Medical Psychiatry

Mentalhealthis ‘a state of well-being in which the individual realizes his or her own abilities, can overcome the normal stresses of life, can work productively, and is able to make a contribution to his or her community’.

Indicators of mental health include the following:

1. Emotional well-being – such as perceived life satisfaction, happiness, cheerfulness, peacefulness.
2. Psychological well-being – such as self-acceptance, personal growth including openness to new experiences, optimism, hopefulness, purpose in life, and positive relationships.
3. Social well-being: social acceptance, belief in the potential of people and society as a whole, personal self-worth and usefulness to society, and sense of community.

In more simple words, good mental health does not only mean the absence of mental disorders, it is characterized by the ability to:

■ learn

■ feel, express and manage a range of positive and negative emotions.

■ form and maintain good relationships with others.

■ cope with and manage change and uncertainty.

Because psychiatric disorders manifest as disordered functions in the areas of emotion, perception, thinking and memory, and/or have had no clearly established biological basis, these disorders have traditionally been considered as ‘mental’ rather than as ‘physical’ illnesses.

However, many researches have confirmed the association between many abnormalities in brain functions with many psychiatric disorders. Furthermore, an important role for psychological and behavioral factors in many medical illnesses was also confirmed. For these reasons, a clear distinction between mental and physical illness has become increasingly questionable.

Psychiatric disorders are amongst the most common of all human illnesses.

Classification of psychiatric disorders

1. Stress-related disorders

• Acute stress disorder

• Adjustment disorder

• Post-traumatic stress disorder

1. Anxiety disorders

• Generalized anxiety

• Phobic anxiety

• Panic disorder

• Obsessive-compulsive disorder

1. Affective (mood) disorders

• Depressive disorder

• Mania and bipolar disorder

1. Schizophrenia and delusional disorders

A-Substance misuse disorders

• Alcohol

• Drugs

B-Organic disorders

• Acute, e.g. delirium

• Chronic, e.g. dementia

1. Disorders of adult personality and behavior

• Personality disorder

• Factitious disorder

1. Eating disorders

• Anorexia nervosa

• Bulimia nervosa

1. Somatoform disorders

• Somatization disorder

• Dissociative (conversion) disorder

• Pain disorder

• Hypochondriasis

• Body dysmorphic disorder

• Somatoform autonomic dysfunction

1. Neurasthenia
2. Puerperal mental disorders

Most disorders are caused by the interaction of:

■ genetic factors

■ sociological factors

■ psychological factors

Definitions

Hallucinations

These are perceptions without external stimuli. They can occur in any sensory modality, most commonly visual or auditory. Typical examples are hearing voices when no one else is present, or seeing ‘visions’. Hallucinations have the quality of ordinary perceptions and are perceived as originating in the external world, not in the patient’s own mind (when they are termed pseudo-hallucinations).

Illusions

These are misperceptions of real external stimuli (such as mistaking a shrub for a person in poor light).

Delusions

Delusions are false beliefs based on incorrect conclusions about external reality that persist despite the evidence to the contrary; these beliefs are not ordinarily accepted by other members of the person's culture.

Confusion

This is a vague term used to describe a range of primarily cognitive problems, including disturbances in perception, belief and behavior. ‘Confusion’ usually presents as a problem when it becomes clear that the patient cannot comply with medical care; they may repeatedly wander off the ward, pull out essential cannulae and catheters, and hit nurses.

Medically unexplained somatic symptoms

Patients commonly present to doctors with physical symptoms. Whilst these symptoms may be an expression of a medical condition, they often are not. They may then be referred to as ‘medically unexplained symptoms’ (MUS). MUS are very common in patients attending general medical outpatient clinics.

Almost any symptom can be medically unexplained, e.g.:

• pain (including back, chest, abdominal and headache)

• fatigue

• dizziness

• fits

• feelings of weakness.

Patients with MUS may receive a medical diagnosis of a so-called functional somatic syndrome, such as irritable bowel syndrome, and may also merit a psychiatric diagnosis on the basis of the same symptoms. The most frequent psychiatric diagnoses associated with MUS are anxiety or depressive disorders. When these are absent, a diagnosis of somatoform disorder may be appropriate.

Common psychiatric disorders

First of all, the dental aspects of psychiatric disorders should be discussed.

Dental aspects of psychiatric disorders

Mental disorders can significantly influence oral health care, not least because of behavioral disorders or interpersonal difficulties. Patients with mental disease may be unable to cooperate. Drug misuse may explain abnormal behavior in some patients:

1-Compliance with appointments or treatment is often poor.

