suicidal, or psychotic symptoms. It is mainly the speed of action that distinguishes ECT from antidepressants. In pregnant depressed patient, ECT is safer than antidepressants. When the depressed patient has psychotic features, an antipsychotic medication should be initiated. *Transcranial magnetic stimulation (TMS)*: It is a 30-minute procedure that is performed as an outpatient treatment. The patient remains awake during the procedure. The treatment is administered daily for 4 weeks to produce electrical stimulation of targeted cortical

regions. It has a safe side effect profile (mild scalp pain) and is not associated with cognitive side effects. TMS therapy is contraindicated in patients with nonremovable metallic objects in or around the head. *Psychological treatment*: Supportive therapy and in less severe cases cognitive-behavior therapy (CBT).

3- Persistent Depressive Disorder (Dysthymia)

Definition: A chronic less severe depressive disoredr. *Dysthymia*: Ill-humored.

Diagnostic criteria (DSM-5)

A. Depressed mood for most of the time for at least 2 years.
B. Presence, while depressed, of at least 2 of 6:
   1. Poor appetite or overeating.
   2. Insomnia or hypersomnia.
   3. Low energy or fatigue.
   4. Low self-esteem.
   5. Poor concentration or difficulty making decisions.
   6. Feelings of hopelessness.
C. Never been without the symptoms in Criteria A & B for more than 2 months at a time.
D. Criteria for a major depressive disorder *may be* continuously present for 2 years.
E. There has never been a manic episode or a hypomanic episode.
F. Not better explained by a another psychiatric disorder.
G. Not attributable to a physical disease, a medication, or substance abuse.
H. Significant distress or functional impairment.

Specify if (for most recent 2 years of persistent depressive disorder):
With pure dysthymic syndrome.
With persistent major depressive episode.
With intermittent major depressive episodes.

Etiology: A number of brain regions (e.g., prefrontal cortex, amygdala, hippocampus) have been implicated in persistent depressive disorder. Presence of specific cognitive distortions susceptible persons (negative thoughts about self, the world, and the future).

Epidemiology: Men = women. Prevalence among the general population is 5- 6 % and among patients in general psychiatric clinics is 30-50%.

Differential Diagnosis:
This is essentially identical to that of MDD. However, *chronic Fatigue Syndrome (neurasthenia*) is another differential disorder. It is a psychosomatic illness with a disabling chronic fatigue of uncertain etiology.
Course and prognosis: By definition, course is a chronic one. *Onset* can be early (< 21 years) or late (at age ≥ 21 years or older). *Recovery* in persistent depressive disorder symptoms are much less likely to resolve without treatment than they are in a major depressive episode. Factors predictive of poorer long-term outcome include presence of anxiety features and higher levels of oversensitive negative temerament (neuroticism). The prognosis is good with treatment. However, about 25 % of never attain a complete recovery.

Management: The most effective treatment is the combination of *psychotherapy* (supportive ,CB, and insight-oriented therapy) and medications (SSRIs or SNRIs).

4- Premenstrual Dysphoric Disorder

Definition: Dysphoric mood associated with irritability and mood lability that occur repeatedly during the premenstrual phase of the cycle and remit around the onset of menses or shortly thereafter.

Diagnostic Criteria (DSM-5)

A. In the majority of menstrual cycles, at least five symptoms must be present in the final week before the onset of menses, start to improve within a few days after the onset of menses, and become minimal or absent in the week postmenses.
B. One (or more) of the following symptoms must be present:
   1 .Marked affective lability.
   2 .Marked irritability or anger or increased interpersonal conflicts.
   3. Marked depressed mood, feelings of hopelessness, or self-deprecating thoughts.
   4. Marked anxiety, tension, and/or feelings of being keyed up or on edge.
C. One (or more) of the following symptoms must additionally be present, to reach a total of five symptoms when combined with symptoms from Criterion B above.
   1. Decreased interest in usual activities (e.g., work, school, friends, hobbies).
   2. Subjective difficulty in concentration.
   3. Lethargy, easy fatigability, or marked lack of energy.
   4. Marked change in appetite; overeating; or specific food cravings.
   5. Hypersomnia or insomnia.
   6. A sense of being ovenwhelmed or out of control.

7. Physical symptoms such as breast tenderness or swelling, sensation of "bloating," or weight gain.

D. The symptoms are associated with clinically significant distress or interference with work, school, usual social activities, or relationships with others (e.g., avoidance of social activities; decreased productivity and efficiency at work, school, or home).

E. The disturbance is not merely an exacerbation of the symptoms of another disorder, such as major depressive disorder, panic disorder, persistent depressive disorder (dysthymia), or a personality disorder (although it may co-occur with any of these disorders).

F. Criterion A should be confirmed by prospective daily ratings during at least two symptomatic cycles.

G. The symptoms are not attributable to the physiological effects of a substance (e.g., a drug of abuse, a medication, other treatment) or another medical condition (e.g., hyperthyroidism).

Etiology: The exact cause is unknown. The underlying mechanism is believed to involve changes in hormone levels during the late luteal phase. Some symptoms may be worsened by a high-salt diet or caffeine. Some women who use oral contraceptives may have fewer premenstrual complaints than do women who do not use oral contraceptives**.** Symptoms do not occur during pregnancy. Environmental factors associated with the expression of premenstrual dysphoric disorder include stress, history of interpersonal conflic, and seasonal changes.

Epidemiology: *Prevalence* is 1.8% for women whose symptoms meet the full criteria *without* functional impairment and 1.3% for women whose symptoms meet the current criteria *with* functional impairment and without co-occurring symptoms from another mental disorder. *Onset* can occur at any point after menarche. Some women, as they approach menopause, report that symptoms worsen. After menopause symptoms usually cease. However, hormone replacement can trigger the re-expression of symptoms.

Differential Diagnosis: 1. Dysmenorrhea (painful menses that begin with the onset of menses). 2. Depressive disorders. However, major depression is a frequent comorbidity.
3. Medication-induced depressive disorder (e.g., exogenous hormonal treatments, including contraceptives). Symptoms occur after initiation of treatment and disappear after its discontinuation.
Course and prognosis: Impairment in social functioning may be manifested by marital discord and problems with children, other family members, or friends.

Management: Confirm the diagnosis and assess the severity. The Premenstrual Tension Syndrome Rating Scale (PTSRS) has a self-report and an observer version, both of which have been validated and used widely to measure illness severity in women who have premenstrual dysphoric disorder.The most effective treatment is the combination of *psychotherapy* (supportive, cognitive-behavioral, and insight-oriented therapy) and medications (SSRIs or SNRIs). Reducing salt, caffeine, and stress along with increasing exercise may be useful in some women. Hormonal contraception might be to reduce physical symptoms but do not relieve emotional symptoms. However, hormonal contraception may worsen symptoms in some women.

5- Substance/Medication-Induced Depressive Disorder

A. A prominent and persistent disturbance in mood in almost all activities.

B. There is evidence from the history, physical examination, or laboratory findings of both (1) and (2).
1. The symptoms developed during or soon after substance intoxication or withdrawal or after exposure to a medication.
2. The involved substance/medication is capable of producing the symptoms.

C. The disturbance is not better explained by another depressive disorder.

D. The disturbance does not occur exclusively during the course of a delirium.

E. The disturbance causes clinically significant distress or functional impairment.

Specify if: With onset during intoxication. With onset during withdrawal.

- ***Most common medications inducing depressive disorder:***
  - Chemotherapy agents e.g., vincristine, interferon (may induce severe depression with suicidal ideas). Tamoxifen (estrogen-receptor antagonist used in breast cancer): it may induce depression that can be difficult to treat with antidepressants.
  - Progestin-containing contraceptives (compared to estrogen-containing contraceptives, which can reduce depression risk).
  - Steroids.
  - Antihypertensives (e.g. beta-blockers, methyldopa, reserpine & Ca-channel blockers).
  - Bromocriptine & L - dopa.
  - Indomethacin.
  - Isotretinoin (Roaccutane); treatment of acne.

6- Depressive Disorder Due to Another Medical Condition

A. A prominent and persistent disturbance in mood in almost all activities.

B. There is evidence from the history, physical examination, or laboratory findings that the disturbance is the direct pathophysiological consequence of another medical condition.

C. The disturbance is not better explained by another mental disorder (e.g., adjustment disorder).

D. The disturbance does not occur exclusively during the course of a delirium.

E. The disturbance causes clinically significant distress or functional impairment.
Specify if: With depressive features. With major depressive-like episode. With mixed features.

- ***Most common medical conditions inducing depressive disorder:***
  - Hypothyroidism - Diabetes mellitus - Cushing's disease.
  - Parkinson's disease - Stroke; see post stroke depression (PSD).
  - Carcinoma (especially of the pancreas and lungs).
  - Autoimmune diseases; SLE, multiple sclerosis.

7- Other Specified Depressive Disorder

This category is used in situations in which the clinician chooses to *specify* reason that the presentation does not meet the criteria for any specific depressive disorder.

1. Recurrent brief depression.
2. Short-duration depressive episode (4-13 days).
3. Depressive episode with insufficient symptoms.

8- Unspecified Depressive Disorder

This category is used in situations in which the clinician chooses *not to specify* the reason that the criteria are not met for a specific depressive disorder, and includes presentations for which there is insufficient information to make a more specific diagnosis (e.g., in emergency room settings).

Bipolar Disorders (in process)

A 35-year-old woman was referred to psychiatry clinic through cardiology clinic with several months history of recurrent episodes of palpitation, sweating, nausea, dizziness, and fear of death.
What is the most likely diagnosis?

Objectives

On completion of this chapter, the student should be able to:

10- Understand the differences between normal and abnormal anxiety.
11- Differentiate between the various types of anxiety disorders.
12- Detect anxiety disorders in clinical practice.
13- Know the assessment and management of each anxiety disorder.

Anxiety Disorders

Anxiety is a normal human feeling of apprehension in certain threatening situations. A mild degree of anxiety is unavoidable and is not considered abnormal. Table 4-1 shows the main differences between normal and abnormal anxiety.

Table 4-1

Normal Anxiety	Abnormal Anxiety
Proportional apprehension to the external stimulus. Features of anxiety are few. Anxiety is not severe and not prolonged. Attention is focused on the external threat rather than on the person's feelings.	Apprehension is out of proportion to the external stimulus. Features are multiple. Anxiety is prolonged or severe or both. Attention is also focused on the person's response to the threat (e.g., palpitation).

Trait anxiety: Part of personality characteristics in which a person has a habitual tendency to be anxious in a wide range of different circumstances (longitudinal view).
State anxiety: Situational anxiety experienced as a response to external stimuli (cross-sectional view).

Anxiety disorders are abnormal states in which the most striking features are a worry, dread and physical symptoms of anxiety that indicate a hyperactive autonomic nervous system and are not caused by an organic brain disease, medical illness or psychiatric disorder.

Anxiety vicious circle: a complex chain of events that reinforce anxiety symptoms through a feedback loop (feeling anxious/physical symptoms/ catastrophic predictions/avoidance/ short term relief/ worsening of anxiety in the long term because of loss of confidence about coping and increased use of safety behaviors).

Table 4-2 Features of Anxiety

Psychological	Physical
Excessive apprehension. Fearful anticipation. Feeling of dread. Worrying thoughts. Hypervigilance. Feeling of restlessness. Sensitivity to noise. Difficulty concentrating. Subjective report of memory deficit. Sleep disturbances.	**Chest**: chest discomfort, difficulty in inhalation. **Cardiovascular**: palpitation, awareness of missed beats, cold extremities. **Neurological:** headache, dizziness, tinnitus, numbness, tremor, blurred vision. **Gastrointestinal:** disturbed appetite, dysphagia, epigastric discomfort, nausea, vomiting, disturbed bowel habits. **Genitourinary:** increased urine frequency and urgency, low libido, erectile dysfunction, dysmenorrhea. **Musculoskeletal:** muscle tension, joint pain , easily fatigued. **Skin:** sweating, itching, hot/cold skin.

Anxiety Disorders (DSM-5 categories)

1- Separation anxiety disorder.
2- Selective mutism.
3- Specific phobia.
4- Social anxiety disorder (social phobia).

5- Panic disorder.
6- Agoraphobia.
7- Generalized anxiety disorder.
8- Substance/Medication-Induced Anxiety Disorder.
9- Anxiety Disorder Due to Another Medical Condition.
10- Other Specified Anxiety Disorder.
11- Unspecified Anxiety Disorder.

1- **Separation Anxiety Disorder**-See later (Child and Adolescent Psychiatry).
2- **Selective Mutism –** See later (Child and Adolescent Psychiatry).

3- Specific Phobia

Definition: Excessive irrational fear and avoidance of a specific object (e.g., insects) or situation (e.g., heights). Patients with blood-injection-injury phobia may develop vasovagal syncope (bradychardia, hypotension, dizziness, and sweating).

Diagnostic criteria (DSM-5)

A. Marked fear of a specific object or situation.
B. The phobic object almost always provokes immediate fear.
C. The phobic object is actively avoided or endured with intense fear.
D. The anxiety is out of proportion to the situation.
E. The disturbance is persistent for at least six months.
F. The disturbance causes clinically significant distress/functional impairment.
G. The disturbance is not better explained by another psychiatric disorder**.**

Common feared objects and situations:

- Needles/blood/ hospitals/clinics/dentists.
- Heights (acrophobia), airplanes.
- Closed spaces (claustrophobia).
- Animals /spiders/ darkness.
- Storms and thunder.

