



A REVIEW ARTICLE ON DEPRESSION

¹kalyani K. Pawar, ² Vaishnavi R. Pawar,

³Assistant Proff. Shital M. Sonawane

Swami Vivekanand Sanstha's Institute Of Pharmacy, Mungase (Malegaon)

Abstract

Major depression is a mood disorder characterized by a sense of inadequacy, despondency, decreased activity, pessimism, anhedonia and sadness where these symptoms severely disrupt and adversely affect the person's life, sometimes to such an extent that suicide is attempted or results. The search for an extended understanding of the causes of depression, and for the development of additional effective treatments is highly significant. Clinical and pre-clinical studies suggest stress is a key mediator in the pathophysiology of depression. Most of the people get depressed "now and then". It's elumps the C feeling Gud feeling, being in the usually fragient vanishing in hours or days, like the proverbial dark Clouds that give way to sunshine we think of such short-lived depressed States as depressed moods, not to be confused. With called the often chronic severe problem Clinical depression. Depression as a disorder has always been a focus of attention of researchers in India. The various aspects studied included epidemiology, demographic and psychosocial risk factor, neurobiology, symptomatology, comorbidity, assessment and diagnosis, impact of depression, treatment related issues and prevention of depression in addition to the efficacy and tolerability of various antidepressants Note the typical symptoms of and the possible trigger factor (bereavement). For depression. Like many of his generation Mr. a does not want a Stigmatizing psychiatric label. Here, we review data on various aspects of depression, originating from

➤ Introduction

Depression is a common mental disorder. Globally, it is estimated that 5% of adults suffer from the disorder. It is characterized by persistent sadness and a lack of interest or pleasure in previously rewarding or enjoyable activities. It can also disturb sleep and appetite. Also called major depressive disorder or clinical depression, it affects how you feel, think and behave and can lead to a variety of emotional and physical problems. You may have trouble doing normal day to day activities, and sometimes you may feel as if life isn't worth living. Different types of depression exist, with symptoms ranging from relatively minor to severe. Generally, depression does not result from a single event, but from a mix of events and factors. depression doesn't spring from simply having too much or too little of certain brain chemicals. Rather, there are many possible causes of depression, including faulty mood regulation by the brain, genetic vulnerability, and stressful life events. Unaddressed mental health problems can have a negative influence on homelessness, poverty, employment, safety, and the local economy. They may impact the productivity of local businesses and health care costs, impede the ability of children and youth to succeed in school, and lead to family and community disruption.

➤ Key facts

- Depression is a common mental disorder. Globally, it is estimated that 5% of adults suffer from depression.
- Depression is a leading cause of disability worldwide and is a major contributor to the overall global burden of disease.
- More women are affected by depression than men.
- Depression can lead to suicide.
- There is effective treatment for mild, moderate, and severe depression
- Antidepressants; cognitive behavioural therapy; complementary and alternative medicine; depression; exercise; psychological therapy.

➤ Types of Depression

- Dysthymia. (Dysthymia is a milder, but long-lasting form of depression.)
- It's also called persistent depressive disorder.)
- Bipolar Disorder. ...(Bipolar disorder, formerly called manic depression, is a mental health condition that causes extreme mood swings that include emotional highs (mania or hypomania) and lows (depression).)

- Psychotic Depression. ...(Depression with psychosis is known as psychotic depression)
- Postpartum Depression. (.Postpartum depression (PPD), also called postnatal depression, is a type of mood disorder associated with childbirth, which can affect both sexes.)

➤ Clinical manifestations (symptoms)

- continuous low mood or sadness
- feeling hopeless and helpless
- having low self-esteem
- feeling tearful
- feeling guilt-ridden
- feeling irritable and intolerant of others
- having no motivation or interest in things
- finding it difficult to make decisions
- not getting any enjoyment out of life
- feeling anxious or worried
- having suicidal thoughts or thoughts of harming yourself
- moving or speaking more slowly than usual
- changes in appetite or weight (usually decreased, but sometimes increased)
- constipation
- unexplained aches and pains
- lack of energy
- low sex drive (loss of libido)
- changes to your menstrual cycle
- disturbed sleep – for example, finding it difficult to fall asleep at night or waking up very early in the morning
- avoiding contact with friends and taking part in fewer social activities
- neglecting your hobbies and interests
- having difficulties in your home, work or family life
- Females may experience symptoms related to their:

