IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

HERBAL DRUGS USED IN THE TREATMENT OF STRESS AND ANXIETY.

Author's

Vishal Sitaram Raut*

Nandini Chidambar Avadhut

Varsha Vikas Jadhav

College Name

Sojar college of pharmacy, khandvi, Barshi.

ABSTRACT

This review article examines the relationship between stress and anxiety. Discusses the physical and psychological processes involved in the stress response Due to the rising cost of prescription drugs and their side effects, patients are seeking green and other natural remedies to manage and treat mental disorders. This review focuses on herbal remedies as effective treatments for anxiety and stress. raising awareness about the use of drugs and creating additional strategies that minimize risk and maximize profit. Here we review the most commonly used herbs for the tips above and products that are provided by them, focusing on their medical data and safety profiles. Lavender, hops, maypop, lemon balm, and valerian have consistently been shown in clinical trials to provide relief from minor ailments, particularly depression, anxiety, and depression anxiety.

KEYWORDS : **Stress And Anxiety, Herbal Drugs, Insomnia, Anxiolytics, Hypertension**

INTRODUCTION

According to the World Health Organization, as life expectancy increases and more people reach the age at which mental disorders are most prevalent, the number of people with depression and other mental disorders is increasing worldwide, particularly in low-income countries. The risks are higher in these countries, including unemployment, loss of a loved one, separation, illness, depression and alcohol and drugs. Worldwide, 300 million people have depression.[11]Herbs are one of the most popular treatments[12]. Depression is one of the five most common illnesses worldwide. By 2020, it is predicted to become the second leading cause of disability worldwide. Depression often manifests as negative emotions, difficulty thinking, dissatisfaction, and physical ailments such as headaches, insomnia, and fatigue. Although there are many causes, depression is now believed to be primarily caused by biochemical changes in the brain. People who reported anxiety and depression used twice as many herbal remedies and diets as people who reported other

problems (excluding the low back and neck pain demon). Currently, the treatment of choice for anxiety is cognitive behavioral therapy and drug therapy[13]. The intervention of Sudarshan Kriya Yoga (SKY) using neurophysiological theories can also be used to treat stress, anxiety and depression.[14]

OBJECTIVE

- It provides a safe and effective way to relieve symptoms of anxiety and depression.
- Promotes relaxation, peace and health without danger or addiction.
- Herbal Advanced Techniques for Relieving Stress and Anxiety.
- To Identify potential herbal plants.

Saffron

Synonyms : Saffron, Crocus, Croci stigma

Biological Source : Saffron consists of dried stigmas and tops of styles obtained from Crocus sativus L.

family : Iridaceae.[1]

(fig.1.0)

Fig1-saffron[1]

Valerian

Synonym: - valerian

Biological source : valerian consists of dried roots, rhizomes and stolon's of valeriana officinalis Linn.,

family : valerianaceae.[3] (fig.2.0)

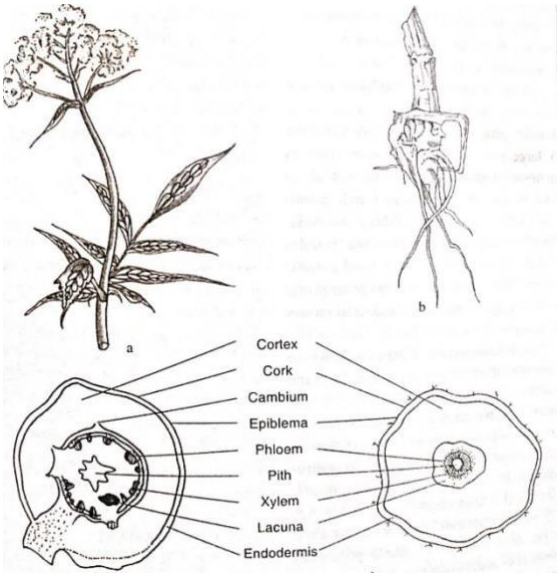

Fig.2.0

HYPERICUM

Synonym: Goat weed **,**Bassant

Biological Source: It includes the dried aerial plant parts of Hypericum perforatum L.