Epidemiology: Specific phobias are common in the general population with no gender differences, but less than 20 % of patients are seen by psychiatrists. Blood-injection-injury phobia is experienced nearly equally by both genders, whereas animal, natural environment, and situational specific phobias are predominantly experienced by females at a rate of approximately 2:1.

Etiology: It tends to run in families (whether genetic or environmental). Modeling a phobic reaction in another person, usually a parent. Pairing of a specific object or situations with the emotions of fear and panic.

Differential Diagnosis: 1**.** Agoraphobia. Social phobia. 2. Panic disorder. 3. Obsessive-compulsive disorder: Some patients have fear and avoidance of specific objects, e.g., dirt, knives. Both can be diagnosed if the criteria are met (commonly called obsessional phobia). 4. Depressive disorder: Some patients with specific phobia seek help for long standing problem when a depressive disorder makes them less able to tolerate their phobic symptoms. 5. Acute stress disorder/Posttraumatic stress disorder (PTSD).

Course and prognosis: Age of onset is usually between 6-12 years. Most specific phobias of adult life are a continuation of childhood phobias. A minority begins in adult life, usually secondary to a highly stressful experience. If started in childhood, it usually disappears in adolescence but may continue for many years. If started in adult life after stressful events the prognosis is usually good. Some patients develop specific phobia following a traumatic event (e.g., being stuck in an elevator). However, many patients are unable to recall the specific reason for the onset of their phobias. Hospital/needle/dental/blood phobias may lead to adverse consequences because of avoidance of necessary medical interventions.

Management (bio-psycho-social)

Biological treatment: Selective serotonin reuptake inhibitors (SSRIs)/serotonin-norepinephrine reuptake inhibitors (SNRIs) are first-line medications. Full effect may take 4-6 weeks and should be continued at least 6 months after symptomatic relief. Beta-blockers (e.g., propranolol) can be used on temporal basis to treat tachycardia, palpitation, tremor, and sweating. However, b-blockers may mask features of hypoglycemia in patients with diabetes mellitus and may worsen bronchial asthma and cardiac failure. Moreover, b-blockers may pricipitate vasovagal syncopy (bradychardia, hypotension, dizziness) in certain susceptible patients. In some cases, minimal doses of benzodiazepines can be given temporarily until long-term medication becomes effective. Although benzodiazepines work quickly and effectively, their use should be restricted to avoid dependence especially in patients with borderline personality traits or with history of substance abuse (e.g., alcohol). Benzodiazepines may worsen depression in patients with comorbid depressive disorders.

Psychological: Behavioral techniques such as graded exposure and response prevention/ desensitization and positive reinforcement. Virtual Therapy: A computer program that allows the patients to see himself as a hero interacting with the phobic object on the computer screen. As he identifies with the hero in repeated sessions, he becomes able to master his fear and avoidance. Hypnotherapy is sometimes effective, especially in highly suggestible patients.
Social: social support and understanding.

4- Social Anxiety Disorder (Social Phobia)

Definition: Excessive irrational fear and avoidance of performance in an embarrassing way in social situations when exposed to scrutiny by others.

Diagnostic criteria (DSM-5)

A. Marked fear about one (or more) social situations in which the individual is exposed to possible scrutiny by others.
B. The individual fears that he will show anxiety symptoms that will be negatively evaluated by others.
C. The social situations almost always provoke fear or anxiety.
D. The social situations are avoided or endured with intense anxiety.
E. The anxiety is out of proportion to the social situation.
F. The disturbance is persistent for at least six months.
G. The disturbance causes clinically significant distress or functional impairment (social, occupational).
H. The disturbance is not due to another medical condition, medication, or substance abuse.
I. The disturbance is not better explained by another psychiatric disorder**.**
J. If another medical condition is present, the anxiety is unrelated or is excessive.

The most common symptoms of social anxiety are tachycardia, palpitation, tremor, sweating, unsteadiness, and blushing. The fear may take a form of panic attack (situationally bound).

Associated features: Hypersensitivity to criticism and negative evaluation or rejection (features of avoidant personality).

Complications*:* Depression, substance abuse (to relieve anxiety and enhance performance), and deterioration in functioning (underachievement in school, at work, and in the social life e.g., delayed marriage).

Epidemiology: Women = men. Age: late teenage or early twenties. It may occur in children. Lifetime prevalence: about 10%. Only 8-10 % are seen by psychiatrists.

Etiology: Genetic factors: some twins studies found genetic basis for social phobia. Social factors: excessive demands for social conformity and concerns about impression a person is making on others. Behavioral factors: sudden episode of anxiety in a social situation followed by avoidance reinforces phobic behavior. Cognitive factors: exaggerated fear of negative evaluation based on thinking that other people will be critical, and one should be a completely perfect individual.

Differential Diagnosis: 1.Agoraphobia. However, both may coexist. 2. Avoidant personality disorder. However, both may coexist. 3. Specific phobia. 4. Panic disorder.

Course and Prognosis: If not treated, social phobia often lasts for several years, and the episodes gradually become more severe with increasing avoidance. When treated properly the prognosis is usually good. Presence of avoidant personality disorder may delay the improvement.

Management: Explain the nature of the illness (overarousal of the autonomic nervous system accompanied by many physical and psychological features). Combined pharmacological and psychological intervention**.**

Biological treatment: Selective serotonin reuptake inhibitors (SSRIs)/serotonin-norepinephrine reuptake inhibitors (SNRIs) are first-line medications. Full effect may take 4-6 weeks and should be continued at least 6 months after symptomatic relief. Beta-blockers (e.g., propranolol) can be used on temporal basis to treat tachycardia, palpitation, tremor, and sweating. However, b-blockers may mask features of hypoglycemia in patients with diabetes mellitus and may worsen bronchial asthma and cardiac failure. Moreover, b-blockers may pricipitate vasovagal syncopy (bradychardia, hypotension, dizziness) in certain susceptible patients. In some cases, minimal doses of benzodiazepines can be given temporarily until long-term medication becomes effective. Although benzodiazepines work quickly and effectively, their use should be restricted to avoid dependence especially in patients with borderline personality traits or with history of substance abuse (e.g., alcohol). Benzodiazepines may worsen depression in patients with comorbid depressive disorders.
Psychological: Cognitive-behavioral therapy (CBT) is the treatment of choice for social phobia. It teaches the patients (in about 15 sessions) how to evaluate his dysfunctional thoughts objectively combined with cognitive restructuring and applied relaxation **(**to relax in anxiety-provoking situations). Social Skill Training: How to initiate, maintain and end conversation. Assertiveness Training: How to express feelings and thoughts directly and appropriately.
Social: support and assistance to overcome functional consequences of the disorder
(social, academic, and occupational disabilities).

5 - Panic Disorder

Definition: Recurrent unexpected panic attacks with persistent concern about their consequences or having additional attacks.

Diagnostic criteria (DSM-5)

A. Recurrent unexpected panic attacks.
B. At least one of the attacks has been followed by ≥ 1 of the following:
   1- Persistent concern about having additional attacks or their consequences (e.g., having a heart attack)
   2- A significant change in behavior related to the attacks (e.g., avoidance of exercise).
C. The disturbance is not due to medical disease or substance abuse.
D. The disturbance is not due to another psychiatric disorder (e.g., specific or social phobias).

Panic Attack: A discrete period of sudden intense fear that builds up to a peak rapidly (usually in 5-15 minutes) and is often accompanied by a sense of imminent danger or impending doom and an urge to escape. There are 13 somatic and cognitive symptoms that accompany fear (four of the thirteen are enough to diagnose a panic attack). The symptoms of a panic attack include: Palpitation, Sweating, shaking, shortness of breath, feelings of choking, chest pain/discomfort, nausea/abdominal distress, dizziness/unsteadiness, chills or hot sensations, paresthesias, derealization/depersonalization, fear of losing control or "going crazy", and fear of dying.

Panic attacks (as attacks, not as a disorder) may occur in a variety of psychiatric disorders other than panic disorder like generalized anxiety disorder, phobias, stress disorders (acute & post traumatic), substance abuse, depressive disorders, obsessive-compulsive disorder. Therefore, in determining the differential diagnostic significance of a panic attack, it is important to consider the *context* in which the panic attack occurs. Panic attacks can be: Unexpected sudden attacks (essential for the diagnosis of panic disorder) or situationally predisposed attacks (more likely to occur on exposure to a situational trigger, e.g., crowded places).

Epidemiology: More common in women than men. Prevalence rate: 2 % (one year), 3 % (life time). Age at onset is bimodal distribution, with one peak in late adolescence and a second smaller peak in the mid-30s. Mitral Valve Prolapse (MVP) is more common in patients with panic disorder (40-50%) than in general population (6-20%). Whether this association has a causal relationship, it is not clear

Etiology: Pathological hyperactivity in the locus ceruleus (alarm system in the body). The neurotransmitters involved are noradrenaline and serotonin. Panic disorder occurs more often among relatives indicating a genetic vulnerability.

Differential Diagnosis

1. Medical disorders (e.g., hypoglycemia, hyperthyroidism, diseases of the vestibular nerve, arrythmia, complex partial seizures, and pheochromocytoma).
2. Medication-induced anxiety disorder (e.g., beta agonists, L-thyroxine).
3. Substance-induced anxiety disorder (e.g., amphetamines, cocaine, cannabis).
4. Phobic disorders.
5. Acute or post-truamatic stress disorder.
6. Major depressive disorder (patients may develop panic attacks, which resolve when the depression is treated).

Course and prognosis: The usual course is chronic waxing and waning course. Some patients recover within weeks. Patients with symptoms persisting for six months or more have a prolonged course. With therapy, the prognosis is excellent in most of the cases.

Management: Attention to any precipitating or aggravating personal or social problems. Explanation, support, and reassurance are essential.
Pharmacotherapy: SSRIs/ SNRIs are the medications of choice and are effective in blocking panic attacks in 75 % of patients. However, because SSRIs/SNRIs side effects may initially worsen panic disorder, start medications at low doses and increase slowly. If SSRIs/ SNRIs are not effective, clomipramine or imipramine (tricyclic antidepressants) can be a good alternative. For a rapid onset of action, add a benzodiazepine (usually alprazolam or lorazepam) for 1- 2 weeks then taper it down slowly. When treatment is discontinued, the relapse rate is high (30-90%) even when the condition has been successfully treated. Thus, it is essential to combine psychotherapy with medications.
Psychological: Cognitive-Behavior Therapy (CBT). Eliciting and correcting the patient's dysfunctional beliefs about the origin, meaning, and consequence of symptoms.
Social: support and assistance to overcome functional consequences of the disorder
(social, academic, and occupational disabilities).

Hyperventilation Syndrome (HVS)

Hyperventilation syndrome is included in this section because it may be mistaken for panic disorder. It can be considered as a psychosomatic complication of certain anxiety situations. It is a manifestation of anxiety with panic attacks characterized by recurrent episodes of hyperventilation (rapid and shallow breathing) associated with a variety of physical sensations:

- Pericardial pain/palpitation.
- Headache/dizziness/vertigo /paraesthesia.
- Nausea/gastrointestinal discomfort.

- Carpopedal spasm and tetany may develop.

These symptoms increase the patient's fear and support the patient's conviction that he is in imminent danger. In some cases, the respiratory rate is not increased, but the patient has repeated habitual sighing which may induce hyperventilation syndrome.

Pathophysiology: Under certain stressful settings autonomic arousal occurs as an immediate response to acute fear. Hyperventilation leads to hypocapnia and respiratory alkalosis due to loss of carbon dioxide, which brings into play some buffer reactions to maintain the PH in the blood. The reactions result in a fall in serum ionized calcium levels and reflex vasoconstriction that affects the CNS, skin, respiratory, gut and other systems.

Differential Diagnosis: 1. Bronchial asthma (difficulty in exhaling). In hyperventilation syndrome, the patient has a sensation of being unable to fill his lungs (difficulty in inhalation). 2. Cardiopulmonary disease (e.g., pulmonary embolism). 3. Metabolic disorder (e.g., diabetic ketosis). 4. Salicylate overdosed (metabolic acidosis).

Management: Rule out possible primary physical causes. Reassurance and treat any underlying psychological problems. Small doses of benzodiazepine (e.g., diazepam 5-10 mg IV) to reduce apprehension and fear. Breathing bag (rebreathe carbon dioxide) for few minutes. Avoid giving oxygen.

6 - Agoraphobia

Agora means open market places (an ancient Greek word). However, the term agoraphobia may be misleading because the fear in agoraphobia is not limited to markets. The fear is about being in crowded places from which escape seems difficult, or help may not be available (the place cannot be left suddenly without attracting attention, e.g., when standing in line). The fear is around *self-safety issues* rather than *personal performance* in the presence of others (which is the case in social phobia).

Definition: Excessive irrational fear and avoidance of being in public places where escape or obtaining help may be difficult.

Diagnostic criteria (DSM-5)

A. Marked fear about two (or more) of the following five situations:
   1. Using public transportation (e.g., cars, buses, trains, planes).
   2. Being in open spaces (e.g., markets, bridges).
   3. Being in enclosed places (e.g., shops, theaters).
   4. Standing in line or being in a crowd.
   5. Being outside of the home alone.

B. Thoughts that escape is difficult in the event of developing embarrassing symptoms.
C. The agoraphobic situations almost always provoke anxiety.
D. The agoraphobic situations are avoided or are endured with distress.
E. The anxiety is out of proportion to the actual danger.
F. The disturbance is persistent for at least six months.
G. The disturbance causes clinically significant distress or functional impairment (social, occupational).
H. If another medical condition is present, the anxiety is excessive.
I. The disturbance is not better accounted for by another psychiatric disorder

Epidemiology: More common in women than men. Onset: most cases begin in the early or middle twenties, though there is a further period of high onset in the middle thirties. Both of these ages are later than the average onset of specific phobia (childhood) and social phobias (late teenagers or early twenties). Prevalence: 3% (one year), 8% (life time).

