

THE PHARMA INNOVATION

Pharmacological Treatment of Depression, Based On Survey in Different Hospitals and Clinics

Bharat Parashar¹, Virendra Yadav*¹, Brajesh Maurya¹, Love Sharma²

1. Manav Bharti University, Department of Pharmaceutics, Solan, H.P., India

2. National Institute of Pharmaceutical Education and Research, Hajipur, Bihar, India

Feeling down from time to time is a normal part of life but when emptiness and despair take hold and won't go away, it may be depression - "living in a black hole" or having feeling of impending doom. Symptoms - you can't sleep or you sleep too much, you can't concentrate or find that previously easy tasks are now difficult, you feel hopeless and helpless, you can't control your negative thoughts, no matter how much you try, you have lost your appetite or you can't stop eating. Non-pharmacological treatment should involve exercise, psychotherapy, supplements and your pleasures, etc. Exercise has been found to be most effective treatment for depression and the minimum recommendation is three times per week for 20 minutes. Weekly psychotherapy and a check on your pleasures like coffee, alcohol, sugar and recreational drugs, and supplements like taking fish oil for omega-3, fatty acid daily, St. John's Wort, and vitamins-B12, etc. Direct exposure to sunlight every day is very helpful, if not possible, a light box can bring a lot of relief. Regular human contact who enjoy the same things you do, challenge your thinking, good nutrition, yoga and meditation only for mild to moderate depression. Data collected from doctors shows that 60% of doctors have opinion that 35-60 years is common age group of depression, 50% doctors said that duration of therapy depends upon patient to patient, the root cause of depression is family reasons which is admitted by 70% of doctors. The most prescribed drugs for the treatment of depression are - Imipramine 40%, Fluoxetine 30%, most prescribed drugs in pregnancy are - Fluoxetine 60%, Sertraline 20%, most prescribed drugs in lactation - Fluoxetine 70%, Amitryptiline 20% and 90% of doctors suggested that only counseling is sufficient to treat depression in children.

Keyword: Depression, Tyeps, Non pharmacological treatment, Survey data

INTRODUCTION: Feeling down from time to time is a normal part of life. But when emptiness and despair take hold and won't go away, it may be depression. Some people describe depression

as "living in a black hole" or having a feeling of impending doom. However, some depressed people don't feel sad at all- instead, they feel lifeless, empty, apathetic, helpless, hopeless and worthless.

Corresponding Author's Contact information:

Virendra Yadav *

Manav Bharti University, Department of Pharmaceutics,
Solan, H.P., India

E-mail: virendra.rkgit@gmail.com

Are you depressed?

If you identify with several of the following signs and symptoms, and they just won't go away, you may be suffering from clinical depression.

- ❖ you can't concentrate or find that previously easy tasks are now difficult
- ❖ you feel hopeless and helpless
- ❖ you can't control your negative thoughts, no matter how much you try
- ❖ you have lost your appetite or you can't stop eating
- ❖ you are much more irritable, short-tempered, or aggressive than usual
- ❖ you're consuming more alcohol than normal or engaging in other reckless behavior
- ❖ you have thoughts that life is not worth living (Seek help *immediately* if this is the case)
- ❖ You can't sleep or you sleep too much.

Signs and symptoms of depression

Depression varies from person to person, but there are some common signs and symptoms. It's important to remember that these symptoms can be part of life's normal lows. But the more symptoms you have, the stronger they are, and the longer they've lasted—the more likely it is that you're dealing with depression. When these symptoms are overwhelming and disabling, that's when it's time to seek help.

Common signs and symptoms of depression

- ❖ **Feelings of helplessness and hopelessness.** A bleak outlook—nothing will ever get better and there's nothing you can do to improve your situation.
- ❖ **Loss of interest in daily activities.** No interest in former hobbies, pastimes, social activities, or sex. You've lost your ability to feel joy and pleasure.
- ❖ **Appetite or weight changes.** Significant weight loss or weight gain—a change of more than 5% of body weight in a month.
- ❖ **Sleep changes.** Either insomnia, especially waking in the early hours of the morning, or oversleeping (also known as hypersomnia).