Family : Hypericaceae[9]

GINKGO

Synonyms: Maiden hair tree, Kew tree.

Biological source: It is the dried leaves of Ginkgo Biloba L.

Family: Ginkgoaceae[8]

SHANKHPUSHPI

(Fig.3.0)

Synonym :shankhpuspi

Biological Source : Whole plant of Convolvulus pluricaulis (CP).

Family: Convulvulaceae [6]

MENTHOL

Synonym: Mentha,Menthol

Biological source:Obtained from oils of plant Mentha piperita ,black pipperment,white pipperment,M. Piprita var.Officinalis.

Family: Labiateae [10]

HOPS

Synonym: Humulus cardifolius mia

Biological Source: obtained from the female cones of Humulus lupulus. **Family**: Cannabaceae [2]

VALERIAN:

Cultivation:

Some orchards in Prairie have varieties of valerian that can be planted in fertile, moisture-retaining soil. Alternatively, plants can be grown from seeds or propagated by division of established plants in spring or fall. Beginners when growing plants from seeds should know that germination is unpredictable and often slow. The seed needs light to germinate and cannot be covered by After the seed has been transplanted, if needs to be sprayed, it will take two or three years before the roots can be harvested.

Older plants will have more than roots that need to be harvested. However, most people who grow valerian in their gardens choose to grow it for horticulture rather than medicinal use.[3]

PHARMACOLOGY:

The medicinal components of Valerian include sesquiterpenoids (such as valeric acid), alkaloids, furofurolignans in essential oil, and free amino acids such as GABA, tyrosine, arginine and so on. Although the sesquiterpene content of essential oil is believed to be responsible for most of valerian's biological effects, it is likely that all of the valerian's active ingredients develop the response in concert. Studies on the physical activity of individual products have shown interactions with neurotransmitters such as GABA (valeric acid and unknown products), as well as direct sedative effects (valerenic acid, valeric acid). The compounds most likely to be medicinal in valerian are found in valerian triates and essential oils.valepotriates are lipophilic and unstable when exposed to heat, moisture or acidic conditions. Potential cytotoxicity has been demonstrated by two valerian trials: valeric acid and dihydrovaleric acid, which raises safety concerns. In vitro studies have shown that these drugs cause the death of rat hepatoma cells.[3]

Contraindications:

Pregnant or breastfeeding women should not take valerian without medical advice as there is a risk to the unborn child or small babies Infants have not been evaluated

Children younger than 3 years old should not take valerian as the risk for children in this age group has not been evaluated.

Persons using Valerian should be aware of the possibility of the additional sedative effect of alcohol or sedative drugs such as barbiturates and benzodiazepines.[3]

PASSIFLORA:

Synonyms : Baldwinia

Family: passifloraceae[5]

Botanical source : Passiflora incarnata L.

Genus : Passiflora L.

Species : Passiflora incarnata L.[4]

Table 1. Classes of Major Anti-Insomnia Drugs

Drug category	Major examples	Effects on sleep latency	Effects on sleep quality	Addictiveness
Benzodiazepines	Temazepam, clonazepam, lorazepam	Decrease it	Degrade it (inhibit stage 3, stage 4, and REM sleep)	High (schedule IV drugs)
Nonbenzodiazepine hypnotics (Z-drugs)	Zolpidem, zopiclone, eszopiclone	Decrease it slightly	Minimal effects on deep and REM sleep, lengthen stage 2 sleep	Low (schedule IV drugs)
H1-antagonists	Diphenhydramine	Decrease it	Minimal effects	None
Tricyclic antidepressants, general (low dose)	Amitriptyline, doxepin	Decrease it	Suppress REM sleep[a]	None
Tricyclic antidepressants, special	Trazodone (low dose), mirtazapine (low dose)	Decrease it	No effect on REM	None (mirtazapine) to moderate (trazodone)
Orexin antagonists	Suvorexant	Decrease it	Minimal effects	Low (schedule IV drug)

[a]Rebound excessive dreaming with sudden discontinuation has been observed.

