A 24-year-old female with no prior psychiatric history 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 bedone.
What psychiatric signs is this patient displaying?

Objectives
On completion of this chapter, the student should be able to:
1- Differentiate between normal and abnormal mental functions.
2- Know and classify the common psychiatric symptoms and signs.
3- Understand what psychosis means and detect signs of psychosis.
4- 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 elicit these symptoms and signs through the psychiatric interview, and 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 and Emotion – Speech – Thinking – Perception - Cognitive functions Judgment - Insight.

Abnormalities of Appearance and Behavior

Agitation: Restlessness associated with some relief of inner psychological tension. It can be caused by many psychiatric disorders: severe depression, mania, schizophrenia, substance abuse, delirium …etc.

Akathisia: Unwanted distressing restlessness induced by antidopaminergic drugs.

Psychomoto Retardation: Slowed motor activities and mental functions (e.g., delayed answers), seen in patients with depression, Parkinson disease, extrapyramidal side effects of antidopaminergic medication, and some patients with schizophrenia. It ranges from hypokinesia/bradykinesia to akinesia (no movement).

Stupor: A state of akinesia, mutism, and unresponsiveness to stimuli despite full consciousness. It can be due to 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, seen mainly in 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, seen mainly in catatonic schizophrenia.
Negativism: Opposition to instructions, seen in catatonic schizophrenia and children with opposional deviant disorder.
Dystonia: Acute painful, severe muscle spasm due to recent use of antidopaminergics.
Dyskinesia: Restless movement of a group of muscles, mainly in the orofacial and hands muscles.Tardive dyskinesia is a late onset side effect of antidopaminergic drugs.

Torticollis: Dystonia of neck muscles, tilting the head to one side. It is mainly due to recent use of antidopaminergics.

Tics: Sudden, repeated involuntary muscle twisting, e.g., repeated blinking, grimacing, seen in healthy people but when excessive and severe they indicate a psychiatric disorder, e.g., Tic disorder.

Compulsions: Repetitive coercive actions associated with obsessions, e.g., compulsive hand washing, seen in obsessive compulsive disorder.

Automatisms: Spontaneous, involuntary movements that occur during an altered state of consciousness (e.g., during seizures) and can range from purposeful to disorganized movements.

Mannerism: Semi-purposeful odd movements, e.g., repeated hand movement resembling a military salute, seen in some patients with schizophrenia.

Stereotypies: Purposeless repetitive, involuntary movements, e.g., foot tapping, thigh rocking, found in normal people but when severe they indicate a psychotic disorder.

Abnormalities of Emotion, Affect, and Mood

Anhedonia: Lack of pleasure in acts which are usually pleasurable, seen in depressed patients.

Euphoria: Excessive happiness associated self-satisfaction, seen in mania and substance abuse.

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

Fear: Anxiety caused by a realistic consciously recognized danger.

Panic: Acute, short-lived intense anxiety associated with overwhelming dread.

Phobia: Irrational exaggerated fear and avoidance of a particular object, situation, or activity.

Constricted Affect: Significantly reduced emotional reactivity, seen in schizophrenia.

Flat Affect: lack of emotions even when discussing happy or sad moments, seen in schizophrenia.

Apathy: Total lack of emotional reactivity associated with detachment and concern, seen in schizophrenia.

Inappropriate Affect: Mismatching between emotion and the thought or behavior accompanying it, seen in schizophrenia.

Abnormalities of Speech

Mutism: Total lack of speech despite the ability to talk, seen in patients with selective mutism, schizophrenia, and depression.

Stuttering: Excessive repetition of part of words, seen in patients with speech disorders.

Poverty of Speech: Limited amount of speech, seen in depression and schizophrenia.

Pressure of Speech: Excessive, rapid, and uninterrupted speech., seen in mania and substance abuse.

Rhyming (clang associations): Association of words similar in sound but not in meaning (e.g., deep, keep, sleep). When rhyming is excessive and not appropriate to the circumstances, think of hypomania, mania and substance abuse.

Punning: Playing upon words, by using a word of more than one meaning (e.g., ant, aunt). When rhyming is excessive and not appropriate to the circumstances, think of hypomania, mania and substance abuse.

Echolalia: Purposeless repetition of words made by others, seen in some normal children, intellectual disability, autism, schizophrenia, and some secondary mental disorders.

Abnormalities of Thinking/Thoughts (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, seen in schizophrenia and depression.
Pressure of Thoughts: Rapid abundant varying thoughts associated with pressure of speech and flight of ideas, seen in mania and stimulant abuse.
Thought Block: Sudden cessation of thought flow with complete emptying of the mind, not caused by an external influence, seen in schizophrenia. It might be considered as a formal thought disorder because loss of thoughts link.