- ❖ **Anger or irritability.** Feeling agitated, restless, or even violent. Your tolerance level is low, your temper short, and everything and everyone gets on your nerves.
- ❖ **Loss of energy.** Feeling fatigued, sluggish, and physically drained. Your whole body may feel heavy, and even small tasks are exhausting or take longer to complete.
- ❖ **Self-loathing.** Strong feelings of worthlessness or guilt. You harshly criticize yourself for perceived faults and mistakes.
- ❖ **Reckless behavior.** You engage in escapist behavior such as substance abuse, compulsive gambling, reckless driving, or dangerous sports.
- ❖ **Concentration problems.** Trouble focusing, making decisions, or remembering things.
- ❖ **Unexplained aches and pains.** An increase in physical complaints such as headaches, back pain, aching muscles, and stomach pain.

Types of depression

Depression comes in many shapes and forms. The different types of depression have unique symptoms, causes, and effects. Knowing what type of depression you have can help you manage your symptoms and get the most effective treatment.

Major depression

Major depression is characterized by the inability to enjoy life and experience pleasure. The symptoms are constant, ranging from moderate to severe. Left untreated, major depression typically lasts for about six months. Some people experience just a single depressive episode in their lifetime, but more commonly, major depression is a recurring disorder. However, there are many things you can do to support your mood and reduce the risk of recurrence.

Dysthymia (recurrent, mild depression)

Dysthymia is a type of chronic "low-grade" depression. More days than not, you feel mildly

or moderately depressed, although you may have brief periods of normal mood. The symptoms of dysthymia are not as strong as the symptoms of major depression, but they last a long time (at least two years). These chronic symptoms make it very difficult to live life to the fullest or to remember better times. Some people also experience major depressive episodes on top of dysthymia, a condition known as “double depression.” If you suffer from dysthymia, you may feel like you’ve always been depressed. Or you may think that your continuous low mood is “just the way you are.” However, dysthymia can be treated, even if your symptoms have gone unrecognized or untreated for years.

Seasonal affective disorder (SAD)

There’s a reason why so many movies and books portray rainy days and stormy weather as gloomy. Some people get depressed in the fall or winter, when overcast days are frequent and sunlight is limited. This type of depression is called seasonal affective disorder (SAD). Seasonal affective disorder is more common in northern climates and in younger people. Like depression, seasonal affective disorder is treatable. Light therapy, a treatment that involves exposure to bright artificial light, often helps relieve symptoms.

Bipolar Disorder: When Depression is Just One Side of the Coin

Bipolar disorder, also known as manic depression, is characterized by cycling mood changes. Episodes of depression alternate with manic episodes, which can include impulsive behavior, hyperactivity, rapid speech, and little to no sleep. Typically, the switch from one mood extreme to the other is gradual, with each manic or depressive episode lasting for at least several weeks. When depressed, a person with bipolar disorder exhibits the usual symptoms of major depression. However, the treatments for bipolar depression are very different. In fact, antidepressants can make bipolar depression worse.

The faces of depression

Depression often looks different in men and women, and in young people and older adults. An awareness of these differences helps ensure that the problem is recognized and treated.

Depression in men

Depression is a loaded word in our culture. Many associate it, however wrongly, with a sign of weakness and excessive emotion. This is especially true with men. Depressed men are less likely than women to acknowledge feelings of self-loathing and hopelessness. Instead, they tend to complain about fatigue, irritability, sleep problems, and loss of interest in work and hobbies. Other signs and symptoms of depression in men include anger, aggression, violence, reckless behavior, and substance abuse. Even though depression rates for women are twice as high as those in men, men are a higher suicide risk, especially older men.

