

A Literature Review on Ayurvedic Management of Psychiatric Disorders

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ABSTRACT: *Psychiatric illnesses are fundamentally no different from medical illnesses. Historically, illnesses with prominent disturbance of psychological function or behavior and no obvious pathology came to be regarded as psychiatric. However, the modern world now knows that there is demonstrably altered brain function in many psychiatric disorders; psychiatric illness is no less real or less deserving of care than medical conditions.*

Ayurveda defines health as a state of equilibrium of tridosha, trimala, sapatadhatu, and homeostasis of mind and sense organs. Grahachikitsa is one of Ayurveda's eight major branches that deal with the prevention and management of mental problems.

Studies estimate that at least 10% of the world's population is affected by mental illness and that 20% of children and adolescents have some mental disorder. A WHO report on depression reveals that almost 7.5% of the Indian population suffers from major or minor mental disorders that require medical intervention. National Health Survey of India reveals that "Every sixth Indian need mental health help

Despite significant advancement in the science of psychiatry, the problems that remained with the management of some mental issues like anxiety, stress, and mental retardation have not been fully solved for decades.

In addition to this, the adverse effect of anti-psychotic; anxiolytic medication also creates a considerable amount of discomfort to the patient. At this point, it is thought that such therapies should be exposed and adapted in order to treat these disorders without causing unwanted consequences properly.

KEYWORDS - *Ayurvedic plants, Herbals, Brain disorders, Ayurvedic treatment.*

1. INTRODUCTION

According to Ayurveda, mental health is a state of sensorial, mental, intellectual, and spiritual well-being. Mental ill-health is brought about essentially due to unwholesome interaction between the individual and his environment. This interaction operates through three fundamental factors viz.

- **Kala** (time rhythm) is the deficient excessive or perverted aspects of seasons.
- **Indriyarth** (sensory inputs) is deficient, excessive, or perverted senses.
- **Buddhi** (intellect) i.e. volitional transgression. When an individual's intelligence, retaining and controlling powers and memory are distracted, and in that state when he performs wrong actions, it is called volitional transgression. It is the perverted mind and intelligence or faulty understanding (**pragyaparadha**).

Ayurveda believes in the theory of punarjanma (reincarnation) and Karma (actions of past life). Accordingly, the principal causative factors involved in mental illness are

- (1) Genetic factors,
- (2) Personality makeup and
- (3) Environmental factors.

In general, a mental disease is characterized by altered behavior, which may present with a wide range. The clinical diagnosis is made based on the pattern of behavior alteration and specific associated symptoms and signs.

An overall view of the total Ayurvedic literature available in the context of ancient psychiatry would reveal that Ayurveda describes in detail all possible clinical entities of psychiatric illness as compared to the contemporary sciences.

The standard psychiatric diseases described in Ayurveda are different kinds of unmade (psychosis), *Apasmara* (convulsive disorders), *Chittodvega* (anxiety disorders), *Chittavasada* (depressive illness), *Mada* (alcoholism and drug abuse), *Murcchha*, & *Smanyasa* (condition associated unconsciousness).

PRINCIPLES OF MANAGEMENT

The treatment modalities described in Ayurveda classics include:-

Daiva Vyapashraya: Spiritual therapy that includes mantra, Japa, other religious activities, and wearing of precious stones.

Satvavajaya: Psycho-behavioral therapy incorporates the principles of assurance therapy (ashvasana), replacement of emotions, and psycho-shock therapy.

Yukti vyapashraya chikitsa: Biological therapy includes *samshodhan (cleansing therapy /panchakarma)* and *shaman therapy (pacification)*. The patient is subjected to bio cleansing therapy to cleanse the body's channels, followed by shaman therapy or palliative treatment with the help of drugs, dietetics, and lifestyle.

Several single and compound *medhya* (promoters of intellectual faculties) formulations are used in Ayurveda to treat mental diseases. These are believed to act as brain tonics and adaptogens.

The medhya drugs are considered specific molecular nutrients for the brain, providing better mental health and alleviating behavioral alterations.

