INTERNATIONAL JOURNAL OF PHARMACEUTICAL SCIENCES
[ISSN: 0975-4725; CODEN(USA): IJPS00]
Journal Homepage: https://www.ijpsjournal.com

Review Article

A Review On Depression

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ARTICLE INFO

Received: 12 Aug 2024
Accepted: 16 Aug 2024
Published: 17 Aug 2024

Keywords:
Depression, patient counselling, SOAP Note.

DOI:
10.5281/zenodo.13335731

ABSTRACT

Depression is a mood disorder that cause a persistent feeling of sadness and loss of interest. The common features of all depressive disorder are sadness, emptiness or irritable mood, accompanied by somatic and cognitive changes that significantly affect the individual`s capacity to function. The types of depression incudes: clinical Depression, Persistent Depressive Disorder [PDD], Disruptive Mood Dysregulation Disorder [DMDD], Premenstrual Dysphoric Disorder [PMDD], Depressive disorder due to another medical condition. The major signs and symptoms are depressive mood on most days, including feelings of sadness or empties, loss of pleasure in previously enjoyable activities, too little or too much sleep most days etc…some of physical symptoms includes weight loss or gain, chronic pain, inflammation, heart disease etc. The etiology of major depressive disorder is multifactorial with both genetic and environmental factors playing a role. The rate for depression occurring with other medical illnesses is quite high and depends on many factors, especially a past history of depression. Here are some examples: With heart attack, 40% to 65% of patients experience depression. Electroconvulsive therapy is useful for patients who are not responding well to medications or are suicidal.

INTRODUCTION

Depression

Depression is a mood disorder that cause a persistent feeling of sadness and loss of interest. The common features of all depressive disorder are sadness, emptiness or irritable mood, accompanied by somatic and cognitive changes that significantly affect the individual`s capacity to function [1]. Because of false perceptions, nearly 60% of people with depression do not seek medical help. Many feel that the stigma of a mental health disorder is not acceptable in society and may hinder both personal and professional life. There is good evidence indicating that most antidepressants do work but the individual response to treatment may vary. More than just a

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Relevant conflicts of interest/financial disclosures: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

bout of the blues, depression isn't a weakness and you can't simply "snap out" of it. Depression may require long-term treatment. But don't get discouraged. Most people with depression feel better with medication, psychotherapy or both.[2]

Objectives

- Review the risk factors for depression.
- Describe DSM V criteria for the diagnosis of depression.
- Summarize the treatment of depression.
- Outline the evaluation and management of depression and the role of interprofessional team members in collaborating to provide well-coordinated care and enhance patient outcomes.

Types Of Depression

- **Clinical depression (major depressive disorder):**

A diagnosis of major depressive disorder means you've felt sad, low or worthless most days for at least two weeks while also having other symptoms such as sleep problems, loss of interest in activities or change in appetite. This is the most severe form of depression and one of the most common forms.

- **Persistent Depressive Disorder (PDD):**

Persistent depressive disorder is mild or moderate depression that lasts for at least two years. The symptoms are less severe than major depressive disorder. Healthcare providers used to call PDD dysthymia.

- **Disruptive Mood Dysregulation Disorder (DMDD):**

DMDD causes chronic, intense irritability and frequent anger outbursts in children. Symptoms usually begin by the age of 10.

- **Premenstrual Dysphoric Disorder (PMDD):**

With PMDD, you have premenstrual syndrome (PMS) symptoms along with mood symptoms, such as extreme irritability, anxiety or depression. These symptoms improve within a few days after your period starts, but they can be severe enough to interfere with your life.

- **Depressive disorder due to another medical condition:**

Many medical conditions can create changes in your body that cause depression. Examples include hypothyroidism, heart disease, Parkinson's disease and cancer. If you're able to treat the underlying condition, the depression usually improves as well.

Epidemiology

Twelve-month prevalence of major depressive disorder is approximately 7%, with marked differences by age group. The prevalence in 18- to 29-year-old individuals is threefold higher than the prevalence in individuals aged 60 years or older. Females experience 1.5- to 3-fold higher rates than males beginning in early adolescence. In the US, depression affects nearly 17 million adults but these numbers are gross underestimates as many have not even come to medical attention.[4]

Signs And Symptoms

- Depressed mood on most days, including feelings of sadness or emptiness
- Loss of pleasure in previously enjoyable activities
- Too little or too much sleep most days
- Unintended weight loss or gain or changes in appetite
- Physical agitation or feelings of sluggishness
- Low energy or fatigue
- Feelings of worthlessness or guilt
- Trouble concentrating or making decisions

Etiology

The etiology of major depressive disorder is multifactorial with both genetic and environmental factors playing a role. First-degree relatives of depressed individuals are about 3 times as likely to develop depression as the general population; however, depression can occur in people without family histories of depression.

