# Introduction

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Psychiatry: A medical discipline concerned with the provision of bio-psycho-social assessment and management of mental disorders.

**Psychiatry Course Objectives:** available on youtube  
Al-Sughayir Psychiatry Teaching  
https://www.youtube.com/watch?v=Z5g2GcJepcc

### Knowledge
Psychiatric Disorders:
- Classification.
- Features.
- Etiology.
- Epidemiology.
- Course.
- Treatment.
- Prognosis.

### Attitude
To adopt a positive attitude. Negative opinion is based on unscientific public thinking, media, peers, and past personal negative experience. It may be a defense mechanism.

### Skills
- Psychiatric History.
- Mental state Examination.
- Interview Skills.
- Eliciting Signs & Symptoms.
Importance of Psychiatry Clerkship

One of the essential qualities of the clinician is interest in humanity. Training in psychiatry will expand your understanding of the spectrum of human perception, thinking, emotion, and behavior. This will serve you well in self-awareness, interpersonal relationships, and patients' care.

Whatever medical specialty you choose in the future, training in psychiatry will upgrade your clinical skills in:
- Putting the patient at ease.
- 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.

Before Psychiatry Clerkship

- Neuroanatomy
- Neurophysiology
- Neurotransmitters
- Clinical Psychology

It is advisable to review these basics. See Basic Psychiatry chapter 1.
## Diagnosis & Classification in Psychiatry

### Significance of Dx & Classification:
1. To distinguish one diagnosis from another.
2. To enable clinicians to communicate with one another about dx, treatment and prognosis.
3. To ensure that psychiatric research can be conducted with comparable groups of patients.

### Organic vs. Functional Classification:
In everyday psychiatric practice the distinction between organic (neurocognitive) and functional mental disorders is still commonly used and useful in the management.

### Organic Mental Disorders:
Psychiatric disorders characterized by neurocognitive structural brain pathology that can be detected by clinical assessment or usual tests. E.g. delirium, dementia, substance-induced mental disorders, and medication-induced mental disorders.

### Features Suggestive of Organic Mental Disorders (CNS pathology):
- Disturbed consciousness +/- other cognitive disturbance in: attention, concentration, orientation or memory.
- Physical illness (e.g. diabetes, hypertension).
- Vital signs disturbances (e.g. fever, high BP).
- Neurological features (e.g. ataxia, dysarthria).

### Non-organic (functional) Mental Disorders:
No obvious structural brain pathology. E.g. Schizophrenia, mood disorders, anxiety disorders, adjustment disorders.

### Psychosis vs. Neurosis Classification:
Although this classification is no longer used in the official current systems of classification (DSM & ICD), in everyday clinical practice these terms are still used widely; hence it is of practical value to know this distinction.

### Psychoses (pleural of psychosis - الذهان)
Mental disorders in which the patient lacks insight and is unable to distinguish between subjective experience and external reality, as evidenced by disturbances in thinking (delusions), perception (hallucinations), or behavior (e.g. violence).

Examples: schizophrenia, severe mood disorders, delusional disorders. It can be due to an organic cause (organic psychosis) e.g. delirium, dementia, substance abuse, head injury.

Features are abnormal in quality (e.g. delusions, hallucinations).

### Neuroses (pleural of neurosis - الغصان)
Generally less severe forms of psychiatry disorders in which the patient is able to distinguish between subjective experience and external reality.

No lack of insight, delusions or hallucinations.

Examples: dysthymic disorder, anxiety, panic & phobic disorders.

Features are abnormal in quantity (e.g. excessive fear and avoidance).
Introduction

DSM-5 Classification (May 2013) is an evidence-based manual useful in accurately and consistently diagnose mental disorders. In preparation for the release of DSM-5, experts from psychiatry, psychology, social work, neuroscience, pediatrics and other fields have committed years to reviewing scientific research and clinical data, analyzing the findings of extensive field trials and reviewing thousands of comments from the public. DSM-5 represents the contributions of more than 700 distinguished mental health and medical experts during an extensive and rigorous 14-year development process. [Source: http://www.dsm5.org/]

