

MENTAL HEALTH CHALLENGES AND POSSIBLE SOLUTIONS WITH SPECIAL REFERENCE TO ANXIETY

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ABSTRACT

Mental disorders are universal and very common. No country can postpone service development until the finalization of national level epidemiological surveys. It should be noted also that such surveys are very costly and the quality of mental health research is low in most developing countries. Anxiety is the result of stressful life, peer pressure, work pressure and family issues. Cognitive, somatic, emotional and behavioural components combine to form a psychological and physiological state that is known as anxiety. The unpleasant feeling is often linked with uneasiness, fear or worry. Due to anxiety, people often experience nervousness, panic, constant sadness and depressed mood. Many anti-stress medicines and therapies have come up to deal with the ill effects of anxiety. However, most of them have certain side effects as well. Although very few drugs are currently approved by regulatory authorities for treating multi-factorial ailments and disorders of brain like anxiety, anxiety was treated with drugs in a class known as benzodiazepines, Neurontin is an anti seizure medication that has been found to be helpful in treating anxiety for some people, but little organized research has indicated whether or not it is effective in addressing anxiety disorders. Certain plant-derived agents, including, for example, Ashwagandha, Borage Juice, Bugleweed, California poppy, Ginkgo Biloba, Ginseng, St. John's Wort. These plants are used both in herbal and conventional medicine and offer benefits that pharmaceutical drugs lack. In the present article, an attempt has been made to review the most important medicinal plants, including the above which are widely used for their reputed effectiveness in CNS disorders. In this review, we present ethnobotanical information on plants with their mechanisms, used by the traditional healers in India to treat mental illnesses, specifically anxiety and debilitating mental disorders.

KEYWORDS: Mental disorders, Anxiety, conventional medicine, Herbal remedies, ethanobotanical

INTRODUCTION

World Health Organization data suggest that neurological and psychiatric disorders are an important and growing cause of morbidity (presently 450 million people)¹. More than 25% of people are affected by mental and behavioural disorders at some point during their lives. In 2000, neuropsychiatric disorders accounted for 12% of the total disability-adjusted life years (DALYs) due to all diseases and injuries, and this is projected to increase to 15% by the year 2020 as per Selye's hypothesis^{2,3}. Human anxiety is defined as a feeling of apprehension, uncertainty or tension stemming from the anticipation of imagined or unreal threat⁴. Anxiety disorders, along with mood disorders, are the disorders that contribute most to morbid-mortality through the suffering that they generate and are the ones that have the biggest repercussions on national economies. Anxiety affects one-eighth population worldwide and has become an important research area in the field of psychopharmacology⁵. Mental disorders are universal and very common. According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR), anxiety is characterized by a feeling of persistent worry that hinders an individual's ability to relax⁶. The impact of the anxiety is not limited to consistent stress, which is associated with higher risk of cardiovascular and cerebrovascular disease⁷. Anxiety also has debilitating physical manifestations as headaches, uncontrolled trembling and sweating, muscle tension and aches, among others. To date, the biological explanations for many types of anxiety disorders remain inadequate. Postulations have implicated a dysregulation of specific neurotransmitters such as serotonin, dopamine and gamma-aminobutyric acid (GABA) as potential causes for both depression and anxiety disorders^{8,9}. These hypotheses are based on the results of pharmacological treatments, but there are no definitive clinical trials that demonstrate the dysregulation of these neurotransmitters as causative factors of anxiety, potentially explaining why the treatment of anxiety with antidepressants is often ineffective. Thus far, cognitive behavioural therapy (CBT) has proven to be the most effective, long-term treatment for anxiety-related disorders¹⁰. No country can postpone service development until the finalization of national level epidemiological surveys. It should be noted also that such surveys are very costly and the quality of mental health

