
Affect, Mood, Emotions: Depressive Disorders and Bipolar and Related Disorders

15

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15.1 Vignette

A 34-year-old Hispanic woman was admitted to the hospital with altered mental status and fever. The patient had been suffering from systemic lupus erythematosus for a number of years, with several small strokes that left her partially paralyzed on the left side. A urinary tract infection was diagnosed, and she was treated with antibiotics and steroids with good results until she aspirated, developed pneumonia, and became comatose. After an intensive care unit stay of several weeks, she emerged from her coma. She was noted to have frequent crying spells. A psychiatric consultation was requested.

The consultant diagnosed a depressive syndrome based on her mood, hopelessness, and a wish to die. She had some equivocal family history of depression, but no previous episodes of depression. The consultant concluded that her depression was a result of several factors—her prolonged hospitalization, the illness and its complications, and the steroids that she was taking. She was prescribed fluoxetine 20 mg per day. She was able to be transferred from the intensive care unit to the general medical service, and she showed some improvement over the next 2 weeks.

But after 2 weeks she refused to take any of her medications, she refused to participate in physical therapy, and she expressed a desire to die. The consultant was called urgently to assess whether she had the capacity to refuse treatment.

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The patient told the consultant that she was very discouraged, felt abandoned by her family, and felt defeated, as she did not have the energy to cooperate with physical therapy. She just wanted to go home and die. The consultant asked her if she would cooperate with therapy and take medications if she had a bit more energy, so that she could successfully complete a course of physical therapy that will make her strong enough to go home, to which she replied in the affirmative, provided she could sign an advance directive. The consultant decided that the patient did have the capacity to sign an advance directive, and that she should be given a trial of stimulants, which she agreed. She was given methylphenidate 10 mg in the a.m. The next day, she showed remarkable improvement in mood and energy level and was eager to participate in physical therapy. In fact, she was smiling for the first time, and wanted to use the wheelchair. In a week, methylphenidate was discontinued, but she maintained her normalized mood and energy level. She was discharged in 2 weeks, still on fluoxetine, to be followed by an outpatient psychiatrist.

15.2 Affect, Mood, and Emotions

15.2.1 Definitions

The emotional feeling tone of an individual, such as sadness, joy, depression, or elation, is called an affect. When the affect is prolonged and colors the whole emotional life of the person, it is called a mood. Thus, a person may be in a blue mood, an elated mood, or a depressed mood. These terms are somewhat confusing, as the term affect is also used for the emotional expression observed, especially in the context of a mental status examination, while the term mood may be used to denote the subjective emotion that the patient experiences. In this sense, affect is usually described in terms of the form of expression, for example, full, blunted, flat, stable vs. labile, or appropriate vs. inappropriate. Mood is a continuum, with one end representing feeling down, blue, sad, miserable, depressed, or down in the dumps; the middle representing euthymia; and

the other end representing feeling happy, high, joyous, euphoric, elated, exulted, ecstatic, or manic. The term emotion usually denotes both the subjective and physiological aspects of affect.

15.2.2 The Functions of Mood and Affect

All of us experience varying gradations of moods, and they are necessary and adaptive experiences for survival and emotional maturation. Sadness is usually experienced after suffering a failure, or the loss of a loved one, a prized possession, or prestige. The loss may be purely imaginary, and even the anticipation of a loss may cause sadness.

There is a close relationship between anxiety and sadness. When one anticipates an event which may result in a loss of a valuable object (e.g., a loved person, prized possession, prestige, bodily part), he/she experiences anxiety. If the loss actually occurs, sadness or even depression ensues. Experiencing sadness *motivates* the individual to anticipate and prevent it by protecting one's bonds both with loved ones and with one's possessions. It also allows for empathy, which is critical in social bonding, and the likelihood for procreation.

Pleasure is clearly the motivating force behind all endeavors and achievements, both at the individual and social levels. Affective or emotional expression is important in communication and social interaction.

15.2.3 Dysregulation of Mood

The extremes of moods, the depressive syndrome and the manic syndrome, are final common pathway brain dysfunctions (see Chap. 7).

