Diagnosis of mental disorders

How doctors diagnose: signs and symptoms

The first step towards making a diagnosis is to ask the patient what is wrong. Then a full history of the presenting condition and other relevant facts should be taken. After this, a general and detailed medical examination with specific focus on the presenting symptoms should be carried out.

Patients present with or complain about certain symptoms. These are subjective reports. The physician carries out a medical examination to identify signs related to an illness or the presenting symptoms. The findings from this examination are objective.

> **Symptoms** — subjective — what a patient can feel and therefore what they complain about.
>
> **Signs** — objective — what a person can see when looking at a patient.

The general physical examination consists of:

- Basic observations, such as the person's walk, skin tone, voice intonation and ability to hold a normal conversation.

- Taking the blood pressure and checking for basic signs of disease such as anaemia or swelling of the legs.

- Examining the various organ systems of the body; the heart, lungs, bowels, etc.

For a person with a psychiatric disorder, it is also important that a neurological examination is performed. This examination gives an understanding of the wellbeing of the person's brain, mental function, nerves and muscles. It is the tool that physicians use to identify structural and psychiatric abnormality.

A psychiatric examination is also performed to determine the individual's mental condition. This involves investigating the individual's abilities regarding orientation, attention span, concentration and memory. Any psychopathology must also be identified, for example abnormalities in perception of stimuli, thought content, speed of thoughts and logical thinking.

Using all of the available evidence, the physician is then able to make a diagnosis. From a list of the possible diagnoses based on the symptoms and signs, the physician identifies the most likely cause, and rules out other diagnoses. The physician will consider both psychiatric conditions and physical diseases.

Psychotic disorders

Characteristically, psychotic disorders are conditions with loss of insight and reality. Patients experience false beliefs and are unable to interpret external stimuli correctly. They are not aware that their thoughts are abnormal. The main psychotic disorders are schizophrenia, schizoaffective disorder and delusional disorders.

The common symptoms of psychotic disorders include:

- Psychosis: a complex of symptoms in which the patient has lost touch with reality; experiencing delusions.

- Illusion: an incorrect perception; false response to a sensory stimulus eg a stick on the floor is seen as a snake.

- Hallucination: sensory perception for which there is no external stimulus eg in an auditory hallucination the patient hears voices in his head. Hallucinations can also be visual or involve taste or touch.

- Delusion: a false belief based on an external reality eg a firmly held belief, despite proof and logical arguments to the contrary and one not held by others in the patient's culture or society.

- Grandiose delusion: a belief that one is great, the best, invincible, or of elevated stature eg the patient believes he is God, a king, the strongest man in the world or the richest person alive.

- Somatic delusion: an incorrect belief about one's body, or part of it eg that it is diseased, disfigured, disabled or deficient/absent — a man might think he is pregnant.

- Paranoid (persecutory) delusion: excessive or irrational suspiciousness; distrustfulness with delusion that one is being persecuted eg the patient thinks he/she is being followed by the FBI.

- Catatonia: motor immobility, waxy rigidity.

Mood disorders

Mood disorders are characterised by a disturbance of mood or a persistent emotional state that affects how a patient acts, thinks and perceives their environment. Mood disorders are typified by either overwhelming feelings of sadness (depression), or alternating periods of mania and depression (bipolar disorder).

The common symptoms of mood disorders include:

- Depression: a feeling characterised by sadness, apathy, pessimism and a sense of loneliness.

- Mania: a mood elevated above that normally considered to be a normal level of happiness or pleasure.

- Apathy: a lack of feeling, emotion and interest. Common in depression.

- Fatigue/loss of drive: low energy levels and/or the inability to start a task.

- Hypersomnia: an increase in time spent sleeping yet the patient still feels tired and wants to sleep more.

- Insomnia: the inability to sleep restfully.

- Suicidal ideation: thoughts of death and killing oneself.

- Psychomotor retardation: a slowing of activity due to the person's mood.

- Psychomotor agitation: an increased level of activity and jitteriness.

- Anhedonia: the absence of pleasure in acts that are normally pleasurable. Most common symptom of depression and a core symptom of schizophrenia.

Anxiety disorders

Anxiety disorders are mental and physical manifestations of anxiety. The feelings of anxiety are not attributable to real danger and occur either in attacks (panic disorder) or as a persisting state (generalised anxiety disorder).

The common symptoms of anxiety disorders include:

- Phobia: an unnatural, irrational fear of an item or situation, which the patient realises is not dangerous, but still takes measures to avoid.

- Egodystonic: thoughts, feelings or actions that are unusual to the person or do not fit into the person's normal behaviour (ego [self]; dystonic [alien]).

- Compulsion: an irresistible impulse, urge, desire to perform an irrational act, that relieves anxiety and is seen as egodystonic to the patient eg washing hands repeatedly or counting steps taken.

- Obsession: an idea, emotion, thought or impulse that is repetitive and/or, unwelcome and provokes anxiety eg constant urge to wash hands or count objects. The patient may feel uneasy for having thought but not actually done the act.

- Panic: a sudden, overwhelming anxiety that produces terror and physiological and psychological changes; the patients feel as if they will die.

- Agoraphobia: the fear of crowded spaces, public places or places where help cannot be reached which causes a panic attack.

Diagnostic classification systems

There are several diagnostic systems in use worldwide. The two best known and most used in the western world are the DSM-IV and ICD-10. China has developed their own classification system and several other systems are in place in other regions of the world.

Why do we classify psychiatric disorders?

A classification system provides a common language with which mental health professionals can discuss similar patients, regardless of their own geographical location. It also allows the natural history of a particular disorder to be studied. Classification is also crucial for administrative and legal documentation and for research purposes.

