DEPRESSION

WHEN TO SUSPECT/ RECOGNISE

Depressive syndromes are often seen in general population and present with varying degrees of severity and course to such an extent that depression in some form or other is represented in the maximum number of categories in International Classification of Diseases, ICD-10. Depression often presents spontaneously but can be a reaction to stress as in Acute Stress reaction and Adjustment disorder. It may have a mild and insidious onset with a chronic course as in dysthymic disorder or may have an acute presentation with a self limiting course as in Severe Depressive Episode. The episode may be single but is more often prone to recurrence as in Recurrent Depressive episode or may involve relapses to mania and hypomania as in Bipolar Disorder I & II respectively. There may be co-morbidities as in Mixed Anxiety Depressive Disorder or Post-Schizophrenic Depression. At the simple level, they can be easily diagnosed by a solo physician at the periphery. However some cases are difficult to diagnose, develop complications or require hospitalization, when they need to be referred to the appropriate higher level. The presentations appropriate for different levels are given below.

Simple presentation (for Level 1):

1. **Undue sadness and unhappiness:** Most depressed patients can be diagnosed if the answer is affirmative to any of the following two simple questions.

   (A) Have you been feeling sad all the time in the recent past?

   (B) Have you stopped feeling pleasure for things which gave you happiness earlier?

These simple cases can be treated with Tricyclic antidepressants (TCAs) like Imipramine, Amitriptyline or Nortriptyline in doses of 75-150 mg or Specific Serotonin Reuptake Inhibitors (SSRIs) like Fluoxetine at 20-40 mg/day for approximately 3 months.

2. **Presentation with somatic complaints only (Masked Depression):** One of the main reasons for underestimation of depressive disorders in general practice is that a large number of depressive patients present with only physical complaints. Symptoms like vague headache, dullness/ heaviness of head, head not working, nervous weakness, loss of vigor, indigestion, body aches and stiffness, sleep disturbances, scholastic backwardness of episodic onset, sudden onset delinquent behavior, anger and irritability should always invoke a suspicion of depressive syndromes especially in the absence of localizing signs of physical illness. At least one of the two questions in paragraph 1 A & B above when asked directly are affirmative in these cases and confirm the diagnosis. Even in the absence of such affirmation, if there are no localizing physical signs, a short course of a TCA or SSRI in doses suggested above for 4 weeks is indicated as a therapeutic trial in such cases. If such intervention provides relief, a diagnosis of depression should be confirmed and medical records updated accordingly.

3. **Co morbid panic or other anxiety disorder:** Panic disorder complicates major depressive disorder in 15%-30% of the cases. In such cases both depressive and anxiety symptoms respond to Tricyclic antidepressants (TCAs) and Specific Serotonin Reuptake Inhibitors (SSRIs), though anxiety and panic symptoms may worsen initially rather than alleviate. Hence in these cases, medication should be introduced at a low dose and gradually increased. Alprazolam may sometimes be used with benefit in conjunction with antidepressant medication but in general, benzodiazepines should not be used for patients with major depressive and anxiety symptoms. Obsessive-compulsive symptoms are also common in patients with major depressive disorder episodes for which Clomipramine (75-150 mg/day) and the SSRIs have demonstrated efficacy.

4. **Dysthymia:** Dysthymia is mild depression present over at least two years and usually has a chronic course. Antidepressant medications including tricyclic antidepressants, SSRIs, and Mono Amine Oxidase Inhibitors (MAOIs) have been found to be effective in the treatment of dysthymia and chronic major depressive

disorder. The combination of psychotherapy and medication has been shown to be more effective than medication alone in patients with dysthymia.

Difficult presentations (for Level 2):