Unlike sadness or normal grief, the final common pathway pathological state of the depressive syndrome is characterized by a period of depressive mood and/ or a pervasive loss of interest or pleasure. The patients often feel sad, hopeless, helpless, and empty. Guilt feelings are prominent, and there is a loss of self esteem. Feeling discouraged and "down in the dumps" is common. The patients typically withdraw from family and

friends, and activities and hobbies that used to give them pleasure no longer interest them. There is usually some sleep disturbance, usually early-morning awakening, but middle-of-the-night awakening and difficulty in falling asleep are not uncommon, especially if anxiety is also prominent. In bipolar patients, there may be hypersomnia. Loss of appetite is quite common, with concomitant weight loss, although in some patients, particularly those with bipolar illness, there may be an increase in eating, resulting in a weight gain. The patients often show psychomotor agitation or retardation. In agitation, pulling out hair, pacing, wringing hands, inability to sit still, incessant talking, and shaking of hands and feet often occur. Psychomotor retardation is characterized by slowing of speech, slowed body movements, or even muteness.

In the *depressive syndrome*, patients often manifest cognitive disturbances, including the inability to concentrate, indecisiveness, and generally slowed thinking processes. Often, patients feel they do not have enough energy to think about a simple problem. They feel tired, fatigued, and exhausted in the absence of physical exhaustion. They may experience vague pains, aches, and discomfort, without any physical basis; headaches, toothaches, backaches, and muscle aches are especially common.

Patients often suffer from feelings of inadequacy, worthlessness, and sometimes completely unrealistic low self-esteem. The smallest task may appear impossible or monumental. There may be excessive guilt feelings concerning current or past failings, most of them minor, or even delusional conviction of sinfulness or responsibility for some untoward tragic event.

Suicidal ideas are frequent and may take the form of fears of dying, the belief that the person himself or herself or others would be better off if the person were dead, or suicidal desires or plans. (See Chap. 4 for further discussion of suicide and suicide attempt.)

Depression increases the risk of suicide. The lifetime risk of suicide in bipolar disorder is considered to be at least 15 times that of general population, and bipolar disorder may account for 1/4 of all completed suicides (APA 2013).

Often, there is a diurnal variation in that the symptoms are worse on waking in the morning and improve slightly as the day progresses, which may be more prominent in bipolar patients (Forty et al. 2008; Morris et al. 2007).

When the symptoms are mild, temporary improvement often occurs in the presence of positive environmental stimuli.

In severe cases, the syndrome is not affected by environmental change to any extent.

15.3 Major Depressive Episode

DSM-5 definition includes five or more of Criteria A symptoms during the same 2 week period, which represent a change from previous functioning, and must include either depressed mood or loss of interest or pleasure. They are: depressed mood most of the day, markedly diminished interest or pleasure in activities nearly every day, change in appetite and/or weight, persistent insomnia/hypersomnia, psychomotor agitation or retardation, fatigue or loss of energy nearly every day, feelings of worthlessness or inappropriate or excessive guilt, difficulty with concentration or indecisiveness nearly every day, recurrent thoughts of death or suicidal ideation, plan, or attempt. In addition, Criterion B requires that the symptoms must cause clinically significant distress or impairment in social, occupational, or other important areas of functioning. Criterion C specifies that the episode is not attributable to substances or other medical condition.

15.4 Euphoria, Hypomania, Manic Episode

Just as sadness and grief are experienced by most people from time to time, the opposite, pleasurable moods of euphoria and elation, short of mania or hypomania, fall within the normal range of mood. In euphoria, there is a positive feeling of emotional and physical well-being. In elation, there is a definite feeling of joy with increase in self-confidence, motor activity, and energy level.

These states can be induced by drugs such as alcohol, narcotics, and amphetamines.

Mania and hypomania, like the depressive syndrome, form a syndrome with definite features and signs. The characteristic feature of the manic syndrome is a distinct period when the predominant mood is elevated, expansive, or irritable and is associated with other symptoms of the manic syndrome. They include hyperactivity, excessive involvement in indiscreet and foolish activities without recognition of the high potential for painful consequences, pressure of speech, flight of ideas, inflated self-esteem, decreased need for sleep, and distractibility. The patient may describe the elevated mood as being euphoric, unusually good, or high. The good mood may have an infectious quality, so that the physician and others in contact with the patient may find themselves feeling expansive and elated. The patient may show indiscriminate enthusiasm in relating to people or in planning things, so that they may start a dozen projects at once, call up distant relatives and acquaintances all over the globe, and go on a buying spree.