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<tr>
<th>DSM-5 Categories</th>
<th>DSM-5 Classification (May 2013)</th>
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<tbody>
<tr>
<td>Neurocognitive Disorders</td>
<td>Delirium, Mild Neurocognitive Disorders, Major Neurocognitive Disorders</td>
</tr>
<tr>
<td>Schizophrenia Spectrum and Other Psychotic Disorders</td>
<td>Schizophrenia, Brief Psychotic Disorder, Schizophreniform Disorder, Schizoaffective Disorder, Delusional Disorder, Substance/Medication-Induced Psychotic Disorder, Psychotic Disorder Due to Another Medical Condition</td>
</tr>
<tr>
<td>Catatonia</td>
<td>Bipolar I &amp; II Disorders, Cyclothymic Disorder, Substance/Medication-Induced Bipolar and Related Disorder, Bipolar and Related Disorder Due to Another Medical Condition</td>
</tr>
<tr>
<td>Depressive Disorders</td>
<td>Disruptive Mood Dysregulation Disorder, Major Depressive Disorder, Single and Recurrent Episodes, Persistent Depressive Disorder (Dysthymic Disorder), Premenstrual Dysphoric Disorder, Substance/Medication-Induced Depressive Disorder, Depressive Disorder Due to Another Medical Condition, Other Specified Depressive Disorder, Unspecified Depressive Disorder</td>
</tr>
<tr>
<td>Anxiety Disorders</td>
<td>Panic Disorder, Agoraphobia, Social Phobia, Specific Phobia, Generalized Anxiety Disorder, Separation Anxiety Disorder, Selective Mutism, Substance/Medication-Induced Anxiety Disorder, Anxiety Disorder Due to Another Medical Condition</td>
</tr>
<tr>
<td>Obsessive-Compulsive and Related Disorders</td>
<td>Obsessive-Compulsive Disorder, Body Dysmorphic Disorder, Hoarding Disorder, Trichotillomania (Hair-Pulling Disorder), Excoriation (Skin-Picking) Disorder, Substance/Medication-Induced Obsessive-Compulsive and Related Disorder, Obsessive-Compulsive and Related Disorder Due to Another Medical Condition</td>
</tr>
<tr>
<td>Trauma- and Stressor-Related Disorders</td>
<td>Adjustment Disorders, Acute Stress Disorder, Posttraumatic Stress Disorder, Reactive Attachment Disorder, Disinhibited Social Engagement Disorder, Other Specified Trauma- and Stressor-Related Disorder</td>
</tr>
<tr>
<td>Somatic Symptom and Related Disorders</td>
<td>Somatic Symptom Disorder, Illness Anxiety Disorder, Conversion Disorder (Functional Neurological Symptom Disorder), Psychological Factors Affecting Other Medical Conditions, Factitious Disorder, Other Specified Somatic Symptom and Related Disorder</td>
</tr>
<tr>
<td>Dissociative Disorders</td>
<td>Dissociative Identity Disorder, Dissociative Amnesia, Depersonalization/Derealization Disorder, Other Specified Dissociative Disorder</td>
</tr>
<tr>
<td>Personality Disorders</td>
<td>Intellectual Disabilities, Communication Disorders, Autism Spectrum Disorder, Attention-Deficit/Hyperactivity Disorder, Specific Learning Disorder, Motor Disorders, Other Neurodevelopmental Disorders</td>
</tr>
<tr>
<td>Neurodevelopmental Disorders</td>
<td>Feeding and Eating Disorders, Pica - Rumination Disorder, Avoidant/Restrictive Food Intake Disorder, Anorexia Nervosa - Bulimia Nervosa, Binge-Eating Disorder, Other Specified Feeding or Eating Disorder</td>
</tr>
<tr>
<td>Elimination Disorders</td>
<td>Enuresis, Encopresis, Other Specified Elimination Disorder</td>
</tr>
<tr>
<td>Sleep-Wake Disorders</td>
<td>Insomnia Disorder, Hypersomnia Disorder, Narcolepsy, Breathing-Related Sleep Disorders, Obstructive Sleep Apnea, Central Sleep Apnea</td>
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</table>
The Complexity of etiology in Psychiatry

1. Time factor: causes are often remote in time from the effect they produce.
2. 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.
3. Single effect may arise from several causes e.g. depression may be due to accumulation of several causes like endocrinopathies, psychosocial stresses and side effects of some drugs. Most psychiatric disorders are multifactorial.

Classification of Causes

Etiological Factors can be classified into biological, psychological, and social factors; Bio-Psycho-Social Approach [Engel 1977]:

<table>
<thead>
<tr>
<th>Nature</th>
<th>Effect</th>
<th>Predisposing</th>
<th>Precipitating</th>
<th>Aggravating</th>
<th>Maintaining</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bio</td>
<td>E.g. genetic predisposition e.g. panic disorder</td>
<td>E.g. First dose of cannabis abuse</td>
<td>E.g. Further abuse</td>
<td>E.g. Continuation of cannabis abuse</td>
<td></td>
</tr>
<tr>
<td>Psycho</td>
<td>E.g. Abnormal personally traits with poor stress adaptation</td>
<td>E.g. Sudden or severe psychological stress</td>
<td>E.g. Further psychological stresses</td>
<td>E.g. Continuation of such stresses</td>
<td></td>
</tr>
<tr>
<td>Social</td>
<td>E.g. Parental separation</td>
<td>E.g. Marriage</td>
<td>E.g. Marital conflict</td>
<td>E.g. continuation of marital problems</td>
<td></td>
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</table>

Main causative factors in psychiatry:

A. Genetic: e.g. in schizophrenia, mood disorders, panic disorder and agoraphobia.
B. Neuropathological: e.g. dementias, delirium.
C. Endocrinopathological: e.g. hyperthyroidism / hypothyroidism.
D. Pharmacological: side effects of medications e.g. steroids > mood changes.
E. Social: e.g. marital discord /occupational problems/financial difficulties.
F. Psychological: behavioral, cognitive, or psychodynamic problems (subconscious processes that involve distortion of reality in order to deal with, and resolve the intra-psychic conflict (defense mechanism).

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

Introduction

Supernatural causal attributions: available on youtube
Al-Sughayir Psychiatry Teaching
https://www.youtube.com/watch?v=RdD452rxkOw
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.

**Psychiatric Interview**

**Goals:**
1. To establish a relationship with the patient.
2. To obtain information.
3. To assess psychopathology (nature, severity ...) of the illness.
4. To provide feedback and formulate a treatment plan.

