

**CLINICAL STUDY OF MEDHYA RASAYANA GHRITA IN THE  
MANAGEMENT OF ATTENTION DEFICIT / HYPERACTIVITY  
DISORDER (ADHD) CHILDREN****Dr. Satish Suresh Patil<sup>1\*</sup> and Dr. Jagruti S. Kharatmal**

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**ABSTRACT**

Attention-deficit / hyperactivity disorder (ADHD) is the most common neurobehavioral disorder of childhood affecting school aged children and most expensively studied mental disorder of childhood. The recent demographic studies report that 1/3<sup>rd</sup> of the world's population is of children below 15 years of age. These statistics definitely increase the responsibility of pediatric community from both Ayurveda as well as the modern contemporary sciences towards the society. ADHD characterized by inattention, including increased distractibility & difficulty sustaining attention; poor impulse control and decreased self-inhibitory capacity; and motor over activity and motor restlessness.

Above characteristics of ADHD are pointing towards imbalance of Shareerika (specifically Vata) and Manasika (specifically Raja) Dosha. Medhya Rasayana Chikitsa will be probable effective in ADHD as the disorder affects the Manasik Bhavas in a child influencing both Shareerika and Manasika Dosha, thus deranging its normal functioning.

**KEYWORDS:** ADHD, Medhya Rasayana Ghrita.**INTRODUCTION**

As the term, KAUMARBHRITYA suggests; Ayurvedic Pediatrics highlights the child rearing i.e. Kumara Bharana as the main aspect of this field. Hence conceptually Ayurvedic pediatrics is not a mere therapeutic branch aimed at treatment of diseases but it also deals with methods of the bringing up the child to a healthy individual. The concept of health in Ayurveda not only means physical health but also the mental well being of a person. ADHD is neurodevelopmental<sup>[1]</sup> disorder characterized by problems in paying attention, excess

activity, uncontrolled behavior which is inappropriate for the age of child. The incidence of ADHD is highest among all the developmental disabilities (75/1000).<sup>[2]</sup> According to W.H.O., mental disorders are increasing day by day on international level, to become one of the main causes of morbidity in children. This increase is regarded as the crisis of the 21<sup>st</sup> century.<sup>[3]</sup> The prevalence of ADHD among primary school children was found to be 11.32%.<sup>[4]</sup> Considering the present scenario of highest prevalence of ADHD amongst developmental disabilities, its ill outcomes in multiple areas of child functioning and lack of effective medication, the disease ADHD is selected for the study to help in treatment from Ayurvedic point of view.

### **Inclusion Criteria**

- 1- Children fulfilling the DSM-5 criteria for diagnosis of ADHD.
- 2- School going children aged between 6-10 years of age with academically under achievements, poor concentration, increased distractibility, motor restlessness will be included in this study.

### **Exclusion Criteria**

- 1- Children not fulfilling the DSM-5 criteria<sup>[5]</sup> for diagnosis of ADHD.
- 2- Children having CNS disorders like cerebral palsy, MR, epilepsy etc.
- 3- Children with hearing deficit.
- 4- Children with congenital anomalies like cleft palate, CHD etc.
- 5- Children with systemic disorders like tuberculosis, HIV, Hyper/Hypo thyroidism etc. and metabolic disorders.
- 6- Immune compromised and malnutrition child.

### **Diagnostic Criteria**

DSM-5 criteria for diagnosis and assessment of children with ADHD.

- 1- The teachers in-charge of individual class will be enquired about the academically under achieving students. When such students will be identified by the teachers, the features of ADHD as mentioned by DSM-5 will be examined.
- 2- Those fulfilling the DSM-5 criteria for diagnosis of ADHD will be selected. The parents of the children will be contacted and the diagnosis will be confirmed after a detailed history taking from the parents.
- 3- All the information will be collected from teachers and parents.

**Base of symptoms three types of ADHD occurs****Combined presentation**

If enough symptom of both criteria- inattention hyperactivity impulsivity were present for the past 6 month.