research is low in most developing countries; errors of measurement may sometimes exceed the confidence interval of measurements in the sample. Thus, in such situations emphasis on exact figures may create false precision. Most of the time, a simple and less costly qualitative study will provide the health system with information on the main priority areas. Antianxiety medications such as Xanax, Valium, Ativan, and BuSpar have all been shown to be an effective general anxiety treatment option. Nevertheless, some of these mediations can lead to dependency, as well as withdrawal symptoms after being discontinued. Some antidepressant medications such as Lexapro, Paxil, Zoloft, and Effexor, have also been shown to be effective treatments, especially when symptoms of depression are also present. Benzodiazepines (BZDs), barbiturates, tricyclic antidepressants (TCA's) have been used for long time to treat anxiety disorders¹¹. The serious side effects associated with these drugs, namely rebound insomnia, sedation, muscle relaxation, withdrawal and tolerance (BZD's, barbiturates and alcohol), sexual dysfunction, anticholinergic, antihistaminic effects (TCA's) have limited their use in patients¹². So many different treatments have been advocated for anxiety states that it is tempting to conclude that none has any specific effect¹³. Alternative and herbal medicines, such as St. John's wort, valerian, lemon balm, passionflower and ginkgo among others, have become increasingly popular treatments for depression, nervous, sleep disorders and others symptoms of dementia. Better explanation of the pharmacological action for biologically active compounds of plants may have important role in development of phytotherapy the CNS disease. In the present study, systematic review and analysis have shown different mechanisms of action for herbal medicines in the brain.

PREVALENCE

Recent epidemiological studies of anxiety disorders provided evidence of their high frequency in the general population worldwide¹⁴. In the United States of America, the recent National Co-morbidity Survey Replication (NCS-R) found a lifetime prevalence rate of 28.8%¹⁵ and a twelve-month prevalence of 18.1%¹⁶. These disorders are mostly chronic, and have a negative impact on the life of patients and they can impair severely the daily functioning of the people suffering from them. They also have a

high co-morbidity between various anxiety disorders and with other mental disorders: depression, alcohol/substance dependence and abuse, suicide¹⁷. On the other hand, anxiety disorders appear to be more common in community populations than in clinical settings¹⁸. Anxiety Disorders affect about 40 million American adults age 18 years and older (about 18%) in a given year¹⁹, causing them to be filled with fearfulness and uncertainty. Unlike the relatively mild, brief anxiety caused by a stressful event (such as speaking in public or a first date), anxiety disorders last at least 6 months and can get worse if they are not treated. Anxiety disorders commonly occur along with other mental or physical illnesses, including alcohol or substance abuse, which may mask anxiety symptoms or make them worse. In some cases, these other illnesses need to be treated before a person will respond to treatment for the anxiety disorder.

SYMPTOMS

Symptoms of anxiety can manifest both in the physical (changes in normal physiological activity) and psychological level (changes in mood, thinking and behavior). The most common somatic symptoms of anxiety can include cardiovascular symptoms and signs such as tachycardia, palpitations, chest tightness, breathing and sighs, shortness of breath, hyperventilation, gastrointestinal and feeling of lump in the throat or stomach, difficulty swallowing, nausea, vomiting, diarrhea, constipation, urogenital and urinary urgency, premature ejaculation, as muscle tension or muscle pain, physical weakness, back pain, feeling of weakness in the legs, neurological conditions such as dizziness, vertigo, headache, unsteady gait, tremor, numbness, and neurovegetative as dry mouth, sweating, flushing, pallor or flushing²⁰. Regarding the possible types of psychic manifestations of anxiety include restlessness, apprehension, vague fears, irritability, or psychological stress. In more severe cases may appear a sense of impending doom²¹.

CLASSIFICATIONS

Anxiety disorders are one of the most frequent in psychiatric illness. Its evolution over time is characterized by relatively early ages initiated by the chronicity, to present periods of improvement and recurrence and generating stages of disability in people who suffer²². Anxiety disorders are common in the daily life of patients in very different ways. In order to sort and categorize these disorders classifications have been developed, with agreed diagnostic criteria, helping to detect and therefore to achieve a better prognosis and treatment. The DSM-IV-TR (APA) Anxiety Disorders divided as follows²³.