**The clinical interview is very important in psychiatry; it requires practical skills, which cannot be learnt effectively without enough practical training under supervision of experienced interviewers.**

**Clinical interview in psychiatry : available on youtube**
Al-Sughayir Psychiatry Teaching  https://www.youtube.com/watch?v=0nPg8maoBr4

**A--Opening phase** (5 min):
1- Greet the patient by name and introduce yourself.
2- Put the patient at ease; arrange for a private comfortable setting, and appropriately tell the purpose of the interview.
3- Build good rapport and alliance.

**B—Interview Proper** (35 min):
1- Be attentive, encouraging, supportive, and observe the patient’s nonverbal behavior.
2- Use open-ended questions and facilitative verbal and non-verbal techniques.
3- Avoid excessive note taking, premature reassurance, advice, and diagnosis.
4- Make graceful transitions throughout the interview.
5- Pay attention to the severity and complications of the problem.
6- Utilize time efficiently. 7- Use interview techniques:

**C—Closing phase** (5 min):
1- Know when to close the interview.
2- Give the patient a chance to ask questions and let him know future plans.

**Interview Skills**

**Interview Techniques:**
1- **Facilitation:** providing verbal and nonverbal cues that encourage the patient to keep talking. E.g. saying, Yes, go on, or Uh-huh, leaning forward in the chair, nodding one’s head.
2- **Clarification:** getting details from the patient about what he has already said.
3- **Direction/redirection:** gracefully using focused questions to maintain the proper track of the interview.
4- **Obstruction:** providing verbal and nonverbal cues that block a very talkative patient.
5- **Reflection:** a doctor repeats to a patient, in a supportive manner, something that the patient has said, to let the patient know that the doctor is perceiving what is being said & to assure the doctor that he has correctly understood what the patient said.
6- **Summation:** periodic summarization of what a patient has said thus far to make sure that the doctor has heard the same information conveyed by the patient.
7- **Silence:** not every moment must be filled with talk. Silence, allow patients to ventilate emotions (e.g. weeping) and to contemplate.
The Psychiatric History is the chronological story of the patient’s life from birth to present (history=his-story). It includes information about who the patient is, his problem and its possible causes and available support. It should be emphasized that:

1. Much more attention needs to be paid to psychological and social aspects.
2. Patient’s feelings, thoughts, perception and behavior during the interview are considered part of the mental status examination (not the psychiatric history).

The history should be compiled from the patient and other informants (the informant’s relationship to the patient should be noted together with the interviewer’s impression of the informant’s reliability).

The main items of the psychiatric history

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<tr>
<td>1</td>
<td>Identification data</td>
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<tr>
<td>2</td>
<td>Source of referral</td>
</tr>
<tr>
<td>3</td>
<td>Chief complaint</td>
</tr>
<tr>
<td>4</td>
<td>History of present illness</td>
</tr>
<tr>
<td>5</td>
<td>Family history</td>
</tr>
<tr>
<td>6</td>
<td>Personal history</td>
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<tr>
<td>7</td>
<td>Medical history</td>
</tr>
<tr>
<td>8</td>
<td>Past psychiatric history</td>
</tr>
<tr>
<td>9</td>
<td>Personality traits</td>
</tr>
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</table>

- **Identification of the Patient**: Name, age, sex, marital status, occupation, education, nationality, residency and religion.

- **Referral Source**: Brief statement of how patient came to the clinic and the expectations of the consultation.

- **Chief Complaint**: Exactly why patient came to the psychiatrist, preferably in the patient’s own words (a verbatim statement). Note if the chief complaint differs significantly from the reports of those who accompany patient (other informants).

- **History of Present Illness**: Chronological background of the psychiatric problem: nature, onset, course, severity, duration, effects on patient (social life, job, family...), review of the relevant problems, symptoms not mentioned by patient (e.g. sleep, appetite ...), and treatment taken so far (nature and effect).

- **Family History**: Family history is important in psychiatry for several reasons:

  1. Events happening currently to a family member may act as a stressor to patient.
  2. Family atmosphere has an effect on the patient’s psychological condition.
  3. Some psychiatric disorders run in families and have an important genetic contribution.

* 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.

How to start history taking in psychiatry:
available on youtube: Al-Sughayir Psychiatry Teaching
https://www.youtube.com/watch?v=GbmkUO0sh34
• 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).

• **Personal History:** (relatives may be a source of information). Personal history helps in constructing a brief biography of the patient & forms a background against which you understand the presenting complaints and predict future behavior.
  
  - **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.
  
  - **Occupations:** age at starting work, jobs held, reasons for change, satisfaction in work, relationships with workmates and with supervisors.
  
  - **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.
  
  - **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.

• **Medical History:**
  
  All major illnesses should be listed (nature, extent, dates, treatment, outcome, and patient’s reaction and attitude). Women should be asked about menstrual (and, if appropriate, about menopausal) difficulties.

• **Past Psychiatric History:**
  
  Any previous psychiatric illness (nature, extent, dates, treatment, outcome and patient’s reaction and attitude).

• **Personality Traits:** It is important to obtain adequate information (from a variety of sources) about patient’s characteristic traits 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..)
  