On the other hand, the mood may be characterized by irritability rather than joyfulness, especially when the patient's expansiveness is thwarted. The patient then becomes touchy and domineering. The hyperactivity is often generalized, including participation in multiple activities that may be sexual, occupational, political, or religious. The patients often have poor judgment, and the activities are disorganized, flamboyant, and bizarre. Manic speech is usually loud, rapid, and difficult to understand. It is often full of jokes and puns and is theatrical, with singing and rhetorical mannerisms. In the irritable mood, there may be hostile comments and angry outbursts. Abrupt changes from topic to topic based on understandable associations and distracting stimuli often occur (flight of ideas). When severe, the speech may be incoherent. Distractibility is usually present.

Self-esteem is usually inflated, with unrealistic and uncritical self-confidence and grandiosity. For example, the patient may give advice on matters about which he or she has no knowledge whatsoever, such as how to perform a surgical procedure or how to run the federal government.

Grandiose delusions may occur, such as, "I have a special hot line to God."

Hypomania refers to elevated mood with many of the symptoms of the manic syndrome but not severe enough to interfere with function significantly. If there are psychotic features, the episode is by definition manic (APA 2013).

15.4.1 Manic Episode

DSM-5 definition includes, in Criterion A, a distinct period of at least 1 week (or any duration if hospitalization is necessary) of abnormally and persistently elevated, expansive, or irritable mood and abnormally and persistently increased goal-directed activity or energy nearly every day. During the period described above, three or more of the Criterion B symptoms are present to a significant degree and they represent a noticeable change from usual behavior. Criterion B symptoms include inflated self-esteem or grandiosity, decreased need for sleep, pressured speech or talkativeness, flight of ideas or racing thoughts, distractibility, increase in goal-directed activity or psychomotor agitation, excessive involvement in risky activities (e.g., shopping sprees, sexually risky activity, risky business ventures). Criterion C provides that the disturbance is severe enough to cause marked impairment in social or occupational functioning, or there are psychotic features, or hospitalization is necessary. Further, Criterion D stipulates that the condition is not attributable to substances or a medical condition. Criteria A–D constitute a manic episode, and at least one lifetime manic episode is required for the diagnosis of Bipolar I disorder.

15.4.2 Hypomanic Episode

DSM-5 definition of the hypomanic episode includes Criteria A and B of Manic Episode above, but stipulates, in Criterion C, that the episode is associated with an unequivocal change in functioning uncharacteristic of the individual when not symptomatic, and that the change is observable by others (Criterion D), and Criterion E, the episode is not severe enough to cause

marked impairment in social or occupational functioning or necessitate hospitalization, and F, the episode is not attributable to medications or a medical condition.

15.5 Diagnosis of Mood Syndromes

Evaluation of depression is probably the most common reason for requesting psychiatric consultation (the second most common reason is likely to be delirium).

The depressive syndrome and manic syndrome are final common pathway syndromes with varying degrees of contribution by genetics, early experiences, developmental factors, prescription and recreational drugs, physical illness, and recent and current stresses including hospitalization (see Chap. 7). Once a phenomenological diagnosis of depression or mania/hypomania is made, a differential diagnostic process should be undertaken to determine whether there is prominent contribution by an identifiable physical illness or prescription and recreational drugs, that is, a secondary mood syndrome (see Chap. 4; also see Table 7.1 in Chap. 7).

Depression is commonly comorbid with many medical conditions including heart disease, stroke, seizure disorder, lung diseases such as asthma and COPD, cancer, HIV, liver disease, kidney disease, as well as in peripartum states, etc. Specific discussions of depression in these conditions are found in chapters dealing with these conditions.