1. All above presentations can be dealt with at Level 2. In addition, in view of the facility to admit patients, the following difficult cases can be managed as an emergency.
2. **Suicide risk:** If the patient has suicidal ideation, intention, or a plan, close surveillance with brief hospitalization is necessary. Most non psychiatric clinicians hesitate to enquire regarding suicidal thoughts for fear of inducing suicide in a vulnerable patient. In reality, suicide is an ultimate act of desperation which can hardly be induced by others. Most patients feel relieved when the clinician broaches the topic because they then feel that the clinician is sensitive and tend to open up. The topic can gently be approached by first asking the patient whether he/she, at any time felt worthless or better off dead. If the patient confirms such feelings, he/she may further be probed regarding suicidal thoughts, urges, plans or attempts made earlier in that order. Information in this regard will help the clinician assess suicidal risk and determine the level of supervision required. At Level 2/3, help of family members can be taken to arrange close supervision in the hospital 24/7 for nearly two weeks, the period which is required for drugs like Imipramine (75-150 mg/day) or Fluoxetine (20-80 mg/day) to become effective. The rapid means of treatment for suicidal depression is Electro Convulsive Therapy (ECT) which works within 2 applications given at twice weekly dosage. These patients should be referred to Level 4 for ECT at the earliest whenever feasible.

Difficult presentations (for level 3):

1. All above presentations become difficult if they do not respond to routine treatment described above, given for 4 weeks and should ideally be referred to Level 3/4. In addition, the following feature makes it a difficult presentation fit for Level 3.

2. Alcohol or substance abuse or dependence: Alcohol and substances are often abused by depressed people and are known to cause depression. It is advisable, if other factors permit, to detoxify such patients before initiating antidepressant medication. Hepatic dysfunction and hepatic enzyme induction frequently complicate pharmacotherapy of patients with alcoholism and other substance abuse.

Complex presentations (for level 4):

1. Any of the above unresponsive to treatment over 4 weeks or associated with following complications at any stage need to be referred to Level 4 immediately.

2. Psychotic features: Delusions and hallucinations constitute psychotic features. Major depressive disorder with psychotic features carries a higher risk of suicide than major depressive disorder without psychosis, and it constitutes a risk factor for recurrent major depressive disorder. Major depressive disorder with psychotic features responds better to treatment with a combination of an antipsychotic and antidepressant medication than to treatment with either alone. Lithium augmentation is helpful in some patients who have not responded to combined antidepressant-antipsychotic medication. Electro Convulsive Therapy (ECT) is highly effective in major depressive disorder with psychotic features and may be considered as first-line treatment for this disorder.

3. Catatonic features: Catatonic features in mood disorders are characterized by catalepsy or stupor or extreme agitation where urgent ECT is a first choice.

4. Major depressive disorder-related cognitive dysfunction (pseudo dementia): Some patients have both major depressive disorder and dementia, while others have major depressive disorder that causes cognitive impairment (i.e., pseudo dementia). In the latter, the treatment of major depressive disorder should reverse the cognitive dysfunction. It is vital that individuals with major depressive disorder related cognitive disturbance not be misdiagnosed and thereby denied vigorous antidepressant medication treatment or ECT.

5. Co morbid personality disorders: People with personality disorders, including obsessive compulsive, avoidant, dependent, narcissistic and borderline disorders are prone to major depressive disorder. Patients with virtually any form of personality disorder exhibit less satisfactory antidepressant medication treatment response, in terms of both social functioning and residual major depressive symptoms. Antisocial personality traits interfere with treatment adherence and development of a psychotherapeutic relationship.

6. Seasonal major depressive disorder: Some individuals suffer annual episodes of major depressive disorder with onset in the fall or early winter, usually at the same time each year. Some of these patients suffer manic or hypomanic episodes as well. The major depressive disorder episodes frequently have atypical features such as hypersomnia and overeating. The entire range of treatments for major depressive disorder may be used to treat seasonal affective disorder, either in combination with or as an alternative to light therapy.

7. Atypical features: Atypical major depressive features include vegetative symptoms of reversed polarity like increased rather than decreased sleep, appetite, and weight. Results of several studies suggest that SSRIs, Mono Amine Oxidase Inhibitors (MAOIs), and possibly bupropion (150-300 mg/day) may be more effective treatments for atypical major depressive disorder.

INCIDENCE OF THE CONDITION IN OUR COUNTRY

International studies, including those in India suggest uniform prevalence of mood disorders across the world. Life time risk for Major Depression ranges from 2-25% with most authorities agreeing to a range of 10-15%. It is about 10% in men and 20% in women. By 2020, the World Health Organization (WHO) expects Depression to be the second frequent cause of morbidity world over.