Etiology: Biological predisposition to respond with excessive anxiety (possibly because of defective normal inhibitory mechanisms). Personality is usually anxious and dependent (overprotected in childhood with a history of separation anxiety). Often precipitated by major life events and associated with avoidance learning.

Differential Diagnosis: 1. Panic disorder. If the patient meets the criteria for agoraphobia and panic disorder (in > 60 % of cases), both diagnoses should be assigned. 2. Social phobia. Agoraphobia is associated with social phobia in around 55% of cases. 3. Specific phobia. 4. Acute or post-truamatic stress disorder. 5. Dependent personality disorder may coexist with agoraphobia.

Course and prognosis: Younger age at onset is associated with *better* prognosis and vice versa. More than 50% of patients experience a panic attack prior to developing agoraphobia. As the condition progresses, patients with agoraphobia may become increasingly dependent on someone else for help with activities that provoke agoraphobia such as shopping. If not treated early, agoraphobia can be chronic disabling disorder complicated by depressive symptoms. *House-bound housewife syndrome* may develop. It is a severe stage of agoraphobia when the patient (usually a housewife) cannot leave the house at all because of the disorder.

Management:

Pharmacotherapy: As for panic disorder (SSRIs/ SNRIs) because many people with agoraphobia will have panic attacks.

Psychological: Cognitive-Behavior Therapy (CBT). Eliciting and correcting the patient's dysfunctional beliefs about the origin, meaning, and consequence of symptoms. Behavior analysis and exposure. Detailed inquiry about the situations that provoke phobia, associated thoughts, and how much these situations are avoided. A hierarchy is made (from the least – to the most anxiety provoking). The patient is then taught to relax (relaxation training). The patient is persuaded to enter the feared situation (to confront situations that he generally avoids). The patient should cope with distress experienced during exposure and try to stay in the situation until anxiety has declined. When one stage is accomplished, the patient moves to the next

stage. The patient is trained to overcome avoidance (as escape during exposure will reinforce the phobic behavior). Virtual Therapy: A computer program that allows the patients to see himself as a hero who is then placed in open or crowded spaces (e.g., a supermarket). As he identifies with the hero in repeated sessions, he becomes able to master his fear and avoidance.
Social: support and assistance to overcome functional consequences of the disorder
(social, academic, and occupational disabilities).

7- Generalized Anxiety Disorder (GAD)

Definition: Excessive irrational fear and worry for at least six months duration about *many* life circumstances (e.g., health, academic/job performance, finances).

Diagnostic criteria (DSM-5)

A. Excessive worry about many events and circumstances for at least 6 months duration.
B. The individual finds it difficult to control the worry.
C. The worry is associated with three (or more) of the following six symptoms:
1. Restlessness. 2. Being easily fatigued. 3. Difficulty concentrating. 4. Irritability.
5. Muscle tension. 6. Sleep disturbances.
D. The disturbance causes clinically significant distress or functional impairment..
E. The disturbance is not secondary to a physical disease, medications, or substance abuse.
F. The disturbance is not better accounted for by another psychiatric disorder.

Associated features: Panic attacks, depressive symptoms, illness-anxiety (fear of a hidden physical disease), and depersonalization/ derealization symptoms.

Findings in the Mental State Examination (MSE): Tense posture, tremor, restlessness, sweating (forehead, hands, feet), difficulty in inhalation, excessive blinking.

Epidemiology: More common in women than men. Prevalence rate: one year 3%, life time 5%. It often begins in early adult life but may occur for the first time in middle age. There is a considerable cultural variation in the expression of anxiety. It is common in primary care and other medical specialties where it presents with physical more than psychological symptoms.

Etiology: Generalized anxiety disorder appears to be caused by stressors acting on a personality predisposed by a combination of genetic and environmental influences in childhood. Maladaptive patterns of thinking may work as maintaining factors. Anxiety as a trait has a familial association.

Differential Diagnosis:

1. Anxiety disorders secondary to medical conditions, medications, or substance abuse. Anemia may cause physical features of anxiety, especially in women with menorrhagia. Patients with bronchial asthma/hypoxemia (beta agonists and steroids may complicate anxiety) may have anxiety. Hyperthyroidism and excessive thyroxine supply in patients with hypothyroidism may induce anxiety. Intoxication with CNS stimulants (e.g., amphetamine).
2. Depressive disorder: Comorbidity is common. Thus, ask any anxious patient about symptoms of depression.
3. Panic disorder.
4. Adjustment disorders with anxious mood.

Course and Prognosis: The course is often chronic, fluctuating and worsen during times of stress. Symptoms may diminish as the patient gets older. Over time, the patient may develop secondary depression (not uncommon if left untreated). When the patient complains mainly of physical symptoms of anxiety and attributes these symptoms to physical causes, he seems more difficult to help. Poorer prognosis is associated with severe symptoms and with derealization, syncopal episodes, agitation and attention-seeking behavior.

Management:
Rule out possible primary medical causes, e.g., anemia, hyperthyroidism. Reassure the patient that symptoms are not due to a serious physical disease. The patient should be educated about the nature of the illness (continuous overarousal of the autonomic nervous system resulting in persistent many physical and psychological symptoms). Explain the chronic nature of the disorder and the tendency of symptoms to wax and wane, often along with external stressors that the patient may be experiencing. Assist the patient to deal with, or adjust to, any ongoing problem. Advise the patient to reduce caffeine intake (coffee, tea, cola).

Pharmacotherapy: The SSRIs (or SNRIs) are first-line medications. In severe cases, minimal doses of benzodiazepines can be given temporarily until long-term medication becomes effective. Buspirone is as effective as benzodiazepines and is much less likely to cause dependence. It is more effective in reducing the cognitive symptoms of GAD than in reducing the somatic symptoms. Its effect takes about three weeks to become evident. Buspirone has no cross-tolerance with benzodiazepines; thus it is not an effective treatment for benzodiazepine withdrawal. Beta-blockers can be used to treat some physical features of anxiety (palpitation, tremor) but not the underlying psychogenic condition.

Psychotherapy: Cognitive-behavioral therapy (CBT) teaches the patients (in about 15 sessions) how to evaluate his anxious

thoughts objectively combined with cognitive restructuring and applied relaxation**,** which teaches the patient to relax in actual anxiety-provoking situations. Relaxation training, re-breathing exercises, and meditation can be easily taught and may be effective, especially if the condition is mild. Acceptance and commitment therapy (ACT) and mindfulness are newer types of cognitive-behavioral therapy. The patient is trained to focus on the present moment and follow actions guided by his values rather than by emotions and anxiety.

8- Substance/Medication-Induced Anxiety Disorder

Definintion: Prominent symptoms of panic or anxiety that are judged to be due to the effects of a substance (e.g., a drug of abuse, caffeine or a toxin exposure) or a medication.

Diagnostic Criteria (DSM-5)

A. Panic attacks or anxiety is predominant in the clinical picture.
B. There is evidence from the history, physical examination, or laboratory findings of both (1) and (2):
1. The symptoms in Criterion A developed during or soon after substance intoxication or withdrawal or after exposure to a medication.
2. The involved substance/medication is capable of producing the symptoms in Criterion A.
C. The disturbance is not better explained by an anxiety disorder.
D. The disturbance does not occur exclusively during the course of a delirium.
E. The disturbance causes clinically significant distress or impairment in functioning.

Etiology: Many substances (drug of abuse or toxins e.g., gasoline and paint) may cause anxiety symptoms. Many medications may evoke anxiety or panic symptoms (e.g., corticosteroid, bronchodilators, anticholinergics, insulin, thyroid preparations, analgesics, oral contraceptives, antihistamines, antiparkinsonian medications, antihypertensive and cardiovascular medications, anticonvulsants).

Epidemiology: In clinical populations, the prevalence is common, both as the result of the prescription drug use and ingestion of substance abuse.

Differential Diagnosis: 1. Substance intoxication and substance withdrawal. 2. Delirium. 3. Anxiety disorder due to another medical condition. 4. Primary anxiety disorders (e.g., panic disorder, GAD).

Course and Prognosis: The course and prognosis g depend on removal of the substance and the ability of the patient to limit use of the substance. The anxiogenic effects of most drugs are reversible. Usually, the anxiety reverse with cessation of the substance. However, in some cases the substance cause irreversible brain damage.

Management: Finding an alternative medication if the substance was a medically indicated drug. Removal of the substance of abuse/toxin. If the substance was introduced through environmental exposure (e.g., gasoline), limit the patient's exposure to that substance. If anxiety or panic symptoms continue even after removal of the cause, treat with appropriate pharmacotherapeutic and psychotherapeutic modalities mentioned earlier.

9- Anxiety Disorder due to Another Medical Condition

Definintion: Prominent symptoms of panic or anxiety that are judged to be due to a medical condition (e.g., hyperthyroidism, hypoparathyroidism).

Diagnostic Criteria (DSM-5)

A. Panic attacks or anxiety is predominant in the clinical picture.
B. The disturbance is the direct consequence of another medical condition.
C. The disturbance is not better explained by another mental disorder.
D. The disturbance does not occur exclusively during the course of a delirium.
E. The disturbance causes clinically significant distress or impairment in functioning.

Epidemiology: In clinical populations, the prevalence is common. However, the incidence varies for each medical condition.

Etiology: Many medical conditions can cause symptoms similar to those of anxiety disorders. Hyperthyroidism, pheochromocytoma, hypoglycemia, vitamin B12 deficiency, anemia, and hypoparathyroidism are frequently associated with anxiety symptoms. Cardiac arrhythmia can produce panic symptoms.

Differential Diagnosis: 1. Delirium. 2. Primary anxiety disorders (e.g., panic disorder, PTSD). 3. Substance/medication-induced anxiety disorder. 4. Substance intoxication and substance withdrawal. 5. Adjustment disorders, with anxiety, or with anxiety and depressed mood.

Course and Prognosis: Onset, course, and prognosis depends on the nature and severity of the underlying medical condition and the patient psychological adaptation. A sudden onset may prompt the patient to seek medical or psychiatric help more quickly than when the onset is insidious. When anxiety is severe and unremitting it can be disabling.

Management: Treat the underlying medical condition. In some cases, the anxiety symptoms persist even after the primary medical condition is treated (e.g., after an episode of encephalitis). If the removal of the primary medical condition does not reverse the anxiety, follow the treatment guidelines for the specific mental disorder and treat symptoms as if they were primary (pharmacotherapeutic and psychotherapeutic modalities mentioned earlier).

10- Other Specified Anxiety Disorder

Anxiety disorder in which symptoms do not meet the full criteria for any of the disorders in the anxiety disorders diagnostic class. This diagnosis is used in situations in which the physician chooses to *specify* the reason that the presentation does not meet the criteria for any specific anxiety disorder (e.g., generalized anxiety not occurring more days than not).

11- Unspecified Anxiety Disorder

Anxiety disorder in which symptoms do not meet the full criteria for any of the disorders in the anxiety disorders diagnostic class. This category is used in situations in which the physician chooses *not to specify* the reason that the criteria are not met for a specific anxiety disorder, and includes presentations in which there is insufficient information to make a more specific diagnosis (e.g., in emergency room settings).

A 33-year-old women has recurrent persistent mental images about harming her son by a knife. She knows that these images are senseless and should be resisted, but she cannot control them.
How would you assess and treat her problem?

Objectives
On completion of this chapter, the student should be able to:

14- Understand the differences between normal and abnormal obsessions.
15- Know the various types of obsessive-compulsive and – related disorders.
16- Differentiate between types of obsessive-compulsive and – related disorders.
17- Detect trauma-and stress-related disorders in clinical practice.
18- Know the assessment and management of each disorder.

Obsessive-Compulsive and – Related Disorders

1. Obsessive-compulsive disorder (OCD).
2. Body dysmorphic disorder.
3. Hoarding disorder.
4. Trichotillomania (hair- pulling disorder).
5. Excoriation (skin-picking) disorder.

1. Obsessive-compulsive disorder (OCD)

Definition: Reacurrent unwanted distressing obsessions or compulsions resulting in functional impairment.

Diagnostic Criteria (DSM-5)

A. Presence of obsessions, compulsions, or both:
Obsessions are defined by (1) and (2):
1. Recurrent and persistent thoughts, urges, or images that are experienced, at some time during the disturbance, as intrusive and unwanted, and that in most individuals cause marked distress.
2. The individual attempts to ignore or suppress such thoughts, urges, or images, or to neutralize them with some other thought or action (i.e., by performing a compulsion).
Compulsions are defined by (1) and (2):
1. Repetitive behaviors (e.g., hand washing, ordering, checking) or mental acts (e.g., praying, counting, repeating words silently) that the individual feels driven to perform in response to an obsession or according to rules that must be applied rigidly.
2. The behaviors or mental acts are aimed at preventing or reducing anxiety or distress, or preventing some dreaded event or situation; however, these behaviors or mental acts are not connected in a realistic way with what they are designed to neutralize or prevent, or are clearly excessive.
B. The obsessions or compulsions are time-consuming (e.g., take more than 1 hour/day) or cause functional impairment.
C. The obsessive-compulsive symptoms are not attributable to the physiological effects of a substance (e.g., a drug of abuse, a medication) or another medical condition.
D. The disturbance is not better explained by another mental disorder.

