

Scenario1:

57-year-old man had a stroke 2 years ago. He then showed low mood, loss of interest, crying spells, difficulty sleeping and death wishes.

Scenario2:

A 48-year-old man had developed a myocardial infarction. In the coronary care unit, he was tearful, apprehensive, tremulous, and his chest pain symptoms worsened.

There is a unity of mind and body. Thus, psychological factors should be taken into account when considering any medical disease. It is helpful to know and differentiate between the following terms:

Disease: pathophysiological process recognized by **physicians**. It is **objective** based on biological changes in the body.

Illness: individual's understanding of **disease**. It is very **subjective** and varies from person to person.

Illness behavior: (تقبل المرض) patient's behavior to adjust to his disease. This can be **adaptive** (e.g. consulting doctors, accepting to be referred to psychiatrist, taking medications) or **non-adaptive** (e.g. exaggerating symptoms, refusing medication). Personality factors play a major role in the psychological adjustment to physical diseases.

Illness-affirmative attitude: a tendency to exaggerate mild physical symptoms and to affirm physical diseases. It can lead to hypochondriasis; excessive concern & preoccupation with physical diseases see later. **Illness-denying attitude:** a tendency to underestimate physical symptoms and to deny physical diseases. It is a psychological defense against weakness. It may help some patients with certain serious diseases.

Sick Role: socially expected/required role of ill person e.g. exemptions from some responsibilities, the right to seek care and help from others. **If sick role continues after the disease is over the sick role is maladaptive.**

Doctor - Patient Relationship (There are 4 main approaches / not mutually exclusive):

1. The autocratic (paternalistic) approach: the physician generally dominates the interview (as the doctor knows best) and the patient is expected to comply without questioning. It can of value in certain emergency situations.

2. The informative approach: the physician dispenses information without suggestion or interference and the choice is left to the patient. It may be appropriate for certain one-time consultations.

3. The shared decision approach: the physician is flexible, presents and discusses alternatives with the patient.

4. The deliberative approach: the physician advocates a particular course of action (e.g. hot to lose weight).

Physicians as Patients: Physician-patients are usually poor patients, most likely because they are trained to be the masters of the patient-doctor relationship. For a physician, being a patient may mean becoming dependent, and giving up control. They may be embarrassed to ask pertinent questions for fear of appearing incompetent. The treating physician may fear criticism of his or her skills or competence.

Consultation Psychiatry: Each patient, on whom an opinion is sought, is referred to the psychiatrist who may visit the ward at any time. **Consultation-Liaison** (C-L) Psychiatry: is the study, practice, and teaching of the relation between medical and psychiatric disorders. It is associated with all the diagnostic, therapeutic, research and teaching services that psychiatrists perform in the general hospital and serves as a bridge between psychiatry and other specialties. The psychiatrist and physician meet regularly to discuss individual patients and general aspects of patient care. It is not confined solely to psychiatric disorders.

Psychosomatic medicine: It is based	Liaison Psychiatry: It is the work of		
upon observation that psychological and	a psychiatrist in a general hospital,		
sociocultural factors play a role in the	which covers the area between		
predisposition, onset, course and response	psychiatry and other branches of		
to treatment of some physiological	medicine where he attends medical		
changes and biomedical disorders.	ward rounds and other clinical		
	meetings.		

Biopsychosocial Model (Engel 1977): It stresses an integrated systems (biological, psychological, and social) approach to human behavior and disease (etiology and management). It encourages a comprehensive understanding of disease and treatment. Each system affects, and is affected by, every other system.

Advantages of consultation-Liaison psychiatric services:

1. Improve the quality of life and the quality of care provided to patients in non-psychiatric wards, e.g. reduce the number of unnecessary investigations performed for physical symptoms that actually reflect underlying psychological distress.

2. Reduce the length of patient's stay in the hospital and the readmission rate. Thus, reducing the cost and increasing the vacancy capacity and bed turnover.

Consultation-liaison psychiatry involves the practical application of all psychiatric knowledge, ideas, skills, and techniques where they may be helpful to non-psychiatrists in the care and understanding of their patients.

Physical and psychiatric morbidity:

There are different types of association between physical and psychiatric morbidity:

1. Psychiatric reactions to physical disease (e.g. anxiety provoked by heart disease).

2. Psychiatric disorder presenting with physical symptoms (e.g. dizziness as a feature of anxiety).

3. Psychological factors affect the physical illness through:

- Prolonging the course (e.g. anxiety may prolong the course of essential hypertension).
- Maintaining unhealthy habits (e.g. psychoactive substance abuse).
- Determining whether a person seeks helps from a doctor for a physical complaint (e.g. a person may seek medical help for backache when he feels depressed, but not when his mood is normal).
- Affecting compliance with treatment (e.g. neglecting the oral hypoglycemic agents when depressed).

4. Psychiatric and physical illness occurring together independently (e.g. gallstone and depression). The physical illness may exacerbate psychiatric symptoms.

5. Physical disease presenting with psychiatric features (e.g. psychosis as early presentation of SLE).

<u>Clues Suggestive of "Organic" Mental Disorders(Psychiatric</u> <u>disorder 2ndary to general medical condition</u>)

History:

Psychological symptoms occurring ...

- New onset psychiatric symptoms presenting after age 40.
- During the course of a major medical illness which had impaired some organ function (e.g., neurological, endocrine, renal, hepatic, cardiac, pulmonary).
- While taking medications/illicit substance, he had psychoactive effects.

Family history of:

- -ve for primary psychiatric illness..
- +ve for medical disease that may present with psychiatric symptoms e.g.:

-Degenerative or inheritable neurological disorders

(e.g., Alzheimer's disease, Huntington's disease)

-Inheritable metabolic disorders (e.g., DM,

Pernicious Anemia, Porphyria)

The major reasons for referral to psychiatry:

1. The patient has a **psychiatric disorder**, on **psychotropic medications**, or has a past history of such.

2. The staff are under strain over the patient because of his behavior is disturbing, demanding, manipulative, or **suicidal**.

3. Diagnostic uncertainty with **suspicion of a psychiatric problem** behind the physical symptoms.

4. The patient has **asked** to see a psychiatrist. However, patients are usually reluctant to see psychiatrist, and families may reinforce this attitude.