DIFFERENTIAL DIAGNOSIS

1. Anxiety Disorders
2. Personality Disorders
3. Substance abuse disorders
4. Dementia
5. Hypothyroidism
6. Systemic malignancies
7. Nutritional deficiencies
8. Metabolic disorders including diabetes, CKD & hepatic dysfunction

DIAGNOSTIC CRITERIA, INVESTIGATIONS, TREATMENT & REFERRAL CRITERIA

Listing the elaborate criteria for all depressive syndromes is beyond the scope of this chapter. Broadly a graduate doctor at Level 1 should diagnose and start treatment for people suffering from Mixed anxiety depressive disorder, dysthymia, and mild depressive episode with or without somatic complaints. A graduate doctor at Levels 2 should in addition be able to provide emergency in-patient care in case of depression with Suicidal risk. A post graduate Physician at Level 3 should in further addition diagnose and start treatment for moderate and severe depression with substance abuse and dependence. The psychiatrist at Level 4 will be competent to deal with the whole spectrum of depressive illnesses. Level 1-4 should be provided with copies of ICD - 10 and Diagnostic and Statistical Manual, 4th edition (DSM - IV) which can be easily referred to. Detailed record keeping at all levels should include a decent case notes/referral notes including history, examination details, investigations done and treatment given, register of OPD/IPD patients with their diagnosis, duration of treatment and follow-up, and drug register showing stock and issue of drugs. The essence of the diagnostic criteria of the most representative of the depressive syndromes, namely Depressive episode in ICD-10 is detailed below as a general guideline.

ICD-10 Criteria for diagnosis of Depressive Episode

a) First set of symptoms are usual and include

1) Depressed mood

2) Loss of interest or enjoyment

3) Reduced energy leading to increased fatigability and diminished activity

b) There are a second set of common symptoms which include

1) Reduced concentration and attention

2) Reduced self-esteem and self-confidence

3) Ideas of guilt and worthlessness

4) Bleak and pessimistic views of future

5) Ideas or acts of self-harm or suicide

6) Disturbed sleep

7) Diminished appetite

c) At least two of the symptoms of first set and two from the second set for a 2-week period would make a **Mild Depressive episode**

d) At least two of the symptoms of first set and three from the second set for a 2-week period would make a **Moderate Depressive episode**

e) All three symptoms of first set and at least four from the second set for a 2-week period would make a **Severe Depressive episode**

f) All three symptoms of first set and at least four from the second set including delusions, hallucinations and depressive stupor for a 2-week period would make a **Severe Depressive episode with psychotic symptoms**

g) Depressive symptoms of mild and moderate levels persisting for a very long duration (two years as per DSM-IV) constitute the criteria for **Dysthymic disorder.**

Essential diagnostic tests to diagnose the case (at different levels of care)

