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Review Article

Herbal Medicine Use for Anxiety and Depression

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ABSTRACT

The substances the body produces during times of stress, depression, and anxiety are examined in this scientific report. It also identifies efficient non-prescription alternatives to prescription drugs for treating anxiety, depression, and stress. Reviewing, evaluating, and summarizing primary material from conference publications and peer-reviewed journals were all part of our research technique. We chose papers that looked at various forms of mental discomfort and their treatment options. According to our findings, there are no over-the-counter drugs that can successfully treat anxiety, sadness, or stress. Nonetheless, there is hope that plants and essential oils can lessen these diseases. Pharmaceutical medications Herbs are more cost-effective, safer, easier to digest, and have less negative side effects. For a number of medical disorders, herbs are the best substitute for prescription medications. When paired with a raw vegan diet and consistent exercise, the herbs support and enhance general health. Vitamin C, minerals, and amino acids found in the leaves, roots, and stems of several plants can be beneficial for conditions affecting the central nervous system. Several medicinal plants that have been shown to have anti-anxiety properties are mentioned as *Passiflora incarnata*, *mentha piperita*, saffron and ashwagandha.

INTRODUCTION

Anxiety: is a condition of emotional stimulation characterised by anxiety or fear. Patients who are worried are more likely to have an inaccurate view of the threat than those who are uneasy. Anxiety can produce agitation and mood changes. Symptoms may include weariness, difficulty focusing, increased heart rate, breathing difficulties, gastrointestinal discomfort, and other physical and cognitive issues. [1]

Anxiety disorders impact around 40 million individuals in the United States, which accounts for roughly 18% of the population between the ages of 18 and 60.[2]

Type of anxiety [3]

1.Generalized Anxiety Disorder

A key characteristic of GAD is the presence of tension and an overwhelming sense of worry, which may concern various situations or occur without accompanying panic or phobic reactions.

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Additional symptoms can include exhaustion, restlessness, disruptions in sleep, trouble concentrating, and muscle tightness. A diagnosis of GAD is confirmed when a person experiences excessive worrying about multiple issues for over six months.

2. Panic Disorder

This type of disorder starts with a series of unexpected panic attacks that involve intense, overwhelming fear, resembling that experienced in life-threatening situations. Symptoms can include sweating, rapid heartbeat, shaking, chest discomfort, a sensation of suffocation, as well as chills or hot flashes. A diagnosis is made when an individual experiences recurrent expected panic attacks along with at least four of the following symptoms that begin suddenly and reach their peak within 10 minutes.

3 Phobia

3.1 Social Phobia

The main characteristic of social anxiety disorder, known as social phobia, is a profound fear or anxiety about being judged, evaluated negatively, or rejected in social or performance contexts. Individuals with this disorder may fear showing signs of anxiety (e.g., blushing or stumbling over their words) or being perceived as foolish, awkward, or uninteresting. Consequently, they often steer clear of social or performance events and when unable to avoid such situations, they experience considerable anxiety and distress.

3.2 Specific Phobia

This phobia involves an overwhelming fear associated with a particular object or situation (e.g., insects, heights, public transport, etc.)

3.3 Obsessive Compulsive Disorder

This disorder is characterized by persistent, intrusive thoughts and repetitive, ritualistic behaviors or actions.

•Action Mechanism of Herbal Remedies

The way herbal medications work primarily consists of influencing neuronal interactions through particular plant compounds that attach to neurotransmitter or neuromodulator receptors and

by modifying the synthesis and overall function of neurotransmitters. [3]

Sign and symptoms:

Individuals frequently come forward reporting issues related to their physical health as their main focus. This can momentarily divert attention away from the deeper anxiety symptoms. This is especially prevalent in panic disorder, which is defined by brief episodes of overwhelming fear and a feeling of imminent disaster, along with physical manifestations such as chest discomfort, lightheadedness, and difficulty breathing.[4]

Diagnostic criteria: encompass persistent anxiety and worry lasting for a minimum of six months, along with challenges in managing this worry. The anxiety must be linked to three or more of the following symptoms for at least six months.

Causes: Including stressful event, environmental, psychological, genetic, and developmental factors.

Depression : The effects of depression go further than just the main symptoms, I feeling low and lacking energy; they also influence a person's quality of life. T includes the capacity to engage socially, sustain and appreciate relationships, perfo in a job, and support themselves and their families financially. [5]

Any alteration that leads to physical, emotional, or psychological strain can be referr to as stress. Although stress can be both beneficial and adaptive, and is a norm aspect of life for everyone, persistent stress is frequently linked to negat consequences. Prolonged exposure to stressful situations or environments can ha mental well-being, acting as a risk factor for various neuropsychiatric disorders I depression.[6]

Type of Depression

Major Depression

Major depression requires the presence of at least five of the symptoms outlined below for a duration of two weeks or more. For a diagnosis of major depressive disorder, these symptoms should not be attributable to a medical issue, another mental health condition, or substance abuse. Depressive episodes can happen once or twice in a person's lifetime, or they may happen more often.