Characteristics of an effective psychiatric consultation:

- 1. Reviewing the patient's chart.
- 2. Obtaining a good psychiatric history (paying attention to psychological and social factors).
- 3. Mental State Examination (and Mini–Mental State Examination if cognitive impairment is suspected).
- 4. Making a logic differential diagnosis among medical, neurological and psychiatric disorders.
- 5. Arriving at a diagnosis based on clinical features, laboratory investigations, and psychiatric knowledge.
- 6. Making reasonable treatment recommendations (medications, psychological treatment, etc.).
- 7. Following the patient during the entire hospitalization and after discharge.

On receiving the request for a consultation, the psychiatrist should make sure that the referring doctor has discussed the psychiatric referral with the patient. Before interviewing the patient, the psychiatrist should read the relevant medical notes and ask the nursing staff about the patient's mental state and behavior. The psychiatrist should know about treatment the patient is receiving. It may be necessary to ask further questions of the ward staff or social worker, to interview relatives and inquire about the patient's social background and any previous psychiatric history. It is often appropriate to discuss the proposed plan of management with the referring team. Nursing staff can help in the management of most brief psychiatric problems that arise in a general hospital.

Somatic responses to psychosocial stress:

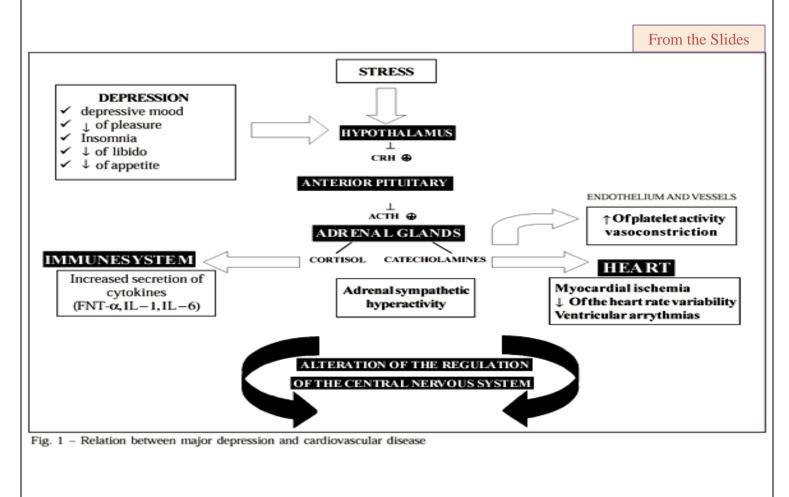
CRF: Corticotropin-releasing factor

Neuroendocrine responses:

Stress >> autonomic hyperarousal >> secretion of CRF from the hypothalamus >> release of ACTH >> stimulation of adrenal cortex to release glucocorticoids >> "flight or fight" response; increasing cardiovascular activity and promoting energy use.

Neuroimmune responses:

- a- Stress >> glucocorticoids >> inhibition of immunity, reproduction, and growth.
- b-Stress >> norepinephrine release >> immune activation >> release of cytokines (humoral immune factors) >> further release of CRF >> glucocorticoids.



C-L Psychiatry and patients in medical specialties

Depression is significantly associated with a wide variety of chronic physical disorders, including hypertension, cardiovascular disease, stroke, chronic respiratory disorders, diabetes, arthritis, asthma, cancer, and a variety of chronic pain conditions. Depression is a causal risk factor, it leads to an increased prevalence of these physical disorders, with all their associated impairments and increased mortality risk. In physically-ill hospitalized patients depressed mood is common. It can be primary, secondary to, or coexisting with the physical disease. Many medications can induce depression (e.g. antihypertensives, steroids, chemotherapy). Depressive disorders in psychiatric patients will be discussed later.

Depression plus Medically illness

Is it serious?

- Poor outcomes of the medical illness
- Increased mortality in cardiovascular disease, stroke, diabetes, and ?cancer
- Chronic medical conditions and depression are interrelated and that treatment of one condition can affect the outcomes for the other.
- Worse adherence to medical regimens, tobacco smoking, sedentary lifestyle, and overeating.
- Increased functional disability, decreased self-care.
- Four to five times greater levels of morbidity, premature mortality, health services use and health care expenditures compared to non- depressed patients with no GMC.

From the Slides

Intensive Care Units (ICUs)

Patients may experience delirium, depression, or anxiety. ICUs staff members face difficult emotional and physical circumstances e.g. deaths and medical disasters.

Cardiology

Psychiatric patients may present to cardiology clinic because of 1. Palpitation associated with anxiety or panic attacks 2. Excessive worries about having a hidden serious cardiac disease (hypochondriasis; see later). Patients with cardiac diseases may present to psychiatry clinic because of depression as a side effect of medications (e.g. prolonged use of betablockers).

Depression is an **independent** risk factor for the development of hypertension (HTN), coronary artery diseases, (CAD) myocardial infarction (MI) & heart failure and for mortality after an acute MI. Mortality rate at 6-month follow-up in depressed post-MI patients (compared to non-depressed post-MI patients) is 4 folds. Research indicate that **15 - 25% o**f patients with CAD fulfill criteria for **major depression**.

Pathophysiology:

1. **Vasospasm**; due to high cortisol levels (hyperactivity of Hypothalamus-Pituitary-Adrenal Axis).

2. **Atherosclerosis**; inducing inflammatory process that enhances plaque formation (inflammatory cytokines; Interleukin-6 [IL-6] and C-reactive protein [CRP]).

3. **Thrombus formation**; platelets activation (increase in pro-coagulant activity & level of binding of anti-ligand-induced binding site anti-LIBS antibody to fibrinogen-induced binding sites).

4. Depression increases the risk factors of cardiovascular diseases (DM, HTN, smoking, and obesity).

Antidepressants; reduce the risk of cardiovascular diseases in depressed patients.

1. **Avoid tricyclics** (serious conduction side effects, orthostatic hypotension & drug interactions).

