

**A REVIEW: CORRELATION OF SYNONYMS OF MEDHYA
DRAVYAS & THEIR ACTION ON COGNITION**

¹*Dr. Swapnali Kukawalkar and ²Dr. Asmita Jadhav

¹M.D. Scholar, Dravyaguna Department, Tilak Ayurved Mahavidyalaya, Rasta Peth, Pune.

²M.D. (Ayu) Associate Professor, Dravyaguna Department, Tilak Ayurved Mahavidyalaya,
Rasta Peth, Pune.

Article Received on
28 August 2020,

Revised on 18 Sept. 2020,
Accepted on 08 Oct. 2020

DOI: 10.20959/wjpr202013-18956

***Corresponding Author**

Dr. Swapnali Kukawalkar

M.D. Scholar, Dravyaguna
Department, Tilak Ayurved
Mahavidyalaya, Rasta Peth,
Pune.

I. INTRODUCTION

Dravyaguna Vidnyan is based on its two pillars namely 'Naamroop Vidnyan' and 'Gunakarma Vidnyan'. The Naamroop Vidnyan of the drug specifies the Basonym & the Synonym of the drug whereas the Gunakarma Vidnyana specifies its specific actions on various Doshas and Dhatus. For the better understanding of the Dravya, Gunakarma Vidnyana along with Naamroopa Vidnyana is necessary. The ancient system of nomenclature consists of a set of terms or synonyms consisting several names, varying in number, nature and kinds, attached with almost every drug in classical texts. These terminologies or synonyms are component units or technical words which are applied for describing a drug or plant from all aspect to facilitate easy

recognition, difference, specification and characterization. While the Basonym justifies the true reason behind the name, the Synonym plays a vital role in describing the Desha, Swaroop, Karma and Guna Panchak of the drug.^[1]

❖ "एको अपि अनेकं सज्ञां लभते कार्यान्तराणि कुर्वन् ।" -च.सू.४/२२

This system of designating the Dravyas by various synonyms marks back from the Vedic era, the Samhita kaal and the Nighantu Kaal. While the Samhitas have focused on the Gunakarma Vidnyana of the Dravya, we find that the Naamroopa Vidnyana of the Dravya has been explained in detail in the various Nighantus.

The Synonyms of the Dravyas not only indicate its Physical properties but also indicate all the specific & salient features of the plants. It helps for recognition of a plant not only in terms of its morphological characters but also in terms of its various other characters such as habit,

habitat, properties (Rasa, Guṇa, Veerya, Vipaka, Prabhava etc.) and therapeutic as well as general uses. In this way the consolidation of various terms forms the synonyms which gives complete profile of the plant drug.

Medha means intellect or retention & Rasayana means therapeutic procedure or preparation that on regular practice will boost nourishment, health, memory, intellect, immunity and hence longevity. Medhya Rasayana is a group 4 medicinal plants specially mentioned with wide range of applications. The Medhya Rasayanas are beneficial to improve the power of retention, power of grasping, power of discrimination power of recollection thus improving the Medha (Cognition). Yet in practice few more handful drugs used with same aim are mentioned elsewhere in the classical textbooks.^[2] These Dravyas are assigned various names similar to their Medhya action.

Here an attempt has been made to emphasize on the relation between the synonyms of these Medhya Dravyas & their action on Cognition.

II. AIM

To correlate the Synonyms of the Medhya Dravyas and its Action on Cognition.

III. OBJECTIVES

1. Identification of various Synonyms of Dravyas from different Nighantu's like Bhavprakash Nighantu, Raj Nighantu, Adarsh Nighantu.
2. Review and assessment of its correlation with its action on Cognition.

IV. REVIEW OF LITERATURE

1. Nighantu's and various Dravyaguna books were reviewed thoroughly.
2. Medhya Dravyas acting on Cognition were identified and their Synonyms were collected.
3. Various types of actions of these Medhya Dravyas on Cognition were studied.
4. Correlation was reviewed between the Synonyms and the actions of the following Medhya Dravyas.

1) **Shankhpushpi** – *Convolvulus prostratus* Forssk.