The genus Passiflora has 500 plant species, of which are found in tropical and subtropical regions.

Passiflora is derived from the Latin word "Passio", was first discovered by Spanish explorers in 1529 and has been described as a symbol of the "Passion of Christ". This herb is widely used in traditional medicine in West India, Mexico, Netherlands, South America, Italy and Argentina. A passion flower of the genus designated is more popular than the other species. Passiflora contains many compounds , including alkaloids, phenols, glycosylflavonoids , and cyanogenic compounds.[7]

Yellow fruits and large flowers are tropical plants, blood sugar berries are adapted and can withstand subtropical conditions Frost-free, but does not tolerate cold through many winters. It needs a temperature of 20 to 30o C for growth and flowering. The rainfall in is 1000-2500 mm and can grow well below 2000 meters above sea level. The vines prefer nearly neutral (pH 6-7) well-drained soil high organic matter (2%), but yellow passionflower vines can tolerate alkaline soil. The temperature of can damage the fruit, the temperature of makes it bloom, but gives very little fruit.[4]

Reproduction

Passion Fruit is propagated by seeds, cuttings and grafting of resistant rootstock. Seedlings and grafted plants are stronger than cuttings.Seed propagation Harvesting fruit from vineyards is very good in terms of yield and quality. The extracted pulp is left to ferment for 72-444 hours and the seeds are extracted. Seeds were sown in beds prepared in well from March to April. After reaching the 4-6 leaf stage, transplant the seeds into 10 cm x 22 cm plastic bags containing a mixture of soil, compost and sand (2:1:1). After about three months, the seedlings will be ready for planting in large fields.[5]

ANTI-INSOMNIA DRUGS

(Source)https://www.researchgate.net/publication/281791280

Moderate Potency Hypnotic Herbs

The hypnotic plant Valeriana officinalis (Valeriana officinalis), Valeriana officinalis sitchensis (Pacific valeriana officinalis) and perhaps the roots of other species are well known among the plants for insomniacs. Valerian is native to Europe, while Pacific valerian comes from northeastern Russia and from western North America. A meta-analysis of various valerian extracts found that had a negative effect on reducing sleep latency, but continued to improve sleep quality. In direct comparison with benzodiazepines, studies dating back to the 1990s and later found that valerian reduced light (phase 1) sleep.A small study of of elderly women

showed that valerian had no effect on sleep structure , compared with placebo.Valerian was safe and effective in Children[4]

Mechanism of Action

The mechanism of action of valerian is complex. that "The sedative and sleep-inducing effects of valerian cannot be attributed to a single substance, and perhaps said cannot be attributed to a single mode of action." There is evidence that has various effects. the role of valerian compounds, g-amino-butyric acid (GABA) and GABAA receptors .Recall that GABAA receptors are mostly found in the central nervous system, while GABAB receptors are mostly found in skeletal muscle. Direct activation of GABAAreceptors by valerian has been demonstrated both in vitro and in vivo, particularly by valerenic acid .Binding sites for various valerian compounds are not clearly defined for ; However, most (but not all) seem to bindn in different places than GABA, benzodiazepines,barbiturates, or ethanol. Valerenic acid appears to bind specifically to the loricazole binding site of. Valerenic acid and-related sesquiterpenoids in valerian appear to cross the bloodbrain barrier and enter GABAA receptors via a non-trans-cellular transport system. edulis spp. procera (MexicanValeriana officinalis) root extract does not contain valerenic acid, it has been shown to improve sleep in insomnia patients, although. officinalis is slightly superior. Valerian also reduces the catabolic enzyme GABA transaminase in mice.[3]