2. Selective Serotonin Reuptake Inhibitors (**SSRIs**); safe and well-tolerated but they might prolong bleeding time, and cause hyponatremia. Paroxetine has some anticholinergic activity. Citalopram 20 mg is a good choice

3. Selective Serotonin-Norepinephrine Reuptake Inhibitors (**SNRIs**); **Venlafaxine** is well tolerated but in doses > 225 mg it **may increase blood pressure (BP) in some person.**

<u>Pulmonology</u>

Psychiatric patients may present to Pulmonology Clinic because of 1. **Shortness of breath** associated with **anxiety**, **panic attacks** or as a side effect of beta-blockers, which are frequently prescribed to treat tremor and palpitation. Before starting beta-blockers always enquire about bronchial asthma [BA] (beta- 2 receptors dilates bronchioles). Patients with asthma frequently suffer from anxiety symptoms. Among asthmatics, 42% reported anxiety focused on breathing, compared with 20% of COPD patients. Treatment of BA may precipitate anxiety. Obstructive sleep apnea syndrome [OSAS] is a common disorder in the adult population; it is often associated with significant cognitive impairments, depression, and irritability. Heroin addicts may develop respiratory depression (due heroin over dose) and pulmonary emboli from agents added to heroin (i.e., talc) or from septic emboli.

<u>Neurology</u>

- Stroke:

A- Depression >>> stroke; meta-analysis studies demonstrate that depression is a significant modifiable risk factor for total stoke, fatal stroke, and ischemic stroke (see pathophysiology of depression in cardiovascular diseases). SSRIs increase bleeding tendency by inhibiting platelet aggregation and have been associated with higher risk of further strokes.

B- Stroke >>> depression; stroke may predispose, precipitate or perpetuate depressive disorders (Post-Stroke Depression [PSD]). Depression occurs in nearly **30 %** of patients either during acute/chronic stroke period. About 80% of cases are under-diagnosed by non-psychiatric clinicians (due to lack of awareness/experience & diagnosis difficulties; aphasia, dysarthria, cognitive impairment). **PSD has been associated with poor social and rehabilitation outcomes, cognitive impairment and increased mortality**. About 10% PSD patients face mortality. DDx: vascular dementia, post-stroke apathy. Risk Factors for PSD: left anterior brain lesion, dysphasia and living alone. However, after 3 years post-stroke, the most important predictor for depression was cerebral atrophy. More evidence is required before recommendations can be made about the routine use of antidepressants to prevent PSD.

Treatment: pharmacologic and rehabilitation strategies are needed to treat PSD. **SSRIs (e.g. citalopram) are effective in PSD and dramatically reduce the symptom of crying** (but there is a risk of bleeding tendency due to inhibition of platelet aggregation).

- Multiple Sclerosis:

It is a central nervous system (CNS) demyelinating relapsing and remitting illness. It is chronic, disabling neurologic illness among young and middle age adults. Patients have temporary loss of vision, or dysconjugate gaze. When the spinal cord is attacked, patients typically develop paraparesis. Spinal cord involvement also leads to urinary and sexual dysfunction. Late in the illness, **pseudobulbar palsy (sudden, unprovoked fits of laughing or crying) appear when large areas of frontal lobe myelin have been consumed by plaque**. MRI of the brain and spinal cord typically shows lesions in affected areas. Sequelae to MS include cognitive impairment, psychosis, depression, and anxiety. MS may be misdiagnosed as a conversion disorder (see later). Steroids can reduce neurological symptoms but may induce psychosis or affective disturbances.

- Epilepsy:

It has many comorbid psychiatric disturbances, which prompt psychiatric consultation and collaboration with neurologists, neurosurgeons, and other specialists. Partial complex seizures may present with psychosis, panic-like attacks, and delirium. Depression is common in epileptic patients (bidirectional relationship). **Epilepsy increases the risk of depression and treatment of depression increases frequency of seizures**.

- Delirium, Dementia, Amnesic Syndrome & Head Injury.

Rheumatology

- Systemic lupus erythematosus (SLE): antineuronal antibodies and vasculitis in SLE can cause a range of neuropsychiatric symptoms; cognitive dysfunction, hallucinations, delusions, depression, suicidal ideation, and personality changes in \geq 74 % of patients. Psychosis may be due to direct CNS involvement or, less frequently, to side effects of corticosteroid treatment. Mania, when present, is usually a side effect of corticosteroid therapy. Delirium becomes a more likely complication as the severity of overall SLE symptoms increases.

- **Rheumatoid arthritis (RA):** is frequently characterized by psychiatric comorbidity (mostly depression or anxiety). Direct CNS involvement is rare in RA. **Tricyclic antidepressants** (e.g. amitriptyline 25-50mg) are prescribed to treat depressive, anxiety, and pain symptoms in RA patients.

Gastroenterology

- **Peptic Ulcer (PU):** psychological distress may induce and exacerbate PU. Psychological treatment is advised.

- Irritable Bowel Syndrome (IBS): It is very common in G.I Clinics. Features include fluctuating nonspecific abdominal discomfort, distention, and alteration of bowel habits; constipation or diarrhea (with occasional mucous in the stool but no blood). SSRIs and psychological treatment can improve the symptoms and quality of life.

- **Inflammatory Bowel diseases (IBD):** early inflammatory processes in the gut might lead to psychiatric illness (depression, anxiety, or irritability) or vice versa, or a third factor might lead to both.

- **Interferon therapy in hepatitis C** patients has psychiatric side effects (e.g. severe depression, suicidal ideation). SSRIs can be given safely to reduce depressive symptoms in such patients.

- Hepatic Encephalopathy: broad range of neuropsychiatric manifestations (impairment of cognition, consciousness, the sleep-wake cycle, and personality changes.

Nephrology

Patients with chronic renal failure are prone to have delirium because of uremia and electrolytes hemodialysis intoxication, dialysis encephalopathy (dysarthria / dysphasia / myoclonus / ataxia / seizures / dementia). **Some Psychiatric patients may develop renal problems due to side effects of psychotropic medications either directly (e.g. lithium)**, or **indirectly** (e.g. antipsychotics >> neuroleptic malignant syndrome >> severe prolonged muscle rigidity >> muscle destruction >> excessive amounts of myoglobin in the blood >> acute renal failure).

Hematology

Heroin addicts may present with vein thrombosis >>> pulmonary embolism. Patients with severe pain due to sickle cell hemolytic crises may become addict on medical narcotics (e.g. pethidine).

