



# Major Depressive Disorder

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A psychiatric disorder characterised by consistent **low mood** and/or **anhedonia**, with impairments in **psychological function**.

## Epidemiology

- Lifetime risk of depression: 11-15%

## Risk Factors

- Female gender
- Age: first episode generally occurs between adolescence and mid 40's
- Fam hx of depression
- Hx of anxiety
- Chronic stress (family conflict, poverty, child abuse, early life trauma)
- Low SES
- Other chronic conditions/psychiatric conditions
- Personality/temperament (behavioural inhibition, neuroticism, negative emotionality)

## Protective Factors

- High quality interpersonal relationships
- Emotion regulation capacity
- Coping mechanisms/strategies

## Pathophysiology

- Due to biological and psychological factors
- Theorised deficiencies in certain neurotransmitters
  - Serotonin: sleep, appetite, mood
  - Dopamine: influences movement, motivation, involvement in reward system
  - Noradrenaline: motivation & reward

## DSM-V Criteria

**A.** Must have **≥1** of the underlined symptoms **and** **≥4** of the other symptoms (≥5/9 criteria in total) present for at least **2 weeks**.

### Acronym: M-SIG-E-CAPS



Mood: low/depressed



Sleep disturbance: hypersomnia/ insomnia



Interest loss (anhedonia)



Guilt



Energy low (fatigue)



Concentration: low or impaired cognition/ indecisiveness



Appetite/ weight changes: increase or decreased



Psychomotor changes: agitation or retardation



Suicidal thoughts

**B.** Symptoms cause significant distress or impairment in functioning.

**C.** Episode is not attributable to physiological effects of a substance or to another medical condition.

**D.** Not better explained by other psychiatric disorders.

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

## Screening Tools

- K10 checklist (depression + anxiety in the last 4 weeks)
- DASS-21 (depression + anxiety + stress)

## Mental State Examination

Appearance	Mismatched clothing, unkempt, may be underweight, signs of deliberate self-harm
Behaviour	Down-cast eyes, stooped posture, psychomotor retardation, omega sign ('furrowed brows')
Speech	Quiet and slow speech, monotonous, often poverty of speech
Mood	"Low", "depressed", "worthless", "hopeless"
Affect	Depressed affect, minimal/nil reactivity, flat, generally mood congruent
Thought	Thought form: usually logical Flow: rumination Content: negative thoughts, sadness, guilt, self-deprecating Often poverty of thought May express suicidal ideation or deliberate self-harm Delusions: generally nihilistic, may present with Cotard's syndrome
Perception	Auditory/visual hallucinations only present in MDD with psychotic features
Insight	May be limited
Judgement	Grossly intact
Cognition	Generally no issues but may perform poorly on MMSE due to lack of concentration/motivation



## Investigations

Test	Rationale
Bedside ECG	Exclude long QT (side-effect of many antidepressants)
FBE, UECs, LFTs	Antidepressants can affect WCC + kidney/liver function
ESR/CRP	If suspecting infection as a cause for symptoms
Iron, B12, folate	Anaemia can cause depression symptoms
TFTs	Thyroid dysfunction can cause depression (and anxiety) symptoms
EBV serology	EBV can cause depression symptoms
B-HCG	Pregnancy has implication on antidepressant choice
Urine drug screen	Considered if substance use likely
Consider MRI	If structural cause suspected

## Management



### Immediate

- Perform a thorough risk assessment
  - If risk is deemed high → admit (as either voluntary patient or involuntary patient using the mental health act)
- Contact family member if required
- Consider getting a collateral history
- Order preliminary investigations (as above)

### Psychological interventions

- Cognitive-behavioural therapy (CBT): effective for mild-moderate depression
- Interpersonal therapy (IPT)
- Practice mindfulness
- Apply principles of sleep hygiene
- Psychoeducation for patient and family members



### Long-term follow-up

- Referral to psychologist
- Ensure follow-up with GP or psychiatrist



### Biological interventions



- Start on antidepressant therapy: takes 4-6 weeks to reach therapeutic effect
  - *Note: the first 2-3 weeks on antidepressant therapy may be associated with an increased risk of suicidal ideation → must warn the patient of this and ensure adequate supports are in place*
- Continue antidepressant therapy for at least **6-12 months**
- **1st line:** SSRIs (most commonly used), SNRIs, NaSSAs, melatonergic agonists, NDRIs
- **2nd line (if non-responsive to 1st line):** TCAs, MAOis
- Other interventions to consider if non-responsive to pharmacotherapy: Electro-convulsive therapy (ECT), Repetitive transcranial magnetic stimulation (rTMS)

### Social interventions

- Optimise diet: some evidence for omega-3 polyunsaturated fats
- Encourage regular exercise and smoking cessation
- Optimise social supports
- Cease substance use
- Encourage returning to work/school + optimize supports



## Differentials

### Depressive disorder due to another medical condition

*e.g. Huntington's disease, multiple sclerosis, Alzheimer's disease, vitamin B12 deficiency, PCOS, lupus, etc.*

### Substance-induced depressive disorder

Symptoms of depression develop during or soon after substance intoxication or withdrawal.  
*e.g. corticosteroids, isotretinoin, oral contraceptive pill, some anticonvulsants, etc.*

### Persistent depressive disorder (dysthymia)

Incomplete depressive picture (<5/9 of the DSM-5 criteria met for MDD), lasts ≥2 years

### Disruptive mood dysregulation disorder (DMDD)

Severe recurrent temper outbursts, age of onset before 10 years

**Specifiers for depressive disorder** (applies to situations in which there are symptoms of depression but do not meet full criteria).

### Acronym: AMP-CAMPS

<b>D</b> epression with <b>A</b> nxious distress	Feeling keyed up/tense, restless, difficulty concentration, feeling something awful might happen, feeling of loss of control
<b>D</b> epression with <b>M</b> ixed features	Depressive symptoms and some manic/hypomanic symptoms present (e.g. elevated mood, grandiosity, etc.)
<b>D</b> epression with <b>P</b> sychotic features	Delusions are usually of: guilty, poverty, nihilism, persecutory Psychotic features are mood congruent
<b>D</b> epression with <b>C</b> atatonic features	Decreased mood, stupor, blunted affected, marked psychomotor retardation
<b>D</b> epression with <b>A</b> typical features	Inverse features present: over-eating, over-sleeping
<b>D</b> epression with <b>M</b> elancholic features	Severe anhedonia, early morning waking, significant weight loss, excessive guilt Warrants ECT
<b>D</b> epression with <b>P</b> ostpartum onset	Commonly occurs within first 4 weeks after delivery
<b>D</b> epression with <b>S</b> easonal pattern	Depressive symptoms are typically seen in winter