- Panic disorder with or without agoraphobia
- Agoraphobia without panic disorder
- Specific phobia
- Social Anxiety Disorder
- Obsessive-compulsive disorder
- PTSD
- Acute Stress Disorder
- Generalized Anxiety Disorder
- Anxiety disorder due to medical cause
- Anxiety disorder induced substance
- Anxiety disorder not otherwise specified

CAUSE

The actual causes of anxiety disorders are still unknown but there are some very solid indications suggesting that they might be results of interactions between different genetic, biological and some other factors like social and economical status. Generally two major groups of causes are distinguished of this disorder, first causes of generalized anxiety disorder and other causes of the episodes described as panic attacks or panic. In the case of generalized anxiety disorder causes are not fully known but there are some factors that predispose to its development²⁴. Outstanding in this group, the individual's genetic inheritance, brain neurotransmitters

and environmental factors. Recent research suggests that family history predisposes and increases the chance of developing the disorder, ie, generalized anxiety disorder may be partly hereditary. No doubt environmental factors can cause and trigger in many cases of generalized anxiety disorder. A bad experience, a trauma or stressful events can trigger the onset of generalized anxiety disorder. Periods of stress can worsen symptoms and other factors such as consumption of drugs or alcohol and snuff, can also worsen the course of the disease.

Generalized anxiety disorder is also associated with alterations in the functioning of the brain neurotransmitters, biochemical substances present in the central nervous system that are directly involved in their regulation and function²⁵. Secondary anxiety disorder is another cause, for example, the consumption of drugs such as alcohol, amphetamines and cocaine, or other diseases such as hyperthyroidism.

MANAGEMENT OF THE ANXIETY DISORDERS

Most cases of anxiety are handled at least initially in the primary care setting. In managing anxiety disorders the primary care physician faces several challenges to detect anxiety disorders in a person complaining of physical elements, to differentiate an anxiety disorder from a medical problem or substance use that could cause or exacerbate the anxiety. Considering the frequency with which patients with anxiety are seen in primary care setting, physician should screen their patients for both anxiety and depressive disorders.

Common treatment for anxiety

1. Medication – Use of anti-anxiety and anti-depressant requires prescription from doctor, and only under guidance and monitor from doctor or qualified psychiatrist, the patient will receive the correct dosage, minimize the danger of side effects.
2. Herbal – This is considered an alternative treatment for anxiety. However, the Chinese and native people had used them for thousands of years to cure the problems, and studies find that they are as effective as prescription medicine without the side effect, and if you don't want side effect or prescription medication doesn't work for you, you can try Herbal based medicine.
3. Relaxation Exercise – Taiji and QiGong are very good relaxation exercises, it can help to relax your mind and body, and restore them to a healthier stat, balance up your body chemical and reduce your mind anxiety and stop feeding anxious sense to the body.
4. Regular Exercise – 30 Minutes of regular exercise every day will reduce the panic attack, and shorten the duration during panic attacks, and eventually eliminate anxiety. When doing exercise, your mind will be distracted from thinking something anxious, and your body will be healthier, less symptoms of anxiety will occur. That's why exercise is vital in every treatment plan for anxiety.
5. Psychological Treatment for Anxiety – One of the most common and effective anxiety treatments is Cognitive Behavioural Therapy (CBT), and this method can be used with drugs or without drug. However, herbal based anxiety relief medicine is highly recommended. See Relora Review and Native Medicine Review for more information.
6. Diaphragmatic or Deep Breathing Exercise – Using special deep breathing technique to help relax the mind and body, increase the oxygen level and reduce chemical imbalance in the body in the body. This kind of techniques has proven itself to be effective for most sufferers to reduce duration and frequency of panic attacks.
7. Complementary Therapies – These are not exactly treatment for anxiety, but rather to restore health and strength of the body. Namely, Messages, Shiatsu, Tuina (Chinese acupressure treatment), Guasa, Acupuncture and Aromatherapy. Once or twice a week would help to relax the body and mind, and should do it regularly to see results.