Oncology

A. Depression >>> cancer: Whether depression can induce certain types of cancer remains a subject for research.

B. Cancer >>> depression (due to several biopsychosocial factors including chemotherapy). However, depression is more challenging to diagnose in patients with cancer because illness produces many neurovegetative symptoms: psychomotor retardation, fatigue, apathy, and poor concentration, appetite reduction, weight loss, and sleep disturbances. Clinical depression is prevalent among cancer patients with rates ranging between 13 and 40%. Many oncologists consider depression part of the illness and **wrongly believe** that if the cancer can be treated, then the accompanying depression will remit on its own. Meta-analysis research presented evidence that depression predicts mortality, but not progression, in cancer patients. Quality of life was shown to commonly predict survival perhaps even better than performance status. Most oncology divisions now have a psycho-oncology unit that provides psychosocial education, enhances the development of therapeutic communication skills for oncology staff, and seeks to study psychological and behavioral variables that may play role in cancer risk and survival. Studies that assessed depression years before cancer diagnosis found more associations with mortality than studies that assessed depression following cancer diagnosis psychological variables might have a stronger effect on disease progression and mortality in early stages of cancer. **Psychological treatments** (e.g. guided imagery, mindfulness based stress reduction [MBSR]) can enhance immunity, reduce fear of recurrence, and improve physical functioning in some patients. Psycho-neuro-immunity: Negative emotions are involved in the initiation or progression of cancer, and autoimmune disorders.

أ د محمد الصغيّر	الأثر النفسي للاحتضار			
ف المحيطة	يتفاوت حسب الجبلة والمعتقدات والتنشئة والظروف المحيطة			
٣- الطاقم الطبي	۲ - أقاربه / مرافقيه	١ - المحتضر		
<u>آثار نفسية طبيعية:</u> مشاعر مختلطة: خوف سكرات الموت والحساب والمصير وحزن و أعراض جسدية(محدودة الشدة والمدة). - رعب و شعور بحلول الموت. - تكرر المشهد في الذهن يقظة ومناما مع الترعاج وعجز عن التخلص منه. - أعراض جسدية متنوعة. - أعراض جسدية متنوعة /+ -	 أ- الصدمة الأولى: مىعق الشعور فوق تحمله المعتاد/ هول المصيبة. # الشعور: خدر كالتنميل لا حزن و لا غضب. # الإدراك: خلل في التوفيق بين الحقيقة والأمل؛ نفي الحدث داخل النفس- لعله حلم أو كذب . # السلوك: تشبث ببقاء المفقود (أنعشوه سيعود الحياة.) + مساومة (بالنذر أو الصدقة المشروطة) * الجسد: عدة أعراض متنوعة. # الجسد: عدة أعراض متنوعة. الحزع؛ غضب للفقد (على من ؟/). الحزيع؛ غضب للفقد (على من ؟/). مهارات إيصال الخير المرير + الانتياه لاحتمال الخير المرير الطاقم الطبى). القتل في الشاجرة ؟! > القصاص 	 أو خوف على ذاته: خروج الروح (+ ألم سكرات الموت). الحساب. المصير. المصير. أولاد / شريك حياة / فراق من وما يحب. رفع الرجاء والتذكير برحمة الله 		

Psychological reactions to terminal illness & impending death

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

1. Denial/Disbelief: "This can't be happening, not to me, I feel fine". It is a temporary shock defensive response to the psychological trauma of bad news. Some persons never pass beyond this stage and may keep going from doctor to doctor searching for one who supports their position.

2. Anger: "How can this happen to me?", "Who is to blame?", "Why me? It's not fair!", "Others are more deserving". Anger arises once the subconscious accepts the reality of the bad news and denial cannot continue. Patient becomes frustrated, irritable, and angry. Anger towards doctors, nurses, medical agencies, relatives, fate, self, and even God/Allah (Why me and now?!). Anger may be associated with envy of healthy people. Therefore, at this stage the person may become very difficult to care for due to misplaced feelings of rage and envy. It is essential for doctors not to take this anger personally. It represents patient's desire for controlling what he feels out of control.

3. Bargaining: "I will give/do anything for a few more years." It is a negotiation for an extended life, made with a higher power in exchange for a reformed lifestyle. Bargaining arises when the subconscious recognizes that anger does not help. Psychologically, the subconscious is saying, "anger did not work maybe being good will work, I understand I will die, but if I could just have more time...". It involves the hope that the individual can somehow postpone or delay death.

4. Depression: "Nothing worked, death is certain; I'm going to die, no way ". Depression arises when the subconscious realizes that nothing has worked to prevent or delay the coming death so that despair and hopelessness prevail. Depressive features appear; low mood, low interest, weeping, poor appetite, disturbed sleep and isolation, negative thoughts (dependence on others, loss of financial support ...). It is not recommended to attempt to cheer up an individual who is in this stage. It is an important stage for grieving that must be processed.

5. Acceptance: "death is inevitable, I can't fight it, I better give up resisting and prepare for it." The subconscious begins to come to terms with mortality. This is not a "happy" stage; it is usually void of feelings. It takes a while to reach this stage and a person who fights until the end will not reach it.

These steps do not necessarily come in the order noted above, nor are all steps experienced by all patients. Any patient could experience the stages in a different order, or could experience emotions not even mentioned in the stage theory... Research has found that those who felt they understood their purpose in life, or found special meaning, faced less fear and despair in the final weeks of their lives than those who had not.

Endocrine Disorders

- Diabetes Mellitus (DM):

Depression and DM have bidirectional relationship. Depression may induce DM through prolonged hyperactivity of Hypothalamus-Pituitary-Adrenal Axis >> high cortisol levels. Depression in DM is under-recognized and undertreated. Depression is two times more prevalent in patients with DM than in the general population. Depressive symptoms are reported by up to 40% of DM patients. Rates of DM complications appear to be greater in patients with depression (see effect of depression on cardiovascular system above). Research found a significant impact of depression treatment on diabetes control. Psychiatric patients receiving second-generation antipsychotics (e.g. olanzapine, risperidone) are prone to develop metabolic syndrome, which increases risk of type II DM. SSRIs (e.g. fluoxetine) can give good results in treating depression in DM patients and improving blood sugar control. Attention to worsening of sexual dysfunction, drug interactions, and weight change should guide the choice of SSRIs and the adjustment of dosing. Duloxetine (SNRI) carries possible benefits in peripheral neuropathy symptoms and control of pain.

Hypoglycemia in Type 1 DM (IDDM) patients may present with panic-like features (sweating, tremor, palpitation, and anxiety). Beta-blockers, when prescribed to patients with IDDM mask the alarming features of hypoglycemia and leading to serious metabolic and neuropsychiatric complications. Severe hypoglycemia can present with delirium.

