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**WHAT IS  
DEPRESSION?**

## INTRODUCTION

- Depression is a psychiatric disorder characterised by persistent feeling of sadness, depressed mood which leads to loss of interest in various activities causing significant impairment of daily life.
- It is a common mental disorder.
- Commonly it is associated with the elevation or lowering of persons mood.

## EPIDEMIOLOGY

- More than 265 million people affected globally.
- 10-15 % of general population experience clinical depression.
- More common in females.
- Close to 8 lakh people commit suicide globally.

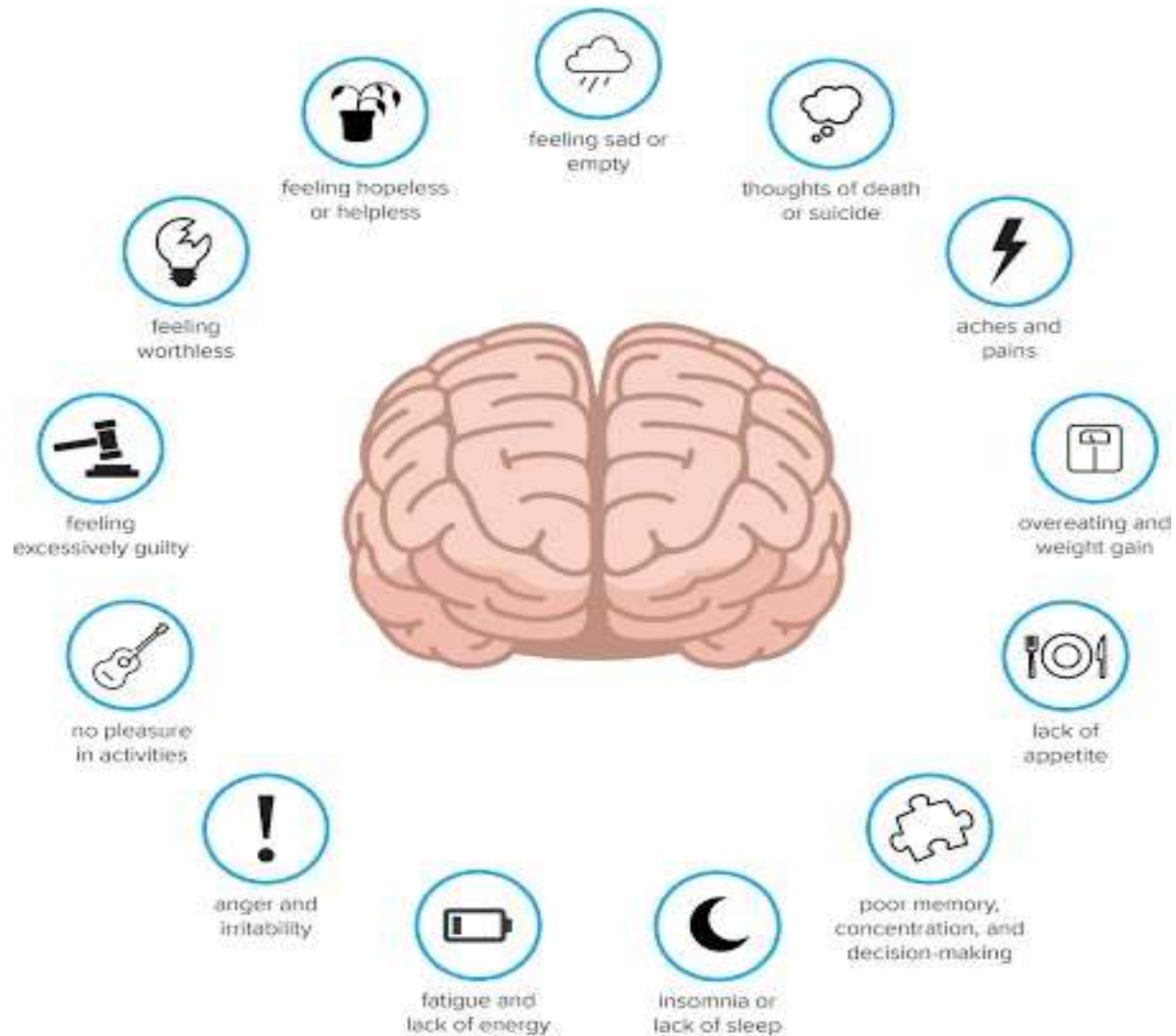
## ETIOLOG

- **Chronic illness:** cancer, AIDS, renal failure.
- **Stress:** stress increase cortisol level which may decrease serotonin level.
- **Drugs:** drugs like steroids, beta blockers, bezodiazepines, anti convulsants, statins.
- **Environmental factors:** death, sexual abuse, unemployment.
- **Genetics:** inherited from parents to children.

# SYMPTOMS

MEDICALNEWS TODAY

## Common Symptoms of Depression



# TYPES OF DEPRESSION

- **Major depressive disorder ( MDD)**

Symptoms persist for more than 1 week.