REVIEW OF LITERATURE

MENTAL RETARDATION

A double-blind study conducted by Appa Rao et al. with *Mandooka parni* (Centella Asiatica) whole plant was conducted on 30 mentally disabled children aged 7 to 18years. Children with a history of Epilepsy and other Neurological problems were excluded. The Binet-Kamat test and a behavioral program were used to examine the children. For six months, children were given 0.5 gm. pills twice a day. Starch tablets were given to the placebo group. All children were reviewed after three and six months.

The results indicate an improvement in the IQ level of the patients treated with this drug compared to Placebo. The data were found statistically significant (“p.001) at the end of 3 months. However, it was observed that there was no significant difference in improvement in the IQ level after 3 months and 6months⁸.

SCHIZOPHRENIA

Brahmyadiyoga, a herbal compound consisting of *Brahmi* (Centella Asiatica), *Vacha* (Acorus calamus), *Sarpagandha* (Rauwolfia serpentina), *Kusta*(Saussurea lappa), *Tagara* (

Nymphoidi macrospermum), and *Jatamansi* (*Nardostachys jatamansi*), is made as to fine powder and administered in the dose of 8 to 16 gm. a day for 90 days to the 14 confirmed cases of Unmada.

The patients selected for the study were under 18 to 40 years with 2 to 6 years of chronicity. Psychological assessment was done on the symptoms rating score, like positive, negative, and total scores.

Out of 14 patients enrolled for the study, 10 completed the study. Of 10 patients, 6 improved according to all the three assessments, but 4 did not show any improvement⁹.

PSYCHOGENIC HEADACHE

His controlled clinical trial with Ksheerabala Taila was conducted in 56 *Vataja Shirah Shoola* (Psychogenic headache).

Two groups had 28 cases in each were made as treated group & Placebo group respectively. The drug was administered for six weeks in the following way:¹⁷

- Abhyanga -(Massage) 5.25.ml. before breakfast
- Pana(Oral)- 1-2 ml. After dinner at bedtime.
- Nasya (Nasal insufflations)-6-12 ml. Before sunset

The multiphasic questionnaire, Rorschach inkblot test, Max Hamilton's Anxiety rating scale, and Hamiltons Checklist of Symptoms of depressive status did assessment.

Results: Significant reduction in anxiety syndrome and severity of headache was noted in the treated group.

ANXIETY NEUROSIS

A Pilot Study on ten patients of either sex suffering from uncomplicated anxiety neurosis (Cillodvega) of six months chronicity was conducted with Kshiradhara (pouring milk on forehead) in the supine position. The assessment was done based on Max Hamilton's Anxiety rating scale, Manifest Anxiety Scale, and Symptoms. Results revealed that Eight patients showed clinically significant improvement¹⁷

CURRENT RESEARCH PROGRAMME ON MENTAL DISORDERS

Currently, the council prioritizes mental health as one of its focused areas for research in this program. In this direction, the council is developing AYUSH-Manas for mental retardation, the standardization is completed, and toxicity studies are in progress. The clinical studies shall be launched soon after completing the above formalities.

Under "GOLDEN TRIANGLE "PARTNERSHIP SCHEME of AYUSH, CSIR & ICMR, it has been decided to focus on "Management of Attention Deficit Hyperactive Disorders in children." For this purpose, one classical drug – Brahmi Ghrita & one coded drug Medhya-6 were identified. The standardization is in progress at CSIR labs. After completing the above formalities, the clinical studies shall be launched with ICMR.

CURRENT SCENARIO AND NEED FOR INDIGENOUS TRADITIONAL THERAPY:

Despite tremendous advancement in psychiatry for decades, the problems with managing some mental issues like anxiety, stress, mental retardation have remained unsolved.

In addition to this, adverse effects of anti-psychotic, anxiolytic medications create considerable discomfort to the patient.

At this juncture, there is a need for exposition and adaptation of such therapies that could effectively tackle such conditions without any adverse events.