Postpartum Depression

After giving birth, approximately 10 to 15 percent of women suffer from postpartum depression, which refers to depression linked to the period following pregnancy. Around 30 to 70 percent experience symptoms for a duration of one year or more.[7]

Causes of depression: Factors Contributing to Depression

Depression is typically the result of a mix of genetic, biological, environmental, and psychological influences.

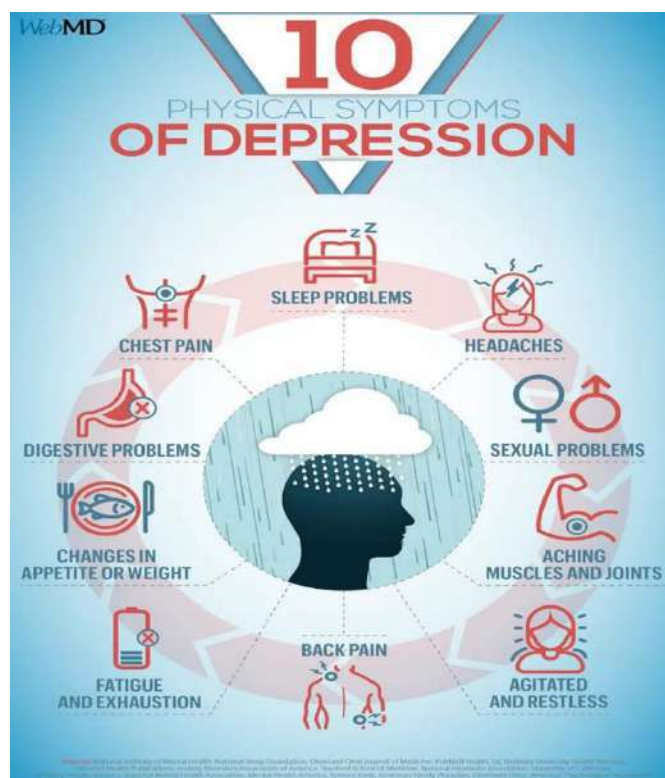


Figure 1.1 physical symptoms of depression Medically Reviewed by Jabeen Begum, MD on July 11, 2024 | Written by Debra Fulghum Bruce, PhD, Angela McPhillips

Ayurvedic view of anxiety and depression:

Anti-anxiety medications - Medhya Rasayanas: Tagara, Brahmi, Mandukaparni, Shankapuspi, Ashwagandha, Jatamansi, Parasika Yavani.

Antidepressant substances - Manobalya: Jyotismati, Vacha, Akarakarabha, Gandira.

Aphrodisiacs - Putranjiva, Kokilaksha, Kapikacchu.

Rasayanas - Shilajatu, Amalaki, Ashwagandha, Abhraka, Yashada, Mukta, Shukti, Swarna, Rajata.

Satvavajaya practices - Sadvruta, Yoga, Dhyana, Pranayama.

Brahmi and Tagara are complementary substances that work well together for alleviating anxiety. Mandukaparni also shares similar properties to

Brahmi. Ashwagandha serves as both an anti-anxiety and antidepressant remedy. Jatamansi promotes short-term sleep, so we should consider these medications for managing anxiety and depression. A minimum treatment duration of three months is necessary for addressing this condition.[9]

Pathophysiology of anxiety and depression:

Modifications of monoamine receptors contribute to the understanding of anxiety and depression, along with the role of endocrine factors in their pathophysiology. The dysfunctional functioning of the hypothalamic-pituitary-adrenal (HPA) axis and its implications for HPA dysregulation in anxiety and depression are also examined. Furthermore, a suggested model illustrating a

neuroendocrine continuum for both anxiety and depression is presented.[10]

Herbal medicine use for anxiety and depression:

1] Brahmi : (*Bacopa monnieri*) is regarded as an adaptogenic herb that enhances the body's ability to cope with stress. Studies indicate that it aids in lowering stress and anxiety by decreasing cortisol levels and boosting serotonin levels, which improves mood.[11]



Chemical Compounds, including alkaloids, glycosides, flavonoids, and saponins.

Brahmi is a medicinal plant that has been used for its antioxidant effects. It is thought to have anti-inflammatory, antibacterial, Anti-anxiety, anticancer, and other properties.

Marketing formulations of Brahmi: Brahmi vati (BV), Brahmi Ghrita (BG), Saraswatarishta (SW).