- **Persistent depressive disorder**

Persist for period of 2 years.

- **Bipolar depression**

Cycles of mood swings from mania to depression.

- **Postpartum depression**

Occur soon after child birth.

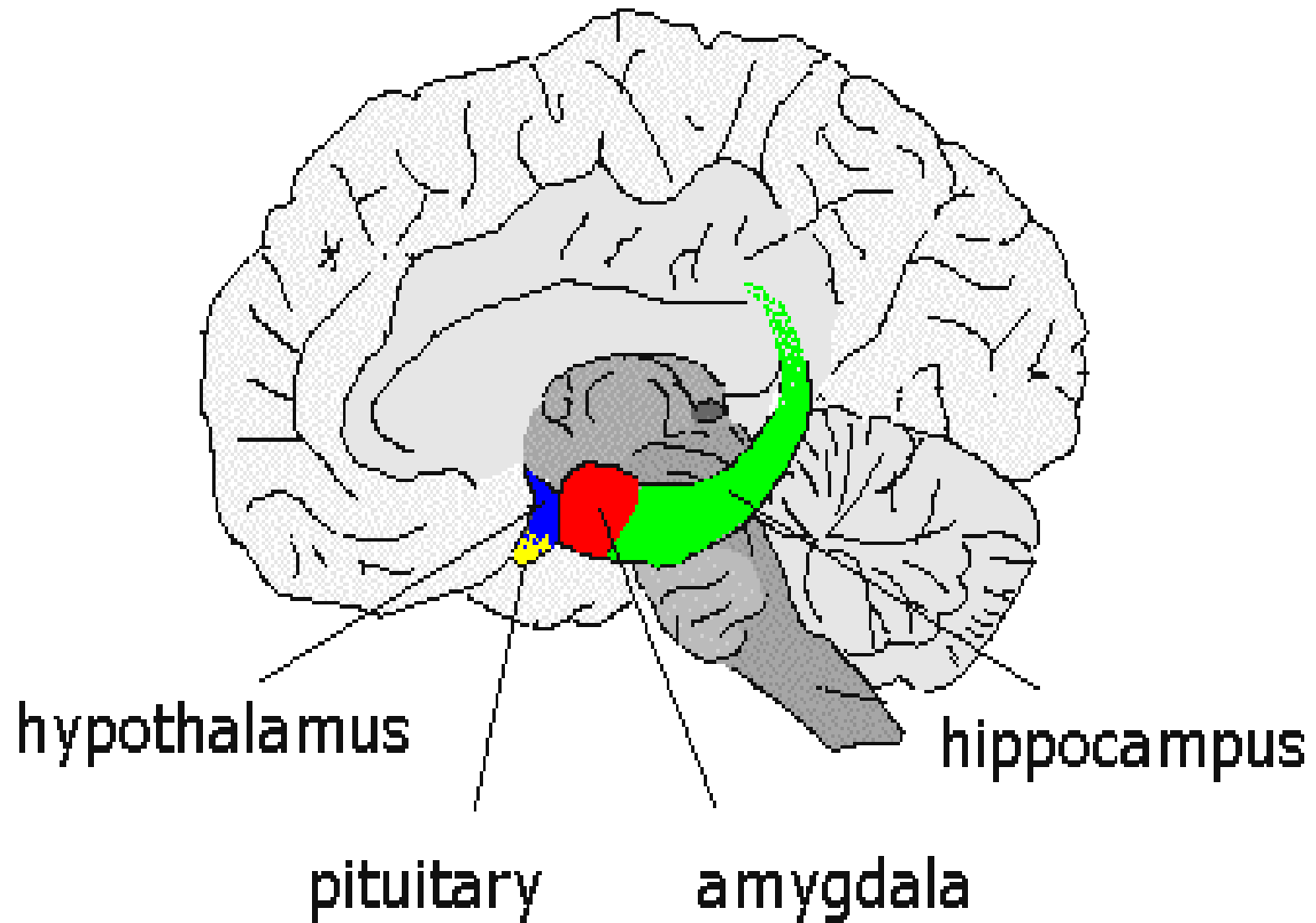
Hormonal changes.