Anxiety disorders are often treated with anxiolytic or antidepressant medications. In some patients combining drug and nondrug therapies produce superior results than either from the treatment alone.²⁶ several classes of drugs relieve the symptoms of anxiety²⁷. The benzodiazepines include diazepam, alprazolam and clonazepam. Benzodiazepines generally work quickly, and are used in the short term management of acute anxiety, panic disorder and GAD. However the side effects of the drugs particularly sedation, drowsiness and central nervous system depression. A physical dependence can also develop with the use of these agents and patients.

MEDICATIONS USED TO TREAT ANXIETY

Anxiolytics

Benzodiazepines- Diazepam, Alprazolam, clonazepam

Non-benzodiazepines- Buspirone

Antidepressants

MAOI- Phenazine

TCAs- Clomipramine, Imipramine

SSRIs- Paroxetine, Sertaline, nefazodone, venlafaxine, mirtazapine

B-blockers- Propranolol, betaxolol

Herbal remedies

Herbal remedies for anxiety are used as alternative treatment for anxiety disorder. Though an herbal remedy for anxiety has been known to man for a long time, advances in medicine and the resulting commercialization of medical cure has obscured herbal remedies. The World Health Organization (WHO) has shown that, over 80% of the population in sub-Saharan Africa patronise traditional medical practitioners (TMP) – WHO, 1980. Medicinal plants have also been used in the development of new drugs and continue to play an invaluable role in the drug discovery process²⁸. Some of the natural remedies that are being explored for anxiety are-