  - Major values, moral / religious attitudes, and standards.
  
  - 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.
  
  - Others>

  **How to assess personality traits:** available on youtube: Al-Sughayir Psychiatry Teaching
  
  https://www.youtube.com/watch?v=1y2v1X2TdxQ
MENTAL STATE EXAMINATION (MSE)

It is a cross-sectional, systematic documentation of the quality of mental functioning at the time of interview. It serves as a baseline for future comparison and follow-up of the progress of the patient.

Items of MSE:

<table>
<thead>
<tr>
<th>1. Appearance;</th>
<th>8- Thoughts &amp; Abstract thinking</th>
<th>9- Judgment;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Note and describe overall appearance, body build, self-care, grooming, facial expressions, and any unusual features (e.g. weight loss)</td>
<td>(See below).</td>
<td>Test patient’s 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’s house? ).</td>
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<tr>
<th>2- Behavior;</th>
<th>10- Insight</th>
<th>11- Cognitive functions and consciousness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Note level of activity, posture, and unusual movements (tics, grimacing, tremor, disinhibited behavior...)</td>
<td>(مدى بصيرة المريض بمرضه النفسي: ) see below</td>
<td>-Consciousness level.</td>
</tr>
</tbody>
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<thead>
<tr>
<th>3- Attitude;</th>
<th>12- Visuospatial ability;</th>
<th>13- Language and reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Note patient’s attitude during the interview (interested, bored, cooperative, uncooperative, sarcastic, aggressive ...). Patient’s attitude is reflected on his non-verbal behavior (eye contact, posture...).</td>
<td>Ask patient either; 1- to copy a figure such as interlocking pentagons  Or 2- to draw a clock (clock Drawing Test): to indicate a specific time (e.g. 10:10).</td>
<td>(See below; Mini-mental state Examination).</td>
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<tr>
<th>4- Speech;</th>
<th>5 - Affect</th>
<th>6- Perception</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listen to and describe how patient speaks, noting: (1) amount of speech (2) flow (3) tone (4) coherence (5) continuity (6) speech impairments (stuttering, dysarthria...).</td>
<td>(See below).</td>
<td>(See below).</td>
</tr>
</tbody>
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<thead>
<tr>
<th>7- Awareness of self and others;</th>
<th>11- Cognitive functions and consciousness</th>
</tr>
</thead>
<tbody>
<tr>
<td>When indicated ask about the extreme feelings of &quot;as if detached from self&quot; (depersonalization) &amp; &quot;as if detached from the environment&quot; (derealization).</td>
<td>-Consciousness level.</td>
</tr>
</tbody>
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<th>9- Judgement;</th>
<th>10- Insight</th>
<th>11- Cognitive functions and consciousness</th>
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<td>Test patient’s 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’s house? ).</td>
<td>(مدى بصيرة المريض بمرضه النفسي: ) see below</td>
<td>-Consciousness level.</td>
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<td>Ask patient either; 1- to copy a figure such as interlocking pentagons  Or 2- to draw a clock (clock Drawing Test): to indicate a specific time (e.g. 10:10).</td>
<td>(See below; Mini-mental state Examination).</td>
</tr>
</tbody>
</table>
Affect (the patient's present emotional state):

- **Subjective affect**: verbal expression of feelings by the patient (some authors call it mood; however, mood actually is defined as a pervasive and sustained emotion - over several days-weeks - that colors the person's perception of the world).
- **Objective affect**: examiner's evaluation of patient's observable expression of affect, through nonverbal signs; facial expression, posture & movements. Note any abnormality in the nature of affect (e.g. anxiety, depression, elation...), the variability of affect (constricted affect, labile affect...), and whether the affect is appropriate to the thought content, the culture, and the setting of the examination.

Perception: Ask patient about perceptual disturbances (auditory, visual, olfactory, gustatory, tactile and somatic), and 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). Determine the exact nature and complexity of perceptual distortions. Hallucinations of voices discussing patient (third person hallucinations) should be distinguished from voices talking to patient (second person hallucinations). Ask patient about the content of the hallucinations (e.g. what do the voices tell you) his reaction to hallucinations.

**How to assess auditory hallucinations**: available on youtube: Al-Sughayir Psychiatry Teaching

https://www.youtube.com/watch?v=fYkqTwsg0z0

Thought: Thoughts are usually reflected in the person’s speech. Note stream, link, & content of thoughts see abnormalities in thoughts p 19 & 20.

**How to asses obsessions**: available on youtube: Al-Sughayir Psychiatry Teaching

https://www.youtube.com/watch?v=E6JOXHXGCWk

Abstract vs. Concrete Thinking:

**Abstract thinking** is the ability to deal with concepts beyond literal meaning and to make appropriate inferences from sentences. It can be tested by: 1. **Similarities & difference**: e.g. tell me the similarity between "car and train" or the difference between "book and notebook". 2. **Proverbs**: ask patient to interpret one or two proverbs e.g., "Mr. X has two faces" this means Mr. X has hypocritical double-dealing (abstract thinking). Some patients (psychotics or mentally retarded) may give a concrete answer (e.g., Mr. X has two real combined faces). **Concrete Thinking**: thinking characterized by actual visual image of things, rather than by abstractions; seen in schizophrenic persons and in young children.