Associated features: Avoidance of situations that involve the content of the obsessions, such as dirt or contamination. Anxiety is an important component of OCD. Compulsions are done to reduce anxiety. Thus, reinforces obsessive-compulsive behavior. Depressive features either as precipitating factor (i.e., primary), secondary to, or simultaneously arising with OCD. Severe guilt due to a pathological sense of self-blaming and total responsibility to such absurd thoughts especially in blasphemous, aggressive and sexual obsessions.

Epidemiology: Women=men. Lifetime prevalence is about 2% of the population. Mean age at onset is 20-25 years. Mean age of seeking psychiatric help is 27 years. In many religious societies, OCD may not be recognized as a mental disorder and religious leaders are usually consulted first for its diagnosis and treatment.

Etiology: *Genetic factors:* The rate of OCD among first-degree relatives of adults with OCD is approximately two times that among first-degree relatives of those without the disorder. *Neurobiological factors:* Serotonin dysregulation in the frontal lobes, cingulum, and basal ganglia. *Psychodynamic theories:* There are subconscious urges of aggressive or sexual nature. These urges could potentially cause extreme intrapsychic conflict, which is reduced by the action of the defense mechanisms of repression, isolation, and undoing. *Behavioral theory:* Compulsions, done to reduce the distress accompanying obsessions, reinforc and maintain OCD symptoms.

Differential Diagnosis: OCD should be differentiated from other mental disorders in which some obsessional symptoms may occur; body dysmorphic disorder, hoarding disorder, hair- pulling disorder, skin-picking disorder, and illness-anxiety disorder. Obsessive-compulsive personality disorder (OCPD) may be a coexistent disorder, which involves a pervasive

pattern of excessive need for neatness, perfectionism, and preciseness, starting by early adulthood.

Course and prognosis: In most cases onset is gradual but acute cases have been noted. The majority has a chronic waxing and waning course with exacerbations related to stressful events. Severe cases may become persistent and drug resistant. Depression is a recognized complication. Prognosis of OCD is *worse* when the patient has OCPD. Patient's age, sex, age of onset and duration of OCD showed no significant correlation with outcome. Good lasting outcome was found to be related to compliance with treatment, presence of mood component (depression/anxiety) and family support.

Management: Search for a depressive disorder and treat it, as effective treatment of a depressive disorder often leads to improvement in the obsessional symptoms. Reduce the guilt by explaining the nature of the illness and clarifying to the patient that the obsessions are against his will. Frequent supportive interviews providing continuing hope. *Medications:* The SSRIs are the medications of choice (e.g., paroxetine, fluoxetine). Clomipramine, a tricyclic antidepressant that has a serotonin reuptake effect, is also approved to treat OCD. The addition of an antidopaminergic drug (e.g., risperidone 1mg/day) may enhance response in cases refractory to SSRIs. *Behavior therapy* (combined with medications): It is more effective with prominent compulsions and less effective for obsessional thoughts. About 60 % may improve greatly though not completely. Behavioral techniques used for OCD include exposure with response prevention, thought distraction/thought stopping, and habituation techniques. In-patient behavior therapy can be helpful for resistant cases. It is important to interview relatives and encourage them to adopt an empathetic and firm attitude to the patient. A family co-therapist plays an important role. Collaboration with religious leaders is helpful to certain patients. Psychosurgery is limited to very severe and resistant incapacitating cases.

2. Body Dysmorphic Disorder

Definition: Excessive preoccupation with an imagined repulsive defect in physical appearance that is actually not observable to others (imagined ugliness).

Diagnostic Criteria (DSM-5)

A. Preoccupation with one (or more) perceived defects in physical appearance that are not observable or appear slight to others.

B. The individual has performed repetitive behaviors (e.g., mirror checking, excessive grooming, reassurance seeking) or mental acts (e.g., comparing his or her appearance with that of others) in response to the appearance concerns.

C. The preoccupation causes functional impairment or clinically significant distress.

D. The appearance preoccupation is not better explained by an eating disorder.

Epidemiology: Prevalence is 2% in the general population. Available data indicate that the women are affected somewhat more often than men. However, some studies found that the disorder is equally common in men and women. Age of onset is 15-30 years.. Affected patients are also likely to be unmarried. It commonly coexists with other mental disorders; a major depressive disorder 90%; an anxiety disorder 70%; and a psychotic disorder 30%. Body dysmorphic disorder has an estimated prevalence of 1%–3% Onset occurs in adolescence or early adulthood. Bod

Etiology: *Neurobiology:* The responsiveness to SSRIs and the high comorbidity with depressive disorders and a family history of OCD indicate that the pathophysiology involves serotonin. *Psychodynamic:* displacement of a repressed conflict (emotional or sexual) onto a body part. *Social:* Concepts of beauty emphasized within the culture may affect some patients.

Differential diagnosis: 1**.** Normal appearance concerns and clearly noticeable physical defects (e.g., scoliosis). 2. Eating disorders (e.g., imagined obesity in anorexia nervosa). However, oncerns about being fat are considered a symptom of the eating disorder rather than body dysmorphic disorder. However, eating disorders and body dysmorphic disorder can be comorbid, in which case both should be diagnosed. 3. Illness anxiety disorder. However, patient with body dysmorphic disorder is not preoccupied with having a serious physical illness.

Course and prognosis: The disorder usually begins during adolescence and has a long and fluctuating course with few symptom-free intervals. The part of the body on which concern is focused may change over time.

Management: Search for and treat any underlying depression or anxiety. *Cognitive-behavioral therapy* to challenge and change the distorted beliefs about the "alleged defect" and to modify behaviors that appear to encourage their preoccupation, such as mirror checking.

Counseling for psychosocial difficulties that accompany the condition and for boosting selfesteem. *Medications:* SSRIs are the medications of choice and are effective treatment. Cosmetic surgery, although may help some patients who have mild defects, does not change the patient's preoccupation, provides few benefits, and can lead to surgical complications. Depression and anger are common consequences. Patients may take out their anger by suing their plastic surgeons. Therefore, cosmetic surgery should be avoided.

3. Hoarding Disorder

Definition: Excessive and persistent collection of objects that are of limited value and inability to discard them.

Diagnostic Criteria

A. Persistent difficulty discarding possessions, regardless of their actual value.

B. This difficulty is due to a perceived need to save the items and to distress associated with discarding them.

C. Accumulation of possessions that congest active living.

D. The hoarding causes clinically significant distress or functional impairment.
E. The hoarding is not attributable to another medical condition (e.g., a brain lesion).
F. The hoarding is not better explained by another mental disorder (e.g., OCD, schizophrenia).

Common hoarded items include bags, gifts, books, newspapers, magazines, and old clothes. Most hoarding patients perceive their behavior to be reasonable and part of their identity.

Hoarding was considered a symptom of OCD and obsessive-compulsive personality disorder. However, hoarding behavior is not intrusive or repetitive and, unlike symptoms of OCD, obsessions about dirt are absent. Hoarding disorder is less responsive to classic treatments for OCD such as SSRIs and cognitive-behavioral therapy (CBT).

Hoarding causes family distress because it makes space unusable, shuts off utilities, and results in poor sanitation. Moreover, hoarding may attract pest infestations that can pose a health risk.

Epidemiology: Women = men. It is more common in single persons, and is associated with social withdrawal and dependent personality traits. It begins in adolescence and persists throughout the lifespan. Hoarding prevalence is approximately 3% of the population. Hoarding is associated with high rates of OCD and personality disorders (e.g., obsessive, dependent, avoidant).

Etiology: *Biological:* Genetic factors may play a role with about 75% of patients reporting at least one first-degree relative with hoarding behavior. *Psychological:* Extreme emotional attachment to possessions, distorted beliefs about the importance of possessions, and inability to organize possessions.

Differential diagnosis: *Dementia:* Onset of the hoarding coincides with onset of the dementia and is associated with rummaging, pilfering, and hiding. *Brain lesions:* Hoarding is purposeless and not motivated by value of possessions or emotional attachment. *Schizophrenia:* Hoarding is affected by delusions and associated with self-neglect and dirtiness.

Course and prognosis: The earlier the onset the poorer the prognosis. The course is usually chronic and symptoms fluctuate throughout the course of the disorder, but full remission is rare. Treatment seeking is usually delayed and under pressure from others.

Management: Most patients are difficult to treat. The treatment is challenging because of low motivation and resistance to treatment. Less than 20% of treated patients respond to treatment. Patients with milder symptoms may benefit from SSRIs. *Psychotherapy:* Identifying and challenging the patient's distorted beliefs about possessions. Improving decision-making skills, monitoring saving behavior, and providing skills to maintain a balance between the possessions and livable space.

4. Hair-Pulling Disorder (Trichotillomania)

Definition: Excessive recurrent pulling out of one's hair, resulting in hair loss and significant distress or functional impairment.

Diagnostic criteria (DSM-5)

A. Recurrent pulling out of one's hair, resulting in hair loss.
B. Repeated attempts to decrease or stop hair pulling.
C. The hair pulling causes clinically significant distress or functional impairment.
D. The condition is not attributable to another medical condition (e.g., skin condition).
E. The hair pulling is not better explained another mental disorder (e.g., body dysmorphic disorder).

About 10% of the patients swallow the pulled hair and develop bezoars (potentially hazardous hairballs accumulating in the alimentary tract).

Epidemiology: Females are more frequently affected than males (10:1). The lifetime prevalence is 1.5% in the general populations, and 3% of adolescents and college students..

Etiology: The studies of trichotillomania reported abnormalities in the basal ganglia and a serotonin 2A receptor gene polymorphism. A significant comorbidity has been found between hair-pulling disorder and depressive disorders; anxiety disorders, OCD, and obsessive-compulsive personality disorder. Family members often have a history of OCD and tics.

Differential diagnosis: *1- Normal hair remova*l. Many normal individuals twist, bite, or play with their hair, but this behavior does not usually qualify for a diagnosis of trichotillomania. *2- OCD* with symmetry concerns. The patient may pull out hairs as part of symmetry rituals. *3- Body dysmorphic disorder* may remove body hair that they perceive as ugly.

Course and prognosis: The onset is usually in the teens and triggered by stressful situations. A childhood type is far less serious dermatologically and psychologically. The course is generally chronic with waxing and waning severity. An early onset (< 10 years of age) tends to remit more readily and responds to treatment. Late onset (> 15 years) tends to be chronic. Complications: Irreversible damage to hair growth, dental damage (e.g., worn teeth due to hair biting), swallowing of hair (trichophagia) may lead to trichobezoars, with subsequent hematemesis, nausea and vomiting, abdominal pain, anemia, bowel obstruction, and even perforation.

Management: *Medications:* SSRIs or clomipramine are the most frequently prescribed medications and help to reduce urges

to pull. Topical steroids and hydroxyzine (an antihistamine with anxiolytic properties) is helpful to patients who describe localized itching that prompts hair pulling. *Behavioral therapy:* Habit reversal (self-monitoring, applying a barrier to prevent hair pulling, such as wearing gloves, and identifying when hair pulling occurs then substituting a benign behavior such as squeezing a ball). *Hypnotherapy* (the skin is susceptible to hypnotic suggestion because of subcutaneous innervation). *Insight-oriented psychotherapy* addressing internal conflicts and low self-esteem.

5. Excoriation (Skin-Picking) Disorder

Definition: Repetitive skin picking resulting in skin lesions and significant distress.

Diagnostic Criteria (DSM-5)

A. Recurrent skin picking resulting in skin lesions.
B. Repeated attempts to decrease or stop skin picking.
C. The condition causes clinically significant distress functional impairment.
D. The condition is not attributable to the physiological effects of a substance (e.g., cocaine) or another medical condition (e.g., scabies).
E. The skin picking is not better explained by another mental disorder (e.g., tactile hallucinations in a psychotic disorder).

Sites of picking: The face, arms, and legs are the most common sites. *Methods:* Fingernails, knives, and pins are the most common methods.

Etiology: *Biological:* Abnormalities in glutamate, serotonin, and dopamine metabolism. *Psychological:* Many patients report picking as a means to relieve tension, distress, aggression, and anger. Patients experience tension prior to picking and a gratification and pleasure after picking. In spite of the relief felt from picking, patients often feel guilty at their behavior.

Epidemiology: Women > men. Skin picking is relatively common, occurring in about 1%–5% of the general population and about 10% in the psychiatric population. Approximately 40% of women report that picking behavior coincides with the menstrual cycle.

Comorbidity: Major depressive disorder, anxiety disorders, OCD, hair-pulling disorder, and body dysmorphic disorder. Borderline and obsessive-compulsive personality disorders are very common associated personality disoders.

Course and prognosis: Many cases begin at the onset of dermatological conditions such as blisters and continue after the condition has cleared. The disorder is chronic and fluctuates in intensity and severity. Few people with this disorder seek treatment. Patients do not seek treatment until a severe medical or dermatological complication has developed. *Complications:* Tissue damage and medical complications (e.g., localized infections, septicemia). Many patients use bandages, clothing, or makeup to hide the damaged tissue.

Differential diagnoses: *1. Intellectual disability (mental retardation)* may coexist. *2. Dermatological diseases* (e.g., atopic dermatitis, blistering skin disorders, dermatitis artefacta, eczema, psoriasis, scabies). *3. Medical diseases* (diabetes, renal or hepatic disease, systemic lupus polycythemia vera, Hodgkin's disease).

