







# Depression

[..وَمَا تَوْفِيقِي إِلَّا بِاللَّهِ..]

Objective	Color index
<ul> <li>To understand what depression is.</li> <li>To know the various types of depression.</li> <li>To recognize features of depression.</li> <li>To be aware of pathophysiology/etiology of depression.</li> <li>List the diagnostic criteria for main Depressive disorders according to DSM-5.</li> <li>Discuss the treatment plan.</li> <li>Adjustment disorder</li> </ul>	Black: Main content. Gray: Notes. Red: important

## Introduction

### Case:

Ms. Amal is a 27-year-old single woman works as a teacher. She has a five-week history of <u>low mood</u>, chest tightness, <u>poor appetite</u>, <u>disturbed sleep</u>, excessive <u>guilt feelings</u>, and <u>loss of interest in her social</u> <u>activities</u>.

### Sadness vs Depression

#### **Sadness:**

experience from time to time, following defeats and losses. There is a relative paralysis of mind and a retardation of the body: one's posture is slumped and there is a feeling of exhaustion and deflation. The down-turned mouth and furrowed brow are universal expression of sadness.

- Healthy people have a wide continuum range of feelings with normal variations.

[ usual sadness \to usual happiness]1.

#### **Depression:**

condition characterized by <u>unremitting sadness</u>, <u>reduced energy, and anhedonia</u> "lack of pleasure" lasting for at least **2 weeks**, and usually triggered by stress.

Depression is **not alleviated by activities** that might have been **enjoyable in the past.** 

Prolonged unusual sadness/lack of pleasure/others features that have adverse effect on functioning. Body physiology is adversely affected (HPT axis).

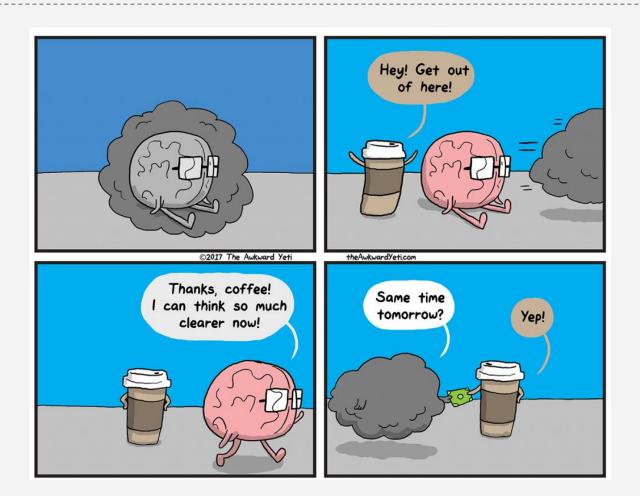
### The depression is maybe primary or secondary to other diseases:

Depression secondary to:	Primary depression
<ul> <li>Medical d. (e.g., hypothyroidism).</li> <li>Medications (e.g., OCPs)<sup>2.</sup></li> <li>Substance Abuse.</li> <li>Brain insult (e.g., CVA).</li> <li>Others</li> </ul>	<ul> <li>Persistent depressive disorder (dysthymia)</li> <li>Major depressive disorder / episode</li> <li>Depressive episodes of bipolar disorder</li> <li>Substance/Medication-Induced Depressive Disorder</li> </ul>

## **Classifications:**

#### Types (DSM-5):

- 1. Disruptive Mood Dysregulation Disorder.
- 2. Major depressive disorder (MDD).
- 3. Persistent depressive disorder (Dysthymia).
- 4. Premenstrual Dysphoric Disorder.
- 5. Substance/Medication-Induced Depressive Disorder.
- 6. Depressive Disorder Due to Another Medical Condition.
- 7. Other Specified Depressive Disorder
- 8. Unspecified Depressive Disorder.



## Introduction

## **Etiology**

#### **Interaction between Bio-psycho-social factors:**

- 1. Biological factors
  - Neurotransmitters (5-HT & NE & DA) Decreases of NT.
  - Limbic system
  - Hormones (Abnormalities in Neuroendocrine Function (abnormal diurnal variation in cortisol production, hypothalamic-pituitary-adrenal axis, GH)

#### 2. Psychological factors

- Loss of a parent before 11 years old
- Cognitive distortions ( Negative thoughts about self, the world, and the future).
- 3. Genetic factors: Genetic (70-90% in the monozygotic twins compared with 16-25% the dizygotic twins)