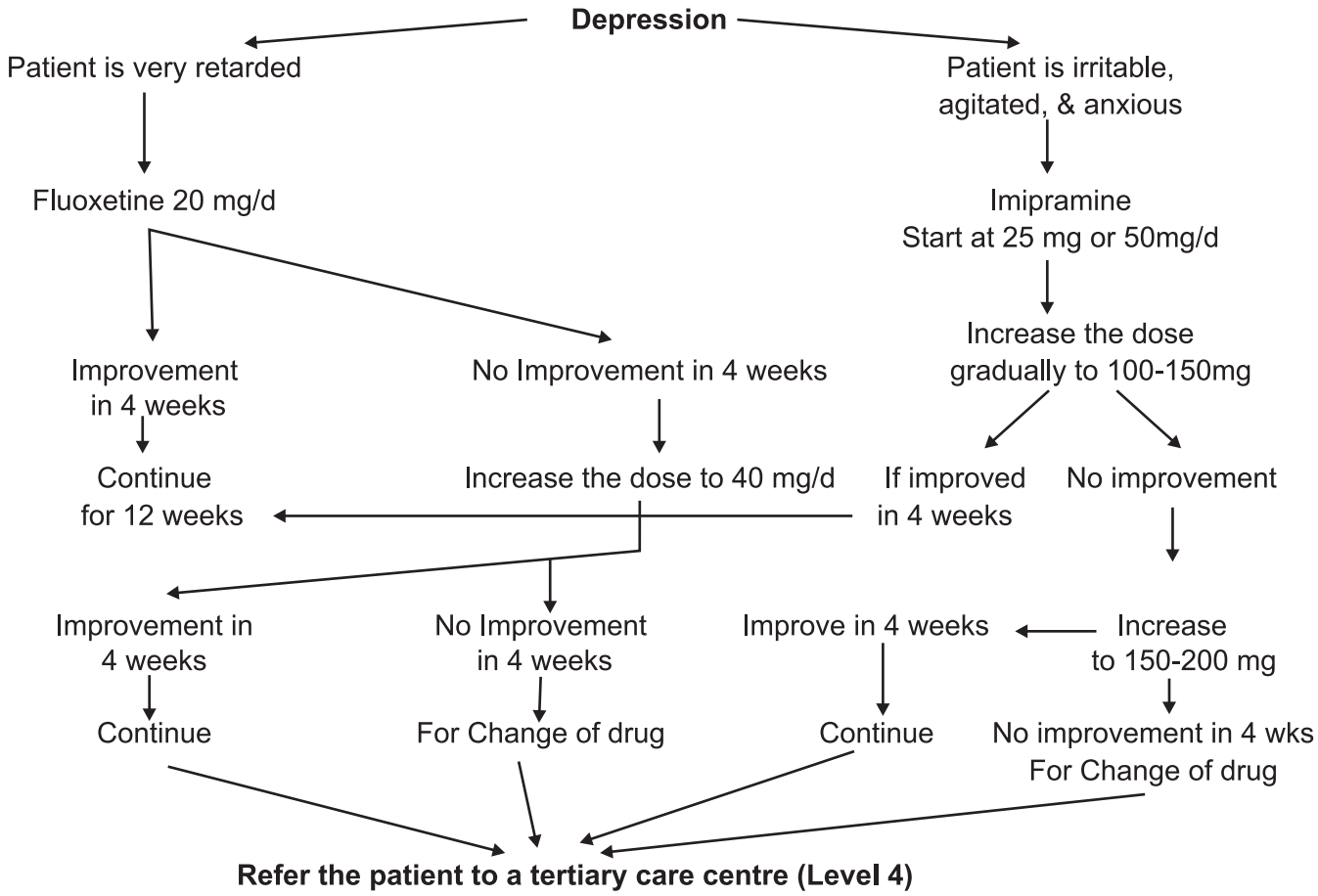
Diagnosis of the case is essentially clinical and by exclusion of other physical illnesses at Levels 1, 2 and 3.

At Level 4, in the District Hospital, Depressive scales and Screening tests as follows along with electronic versions, 01 laptop and Printer would optimize care.

1. Beck's Depressive Index (BDI)
2. Hamilton Anxiety Scale (HAS)
3. Bender Gestalt Test (BGT)
4. Minnesota Multiphasic Personality Inventory (MMPI)
5. Luria Nebraska Neuropsychiatric test Battery (LNNB)

Referral criteria at different levels of care

Acute phase treatment can be initiated at Levels 1 & 2 with/without minimal training. Difficult cases with suicidal risk are better handled at Levels 2/3/4. Complicated cases and those unresponsive to treatment at corresponding lower levels need to be referred to Level 4 straight away. Broad guidelines for management and referral at different levels are given in the logarithm below.



Treatment at different levels of care

(a) **Primary Health Care Level 1(solo physician clinic):** The general practitioner can diagnose and treat Dysthymia, mixed anxiety depressive disorders and mild depression with and without somatic complaints as already detailed in the earlier sections. Treatment consists of an acute phase, during which remission is induced and usually lasts 6 weeks and a continuation phase, with reduced dosage of the same drug during which remission is preserved and usually lasts 6 months. The maintenance phase, which involves mood stabilizers like lithium and sodium valproate is reserved for patients with recurrent depressive episodes, may last 2-5 years and ideally should be at Level 4.

(b) **Primary Health Care Level 2 (6-10 bedded Primary health centre):** In addition, at this level emergency hospitalization, close supervision and treatment can be provided to patients with suicidal risk.

(c) **Secondary Health Care Level 3 (30- 100 bedded Community Health Centre):** The physician can in addition to above diagnose and treat alcohol induced and alcohol associated depressive disorders.

(d) **Tertiary Health Care Level 4 (100 & above bedded District Hospital):** Psychiatrist available at Level 4 can provide successful treatment to the whole spectrum of depressive disorders. Psychiatrists initiating treatment for Severe depression with or without psychotic features have at their disposal a number of medications, a variety of psychotherapeutic approaches, electroconvulsive therapy (ECT), and other treatment modalities (e.g., light therapy) that may be used alone or in combination.