Synonyms- मनोरमा, मांगल्यकुसुमा

Ayurvedic Point of View^[3]Modern Point of View^[4]

Madhur vipak and Sheet Veerya	➡ Majja dhatu poshan	<ul style="list-style-type: none"> ➤ Triterpenoids, Flavanol glycosides, anthocyanins and steroids may be responsible for Shankhpushpi's nootropic and memory enhancing properties. ➤ Psychostimulant, tranquilizer, reduces mental tension, brain tonic in hypotonic syndromes, induce a feeling of calm and peace, relief in anxiety neurosis, stress, mental fatigue, modulation of neurochemistry of brain, prominent memory improving drug.
Ushna, Kantida, Balya, Agnida	➡ Vataj Manas Roga har	
Prabhav- Medhya and Bhoot hari	➡ Unmad, Apasmar hanti	

2) **Jyotishmati** – *Celastrus paniculatus* Willd.

Synonym- मेध्या

Ayurvedic Point of View^[5]

Modern Point of View

Tikta katu rasa, Katu vipak and Ushna Veerya	➡ Pitta Vardhan	<ul style="list-style-type: none"> ➤ The mechanism by which Jyotishmati enhances memory and cognition may be due to increased acetylcholine level in the brain. ➤ The seed oil is used for stimulating intelligence, sharpening memory and improving IQ in mentally retarded children. ➤ The seed oil improves the sensory and motor systems of the brain. ➤ Jyotishmati is rich in anti-^[6]oxidants that help in stress management.
Hruday sthit Sadhak Pitta vardhan	➡ Medha Vardhan	
Medha vardhan	➡ Smruti vardhan	

3) **Vacha** – *Acorus calamus* Linn.

Synonyms- भूतनाशिनी, मंगल्या, रक्षोघ्नी, स्मारणी

Ayurvedic Point of View^[7] Modern Point of View^[8]

Katu rasa and Ushna veerya	➡ Pitta vardhan and hence medha vardhan	<ul style="list-style-type: none"> ➤ The roots contain oils and terpenoids that help in strengthening the nervous system. It is an excellent nervine tonic. ➤ Vacha promotes cerebral circulation and increases memory recall power and helps in restoring consciousness. ➤ It stimulates brain tissues for providing them complete nourishment. ➤ This mind enhancer herb helps in improving and enhancing memory, intelligence, confidence and cognition.
Tikta rasa and Ushna veerya	➡ Majja Dhatwagni vardhan	
Majja mala vishodhan	➡ Medha vardhan	
Rakshobhi, Bhoot badhaya prashastam	➡ Prabhav	

4) **Jatamansi** – *Nordostachys jatamansi* Don.

Synonyms- माता, भूतजटा, भूतकेशी, तपस्विनी

Ayurvedic Point of View^[9]Modern Point of View^[10]

Tridosha Shaman, Majjagata dosha shaman	➡ Prabhav	<ul style="list-style-type: none"> ➤ The sedative sesquiterpene Valeranone is the major component of root essential oil. ➤ It is used to increase mental powers and to sharpen intellect. ➤ It acts as a natural nervine tonic and a memory booster. ➤ It relieves stress by inducing calming and relaxation effects. ➤ It prevents neurological degeneration due to its neuroprotective action.
Madhur Vipak	➡ Majja dhatu bruhan	
Prinayati, Satva guna vardhan	Unmad, Apasmar, medhya	
Vata dosha shaman	➡ Majja dhatu poshan	
Rakshoghna, bhoot badha, graha badha nash	➡ Prabhav	

5) **Brahmi** – *Bacopa monnieri* L.Wettst.

Synonyms- ब्राह्मी, सरस्वती, दिव्या

Ayurvedic Point of View^[11]Modern Point of View^[12]

Pitta dosha shaman	➡ Majja dhatu poshan	<ul style="list-style-type: none"> ➤ Triterpenoids, Flavanol glycosides, anthocyanins and steroids may be responsible for Shankhpushpi's nootropic and memory enhancing properties. ➤ Psychostimulant, tranquilizer, reduces mental tension, brain tonic in hypotonic syndromes, induce a feeling of calm and peace, relief in anxiety neurosis, stress, mental fatigue, modulation of neurochemistry of brain, prominent memory improving drug.
Laghu guna and Tikta rasa	➡ Buddhi malinya, jadya nash	
Medhya	➡ Prakrut mano vyapar, smruti hani nash & buddhi bhransh nash	

6) **Shatavari** – *Asparagus racemosus* Wild.