Some evidence suggests that genetic factors play a lesser role in late-onset depression than in early-onset depression. There are potential biological risk factors that have been identified for depression in the elderly. Neurodegenerative diseases (especially Alzheimer disease and Parkinson disease), stroke, multiple sclerosis, seizure disorders, cancer, macular degeneration, and chronic pain have been associated with higher rates of depression. Life events and hassles operate as triggers for the development of depression. Traumatic events such as the death or loss of a loved one, lack or reduced social support, caregiver burden, financial problems, interpersonal difficulties, and conflicts are examples of stressors that can trigger depression.[7]

Pathophysiology

The underlying pathophysiology of major depressive disorder has not been clearly defined. Current evidence points to a complex interaction between neurotransmitter availability and receptor regulation and sensitivity underlying the affective symptoms. Clinical and preclinical trials suggest a disturbance in central nervous system serotonin (5-HT) activity as an important factor. Other neurotransmitters implicated include norepinephrine (NE), dopamine (DA), glutamate, and brain-derived neurotrophic factor (BDNF).

The role of CNS 5-HT activity in the pathophysiology of major depressive disorder is suggested by the therapeutic efficacy of Selective Serotonin Reuptake Inhibitors (SSRIs). Research findings imply a role for neuronal receptor regulation, intracellular signaling, and gene expression over time, in addition to enhanced neurotransmitter availability. Seasonal affective disorder is a form of major depressive disorder that typically arises during the fall and winter and resolves during the spring and summer. Studies suggest that seasonal affective disorder is also mediated by alterations in CNS levels of 5-HT and appears to be triggered by alterations in circadian rhythm and sunlight exposure. Vascular lesions may contribute to depression by disrupting the neural networks involved in emotion regulation—in particular, front striatal pathways that link the dorsolateral prefrontal cortex, orbitofrontal cortex, anterior cingulate, and dorsal cingulate. Other components of limbic circuitry, in particular, the hippocampus and amygdala, have been implicated in depression.[8][9]

Risk Factors

Depression often begins in the teens, 20s or 30s, but it can happen at any age. More women than men are diagnosed with depression, but this may be due in part because women are more likely to seek treatment.

Factors that seem to increase the risk of developing or triggering depression include:

- Certain personality traits, such as low self-esteem and being too dependent, self-critical or pessimistic
- Traumatic or stressful events, such as physical or sexual abuse, the death or loss of a loved one, a difficult relationship, or financial problems
- Blood relatives with a history of depression, bipolar disorder, alcoholism or suicide
- Being lesbian, gay, bisexual or transgender, or having variations in the development of genital organs that aren't clearly male or female (intersex) in an unsupportive situation
- History of other mental health disorders, such as anxiety disorder, eating disorders or post-traumatic stress disorder
- Abuse of alcohol or recreational drugs
- Serious or chronic illness, including cancer, stroke, chronic pain or heart disease
- Certain medications, such as some high blood pressure medications or sleeping pills (talk to your doctor before stopping any medication) [10][11]

Complication

Possible complications include:

- blood clots
- contractures, or shortening of muscles or tendons
- decubitus ulcers
- dehydration
- malnutrition
- pneumonia

The rate for depression occurring with other medical illnesses is quite high and depends on many factors, especially a past history of depression. Here are some examples: With heart attack, 40% to 65% of patients experience depression. The rate of depression for both Parkinson's disease and multiple sclerosis is 40%. As many as 25% of patients with cancer and patients with diabetes experience depression. In patients with coronary artery disease who have not had a heart attack, the rate of depression ranges from 18% to 20%. For stroke patients, the rate ranges from 10% to 27%.[12]

Diagnosis

- Adjustment disorders
- Anaemia
- Chronic Fatigue syndrome
- Dissociative disorders
- Illness anxiety disorders
- Hypoglycaemia
- Hypopituitarism
- Schizoaffective disorders
- Schizophrenia
- Somatic symptom disorders [13]

Treatment

Electroconvulsive therapy is useful for patients who are not responding well to medications or are suicidal.