Management: It is often consists of similar elements as treating trichotillomania. *Medications:* SSRIs or clomipramine. Lamotrigine and glutamatergic agents have shown efficacy. Naltrexone (opioid antagonist) reduces the urge to pick, particularly in patients who experience pleasure from picking. *Behavioral therapy:* Habit reversal (self-monitoring, applying a barrier to prevent skin picking, such as wearing gloves, and identifying when skin picking occurs then substituting a benign behavior such as squeezing a ball). *Hypnotherapy* (the skin is susceptible to hypnotic suggestion because of subcutaneous innervation). *Insight-oriented psychotherapy* addressing internal conflicts, associated emotional factors, and low self-esteem.

Two weeks after home fire, a 25-year-old male presented to the psychiatry clinic. Since then, he has been suffering from recurrent distressing memories of the traumatic event, sleep disturbace, hypervigilance, and problems with concentration.
Is this psychological reaction normal or not? Explain why.

Objectives

On completion of this chapter, the student should be able to:

19- Understand the differences between normal and abnormal stress reaction.
20- Differentiate between the various types of trauma-and stress-related disorders.
21- Detect trauma-and stress-related disorders in clinical practice.
22- Know the assessment and management of each disorder.
23- Know human reaction to grief and impending death.

Trauma and –Stress Related Disorders

Stress is essential to human to meet certain challenges. Stresses vary in their severity, duration, and meaning to the involved person. Some stresses are productive (e.g., exam-related stress), whereas some stresses are psychologically very harmful (e.g., rape).

Stress reaction: The automatic/instantaneous physiological/psychological response that increases the body's capability to cope with a stress. *Physiological response:* Neural circuits between midbrain, limbic system, and the hypothalamus convey the effects of perceived stress to the endocrine and the autonomic nervous systems to prepare the whole body for the situation. *Psychological response:* All the psychological domains are triggered in varying degrees. Emotional response: Apprehension (in case of threat), sadness (in case of loss), or both. Cognitive response: Intensified concentration on the stress, analysis of components, and conclusions about the causal relationships. In normal stress reaction the physiological and psychological responses are proportionate to the severity of the stress and decline after cessation of stress. The main influencing factors of stress reaction are the individual (personality, intelligence, physical health), the stressor (nature, severity, duration, meaning to the individual), and availability of psychosocial support.

Trauma and –Stress Related Disorders

1- Reactive attachment disorder.
2- Disinhibited social engagement disorder.
3- Acute and posttraumatic stress disorders.
4- Adjustment disorders.
5- Other specific trauma- and stressor-related disorder.
6- Unspecified trauma- and stressor-related disorder.

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1- Reactive Attachment Disorder: See later (Child & Adolescent Disorders).
2- Disinhibited Social Engagement Disorder See later (Child & Adolescent Disorders).

3- Acute and Post-Traumatic Stress Disorder

Acute stress disorder (ASD) and posttraumatic stress disorders (PTSD) are abnormal stress reactions that occur in individuals who have been exposed a very severe stress typically outside the range of normal human experience. Examples of such events include actual or threatened death, serious injury, sexual violence, disasters (e.g., home fires).

Both disorders share almost the same etiology, epidemiology, differential diagnoses, management, and prognosis. However, they differ in onset and duration. See DSM-5 diagnostic criteria (criterion C of ASD and criterion F of PTDS).

Diagnostic criteria for *acute stress disorder* (ASD) (DSM-5)

A. Exposure to threatened death, serious injury, or sexual violation in one (or more) of the following ways: 1. Directly experiencing the traumatic event. 2. Witnessing, in person, the event as it occurred to others. 3. Learning that the event occurred to a close family member or close friend. 4. Experiencing repeated or extreme exposure to aversive details of the traumatic event (e.g., first responders collecting human remains).

B. Presence of nine (or more) of the following symptoms from any of the five categories of *intrusion, negative mood, dissociation, avoidance, and arousal*:

Intrusion Symptoms:

1. Recurrent intrusive distressing memories of the traumatic event.
2. Recurrent distressing dreams in which the contents of the dream are related to the event.
3. Re-experiencing reactions (e.g., flashbacks) in which the individual feels as if the traumatic event were recurring.
4. Intense distress or marked physiological reactions in response to cues that resemble an aspect of the traumatic event.

Negative Mood:

5 .Persistent inability to experience positive emotions (e.g., inability to experience happiness, satisfaction, or loving feelings).

Dissociative Symptoms:

6 .An altered sense of the reality of one's surroundings or oneself (e.g., seeing oneself from another's perspective, being in a daze, time slowing).

7. Inability to remember an important aspect of the traumatic event (typically due to dissociative amnesia and not to other factors such as head injury, alcohol, or drugs).

Avoidance Symptoms:

8 .Efforts to avoid distressing memories, thoughts, or feelings about or closely associated with the traumatic event.

9. Efforts to avoid external reminders (people, places, conversations, activities, objects, situations) that arouse distressing memories, thoughts, or feelings about or closely associated with the traumatic event.

Arousal Symptoms:

10 .Sleep disturbance (e.g., difficulty falling or staying asleep, restless sleep).

11. Irritable behavior and angry outbursts (with little or no provocation), typically expressed as verbal or physical aggression toward people or objects.

12. Hypervigilance.

13. Problems with concentration.

14. Exaggerated startle response.

C. Symptoms begin immediately after the trauma and persist for at least 3 days and up to a month after trauma exposure. Therefore, ASD cannot be diagnosed until 3 days after the event.

D. The disturbance causes clinically significant distress or functional impairment.

E. The disturbance is not attributable to the physiological effects of a substance (e.g., medication or alcohol) or another medical condition (e.g., mild traumatic brain injury) and is not better explained by brief psychotic disorder.

Diagnostic criteria for *posttraumatic stress disorder* (PTSD) (DSM-5)

Note: The following criteria do not apply to children younger than 6 years.

A. Exposure to actual or threatened death, serious injury, or sexual violence in one (or more) of the following ways:

1. Directly experiencing the traumatic event.

2. Witnessing, in person, the event as it occurred to others.

3. Learning that the traumatic event occurred to a close family member or close friend. In cases of actual or threatened death of a family member or friend, the event must have been violent or accidental.

4. Experiencing repeated or extreme exposure to aversive details of the traumatic event (e.g., first responders collecting human remains: police officers repeatedly exposed to details of child abuse).

B. Presence of one (or more) of the following *intrusion* symptoms associated with the traumatic event, beginning after the traumatic event occurred:

1 .Recurrent, involuntary, and intrusive distressing memories of the traumatic event.

2. Recurrent distressing dreams in which the contents of the dream are related to the traumatic event.

3. Re-experiencing reactions (e.g., flashbacks) in which the individual feels or acts as if the traumatic event were recurring.

4. Intense psychological distress at exposure to cues that resemble an aspect of the traumatic event. 5. Marked physiological reactions to cues that resemble an aspect of the traumatic event.

C. Persistent avoidance of stimuli associated with the traumatic event, beginning after the traumatic event occurred, as evidenced by one or both of the following:

1 .Avoidance of or efforts to avoid distressing memories, thoughts, or feelings about or closely associated with the traumatic event.

2. Avoidance of or efforts to avoid external reminders (people, places, conversations, activities, objects, situations) that arouse distressing memories, thoughts, or feelings about or closely associated with the traumatic event.

D. Negative alterations in cognitions and mood associated with the traumatic event as evidenced by two (or more) of the following:

1 .Inability to remember an important aspect of the traumatic event(s) (typically due to dissociative amnesia and not to other factors such as head injury, alcohol, or drugs).

2 .Persistent and exaggerated negative beliefs or expectations about oneself, others, or the world (e.g., "I am bad," "No one can be trusted," 'The world is completely dangerous," "My whole nervous system is permanently ruined").

3. Persistent, distorted cognitions about the cause or consequences of the traumatic event(s) that lead the individual to blame himself/herself or others.

4. Persistent negative emotional state (e.g., fear, horror, anger, guilt, or shame).

5. Markedly diminished interest or participation in significant activities.

6. Feelings of detachment or estrangement from others.

7. Persistent inability to experience positive emotions (e.g., inability to experience happiness, satisfaction, or loving feelings).

E. Marked alterations in arousal and reactivity associated with the traumatic event as evidenced by two (or more) of the following:

1 .Irritable behavior and angry outbursts (with little or no provocation) typically expressed as verbal or physical aggression toward people or objects.

2. Reckless or self-destructive behavior.

3. Hypervigilance.

4. Exaggerated startle response.
5. Problems with concentration.
6. Sleep disturbance (e.g., difficulty falling or staying asleep or restless sleep).

F. Duration of the disturbance (Criteria B, C, D, and E) is more than one month.
G. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.
H. The disturbance is not attributable to the physiological effects of a substance (e.g., medication, alcohol) or another medical condition.
Specify whether: With dissociative symptoms: *1.Depersonalization*: Persistent or recurrent experiences of feeling detached from, and as if one were an outside observer of, one's mental *2.Derealization*: Persistent or recurrent experiences of unreality of surroundings (e.g., the world around the individual is experienced as unreal, dreamlike, distant, or distorted).
Specify if with delayed expression: If the full diagnostic criteria are not met until at least 6 months after the event.

Etiology: The traumatic event provokes a massive amount of emotions which is not processed easily by the brain and result in hyperregulation of the hypothalmus-pitutary adrenal axis and some physiological changes in the limbic system. A person's age, history of psychiatric illness, level of social support, and proximity to the stressor are all factors that affect the likelihood of developing acute stress disorder and PTSD. However, recent research work places great emphasis on a person's subjective response to trauma than the severity of the stressor itself.

Epidemiology: More prevalent among females than among males. Rape 35%, road traffic accidents 17%, severe burns 10%, and industrial accidents 9%.

Differential Diagnosis: 1. Adjustment disorders (stresse is not life-threatening and no dissociative features or mental flash backs). 2. Anxiety disorders. 3. Head injury sequence (if the traumatic event has included injury to the head, e.g., road accident). Neurological examination should be carried out to exclude a subdural hematoma or other forms of cerebral injury. 4. Substance abuse (intoxication or withdrawal).

Course and prognosis: Usually, an individual's reaction to a trauma initially meets criteria for acute stress disorder in the immediate aftermath of the trauma (symptoms occurs within 1 month of the trauma and last for less than 1 month). The onset of PTSD and duration of the symptoms vary, with complete recovery within 3 months occurring in approximately one-half of adults, while some patients remain symptomatic for years.
Symptom recurrence may occur in response to newly experienced traumatic events , reminders of the original trauma, or ongoing life stressors, For older patients, declining cognitive functioning, social isolation, and worsening physical health, may exacerbate PTSD symptoms. Good prognostic factors: 1. Healthy premorbid personality. 2. Less severe/prolonged trauma. 3. Early intervention. 4. Patient's cooperation with treatment.s. 5. Social support.

Management
Biological treatment: One of SSRIs (e.g., sertraline) or SNRIs (e.g., desvenlfaxine) to reduce intrusive symptoms such as flashbacks, to decrease comorbid depressive symptoms, and to normalize sleep. Prazosin (adrenergic antagonist) is effective in alleviating the intractable nightmares that some ASD and PTSD patients report. There is some evidence that the administration of B-blockers immediately after a trauma may reduce the later development of symptoms of PTSD. When anxiety is severe, benzodiazepine (e.g., clonazepam, 1–2 mg twice daily) may be helpful. However, because of high risk of abuse, benzodiazepines should be used for short-term treatment (e.g., days to 2 weeks). Moreover, benzodiazepines may worsen depression in patients with comorbid depressive disorders.
Psychological: Encourage discussing stressful events and overcome patient's denial.
The updated clinical practice guideline for ASD and PTSD recommends trauma-focused psychotherapy as the first-line treatment for PTSD over pharmacotherapy. In vivo (imaginary) exposure with relaxation and cognitive techniques. Eye movement desensitization and reprocessing (EMDR): while maintaining a mental image of the trauma, the patient focuses on, and follow the rapid lateral movement of the therapist's finger, so that the traumatic mental experience is distorted and the associated intense emotions are eliminated. Group therapy (for group of people who were involved in a disaster).
Social: social support and paying attention to possible secondary gains (e.g., monetary compensation, increased sympathy) that may be present and reinforce the disorder and its persistence.

4- Adjustment Disorder

Definition: Abnormal stress reaction characterized by marked distress that is out of proportion to the intensity of the stressor occurring within three months of the onset of the stressor and causing a significant functional impairment. The maladaptive reaction usually does not persist for more than 6 months after the termination of the stressor or its consequences.
Diagnostic Criteria (DSM-5)

A. The development of emotional or behavioral symptoms in response to an identifiable stressor(s) occurring within 3 months of the onset of the stressor(s).
B. These symptoms or behaviors are clinically significant, as evidenced by one or both of the following:
   1. Marked distress that is out of proportion to the severity or intensity of the stressor, taking into account the external context and the cultural factors that might influence symptom severity and presentation.
   2. Significant impairment in social, occupational, or other important areas of functioning.
C. The stress-related disturbance does not meet the criteria for another mental disorder and is not merely an exacerbation

of a preexisting mental disorder.
D. The symptoms do not represent normal bereavement.
E. Once the stressor or its consequences have terminated, the symptoms do not persist for more than an additional 6 months.

Specify whether:
With depressed mood: Low mood, tearfulness, or feelings of hopelessness are predominant.
With anxiety: Nervousness, worry, jitteriness, or separation anxiety is predominant.
With mixed anxiety and depressed mood: A combination of depression and anxiety is predominant.
With disturbance of conduct: Disturbance of conduct is predominant.
With mixed disturbance of emotions and conduct: Both emotional symptoms (e.g., depression, anxiety) and a disturbance of conduct are predominant.
Unspecified: For maladaptive reactions that are not classifiable as one of the specific subtypes of adjustment disorder.