Synonyms- अभीरु, नारायणी

Ayurvedic Point of View^[13]Modern Point of View^[14]

Madhur and Tikta rasa	➡ Medha vardhan	<ul style="list-style-type: none"> ➤ Shatavari is a body and cerebrum rejuvenator and is brilliant for mind. ➤ Shatavari is high in Saponins and Shatavarins which have anti-oxidant abilities. ➤ It is used to treat depression by impacting the neurotransmitters associated with depression. ➤ It prevents ageing, increase longevity, improve mental function and it is also used in nervous disorders and neuropathy.
Shukra vardhan, Oja vardhan	➡ Grantha grahan shakti vardhan	
Medhya	➡ Manas roga har	

7) **Gorakhmundi** – *Sphaeranthus indicus* Linn. Synonym- तपोघनी**Ayurvedic Point of View**^[15]**Modern Point of View**^[16]

Madhur and Tikta rasa	➔Majja dhatu vardhan	<ul style="list-style-type: none"> ➤ Gorakhmundi is found to work on the optical area of the brain, thereby fortifying the micro senses. ➤ Neuroleptic and immune modulatory activity has also been reported. ➤ It is able to modulate the physiology of the Central Nervous System. ➤ It keeps the mind relaxed and helps in concentrating on tasks and activities. ➤ Anti-oxidants present in these herbs protect brain cells from free radicals
Madhur rasa	➔Majja dhatu poshan	
Katu vipak	➔Majjagat kapha dosha hanti & hence manas roga har	

8) **Haritaki** – *Terminalia chebula* Retz.

Synonyms-अभया, प्राण्दा, शिवा

Ayurvedic Point of View^[17]**Modern Point of View**^[18]

Haritaki guna	➔Buddhi vardhan Medha vardhan	<ul style="list-style-type: none"> ➤ The chief components consist of chebulic & chebulinic acid. ➤ It increases the circulation in the CNS and balance the level in the blood thus it has anti hypoxic effects. ➤ Depletion of the neurotransmitters generally results in reduced mental performance with difficulty in concentrating, slowed reasoning etc. ➤ Nootropics such as Haritaki work by increasing supply of neuro chemical like serotonin, acetylcholine as well as oxygen and glucose by stimulating nerve growth.
Kapha dosha and Meda dhatu nash	➔Netradi Indriya jadya nash & Sharir mala sanchay nash	
Laghu, Ruksha guna and panch rasa	➔Dhatugat shaithilya nash	
All the above factors	➔Medhya and manas roga har	

V. METHODOLOGY

Correlation of the Synonyms and its Medhya Action.

Basonym	Synonym	Ayurvedic point of view	Modern point of view
1. Shankhapushpi	मनोरमा, मांगल्यकुसुमा	Majja dhatu poshan, Unmad, Apasmar hanti	Induce a feeling of calm and peace, relief in anxiety neurosis, stress, mental fatigue
2. Jyotishmati	मेध्या	Medha vardhan	Stimulates intelligence, sharpening memory and improving IQ
3. Vacha	भूतनाशिनी, मंगल्या, रक्षोघ्नी, स्मरणी	Majja dhatwagni Vardhan, Medha Vardhan, Prabhav	Improving and enhancing memory, intelligence, confidence and cognition.
4. Jatamansi	माता, भूतजटा, भूतकेशी, तपस्विनी	Majja dhatu bruhan, Prabhav	Relieves stress by inducing calming and relaxation effects.

5. Brahmi	ब्राह्मी, सरस्वती, दिव्या	Buddhi malinya, jadya nash, Prakrut mano vyapar, smruti hani nash and buddhi bhransh nash	Brain tonic for mood, clarity and memory, intellect promoting and improve cognitive functions of brain.
6. Shatavari	अभीरु, नारायणी	Grantha grahan shakti Vardhan, Manas roga har	Treat depression, prevents ageing, increase longevity, improve mental function
7. Gorakhmundi	अभया, प्राण्दा, शिवा	Majjagat kapha dosha hanti	Work on the optical area of the brain, Anti- oxidants present in these herbs protect brain cells from free radicals.
8. Haritaki	तपोघनी	Netradi Indriya jadya nash and Sharir mala sanchay nash, Medhya and manas roga har	Anti-hypoxic effects, increasing supply of neuro chemical like serotonin, acetylcholine as well as oxygen and glucose by stimulating nerve growth.