- mood, such as irritability
- emotional well-being, such as feeling sad or empty, anxious, or hopeless
- behaviour, such as loss of interest in activities, withdrawing from social engagements, or thoughts of suicide
- cognitive abilities, such as thinking or talking more slowly
- sleep patterns, such as difficulty sleeping through the night, waking early, or sleeping too much
- physical well-being, such as decreased energy, greater fatigue, changes in appetite, weight changes, aches, pain, headaches, or increased cramps
- Etiopathogenesis (causes)
- Stressful events. Most people take time to come to terms with stressful events, such as bereavement or a relationship breakdown.
- Personality.
- Family history.
- Giving birth.
- Loneliness.
- Alcohol and drugs.
- Abuse. Physical, sexual, or emotional abuse can make you more vulnerable to depression later in life.
- People who are elderly are at higher risk of depression. That can be made worse by other factors, such as living alone and having a lack of social support.
- Certain medications. Some drugs, such as isotretinoin (used to treat acne), the antiviral drug interferon-alpha, and corticosteroids, can increase your risk of depression. Depression in someone who has the biological vulnerability to it may result from personal conflicts or disputes with family members or friends.
- Death or a loss. Sadness or grief after the death or loss of a loved one, though natural, can increase the risk of depression.
- Gender. Women are about twice as likely as men to become depressed. No one's sure why. The hormonal changes that women go through at different times of their lives may play a role.
- A family history of depression may increase the risk. It's thought that depression is a complex trait, meaning there are probably many different genes that each exert small effects, rather than a single gene that contributes to disease risk. The genetics of depression, like most psychiatric disorders,

are not as simple or straightforward as in purely genetic diseases such as Huntington's chorea or cystic fibrosis.

➤ Pathophysiology

- Exact pathophysiology of depression is unknown but hypothesis is monoamine deficiency (e.g. norepinephrine and serotonin) and this may represent a final common pathway triggered by initial disorder involving other neurotransmitters or their receptor. Autopsy examination of neural tissue revealed that, significant low concentration of serotonin metabolites and reduced serotonin uptake by platelet in depressed people. Dietary restriction of L-tryptophan, an amino acid that is serotonin precursor. Deregulation of Serotonin (5HT) and Norepinephrine (NE) in the brain are strongly associated with depression. Deregulation of 5HT and NE in the spinal cord may explain an increased pain perception among depressed patients. Decreased levels of 5HT and NE may explain the presence of both emotional and physical symptoms of depression. Serotonin is made via a unique biochemical conversion process. It begins with tryptophan, a building block to proteins. Cells that make serotonin use tryptophan hydroxylase, a chemical reactor which, when combined with tryptophan, forms 5-hydroxytryptamine, otherwise known as serotonin.

➤ Serotonin

As a neurotransmitter, serotonin helps to relay messages from one area of the brain to another. Because of the widespread distribution of its cells, it is believed to influence a variety of psychological and other body functions. Approximately 40 who million brain cells, most are influenced either do n directly or indirectly by serotonin. This includes brain cells related to mood, sexual desire and function, appetite, sleep, memory and learning, temperature regulation, and some social behaviour. In terms of body function, serotonin can also affect the functioning of cardiovascular system, muscles and various elements in the endocrine system.

➤ Link between serotonin and depression

Researchers believe that an imbalance in serotonin levels may influence mood in a way that leads to depression. Possible problems include low brain cell production of serotonin, a lack of receptor sites able to receive the serotonin that is made,

inability of serotonin to reach the receptor sites, or a shortage in tryptophan. If any of these biochemical glitches occur, it can lead to depression. Although it is widely believed that a serotonin deficiency plays a role in depression, there is no way to measure its levels in the living brain. Therefore, there have not been any studies proving that brain levels of this or any neurotransmitter are in short supply when depression or any mental illness develops. Blood levels of serotonin are measurable and have been shown to be lower in people who suffer from depression but researchers do not know if blood levels reflect the brain's level of serotonin. Also, researchers do not know whether the drop in serotonin causes the depression, or the depression causes serotonin levels to drop

➤ **What causes depression Ayurveda?**

According to Ayurveda, depression is caused by an imbalance of the Vata, Pitta, and Kapha natural doshas. In order to cure the issue, the specific Dosha imbalance that gave rise to it must be identified. The doctors distinguish three different types of Ayurvedic depression treatments based on these three criteria.