Depression in women

Rates of depression in women are twice as high as they are in men. This is due in part to hormonal factors, particularly when it comes to premenstrual syndrome (PMS), premenstrual dysphoric disorder (PMDD), postpartum depression, and perimenopausal depression. As for signs and symptoms, women are more likely than men to experience pronounced feelings of guilt, sleep excessively, overeat, and gain weight. Women are also more likely to suffer from seasonal affective disorder.

Depression in teens

While some depressed teens appear sad, others do not. In fact, irritability—rather than depression—is frequently the predominant symptom in depressed adolescents and teens. A depressed teenager may be hostile, grumpy, or easily lose his or her temper. Unexplained aches and pains are also common symptoms of depression in young people. Left untreated, teen depression can lead to problems at home and school, drug abuse, self-loathing—even irreversible tragedy such as

homicidal violence or suicide. But with help, teenage depression is highly treatable.

Depression in older adults

The difficult changes that many older adults face—such as bereavement, loss of independence, and health problems—can lead to depression, especially in those without a strong support system. However, depression is not a normal part of aging. Older adults tend to complain more about the physical rather than the emotional signs and symptoms of depression, and so the problem often goes unrecognized. Depression in older adults is associated with poor health, a high mortality rate, and an increased risk of suicide, so diagnosis and treatment are extremely important.

Postpartum Depression

Many new mothers suffer from some fleeting form of the “baby blues.” Postpartum depression, in contrast, is a longer lasting and more serious depression triggered, in part, by hormonal changes associated with having a baby. Postpartum depression usually develops soon after delivery, but any depression that occurs within six months of childbirth may be postpartum depression.

Natural remedies to avoid depression without using medical drugs:

If you live in the upper reaches of the Northern Hemisphere, winter can often mean a seemingly interminable period of cold weather and short days. For many, the lack of sunshine, combined with life stress factors, can lead to depression. Often people fail to recognize depression for what it is, treating it as a weakness or personality flaw rather than an illness. A "suck it up and get on with it" attitude often keeps people from labeling themselves as depressed, but this approach is counterproductive; failing to treat the disease only prolongs it. Some of the signs of

depression include: difficulty concentrating; persistent sadness or anxiety; inability to experience ordinary pleasure and enjoyment; irritability; change in appetite; ongoing fatigue and feelings of hopelessness. Learn how to cope with dark days naturally, without recourse to pharmaceutical anti-depressants which can cause serious side-effects ranging from nausea to reduced sex drive.

Light Therapy

Research shows morning *light therapy* from a light-therapy lamp is effective at treating seasonal affective disorder (seasonal depression), and that it is equally or possibly even more effective than antidepressants. A study of 98 patients with seasonal depression illustrated this. Depressed subjects were randomly assigned to 8 weeks of therapy with light in the morning (20 minutes, 10,000 lux, and a placebo pill) or 30 minutes of dim light (100 lux and 20 mg of fluoxetine), with both groups experiencing a 67 % response rate . Light therapy for non-seasonal depression is not well established, although results are promising; light therapy may be more helpful as an adjuvant treatment than as a stand-alone treatment.

Vitamin B12

Vitamin B12 should always be measured in the event of depression (or any other psychological problems) as a vitamin B12 deficiency can be a reversible cause of various neuropsychiatric disorders . One should also consider whether a vegetarian diet or malabsorption due to celiac disease or gluten enteropathy is a factor in B12 deficiency. Weaker digestion, reduced absorption of nutrients, and hypochlorhydria (inadequate stomach acid needed to break down proteins that contain vitamin B12) are common in the aging population and associated with a B12 deficiency; B12 levels should be tested in an older person with symptoms of depression. Evidence suggests that *methylcobalamin* form of B12 may have more beneficial metabolic effects than cyanocobalamin .