VI. DISCUSSION AND RESULT : Amongst these above Dravyas,

- Some of the Dravyas like **Shatavari** and **Shankhpushpi** will strengthen the function of *Mana* by **Santarpana** action (Madhur rasa and Sheet veerya) and by **Oja Vardhan**.
- Some of the Dravyas like **Haritaki** and **Gorakhmundi** will improve the
- Medha by increasing the **Sadhak Pitta** due to its Ushna veerya.
- Some of the Dravyas like **Jyotishmati** and **Brahmi** will work on improving the Buddhi & Smruti by its **Prabhav**.
- Some of the Dravyas like **Vacha** and **Jatamansi** will enhance the Satva guna, making normalcy of the Rajo and Tamo guna by **Shodhan of Manovaha Strotas**.
- In Chikitsa,

❖ "तेषां कायमनोभेदात् अधिष्ठानं अपि द्विधा ।"

-वा.सू.१/21

Since Mana is a very important Adhishthan in Chikitsa Siddhant and as Sharir Shuddhi is the preliminary stage for Manas Shuddhi, the above Dravyas also perform the karya of Sharir shodhan as follows.

Shaman	Shodhan	Rasayan
Shankhpushpi	Haritaki	Shatavari
Shatavari	Vacha	Haritaki
	Jyotishmati	Brahmi
	Gorakhmundi	Shankhpushpi

CONCLUSION

- By unfolding the various aspects of the Basonyms and Synonyms of the various Medhya Dravyas, we can conclude that there is a positive correlation between the Synonyms and

their action on Cognition.

- **The study of the Synonyms and their application surely widens the approach, aspect and angle of the treatment of various Manas Rogas.**
- In Chikitsa, the Synonyms of the Dravyas should be taken into account and Chikitsa should be done accordingly.
- In the Chikitsa sthan of Charak Samhita, the Synonym ‘**Abhaya**’ for Haritaki has been used in various Vyadhis denoting that the consumption of Haritaki removes the fear of occurrence of these diseases.
- Similarly in Sushrut Samhita and Vagbhat Samhita, the Synonym ‘**Abhiru**’ for Shatavari denotes being fearless.
- The above references from Brihatrayee also prove the correlation of the synonyms of the Medhya Dravyas and the their action on various diseases.
- Chikitsa should always be decided by examining the Dashvidha Parikshya bhav thoroughly.

❖ “दूष्यं देशं बलं कालं अनलं प्रकृतिं वयः ।

सत्त्वं सात्म्यं तथा आहारं अवस्थाश्च पृथग्विधः ॥”

-वा.सू.१२

- In the Manas Rogas, Satva Pariksha being the most important one, all the Medhya Dravyas must be administered by considering some of the below factors :

Desha – Ushna : Shatavari, Jatamansi Sheeta : Vacha, Jyotishmati	Prakruti – Vaata : Shankhpushpi Pitta : Brahmi Kapha : Vacha
Bala – Uttam : Vacha, Haritaki Heena:Shatavari, Shankhpushpi	Agni – Mandya : Haritaki, Vacha Teekshna : Shatavari

VII. BIBLIOGRAPHY

1. Sartha Bhavaprakash: Ayurvedacharya Purushottam Ganesh Nanal Vaidya: Chaukhamba Bharati Academy, Varanasi, RajeshPrakashan.
2. Caraka Samhita by Agnivesa, Revised by Charaka & Drudhbala with the Ayurveda Dipika commentary, publications, New Delhi, edition Reprint 2016.
3. Dravyaguna shastram, VD. G. A. Phadke, Shuddha Ayurveda Pathyakram samhita, Bombay 1st edition, 1960.
4. Dravyaguna Vidnyana (Part II) Acharya P. V. Sharma, Chaukhamba Bharati Academy, Varanasi, Reprint 2012.