Kapha imbalance—heaviness, sadness, and general stagnation. Apathy, low energy, poor mood, and reduced movement are part of the official criteria psychiatrists use to diagnose depression. These symptoms are all Kapha problems, which suggests that the Kapha element is indeed out of balance in most cases of clinical depression.

➤ **Some science-backed recommendations are:**

Thirty minutes of yoga daily (especially Sun Salutations)

Thirty minutes of outdoor exercise daily (start gentle and increase to moderate intensity). Spend time in nature at least once a week. Increase fresh vegetables in your diet. Reduce processed foods and sugars (including alcohol, which is a depressant). Eat warm, spicy meals. Reduce cold food and smoothies. Add pungent, warming herbs such as cayenne and cinnamon to meals. Consider fresh-squeezed veggie juice to help the body detoxify. A program of physician-supervised cleansing (called panchakarma in Ayurveda) could be helpful. Consume ginger tea morning and night. (Cut and boil a 2–3-inch piece of organic ginger. Steep 20 minutes.) Also helpful for Vata depression. Use caution and discuss with your physician if already on an SSRI or other pharmaceutical.

➤ Statistics

According to a World Health Organisation (WHO) report, India has the highest number of depressed individuals in the world. This means that one out of three individuals in India suffers from depression

According to a report, in the year 2022 the prevalence rate of depression in India is 4.50% and the cases stand at 56,675,969.

The lifetime rate of depression is around 12% in women and 8% in men After puberty, depression rates are higher in females than in males. Because girls typically reach puberty before boys do, they're more likely to develop depression at an earlier age than boys are. There is evidence to suggest that this depression gender gap may continue throughout the lifespan.

➤ Causes of depression in women

Premenstrual problems.

Pregnancy and infertility.

Postpartum depression.

Menopause and perimenopause.

The female physiological response to stress.

Body image issues which increase in girls during the sexual development of puberty may contribute to depression in adolescence.

13 show that more than 8% of adults older than 20 years old reported having depression during a given two-week period. Women (10.4%) were almost twice as likely as were men (5.5%) to have had depression. Every day, women face many different stressors in both their personal and professional lives.

➤ Depression symptoms in children and teens

A lot of teens feel unhappy or moody. But if your teen's sadness lasts for more than 2 weeks and they have other symptoms of depression, there may be a problem. Watch for their withdrawal from friends and family, a drop in their performance at school, or use of alcohol or drugs. Talk to your doctor and find out if your teen may be depressed. There's effective treatment that can help them move beyond depression as they grow older. Common symptoms of depression in children and teens are similar to those of adults, but there can be some differences. In younger children, symptoms of depression may include sadness,

irritability, clinginess, worry, aches and pains, refusing to go to school, or being underweight. In teens, symptoms may include sadness, irritability, feeling negative and worthless, anger, poor performance or poor attendance at school, feeling misunderstood and extremely sensitive, using drugs or alcohol, eating or sleeping too much, self-harm, loss of interest in normal activities, and avoidance of social interactions Depression may occur with other mental health conditions, such as anxiety, eating disorders and substance abuse.

➤ Depression symptoms in adults

There's no single cause of depression. It can occur for a variety of reasons and it has many different triggers. For some people, an upsetting or stressful life event, such as bereavement, divorce, illness, redundancy and job or money worries, can be the cause. Different causes can often combine to trigger depression. Medication and older adults. As you get older, body changes can affect the way medicines are absorbed and used. Because of these changes, there can be a larger risk of drug interactions among older adults. Share information about all medications and supplements you're taking with your doctor Symptoms of depression may be different or less obvious in older adults, including: Memory difficulties or personality changes, fatigue, loss of appetite, sleep problems, aches or loss of interest in sex, which are not caused by a medical condition or medication. Often wanting to stay at home, rather than going out to socialize or doing new things, suicidal thinking or feelings, especially in older men. Depression can appear as anger and discouragement, rather than feelings of sadness.

If depression is very severe, there may also be psychotic symptoms, such as hallucinations and delusions.

➤ Depression patient situation in india

In India, the National Mental Health Survey 2015-16 revealed that nearly 15% Indian adults need active intervention for one or more mental health issues and one in 20 Indians suffers from depression. It is estimated that in 2012, India had over 258 000 suicides, with the age group of 15-49 years being most affected. According to a report, in the year 2022 the prevalence rate of depression in India is 4.50% and the cases stand at 56,675,969. After the pandemic, mental health issues among the people aggravated across the country. Loneliness and depression are the most important symptoms, followed by suicide. There has been a 17

percent rise in suicide cases between 2019 and 2021. So, loneliness, depression and suicide are the most important issues across the country. This is also because of lack of jobs, loss of income, rapid pace of life and disconnection,” he explained.