**How to assess abstract thinking**: available on youtube: Al-Sughayir Psychiatry Teaching

https://www.youtube.com/watch?v=MSVF7_SmkhY

**Examples of Concrete thinking**: available on youtube: Al-Sughayir Psychiatry Teaching

https://www.youtube.com/watch?v=Nld9U3gmlu
Insight:  the degree of patient's awareness of his/her mental illness.

1. Do you believe that you have abnormal experiences?
2. Do you believe that your abnormal experiences are symptoms of illness?
3. Do you believe that the illness is psychiatric?
4. Do you believe that psychiatric treatment might benefit you?

Patient’s compliance with psychiatric treatment depends on his insight.

Consciousness and Cognitive Functions:

- **Consciousness**: note patient’s general state of awareness (alert, drowsy...)
- **Attention**: *(The ability to focus on the matter in the hand).* Attention 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 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. Psychiatrist assesses whether patient can concentrate on this task. 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).
  
  Disorientation is an important feature of delirium, which indicates impaired consciousness. It usually appears in this order: time - place - person, and clears in the reverse order: person - place - time.

- **Memory** (registration >> retention >> recall):
  1. **Immediate memory** (registration and immediate recall/ frontal lobe function): it is tested by the digit span test; ability to repeat 7 digits (e.g. 3,8,1,4,7,2,9) after an examiner dictates them slowly, first forward, then backward. A normal person can repeat 7 digits correctly, impaired registration should be considered if less than 5 digits could be repeated. This test is also used to assess attention because it requires enough focus. Defect indicates frontal lobe impairment.
  2. **Short term recall**: mention 3 names to the patient to remember (e.g. a banana, a clock and a car), and then after 5 minutes ask for recall, during which time you distract patient by doing something else. Defect indicates temporal lobe impairment (Amnestic Syndrome).
  3. **Recent memory**: ask questions regarding the last few days in patient’s life events that you can verify (e.g., what the patient did yesterday morning), defect occurs in early dementia but may occur in normal elderly and because of medications side effects (e.g., SSRIs, antipsychotics). Recent past memory: ability to recall events in the past few months, defected in dementia.
  4. **Remote memory** (long-term memory): ask patient to recall personal events (e.g. birth date, wedding date) or well-known public events from some years before, provided that these events (personal or public) are known with certainty to you. Note also the sequence of events. Defect indicates global cortical impairment; advanced dementia.

How to assess insight: available on youtube: Al-Sughayir Psychiatry Teaching
https://www.youtube.com/watch?v=SDEs5QpLwII

How to assess cognitive functions: available on youtube: Al-Sughayir Psychiatry Teaching
https://www.youtube.com/watch?v=DxsoVIderrM
Mini-Mental State Examination (MMSE);

It is a brief instrument designed to assess higher mental functions. It is widely used as a screening test that can be applied during a patient’s clinical examination, and as a test to track the changes in a patient’s cognitive state. It assesses orientation, memory, calculations, writing and reading capacity, language, and visuo-spatial ability.

<table>
<thead>
<tr>
<th>Function / test</th>
<th>Score</th>
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<tbody>
<tr>
<td><strong>1. Orientation</strong></td>
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<tr>
<td>What is the day, time of the day &amp; date (day, month, and year)?</td>
<td>5 points</td>
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<tr>
<td>Where are we (building/hospital, area, city, country)?</td>
<td>5 points</td>
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<tr>
<td><strong>2. Registration;</strong> Name three objects (e.g. a tree, a pen, and a car) repeat them (after the interviewer).</td>
<td>3 points</td>
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<td><strong>3. Attention and calculation</strong></td>
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<tr>
<td>Spell “world” backward (attention).</td>
<td>5 points</td>
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<td>Tell the months of the year backward (concentration), or serial 7s test.</td>
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<tr>
<td><strong>4. Retention &amp; Recall;</strong> Name the three objects mentioned above 5 minutes later.</td>
<td>3 points</td>
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<td><strong>5. Language (aphasias)</strong></td>
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<td>Ask patient to name two objects (e.g. a pen and a watch)- for <em>nominal aphasia</em>.-</td>
<td>2 points</td>
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<tr>
<td>Ask patient to repeat after you certain words Say, “No ifs, ands, or buts.” -for <em>expressive aphasia</em>.</td>
<td>1 point</td>
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<tr>
<td>Ask patient to carry out a three-step verbal commands e.g., take a pencil in your right hand, put in your left hand, and then put it on the floor-for <em>receptive aphasia</em> (auditory functions).-</td>
<td>3 points</td>
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<td><strong>6. Reading comprehension;</strong> ask patient to read a sentence with written command</td>
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<td>Close your eyes.</td>
<td>1 point</td>
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<tr>
<td>Write a sentence.</td>
<td>1 point</td>
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<tr>
<td>Copy a design.</td>
<td>1 point</td>
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</table>

**TOTAL** | **30 points**

A score of less than 24 points suggests impairment, and a score of less than 20 indicates a definite organic mental impairment (most common are delirium & dementia). It is advised to be done by more than one interviewer and repeated over a period of time.
Psychiatric symptoms and signs are common in patients of all kinds; therefore, medical students require sound knowledge of these symptoms and signs. In psychiatric clinical practice, diagnosis is not made on a single symptom or sign, but on the pattern of several clinical features; symptoms, signs, course, causes ....