**Predominantly inattentive presentation**

If enough symptom of inattention but not hyperactive impulsivity were present for past 6 month.

**Predominantly hyperactive- impulsive presentation**

If enough symptom of hyperactivity impulsivity but not inattention were present for past six month.

**Disease Pathogenesis:** Pathogenesis of ADHD depends upon structural, function and chemical abnormality in brain. Development pattern of brain is normal but it is delayed on an average by about 3 years.<sup>[6]</sup> Delay development mostly in region of thinking playing attention and planning.

In ADHD research shown that reduced level of activity has also been observed in basal ganglia-thalamus and parietal cortices.

In ayurveda there is no direct reference of ADHD disease but charaka charya told that we cannot label each disease by name but u can see the vitiation dosha, dhatu and mala and treat accordingly.

ADHD can be correlated with different avastha of some disease like Unmad, Manoroga.

In ADHD there is Vata prakop in manovaha srotas where kha vaigunya created in garbhkala because of vataj ahar vihar sevan by mother which expressed in later periode in presence of favorable environment. Which causes the vibhransha of Dhee dhriti and smriti which express in the form of ADHD like symptoms?

| Sr.No | DSM-5 CRITERIA <sup>[5]</sup><br>(Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition Criteria)                                    |
|-------|---|
| A     | <b>INATTENTION-</b> [Six(or more) of the following symptoms have persisted for at least 6 month]  |
| 1     | Often fails to give close attention to details or makes careless mistakes in school work, at work, or with other activities.                        |
| 2     | Often has trouble holding attention on tasks or play activities.  |
| 3     | Often does not seem to listen when spoken to directly.  |
| 4     | Often does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace (e.g. loses focus, side-tracked).  |
| 5     | Often has trouble organizing tasks and activities.  |
| 6     | Often avoids, dislikes, or is reluctant to do tasks and that require mental effort over a long period of time (such as schoolwork or homework).     |
| 7     | Often loses things necessary for tasks and activities (e.g. school materials, pencils, books, tools, wallets, keys, eyeglasses, mobile telephones). |
| 8     | Is often easily distracted  |
| 9     | Is often forgetful in daily activities.   |
| B     | <b>HYPERACTIVITY AND IMPULSIVITY</b> - [Six(or more) of the following symptoms have persisted for at least 6 month]                                 |
| 1     | Often fidgets with or taps hands or eat, or squirms in seat.  |
| 2     | Often leaves seat in situations when remaining seated is expected.  |
| 3     | Often runs about or climbs in situations where it is not appropriate. (adolescents or adults may be limited to feeling restless).                   |
| 4     | Often unable to play or take part in leisure activities quietly.  |
| 5     | Is often “on the go” acting as if “driven by a motor”.  |
| 6     | Often talks excessively.  |
| 7     | Often blurts out an answer before a question has been completed.  |
| 8     | Often has trouble waiting his/her turn.   |
| 9     | Often interrupts or intrudes on others.   |

## Management

In Ayurveda ballancing of three doshas is the prime goal of treatment. Desire of garbh from womb of mother expressed in the form of dauhrudya but if it is not fulfilled that causes avmanana of that desire of garbh which expressed in childhood in the form of different manovyadhis in presence of favorable condition. In ADHD Mann (mind) affected and as it is the function of mind to have control on all the sence organ and itself<sup>[7]</sup> so the function all the sence organ hampered i.e Dhee, Dhriti, And Smriti. So the Medhya rasayana ghrita<sup>[8-9]</sup> contains.