➤ **Complications**

Depression is a serious disorder that can take a terrible toll on individuals and families. Untreated depression can result in emotional, behavioural and health problems that affect every area of life. Complications associated with depression may include:

- Excess weight or obesity, which can lead
- To heart disease and diabetes. Alcohol or substance abuse.
- Anxiety, panic disorder or social phobia.
- Family conflicts, relationship difficulties, and work or school problems.
- Social isolation.
- Suicidal feelings, suicide attempts or
- Suicide Premature death from other medical conditions.

➤ **Tests and Diagnosis**

These exams and tests can help to rule out other problems that could be causing symptoms, pinpoint a diagnosis and check for any related complications:

➤ **Physical examination**

There are no definitive findings of depression on physical examination, although most patients will have a depressed affect, as well as a downcast gaze, furrowed brow, psychomotor slowing, speech latency, and expressions of guilt or self-blame. The physical examination and cognitive screening may be useful in ruling out common conditions that are often confused with depression (i.e. hypothyroidism, dementia) and in looking for commonly co- Occurring illnesses (ie., obesity, cancer, stroke). In some cases, depression may be linked to an underlying physical health problem.

➤ Lab tests

Simple laboratory tests should be performed in the work-up to exclude other causes of depression symptoms. Adults diagnosed with depression and with negative findings on physical examination do not routinely need further testing.

➤ Certain lab tests include

1. A complete blood count
2. Basic metabolic panel
3. Thyroid function
4. Tests to rule out anaemia
5. Thyroid disease
6. Nutritional status.

➤ Psychological evaluation

To check for signs of depression, mental health provider asks about symptoms, thoughts, feelings and behaviour patterns.

Other tests may include

- CT scan or MRI of the brain to rule out serious illnesses such as brain tumour.
- Electrocardiogram (ECG), which is used to diagnose some heart problems.
- Electroencephalogram (EEG), which is used for recording electrical activity of the brain.

Pharmacological Management

Many types antidepressant medications are available to treat depression, including those below. The more commonly used medications are from the following classes:

- Selective serotonin reuptake inhibitors (SSRIs): SSRIs include Fluoxetine, Paroxetine, Sertraline, Citalopram and Escitalopram.
- Serotonin-norepinephrine reuptake inhibitors (SNRIs): SNRI medications include Duloxetine, Venlafaxine and Desvenlafaxine.

Atypical antidepressants: Trazodone and Mirtazapine

- Serotonin modulators. Older less commonly use antidepressants include:

- Tricyclic antidepressants: Tricyclic antidepressants such as Imipramine and Nortriptyline tend to cause more severe side effects than do newer antidepressant.
- Monoamine oxidase inhibitors (MAOIs) Commonly used MAOIS are Tranylcypromine and Phenelzine. Taking MAOIS
- Should avoid or limit certain foods, which can interact with the medication and cause serious health problems.
- SSRIs include fluoxetine (Prozac), paroxetine (Paxil, Pexeva), sertraline (Zoloft), citalopram (Celexa) and escitalopram (Lexapro).

Table 2. Dosing of Antidepressants

Class	Drug	Range (mg/day)
SSRIs	Citalopram (Celexa)	20-40
	Escitalopram (Lexapro)	10-20
	Fluoxetine (Prozac)	20-60
	Paroxetine (Paxil)	20-60
	Sertraline (Zoloft)	50-200
TCAs	Amitriptyline (Elavil)	100-300
	Clomipramine (Anafranil)	100-250
	Desipramine (Norpramin)	100-300
	Doxepin (Sinequan)	100-300
	Imipramine (Tofranil)	100-300
	Nortriptyline (Pamelor)	50-150

*SSRI: selective serotonin reuptake inhibitor; TCA: tricyclic antidepressant.
Source: Reference 5.*

- The five well-known, FDA-approved SSRIs to treat depression are: Citalopram (Celexa) ,Escitalopram (Lexapro) ,Fluoxetine (Prozac) ,Paroxetine (Paxil) ,Sertraline (Zoloft)

➤ **Ayurvedic medication for depression patients**

- Ashwagandha: Also known as Indian ginseng, it is known to reduce stress and help control mood swings.
- 2. Brahmi: It helps treat stress and calms down the mind, which helps in treating depression.
- Brahmi is a powerful herb for treating clinical mental health diseases, and dealing with daily life stressors. Bacosides, a biochemical present in Brahmi, helps to rebuild brain tissues and hence has a positive effect on memory, concentration and intelligence.
- Triphala: Serotonin, the happy hormone, is mostly made in the gut. This explains that when you have a healthy elimination, you feel at your best. Triphala tablet is an Ayurvedic medicine for constipation and other digestive issues, that will make your gut healthy and enhance your mood.