The entire Ayurvedic management is more health-oriented than disease-oriented. Moreover, there is an enormous scope of utilizing the Ayurvedic approach and therapeutics as an adjunct to the disease-oriented therapy of modern psychiatry to provide complete treatment.

Every year 10th October is when world mental health day is celebrated worldwide. The awareness regarding balanced mental health is increasing, and it is now recognized as a significant cause of morbidity worldwide.

According to the WHO, depression will overtake heart illnesses as the significant cause of morbidity and disability in the world by 2020¹. According to a more recent report by the National Mental Health Survey (NMHS) commissioned by the Government of India and implemented and coordinated by the National Institute of Mental Health and Neuro Sciences (NIMHANS), Bangalore, about 150 million Indians aged 18 and above and 7.3% of those aged 13 to 17 years of the total population are suffering from various mental disputes and require mental care service.

India's health budget on mental health care is surprisingly 7.5 times lesser than Bangladesh. There is an acute shortage of psychiatrists in India, with 3 psychiatrists per million populations, which is 18 times lesser than the commonwealth nations' norm of 56 psychiatrists per million people. Keeping these facts in mind, a new Bill was passed through the Indian Parliament in August 2016, increasing the government funding a little more than before²⁻⁴

COMMON BRAIN DISORDERS

The term mental disease or brain disorder is not restricted to mean insanity and allied conditions of mental derangement but also includes, to a certain extent, emotional disorders.

It is stated that the brain has 100 billion nerve cells (neurons), and each of them connects with many others to form communication networks. These nerve cells have particular jobs like thinking, learning, remembering, seeing, hearing, and smell.

To do their work, brain cells, like tiny factories, receive supplies, generate energy, construct equipment, and get rid of the waste. Brain cells also process and store information to communicate with other cells.

Keeping everything functional requires large amounts of fuel and oxygen for proper coordination⁵. Once the system is disturbed, many human brain disorders start appearing, for example, Alzheimer's disease, Parkinson's disease, Huntington's disease, depression, Epilepsy, schizophrenia, anxiety.

ALZHEIMER'S DISEASE

Alzheimer's disease (AD) was initially defined as presenile dementia and meant an acquired mental disorder with loss of intellectual abilities to interfere with social or occupational functioning. It is associated with localized loss of neurons and brain shrinkage, mainly in the basal forebrain and hippocampus⁶.

ANXIETY

Anxiety is a psychological and physiological state characterized by cognitive, somatic, emotional, and behavioral factors. These factors combine to create an unpleasant feeling typically associated with fear, worry, or uneasiness. Without an identifiable triggering stimulus, anxiety is a generalized mood state⁷.

DEPRESSION

Depression is a common affective disorder of mood rather than disturbances of thought or cognition. It is the most common affective disorder, accompanied by delusions and hallucinations. Increased neurotransmitters such as dopamine, acetylcholine, and norepinephrine are observed in this illness condition⁸.

The symptoms of this disease are of two types

- (i) Biological symptoms: retardation of thought, loss of libido, sleep disturbance, and loss of appetite
 - (ii) Emotional symptoms are feelings of guilt, loss of motivation, ugliness.
- There are 2 types of depressive syndrome, e.g.,
- (i) Unipolar depression: mood always swinging in the same direction;
 - (ii) Bipolar depression: depression alternates with mania⁹

EPILEPSY

A seizure is a characteristic event in Epilepsy. Epilepsy is associated with the high-frequency discharge of impulses by a group of neurons in the brain. It can be of two types:

- (i) **Partial epilepsy**: In this, the localized areas of the brain are damaged. Its symptoms depend on the brain regions involved and
- (ii) **Generalized Epilepsy**: In this case total brain, including the reticular system, is damaged. With the common synthetic medicines for Epilepsy, relief is possible on long term use, but side effects have to be borne¹⁰

PARKINSON'S DISEASE

It occurs mainly in the elderly and is a progressive movement disorder showing continuous shivering. It is commonly associated with dementia, and the symptoms include tremors at rest, usually starting in the hands. The muscle rigidity can be detectable as increased resistance in passive limb movement and hypokinesia suppression of voluntary muscles.