Medications

1. Selective Serotonin Reuptake Inhibitors (SSRIs): SSRIs have the advantage of ease of dosing and low toxicity in overdose. They are also the first-line medications for late-onset depression.

2. SSRI's include: Citalopram, Escitalopram, Fluoxetine, Fluvoxamine, Paroxetine, Sertraline, Vilazodone, Vortioxetine.

3. Serotonin/Norepinephrine Reuptake Inhibitors (SNRIs): SNRIs, which include Venlafaxine, Desvenlafaxine, Duloxetine, and Levomilnacipran can be used as first-line agents, particularly in patients with significant fatigue or pain syndromes associated with the episode of depression. SNRIs also have an important role as second-line agents in patients who have not responded to SSRIs.

4. Atypical antidepressants: Atypical antidepressants include Bupropion, Mirtazapine, Nefazodone, and Trazodone. They have all been found to be effective in monotherapy in major depressive disorder and may be used in combination therapy for more difficult to treat depression.

5. Serotonin-Dopamine Activity Modulators (SDAMs): SDAMs include Brexpiprazole and Bripiprazole. SDAMs act as a partial agonist at 5-HT1A and dopamine D2 receptors at similar potency, and as an antagonist at 5-HT2A and noradrenaline alp Brexpiprazole is indicated as adjunctive therapy for Major Depressive Disorder (MDD).

6. Tricyclic Antidepressants (TCAs): Amitriptyline, Clomipramine, Desipramine, Doxepin, Imipramine, Nortriptyline, Protriptyline, Trimipramine. TCAs have a long record of efficiency in the treatment of depression. They are used as less commonly because of their side effects profile and their considerable toxicity in overdose.

7. Monoamine Oxidase Inhibitors (MAOIs): MAOIs include Isocarboxazid, Phenelzine, Selegiline, and Tranylcypromine. These agents are widely effective in a broad range of affective and anxiety disorders. Because of the risk of hypertensive crisis, patients on these medications must follow a low-tyramine diet. Other adverse effects can include insomnia, anxiety, orthostasis, weight gain, and sexual dysfunction.

8. Electroconvulsive Therapy (ECT): ECT is a highly effective treatment for depression. Onset of action may be more rapid than that of drug treatments, with benefit often seen within 1 week of commencing treatment. A course of ECT (usually up to 12 sessions) is the treatment of choice for patients who do not respond to drug therapy, are psychotic, or are suicidal or dangerous to themselves. Thus, the indications for the use of ECT include the following:

a) Need for a rapid antidepressant response
b) Failure of drug therapies
c) History of a good response to ECT
d) Patient preference
e) High risk of suicide
f) High risk of medical morbidity and mortality

Although advances in brief anaesthesia and neuromuscular paralysis have improved the safety and tolerability of ECT, this modality poses numerous risks, including those associated with general anaesthesia, postictal confusion, and, more rarely, short-term memory difficulties.

• Psychotherapy

Cognitive Behaviour Therapy and Interpersonal Therapy are evidence-based psychotherapies that have been found to be effective in the treatment of depression.

• Cognitive-Behavioural Therapy (CBT)

CBT is a structured, and didactic form of therapy that focuses on helping individuals identify and modify maladaptive thinking and behaviour patterns (16 to 20 sessions). It is based on the premise that patients who are depressed exhibit the "cognitive triad" of depression, which includes a negative view of themselves, the world, and the future. Patients with depression also exhibit cognitive distortions that help to maintain their negative beliefs. CBT for depression typically includes behavioural strategies (i.e., activity scheduling), as well as cognitive restructuring to change negative automatic thoughts and addressing maladaptive schemas.

