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RESEARCH ARTICLE

MANOVAHA SROTOVIKARA CHIKITSA – AYURVEDIC EXPLICATION

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ABSTRACT

In spite of advancements on multiple fronts of Science & Technology, man lives a life of worry, stress and discontentment, which is a sad and unfortunate paradox. Although we have greater opportunities for rich and fulfilling life than ever before, we ever desire new things and seldom content with what we have. In the process we have disconnected ourselves from the great traditions that have provided us the guidance and wealth of practical knowledge on how to live healthy and meaningful life. As a result of this, the psychological diseases have posed as serious challenge to human civilization. Ayurvedic Psychology clearly recognizes that the Mind and Body are one with mind being field of ideas and the body, a field of molecules. Ayurveda considered both physical and mental diseases as two separate subjects and has always followed the psychosomatic approach to the diseases, where more emphasis is given to the integration aspect of these two factors. In somatic clinical conditions, the Psychological factors have never been neglected and in Psychological disorders, the possibility of organic involvement has always been given due consideration. India has a heritage flora & fauna enriched with medicinal properties and the usage of which has been in vogue since centuries. Many of the Ayurvedic medicinal plant drugs, single are compound preparation are being use for mental well being. The pharmacological properties and their actions of Ayurvedic drugs recommended in the management of *Manovaha Sroto Vikara* are vividly discussed in this paper.

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INTRODUCTION

According to Indian concepts, *Manas* (mind) is one of the major operational factors in the process of learning. It is capable of remaining *atindriya* (beyond sensory perception)⁽¹⁾ and is considered to be responsible for *bandha* and *moksha*. It is the 'knower' and there is no other entity to 'know' this 'knower', whereas the tools of clinical examinations are limited to its sensory transactions only. This situation makes the understanding and examination of *Manas* very difficult. According to Ayurveda, though *Manas* & *Sareera* are separate entities, they have an inseparable and interdependent relationship in a living body⁽²⁾. The entity by which contemplation and understanding are made possible is known as *manas* according to Charaka⁽³⁾. *Chitta*, *chetus*, *chetana*, *hridaya*, *hrit*, *swanta*, *manasam*, *mana*, *satwa* are its synonyms wherein *Chitta*, *Chetus* and *Chetana* suggest the origin of perception, and *hrit* and *hridaya* sensory control.

STHANA OF MANAS

- According to Charaka Samhita⁽⁴⁾ - *Hridaya & Dasa Dhamani*
- According to Sushruta Samhita⁽⁵⁾ - *Hridaya*
- According to Ashtanga Hridaya⁽⁶⁾ - *Hridaya*
- According to Bhela Samhita⁽⁷⁾ - *Between Siras & Talu*

According to Modern Science also, there are different opinions on the location of Mind or consciousness.

- According to Plato - *Brain & Spinal Cord*
- According to Aristotle - *Heart*
- According to Descartes - *Pineal Gland*

MANOVAHA SROTAS: Though Ayurvedic Classics have not given any description over *Manovaha srotas* in the chapters on *Srotovijnana*, the description of *manovaha srotas* can be seen scattered in other chapters related to *Manasika vyadhis* (mental disorders), Chakrapani while commenting on Charaka Vimana 5th Chapter, states that the *Manovaha srotas* are not mentioned separately anywhere, as the mental faculties are found everywhere except *Kesa, roma, mala, drava, anna* etc. ⁽⁸⁾.

MANOVAHA SROTO VIKARA: Also known as *manasika roga*, is a pattern of behavioural/psychological symptoms that impact multiple life areas and create distress for the person experiencing these symptoms. It's a syndrome characterized by a clinically significant disturbance in an individual's cognitive emotion regulation, or behaviour that reflects a dysfunction in the psychological, biological, or developmental process underlying mental functioning and associated with significant disturbance in regular activities. This could be either due to dietary deficiencies and resultant impaired *Agni* ⁽⁹⁾.

TREATMENT: The drugs employed for the management of mental illnesses are broadly classified into three categories for practical purposes viz. Psychotropic Drugs, Psychedelic Drugs and Psychoactive Drugs.