#### 4. Social factors

Social stressors

### Features and clinical findings

- Unusual sadness or irritability (low mood)
- Anhedonia. Inability to enjoy anything
- Crying spells
- Feeling empty
- Hopelessness
- Loss of warm feelings for family or friends
- Guilt Feelings and self blame Loss of self esteem
- General slowing down
- Neglect of responsibilities and appearance
- Poor memory
- Change in menstrual cycle (amenorrhea).
- Several immunological abnormalities

(e.g. low lymphocytes) increasing the risk to infection

- Inability to concentrate
- Difficulty making decisions
- Suicidal thoughts, feelings or behaviors
- Lack of energy
- Change in appetite and sleep (usually reduced but in some patients increased).
- Weight loss or gain
- Sleep disturbances
- Loss of sexual desire
- **Unexplained headaches** or backaches
- Turning downwards of corners of the mouth.
- Pain threshold becomes low (gate theory/serotonin).
- Psychotic Features Associated with Severe
   Depression. Eg :auditory hallucination or Visual hallucinations and Delusions

### Differential diagnosis

#### **Other Psychiatric disorders:**

- o Adjustment disorder with depressed mood.
- Schizophrenia, schizoaffective disorder.
- Anxiety disorder.

#### Depression secondary to medical diseases:

- Hypothyroidism (40%) Diabetes mellitus, Cushing's disease (60-80%), Parkinson's disease (35%)
- MI, Dementias, HIV/AIDS
- Stroke/CVA (35%).
- o <u>Carcinoma</u> (especially of the pancreas and lungs).
- o Autoimmune diseases; **SLE**, multiple sclerosis.

#### **Depression secondary to medications:**

- o Antihypertensives (e.g. beta-blockers, methyldopa, reserpine & Ca-channel blockers).
- o Steroids.
- o Bromocriptine & L-dopa.
- o Indomethacin.
- o secondary to substance abuse: alcohol, cannabis, Amphetamine
- Isotretinoin (Roaccutane): treatment of acne.
- Oral contraceptives

## **Depressive Disorders**

## 1- Major depressive disorder (MDD).

## **Specific Etiology**

Bereavement, Grief, Mourning: Psychological reactions of those who survive a significant loss.

- **Mourning** is the process by which grief is resolved.
- Bereavement the state of being deprived of someone by death & refers to being in the state of mourning, Normal Bereavement Reactions \*may resemble a depressive episode.
  - Stage 1: Shock & Denial
  - Stage 2: Anger
  - Stage 3: Bargaining
  - Stage 4: Depression
  - Stage 5: Acceptance

## **Epidemiology**

- Lifetime prevalence is in the range of 15 25 %.
- More common in women than in men (2:1)
- The mean age of onset is about 40 years average (25 50 years).
- It may occur in childhood or in the elderly.
- In adolescents, it may be precipitated by substance abuse.
- More common in those who lack confiding relationship (e.g. divorced, separated, single...).

### **Diagnostic Criteria**

- ★ 5 (or more) symptoms + 2-week period + change from previous functioning (At least one of the symptoms is either: (1) depressed mood or (2) loss of interest or pleasure.) 1
  - 1. Depressed mood (e.g., feels sad, empty, hopeless)
  - 2. Markedly diminished interest or pleasure (in almost all activities most of the day, nearly every day)
  - 3. Significant weight loss or weight gain, or decrease or increase in appetite.
  - 4. Insomnia or hypersomnia.
  - Psychomotor agitation or retardation.
  - 6. Fatigue or loss of energy.
  - Feelings of worthlessness.
  - 8. Diminished ability to think/concentrate.
  - 9. Recurrent thoughts of death, recurrent suicidal ideation.
- symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- The episode is not attributable to the physiological effects of a substance or to another medical condition.
- The occurrence of the major depressive episode is not better explained by schizoaffective disorder, schizophrenia, schizophreniform disorder, delusional disorder, or other specified and unspecified schizophrenia spectrum and other psychotic disorders.
- There has never been a manic episode or a hypomanic episode.

#### **Prognosis Of MDD**

- A depressive episode may begin either suddenly or gradually
- Duration of an untreated episode may range from a few weeks to months or even years (6 months).
- Recovery (without treatment) within 3 months of onset of MDE (Major depressive episode) is 40% and within one year is 80% of cases<sup>2</sup>
- 20% will develop a chronic form of depression
- About 10 % will eventually develop a manic episode.

Grief vs MDD		
Predominant effect is <b>feeling of emptiness &amp; loss</b>	Persistent depressed mood and inability to anticipate happiness or pleasure	
Decrease in intensity over days to weeks	Depressed mood is more persistent.	
Pain may be accompanied by positive emotions & humor	Pervasive unhappiness and misery	
Preoccupation with memories of the deceased	Self-critical or pessimistic ruminations	
Self esteem generally preserved	Feelings of worthlessness and self- loathing	
Death & dying focused on the deceased & about jointing the deceased	Thoughts are focused on ending one's own life because of feeling worthless.	