Plant/Herbs	Family	Uses
<i>Abies Pindow</i> Royle	Pinaceae	Ethanollic extract of leaves showed significant anxiolytic effects on all the paradigms of anxiety. Terpenoids, flavonoids, glycosides and steroids of the leaf were found to have mast cell stabilizing action. Terpenoids and flavonoids offered bronchoprotection against histamine challenge. The ulcer protective action of petroleum ether, benzene and chloroform fraction has been attributed to steroidal contents ²⁹ .
<i>Achillea Millefolium</i> linn	Asteraceae	It is generally used as Digestive aid, appetite stimulant, anti-inflammatory, liver tonic, wounds and bruises and anti-anxiety. Most frequently reported uses are Digestive aid, Appetite stimulant, Anti-inflammatory and liver tonic ³⁰ .
<i>Aloysia Polystachya</i>	Verbenaceae	The aerial parts of the plant is having sedative and anxiolytic like effects ³¹ .
<i>AlbiziaLebeck</i> Benth	Mimosaceae	Lebeck is an astringent, also used by some cultures to treat boils, cough, to treat the eye, flu, gingivitis, lings problems, pectoral problems, is used as a tonic, and is used to treat abdominal tumours. The bark is used medicinally to treat inflammation. The antianxiety activity of the plant might be due to effect on GABA or saponins present in the extract ³² .
<i>Albizia Zulibrissin</i> Durazz	Fabaceae	The aqueous extract of the plant having anxiolytic-like effect ³³ .
<i>Angelica Sinensis</i> Diels	Apiaceae	The anxiolytic activity of the plant is due to the presence of an essential oil contains lingustilide ³⁴ .
<i>Aniba Riparia</i> Mez	Lauraceae	The unripe fruits contains Riparin I and Riparin III that shows anxiolytic activity ^{35,36} .
<i>Apocynum Venetum</i> Linn	Apocyanaceae	The aqueous extract of the leaves of <i>Apocynum venetum</i> shows anxiolytic activity due to the presence of Kaempferol ³⁷ .
<i>Annona Cherimola</i> Mill	Annonaceae	The antimicrobial activity of 17 alkaloids isolated from <i>A. cherimolia</i> [<i>A. cherimola</i>] stem bark was assessed. Most of the alkaloids were active against the Gram-positive bacteria <i>Bacillus subtilis</i> , <i>Staphylococcus aureus</i> and <i>Mycobacterium phlei</i> , but not against the Gram-negative bacteria. Anonaine was active against <i>Klebsiella pneum-oniae</i> , norushinsunine was active against <i>Pseudo-monas aeruginosa</i> , and anolobine was active against <i>Escherichia coli</i> and <i>Salmonella typhim-urium</i> . The juice showed the highest antioxidant activity, while the flesh exhibited the lowest ³⁸ .
<i>Azadirachta Indica</i> A.Juss	Meliaceae	The anxiolytic-like actions produced by interacting GABA _A receptor complex. Compounds such β -cariophyllene, β -selinene, α -cubebene, and linalool that has been reported to show anxiolytic effects ^{39,40} .
<i>Bacopa Monnieri</i> Penn	Scrophulariaceae	In Ayurveda it is used as nerve tonic and memory enhancer. It has been reported to possess anxiolytic activity in humans ^{41,42} .
<i>Casimiroa Edulis</i> Llave & Lex	Rutaceae	The aqueous extract of the leaves shows anxiolytic activity. The aqueous extract of the seed shows aphrodisiac activity ⁴³ .
<i>Cecropia Glazioui</i> Sneth	Moraceae	It has been used in most Latin American countries as an antihypertensive cardiogenic, and antiasthmatic folk medicine. The aqueous extract promotes anxiolytic like effect ⁴⁴ .
<i>Centella Asiatica</i> Urban	Apiaceae	It shows anxiolytic activity mainly due to the presence of asiaticoside ⁴⁵ .
<i>Coriandrum Sativum</i> Linn	Apiaceae	The major constituents were 2E-decenal (15.9%), decanal (14.3%), 2E-decen-1-ol (14.2%) and n-decanol (13.6%). Other constituents present in fairly good amounts are 2E-tridecen-1-al (6.75%), 2E-dodecenal (6.23%), dodecanal (4.36%), undecanol (3.37%), and undecanal (3.23%). The oil was screened for antimicrobial activity against both Gram positive (<i>Staphylococcus aureus</i> , <i>Bacillus spp.</i>) and Gram negative (<i>Escherichia coli</i> , <i>Salmonella typhi</i> , <i>Klebsiellapneumonia</i> , <i>Proteus mirabilis</i> , <i>Pseudomonas aeruginosae</i>) bacteria and a pathogenic fungus, <i>Candida albicans</i> ⁴⁶ .
<i>Coptis Chinensis</i> Franch	Ranunculaceae	It contains alkaloids Berberine. The anxiolytic mechanism of Berberine might be related to the increase in turnover rates of monoamines in the brain stem and decreased serotonergic system activity. Moreover, BER decreased serotonergic system activity via activation of somatodendritic 5-HT _{1A} autoreceptors and inhibition of postsynaptic 5-HT _{1A} and 5-HT ₂ receptors ⁴⁷ .
<i>Citrus Sinensis</i> Osbeck	Rutaceae	The main constituent is limonene. Which have anti viral and antiseptic action. Along with this it is also used for Anxiety, Insomnia, Relaxation, Nervousness etc ⁴⁸ .
<i>Crinum Giganteum</i> Andrews	Amaryllidaceae	The aqueous extract of <i>C. giganteum</i> contains some biologically active principles with sedative activity ⁴⁹ .
<i>Davilla Rugosa</i> Poir	Dilleniaceae	The Hydroalcoholic extract of the stems showed anxiolytic activity ⁵⁰ .
<i>Eschscholzia Californica</i> Cham	Papaveraceae	An aqueous alcohol extract of <i>Eschscholzia californica</i> has been evaluated for benzodiazepine, neuroleptic, antidepressant, antihistaminic and analgesic properties. It appeared to possess an affinity for the benzodiazepine GABA receptor ⁵¹ .
<i>Echium Amoenum</i> Fisch	Boraginaceae	The ethanollic extract of flowers contained pyroxolidines and showed anxiolytic activity ⁵² .
<i>Erythrina Velutina</i> Willd	Fabaceae	The stem bark having flavonoids and terpenes shows anxiolytic effect ⁵³ .
<i>Erythrina Mulungu</i> Mart.Ex Benth	Fabaceae	It contains alkaloids 11 α -hydroxyerythravine, erythravine and α -hydroxyerysotrine. Which was found to be anxiolytic activity ⁵⁴ .
<i>Euphoria Longana</i> Lam	Sapindaceae	The extract of Longan Arillus was tested for its anxiolytic-like effect and that is mainly due to the presence of inosine ⁵⁵ .