Vitamin D

A depression which recurs annually during the winter, as well as feelings of depression which deepen during this period, are related to lack of vitamin D, which is delivered in its most powerful form through sunshine. Vitamin D increases brain levels of serotonin, which has been called the "happiness hormone." Vitamin D also plays an important role in the body's production of dopamine, a mood-lifting transmitter. One excellent source of vitamin D is fermented cod liver oil; just one teaspoon a day delivers a potent dose of this vitamin. Dietary sources include salmon, sardines and mackerel as well as organ meats and eggs (choose organic sources for maximum health benefit, of course). You may also want to try a vitamin D supplement to ensure that you get your daily dose.

St. John's Wort

This plant has been used as a nerve tonic for centuries. Its name derives from the fact that its bright yellow flowers bloom around June 24, the day when the feast of St. John was celebrated in the medieval era, shortly after the summer solstice. Traditional herbalists have long held that a tincture made from this plant delivers some of the bright solar energy of that time of year. Recent medical research has confirmed its efficacy in treating anxiety as well as moderate depression.

Side-effects and precautions: St. John's wort should not be taken in combination with pharmaceutical anti-depressants. Some studies suggest it may interfere with oral contraceptives. St. John's Wort may increase the effect of sleeping medications and anesthetics. It may cause sensitivity to ultraviolet light. Also, for people suffering from bipolar disorder, taking this herbal remedy may increase mood swings.

Balanced Lifestyle

In addition to taking St. John's wort and vitamin D, take care that your lifestyle remains healthy

and active throughout the winter months. Avoid eating too many "comfort foods" as many of these do not travel easily through the digestive tract, leaving the body constipated and with an overall sluggish feeling.

Try not to succumb to the temptation to hibernate through the winter; human bodies are not designed for months of stillness. You can try to develop a better relationship with cold weather by learning a winter sport such as cross-country or downhill skiing, ice-skating or hockey. Or commit to a regular program of indoor exercise, preferably something you enjoy enough that you won't find excuses to avoid it. Try dancing or doing yoga if the prospect of getting on a treadmill fills you with boredom. Also, take some time to perform emotional self-care. Express your feelings rather than suppressing them, whether by visiting a therapist, writing in a journal or talking with a trusted friend. Re-connect frequently with feelings of happiness, whether watching a funny movie or listening to music that lifts your spirit.

Often people believe they must either deny their emotions or end up drowning in their feelings. Learning to meditate can help provide a balanced path between those two extremes and enable you to feel that you are not at the mercy of your emotions.

OBJECTIVE:

Primary Objective :

- 1) To collect the data about the treatment provided by the doctors for depression.
- 2) To evaluate the reason behind the cause of depression.

Secondary Objective :

- 1) To check the prescription pattern of the antidepressants.
- 2) To analyze the duration of the treatment.

METHODOLOGY:

A well-defined Questionnaire was prepared and survey was done in different hospitals and clinics. The data obtained was analyzed accordingly.

ANTIDEPRESSANTS:

These are drugs which can elevate mood in depressive illness. Practically all antidepressants affect monoaminergic transmission in the brain in one way or other and many of them have other associated properties.

Phenelzine Tranlycypromine Selegiline	NA,5-HT,DA DA
Atypical Antidepressants Bupropion Nefazodone Trazodone	DA 5-HT

Classification of antidepressants: Table 1:

Antidepressant group	Amine Effects
Noradrenaline-reuptake inhibitor: 1. Tricyclics(Tertiary Amines): Amitriptyline Clomipramine Doxepin Imipramine Trimipramine 2. Tricyclics(Secondary Amines): Amoxapine Desipramine Nortriptyline	NA,5-HT NA,DA NA
Serotonin-Reuptake Inhibitors: Fluoxetine Paroxetine Sertraline Venlafaxine	5-HT 5-HT,NA
MonoamineOxidase Inhibitors(MAOIs)	

RESULTS AND DISCUSSION:

Demographic Data :