2-There may be difficulties in gaining informed consent to treatment.

3-There may also be oral neglect with a high prevalence of caries and periodontal disease, difficulties coping with dental prostheses, and self-induced lesions or other oral symptoms caused by the psychiatric illness or its treatment.

4-Some of the more severely ill or neglected patients with mental disorders are at high risk for diseases of deprivation and lifestyle, such as tuberculosis.

5-Drugs such as antidepressants, phenothiazines, lithium or barbiturates can cause xerostomia or other orofacial disorders, or otherwise influence dental care.

1. Delirium

A condition characterized by acute agitation, confusion, hallucinations, delusions, and disturbed consciousness.

Causes

Substance abuse

Drugs

Infections

Metabolic

Electrolyte disturbance

Head injury

Treatment

Treat the cause, reassurance, haloperidol, and benzodiazepines for alcohol withdrawal.

1. Alcoholism

Alcohol use is the fourth leading cause of preventable death in the United States (after smoking, high blood pressure, and obesity).

Many medical problems can be caused by alcohol use, and alcohol withdrawal as well.

Signs of chronic alcoholism include:

* Gynecomastia
* Spider angiomata
* Dupuytren contractures (also may be congenital)
* Testicular atrophy
* Enlarged or shrunken liver
* Enlarged spleen

Signs and symptoms of alcohol withdrawal are:

* Nausea and vomiting
* Diaphoresis
* Agitation and anxiety
* Headache
* Tremor
* Seizures
* Visual and auditory hallucinations

Delirium tremens: life-threatening alcohol withdrawal syndrome occurs 2-4 days after last drink characterized by autonomic hyperactivity:

* 1. Tremor
	2. Tachycardia and hypertension
	3. Anxiety
	4. Seizures
	5. Hyperthermia
	6. Delirium

Complications of alcoholism

•Neurological: peripheral neuropathy, cerebellar degeneration, cerebral hemorrhage, dementia

• Hepatic: fatty change and cirrhosis, liver cancer

• Gastrointestinal: oesophagitis, gastritis, pancreatitis, oesophageal cancer, malabsorption, oesophageal varices

• Respiratory: pulmonary tuberculosis, pneumonia

• Skin: spider naevi, palmar erythema, Dupuytren’s contractures, telangiectasias

• Cardiac: cardiomyopathy, hypertension

• Musculoskeletal: myopathy, fractures

• Endocrine and metabolic: pseudo-Cushing’s syndrome, hypoglycaemia, gout

• Reproductive: hypogonadism, fetal alcohol syndrome, infertility

Psychiatric and cerebral consequences

• Depression

• Alcoholic hallucinosis

• Alcoholic ‘blackouts’

• Wernicke’s encephalopathy: nystagmus, ophthalmoplegia, ataxia, confusion.

• Korsakoff’s syndrome: short-term memory deficits, confabulation.

Laboratory findings

Toxic effect of alcohol will lead to increase:

-Aspartate aminotransferase (AST) -Alanine aminotransferase (ALT)

-Gamma glutamyltransferase (GGT) - Mean corpuscular volume (MCV)

-Carbohydrate-deficient transferrin (CDT)

Treatment

1. Complete abstinence
2. Benzodiazepines for withdrawal symptoms
3. Disulfiram (Antabuse)

Disulfiram inhibits aldehyde dehydrogenase, and, as a result, acetaldehyde accumulates. This leads to nausea, hypotension, and flushing if a person drinks alcohol while taking disulfiram.

Only administer disulfiram after the patient has abstained from ethanol for at least 12 hr. Use ONLY as adjunct to supportive & psychotherapeutic treatment; in motivated patient 500 mg PO q/Day initially for 1-2 weeks; not to exceed 500 mg/day.

Maintenance: 250 mg PO q/Day (125-500 mg range); continue therapy until a bases for self-control has been established; patient may continue to take drug therapy for months or even years.

Dental aspects

-Consider poor compliance, aggressive behavior, associated complications (bleeding tendency, vomiting, vomitus aspiration during GA, impaired wound healing, infections, osteomyelitis after jaw fractures, post-operative delirium tremens because which could be prevented by chlordiazepoxide.

-Appointment at early morning.