15.5.1 Differential Diagnosis

15.5.1.1 Secondary Mood Syndromes

Mood syndromes are quite commonly the result of physical illness or prescription and recreational drugs. It is useful to classify secondary mood syndromes as follows:

(A) Substance-induced

1. Prescription Drugs, e.g., exogenous steroids, sedatives, opioid analgesics
2. Recreational Drugs, e.g., alcohol, methamphetamine, heroin

(B) Secondary to General Medical Condition

1. Metabolic/Endocrine disorders, e.g., diabetes mellitus, hypoglycemia, hypothyroidism and hyperthyroidism, Cushing's syndrome
2. Infections, e.g., HIV, syphilis, encephalitis, post-viral syndrome
3. Neoplasms, e.g., pheochromocytoma, paraneoplastic syndromes, e.g., ca of pancreas
4. Neurologic disorders, e.g., Parkinsonism, Epilepsy, Migraine
5. Other conditions, e.g., anemia, heavy metal poisoning

Depression is commonly associated with hypothyroidism, hypopituitarism, Cushing's disease, viral infections, pancreatic cancer (for which it may be the presenting symptom), Parkinsonism, and many other medical conditions (see Chap. 7). Various drugs may cause depression as a side effect or a withdrawal effect (e.g., cocaine crash). See Table 7.1 in Chap. 7 for a comprehensive listing of medical causes of psychiatric syndromes.

According to DSM-5, secondary mood syndromes consist of
 Substance/Medication-Induced Depressive or Bipolar disorder
 Depressive or Bipolar disorder secondary to Another Medical Condition

15.5.1.2 Primary Mood Syndromes

Once physical illness or prescription and recreational drugs have been ruled out as the primary cause of a mood syndrome or are considered to be contributing to a preexisting primary mood disorder, a primary mood disorder may be diagnosed. DSM-5 separates bipolar disorder from depressive disorder but in CL practice, it is more convenient to first ascertain that the mood syndrome does or does not have contribution from secondary factors (substances and/or other medical condition), then determine which syndrome best fits the patient's symptoms.

It is important to note that the differential diagnosis of primary mood disorders includes major psychiatric syndromes that are not usually classified as mood disorders but are often accompanied with mood symptoms—i.e., schizoaffective disorder, schizophrenia, and PTSD.

15.5.1.2.1 Major Depressive Disorder

Major depression (unipolar depression) may be diagnosed in the presence of the depressive syndrome if the criteria for Major Depressive Episode are met (see above).

According to DSM-5, the 12-month prevalence of major depressive disorder is about 7 % in the USA; in 18–29-year-old groups, it is three times higher than in persons 60 years or older. Female to male ratio is 1.5–3:1 beginning in early adolescence (APA 2013).

The onset of major depressive disorder is variable, but peaks around age 20, but late onset is not uncommon.

According to DSM-5, the heritability is approximately 40 %, and the personality trait of neuroticism accounts for a major portion. Childhood adverse experiences are risk factors as well as recent stressors (see Chap. 7 for further discussion).

15.5.1.2.2 Bipolar and Related Disorders

DSM-5 states that bipolar and related disorders are separated from the depressive disorders and placed between the chapters on schizophrenia spectrum and other psychotic disorders and depressive disorders *in recognition of their place as a bridge between the two diagnostic classes* in terms of symptomatology, family history, and genetics (APA 2013). DSM-5 includes under this heading bipolar I disorder, bipolar II disorder, cyclothymic disorder, and substance/medication-induced bipolar disorder, and bipolar disorder secondary to a medical condition, as well as other specified and unspecified bipolar and related disorders.

Bipolar I disorder is little changed from the classic Kraepelinian description of manic-depressive illness (Kraepelin and Defendorf 1902; Kraepelin 1976) except that neither psychosis nor a lifetime experience of major depression is a requirement (only a manic episode is).

When a person has at least one manic episode, bipolar I disorder is diagnosed.

If a person meets the criteria for at least one major depressive episode and one hypomanic episode without the extreme of the manic syndrome, *bipolar II disorder* is diagnosed. If the

patient with a bipolar disorder or depressive disorder also has psychotic symptoms, then a mood disorder with mood-congruent or mood-incongruent psychotic features is diagnosed.

If episodic prominent mood symptoms are superimposed on psychotic symptoms that persist even when the mood symptoms are not present, schizoaffective disorder is diagnosed.

The prevalence of bipolar I disorder in the USA is 0.6 % and male to female ratio is 1.1:1. Bipolar disorder is more common among higher income countries. Family history of bipolar disorder is a very strong risk factor. It is believed that bipolar disorder and schizophrenia share a genetic contribution as there is familial co-aggregation of schizophrenia and bipolar disorder.

The onset of bipolar disorder is usually in the teens or early adulthood, and more than 90 % of patients with a single manic episode have recurrent episodes. Approximately 60 % of manic episodes are followed immediately by a depressive episode (DSM-5).