For simplification, symptoms and signs in psychiatry can be grouped into the following categories:

**Abnormalities of behavior and movements**

1. **Psychomotor Retardation**: slowed motor activities and mental functions (e.g. delayed answers), seen in depressed patients.

2. **Stupor**: a state in which a person, although fully awake with open eyes, does not react to the surroundings: mute, immobile and unresponsive. It can be due to organic or functional psychiatric disorders. **Catatonic Stupor**: stupor with rigid muscles and posturing seen mainly in schizophrenia.

3. **Agitation**: restlessness with inner tension. Patient is not fully aware of restlessness. It can be due to many psychiatric disorders: mania, depression, schizophrenia, substance abuse, delirium ... etc.

4. **Akathisia**: inability to keep sitting still, due to a compelling subjective feeling of restlessness. Patient is fully aware of restlessness. It is due to antidopaminergic drugs. When akathisia is mistaken for agitation, patient may be given unnecessary doses of antidopaminergic drugs that exacerbates akathisia in a vicious circle.

5. **Acute Dystonia**: very severe painful muscle spasms (neck, back, eyes, and tongue). It is due to a recent use of anti-dopaminergics, which induces a hypercholinergic state in the basal ganglia. See S/E of antipsychotics.

6. **Tardive Dyskinesia**: restless movements of group of muscles, mainly in the orofacial muscles.

Hand muscles may be involved. It is due to a prolonged use of anti-dopaminergics.
7. **Waxy Flexibility (catalepsy):** patient’s limbs may be moved like wax, holding position for long period of time before returning to previous position, seen mainly in schizophrenia; catatonic type.

8. **Stereotypies:** purposeless repetitive involuntary movements. E.g. foot tapping, thigh rocking, seen in normal people but when severe they indicate a psychotic disorder.

9. **Mannerism:** odd goal-directed movements. E.g. repeated hand movement resembling a military salute. They indicate a psychotic disorder.

**Abnormalities of mood and emotion:**

1. **Anxiety:** feeling of apprehension accompanied by autonomic symptoms (such as muscles tension, perspiration and tachycardia), caused by anticipation of danger.

   *Free-floating anxiety:* diffuse, unfocused anxiety, not attached to a specific danger.

2. **Fear:** anxiety caused by realistic consciously recognized danger.

3. **Panic:** acute, self-limiting, episodic intense attack of anxiety associated with overwhelming dread and autonomic symptoms.

4. **Phobia:** irrational exaggerated fear and avoidance of a specific object, situation or activity.

5. **Dysphoria:** mixture feelings of sadness and apprehension.

6. **Depressed mood:** feeling of sadness, pessimism and a sense of loneliness.

7. **Anhedonia:** lack of pleasure in acts that are normally pleasurable.

8. **Euphoria:** intense elation with feeling of grandeur seen in patients with mania or substance abuse.

9. **Constricted Affect:** significant reduction in the normal emotional responses.

10. **Flat Affect:** absence of emotional expression.

11. **Apathy:** lack of emotion, interest or concern, associated with detachment.

12. **Inappropriate Affect:** disharmony between emotions and the idea, thought, or speech, accompanying it seen in chronic schizophrenia.

**Abnormalities of speech:**

1. **Poverty of Speech:** restricted amount of speech; seen in depression and schizophrenia.

2. **Pressure of Speech:** rapid, uninterrupted speech; seen in patients with mania or stimulant abuse.

3. **Stuttering (Stammering):** frequent repetition syllable, leading to markedly impaired speech fluency.

4. **Clang Associations (Rhyming):** association of word similar in sound but not in meaning (e.g. deep, keep, sleep) seen in patients with mania or substance abuse.

5. **Punning:** playing upon words, by using a word of more than one meaning (e.g. ant, aunt). seen in patients with mania or substance abuse.

6. **Word Salad:** incoherent mixture of words, seen in chronic schizophrenia.

7. **Circumstantialities:** over inclusion of unnecessary details delaying reaching the desired goal, seen in obsessional personality.