-Consider orofacial complications: caries, periodontal disease, dental erosions from acid regurgitation and GERD, leukoplakia, oral cancers, glossitis, angular stomatitis, recurrent aphthus ulcers, bilateral painless swelling of major salivary glands, breath smell of alcohol, telangiectasia, maxillofacial trauma, and implant failure.

-Drugs:

Altered drug metabolism by liver enzyme (i.e. enhanced warfarin effect, increased hepatotoxicity of paracetamol).

BDZ, antihistamines, or hypnotics have additive sedative effect with alcohol.

-Avoid aspirin and NSAIDs for risk of gastric erosion and bleeding.

-Avoid alcohol-containing mouthwash if the patient given metronidazole to avoid risk of disulfiram reaction (Metronidazole inhibits liver breakdown of acetaldehyde, which accumulates causing widespread vasodilatation, nausea, vomiting, sweating, headache and palpitations).

1. Psychosis and schizophrenia

Any mental disorder characterized by symptoms of delusions, hallucinations, and loss of insight leading to abnormal thoughts, beliefs, perceptions, behavior and decline functioning.

Acute psychosis

Causes: brief psychotic disorder, schizophreniform disorder, schizophrenia, mania, part of delirium picture, drugs, substance abuse, and toxins.

Treatment: antipsychotic (chlorpromazine) injection and reassurance.

Brief psychotic disorder: post stress psychosis for less than 1 month. It characterized by a sudden onset of psychosis (Sudden onset is defined as change from non-psychotic state to a clearly psychotic state within 2 weeks, usually without prodrome), and short duration.

Schizophreniform disorder: psychotic features for l ~ 6 months.

Schizophrenia

Schizophrenia is a brain disorder that affects how people think, feel, and perceive. The hallmark symptom of schizophrenia is psychosis, such as experiencing auditory hallucinations (voices) and delusions (fixed false beliefs). Psychotic features should be present for more than 6 months.

Acute schizophrenia may present with disturbed behavior, marked delusions, hallucinations and disordered thinking, or with insidious social withdrawal and other so-called negative symptoms and less obvious delusions and hallucinations.

The prevalence is similar worldwide at about 1% and the disorder is more common in men. The children of one affected parent have approximately a 10% risk of developing the illness, but this rises to 50% if an identical twin is affected. The usual age of onset is the mid-twenties.

Signs and symptoms

The symptoms of schizophrenia may be divided into the following 4 domains:

* Positive symptoms - Psychotic symptoms, such as hallucinations, which are usually auditory; delusions; and disorganized speech and behavior.
* Negative symptoms - Decrease in emotional range, poverty of speech, and loss of interests and drive.
* Cognitive symptoms - Neurocognitive deficits (eg, deficits in working memory and attention and in executive functions, such as the ability to organize and abstract).
* Mood symptoms - Patients often seem cheerful or sad in a way that is difficult to understand; they often are depressed.

Diagnosis

Schizophrenia usually presents with an acute episode and progresses to a chronic state. Acute schizophrenia should be suspected in any individual with bizarre behavior accompanied by delusions and hallucinations that are not due to organic brain disease or substance misuse. The diagnosis is made on clinical grounds, with investigations used principally to rule out organic brain

disease.

To meet the criteria for diagnosis of schizophrenia, the patient must have experienced at least 2 of the following symptoms:

* Delusions
* Hallucinations
* Disorganized speech
* Disorganized or catatonic behavior
* Negative symptoms

At least 1 of the symptoms must be the presence of delusions, hallucinations, or disorganized speech.

Management

First-episode schizophrenia usually requires admission to hospital because patients lack the insight that they are ill and are unwilling to accept treatment. In some cases, they may be at risk of harming themselves or others.

Subsequent acute relapses and chronic schizophrenia are now usually managed in the community.

There is no clear antipsychotic drug of choice for schizophrenia. Clozapine is the most effective medication but is not recommended as first-line therapy.

Antipsychotic agents are effective against the positive symptoms of schizophrenia in the majority of cases. They take 2–4 weeks to be maximally effective but have some beneficial effects shortly after administration. Treatment is then ideally continued to prevent relapse.

In a patient with a first episode of schizophrenia, this will usually be for 1–2 years, but in patients with multiple episodes, treatment may be required for many years.

For long-term use, antipsychotic agents are often given in slow-release (depot) injected form to improve patient adherence.

Drugs used include: chlorpromazine (largatil), ﬂuphenazine (modecate), risperidone).

Social rehabilitation is extremely important mode of treatment.