B. Form/Link abnormalities

Flight of ideas: Excessive rapidly shifting incomplete ideas but with a clear link, seen in mania and stimulant intoxication.
Thought perseveration: Repeating the same sequence of thoughts persistently and inappropriately in response to a stimulus , seen in neurocognitive disorders.
Verbigeration: Continual repetition of words or phrases without a stimulus. Seen in schizophrenia and intellectual disability.
Circumstantiality: Excessive unnecessary details and irrelevant remarks causing a delay in getting to the point but often comes back to the point. Seen in normal individuals but when excessive it may indicate obsessive-compulsive personality traits.
Tangentiality: Erratical divergince from a previous line of thought and usually never returns to the original point. Seen in schizophrenia, intellectual disability, and some patients with neurocognitive disorders.
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. Seen in chronic schizophrenia.
Neologism: A new word or phrase, often consisting of a combination of other words, that is understood only by the speaker: seen most often in schizophrenia.
Incoherence/Word salad: meaningless mixture of words, seen in 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, seen in obsessive-compulsive disorder.
Overvalued ideas: Exaggerated false but shakable beliefs (e.g., a patient believes that his wife may be unfaithful to him).
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, seen in many psychotic disorders (schizophrenia and others).

Types of delusions:

1. *Persecutory/paranoid delusion*: Delusion of being persecuted (cheated, mistreated, harassed, followed for harm, etc.), seen in schizophrenia, mania, substance-induced psychosis, and other disorders.
2. *Grandiose delusion*: Delusion of exaggerated self-importance in power or identity. Seen in mania, substance-induced psychosis, schizophrenia, and other disorders.
3. *Delusion of reference*: Delusion that some events and others' behavior (e.g., TV news) refer to oneself in particular. Seen in many psychotic disorders (schizophrenia and others).
4. *Delusion of influence and control (passivity phenomena)*:
   Delusion that person's actions, feelings, or thoughts are controlled by outside forces. Seen mainly in schizophrenia but might be present in other psychotic 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, seen in severe depressive disorder with psychotic features.
8. 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).
9. 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.

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, seen in the prodromal phase of schizophrenia in some patients.

Abnormalities of Perception

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

Hallucinations: Perception in the absence of a real external stimulus; experienced as real 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.

Auditory hallucinations (voice, sound, noise).

Second-person hallucinations: Voice of one person or more, speaking *to* the person addressing him as "you", seen in many disorders:
Schizophrenia (usually self-depreciating associated with nonacceptance or giving orders).
Severe depression with psychotic features (usually self-depreciating associated with acceptance and guilt feeling).
Mania (usually self-appreciating associated with acceptance and pride).
Third-person hallucinations: voice talking *about* the person as "he" or "she".

Visual hallucinations (images/sights): Usually indicate a neurocognitive disorder but can be found in schizophrenia.
Olfactory hallucinations (smell/odor).
Gustatory hallucinations (taste).
Tactile hallucinations (touch/surface sensations).
Somatic hallucinations (visceral and other internal sensations). Compared to somatic delusion (abnormality in thinking), somatic hallucinations are abnormality of perception.
Certain kinds of hallucinations occur in normal people: Hypnagogic hallucinations (when falling asleep) and hypnopompic hallucinations (when waking from sleep).

Pseudo-Hallucinations: Sensory deceptions 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.
Thought echo: Hearing one's own subvocal self-dialogue spoken aloud in the head with echo. Seen in 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, 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, seen in many psychiatric disorders.

Abnormalities Insight (the degree of awareness of being mentally ill)

Total lack of insight: Complete denial of illness seen in psychotic patients.
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.

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. Psychomotor akathisia.
   b. Psychomotor retardation.
   c. Psychomotor dyskinesia.
   d. Psychomotor dystonia.

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. Dyskinesia.
   c. Akathisia.
   d. Acute dystonia.

3- 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.

4- A 53-year-old woman on antipsychotic medications seen at outpatient 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.

5- A 25-year-old man came to outpatient psychiatry clinic because of persistent and recurrent bad mental images that he cannot eliminate.
What is this psychopathology?
a. Illusions.
b. Obsessions.
c. Delusions.
d. Hallucinations.

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.Pseudo-hallucinations.
b.Derealization.
c.Illusions.
d.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. Hallucinations.
b. Delusions.
c. Illusions.
d. Obsessions.

8- A 45-year-old male seen at the outpatient 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

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