RESOURCES REQUIRED				
Level	**Manpower**	**Investigations-Equipment & Consumables**	**Drugs & Consumables**	**Equipment**
I	MO (with 3 months training in a Psychiatric centre)	ICD- 10 & DSM IV clinical criteria manuals	As per table below*	Nil
II	1 MO, 1 Lab Astt (both with 3 months training in a Psychiatric centre), 1 Pharmacist	ICD- 10 & DSM IV clinical criteria manuals	As per table below*	01 hospital bed with provision for close supervision
III	Physician(with one month training in a Psychiatric centre), 1 Psychiatric nursing assistant	ICD- 10 & DSM IV clinical criteria manuals	As per table below*	02 hospital beds with provision for close supervision
IV	Physician, Surgeon,Psychiatrist, Anaesthesiologist, 01 clinical psychologist,01 Psycho-social worker,06 Psychiatric Nurses (03 male & 03 female)	As per list below***	As per table below*	10 hospital beds with provision for close supervision & list of equipment listed below **

* **Drugs and consumables:** List of drugs to be made available at Levels 1 to 3 are basic TCAs and SSRIs as indicated in table below. All drugs listed in Table below need to be made available at Level 4. MMF needs to be worked at different levels based on the dependent population, morbidity worked out based on the epidemiological estimates above and duration of treatment envisaged at different levels as indicated above.

Tricyclics and tetracyclics	**Strength***	**Dose**
Tertiary amine tricyclics		
Amitriptyline	25-50	100-300
Clomipramine	25	100-250
Doxepin	25-50	100-300
Imipramine	25-50	100-300
Trimipramine	25-50	100-300
Secondary amine tricyclics		
Desipramine	25-50	100-300
Nortriptyline	25	50-200
Protriptyline	10	15-60
Tetracyclics		
Amoxapine	50	100-400
Maprotiline	50	100-225
SSRIs		
Citalopram	20	20-60
Fluoxetine	20	20-60
Fluvoxamine	50	50-300
Paroxetine	20	20-60
Sertraline	50	50-200

Dopamine-norepinephrine reuptake inhibitors		
Bupropion	150	300
Serotonin-norepinephrine reuptake inhibitors		
Venlafaxine	37.5	75-225
Venlafaxine, extended release	37.5	75-225
Serotonin modulators		
Nefazodone	50	50-300
Trazodone	50	75-300
Norepinephrine-serotonin modulator		
Mirtazapine	15	15
MAOIs		
Irreversible, nonselective		
Phenelzine	15	15-90
Tranylcypromine	10	30-60
Reversible MAOI-A		
Moc1obemide	150	300-600

****Equipment for treatment at different levels of care:** No additional equipment for treatment is envisaged at Levels 1, 2 & 3. Level 4 would require a Brief Pulse ECT machine with provision for one channel ECG and 2 channel EEG display. Provision should also be made for availability of Anaesthesiologist and Operation theatre facilities for modified ECT like Boyle's apparatus, electrical suction and resuscitation equipment twice a week.

***** **Investigative procedures** - No additional equipment envisaged at Levels 1 to 3. Depressive scales and Screening tests as follows along with electronic versions, 01 laptop and Printer need to be made available at Level 4.

1. Beck's Depressive Index (BDI)
2. Hamilton Anxiety Scale (HAS)
3. Bender Gestalt Test (BGT)
4. Minnesota Multiphasic Personality Inventory (MMPI)
5. Rorshach Ink blot tests
6. Luria Nebraska Neuropsychiatric test Battery (LNNB).

In addition a 16 channel EEG machine is recommended for Level 4.

SUGGESTED READING

1 Gelder Michael, Harrison Paul, Philip Owen, editors. Mood disorders. In Shorter Oxford text book of Psychiatry, 5th ed, Oxford. Oxford University Press, 2006

2 Sadock J Benjamin, Sadock A Virginia. editors. Mood disorders. In Synopsis of Comprehensive Text Book of Psychiatry, 9th edition, 2003. Published by Lippincott Williams & Wilkins, 530 Walnut Street, Philadelphia, PA 19106 USA

3 Practice Guidelines, 2000, American Psychiatric Association, Available at www.psyorg.com