Etiology: There are two main factors: 1. The individual's vulnerability (less mature defense mechanisms, high anxiety temperament, low frustration tolerance, family overprotection, and lack of social support). 2. The stressor (nature, severity, duration, and meaning).

Epidemiology: The disorder is common in the hospital psychosomati consultation setting (50%), in psychiatric clinics (5% to 20%). The diagnosis is more common in women, young people, and unmarried persons. The disorder can occur at any age, but most frequent in adolescents and young adults. *In adults*: depressive, anxious and mixed features are the most common. *In children and the elderly*: physical symptoms are most common. Disturbance of conduct occurs mainly in adolescents.

Differential Diagnosis:

1. Normal expected psychological reaction, e.g., bereavement (see later in this chapter).
2. Major depressive episode (severe depressive features with death wishes).
3. ASD/PTSD.
4. Anxiety disorders (generalized anxiety or panic disorders).
5. Personality disorders: coexisting personality disorders are common, e.g., histrionic, obsessive-compulsive, avoidant, paranoid or borderline personality disorders.

Course and Prognosis: Generally favorable, particularly with early intervention. Most symptoms diminish over time without treatment especially after stressor removal. Most patients return to their previous functioning capacity within few months. Adults recover earlier than adolescents. Some patients maintain chronic course with risk of anxiety, depression and substance abuse. Recurrence is common following other usual life stresses. Some patients suffering from adjustment disorder with depressed mood may develop into major depression.

Management:
The most widely used treatment for adjustment disorders is *supportive psychotherapy* (empathy, understanding, and emptional ventilation) and *Crisis Intervention:* (Several sessions over 4-8 weeks). The patient, during crisis, is passing through emotional turmoil that impairs problem-solving abilities. Build good relationship with the patient. Review the steps that have led to the crisis (stresses, defense mechanisms). Understand the meaning of the stressor and its consequences to the patient. Identify the maladaptive reactions. Manipulate the environment to reduce distress, (e.g., hospitalization). Encourage and support the patient until he goes through the problem. Transform that into learning a more adaptive ways of coping strategies (for the future, to prevent such maladjustment reactions). After successful therapy the patient usually emerges stronger. *Group therapy:* for patients with similar problems, e.g., newly discovered diabetes mellitus. *Family therapy:* for patients whose problems are related to family dynamics.

Biological treatment: Medications should be prescribed based on the patient's predominant symptoms. For example, for adjustment disorder with depressed mood small doses of an SSRI might be beneficial A patient experiencing adjustment disorder with anxious mood may benefit from a brief course a benzodiazepine (e.g., clonazepam, 0.5 twice daily for one week).

Misconceptions*:* In many Arab countries, a great number of patients with adjustment disorders are seen first and treated by faith and folk healers who consider various non-medical conclusions and therapeutic trials, which coincide with the natural course of the illness and resolve with time. Therefor, most of these cases are attributed to Evil Eye, Witchcraft, or Jinni possessions, despite the presence of obvious psychosocial stresses severe enough to precipitate psychological disturbances.

5- Other Specified Trauma and Stress-Related Disorders

The category is used in situations in which the clinician chooses to communicate the *specific* reason that the presentation does not meet the criteria for any specific trauma- and stressor-related disorder. This is done by recording "other specified trauma- and stressor-related disorder" followed by the specific reason. Examples of presentations that can be specified using the "other specified" designation include the following: 1. Adjustment-like disorders with delayed onset of symptoms that occur more than 3 months after the stressor. 2. Adjustment-like disorders with prolonged duration of more than 6 months

without prolonged duration of stressor. 3. Persistent complex bereavement disorder: This disorder is characterized by severe and persistent grief and mourning reactions.

6- Unspecified Trauma and Stress-related Disorder

The category is used in situations in which the clinician chooses *not to specify* the reason that the criteria are not met for a specific trauma- and stressor-related disorder, and includes presentations in which there is insufficient information to make a more specific diagnosis (e.g., in emergency room settings).

Bereavement

Bereavement: Being deprived of someone by death. *Grief:* Sadness appropriate to a real loss. *Mourning:* The process of resolution of grief.

Normal uncomplicated bereavement: It is a multi-stage psychological process.

Shock stage: It takes hours to few days, characterized by denial, feeling unreality, anger, yearning, and lack of sadness. *Disorganization stage:* It takes a week to several months, characterized by sadness with an anxious mood, diminished interests, weeping, self-blame toward the deceased person, experience *as if* he/she is still alive, pseudohallucinations, social withdrawal, sleep disturbance, poor appetite, social withdrawal, and nonspesific physical complaints. *Reorganization stage:* It is characterized by acceptance of the loss with gradual resolution of symptoms and new adjustment. Most people reach this stage within one year after the loved one's death. However, often there is a temporary return of symptoms on the anniversary of the death. See later the 5 stages (proposed by Elizabeth Kubler-Ross) for adaptation with *terminal illness*.

Causes of abnormal bereavement

1. Sudden and unexpected or traumatic death.
2. When the bereaved had a role in the death.
3. When the relationship with the deceased had been very intense, dependent or ambivalent.
4. When the bereaved person has to care for dependent children, has suffered a previous psychiatric disorder, or has a difficulty in expressing feelings.

Persistent Complex Bereavement Disorder (DSM-5 Category)

This disorder is diagnosed only if bereavement has exceeded 12 months (6 months in children). The nature and severity of bereavement are beyond expected norms for the relevant cultural setting or religious group resulting in clinically significant distress or functional impairment. The disorder is characterized by a persistent longing for, and preoccupation, with the deceased, intense sorrow, frequent crying, marked difficulty accepting that the individual has died (e.g. preparing meals for him/her), excessive avoidance of reminders of the loss, and beliefs that life has no meaning or purpose without the deceased. Some patients experience diverse non-specific physical complaints, including symptoms experienced by the deceased. However, abnormal bereavemnt may take other forms:

Delyed bereavement: The first stage of grief does not appear until more than two weeks after the death. It is more frequent after sudden, traumatic, or unexpected death.

Distorted bereavement: Unusual reaction to death, e.g., marked overactivity, hostility, stupor.

Bereavement	Major Depressive episode (MDE)
Affect/Mood: Feelings of emptiness and loss. Dysphoria decrease in intensity over days to weeks and occurs in waves associated with thoughts of the deceased. *Self-esteem*: Preserved. *Death wishes*: Focused on the deceased and possibly about "joining" the deceased. *Thought*: A preoccupation with thoughts and memories of the deceased may be accompanied by positive emotions and occasional humor.	*Affect/Mood*: Depressed mood and lack of pleasure that are more persistent and not tied to specific thoughts. *Self-esteem*: Affected with self-loathing and worthlessness. *Death wishes*: Focused on being unable to cope with the pain of depression. *Thought*: Pessimistic and self-critical.

Reaction to Impending Death

A dying individual's approach to death has been linked to the amount of meaning and purpose a person has found throughout his lifetime. Research has found that those who felt they understood their purpose in life, or found special meaning, faced less fear and despair in the final weeks of their lives than those who had not. Spirituality helped dying individuals deal with the depression stage more adaptively than those who were not spiritual. However, there are individuals who struggle with death until the end. Some researchers believe that the harder a person fights death, the more likely he is to stay in the denial stage. Others state that not confronting death until the end is adaptive for some people.

The following psychological stages (proposed by Elizabeth Kubler-Ross) are widely encountered. These stages begin when the patient is first aware of a terminal illness. Not everyone goes through each stage, and the order may be different for each person.

1. *Denial/Disbelief:* "This can't be happening, not to me, I feel fine." It is a temporary shock defensive response to the psychological trauma of bad news. Some patients never pass beyond this stage and may keep going from doctor to doctor searching for one who supports their position.
2. *Anger:* "How can this happen to me?", "Why me?! It's not fair!, others are more deserving." Anger arises once the subconscious accepts the reality of the bad news and denial cannot continue. Patient becomes frustrated, irritable, and angry. Anger towards doctors, nurses, medical agencies, relatives, fate, self, and even God/Allah. Anger may be associated with envy of healthy people. Therefore, at this stage the person may become very difficult to care for due to misplaced feelings of rage and envy. It is essential for doctors not to take this anger personally. It represents patient's desire for controlling what he feels out of control.
3. *Bargaining*: "I will give/ do anything for a few more years." It is a negotiation for an extended life, made with a higher power in exchange for a reformed lifestyle. Bargaining arises when the subconscious recognizes that anger does not help. Psychologically, the subconscious is saying: "as anger did not work, maybe being good will work, I understand I will die, but if I could just have more time." It involves the hope that the individual can somehow postpone or delay death.
4. *Depression*: "Nothing worked, death is certain, I'm going to die, no way." Depression arises when the subconscious realizes that nothing has worked to prevent or delay the coming death so that despair and hopelessness prevail. Depressive features appear: low mood, low interest, lack of enjoyment, weeping, poor appetite, disturbed sleep isolation, and negative thoughts. It is not recommended to attempt to cheer up an individual who is in this stage. It is an important stage for grieving that must be processed.
5. *Acceptance*: " death is inevitable, I can't fight it, I better give up resisting and prepare for it." The subconscious begins to come to terms with mortality. This is not a "happy" stage; it is usually void of feelings. It takes a while to reach this stage and a person who fights until the end will not reach it.

These stages do not necessarily come in the order noted above, nor are all stages experienced by all patients. People may experience switching between two or more stages, returning to one or more several times before working through it. Any patient could experience the stages in a different order, or could experience emotions not even mentioned in the stage theory.

Helping bereaved individuals and dying patients

Normal process of grief should be explained and facilitated: help to overcome denial, encourage talking about the loss, allow expressing feelings. Continuous support through stages 1 and 2. Consider any practical problems like financial difficulties and caring for dependent children. Medications**:** Anxiolytics for few days are helpful (when anxiety is severe and sleep is markedly interrupted). Antidepressants do not relieve the distress of normal grief and therefore should be restricted to pathological grief which meets criteria for depressive disorders.

A 78-year-old man was brought to the emergency department because of a 5-day history of disorientation, poor memory, and bladder incontinence.
How would you assess and treat this patient?

Objectives
At the end of this lecture, the student should be able to
1. Understand the concept of neurocognitive disorders disorders.
2. Know the various types of neurocognitive disorders.
3. Detect neurocognitive disorders and act accordingly.

Neurocognitive Disorders (NCD)

1. Delirium.
2. Major neurocognitive disorders.
3. Mild neurocognitive disorders.

The common feature of all of these disorders is the presence of structural or functional disturbances of brain function leading to impairments in attention, orientation, memory, abstract thinking, or judgment.

Delirium

Definition: An acute short-term decline in the level of consciousness and cognition with particular impairment in attention due to a direct consequence of a biological cause.
Impairment of consciousness is the hallmark symptom of delirium, usually occurring in association with global impairments of cognitive functions. Delirium often involves disturbances in perception (illusions, hallucinations), emotion (anxiety, anger), thinking (delusions), speech (incoherence), behavior (agitation, retardation), and sleep cycle. It is a potentially reversible but life threatening disorder that is often under recognized by physicians.

Diagnostic Criteria (DSM-5)

A. A disturbance in attention.
B. The disturbance develops over a short period of time (usually hours to a few days), represents a change from baseline attention and awareness, and tends to fluctuate in severity during the course of a day.
C. An additional disturbance in cognition (e.g., disorientation or perception).
D. The disturbances in Criteria A and C are not better explained by another disorder.
E. There is evidence that the disturbance is a direct consequence of a biological cause.

Specify whether: Substance intoxication delirium. Substance withdrawal delirium. Medication-induced delirium. Delirium due to another medical condition. Delirium due to multiple etiologies.
Specify if: Acute: Lasting a few hours or days. Persistent: Lasting weeks or months.
Specify if: Hyperactive- Hypoactive- Mixed level of activity.

Epidemiology: Advanced age is the main risk factor for the development of delirium.

Prevalence	Setting
1 % -2 %	In the community (all age groups)
14 %	In the community among individuals older than 85 years
14% - 24%	Among hospitalized patients
10 % - 30 %	In older individuals presenting to emergency departments
15% - 53%	In older individuals postoperatively
70% - 87%	In older individuals in intensive care units

Etiology: The main affected area in the brain is the reticular formation, which is the principal area regulating arousal and attention. The major neurotransmitter hypothesized to be involved in delirium is acetylcholine (many anticholinergic medications causes delirium). However, other neurotransmitters have been implicated including serotonin, norepinephrine, and glutamate. The EEG usually shows diffuse slowing of background activity. Compared to adulthood, the susceptibility to delirium is greater in childhood and in elderly individuals (may be related to brain vulnerability to the effect of physical diseases, metabolic disturbances, febrile illnesses and certain medications). Precipitating factors of delirium are many.

Common causes of delirium include:

- Metabolic disturbances/electrolyte imbalance.
- Organ failure: uremia, hypoxia, hepatic encephalopathy.
- Infections: systemic (e.g. septicemia) or specific(e.g. encephalitis).
- Medications (multiple drugs with multiple interactions, central anticholinergic effects).
- Endocrinopathies (e.g. hypoglycemia).
- Neurological diseases: seizure, head trauma.
- Substance abuse: alcohol withdrawal (delirium tremens)/intoxication.

Differential diagnosis:

1- Other neurocognitive disorders. The physician should determine whether the patient has an NCD without delirium; delirium; or a delirium superimposed on a preexisting NCD (e.g., Alzheimer's disease). A patient with dementia is usually alert; a patient with delirium has episodes of decreased consciousness. A dual diagnosis of delirium can be made when there is a definite history of preexisting dementia. Occasionally, delirium occurs in a patient with dementia.