<i>Euphorbia Hirta</i> Linn	Euphorbiaceae	The active principle. Adenosine produced the anti-conflict effect significantly at a dose of 30 mg/kg, s.c. Adenine, uridine, and 5-methyluridine did not exhibit the effect ⁵⁶ .
<i>Eurycoma Longifolia</i> Jack	Simaroubaceae	Eurycoma peptides and related compounds help to release more free testosterone from its binding proteins. Reports show an increase in energy levels and enhanced sex drive. Eurycoma longifolia has shown to lower fatigue, heighten energy, enhance mood, and provide a greater sense of well-being ⁵⁷ .
<i>Euphorbia Nerifolia</i> Linn	Euphorbiaceae	<i>E. nerifolia</i> leaf extract shows anti-anxiety, anti-psychotic and anti-convulsant activity ⁵⁸ .
<i>Gastodia Elata</i> Blume	Orchidaceae	The plant contains phenolic compounds like 4-hydroxybenzylalcohol, 4-hydroxybenzaldehyde, which has been found to have anxiolytic effect by activating benzodiazepine, GABA _A and 5-HT _{1A} receptors ⁵⁹ .
<i>Ginkgo Biloba</i> Linn	Ginkgoaceae	Ginkgo biloba is used as a natural anti-depressant that improves circulation to the brain and elevates mood. It improves circulation of blood within the body, when a person experiences anxiety attacks ⁶⁰ .
<i>Hypericum Perforatum</i> Linn	Hypericaceae	<i>H. Perforatum</i> total extract, and of some pure components such as protohypericin and a fraction containing hypericin and pseudohypericin having anxiolytic activity, former by reducing the GABA-activated chloride currents, while later by inhibiting the activation of NMDA receptors ⁶¹ .
<i>Magnolia Dealbata</i> Zucc	Magnoliaceae	The extract decreases anxiety response, that may be due to magnolol ⁶² .
<i>Pachyrrhizus Erosus</i> Linn	Fabaceae	It contains rotenoids, flavonoids and phenyl furanocoumarin derivatives. Which showed anti-anxiety activity ⁶³ .
<i>Paeonia Moutan</i> Sims	Paeniceae	The root bark produced anxiolytic effect due to the presence of paeonol ⁶⁴ .
<i>Panax Ginseng</i> C.A.Mey	Araliaceae	The major components-ginsenosides, having antioxidant ability. It induces neuroprotection mainly through activation of antioxidant enzymes ⁶⁵ .
<i>Passiflora Incarnate</i> Linn	Passifloraceae	It works by increasing levels of a chemical called gamma-aminobutyric acid (GABA) in the brain. GABA lowers the activity of some brain cells ⁶⁶ .
<i>Piper Methysticum</i> G.Forst	Piperaceae	It is well known for tranquilizing and anxiolytic effects. Dihydrokavain, a major kavalactone is necessary to mediate anxiolytic effect ⁶⁷ .
<i>Salvia Elegans</i> Vahl	Lamiaceae	It is used for digestion, heartburn, balancing the nervous system and as a general tonic ⁶⁸ .
<i>Salvia Reuterana</i> Boiss	Lamiaceae	The genus having some essential oils and flavonoids, the flavonoid apigenin, which selectively binds with high affinity to the central benzodiazepine receptor, possesses important anxiolytic and antidepressant activities. The essential oil contains linalool that exerts sedative effects in humans ⁶⁹ .
<i>Salvia Officinalis</i> Linn	Lamiaceae	<i>Salvia officinalis</i> contains rosmarin, which acts as antioxidant by scavenging superoxide free radicals. It also contains triterpenoids, ursolic acid, uvaol, betulinic acid and betulin. Ursolic acid showed antimicrobial activity against Vancomycin-resistant enterococci (VRE) ⁷⁰ .
<i>Scutellaria Baicalensis</i> Georgi	Lamiaceae	The presence of wogonin, a major constituent elicited anxiolysis through positive allosteric modulation of the GABA(A) receptor complex via interaction at the BZD-S ⁷¹ .