5. Drugs in Ayurveda and their Classification, Part 2, Vishwanath Dwivedi, Institute for Ayurvedic Studies and Research, Jamnagar, 2nd Edition.
6. Anagha Ranade, Neuro Pharmacological Review of Medhya dravyas described by Charaka, International Ayurvedic Medical Journal, ISSN: 2320-5091.
7. Prakash Paranjpe, Indian Medicinal Plants: Forgotten healers (A guide to Ayurvedic herbal medicines), Chaukhamba Sanskrit Pratishthan, Delhi, India, 2001.
8. Lale Sanjivkumar, Aushadh NaamRoopVidnyan, Part 1, Indore, Madhya Pradesh, India.
9. Prof P V Sharma, Classical Uses of Medicinal Plants, Chaukhamba Vishwa Bharati, 1st edition, 1996.
10. Bapalal G Vaidya, Nighantu Adarsh, Vol 2, Chaukhamba Bharati Academy, Varanasi, India, 1999.
11. Tripathi, Indradev, Raj Nighantu, Shatavhadi Varga, Acharya Vishwanath Dwivedi, Krishna Das Academy Publication, Varanasi.

REFERENCES

1. Caraka Samhita by Agnivesa, Revised by Charaka & Drudhbala with the Ayurveda Dipika commentary, publications, New Delhi, edition Reprint, 2016; 34.
2. Nirmal Kumar, Anil Kumar Singh, Medhya Dravya in Ayurveda: A critical Review, International Ayurvedic Medical Journal, June 2013; 1(3).
3. Dravyaguna shastram, VD. G. A. Phadke, Shuddha Ayurveda Pathyakram samhita, Bombay 1st edition, 1960; 314.
4. Hetal Amin, Rohit Sharma, Shankhapushpi : Validation of the Ayurvedic therapeutic claims through contemporary studies, www.greenpharmacy.info, Oct 16, 2014.
5. Dravyaguna shastram, VD. G. A. Phadke, Shuddha Ayurveda Pathyakram samhita, Bombay 1st edition, 1960; 207.
6. Abhay Gandhi, Prashant Bedarkar, Herbal drugs indicated for Rasayana Therapy : A review, World Journal of Pharmaceutical research, 5(5): 1715-1725.
7. Dravyaguna shastram, VD. G. A. Phadke, Shuddha Ayurveda Pathyakram samhita, Bombay 1st edition, 1960; 295.
8. Sandip G Buddhadev, Sheetal G Buddhadev, Memory & Intelligence enhancers prescribed in Ayurveda as Medhya Dravya, JAHM, ISSN: 2321-1563.
9. Dravyaguna shastram, VD. G. A. Phadke, Shuddha Ayurveda Pathyakram samhita, Bombay 1st edition, 1960; 203.
10. Bhawana Mehra, K.N. Dwivedi, Mode of action of Medhya Dravyas : A Review, Ancient

- science of Life, Dec 2012; 7-10.
11. Dravyaguna shastram, VD. G. A. Phadke, Shuddha Ayurveda Pathyakram samhita, Bombay 1st edition, 1960; 265.
 12. Reena Kulkarni, K.J. Girish, Nootropic herbs (Medhya Rasayana) in Ayurveda : An update, Pharmacognosy reviews, Medknow publications.
 13. Dravyaguna shastram, VD. G. A. Phadke, Shuddha Ayurveda Pathyakram samhita, Bombay 1st edition, 1960; 341.
 14. Suman Ray, Asim Ray, Medhya Rasayanas in Brain function and disease, Medicinal chemistry, 2015.
 15. Dravyaguna shastram, VD. G. A. Phadke, Shuddha Ayurveda Pathyakram samhita, Bombay 1st edition, 1960; 279.
 16. A.K. Kaushik, R.H. Singh, Clinical evaluation of Medhya Rasayana compound in cases of non-depressive anxiety neurosis, Ancient science of life, 1982; 11-16.
 17. Dravyaguna shastram, VD. G. A. Phadke, Shuddha Ayurveda Pathyakram samhita, Bombay 1st edition, 1960; 327.
 18. B. Mahadev, G. Sivaram, Critical Review of Medhya Rasayana drugs mentioned in Ayurveda, IJAPR, June 2016; 4(6).