2- Vascular brain injury caused by stroke may present initially with some features of delirium.

3- Psychotic disorders. When a delirious patient has hallucinations, delusions, or language disturbances, his condition might be misdiagnosed as a brief psychotic disorder or a bipolar disorder.

4- Depressive disorders with psychotic features.

Course and prognosis: Although delirium generally lasts less than 1 week, the symptoms of delirium usually persist as long as the causes are present. After removal of the causative factors, the symptoms of delirium usually disappear within a week, although some symptoms may take up to 2 weeks to resolve completely. The majority of patients with delirium have a full recovery with or without treatment. However, early recognition and intervention usually shorten the duration of the delirium. If the underlying cause remains untreated, some cases with delirium may progress to seizures, stupor, coma, or death.

Management: Delirium is a medical emergency and should not be treated in a psychiatric ward.

1. The referring physician should search for the cause and treat it properly.
2. Correct any metabolic abnormality: ensure nutrition, hydration, electrolyte balances.
3. Discontinue unnecessary medications, including benzodiazepines. Although benzodiazepines may be appropriate for promoting sleep at night, they should generally be avoided because their effects may increase disorientation, drowsiness and ataxia with possible falls, head trauma and fractures.
4. When the underlying condition is anticholinergic toxicity, the use of physostigmine salicylate, 1-2 mg intravenously or intramuscularly, with repeated doses in 20 minutes may be indicated.
5. Keep the patient in a quiet, well lit-room; avoid over and under stimulation.
6. Frequently reorient, reassure and explain procedures clearly to the patient.
7. Treat agitation and psychotic features with with low doses of high-potency antipsychotics (e.g., haloperidol, 1–2 mg every 2–4 hours as needed) or a second-generation antipsychotic (e.g., quetiapine 50 mg. every 12 hours as needed). Physicians should evaluate baseline and periodic electrocardiograms as well as monitor cardiac status of the patient because haloperidol and quetiapine have been associated with prolongation of QT interval.
8. Observe for unrecognized alcohol withdrawal that may manifest as delirium, particularly in postsurgical patients. Some patients fail to disclose their history of alcohol abuse, and within days of the surgery develops a delirium. In these cases benzodiazepines are indicated because they will treat the alcohol withdrawal symptoms.

Major Neurocognitive Disorder

Definition: *Significant* multiple cognitive deficits with intact level of consciousness resulting in significant impairment in basic activities of daily living and occupational functioning.

Diagnostic Criteria (DSM-5):

A. Evidence of *significant* cognitive decline from a previous level of performance in ≥ 1 cognitive domains (complex attention, executive function, learning and memory, language, perceptual-motor, or social cognition) based on:
   1. Concern of the individual, an informant, or the clinician. and
   2. A documented substantial impairment in cognitive performance.

B. The cognitive deficits *interfere* with independence in everyday activities.

C. The cognitive deficits do not occur exclusively in the context of a delirium.

D. The cognitive deficits are not better explained by another mental disorder.

Specify the etiology (e.g., vascular disease, Alzheimer's disease, frontotemporal lobar degeneration, traumatic brain injury, Lewy body disease, Parkinson's disease, Prion disease, multiple etiologies).

Specify: Without or with behavioral disturbance (e.g., psychotic symptoms, mood disturbance, agitation).

Specify current severity: Mild: Difficulties with instrumental activities of daily living (e.g., housework, managing money). Moderate: Difficulties with basic activities of daily living (e.g., feeding, dressing). Severe: Fully dependent.

Mild Neurocognitive Disorder

Definition: Mild impairment in cognitive performance but with relatively preserved basic activities of daily living. It was suggested as a diagnostic category designed to fill the gap between normal cognitive changes associated with aging and significant cognitive impairment due to dementia (major NCD).

Diagnostic Criteria (DSM-5)

A. Evidence of *modest* cognitive decline from a previous level of performance in ≥ 1 cognitive domains (complex attention, executive function, learning and memory, language, perceptual-motor, or social cognition) based on:
   1. Concern of the individual, an informant, or the clinician. and
   2. A documented substantial impairment in cognitive performance.

B. The cognitive deficits *do not interfere* with capacity for independence in everyday activities.

C. The cognitive deficits do not occur exclusively in the context of a delirium.

D. The cognitive deficits are not better explained by another mental disorder.

Specify the etiology (e.g., vascular disease, Alzheimer's disease, frontotemporal lobar degeneration, traumatic brain injury, Lewy body disease, Parkinson's disease, Prion disease, multiple etiologies).

Epidemiology of major and mild NCDs: Risk factors vary by etiological subtype and by age at onset within etiological subtypes. The strongest risk factor is age, because age increases the risk of cerebrovascular and neurodegenerative disease. Female gender is associated with higher prevalence of dementia mainly of Alzheimer's disease, but this difference might be attributable to greater longevity in females. The prevalence in the general population is 5% (65 years of age), 30% (> 85 years of age). The prevalence in outpatient general medical practices is approximately 15%. The most common type of dementia is Alzheimer's disease (50%). Vascular dementia is the second most common type of dementia (25%), most common in persons between the ages of 60 and 70 and is more common in men than in women. Approximately 10 to 15 percent of patients have coexisting Alzheimer's and vascular dementias.

Etiology of major and mild NCDs:

1- *Alzheimer's disease* (After Alois Alzheimer a German psychiatrist, 1864–1915).

Alzheimer's disease has insidious onset and steadily progressive decline in memory and learning, without extended plateaus. Early in the course of the disease, memory impairment is mild and usually most marked for recent events; people forget events of the day and conversations. As the course of the disease progresses, memory impairment becomes severe, and only the earliest learned information (e.g., a person's date of birth) is retained. When external stimuli, such as light, are diminished, a patient may become drowsy or confused with increased risk of accidental falls (sundowner syndrome). Under stressful circumstances, a patient may develop agitation secondary to the subjective awareness of intellectual deficits (catastrophic reaction). The main pathophysiology is decreased acetylcholine and choline acetyltransferase concentrations in the nucleus basalis of Meynert in the brain. In some cases, there is an evidence of a causative Alzheimer's disease genetic mutation from family history or genetic testing. Brain CT shows diffuse atrophy with flattened cortical sulci and enlarged cerebral ventricles. The pathognomonic microscopic findings are neuronal loss (particularly in the parietal-temporal cortex and the hippocampus), senile plaques, and neurofibrillary tangles. When a comorbid condition (e.g., a vascular disease) contributes to the NCD in a patient with Alzheimer's disease, then NCD due to multiple etiologies should be diagnosed.

2- Vascular disease (major or mild NCD) (formerly referred to as multi-infarct dementia)

Vascular dementia most commonly is seen in men, especially those with preexisting hypertension or other cardiovascular risk factors. The presentation is very heterogeneous, depending on the types of vascular lesions and their extent and location. Vascular etiology may be focal, multifocal, or diffuse. The disorder affects primarily small-sized cerebral vessels, which undergo infarction and produce multiple parenchymal lesions. The causes of the infarctions can include thromobemboli from distant origins (e.g., heart valves) or occlusion of the vessels by arteriosclerotic plaques. Many patients present with multiple infarctions, with an acute stepwise or fluctuating decline in cognition, and intervening periods of stability and even some improvement. The Cognitive deficits in these cases can be attributed to disruption of cortical-subcortical circuits, and complex attention, particularly speed of information processing, and executive ability are likely to be affected. Vascular disease is often punctuated by acute events that leave subtle neurological deficits. The gradual progression in these cases is generally due to small vessel disease leading to lesions in the white matter, basal ganglia, and/or thalamus. *Subcortical arteriosclerotic encephalopathy* (Binswanger's Disease) is characterized by the presence of many small infarctions of the white matter that spare the cortical regions.

Recognition of transient ischemic attacks (brief episodes of focal neurological dysfunction lasting less than 24 hours) is an important clinical strategy to prevent brain infarction. Physicians should distinguish episodes involving the vertebrobasilar

system (functional disturbance in either the occipital lobe or the brainstem) from those involving the carotid arterial system (symptoms reflect unilateral hemispheric or retinal abnormality).

3- Frontotemporal neurocognitive disorder (Pick's Disease)

This disorder constitutes 5% of dementias. It is most common in men and typically begins before 75 years of age. Common symptoms are lack of planning and organization, distractibility, and poor insight and judgment. The disorder is difficult to distinguish from Alzheimer's disease, although the early stages of frontotemporal neurocognitive disorder are characterized by personality and behavioral changes, with relative preservation of other cognitive functions. This disorder has two variants:

1. *Behavioral variant*: Apathy, loss of empathy, dietary changes (hyperorality), disinhibition, perseveration, repetitive movements, hoarding, and decline in self-care, and social responsibilities. Individuals may develop changes religious beliefs.
2. *Language variant*: Decline in word finding, speech production, object naming, grammar, or word comprehension.

Features of Klüver-Bucy syndrome (hyperorality, hypersexuality, and quietness) are much more common in Frontotemporal disorder than in Alzheimer's disease. Extrapyramidal features may be prominent in some cases, with an overlap with some neurological diseases. In the early stages, perceptual motor abilities are preserved, cognitive decline is less prominent, and formal testing may show relatively few deficits. In later stages, loss of sphincter control may occur. Some patients develop visual hallucinations. Brain CT or MRI may show distinct patterns of atrophy in the frontal and temporal lobes. Functional MRI demonstrates hypoperfusion and/or hypometabolism in the corresponding brain regions, which may be present in the early stages in the absence of structural abnormality.

4- Traumatic brain injury (TBI) (major or mild NCD)

Traumatic brain injury (TBI): Brain trauma with specific characteristics that include at least one of the following: loss of consciousness, disorientation and confusion, posttraumatic amnesia, or neurological signs (e.g., , a new onset of seizures or a marked worsening of a preexisting seizure disorder, hemiparesis, visual field cuts, anosmia, positive neuroimaging). To be attributable to TBI, the neurocognitive disorder must present either immediately after the brain injury occurs or immediately after the individual recovers consciousness after the injury and persist past the acute post-injury period. The cognitive deficit is variable. Attention, concentration, memory, and speed of information processing are common. In more severe TBI in which there is penetrating injury, brain contusion, or intracranial hemorrhage, there may be additional neurological deficits, such as aphasia, cranial nerve deficits, and constructional dyspraxia. TBI is usually accompanied by personality changes (e.g., aggression, disinhibition, suspiciousness); disturbances in emotional function (e.g., easy frustration, irritability, apathy, affective lability); physical disturbances (e.g., headache, dizziness, tinnitus or hyperacusis, photosensitivity, anosmia). Except in the case of severe TBI, the typical course is that of substantial improvement in neurocognitive and associated psychiatric problems.

5- Lewy body disease (major or mild NCD)

Fluctuating cognition with pronounced variations in attention and alertness. Recurrent visual hallucinations that are well formed and detailed. Other nonvisual hallucinations, delusions, and depression are common. Spontaneous features of Parkinsonism, with onset subsequent to the development of cognitive decline. Severe neuroleptic sensitivity. Symptoms of rapid eye movement (REM) sleep behavior disorder (which can be a very early manifestation). Some patients develop *Capgras syndrome* (a delusion that an identical impostor has replaced a friend or a close family member). Patients frequently experience repeated syncope and falls and transient episodes of unexplained loss of consciousness. Because of sympathetic denervation, autonomic dysfunction (e.g., orthostatic hypotension, urinary incontinence) may be observed. Brain CT and MRI show relative preservation of medial temporal structures. Electroencephalogram (EEG) shows prominent slow-wave activity with temporal lobe transient waves. Lewy bodies are aggregation of misfolded alpha-synuclein found in the cerebral cortex and the substantia nigra.

6- Parkinson's disease (major or mild NCD)

The NCD is considered due to Parkinson's disease when the Parkinson's disease precedes onset of the NCD or when there is no evidence of another disorder that might be contributing to the cognitive decline. The deficits must have developed gradually. Psychiatric features include low mood, anxiety, apathy, hallucinations, delusions, personality changes, excessive daytime sleepiness, and rapid eye movement sleep behavior disorder. Risk factors for Parkinson's disease include exposure to herbicides and pesticides. Structural neuroimaging differentiates Lewy body-related dementias (Parkinson's and dementia with Lewy bodies) from non-Lewy body-related dementias (e.g., Alzheimer's disease). Motor symptoms and frequent co-occurrence of depression or apathy can make functional impairment worse. Parkinson's disease may coexist with cerebrovascular disease and Alzheimer's disease, especially in older individuals. Side effects of antiparkinsonian medications may complicate the clinical presentation and the management of NCD in patients with Parkinson's disease.

7- Prion disease (major or mild NCD)

The word *prion* derives from "proteinaceous infectious particle." Prions are misfolded proteins with the ability to transmit their misfolded shape onto normal variants of the same protein. Prions form abnormal aggregates of proteins (amyloids),

which accumulate in infected tissue and are associated with tissue damage and cell death.] Amyloids are also responsible for several other neurodegenerative diseases such as Parkinson's disease and Alzheimer's disease. Prion diseases characterize several fatal and transmissible spongiform encephalopathies in humans and many other animals e.g., bovine spongiform encephalopathy, also called "mad cow disease." The most common type is sporadic Creutzfeldt-Jakob disease, typically referred to as Creutzfeldt-Jakob disease (CJD). Patients with CJD present with cognitive deficits, psychiatric symptoms (e.g., low mood, anxiety), and neurological symptoms (e.g., ataxia, abnormal movements such as chorea, dystonia, myoclonus). Patients with CJD usually have rapid progression to major NCD over as little as 6 months. Prion disease is typically not diagnosed without at least one of the characteristic biomarker features (e.g., recognized lesions on MRI, characteristic triphasic waves on EEG, protein in cerebrospinal fluid).