In this condition, the neurotransmitter levels, such as dopamine, 5- hydroxytryptamine, acetylcholine, norepinephrine, are decreased, mainly in the brain's substantia nigra and corpus striatum. Short relief is possible with synthetic drugs, but a complete cure is usually unachievable¹¹.

SCHIZOPHRENIA

This disease condition is associated with elevated neurotransmitters such as dopamine, acetylcholine, and norepinephrine⁸. This disorder has 2 types of symptoms:

- (i) **Positive symptoms** are Abnormal behavior, delusions, Hallucination, thought disorders.
- (ii) **Negative symptoms**: Flattening of emotional responses and withdrawal from social contact. In this condition, the neurotransmitter level such as dopamine, 5-hydroxytryptamine, acetylcholine, the norepinephrine level increase in the brain¹².

ATTENTION DEFICIT HYPERACTIVITY DISORDER (ADHD)

It is considered a disorder of children, but it is not limited to them. 30- 70% of kids with this disorder continue showing symptoms of ADHD when they grow up. In addition, people who were never diagnosed with ADHD in childhood may develop more apparent symptoms when grown-up, causing trouble on the job or in relationships. In people with ADHD, the neurotransmitters are less active in areas of the brain that control attention¹³.

NATURAL WAYS OF HEALING OF MIND

Over time, new medicinal approaches such as herbal treatment, yoga, meditation, naturopathy, and acupressure are being reintroduced. Several individuals and organizations are working to fulfill the body's basic healing requirements.

There has been an enormous change in the mindset of people who once depended on painkillers, who are now looking for natural treatments, including Ayurvedic, traditional Chinese, Siddha, Unani, Homeopathy, and several folklore medicines [25].

Plant-based medicine systems have been doing wonders in treating various diseases worldwide. So is the case with mental disorder problems. It is well proven that herbs have excellent properties for treating panic and anxiety affecting the central nervous system, much like some prescription drugs, without the adverse side effects.

Valerian is used throughout the world as a natural sedative for insomnia and panic attacks. It is also a mild painkiller and is considered safe for short-term use. Ginkgo biloba and Hypericum perforatum are very well-known Chinese and European plants with neuroprotective properties and helpful in improving memory and treating learning dysfunction¹⁴

ROLE OF AYURVEDIC DRUGS IN PSYCHIATRY

Ayurveda is based on the fundamental premise of the five big elements, which states that the defect, tissue, and impurity must be in perfect harmony with all five of the elements that make up the human body, namely earth (prithvi), water (jal), fire (agni), air (vayu), and space (akash).

According to this, there should be a balance in the three elemental energies, *Vata* (air+space=wind), *Pitta* (fire+water=bile), and *Kapha* (water+earth=phlegm). Ayurveda explains that when these three energies are balanced or exist in equal proportion, the body will remain healthy; otherwise, it becomes unhealthy in many ways [32].

Ayurveda is mainly connected with the cures accessible from nature, deals with the root cause of the disease, and provides a permanent cure in most cases. Usually, a patient treated with Ayurvedic medicines gets cured and achieves permanent immunity.

Ayurveda's main advantage over allopathy is that the former uses only the natural means to cure a disease and is the most eco-accommodating approach to get an everlasting cure (Table 1).

S NO	CONDITION	ALLOPATHY	AYURVEDA
1	Taking up the disease	Allopathy takes the body in pieces is objective and incomplete.	Ayurveda takes the body as a whole, and the physician knows all the systems of the body
2	System of treatment	Allopathy is a system of physical health, and it believes in replacing/changing the systems or organs for treatment and is not much worried about the cure.	Ayurveda focuses on wellness as a complete package, be it physical, psychological, spiritual, or social
3	Possibility of side effects	Allopathy is primarily a system of internal or external side effects.	Ayurveda is a natural cure in which the scope of side effects is significantly less or mild.
4	The focus of the treatment	Allopathy focuses on suppressing the signs and	Ayurveda considers that until a body devoids the disease-

		symptoms of a disease and never appreciates eradicating the disease-causing factors.	causing factors, it will keep on relapsing. It considers detoxification as a primary part of the treatment
5	Nature of effect	Allopathic medicines partially cleanse the body	Ayurvedic medicines decontaminate the whole body by balancing the three energies (Vata, Pitta, and Kapha).