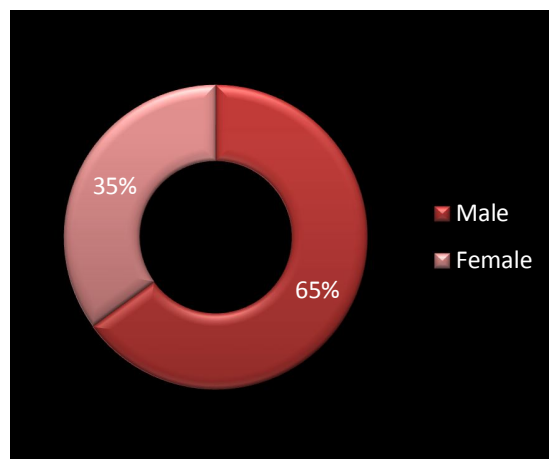


Figure No.1

Table 2:

SEX	PERCENTAGE(%)
Male	65
Female	35

This is the epidemiological data obtained locally in which Male predominate over Female in depression state.

AGE GROUPS OF DEPRESSION:

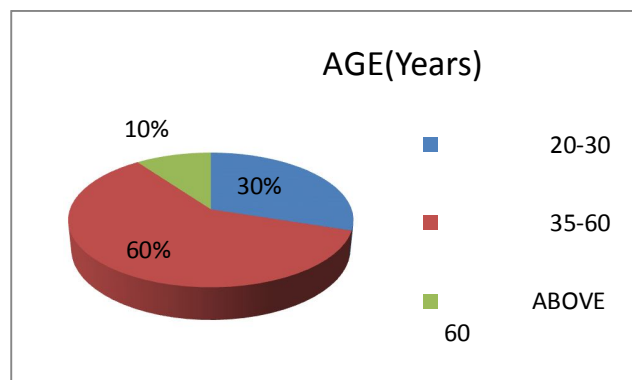


Figure No.2

Table 3:

AGE (Years)	PERCENTAGE(%)
20-30	30
35-60	60
ABOVE 60	10

The middle age were the most affected group with Depression which includes about 60 %.

DURATION OF THERAPY:

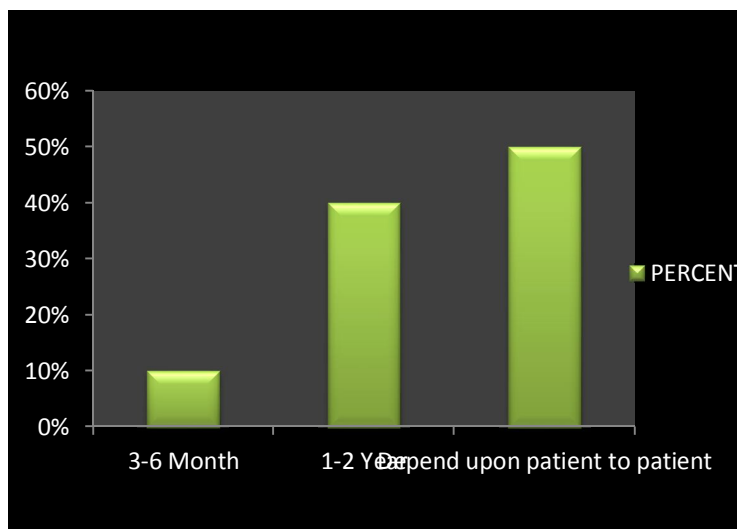


Figure No.3

Table 4:

DURATION	PERCENTAGE(%)
3-6 Month	10
1-2 Year	40
Depend upon patient to patient	50

Most of the cases were treated with Chronic or maintenance therapy which takes more than year to treat.