Hypertension

Despite advances in medical and mechanical therapy, heart disease remains the leading cause of morbidity and mortality worldwide and this burden is increasing with each event P. incarnata is a relative of P. nepalensis and has antihypertensive effects has been reported. Antihypertensive effects of P.Incarnata is due to the presence of watersoluble substances (C10H22O8NHgCl2) and isolated flavonoids as mercury salts. P. nepalensis Folk medicine for the treatment of hypertension.[7]

Conclusion

Food and herbs appear to be effective in treating stress-related disorders, including anxiety and depression, without the risk of serious side effects. However, according to this review, there is strong evidence for the use of herbal remedies containing kava or kava extracts. There is insufficient evidence that St John's wort monotherapy is an effective treatment for depression. Armed with this information, the herbs described herein will be used with greater success and confidence to reduce or eliminate many psychological disorders.

The therapeutic efficacy of herbal drugs, which is widely used in the Indian medical system, has been established through routine testing and evaluations (pre-clinical and clinical trials) in different diseases.These studies identified domestic drugs as new drugs for bioprospecting and new drugs for the treatment of conditions such as anxiety, insomnia.The medicinal use of this plant and many research possibilities are still in its new field of study. Thus, the phytochemicals and minerals of this plant will allow to improve its medicinal use.

References

1. A book of pharmacognocy and phytochemistry, volume 1 fourth edition of pharma carrier publication by VINOD D. RANGARI page no 384-385.
2. A book of pharmacognocy and phytochemistry, volume 1 fourth edition of pharma carrier publication by VINOD D. RANGARI page no-400.
3. Muktika Sharma , U. K. Jain *, Ajay Patel and Nilesh Gupta **A**

COMPREHENSIVE PHARMACOGNOSTIC REPORT ON VALERIAN IJPSR (2010), Vol. 1, Issue 7.

4. Eric Yarnell, ND, RH (AHG) **Herbal Medicine for Insomnia** Article in Alternative and Complementary Therapies · July 2015 DOI: 10.1089/act.2015.29011.
5. Rocky Thokchom and Goutam Mandal **Production Preference and Importance of Passion Fruit (Passiflora Edulis): A Review** Journal of Agricultural Engineering and Food Technology p-ISSN: 2350-0085; e-ISSN: 2350-0263; Volume 4, Issue 1; January-March, 2017 pp. 27-30.
6. Sharnagat Shubham Baban*1, Shinde Sonal*2, Wamane Vikas Bhausaheb*3 **A REVIEW ON ADVANCE HERBAL TECHNOLOGY** International Research Journal of Modernization in Engineering Technology and Science (PeerReviewed, Open Access, Fully Refereed International Journal) Volume:04/Issue:11/November-2022 Impact Factor- 6.752.
7. S. S. Patel, T. S. Mohamed Saleem, V. Ravi, B. Shrestha, N. K. Verma, K. Gauthaman , Passiflora incarnata Linn: A phytopharmacological review
8. A book of herbal drug technology by nirali publication of Dr.(Mrs) VARSHA TIWARI page no 5.11
9. A book of herbal drug technology of nirali publication by Dr.(Mrs) VARSHA TIWARI page no 5.8
10. A book of pharmacognosy and phytochemistry 2 by Thakur publication PVT.LTD of DR.K.PRABHU AND DR.G.ARUNACHALAM page no 113
11. Maša Kenda , Nina Koˇcevar Glavaˇc , Milan Nagy and Marija Sollner Dolenc Medicinal Plants Used for Anxiety, Depression, or Stress Treatment: An Update
12. A book of Edzard Ernst. Herbal remedies for depression and anxiety. Advances in psychiatric treatment (2007), vol 13.
13. A book of Sy Atezaz Saeed, Richard M Bloch, Diana. Herbal and dietary supplements for treatment of anxiety disorders. American family physician (2007), vol 76
14. A book of Richard P Brown, Patricia L Gerbarg. Sudarshan Kriya Yogic Breathing in the Treatment of Stress, Anxiety, and Depression: Part II—Clinical Applications and Guidelines. The journal of alternative and complementary medicine(2005), vol 11.