15.5.1.2.3 Subthreshold Mood Syndromes

Many persons suffer from mild to moderate depression that does not quite meet the threshold for the depressive syndrome. Such depression may have prominent affective (feeling sad, crying spells) or cognitive (feeling hopeless and helpless) components without the neurovegetative component (insomnia, hypersomnia, anorexia, anhedonia), or vice versa. Subthreshold depressive symptoms are particularly common in the medical setting, and may be caused by any of the factors for secondary depression, or may be an *adjustment disorder* with depressed mood, associated with the stress of hospitalization or of the medical illness.

Persistent Depressive Disorder (Dysthymia) refers to chronic or neurotic depression, low-grade depression of long, perhaps lifelong, duration. Such patients are at higher risk of developing major depression (double depression), and even when the major depression is successfully treated, are likely to revert back to dysthymia. *Cyclothymia* is a trait characterized by ups and downs in mood but not quite reaching the degree seen in bipolar illness.

15.5.1.2.3.1 Demoralization Syndrome

Although not a Diagnostic and Statistical Manual of Mental Disorders (APA 2013) diagnosis, demoralization syndrome is a useful concept in consultation-liaison (CL) settings. Seen mostly in patients with chronic illness, especially in palliative care settings, this syndrome is characterized by helplessness, hopelessness, fatigue, and anhedonia (Clarke et al. 2003; Kissane et al. 2001). See Chap. 27 and 29 for further discussion of demoralization syndrome.

15.5.1.2.3.2 Disruptive Mood Dysregulation Disorder

This is a new diagnosis in DSM-5, which is meant to “address concerns about the potential for the overdiagnosis of and treatment for bipolar disorders in children.” It refers to children up to 12 years of age with persistent irritability and frequent episodes of extreme behavioral dyscontrol. This is placed in the category of depressive disorders because children with these symptoms typically develop unipolar depressive or anxiety disorders when they mature (APA 2013). The prevalence is considered to be 2–5 %.

Premenstrual Dysphoric Disorder is classified under depressive disorders in DSM-5. This is discussed in Chap. 31.

15.6 Management and Treatment of Mood Syndromes

15.6.1 Depression

The management and treatment of depression in the CL setting depends on several factors including the nature of the medical condition for which the patient is being treated, the severity and cause of the depression, and the comorbid conditions such as delirium. Treatment of delirium takes precedence over the treatment of depression. If the depressive syndrome is severe, pharmacotherapy or electroconvulsive therapy should be considered regardless of whether the depression is secondary or primary. For mild to moderate depression, supportive psychotherapy, providing reassurances and explanations, and encouraging supportive visitors

may be most helpful. If the patient is actively suicidal, they should be placed on constant observation and promptly transferred to a psychiatric inpatient service when medically stabilized.

15.6.1.1 Pharmacotherapy

Pharmacotherapy of depression should be reserved for the depressive syndrome rather than for subthreshold adjustment syndromes, for which psychotherapy and social support may be more effective.

If drug therapy is indicated, it usually involves selective serotonin reuptake inhibitors (SSRI) or third-generation antidepressants such as mirtazapine (a serotonergic and noradrenergic agonist through adrenergic α_1 -agonism and α_2 -antagonism on serotonergic and adrenergic neurons), serotonin and norepinephrine reuptake inhibitors (SNRI) such as duloxetine, and bupropion, which is a norepinephrine–dopamine reuptake inhibitor and nicotinic acetylcholine receptor antagonist. In the medically ill population, antidepressants should be used cautiously and doses modified, as many medically prescribed drugs interact with them. In general, however, drugs used for medical purposes do not need dose adjustment because of the antidepressant. Serotonin syndrome is a rare but serious potential adverse reaction of antidepressants, especially when used in combination (see Sect. 7.2.3.1 in Chap. 7).

The choice of antidepressants depends on which side effect might be beneficial or detrimental for a patient. For example, a patient with insomnia may benefit from mirtazapine, which in small doses tends to induce sleep, while fluoxetine might be the drug of choice for an obese patient for its appetite suppressing effect. For patients who are psychomotor retarded, bupropion may be helpful because it is a mild stimulant. Bupropion also does not have sexual side effects often seen in other antidepressants. However, bupropion lowers the seizure threshold and should be used with caution in patient with a history or family history of seizure disorder.