PSYCHOTROPIC DRUGS: Psychotropic drugs are a broad category of drugs that treat many different conditions. They are the drugs that affect behavior, mood, thoughts, or perception. This covers different drugs, including prescription drugs and commonly misused drugs. They work by adjusting levels of brain chemicals, or neurotransmitters, like dopamine, Gamma Amino Butyric Acid (GABA), nor-epinephrine, and serotonin. Some of these Psychotropic Drugs may result in serious side effects and hence, they need regular monitoring by healthcare providers. They are not a cure. They can only treat mental health disorders, and they are sometimes more effective when combined with psychotherapy. The Psychotropic drugs have been placed into following categories basing on their pharmacological action.

S.NO.	CATEGORY	SIDE EFFECTS
1.	Anti-anxiety Agents	Addiction, Nausea, Blurry vision, Headache, Confusion, Fatigue, Nightmares
2.	Antidepressants	Anxiety, Blurred vision, Constipation, Dizziness, Dry mouth, Fatigue, Numbness, Tremors, Insomnia, Nausea, Sexual issues, Weight gain. More serious side effects include Suicidal ideation, Allergic reactions, Mania, Seizures, Hypo-natremia (Low Sodium levels), Serotonin Syndrome
3.	Antipsychotics	Weight gain, Metabolic problems, Sexual issues. More severe can include Tremors, Spasms, Muscle rigidity, Loss of control and coordination
4.	Mood stabilizers	Addiction, Dyspepsia, Drowsiness, Weight gain, Dizziness, Tremors, Blurry vision, Confusion
5.	Stimulants	Addiction, Insomnia, Decreased appetite, Weight loss
6.	Common Side-effects	Cardiac issues, Changes in appetite, Dizziness, Drowsiness, Fatigue, Sexual problems, Sleep disturbances, Weight gain

PSYCHEDELIC DRUGS: The drugs that cause mood changes, cognition & perception are known as Psychedelics and they can distort the sense of reality and result in perceiving the things that do not exist.

PSYCHO-ACTIVE DRUGS: Psychoactive drugs are the drugs that affect the brain and lead to changes in a person's mental state. They are capable of crossing blood-brain barrier. Though the Psychoactive drugs have the ability to change the individual's mental state, they usually do not induce such changes. Psychoactive drugs are divided into four major groups.

S.NO.	CATEGORY	MECHANISM OF ACTION
1.	Stimulants	They act by increasing alertness, attention and energy levels through inhibiting the effects of sleep. They exert excitatory effect by interacting with certain neurotransmitters
2.	Depressants	Depressant substances slow down the central nervous system by affecting neurotransmitters that regulate mood and cognition. As a result, cause drowsiness and impaired cognition.
3.	Opiates	Opiate drugs bind the Opioid receptors in the brain thereby reducing pain signals and create a feel of euphoria. They have the tendency of leading the individual to addiction, tolerance and dependence.
4.	Hallucinogens	Hallucinogens are also referred to as psychedelics They are a class of drugs that produce changes in perception, mood and thought. The user of these drugs feel or hear things that aren't actually there.

PRECAUTION: While psychoactive, psychedelics and psychotropic drugs exert potential therapeutic benefits when used under supervision and cause when used otherwise. Because of their diversified effects, they may lead to accidents or serious injuries.

The Science of Ayurveda has always prescribed a holistic approach for disease control & management. Ayurveda recommends three types of *Chikitsa* viz., *Daivavyapasraya Chikitsa* (Emperical/spiritual therapy), *Yuktivyapasraya Chikitsa* (Rational therapy), and *Satwavajaya Chikitsa* (Psycho therapy) ⁽¹⁰⁾. The term *Daivavyapasraya* is concerned with logical use of certain spiritual practices and personal code of conduct beyond the purview of reasoning. These include *Mantra, Aushadi, Mani, Bali, Upahara, Homa, Niyama, Prayashchitta, Upavasa, Swatyayama, Pranipatagamana*, These measures are aimed at creating confidence and remove negative tendencies ⁽¹¹⁾. *Yuktivyapasraya* is reasoning out the causative factors of the diseases and devising suitable ways and means for the cure through proper administration of Medicines, suitable diets and other Physiological & Pharmacological methods ⁽¹²⁾. Charaka defined *Satwavajaya* as a mind control therapy where stress has been laid on restraining the mind from unwholesome objects ⁽¹³⁾.