- Thyroid Dysfunctions:

Hyperthyroidism can present with anxiety, panic attacks, mania, psychosis, and delirium. **Hypothyroidism** can present with depression, psychosis, and dementia. Thyroxin supplement may induce anxiety features (tremor, palpitations, and worries).

- Hypercortisolism:

Cushing's disease results from excessive ACTH secretion due to a pituitary adenoma, whereas **Cushing's syndrome** includes all causes of excess cortisol; it may result from exogenous administration of glucocorticoids, adrenal tumors, or other ectopic ACTH-producing tumors. Excessive steroids in the body may induce anxiety, depression, mania, psychosis, and delirium. Depression in Cushing syndrome is reported to improve with treatment of the syndrome. Corticosteroids therapy (e.g. SLE, MS) is associated with predominance of manic episodes and frequent psychotic symptoms. Antipsychotics (e.g. olanzapine 10mg) can be given to control such complications.

Infectious Diseases

- **TB**: Psychiatric symptoms have long been recognized as common complications of anti-TB therapy (notably **INH** and **cycloserine**); depression, attempted suicide, irritability, mania, and psychosis. There have been recent concerns over the possible drug interactions between INH and SSRIs that were based on the ability of INH to inhibit MAO enzyme >> serotonin syndrome.

- HIV: depression in HIV-infected individuals is as high as 50%. SSRIs/SNRIs and interpersonal psychotherapy (IPT) can reduce depressive features in such patients. AIDS can present with cognitive impairment; delirium or dementia.

- **Hepatitis C:** interferon therapy >>> depression: give an SSRI (see gastroenterology).

Dermatology

Psycho-dermatologic disorders (e.g. psoriasis, vitiligo, alopecia, pruritis ...) are conditions involving an interaction between the mind and the skin. The skin is an interface, attacked by external factors, as well as expressing psychic conflicts. Many dermatological diseases have a direct or indirect link with psychiatric pathology. Many skin diseases are cosmetically disfiguring and adversely affecting quality of life. They can be treated with psychotherapeutic techniques and psychotropic drugs.

Gynecology (Important)

- **Premenstrual Syndrome (PMS):** A group of physical and **psychological features beginning a few days before and ending shortly after the onset of menstrual period**. Psychological features: tension, anxiety, irritability, nervousness and low mood. Physical features: abdominal distension and pain as well as breast tenderness. The condition may lead to social, academic or marital dysfunctioning. No specific cause has been found. **Treatment: Support**, identify and treat familial and social stresses, **cognitive-behavior therapy** (CBT). Many drugs have been tried (hormones, psychotropic drugs...) with varying degrees of response.

- Amenorrhea due to antipsychotics: females with psychotic disorders treated with antipsychotics are prone to develop amenorrhea because of high prolactin levels (prolactin secretion is usually inhibited by dopamine and most antipsychotics have antidopaminergic effect notably risperidone). Some gynecologists prescribe dopaminergic medications (e.g. bromocriptine) to reverse amenorrhea in psychotic females, which may aggravate their psychosis. Quetiapine (a second-generation antipsychotic) has no effect on prolactin, thus it is a good choice in such cases.

- **Pregnancy:** Minor psychological symptoms are common during pregnancy, especially in the first and third trimesters (anxiety, irritability and minor lability of mood). Risk increases in case of unwanted pregnancy, marital conflicts, and previous history of abortion or depression and in adolescent mothers. **Management consists of:** counseling, increased support by medical services as well as family and marital therapies. <u>Medications are rarely used and</u>

should be avoided in the first trimester.

Lithium may cause congenital cardiac anomalies. Valproate may cause neural tube defects (e.g. spina bifida). Tricyclics may be indicated in second and third trimester.

- **Abortion**: Depressive mood is an expected reaction especially if there is a previous history of abortion, a past psychiatric history or poor marital adjustment. Counseling, reassurance and supportive therapy are indicated.

From the Slides

Treatment of mania & psychosis during pregnancy

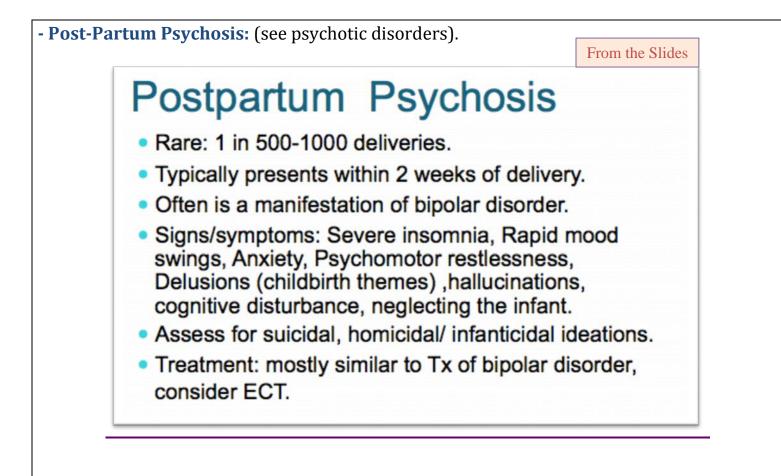
- Typical antipsychotics esp. high potent considered as relatively safe compared to other medications.
- Atypical antipsychotics: no major malformations were found. However, limited data so far, Metabolic syndrome is more with olanzapine and clozapine.
- Lithium is considered first line mood stabilizer during pregnancy despite rare cardiac anomaly.
- Lamotrigine is the safest anticonvulsants mood stabilizers.
- Avoid valproate & carbamazepinein child bearing women and pregnancy

- Maternity Blues: Brief emotional disturbance (tearfulness, irritability, crying, lability of mood, insomnia and poor concentration) starts 2-3 days after delivery, remains for few days. Very common (about 50 %), more common in primiparous and those who complain of PMS. May be related to hormonal changes. No specific treatment. General measures are enough; reassurance, support ... etc.

- **The Menopause**: Menopausal women often complain of multiple physical symptoms including sweating, dizziness, flushing and headache. No strong evidence that depressive symptoms are more common in menopausal women than in non-menopausal. Psychiatric symptoms at menopause could have several causes: altered perception of the self, altered relationship with husband, children leave home (empty nest syndrome), Parents become ill or die. Oestrogen deficiency has been suggested but the results of oestrogen replacement were much debated. Depression and anxiety in menopausal women can best be treated with the usual methods that have been shown to be effective for these disorders at any other time of life.