Unfortunately, extant antidepressants are not very effective in treating depression.

*Star*D* (Sequenced Treatment Alternatives to Relieve Depression) was a large scale, multicenter

randomized outpatient study in which patients received citalopram first, then for non-responsive patients, various switch or augmentation options were provided including sertraline, bupropion, buspirone, venlafaxine, mirtazapine, nortriptyline, lithium, and tranylcypromine, as well as cognitive behavioral therapy (Rush et al. 2004). The depression remission rate for the first phase involving citalopram (average 40 mg or more) was only 27 % and the response rate (some improvement but not full remission) was 47%. About 40% of patients who had remission required 8 weeks or more to achieve it. With the addition of switching, augmentation, etc., the remission rate could be brought up to about 60% in those who completed treatment (Gaynes et al. 2009). Except in seriously depressed patients, there is little difference between placebo, antidepressants, and psychotherapies in alleviating depression. Combining pharmacotherapy with psychotherapy may have some advantage over one modality alone (Fournier et al. 2010; Kirsch 2009).

Some promising newer treatment modalities are being developed for treatment-resistant depression which may revolutionize treatment for depression. *Ketamine* is a glutamatergic *N*-methyl-D-aspartate (NMDA) receptor antagonist which produces a rapid antidepressant response within hours in about two thirds of patients with treatment-resistant depression, with effects lasting up to 2 weeks (Salvadore and Singh 2013). Ketamine is an intravenous anesthetic drug that has psychotomimetic effects and is a drug of abuse. The antidepressant effect occurs in subanesthetic doses and seems to occur as a result of NMDA receptor antagonism resulting in an increase in brain derived neurotrophic factor (*BDNF*), contributing to an increase in synaptic plasticity (Duman et al. 2012; Kavalali and Monteggia 2012; Liu et al. 2012; Salvadore and Singh 2013).

In fact, an increase in BDNF activity may be the common downstream effect of almost all effective psychotropic drugs (Bath et al. 2012; Budhdeo and Deluca 2012; Kerman 2012; Li et al. 2012; Lindholm et al. 2012; Park et al. 2011; Rantamaki et al. 2011), and epigenetic changes in the BDNF gene may play an important

role in the susceptibility to various psychiatric disorders (Boulle et al. 2012).

Another promising development is *deep brain stimulation* (Lujan et al. 2013; Mayberg et al. 2005; Neimat et al. 2008; Riva-Posse et al. 2012). Mayberg and her colleagues have shown that deep brain stimulation of subcallosal anterior cingulate (Area 25), which is often hyperactive in depression, resulted in rapid amelioration of depressive symptoms in about 40–60 % of treatment-resistant patients. Chronic stimulation of the area up to 2 years in treatment-resistant patients with unipolar and bipolar depression resulted in remission rate of 50 % in major depression and 90 % in bipolar depression, with no relapse reported (Holtzheimer et al. 2012).

15.6.1.2 Electroconvulsive Therapy (ECT)

ECT is the most effective treatment for severe depressive syndrome, and, if available, is particularly useful in the CL setting (Klapheke 1997; Pandya et al. 2007). The remission rate with ECT is about 60 % even in treatment resistant depression (Holtzheimer and Mayberg 2012). The main side effects are postictal confusion and usually transient anterograde and retrograde amnesia.

Other neuromodulatory treatments for depression include transcranial magnetic stimulation, with a remission rate of 20–40 % of major depression and 10–20 % of treatment resistant depression, and vagus nerve stimulation which has a response rate of approximately 30–40 % and remission rate of 15 % in treatment resistant depression patients (Holtzheimer and Mayberg 2012).

In the future, pharmacogenomics may play an important role in the choice of an antidepressant. For example, patients who have the short-allele polymorphism of the serotonin transporter gene linked polymorphic region (5-HTTLPR), a drug that has both noradrenergic and serotonergic action, such as mirtazapine, may be preferable to a pure SSRI (Murphy 2004a, b). When the depressive syndrome is accompanied with psychotic symptoms such as hallucinations, delusions, or paranoia, the addition of an antipsychotic medication is indicated. If the patient is acutely

agitated, the agitation should be managed immediately, before antidepressant therapy can begin (see Sect. 4.3.4 in Chap. 4).