8. **Echolalia:** imitation of words or phrases made by others, seen in some schizophrenic patients, mentally retarded and some organic mental disorders.
<table>
<thead>
<tr>
<th>Abnormality in Thought</th>
<th>Type</th>
<th>Definition &amp; DDx</th>
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<tbody>
<tr>
<td>A Stream</td>
<td>Poverty of thoughts</td>
<td>Slow, few, unvaried thoughts associated with poverty of speech, seen in chronic schizophrenia and depression.</td>
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<tr>
<td></td>
<td>Pressure of thoughts</td>
<td>Rapid abundant varying thoughts associated with pressure of speech and flight of ideas, seen in mania and stimulant abuse.</td>
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<td>Thought block</td>
<td>Sudden cessation of thought flow with complete emptying of the mind, not caused by an external influence, seen in schizophrenia.</td>
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<tr>
<td>B Link</td>
<td>Loose association</td>
<td>Lack of logic connection between thoughts, seen in chronic schizophrenia.</td>
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<tr>
<td></td>
<td>Flight of ideas</td>
<td>Successive rapidly shifting incomplete ideas but with an understandable link (usually associated with pressure of speech and thought) seen in mania and stimulant intoxication.</td>
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<td></td>
<td>Thought perseveration</td>
<td>Repeating the same sequence of thoughts persistently and inappropriately, seen in organic brain pathology (e.g. dementia).</td>
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<tr>
<td>C Content</td>
<td>Overvalued ideas</td>
<td>Strongly held but shakable ideas (e.g., vitiligo is a contagious illness / patient's conviction that he has a hidden serious physical disease).</td>
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<tr>
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<td>Obsessions</td>
<td>Undesirable repetitive ideas insistently entering person’s mind against his will despite resistance, seen in obsessive-compulsive disorder (OCD).</td>
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<td>Obsessional forms</td>
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<td>Thoughts.</td>
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<td>Urges.</td>
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<td>Feelings.</td>
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<td>Obsessions (also called ruminations) are frequently, but not always, followed by compelling actions (called compulsions or rituals).</td>
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<tr>
<td></td>
<td>Delusions</td>
<td>False beliefs characterized by being:</td>
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<td></td>
<td></td>
<td>1. fixed(unshakable).</td>
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<td>2. not arrived at through logic thinking.</td>
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<td>3. not amenable to reasoning.</td>
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<td>4. out of keeping with the person’s cultural background.</td>
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<td>Seen in many psychotic disorders; brief psychosis, schizophreniform disorder, delusional disorders, schizophrenia, mood disorders, psychosis induced by medications or substance abuse, delirium, and dementia.</td>
</tr>
</tbody>
</table>
Common Types of Delusions (Delusional Contents):

1. **Persecutory delusion**: Delusion of being persecuted (cheated, mistreated, harassed, followed for harm etc.). Persecutory delusion is sometimes called *paranoid delusion*, however, paranoid delusion means not only being persecuted but being persecuted because of having special importance.

2. **Grandiose delusion**: Delusion of exaggerated self-importance, power or identity.

3. **Delusion of jealousy**: (infidelity delusion). Delusion that a loved person (wife/husband) is unfaithful.

4. **Erotomanic delusion**: Delusion that someone, (usually inaccessible, high social class person) is deeply in love with the patient.

5. **Nihilistic delusion**: Delusion of nonexistence of body organ, belongings, self, others or the world. Seen in some patients suffering from major depression with psychotic features.

6. **Delusion of self - accusation**: Delusion that a patient has done something sinful, with excessive pathological feeling of remorse and guilt seen in severe depression.

7. **Delusion of reference**: Delusion that some events and others’ behavior refer to oneself in particular. It can be seen in any type of psychosis. Note that: in some manic patients they feel happy with the content of the delusion, perceiving it as a sign of self-importance.

8. **Delusion of influence** (delusion of control= passivity phenomena): Delusion that person’s actions, feelings, or thoughts are controlled by outside forces, seen in schizophrenia.

**Thought alienation (thought control)** is a kind of delusion of control concerning patient’s thoughts. It can take different forms:

- **Thought Insertion**: Thoughts being put into his mind against his will by an external force (other people, a certain agency).
- **Thought Withdrawal / Broadcasting**: Thoughts being taken out of his mind against his will (withdrawal) +/- being broadcast over the air, radio, TV, newspapers or some other unusual way.
- **Thought (mind) Reading**: Somebody (or others) can know exactly (read) his hidden thoughts from a distance.

How to asses delusions: available on youtube:
Al-Sughayir Psychiatry Teaching
https://www.youtube.com/watch?v=70VfdKU3gOE

- **Delusions can be either**:
  - *Mood-Congruent Delusion*:
    - Delusional content has association to mood:
      - in elevated mood: grandiose delusion.
  - *Mood-Incongruent Delusions*:
    - Delusional content has no association to mood, e.g. patient with elevated mood has delusion of thought insertion.

- **Delusions can be either**:
  - *Systematized*: united by a single event or theme e.g. delusion of jealousy.
  - *Bizarre*: totally odd and strange delusional belief, e.g. delusion that stars control patient’s acts.

However, in DSM-5 bizarre & non-bizarre distinction has been eliminated.
Abnormalities of perception:

- **Illusions:**
  Misperceptions of real external sensory stimuli: E.g., shadows/wallpapers may be misperceived as frightening figures. Illusions are non-specific signs, seen in many psychiatric cases: delirium, substance abuse and others. They may occur in normal people (dim light/exhaustion).

- **Pseudo-Hallucinations:**
  Normal sensory deceptions perceived as emanating from within the mind (person has insight). E.g. After listening to an audio tape for long time, the same material can be re-experienced even with no actual source.

- **Hallucinations:** (auditory, visual, tactile, olfactory, gustatory, somatic)
  Abnormal perception in the absence of real external stimuli; experienced as true perception coming from the external world (not within the mind) e.g. hearing a voice of someone when actually nobody is speaking within the hearing distance. Patient has no insight. They indicate major mental illness (psychosis).

- **Auditory hallucinations** (voice, sound, noise).

  **Second-person hallucinations:** voices of a person speaking to the patient addressing him/her directly. E.g., "you are bad". These are seen in many disorders: schizophrenia (usually derogatory voices calling bad names/giving orders), severe depression with psychotic features (usually self-depreciating associated with guilt feeling), mania (usually self-appreciating associated with acceptance).