PHARMACOLOGICAL ACTIONS OF THE SINGLE DRUGS ACTING ON MANOVAHA SROTAS

S.NO.	DRUG	PHARMACOLOGICAL ACTION
HERBAL⁽¹⁴⁾		
1.	Ahiphena (Papaver somniferum)	Hypnotic, Narcotic, Analgesic, CNS depressant
2.	Amalaki ⁽¹⁵⁾ (Embelica officinale)	Brain tonic, Memory booster, Balances emotions, Mind Calming, Immunomodulatory, Anti oxidant
3.	Ashwagandha (Withenia somnifera)	Adaptogen, Analgesic, Anxiolytic, Immune-stimulant
4.	Avalguja Bija (Psoralea corylifolia)	Neuroprotective, Anti depressant (in menopause), Anti oxidant, Anti stress
5.	Bhanga	Stimulant, Anti convulsant, Psychotropic, Analgesic

	(Cannabis sativa)	
6.	Bhringaraja (Eclipta alba)	Anxiolytic, Anti depressant, Anti stress
7.	Brahmi (Bacopa monnieri)	Nootropic, Sedative, Tranquillizing, Anxiolytic, Anti depressant, Anti epileptic
8.	Brihad Jiraka (Cuminum cyminum)	Anti oxidant, Memory booster, Anti stress
9.	Bhurja Patra (Betula utilis)	Anti oxidant, Anxiolytic, Anti convulsant
10.	Chakramarda (Cassia tora)	Anxiolytic, Anti oxidant
11.	Dadima (Punica granatum)	Anti oxidant, Neuroprotective, Anxiolytic, Anti depressant, Anti stress
12.	Dhattura (Datura metel)	Anxiolytic, Anti oxidant, Anti convulsant, Anti depressant
13.	Guduchi (Tinospora cardifolia)	Anti oxidant, Anxiolytic, Cognitive
14.	Guggulu (Commiphora mukul)	Anti oxidant, Neuroprotective, Sedative
15.	Haritaki (Terminalia chebula)	Anti oxidant, Neuroprotective
16.	Jatamansi (Nardostachys jatamansi)	CNS depressant, Sedative, Memory booster, Anti oxidant, Anti convulsant, Anxiolytic
17.	Jyotishmati (Celastrus paniculatus)	Nootropic, Anxiolytic, Anti stress, Cognitive, Anti convulsant, Sedative, Anti oxidant
18.	Kashmari (Gmelina arborea)	Sedative, Anti oxidant, useful in Hallucination
19.	Kushmanda (Benincasa hispida)	Anti oxidant, Anti depressant, Analgesic, Anxiolytic
20.	Lasuna (Allium sativum)	Anti oxidant, Memory booster, Neuroprotective, Cognitive
21.	Mandukaparni (Centella asiatica)	Anxiolytic, Anti convulsant, Stimulant, Nervine, Rejuvenator, Sedative, Tranquilizer, Cognitive
22.	Nagakesara (Mesua ferrea)	Brain tonic, Anti oxidant, Analgesic, Immuno-modulatory
23.	Parasika Yavani (Hyoscyamus niger)	Hypnotic, Sedative, Anti convulsant, Analgesic, Anxiolytic
24.	Pippali (Piper longum)	Anti oxidant, Neuroprotective, Analgesic, Immunomodulatory, CNS depressant
25.	Punarnava (Boerhavia diffusa)	Anti oxidant, Anti stress, Anti convulsant, Immunomodulatory
26.	Rasna (Pluchea lanceolata)	Anti oxidant, Anti stress, Cognitive, Anti convulsant
27.	Sarpagandha (Rauwolfia serpentina)	Anxiolytic, Sedative, Anti psychotic, Decreases thought disturbance, agitation, hostility, Suspiciousness
28.	Satavari ⁽¹⁶⁾ (Asparagus racemosus)	Anti oxidant, Anti inflammatory, Anti depressant, Immunomodulatory, Neuroprotective, Nootropic
29.	Shankhapushpi (Convolvulus pluricalis)	Cognitive, Anti oxidant, Calms the nerves by regulating Stress hormones, Adrenaline & Cortisol
30.	Tagara (Valeriana wallichii)	Anxiolytic, Sedative, Nervine, Tranquilizer, Anti depressant, Anti convulsant
31.	Tila (Sesamum indicum)	Neuroprotective, Anti oxidant, Anti stress, Sedative
32.	Tulasi ⁽¹⁷⁾ (Ocimum sanctum)	Anti depressant, Anti stress, Anxiolytic, Anti oxidant, Adaptogenic, Neuroprotective, Analgesic, Immunomodulatory, CNS depressant, Memory booster
33.	Vacha (Acorus calamus)	Anti convulsant, Sedative, Hypnotic, Tranquillizing, Memory booster
34.	Vamsalochana (Bambusa arundinaceae)	Neuroprotective, Anti oxidant
35.	Varahikanda ⁽¹⁸⁾ (Dioscorea bulbifera)	CNS depressant, Sedative, Anxiolytic, Anti oxidant
36.	Yashtimadhu (Glycyrrhiza glabra)	Anti oxidant, Neuroprotective, Memory booster
37.	Yava ⁽¹⁹⁾ (Hordeum vulgare)	Anti oxidant, Anti stress
METALS / MINERALS⁽²⁰⁾		
38.	Abhraka (Mica)	Nervine, Controls negative emotions, Anti stress, Anxiolytic
39.	Gomeda (Hessonite)	Anti stress, Anxiolytic, Sedative, Cognitive
40.	Manahsila (Realgar)	Sedative, Anxiolytic, Tranquillizing, Anti stress, Anti-oxidant
41.	Manikya (Ruby)	Promotes Cognitive functions
42.	Marakata (Emerald)	Anti convulsant, Cognitive, Memory booster, Anti stress
43.	Mouktika (Pearl)	Anti convulsant, Hypnotic, Sedative, Anti oxidant. Effective in Psychoneurosis, Epileptic Mania, Panic disorders
44.	Pravala (Coral)	Anti inflammatory, Useful in Neuro-degenerative disorders, Anti stress
45.	Shilajith (Bitumen/Asphaltum)	Anti oxidant, Neuroprotective, Anti inflammatory
46.	Suvarna (Gold)	Nervine, Anti convulsant, Anti depressant, Anti oxidant
47.	Vaidurya (Cat's Eye)	Anti stress, Anxiolytic, Controls Emotions, Memory booster, Anti depressant
OTHERS		
48.	Ghrita (Ghee)	Nervine, Neuroprotective, Memory booster, Anti oxidant, Enhances Concentration and Cognitive ability
49.	Ksheera (Milk)	Mood regulator, Prevents Cognitive decline & Memory loss, Provides all important nutrients like Proteins, Vitamin D, Potassium, Calcium, Omega – 3 Fatty acids for brain health
50.	Taila (Oil)	Anti Stress, Mitigates memory impairment, Neuro-degeneration, Anxiolytic, Anti depressant, regulates Serotonin production and thus has Calming effect on Brain & Nerves