- One of the 5 symptoms should include Low mood or lack of interest or both. To diagnose with depression.
- Why do we treat then? To prevent relapse.

## **Depressive Disorders**

## 2- Persistent Depressive Disorder (Dysthymic Disorder)

## **Epidemiology**

- Men = women.
- Prevalence among the general population is 5-6 %.
- In general psychiatric clinics is 30-50%

### **Diagnostic Criteria**

- A. At least 2 years history of chronic low mood for most of day, for more days than not.
- B. During the 2-years period of the disturbance, No remission periods (being without symptoms) more than two months at a time.
- C. During low mood there should be ≥ 2 out of the following symptoms:
- low energy or fatigue.
- low self-esteem.
- feeling of hopelessness.
- insomnia or hypersomnia.
- poor appetite or overeating.
- poor concentration or difficulty in making decisions.

**D.**The occurrence of the PDD is not better explained by schizoaffective disorder, schizophrenia, schizophreniform disorder, delusional disorder, or other specified and unspecified schizophrenia spectrum and other psychotic disorders.

**E.** There has never been a manic episode or a hypomanic episode.

**F**.The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

D,E and F are common in both PDD and MDD.

### **Prognosis Of PDD**

- The onset is usually insidious before age 25, or late (older than 25).
- the course is chronic.
- Some patients may consider early onset dysthymic disorder as part of life.
- Patients often suffer for years before seeking psychiatric help.
- Recovery in persistent depressive disorder symptoms are <u>much less likely to resolve without treatment</u> than they are in a major depressive episode.
- Factors predictive of poorer long-term outcome include presence of **anxiety.**
- The prognosis is good with treatment.(the treatment is long-life treatment)
- HOWEVER, about 25 % of patients never attain a complete recovery.

## 3-Adjustment disorder.

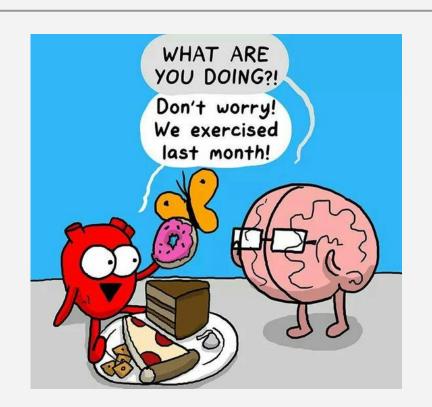
The adjustment disorders: emotional response to a stressful event.

The characteristic key points: \*crying, not sleeping, stressed out.\* but Without lack of interest or depressed mood. \*it involves sadness which is transient eg: ( the sadness reduce in the weekend )

- The stressor involves financial issues, a medical illness, workplace difficulties, or a relationship problem.
- The symptoms must begin within 3 months of the onset of the stressor and must remit within 6 months of removal of the stressor.
- sometimes if the adjustment disorder Persist for long time it gets worse and then could be converted to depression (no longer adjustment disorder)

#### **Course and Prognosis:**

- With appropriate treatment (not by drugs but by psychological support), the overall prognosis of an adjustment disorder is generally favorable.
- Most patients return to their previous level of functioning within 3 months.



## **Depressive Disorders**

## 4- Perinatal/Post-partum Depression

- About 10 15 %.
- In late pregnancy /within 6 weeks of childbirth (10–14 days after delivery).
- If not treated may continue for 6 months or more and cause considerable family disruption.
- It is associated with increasing age, mixed feelings about the baby, physical problems in the pregnancy and prenatal period, family distress and past psychiatric history.
- May be associated with irritability, self-blame and doubt of being a good mother, excessive anxiety about the baby's health and death wishes.
- Counseling, additional help with child-care may be needed. Antidepressants or ECT are indicated if there are biological features of depression.

## Management/Treatment

#### **Investigations:**

Blood work (CBC with differential, TSH, blood glucose, electrolytes,

Ca, Mg, vitamin B12, folate, liver and renal function tests, urine ,toxicology screen, sleep study).

### **Medications (Antidepressants)**

(SSRIs) and (SNRIs).

- Antidepressant effect requires a period of time, usually 3-5 weeks.
- Avoid Tricyclic/Tetracyclic in suicidal patient because of cardiotoxicity in overdose.
- continued for 6-9 months after clinical recovery, to reduce the rate of relapse.