- **Premenstrual dysphoric disorder (PMDD)**

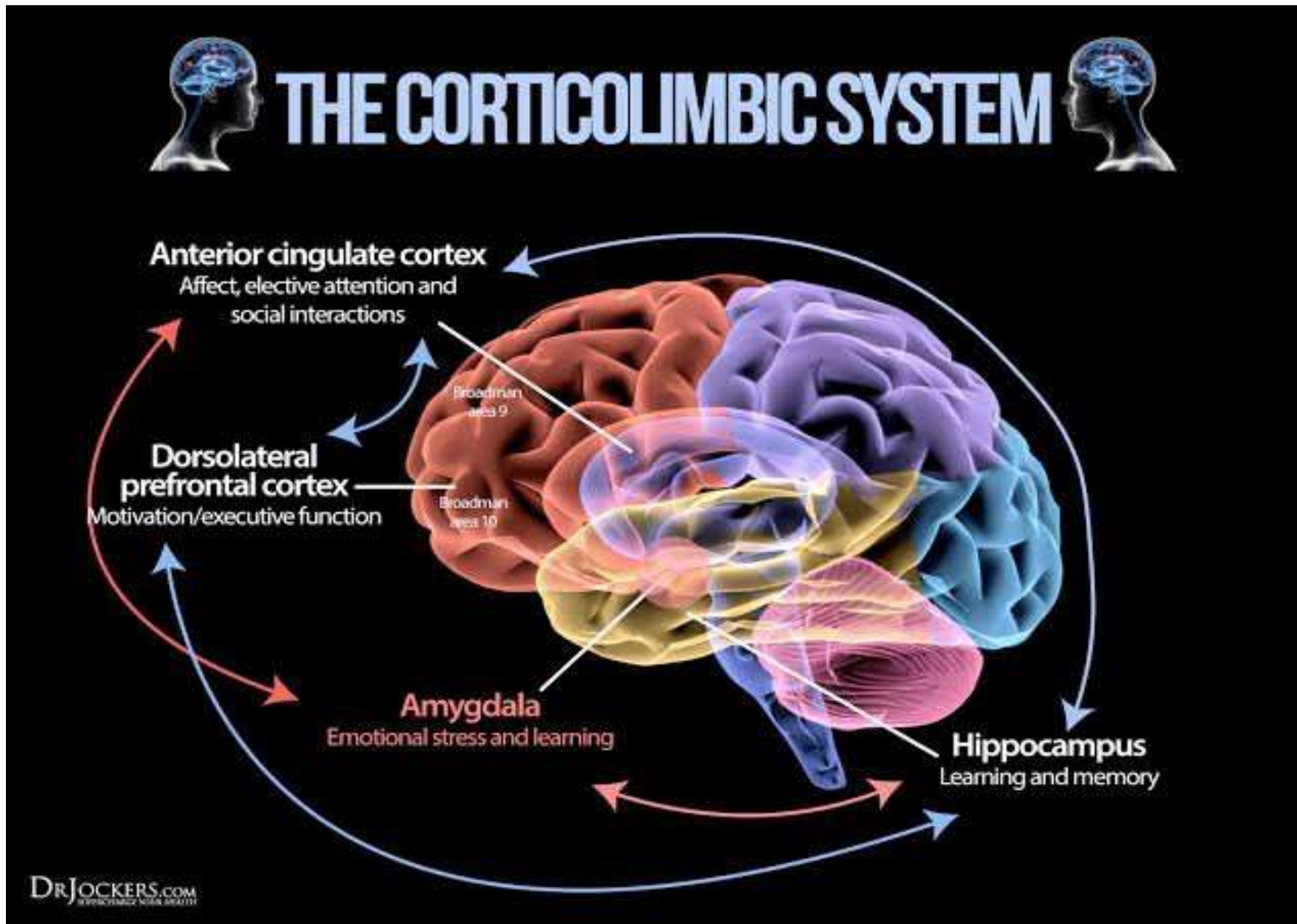
Significant mood symptoms during menstrual phase.

# PATHOGENESIS

## S



Connective abnormalities in cortico limbic network leads to depression.



Raphe nucleus- **serotonin**

Locus coeruleus- **Nor adrenaline**

Substantia nigra- **Dopamine**

- Normally, serotonin(happy chemical) level is high in excited state.
- Serotonin regulates Nor adrenaline or Not epinephrine.
- Nor adrenaline or not epinephrine regulates Dopamine .
- In case of depression, there is a low level of serotonin, Nor adrenaline and Dopamine.



## Dopamine hypothesis

- Neural circuits in the limbic region gets constricted
- Constriction of neural networks leads to decreased production of Dopamine.
- Or increased uptake(uptake is by the Dopamine decarboxylase or Monoamine oxidase called MAO) of dopamine.
- Causes less dopamine level in CNS.
- Finally, there is a decreased hippocampal volume
- Which leads to **depression**.

## DIAGNOSIS

- Persistent feeling of sadness.
- Low mood.
- Loss of usual activities for at least two weeks.

## TREATMENT

Use of Anti-depressant drugs.

# CLASSIFICATION OF ANTIDEPRESSANT DRUGS

- 1) **SSRIs:** Citalopram, Escitalopram, Fluoxetine, Fluvoxamine, Paroxetine, Sertraline.
- 2) **SNRIs:** Duloxetine, Venlafaxine, Desvenlafaxine, Milnacipram.
- 3) **SEROTONIN RECEPTOR ANTAGONIST:** Mirtazapine, Nefazodone, Trazodone, Atomoxetine, Bupropion, Mianserin.
- 4) **MAOIs:** Phenelzine, Selegiline, Tranylcypromine, Moclobemide.
- 5) **TCAs:** Amitriptyline, Clomipramine, Doxepin, Imipramine, Trimipramine, Reboxetine, Amoxapine, Desipramine, Maprotiline, Nortriptyline, Protriptyline.