REASON BEHIND THE DEPRESSION:

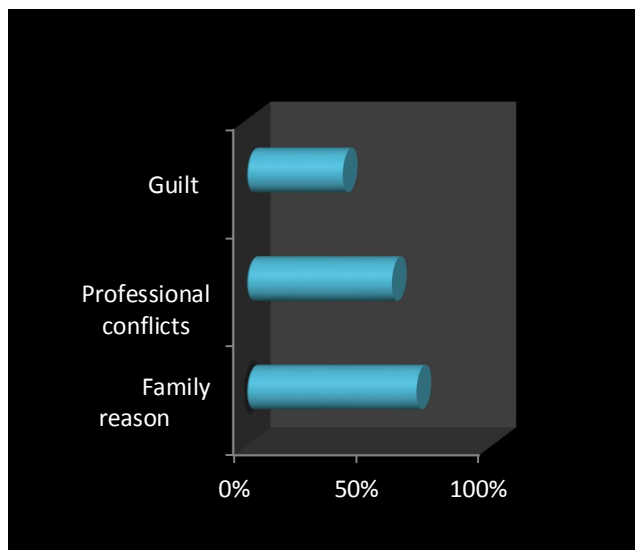


Figure No.4

Table 5:

REASON	PERCENTAGE(%)
Family reason	70
Professional conflicts	60
Guilt	40

The family reason was the leading cause of depression in the patients as told by them and by treating physician followed by conflicts in their professional life.

GENERAL DRUG PRESCRIBED IN DEPRESSION:

Commonly drugs prescribed for the treatment of depression is as given below:

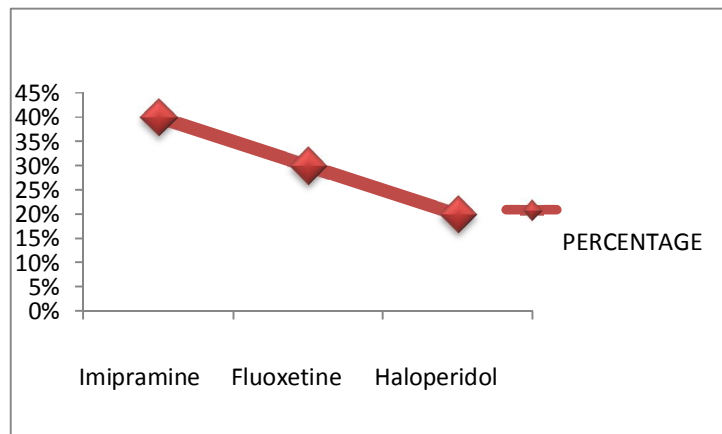


Figure No.5

Table 6:

REASON	PERCENTAGE(%)
Family reason	70
Professional conflicts	60
Guilt	40

Among all Imipramine was the most prescribed drug followed by flouxetine and others.

ANTI-DEPRESSION THERAPY IN CHILDREN:

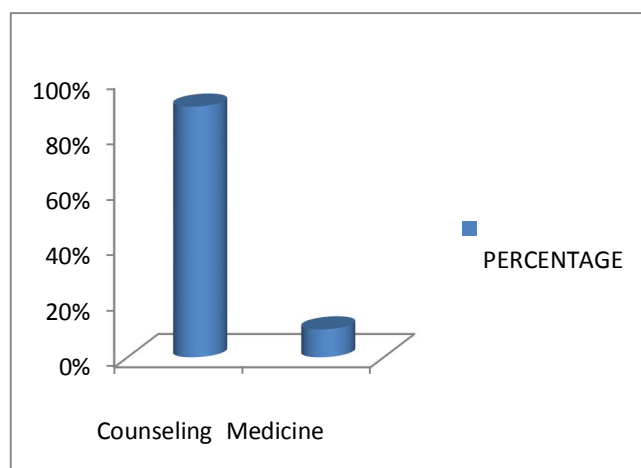


Figure No.6

Table 7:

THERAPY	PERCENTAGE(%)
Counseling	90
Medicine	10

In children counseling was the first line of treatment in most of the cases.

CONCLUSION:

- Middle age is at most risk of developing depression.
- Family reason and professional conflicts are root cause for the same.
- For general treatment *Imipramine* is drug of choice.
- Drugs of choice for pregnancy and lactation is *Fluoxetine*.
- Non-pharmacological treatment plays a major role in treatment of depression.
- Counseling is a foundation for every type of depression treatment and it is only choice for treating children.

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