Therefore, it is well accepted that the Ayurveda treats a patient with mental diseases and increases the overall mental capability by strengthening the immunity, thus keeping the mind and the body free from further damages.

The consumption of the prescribed Ayurvedic medicines improves concentration and other mental capabilities. Popularly, the extracts of *Bacopa monnieri* (*Brahmi*), *Acorus calamus* (*vach*), *Celastrus paniculatus* (*jyotismati*) are considered highly beneficial in strengthening mental condition.

AYURVEDIC TREATMENTS FOR COMMON MENTAL DISEASES

For example, depression is a feeling of dejection affecting the natural functioning of our mind and body thus tend to become unhappy. It can be treated with herbal medicines rich in ingredients like *Crataegus oxyacantha* (hawthorn), *Eschscholzia California* (California poppy), *Ginkgo biloba*, *Lavandula angustifolia* (lavender).

Stress and anxiety tend to make us hyper and unaware of mood swings. Following Ayurvedic plants effectively counter stress and anxiety, mulungu bark, *Rhodiola rosea*, ashwagandha, lavender.

Similarly, ADHD reduces a mind's capability to pay concentration, to focus, or pay attention to anything. Ayurvedic medicines for ADHD are made from natural herbs that cure mental disabilities, for example, *Centella Asiatica* (mandukparni), *Bacopa monnieri* (*Brahmi*), *Withania somnifera* (ashwagandha), *Celastrus paniculatus* (*jyotismati*).

Bipolar disorder manifests as an abnormal shift in mood and behavior, impairing a person's mental capacity to carry out routine daily activities. *Brahmi*, passionflower, and various other Ayurvedic herbs are beneficial in treating this. Since the Ayurvedic system treats the cause of illness in the body by balancing the act of Vata, pitta, and Kapha, the treatment is long-lasting and undoubtedly irreversible. This is why Ayurvedic medicine is almost free from side effects, making it more acceptable in society than synthetic drugs, which focus mainly on the symptoms in the patients leading to temporary relief but with side effects in most cases.

Apart from this, most of the prescriptions in Ayurveda are in the form of Poly Herbal Formulations (PHF). It has gained popularity because PHF possesses clear advantages, which is not available in allopathic drugs, by expressing high effectiveness in many diseases.

The therapeutic effect of herbal medicines is exerted due to the presence of different bioactive phytoconstituents, and the effects are further potentiated when compatible herbals are formulated together in PHFs. PHFs usually have a wide therapeutic range, and most of them are effective even at a low dose and safe at a high dose, thus exhibiting a superior risk-to-benefit ratio^{15,16}.

2. CONCLUSION

Since more than 60 million Indian population suffers from mental disorders and the country lags far behind the world for treatments and spending in the hospitals for a mental cure, it is high time to look for an established alternative system of medicine. It was estimated that nearly 1-2% of Indians have schizophrenia and bipolar disorder, whereas 5% population showed common mental disorders like depression, anxiety, convulsion.

The Ayurvedic prescriptions have been proven to be very useful against such disorders. Currently, the world is rightly looking towards the brain healing properties of traditional medicines, including Ayurveda, for a reliable cure with no or minimal side effects. The present review clearly explains that the Ayurvedic system of medicine is very well developed for treating most brain-related disorders.

This review has right timely included some of the Ayurvedic treatments, which have been described for mental disorders and are currently part of the Ayurvedic prescriptions.

Thus, it can be concluded that the Ayurvedic system of herbal medicine has a true treasure mine of plant drugs that reintroduces the long-desired promise of treating mental illnesses completely and permanently utilizing natural means that have fewer adverse effects than allopathic prescriptions.

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