<i>Scutellaria Lateriflora</i> Linn	Lamiaceae	It is commonly known as skullcap. Baicalin and its aglycone baicalein showed anxiolytic effect by binding to the benzodiazepine site of the GABA _A receptor ⁷² .
<i>Sesbania Grandiflora</i> Pers	Fabaceae	The extract contains tri-terpenes and raised the brain contents of gamma-aminobutyric acid and serotonin and produces anxiolytic activity ⁷³ .
<i>Sphaeranthus Indicus</i> Linn	Asteraceae	<i>S. indicus</i> has long been used in the treatment of skin infection, bronchitis, jaundice and nervous depression. The roots and seeds are considered anthelmintic. The herb is also reported to be useful as a tonic to treat indigestion, asthma, leucoderma and dysentery. A novel isoflavone glycoside from leaves and a new sesquiterpene glycoside and sphaeranthanolide were isolated from the flowers of <i>S. indicus</i> and it was found to be an immune stimulant ⁷⁴ .
<i>Stachys Lavandulifolia</i> Vahl	Lamiaceae	The anxiolytic activity is related to the presence of flavonoids, phenylpropanoids or terpenoids ⁷⁵ .
<i>Tragia Involucrate</i> Linn	Euphorbiaceae	It played an important role as a source of effective anti-cancer agents ⁷⁶ .
<i>Turnera Aphrodisiaca</i> Ward	Tunaceae	<i>Turnera aphrodisiaca</i> has been used for the treatment of anxiety neurosis and as an aphrodisiac. Anti-anxiety activity is due to the presence of 5,7,4'-trihydroxy flavone apigenin ⁷⁷ .
<i>Uncaria Rhynchophylla</i> Jacks	Rubiaceae	It contains hirsutine, and antihypertensive indole alkaloids. In addition, the anxiolytic-like effects observed by blocking 5-HT receptor ⁷⁸ .
<i>Valeriana Edulis ssp.procera</i> Mey	Valerianaceae	Valerian is a central nervous system relaxer, and as such has been used as a calming sleep. It is an effective stress reducer, and has benefit in cases of nervous tension, depression, irritability, hysteria, panic, anxiety, fear, stomach cramping, indigestion due to nervousness ⁷⁹ .
<i>Zingiber Officinale</i> Rosc.	Zingiberaceae	It contains zingiberene, phellandrene and gingerol. The extract of dried rhizomes of ginger, which contained anticonvulsant principle(s), was screened for anxiolytic and antiemetic activity ⁸⁰ .
<i>Ziziphus Jujube</i> Mill.	Rhamnaceae	It showed anxiolytic activity. Active constituent reported is Jujuboside A ⁸¹ .

CONCLUSION

The purpose of this review is to identify the pharmacological and Phytochemical usage of herbs that show great advantage for the human body specially for anxiety. Mental illness is a worldwide problem with implications at the individual and national levels. In the light of expected increases in mental illness and its burden worldwide, Herbs and other natural remedies are becoming an increasingly popular alternative to prescription drugs for the treatment of anxiety. While anti-anxiety medications do work well, they can often be habit-forming or cause side effects, whereas herbal treatments for anxiety are considered safer and typically do not lead to dependence or addiction. But because the FDA does not thoroughly evaluate all natural treatments, most of the herbal treatments for anxiety on the market simply are not effective. The best natural treatments for anxiety are those containing proven ingredients in the proper doses and potencies so, research is absolutely needed to fill in those gaps and to advance the delivery of quality health care at the lowest possible cost.

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