For demoralization syndrome, a stimulant such as methylphenidate (5–10 mg in the a.m.) or dextroamphetamine (2.5–5 mg in the a.m.) may be particularly effective.

When antidepressant therapy is instituted, it is critical that outpatient follow-up is provided.

15.6.2 Hypomania, Mania, Mood Stabilizers

Isolated hypomania may not need treatment. A bipolar patient who is already on mood stabilizers should be continued on them in the general hospital. If the symptoms increase due to the stress of hospitalization, one or more of the following may be done: the mood stabilizer could be increased, another mood stabilizer added, or an antipsychotic medication added.

If a patient who is not currently on a mood stabilizer develops a manic syndrome, with or without psychotic features, or if schizoaffective syndrome is suspected or diagnosed, an antipsychotic/mood stabilizer drug such as quetiapine or aripiprazole should be used. Haloperidol IV or IM, chlorpromazine IM, olanzapine IM, and/or lorazepam IV or IM may be used for immediate sedation if indicated (see Sect. 4.3.4 in Chap. 4).

Anticonvulsant mood stabilizers, such as valproic acid, carbamazepine, and lamotrigine may also be used as well as lithium carbonate. With valproic acid, liver function should be closely monitored. Carbamazepine may cause agranulocytosis. Carbamazepine may cause Stevens–Johnson syndrome and toxic epidermal necrolysis especially in Asians—FDA recommends testing for *HLA allele B*1502* in all Asians prior to carbamazepine therapy (Ferrell and McLeod 2008). Carbamazepine is an enzyme inducer and affects drug levels and efficacy of many drugs metabolized by liver enzymes. Lamotrigine should be titrated up very gradually watching carefully for the occurrence of rashes as it is also associated with a risk of Stevens–Johnson syndrome. As with clozapine, if maintenance lamotrigine

was stopped for more than 48 h, it should be restarted at the low starting dose of 25 mg/day and follow the initial escalation schedule. The dose has to be lowered in patients taking valproic acid.

15.6.3 Psychotherapy for Depression and Mood Syndromes

15.6.3.1 Supportive Psychotherapy and Psychoeducation

In the CL setting, supportive psychotherapy is essential in helping patients with depression and demoralization. Supportive psychotherapy includes listening to the patient, showing empathy for the patient, responding to questions, and offering help in problem solving. It also involves allowing patients to express feelings of hopelessness and helplessness about their medical illness and the procedures they are undergoing, and providing explanations and reassurances when indicated. It may also involve facilitating communication between the patient and the responsible physician or nursing staff. Psychoeducation and supportive psychotherapy are also the major psychotherapeutic tools for major depression, bipolar syndrome, and schizoaffective disorder. Psychoeducation involves educating the patient and family about the nature, symptoms, course, and the indications and potential side effects of medications. Recognizing the first symptoms of depression and seeking help may be lifesaving for patients with major and bipolar depression.

15.6.3.2 Formal Psychotherapies

Cognitive-behavioral therapy (CBT) and interpersonal psychotherapy (IPT) have been shown to be effective in the treatment of depression. Both are brief psychotherapies for which manuals are available.

Cognitive-behavioral therapy postulates that the cognitive distortions in depression such as pessimism, low self-esteem, and consequent behaviors such as self-criticism and social isolation are fundamental to depression. Thus, CBT attempts to correct such cognitive distortions through careful examinations of such faulty beliefs and overcome them through behavioral

exercises and homework (Beck 1995). Cognitive-behavioral therapy seems effective for mild to moderate depression.

Interpersonal psychotherapy recognizes that depression has biological roots but is often triggered by interpersonal factors. Such factors may include grief from the loss of a loved one or grief from having a chronic illness; interpersonal disputes with family, friends, or coworkers; role transitions, such as changing jobs or disability; and interpersonal deficits, such as social isolation and substance abuse. Interpersonal psychotherapy examines such triggers and attempts to work through and potentially prevent recurrence of triggers through problem-solving techniques. Interpersonal psychotherapy is often used in combination with antidepressant drugs and thus is effective even in severe depressions (Klerman et al. 1994).

Psychotherapy does not necessarily involve face-to-face contact. Remote psychotherapies, such as through telephone or Internet, have been effectively performed for depression (Applebaum et al. 2012; Furukawa et al. 2012; Ketterer 1999; Shore 2013).

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