2] Tagara (*Valeriana wallichii*) - The roots of Tagara aid in enhancing sleep by soothing the central nervous system due to their sedative effects. They boost the levels of GABA—gamma aminobutyric acid—which aids in controlling nerve cells and has a soothing impact on anxiety. Additionally, it is helpful in regulating blood pressure by relaxing smooth muscles and improving blood circulation.[12]



Tagara (*Valeriana wallichii*) contains many chemical constituents, including valepotriates, valerenic acid, and essential oils.

Tagara is an Ayurvedic herb that has been used to treat a variety of ailments. It is used to treat insomnia, stomach pain, nerve inflammation and antidepressant.

Marketing formulations of tagara: Himalaya Tagara, Maha Herbals, Tagara Plus Capsule:

3] Mandukaparni: (*Centella asiatica*) has compounds such as brahminoside and brahmoside that interact with cholecystokinin receptors, a class of G protein-coupled receptors that interact with the peptide hormones cholecystokinin and may influence anxiety regulation.[13]



Mandukaparni contain many chemical constituents, including Triterpenoids, Flavonoids, Alkaloids, Aminoacids, Vitamins, Sterols, Inorganic salts, Carotenoids, Essential oils and Volatile fatty acids.

Mandukaparni is also known as Indian pennywort or Gotu Kola. It is used in Ayurveda to treat neurological disorders like anxiety.

Marketing formulations: Capsules, Gels and Powders

4] Jatamansi: (*Nardostachys jatamansi*) boosts the concentrations of monoamines and inhibitory amino acids, including serotonin, 5-hydroxyindole acetic acid, GABA, and taurine, which play a role in its antidepressant effects.[14]



Jatamansi contains many chemical constituents, including sesquiterpenes, coumarins, and other compounds.

jatamansi has traditionally been used to treat insomnia and blood, circulatory, and mental disorders.

Jatamansi formulations include oils, powders, and decoctions

5] Ashwagandha: (*Withania somnifera*) demonstrates a stabilizing influence on the HPA axis, making it less sensitive to stressors. It lowers levels of cortisol and DHEAS, indicating it has a moderating impact on HPA axis functioning in individuals under stress.[15]



Ashwagandha contain chemical constituents alkaloids, flavonoids, steroidal lactones, saponins, and sitoindosides.

Ashwagandha is an important herb in Ayurveda, the traditional system of medicine in India. It is used as a rejuvenator, or Rasayana, to promote a youthful state of physical and mental health.

Ashwagandha can be formulated in many ways, including as a decoction, jam, tablet, cream, or gel.

Panchakarma for Anxiety and Depression[16]

In addition to the medications mentioned earlier, patients undergo various Panchakarma therapies. The following procedures are beneficial:

a) Abhyanga: This involves a medicated oil massage that enhances blood circulation throughout the body and brain. It activates the Srotas, which helps release stress and calms the mind. This treatment is particularly effective in balancing Vata, a primary factor contributing to mental health issues.

b) Shirodhara: This is one of the most soothing relaxation techniques. Medicated oil or buttermilk is poured in a cyclic manner over the forehead, stimulating the points across the forehead. This therapy revitalizes the central nervous system, which can become congested due to accumulated stress, lifestyle choices, and workplace pressures. It alleviates various ailments caused by an aggravated Vata Dosha.

c) Nasya: medicated oil is introduced into the nasal passages, aiding in the relief of headaches, sinus-related migraines, alleviating anxiety, enhancing mental clarity, and stimulating the nervous system.

d) Karnapoorana: when medicated oil is poured into the ear, it activates the nerve endings in the small bones of the inner ear, known as ossicles, which then send signals to the brain. This process encourages neuronal stimulation and promotes mental wellness by soothing the mind.

post anxiety and depression complications: Complications arising from post-anxiety depression may encompass various challenges, including difficulties in relationships, issues at work or school, substance abuse, social isolation,

and physical health concerns such as fluctuations in weight or chronic pain. Additionally, individuals may experience suicidal thoughts, engage in self-harm, and face a diminished quality of life as a result of the persistent effects of anxiety and depressive symptoms on their daily activities.

Post anxiety and depression management's: Adopting and sustaining healthy lifestyle practices, such as engaging in regular physical activity, ensuring proper sleep hygiene, following a balanced diet, and fostering connections with supportive individuals, is essential. Additionally, it is important to persist with therapeutic approaches, including cognitive behavioral therapy (CBT), to tackle negative thought patterns and cultivate effective coping strategies.

CONCLUSION:

Ayurveda presents numerous benefits for those experiencing distress. In today's world, individuals encounter varying degrees of stress and depression, highlighting the necessity for enhanced mental well-being. To address these challenges, we have access to various resources, including counseling, physical exercises, Yoga, brain tonics (Medhya Rasayanas), and Manobalya medicines, all of which serve as effective tools for managing anxiety and depression in patients.

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