- Infertility: It can be complicated by feelings of depression, guilt, and in adequacy frequently accompanied the perception of being infertile. Psychotherapy gives good results.

- Post-Partum Depression (see mood disorders).



<u>Surgery</u>

Scenario3:

Mrs. Fatima is a 34- year- old woman hospitalized for cholecystectomy. She became excessively worried about the operation procedures and complications. She refused to sign consent for the operation.

Surgical wards often have psychiatric patients who may disrupt the smooth functioning necessary for a surgical unit and can result in danger to the patient or others (e.g., staff, visitors, other patients).

Common psychiatric consultations in surgical ward:

There is a linear relationship between anxiety before and after surgery. Those who show more general ability to cope with stress suffer fewer post-operative psychiatric problems. Psychological preparations for surgery can reduce post-operative distress and problems.

Psychiatrists are sometimes asked to advise on the capacity to consent (see below) and management of patients with pain.

Delirium is common after major surgery especially in the elderly (see epidemiology of delirium). Adjustment disorders are common following mastectomy and after surgery that has not lead to the expected benefit. **Phantom limb sensations follow limb amputation.**

Organ transplantation is associated with certain psychosocial stresses that may cause anxiety or depression. Problems of transplant rejection are frequently associated with anger and low mood. Psychological symptoms may also occur as side effects of immunosuppressive drugs, steroids in high doses and antihypertensive drugs.

Clinical-legal issues

Does a mental illness imply a loss of autonomy & capacity to consent?

No, not all mental illnesses imply that. Only when a mental illness (e.g., dementia) results in a permanent impairment of understanding, judgment, and competence for decision-making. The physician then should consider alternative ways for decision-making, through official court proceedings such as guardianship, or proxy.

Durable Power of Attorney: It permits persons to make provisions for their own anticipated loss of decision-making capacity. The document permits the advance selection of a substitute decision maker who can act without the necessity of court proceedings when the signatory becomes incompetent through progressive dementia.

Respect for autonomy: Autonomy requires that a person acts intentionally after being given sufficient information and time to understand the purpose, benefits, risks, and costs of all reasonable options and decisions about his/her wealth, family, heath (e.g. providing or withdrawing consent).

Capacity to consent; ability to:

- 1- Understand information & options relevant to his condition.
- 2- Appreciate his own clinical situation (insight into the need for treatment).
- 3- Form a sound decision about his condition.
- 4- Provide a consistent choice.

Valid informed consent:

- 1- <u>Person:</u> has capacity to consent.
- 2- <u>Explanation</u> of sufficient information about the purpose, benefits, risks, and costs of all reasonable options and decisions concerning the matter in hand.
- 3- <u>Time</u> to understand and decide.
- 4- No coercion or deceit.
- 5- The right to withdraw consent.

Somatic Symptom and Related Disorders (Important)

These are a group of disorders in which physical symptoms are the main complaints and cannot be explained fully by a medical condition, a direct effect of a substance or a mental disorder. Psychological factors are judged to be behind the somatic symptoms and complaints. They usually lead to distress and/or functional impairment in social, occupational or academic aspects.

Somatic Symptom and Related Disorders (DSM -5):

Somatic Symptom Disorder. Illness Anxiety Disorder. Conversion Disorder (Functional Neurological Symptom Disorder). Psychological Factors Affecting Other Medical Conditions. Factitious Disorder.

Somatic Symptom and Related Disorders in DSM-5, somatoform disorders are now referred to as somatic symptom and related disorders. Diagnoses of somatization disorder, hypochondriasis, pain disorder, and undifferentiated somatoform disorder have been removed.

- Somatic Symptom Disorder:

Because the distinction between somatization disorder and undifferentiated somatoform disorder was arbitrary, they are merged in DSM-5 under somatic symptom disorder, and no specific number of somatic symptoms is required.

- Hypochondriasis (Illness Anxiety Disorder):

Hypochondriasis has been eliminated as a disorder, in part because the name was perceived as pejorative and not conducive to an effective therapeutic relationship. Most individuals who would previously have been diagnosed with hypochondriasis have significant somatic symptoms in addition to their high health anxiety, and would now receive a DSM-5 diagnosis of somatic symptom disorder. In DSM-5, individuals with high health anxiety without somatic symptoms would receive a diagnosis of illness anxiety disorder (unless their health anxiety was better explained by a primary anxiety disorder, such as generalized anxiety disorder).

- Conversion Disorder (Functional Neurological Symptom Disorder):

Criteria for conversion disorder (functional neurological symptom disorder) are modified to emphasize the essential importance of the neurological examination, and in recognition that relevant psychological factors may not be demonstrable at the time of diagnosis. Medically unexplained symptoms do remain a key feature in conversion disorder.

- Pain Disorder:

Pain with no adequate physical findings. It is not intentionally produced and not due to another psychiatric disorder (e.g. anxiety). It is inconsistent with anatomical distribution of the nervous system.

Most individuals with chronic pain attribute their pain to a combination of factors, including somatic, psychological, and environmental influences. In DSM-5, some individuals with chronic pain would be appropriately diagnosed as having somatic symptom disorder, with predominant pain. For others, psychological factors affecting other medical conditions or an adjustment disorder would be more appropriate.

- **Psychological Factors Affecting Other Medical Conditions and Factitious Disorder** This disorder and factitious disorder are placed among the somatic symptom and related disorders because somatic symptoms are predominant in both disorders and both are most often encountered in medical settings.

1- Somatic Symptom Disorder

بنت كانت تمشي وزلقت وجاها ألم في ظهر ها وراحت للمستشفى وسوت أشعة لظهر ها وطلع في احتكاك بسيط بين الفقرة الرابعة والخامسة (هذا الإحتكاك قد يكون عند كثير من الناس ولا يسبب مشكلة) ف المريضة كل ما حست بالألم تظن أن عندها مشكلة خطيرة فرراحت لعدة مستشفيات وتطلب فحوص عشان تكتشف المشكلة الي عندها والمريضة قلة طلعاتها وروحاتها وصرفت مبالغ كبيرة على المستشفيات عشان الفحوص .. يعني هناك مشكلة صحية ولكن تفاعل الشخص معها

Features:

Multiple somatic symptoms (affecting multiple organ system) that <u>cannot be explained</u> adequately based on physical examination and laboratory investigations. The symptoms are not intentionally produced. The disorder is chronic. It is an associated with excessive medical help-seeking behavior. It leads to significant distress and functional impairment (social, occupational...).