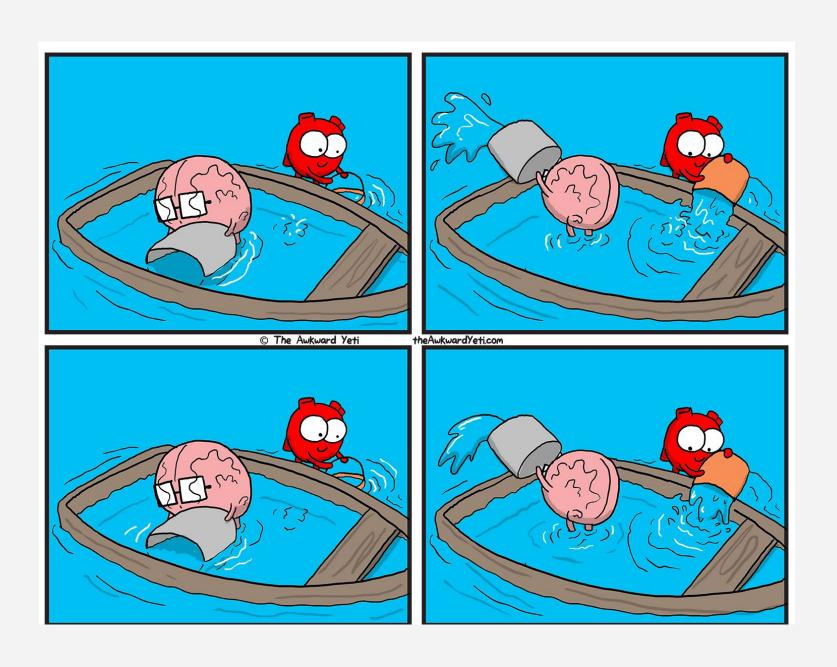
#### **Brain stimulation**

- Electroconvulsive therapy (ECT):
- 1- Fast action.
- 2- in severe depression, with severe neurovegetative symptoms/suicidal, homicidal & psychotic features.
- 3- Safer than antidepressants in pregnant depressed.
- rTMS.1
- Light therapy.<sup>2</sup>
- Vagal nerve stimulation.
- Deep brain stimulation.

#### The treatment also involve some Psychological and Social Approaches

#### Hospitalization is indicated for

- Suicidal or homicidal patient.
- Patient with severe psychomotor retardation who is not eating or drinking (for ECT).
- Diagnostic purpose (observation, investigation).
- Drug resistant cases (possible ECT).
- Severe depression with psychotic features (possible ECT).





## Answers Key!

1.A 2.C 3.C 4.A 5.D 6.B 7.B

#### 1-Which one of the following is a <u>major</u> symptom of depression?

- A. Lack of interest.
- B. Fatigue.
- C. Poor appetite.
- D. Sleep disturbances.

## 2-A 39 years old <u>married female</u> complaining of low mood, in ability to enjoy anything, lack of energy. <u>Without any medical diseases</u>. What is the most likely cause?

- A. Genetic.
- B. Schizophrenia.
- C. Oral contraceptives.
- D. Anxiety.

## 3-A 30 years old male present with <u>4 years</u> history of sadness most of the day. Insomnia. Low energy. What is the diagnosis?

- A. Major depressive disorder (MDD).
- B. Major depressive episode (MDE).
- C. Persistent depressive disorder (PDD) Dysthymia.
- D. Adjustment disorder.

## 4-25 years old woman complaining of 5 weeks history of unremitting sadness. <u>lack of interest</u>. Poor appetites. Insomnia. Diminished concentration. What is the diagnosis?

- A. Major depressive disorder (MDD).
- B. Major depressive episode (MDE).
- C. Dysthymia (PDD).
- D. Adjustment disorder.

## 5-A 33 years old male complaining of remitting sadness. With workplace problems. Insomnia. Poor appetite. What is the diagnosis?

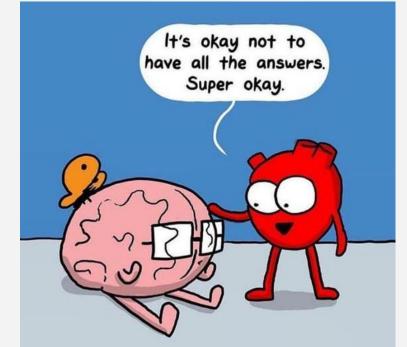
- A. Major depressive disorder (MDD).
- B. Major depressive episode (MDE).
- C. Dysthymia (PDD).
- D. Adjustment disorder

#### 6-What is postpartum depression?

- A. Depression during pregnancy
- B. Depression after childbirth
- C. Depression due to breastfeeding
- D. None of the above