| Sr. No | Dravya        | Latin Name                     | Rasa                   | Virya  | Vipaka  | Guna             | Karma                                 |
|--------|---------------|--------------------------------|------------------------|--------|---------|------------------|---------------------------------------|
| 1      | Mandukparni   | <i>Centella asiatica</i>       | Tikta, Kashaya Madhura | Sheeta | Madhura | Laghu            | Medhya, Balya, Rasayana               |
| 2      | Yashtimadhu   | <i>Glycyrrhiza Glabra</i>      | Madhura                | Sheeta | Madhura | Guru, Snigdha    | Chakshushya, Balya, Keshya, Rasayana  |
| 3      | Guduchi       | <i>Tinospora Cordifolia</i>    | Tikta, Katu, Kashaya   | Ushna  | Madhura | Guru, Snigdha    | Tridoshaghna, Balya, Rasayana         |
| 4      | Shankhapushpi | <i>Convolvulus Pluricaulis</i> | Kashaya                | Ushna  | Madhura | Snigdha, Picchil | Medhya, Balya Rasayana, Manasrogahara |
| 5      | Go Ghrita     |                                | Madhura                | Sheeta | Madhura | Guru, Snigdha    | Chakshushya, Rasayana, Balya, Medhya  |

All the drug used in this formulation almost have the medhya property and because of medhya property it promote Dhee Dhriti and Smiriti.

## DISCUSSION AND CONCLUSION

Dravyas those increases the Medha is known as 'Medhya'. Although this function related with Mana.

Tikta Rasa- Most of grugs used in formulation is tikta rasatmak so it increasas the aakash mahabhut in the body and finally at the level of man it increases the satva guna of mana.

Madhur vipak- Because of madhura vipak of all dravya it helps in uttrottar vridhi of all the dhatus, indriya prasadan which vitiated by vaat mainly, & oja vardhan.

Guna- Guru guna mainly present in the formulation provide more sthiratva and stambhan to mana which is unstable state in ADHD. Laghu gun increases the satva guna of mana.

Go ghrita<sup>[10-11]</sup> Go ghrita is the Ajanmsatmay so it easily assimilates in our body and provides the lipid media to all the dravyas which make able them to cross the blood brain barrier.

## REFERENCES

1. [http://en.m.wikipedia.org/wiki/Attention\\_deficit\\_hyperactivity\\_disorder](http://en.m.wikipedia.org/wiki/Attention_deficit_hyperactivity_disorder) -introduction.
2. MS Mahadeviah, Developmental disabilities in children, I.A.P. textbook of pediatrics 4<sup>th</sup> edition, 2009; 1044.
3. INSERM expert exports.[www.pubmed.com](http://www.pubmed.com).NCBI National library.

4. Venkata JA, Panicker AS. Prevalence of attention deficit hyperactivity disorder in primary school children. *Indian J Psychiatry*.
5. American Psychiatric Association: Diagnostic and statistical manual of mental disorder, fifth edition, Washington, DC, 2013, American Psychiatric Association.
6. Shaw P, Eckstrand K, Sharp W, Blumenthal J, Lerch JP, Greenstein D, et al. Attention-deficit/hyperactivity disorder is characterized by a delay in cortical maturation. *Proc Natl Acad Sci U S A* 2007 Dec 4; 104(49): 19649-54. <http://dx.doi.org/10.1073/pnas.0707741104>.
7. Pandit Kashi Nath Shastri, Dr. Gorakh Nath Chaturvedi, Editors. Charaka Samhita of agnivesha, Sharira Sthana Chapter 1, Verse 21; Chaukhamba Bhartiya Academy Varanasi, 2011; 805.
8. Pandit Kashi Nath Shastri, Dr. Ravidatta Tripathi, Editors. Charaka Samhita of agnivesha, Chikitsa Sthana Chapter 1|3/30-31; Chaukhamba Sanskrit Pratishthan Delhi; 2005; 29.
9. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3459457/>.
10. Bhavprakash Nighantu (1993) edited by Dr. K. C. Chuneekar and Dr. G. S. Pandey Hindi Commentary Chaukhamba Prakashan Varanasi, Ghrutvarga Verse 4-6 / 774.
11. Greentree Group, *Int J Ayu Pharma Chem* 2015 Vol.3 Issue 1- Published 10/7/15 [www.ijapc.com](http://www.ijapc.com), 177-186.