- These are some of the supplements that people most widely use
- Ginseng. This supplement comes from the gnarled root of the American or Asian ginseng plant.
- Chamomile.
- Lavender.
- Saffron.
- Omega-3 fatty acids.
- 5-HTP.
- Brahmi has neuroprotective, anxiolytic (anti-anxiety) and antidepressant properties. These properties may be useful in managing mental illnesses like anxiety, depression and insanity. Brahmi may be useful in promoting mental health, intellect and improving memory.

➤ **Psychotherapy**

- Psychotherapy treatment is focused on improving positive changes in depressive Psychodynamic patients. There are many specific types of psychotherapy that are used to treat depression. Each works in a slightly different way, but all have been proven to help improve the symptoms of depression.
1. **Cognitive-behavioural therapy (CBT):** In CBT, the therapist is to identify and reshape the thought and behaviour patterns that contribute to depression.
 2. **Interpersonal psychotherapy:** In interpersonal psychotherapy, focus is on improvement of relationships, the way that depressive patients interact with other people in their life.
 3. **Family and couples' therapy:** In family and couples therapy, the therapist shall improve interaction of patient with family members so that depressive patients can work together on the issues that are contributing depression.
 4. **Problem solving therapy:** In problem- solving therapy, the therapist has to develop practical and systematic approach to the problems in life and find effective ways to solve them.
 5. **Psychodynamic psychotherapy:** In psychodynamic therapy, therapist might explore childhood or historic life events and work to reduce their influence by gaining insight into how they may be shaping current behaviour.

➤ Non pharmacological Management

- Non-pharmacological interventions include formal psychological therapies such as cognitive behaviour therapy (CBT) and interpersonal psychotherapy (IPT), as well as less formal supportive therapies such as counselling within primary care, mindfulness-based therapy, behavioural activation and self-help strategies

➤ Conclusion

- Mental illness can be treated with the right kind of support, for psychosis illnesses, the right medication under the right guidance is very important and for neurosis illness, getting good counselling, support and love from peer circle and family plays a crucial role. Reaching out or identifying these problems at an early stage is very important.
- Depression is a serious medical condition and a profound public health concern. Although the development of depression is likely due to a combination of factors, understanding the effects, possible triggers, and treatments of the disorder is essential for promoting the wellbeing of affected individuals. There is also a need to study the course of depressive disorders present in the world so as to determine the need and duration of continuation treatment. Studies should also evaluate the cost-effective models of treatment which can be easily used in the primary care setting to effectively treat depression

➤ REFERENCES

- 1 Health Metrics and Evaluation. Global Health Data Exchange (GHDx). <http://ghdx.healthdata.org/gbd-results-tool?params=gbd-api2019permalink/d780dffbe8a381b25e1416884959e88b> (Accessed 1 May 2021).
- 2 Evans-Lacko S, Aguilar-Gaxiola S, Al-Hamzawi A, et al. Socio- economic variations in the mental health treatment gap for people with anxiety, mood, and substance use disorders: results from the WHO World Mental Health (WMH) surveys. *Psychol Med.* 2018; 48(9):1560-1571.
- 3 **Pathophysiology** = Dr. C.M. Jangme, R.D. Wadulkar, Shivakumars. Ladde, Dr. B. N. poul
- 4 **Understanding depression** : Paul R. Robbins

- 5 **Metacognitive therapy for Anxiety Depression:** Adrian wells

- 6 **Depression in later life :**Jill manthorpe and steve Iliffe

- 7 **When someone you love is depressed:** Laura ea Epstein Rosen, P.H.D Xavier Francisco Amador

- 8 **Depression :**Aaron T. Beck. M.D

- 9 **Depression emerging from darkness into the dawn**
: June Hunt

- 10 **Sex Differences in pepression :** Gusan Holen Hoeksema

- 11 **Understanding Depression :** yong-ku kim