There is evidence supporting the use of CBT with individuals of all ages. It is also considered being efficacious for the prevention of relapse. It is particularly valuable for elderly patients, who may be more prone to problems or side effects with medications. Mindfulness-Based Cognitive Therapy (MBCT) was designed to reduce relapse among individuals who have been successfully treated for an episode of recurrent major depressive disorder. The primary treatment component is mindfulness training. MBCT specifically focuses on ruminative thought processes as being a risk factor for relapse. Research indicates that MBCT is effective in reducing the risk of relapse in patients with recurrent depression, especially in those with the most severe residual symptoms. Interpersonal therapy (IPT)

• Interpersonal Therapy (IPT)

Interpersonal therapy (IPT) is a time-limited (typically 16 sessions) treatment for major depressive disorder. IPT draws from attachment theory and emphasize the role of interpersonal relationships, focusing on current interpersonal difficulties. Specific areas of emphasis include grief, interpersonal disputes, role transitions, and interpersonal deficits.[14]

Pharmacological Treatment

SSRIs: Citalopram, Escitalopram, Fluoxetine.
SNRIs: Duloxetine, Venlefexin
MAOIs: Isocarboxazid, Selegilline.
TCAs: Amitriptyline, Doxepin, Imipramine.
Miscellaneous: Bupropion, Mirtazapine.

Non-Pharmacological Treatment

Psycotherapies

• Behavioural therapy
• Interpersonal psychotherapy
• Group therapy
• Cognitive-Behavioural Therapy [CBT]
• Mindfulness Based Cognitive Therapy [MBCT]

Brain stimulation methods

• Electro Convulsive Therapy [ECT]

• Vagus Nerve Stimulation [VNS]
• Transcranial Magnetic Stimulation [TMS]
• Deep Brain Stimulation [DBS]

Prevention

• Balanced diet
• Regular physical activity
• Adequate sleep
• Stress management
• Self-improvement
• Time management
• Seeking psychological support
• Social connections

- 7 -Habits For Depression Prevention

• Nurture relationships
• Adopt acts of kindness
• Live healthy
• Find your glow
• Find meaning
• Know your strengths
• Have a positive mindset

Life History

The investigation into depressive symptoms begins with inquiries of the neuro -vegetative symptoms which include changes in sleeping patterns, appetite, and energy levels. Positive responses should elicit further questioning focused on evaluating for the presence of the symptoms which are diagnostic of major depression. [15]

1. Sleep disturbance
2. Interest/pleasure reduction
3. Guilt feelings or thoughts of worthlessness
4. Energy changes/fatigue
5. Concentration/attention impairment
6. Appetite/weight changes
7. Psychomotor disturbances
8. Suicidal thoughts
9. Depressed mood

Patient Counselling

Benefits of patient counselling

- Cognitive therapy, Behavioural therapy and Cognitive behavioural therapy focus on how your own thoughts and behaviours contribute to your depression. Your therapist will help you learn ways to react to things and challenge your preconceptions. You and your therapist might come up with goals. You might also get "homework" assignments, like to keep a journal or apply problem-solving techniques in particular situations.
- Interpersonal therapy focuses on how your relationships with others play a role in your depression. It focuses on practical issues. You will learn how to spot unhealthy behaviours and change them.
- Psychodynamic therapy is more traditional. You and your therapist explore behaviour patterns and motivations that you may not be aware of which could contribute to depression. You may focus on any traumas from your childhood.
- Individual counselling is a one-on-one session with a professional therapist who might be an MD (psychiatrist/doctor), PhD (psychologist), PsyD (psychologist), LCSW (licensed clinical social worker), NP (nurse practitioner), or other licensed therapist with experience in treating depression and other mood disorders. Your therapist can teach you more about depression and help you understand yours. You can discuss new strategies to manage stress and to keep your depression from getting worse or coming back.
- Family counselling treats the entire family -- because it's not only the person with the diagnosis who is affected by depression. If you're depressed, your family feels it, too. And unfortunately, although family members may have the best of intentions, without professional guidance, they sometimes make things worse. Family therapy is a great way for your relatives to learn about depression and the early warning signs. Studies suggest that family sessions might really help with treatment, too, improving lifestyle,

compliance with medication, and sleep habits. It also lets you and your family members talk about the stresses of life with depression. You may all feel more comfortable talking openly with a therapist there to guide the conversation.

- Group counselling sessions give you a chance to meet other people who are going through the same things you are. You can share experiences and strategies. The give-and-take is often a good way to learn new ways to think about your illness.[16]

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HOW TO CITE: Ancy T. S.*, Akhila S. P., Sneha P. S., Sree Lekshmi R. S., Prasobh G. R., A Review On Depression, Int. J. of Pharm. Sci., 2024, Vol 2, Issue 8, 3286-3293. https://doi.org/10.5281/zenodo.13335731