Epidemiology:

Women > men 5 – 10: 1. The lifetime prevalence in the general population is about 2%. More common in patients who bottle up their emotions and are less assertive.

Etiology:

Faulty perception and assessment of somato-sensory inputs due to characteristic attention impairment. Displacement of unpleasant emotions into a physical symptom. Alleviation of guilt through suffering. To obtain attention or sympathy.

DDx:

1. Medical diseases (e.g. SLE, endocrinopathies, chronic infections). 2. Depression (multiple somatic complaints are associated with low mood and/or loss of interest). 3. Anxiety (many physical manifestations of anxiety e.g. headache, low back pain are accompanied with excessive worries and apprehension). 4. Hypochondriasis (the emphasis is on over-concern with a serious disease). 5. Psychogenic pain disorder (limited to one or two pain symptoms).

Course and Prognosis:

Chronic fluctuating course with risk of multiple unnecessary operations and possible complications.

Management:

The number of medical staff involved is better <u>limited</u> (a single identified physician as the primary care taker) because opportunity of the patient to express somatic complaints increases when more than one physician is involved. <u>Arrange brief regularly scheduled</u> <u>appointments</u>, e.g. every month. Repeat physical examination.

Avoid additional diagnostic procedures. Shift the patient's awareness to psychological factors, and <u>support</u> her/him. <u>Minimize the use of psychotropic drugs</u> (patients tend to use drugs unreliably and erratically). <u>Encourage graded return to normal activities.</u> Antidepressants are useful when secondary depression develops.

2- Illness Anxiety Disorder (Hypochondriasis)

مريض شاب عمره 32 سنة توفى والدة بسرطان القولون وسوا 12 مرة منظار للقولون خايف يكون عنده سرطان في القولون وما عنده أي ألام أو أعراض .. يعني ما عنده عرض ولكن خايف من مرض خطير .. قد يكون المريض يروح للمستشفيات كثير عشان يبغى يكتشف المرض الي ما هو موجود أو أنه يبتعد عن المستشفيات تماماً خايف يكتشفون

Features:

Intense prolonged over-concern and preoccupation with physical health and/or <u>excessive</u> <u>worry about having a serious physical disease</u> (e.g. cancer, organ failure, AIDS, etc.). The preoccupation persists in spite of medical reassurance. It is not delusional in intensity. It causes social or occupational dysfunctioning. Associated Features: Doctor–shopping and deterioration in doctor-patient relationships, with frustration and anger on both sides. The patient often believes that he is not getting a proper medical care and may resist referral to psychiatry. Physical complications may result from repeated diagnostic procedures. Family and social relationships may become disturbed because the patient expects special consideration. Associated Psychiatric Disorders: major depression, dysthymic disorder, generalized anxiety disorder or adjustment disorders. Most of such patients have obsessional and anxiety personality traits.

Epidemiology:

Age: it can begin at any age. However, onset is thought to be most common between 25 – 45 years. It is thought to be more common in men, and those closely associated with the disease (e.g. relatives of a patient with cancer). The true prevalence is uncertain, but it is common amongst patients attending general medical clinics.

Etiology:

No specific cause has been detected; however, there are some etiological theories: 1. The patient amplifies his normal somatic sensations due to unrealistic interpretation of physical complaints, and misattributes pathological meaning (e.g., minor usual muscular chest pain is interpreted as a sign of cardiac disease). Most of such patients have obsessional and anxiety personality traits.

DDx:

1. Physical diseases (e.g. endocrinopathy). 2. Somatization disorder (the focus is on the symptoms and not on the over-concern with a disease). 3. Underlying other psychiatric disorders (depression – anxiety).

Course and Prognosis:

Usually chronic course with waxing and waning symptoms. Complete recovery occurs in some cases specially if there is underlying depressed or anxious mood. Presence of secondary gain (e.g. sick role) and personality problems are unfavorable prognostic factors.

Management:

1. Exclude a possible organic pathology. 2. Search for and treat any underlying depression or anxiety. (Hypochondriasis often improves when these conditions are treated; SSRIs can give good results).

A cognitive-educational approach: provide a more realistic interpretation of complaints (e.g. hyperarousal of the autonomic nervous system associated with exaggeration and misinterpretation of the consequences) explain the role of psychological factors in symptoms origin and fluctuation.

3- Functional Neurological Symptom Disorder (Conversion Disorder)

مريضة متزوجة قاعد تفتش جوال زوجها وتلقى رسالة رومانسية هي مرسلتها لزوجها والزوج مرسلها لوحدة ثانية ويوم دققت في باقي الرسائل اكتشفت أن زوجها متزوج عليها فجاها صدمة عاطفية قوية وبعد الصدمة صارت ما تقدر تتكلم (Aphonia)

Features:

Symptoms are related to the neurological system. <u>Sensory</u>: paraesthesia/partial blindness/deafness/... <u>Motor</u>: paralysis/paresis/aphonia/... <u>Pseudoseizures</u> and fainting: Pseudoseizures usually lack a number of features of the true epileptic seizures e.g. aura, cyanosis, physical consequences of seizure (tongue bite, trauma, incontinence) and do not occur in sleep. EEG findings are normal. Prolactin level usually increases within 3 hours of a

true seizure but not a pseudoseizure. Patient may be unconcerned about his symptoms (denial of affect) this is called "La belle indifference" or may also present in a dramatic or histrionic fashion. <u>Primary gain</u>: the reduction of inner tension and intrapsychic conflict after developing the physical disability through conversion. <u>Secondary gain</u>: the advantage that the patient gains, e.g. avoiding unpleasant duties. Conversion disorder occurs mainly in young females. It is more common among little educated persons, those with low intelligence and in low socioeconomic groups. Common associated disorders include anxiety and depressive disorders.

DDx:

1.Neurological diseases e.g. multiple sclerosis, stroke, optic neuritis, etc. (about 30 % of patients followed up later were discovered to have neurologic diseases). 2. Acute dystonic reaction (a side effect of antipsychotics). 3. Factitious disorders (Munchausen's syndrome: intentionally produced symptoms and sign to assume the sick role without external incentives. 4. Malingering: faked symptoms motivated by an external incentive e.g. to evade the police. Patient stops the symptoms when they are no longer useful.