## 7- Proper nutrition may improve your state of mind. Which of these vitamins may help ease depressed moods?

- A. Vitamin C
- B. Vitamin B-complex
- C. Vitamin A
- D. Vitamin E



## Good luck!

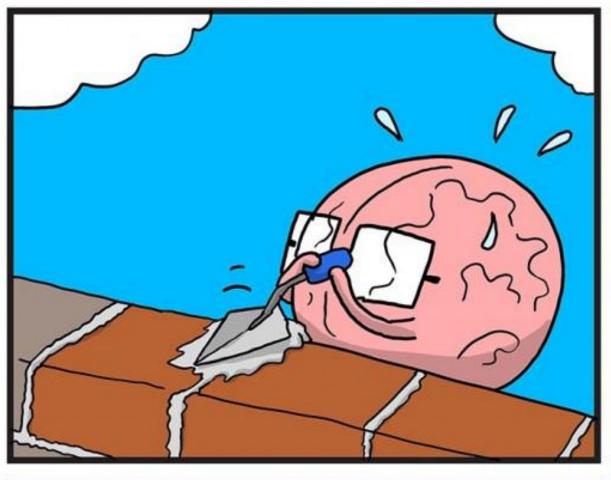
A pessimist sees the difficulty in every opportunity, an optimist sees the opportunity in every difficulty.

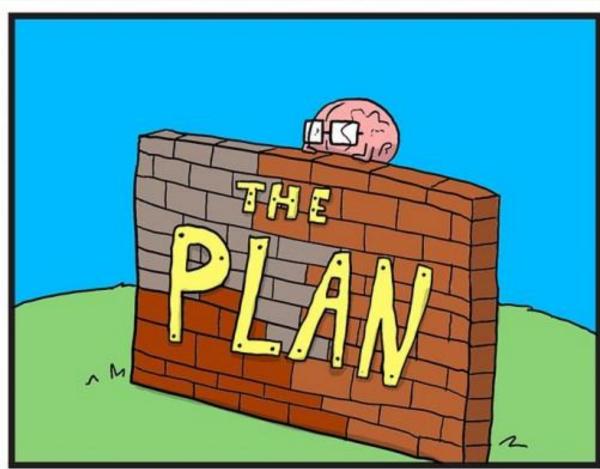
## Team Leaders

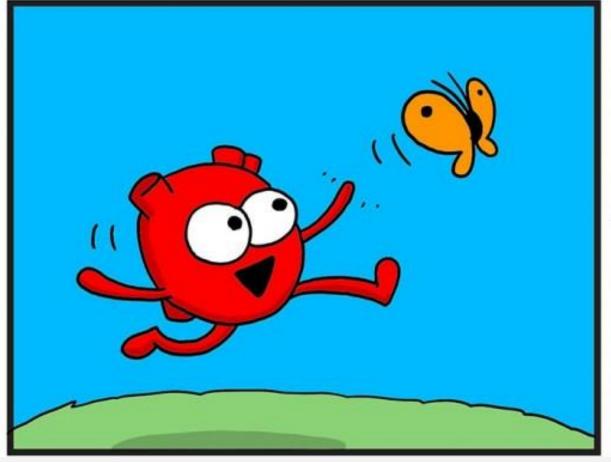
- Njoud Alali
- Abdullah shadid

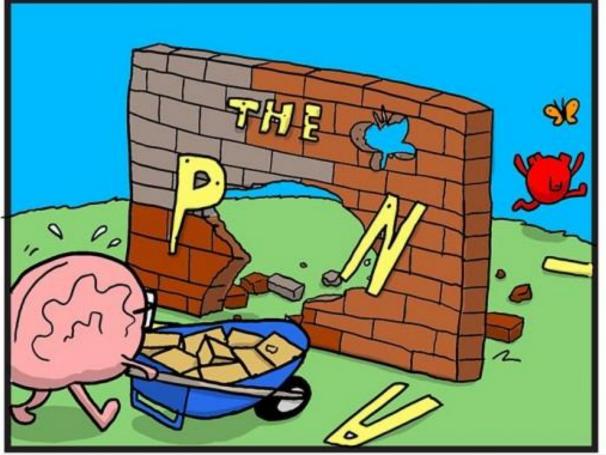
## Team Members |

- Renad Alhaqbani
- Shahad Alsahil
- Nouf Albrikan
- Sarah Alhelal
- Rawan Alzayed
- Faisal alqifari
- Mohammed alhuqbani
- khyal alderaan









+ Bader alshehri (didn't work on the lecture, just reviewed it and was used as a reference for the symptoms)