8- *Neurocognitive disorder due to another medical condition*

Potential causes include renal or hepatic failure, vitamin deficiencies, endocrine diseases, normal-pressure hydrocephalus (dementia, gait disturbance, and urinary incontinence), brain tumors, subdural hematomas, multiple sclerosis, and storage diseases.

9- *Neurocognitive Disorder Due to Multiple Etiologies*

This category covers the clinical presentation of a neurocognitive disorder (NCD) for which there is an evidence (i.e., findings from the history and physical examination, and laboratory findings) that multiple medical conditions have played a probable role in the development of the NCD.

10- *Other disorders*.

Differential diagnosis of major and mild neurocognitive disorders

1- *Normal age-related cognitive decline:* The course is not progressively deteriorating and no loss of social or occupational functioning. The distinction between normal cognition and mild NCD is challenging because the boundaries are arbitrary. Thus, objective clinical tests are critical in detecting mild NCD and in differentiating mild from major NCDs.
2- *Delirium*: Careful history and cognitive function assessment are essential to make distinction between delirium and other NCDs. A patient with delirium has episodes of decreased consciousness, whereas a patient with dementia is usually alert. Occasionally, delirium occurs in a patient with a pre-existing major or mild NCD. A dual diagnosis of delirium can be made when there is a definite history of pre-existing major or mild NCD.
3- *Major depressive disorder (MDD) in the elderly*: Cognitive deficit secondary to MDD (pseudo-dementia) is relatively of rapid onset and proceeded by depressive features. The differentiation is sometimes difficult because demented patients may also become depressed as they begin to comprehend their progressive cognitive impairment. EEG and CT scan are normal in pseudo-dementia. Treatment of the depressive disorder with repeated observation over time may be required to make the diagnosis.

Management of major and mild NCD

A multidisciplinary bio-psycho-social approach is necessary. Adequate screening, improvement of memory loss, prevention of further cognitive decline. Identifying reversible causes of NCD (e.g., vitamin B12 deficiency, hypothyroidism). Controlling for vascular risk factors (hypercholesterolemia, diabetes mellitus, and hypertension) is an essential preventive method for those cases underlying vascular pathology. A cognitive-enhancer medication (memantine or a cholinesterase inhibitor) may slow the rate of cognitive decline but will not reverse decline. Due to their differing mechanisms of action, memantine and acetyl cholinesterase inhibitors can be used in combination. Accompanying depressive symptoms generally respond to SSRIs antidepressants. Aggression, agitation, and psychotic features can be treated with antipsychotic drugs. However, low doses should be prescribed for short periods because these drugs have risky adverse effects, including increasing the person's chance of stroke and death. Benzodiazepines should be avoided due to the risks of falls and increased cognitive impairment. Trazodone given as a bedtime dose may help to relieve nighttime agitation. Supportive care (including caregiver) via social and environmental interventions is essential. Many measures can improve the quality of life of patients with major and mild NCD and their caregivers. Cognitive and behavioral interventions may be appropriate.

Others NCDs/in process

Substance-Related Disorders/in process
Psychotic Disorders/in process
Psychosomatic Disorders/in process
Emergency Psychiatry/in process
Child psychiatry/in process
Personality Disorders/in process
Other Psychiatric disorders/ in process

Medications in Psychiatry and ECT/in process

A 20 year-old female student came to outpatient clinic complaining that when talking to important people she feels embarrassed, dizzy, and tremulous . She came asking for non-pharmalogical treatment.

Objectives:
At the end of the lecture, the student should be able to:
1- Know the concept of psychological treatment and related terms.
2- Understand different types and applied techniques of psychotherapy.
3- Know indication of each technique.

Pychological Treatment

Definition: A group of non-pharmacological psychotherapeutic techniques employed by a therapist to ameliorate distress, abnormal patterns of relations or symptoms.
Psychotherapy is sometimes used to mean all forms of psychological treatments.
Counseling is used to refer to a wide range of the psychological treatments ranging from the giving of advice, to structural ways of encouraging problems solving.

Types

According to concept	According to aim	According to participants
▪ Behavior therapy. ▪ Cognitive therapy. ▪ Cognitive-Behavior Therapy. ▪ Psychodynamic therapy. ▪ Person - Centered therapy. ▪ Eclectic model of therapy. ▪ Others.	▪ Maintenance of function, e.g. supportive therapy. ▪ Readjustment to distress, e.g. problem - solving. ▪ Restoration of function, e.g. cognitive-behavior therapy. ▪ Reconstruction of personality, e.g. analytic therapy.	▪ Individual therapy. ▪ Group therapy. ▪ Marital therapy. ▪ Family therapy.

General Indications

Based on diagnosis	Based on presenting features:
▪ Anxiety (acute - chronic). ▪ Personality disorders. ▪ Psychoactive substance abuse. ▪ Childhood disorders. ▪ Chronic psychosis.	▪ Subjective symptoms e.g. anxiety, phobia. ▪ Interpersonal difficulties e.g. overdependence, marital discord.

Predictions of good outcome: Willingness and motivation. Reasonable intelligence. Capacity to verbalize feelings and tolerate frustration. Efficient and committed therapist. Early intervention.

Behavior Therapy

Concept : Intrapersonal and interpersonal problems are seen as resulting from learning maladaptive inappropriate behavior. There is no place in this approach for the unconscious repressed conflicts. It is assumed that the main aim of any person is to adapt effectively to his environment. A person can achieve this goal on the basis of the application of the principles of learning. The aim for the client (patient) is to increase desirable behaviors and decrease undesirable ones. Behavioral assessment seeks to observe and measure maladaptive behaviors focusing on how the behavior varies in particular settings and under specific conditions. Problems will be decreased or extinguished through client's learning more adaptive behaviors or unlearning maladaptive ones.

Techniques:

- **Relaxation Training:** There are various techniques which include the following common procedures:
  Slow deep and regular breathing. Clearing the mind of worrying thoughts; by concentrating on an imagined tranquil scene (meditation). Progressive repeated tension and relaxation of group of muscles (face, neck shoulders, back, abdomen, arms and legs) until generalized relaxation is achieved. About 20 sessions are required until a person becomes able to achieve rapid relaxation. Time required for each session gets less with repeated sessions. Tape recording of the instructions for relaxation is useful. Relaxation is helpful in anxiety and phobic disorders.

- **Exposure (**mainly for phobic disorders and OCD): Exposing the patient to repeatedly enter situations that he has avoided previously or, if this is not practicable, to imagine doing so. Gradual re-entry is called *desensitization*. Rapid re-entry is called *flooding*. Hierarchy of avoided situations is drawn (situations are arranged in a descending order). Anxiety is reduced by relaxation training. (see down). The patient is asked to enter a situation that provokes the least anxiety (at the bottom of the hierarchy) and stay until anxiety subsides. The procedure is then repeated with the next situation on the hierarchy and so on. Repeated

adequately prolonged exposure (for about an hour everyday) is required until patient's anxiety subsides. A family co-therapist is sometimes required to sustain motivation, praise success and encourage practice.

- **Response Prevention**: It helps patients (with compulsions or phobia). Patient is asked to exert efforts to suppress control the abnormal behavioral responses triggered by exposure (avoidance in phobia and compulsions in OCD) for enough about 30 – 60 minutes until the associated distressing feelings wane. Repeated application of this technique help the autonomic nervous system to readapt to the stimulus through diminishing the frequency and intensity of abnormal responses (fear, avoidance, or compulsions). Patient should be encouraged to overcome the initial distress.
- **Assertiveness Training:** Unassertive persons are usually deficient in expressing their honest feelings and thoughts directly to others. Assertiveness training helps unassertive persons to practice appropriate social behavior in everyday life, expressing their honest feelings and thoughts through verbal (tone of voice, volume, and content) and nonverbal communication (posture, eye contact, facial expression). Role play (therapist and patient exchange roles) helps the patient understand the view point of the other person in the situation.
- **Thought Stopping**: It is used to treat obsessional thoughts. Obsessional thoughts are interrupted by a noxious stimulus e.g., an elastic band worn around the wrist (mildly painful). Gradual reduction in the intensity of the thoughts is achieved by repeated interruptions.
- **Token Economy**: Repeated rewards of a desired behavior encourage persons to repeat the behavior. It is used with chronic schizophrenic patients to improve their social skills e.g. self-hygiene. Also used with children and patients with intellectual disability.

Cognitive Therapy

Concept: Maladaptive cognitive processes are associated with behavioral and emotional problems. Correcting maladaptive cognitive processes reduces patient's such problems. Cognitive therapy is mainly indicated for depressive disorders (mild – moderate), anxiety, and phobic disorders.

Process:

Identification of cognitive errors that have negative impact on the patient thinking. Common cognitive errors include :

1. *Magnification and minimization* of events out of proportion to their actual significance, e.g. depressed patient magnifies his faults and minimizes his achievements.
2. *Overgeneralization*: Forming a general rule from few instances and applying this rule to all situations no matter how inappropriate.
3. *Arbitrary inferences*: Making an inference without backing it up with evidence, or alternatively ignoring conflicting evidences.
4. *Selective abstraction*:Taking a fact out of context while ignoring other significant features and then proceeding to base entire experience on that isolated fact.
5. *Dichotomous thinking*: Thinking about events or persons in terms of opposite extremes (all or none).
6. *Personalization*:Relating events and incidents to self where such incidents have no personal bearing or significance.

Challenging the identified cognitive errors with accurate information and pointing out illogical ways of reasoning.
Finding alternative more adaptive ways of thinking.
Testing the effect on emtion and behavior and encouraging positive thinking.

Cognitive Behavior Therapy (CBT)

Combination of cognitive and behavioral techniques. It is indicated in many psychiatric disorders like depressive disorders (mild-moderate, but not severe), adjustment disorders, anxiety disorders/phobic disorders, and stress-related disorders.

Supportive Therapy

Concept: It is a systematic professional approach that involves building a good therapeutic relationship, Careful listening to the patient's problems, facilitating emotional ventilation, sharing emotions with the patient, giving reasonable advice, and improving self-esteem. It is indicated to relieve distress during a short period of personal misfortune, a short episode of illness, or in the early stages of treatment before specific measures have had time to act. To sustain a patient who has stressful life problems that cannot be resolved completely or a medical disease that cannot be treated.

Counseling

It helps persons to solve stressful problems through *decision making*. The counselor's role is not to provide solutions to the client's problems, instead he assists the client to choose a decision among alternative courses of actions. Pros and cons of each alternative are considered before selecting one. Counseling process requires empathy (understanding the client's feelings) and unconditional positive regard of the client.

Psychodynamic / Insight-Oriented Psychotherapy

Concept: Person's behavior is determined by unconscious process. Current problems arise from unresolved unconscious conflicts originating in early childhood. Problems will be reduced or resolved through the client attaining insight (greater understanding of aspects of the disorder) as a mean to gaining more control over abnormal behavior. **Indication**: The main indication is personality problems. However, it might help in many other conditions.

Marital Therapy

Indications: Marital discord and when marital problems act as a maintaining factor of a psychiatric disorder in one or both partners.

Process: The couple and the therapist identify marital problems, such as failure to listen to the other partner, failure to express wishes, emotions, and thought directly. The couple then are helped to understand each other. The therapist should remain neutral.

Techniques used include: Behavioral (reinforcement of positive behavior), cognitive, counseling, and insight oriented.

Family Therapy

Family members are all involved in the treatment to reduced suffering of one or more of the members.Concept and techniques are similar to marital therapy.

Group Therapy

Group of patients (6 – 10) with similar psychiatric problems (e. g. social phobia) are guided by a trained therapist through using a variety of psychological techniques (behavioral, cognitive…) to help them overcome their psychological problems. Therapeutic factors: Group cohesion and support - Acceptance and ventilation - Identification and universalization.

Self-Assessment

1- A 17-year-old girl has severe phobia of needles and injections.
What is the most appropriate treatment?

a. Behavior therapy.
b. Cognitive therapy.
c. Insight-oriented therapy.
d. Psycho-education.

2- A 21-year-old male attending psychotherapy was asked to write records of his life events in order to identify his positive personal character that he neglects.
Which of the following was the therapist identifying?

a. Arbitrary inferences.
b. Dichotomous thinking.
c. Overgeneralization.
d. Selective abstraction.

3- A 32-year-old married woman has excessive worries and difficulty making personal decisions unless having enough advice and reassurance from others.
What is the recommended psychological treatment?

a. Exposure therapy.
b. Insight-oriented therapy.
c. Marital therapy.
d. Response prevention.

4- A 29-year-old married man has a 5-year continuous history of mild low mood and lack of enjoyment.
What is the most appropriate treatment?

a. Cognitive behavior therapy.
b. Dynamic psychotherapy
c. Marital therapy.
d. Response Prevention.

5- A 20-year-old college student female failed two weeks ago in Mathematics. She came to outpatient psychiatry clinic with 7 days history of lack of sleep, very poor appetite, excessive crying episodes, lack of pleasure and loss of hope.
What is the most appropriate psychological treatment?

a. Behavioral therapy.
b. Cognitive-Behavior Therapy.
c. Family therapy.
d. Group therapy.

Answers: 1- a 2- d 3- b 4- a 5- b.