The DSM-IV (Diagnostic and Statistical Manual of Mental Disorders – fourth edition)

The DSM-IV was developed and published by the American Psychiatric Association (APA), and is only applicable to mental disorders. The first edition (DSM-I) was published in 1952 and described the diagnostic categories of mental disorders. There have been four updates since — the most recent is DSM-IV, which was published in 1994. DSM-IV-TR (text revision) was released in 2000 and has significant changes in the descriptions of the symptoms and the discussion around diagnoses. It is estimated that DSM-V will be available in 2004.

The DSM classification system is descriptive, without any reference to aetiology. This approach enables clinicians of different theoretical orientations to use the classification.

A significant feature of the DSM classification is the 5-axis diagnostic system. This multi-axial system facilitates comprehensive and systematic evaluation of the patient and takes into account various mental disorders, the general medical condition of the patient, any psychosocial and environmental problems, as well as the level of functioning of the patient. These factors may otherwise be overlooked if the focus of an assessment was to assess a single presenting symptom. A multi-axial system provides a convenient format for describing the heterogeneity of individuals presenting with the same symptoms.

Axis I: Psychiatric diagnosis(es)

All psychiatric diagnoses are listed on Axis I (except for the personality disorders and mental retardation, which are reported on Axis II). If there is more than one diagnosis, the primary diagnosis is mentioned first and then the subsequent comorbid diagnoses.

Axis II: Developmental diagnoses and diagnoses first diagnosed in infancy or childhood

Diagnoses recorded on Axis II include mental retardation and the personality disorders. Axis II may also be used to note prominent maladaptive personality features and defence mechanisms. These diagnoses are difficult to make and are often only made after several visits to a physician. The listing of personality disorders and mental retardation on a separate axis ensures that consideration is given to the possible presence of these conditions which might be overlooked when attention is focused on the usually more florid Axis I disorders.

An Axis II diagnosis should not be made while the patient is suffering from an Axis I diagnosis. For example, a person with depression should not be diagnosed with a personality disorder while the depression is still present; depression does not allow a true evaluation of a person's personality. In this case the Axis II diagnosis is 'deferred'.

Axis III: Physical diseases

All physical diseases are mentioned here, whether the disease symptoms are related to the psychiatric disorders or not. These general medical conditions are potentially relevant to the understanding or management of the individual's mental disorder.

General medical conditions can be related to mental disorders in a number of ways. In some cases it is clear that the general medical condition is directly related to the development or worsening of mental symptoms. When a mental disorder is judged to be a direct physiological consequence of the general medical condition it should be diagnosed on Axis I and the general medical condition should be recorded on both Axis I and Axis III. For example, when hypothyroidism is a direct cause of depressive symptoms, the designation on Axis I is mood disorder due to hypothyroidism with depressive features, and the hypothyroidism is listed again on Axis III.

Some general medical conditions may not be directly related to the mental disorder but have important prognostic or treatment implications. For example, when the diagnosis on Axis I is major depressive disorder and on Axis III is arrhythmia, the choice of pharmacotherapy for the depressive disorder is influenced by the arrhythmia.

Axis IV: Psychological stress factors affecting the patient

This includes all stressors, past and present, which have an influence on the patient at the time of the evaluation. These factors may include situations dating from childhood up to the present day. Possible psychosocial or environmental problems include:

- Negative life events
- Environmental difficulties or deficiencies
- Familial or other interpersonal stressors
- Inadequate social support or personal resources
- Problems relating to the context in which a person's difficulties have developed.

Axis V: Global functioning of the patient

This gives a broad evaluation of the individual's ability to cope with their present life situation and can also be used as a measure of the need for hospital admission. This information is useful in planning treatment and measuring its impact as well as in predicting outcome.

The Global Assessment of Functioning (GAF) scale can be used to quantify this level of functioning. The GAF scale was developed specifically to rate psychological, social and occupational functioning (see fact sheet: 'Rating mental disorders' for more information on the GAF and other rating scales). An example of a psychiatric diagnosis using the 5 axes is given in table 1.

Axis I: psychiatric diagnosis(es) include major depression, first episode, moderate severity and panic disorder with agoraphobia

Axis II: developmental diagnoses of infancy or childhood. Diagnosis deferred on axis 2

Axis III: physical diseases including epilepsy, headaches, bronchitis

Axis IV: psychological stress factors affecting the patient including divorce, death of mother 15 years ago

Axis V: global functioning of the patient, moderate to poor with a GAF score of 75

Table 1. Psychiatric diagnosis using the 5 axes

The ICD-10 (International Classification of Diseases and Related Health Problems)

Another widely used diagnostic system is ICD-10 (International Classification of Diseases and Related Health Problems), developed by the World Health Organization (WHO). This classification system includes diagnoses for all the systems in the human body. The first edition to include a psychiatric section was ICD-6. The current edition, ICD-10, was published in 1992. ICD-10 is less widely used in clinical trials than DMS-IV.

ICD-10 is similar to DSM-IV in that it recognises and defines the following:

- Manic episodes
- Depressive episodes
- Bipolar affective (mood) disorder
- Recurrent depressive disorders
- Persistent depressive disorders (includes dysthymia).

ICD-10 defines two other categories not included in DSM-IV:

- Other mood disorders (ie disorders that do not fit any of the categories above)
- Schizoaffective disorder (often classed as a subtype of schizophrenia).

There was close collaboration between the APA and the WHO during the development of the two systems. This approach helped to reduce unnecessary differences between the systems and has enabled fully compatible cross-diagnoses.