On screening pharmacological properties of the above mentioned single drugs, they can be grouped into following categories from clinical perspective.

S. NO.	ACTION	DRUGS
NOOTROPICS		
1.	Adaptogenic	Ashwagandha, Tulasi
2.	Anti oxidant	Amalaki, Brihad Jiraka, Dadima, Dhattura, Guduchi, Guggulu, Haritaki, Jyotishmati, Kashmari, Kushmanda, Lasuna, Nagakesara, Punarnava, Rasna, Satavari, Tila, Vamsalochana, Varahikanda, Yashtimadhu, Yava
3.	Brain tonic	Amalaki, Nagakesara
4.	Cognitive	Guduchi, Jyotishmati, Lasuna, Mandukaparni, Rasna, Shankhapushpi, Gomeda, Manikya, Marakata, Ghrita, Ksheera
5.	Memory booster	Amalaki, Brihad Jiraka, Jatamansi, Lasuna, Tulasi, Vacha, Yashtimadhu, Marakata, Vaidurya, Ghrita
6.	Nootropic	Brahmi, Jyotishmati, Satavari
7.	Nervine	Mandukaparni, Tagara, Abhraka, Suvarna, Ghrita
8.	Neuro-protective	Dadima, Guggulu, Haritaki, Lasuna, Pippali, Satavari, Tila, Vamsalochana, Shilajith
PSYCHOTROPICS		
1.	Analgesic	Ahiphena, Ashwagandha, Bhanga, Kushmanda, Nagakesara, Parasika Yavani, Pippali, Tulasi
2.	Anti Convulsant	Bhanga, Bhurja Patra, Dhattura, Jatamansi, Jyotishmati, Mandukaparni, Parasika Yavani, Punarnava, Rasna, Tagara, Vacha, Marakata, Mouktika, Suvarna
3.	Anti Depressant	Avalguja Bija, Bhringaraja, Brahmi, Dadima, Dhattura, Kushmanda, Satavari, Tagara, Tulasi, Suvarna, Vaidurya, Taila