  **Third-person hallucinations:** voices of a person talking to another person about the patient. E.g. "look! he is bad", (seen in schizophrenia).

  + youtube.com/watch?v=0tn8xLOY53U

  **Examples of auditory hallucinations:** available on youtube: Al-Sughayir Psychiatry Teaching
  https://www.youtube.com/watch?v=ukykXlfYuYA

  **Thought echo:** hearing one’s own thoughts spoken aloud (seen in schizophrenia).

  **Visual hallucinations (images/sights):** indicate an organic mental disorder (e.g. delirium, intoxication with drugs, uremia) or schizophrenia.
1- While interviewing a 21-year-old man, the psychiatrist asked the patient "how do you usually spend your leisure time". What was the psychiatrist assessing?
   a. Thinking process.
   b. Personality traits.
   c. Judgment.
   d. Personal history.

2- A 42-year-old man seen at the out-patient psychiatry clinic. He has a disturbance in the logical connection of ideas. What mental function is impaired in this patient?
   a. Memory.
   b. Thinking.
   c. Perception.
   d. Insight.

3- During the interview of a 34-year-old woman, the psychiatrist asked her to express her current feelings during the interview. What was the psychiatrist assessing?
   a. Anxiety level.
   b. Self-awareness.
   c. Subjective affect.
   d. Objective mood.

4- While interviewing a 30-year-old man, the psychiatrist asked the patient "what would you do if you smelled smoke in the kitchen". What is the doctor trying to evaluate?
   b. Insight.
   c. Social attitude.
   d. Concrete thinking.

5- While assessing a 25-year-old man, the psychiatrist asked his patient "do you think that you are mentally ill?" What was the psychiatrist assessing?
   a. Intelligence.
   b. Insight.
   c. Perception.
   d. Judgment.

6- While interviewing a 74-year-old woman she could not identify the place correctly, although she was fully conscious. Which mental function is impaired in this patient?
   a. Memory.
   b. Registration.
   c. Attention.
   d. Orientation.

7- While assessing a 26-year-old man, you ask him to tell you the difference between “book and notebook”. Which mental function you were assessing?
   b. Visuospatial ability.
   c. Judgment.
   d. Abstract thinking.

8- A psychiatric nurse phoned the psychiatrist telling him about one of the patients in the psychiatric ward. She said: “the patient looks drowsy and could not identify people around him”. Which mental function does the nurse describe?
   b. Perception.
   c. Behavior.
   d. Illusions.
9- While evaluating a 23-year-old patient the psychiatrist requested the patient to repeat 7 digits after the psychiatrist dictates them slowly. What was the psychiatrist assessing?
   a. Perception.
   b. Short term recall.
   c. Attention.
   d. Concentration.

10- While assessing an 81-year-old man the psychiatrist asked the patient to tell what time is it. What was the psychiatrist looking for?
   a. A psychotic disorder.
   b. Impaired concentration.
   c. Impaired judgment.
   d. A neurocognitive deficit.

11- A 53-year-old man seen at the emergency department has slowed body movements and delayed answers. What is this psychopathology?
   a. Psychomotor akathisia.
   b. Psychomotor retardation.
   c. Psychomotor dyskinesia.
   d. Psychomotor dystonia.

12- A 46-year-old man seen at the emergency department showed restlessness with inner tension. The patient is not aware of his restlessness. What is this psychopathology?
   a. Agitation.
   b. Dyskinesia.
   c. Akathisia.
   d. Acute dystonia.

13- A 32-year-old psychiatric patient is unable to keep sitting still and is fully aware of his restlessness. What is this psychopathology?
   a. Agitation.
   b. Mannerism.
   c. Akathisia.
   d. Dystonia.

14- A 28-year-old schizophrenic male patient on medications. He was seen at the emergency department because of painful neck spasm and tongue protrusion for 2 hours. What is this psychopathology?
   a. Stupor.
   b. Dyskinesia.
   c. Parkinsonism.
   d. Acute dystonia.

15- A 53-year-old woman on antipsychotic medications seen at out-patient psychiatry clinic. She has continuous slow movements of her lips and tongue. What is this psychopathology?
   a. Akathisia.
   b. Parkinsonism.
   c. Tardive Dyskinesia.
   d. Acute Dystonia.
16- A 25-year-old man seen at out-patient psychiatry clinic. He has persistent and recurrent bad mental images that he cannot eliminate. What is this psychopathology?
   a. Illusions.
   b. Obsessions.
   c. Delusions.
   d. Hallucinations.

17- A 25-year-old man seen at out-patient psychiatry clinic said: “Neighbors are able to make me do what they want, even at a distance with no direct contact with me”. What is the most likely psychopathology in this case?
   a. Persecutory delusion.
   b. Delusion of reference.
   c. Hallucinations.
   d. Delusion of control.

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

19- A 26-year-old male seen at out-patient psychiatry clinic. He misperceived wallpapers as frightening figures. What is this psychopathology?
   a. Hallucinations.
   b. Delusions.
   c. Illusions.
   d. Obsessions.

20- A 45-year-old male seen at the out-patient psychiatry clinic. He has an abrupt interruption in train of thinking before a thought is finished. What is this psychopathology?
   a. Hallucinations.
   b. Flight of ideas.
   c. Loose association.
   d. Thought block.

Answers

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