Course:

Symptoms usually remit in a short time (hours, days). Recurrence is common.

Treatment:

Sympathetic approach with reassurance that the condition is a reaction to stress and will resolve overtime. This helps the patient let go of symptoms without confrontation. Avoid confrontation. Abreaction (drug-aided interview): using amytal or diazepam with suggestion can result in a dramatic resolution. Stressful events in the patient's life should be evaluated and appropriate intervention made: individual, marital or family therapy. Underlying psychiatric illness, such as depression, should be recognized and properly treated.

Prognosis:

Good prognosis is associated with acute onset, an obvious stressful precipitant, good premorbid personality, above average intelligence, a short interval between onset and treatment.

Diagnosis Distinction	Conversion Disorder	Factitious Disorders	Malingering
Intentions	No	Yes	Yes
Goal & motivation	Subconscious Secondary gain	Partially aware. To assume the sick role	Fully aware. Motivated by external incentives (e.g. to evade the police, avoid work, or secure financial compensation). They always have some apparent end of their behavior
Suggestibility	Yes	No	No
Course	Short & Recurrent	Depending on the goal	Varies depending on the goal

Comparison between conversion, factitious, and malingering disorders.

Summary

- Disease: pathophysiological process recognized by physicians. It is objective based on biological changes in the body.

- Illness: individual's understanding of disease. It is very subjective and varies from person to person.

- Illness Behavior can ranges from denying attitude to affirmative attitude.

- If sick role continues after the disease is over the sick role is maladaptive.

- Depression Increases morbidity and mortality in cardiovascular disease, stroke, diabetes, and cancer it can also Increased functional disability, decreased self-care.

- Antidepressants; reduce the risk of cardiovascular diseases in depressed patients.

- SSRIs safe and well-tolerated in cardiac but they might prolong bleeding time.

- Epilepsy increases the risk of depression and treatment of depression increases frequency of seizures.

-SLE can cause a range of neuropsychiatric symptoms; cognitive dysfunction, hallucinations, delusions, depression, suicidal ideation, and personality changes in \geq 74 % of patients.

- Mania, when present, is usually a side effect of corticosteroid therapy.

- Patients with chronic renal failure are prone to have delirium because of uremia and electrolytes hemodialysis intoxication.

- Lithium is contraindicated in patients with renal diseases.

- Many patients deal with the knowledge of having cancer through the expected grieving process. BUT, it may precipitates an episode of major depression in 25%.

- Premenstrual Syndrome (PMS): A group of physical and psychological features beginning a few days before and ending shortly after the onset of menstrual period.

- Antipsychotics medications can cause amenorrhea and using dopaminergic medications to reverse the amenorrhea may aggravate the psychosis.

- Lithium may cause congenital cardiac anomalies. Valproate may cause neural tube defects.

- Maternity Blues: Brief emotional disturbance starts 2-3 days after delivery, remains for few days. Very common and it have no specific treatment.

- Delirium is common after major surgery especially in the elderly.

Diagnosis Gen		Course	Management		
Hypochondriasis (somatic symptom disorder + illness anxiety disorder)	M = F	Chronic, waxes and wanes	Do Allow patient role Concentrate on functions	AVOID Concentrating on Symptoms. Say (It is just in your mind, take it easy) Tests or Rx without Dx Unnecessary Referrals / consults	
Conversion disorder	F > M 2 - 10	Acute or sudden remit in about 2 w recur in 25%	Frequent, short visits Single doctor Group therapy May individual Tx Drug treatment for psych co-		
Pain disorder (subtype of somatic symptom disorder)	M = F	Can be acute or chronic	for psych co- morbidity. SSRIs, high doses for Hypochondriasis		
Factitious Disorder	F > M	Episodic	and BDD		

MCQ's

1) 78 year old diabetic woman seen in the emergency room. Over the past 3 days she seems confused and cannot identify the place correctly. What is the most important immediate management?

- A. Check her plasma glucose level.
- B. Ask her about past suicidal attempts.
- C. Give her IV diazepam 10 mg.
- D. Hospitalize her in the psychiatry ward.
- 2) A 30 year old woman came to primary care clinic asking for investigations because she has shoulder pain, headache, abdominal distention, numbness in her left arm, nausea, and discomfort in her pelvis for 2 years. The following is the most important first management step:
 - A. Explore psychosocial stresses.
 - B. Hospitalize her for close observation.
 - C. Investigate her for Tuberculosis.
 - D. Request a personality test.

3) 34 year old man has 7-month history of headache, dizziness, shortness of breath. What is the initial management step?

- A. Propranolol 20mg.
- B. Cognitive therapy.
- C. Brain CT.
- D. Thyroid function test.

4) 64 year old woman with 6 months history of stroke seen at neurology clinic, has low mood, loss of interest and crying. Which one of the following medications is effective and safe for her symptoms?

- A. Resperidone.
- B. Amitriptyline.
- C. Escitalopram.
- D. Carbamazepine.

- 5) 17- year-old girl has several unpredictable episodes of distortion of sensations and perception associated with memory disturbances and fear followed by periods of confusion. In between the episodes she is completely normal. The most likely diagnosis is:
 - A. Schizophrenia.
 - B. Somatic symptom disorder.
 - C. Complex partial seizures.
 - D. Conversion disorder.
- 6) 18-year-old female, brought to the emergency department by her parents with a sudden episode of right hand weakness and muteness the night before exam. Her clinical assessment revealed no real neurological deficit. The most important management step is:
 - A. Intramuscular injection of haloperidol.
 - B. Drug-aided interview with suggestions.
 - C. Arrange brief regular appointments.
 - D. Confront her that she is malingering.
- 7) A 42-year-old man has repeated chest pain, extreme worries about his heart, and afraid of sustaining ischemic heart disease. His treating physician reassured him "nothing wrong in your heart". His preoccupation persists in spite of medical reassurance. The next management step would be:
- A. Confrontation.
- B. Excluding anxiety.
- C. Amitriptyline.
- D. Repeated reassurance.
- 8) A 48-year-old woman was commenced on interferon treatment for hepatitis C infection. She then developed depressive features. The appropriate medication would be:
 - A. Imipramine.
 - B. Alprazolam.
 - C. Sertraline.
 - D. Methadone.

Answers

1	2	3	4	5	6	7	8
Α	Α	D	С	С	В	В	С



For any suggestions: Dr.7ossam1993@gmail.com