4.	Anti Stress	Avalguja Bija, Bhringaraja , Brihad Jiraka, Dadima, Jyotishmati, Punarnava, Rasna, Tila, Tulasi, Yava, Abhraka, Gomeda, Manahsila, Marakata, Pravala, Vaidurya, Taila
5.	Anti-Psychotic	Sarpagandha
6.	Anxiolytic	Ashwagandha, Bhringaraja, Brahmi, Bhurja Patra, Chakramarda, Dadima, Dhatura, Guduchi, Jatamansi, Jyotishmati, Kushmanda, Mandukaparni, Parasika Yavani, Sarpagandha, Tagara, Tulasi, Varahikanda, Abhraka, Gomeda, Manahsila, Vaidurya, Taila
7.	CNS Depressant	Ahiphena, Jatamansi, Pippali, Tulasi, Varahikanda
8.	Hypnotic	Ahiphena, Parasika Yavani, Vacha, Mouktika
9.	Narcotic	Ahiphena
10.	Psychotropic	Bhanga
11.	Sedative	Brahmi, Guggulu, Jatamansi, Jyotishmati , Kashmiri, Mandukaparni, Parasika Yavani, Sarpagandha , Tagara, Tila, Vacha, Varahikanda, Gomeda, Manahsila, Mouktika
12.	Stimulant	Bhanga
13.	Tranquillizing	Brahmi, Vacha

COMPOUND FORMULATIONS ⁽²¹⁾:

S. NO.	CATEGORY	FORMULATIONS
1.	Avaleha	Agastya Haritaki, Amalaka Rasayana, Brahmi Rasayana, Chyavanaprasa, Haridrakhanda, Haritakyadi Rasayana, Lohadi Rasayana, Nagabala Rasayana, Pippali Rasayana, Ritu Haritaki, Shilajit Rasayana, Triphala Rasayana, Vardhamana Pippali, Vidangavaleha
2.	Ghruta	Bhallataka Ghruta, Brahmi Ghruta, Caryadi Ghruta, Changeri Ghruta, Hingwadi Ghruta, Kalyanaka Ghruta, Maha Kalyanaka Ghruta, Maha Katushatphala Ghruta, Maha Paisachika Ghruta, Maha Panchagavya Ghruta, Mayura Ghruta, Panchagavya Ghruta, Paniya Kalyana Ghruta, Phala Ghruta, Pippaladya Ghruta, Samvardhana Ghruta, Saraswathi Ghruta, Vachadya Ghruta
3.	Liquids	Arjunarishta, Ashwagandharishta, Ayaskriti, Draksharishta, Jatamansyadi Kwatha, Punarnavasava, Saraswatharishta
4.	Rasaushadha	Bhuta Bhairava Rasa, Brihadwata Chintamani Rasa, Chaturbhujia Rasa, Chaturmukha Rasa, Maha Lakshmi Vilasa Ras, Makaradhwaaja, Manasamitra Vati, Manikya Pishti, Mritasanjivani Vati, Mukta Pishti, Pravala Pishti, Purna Chandrodaya Rasa, Shiva Gutika, Siddha Makaradhwaaja, Trailokya Chintamani Rasa, Vasanta Kusumakara Rasa, Vatakulantaka Rasa, Vijaya Parpati

DISCUSSION

In Ayurveda, the effectiveness of “traditional mental health promoting practices” was identified as health regimens (*swasthavritta*), correct behavior (*sadvritta*), and yoga. The Ayurvedic literature dealing with *manas* and *manasika vikara* though scattered is very much useful for understanding *manas* and treating its disorders provided they are carefully collated in view of our present needs. Speaking on the role of the therapist, it is stated that, the therapist should be ‘*suhrit*’ implying that he should be compassionate to the patient and involve himself in solving the problems of the patient. When the ancient concepts of Ayurveda on Psycho-therapy are integrated with contemporary advancements in Psychiatry, it will become complementary and offer a better solution to this ever growing menace

CONCLUSION

Management of mental disorders or psychological medicine was a specialization area right from Charaka’s time (500 B.C.). Charaka says that that the mental illnesses should always be treated by an expert in the field whom Chakrapani has named ‘*manasaroga bhesaja vetti*’ (Knower of treatment for mental illnesses). While Modern drugs promote relaxation by blocking awareness of a stressful event, Ayurvedic approach makes the individual to realize the situation and adopt suitably to solve the stress problem in a refreshing way forever. Its humanistic and holistic approach covers all the shades of life and living.

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