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## **Attention Deficit Hyperactivity Disorder (ADHD) – An Ayurvedic Review**

### **Abstract**

Attention Deficit Hyperactivity Disorder (ADHD) is a frequently encountered childhood neurodevelopmental disorder characterized by inattention, hyperactivity, and impulsivity. It primarily affects children and may persist into adolescence and adulthood, impairing academic performance, behavior, and social functioning. Modern medicine attributes ADHD to neurochemical imbalance and genetic factors.

In Ayurveda, ADHD can be understood through ManovahaSrotas Dushti, Vata Prakopa, and impairment of Dhi, Dhriti, and Smriti. Factors such as improper diet, lifestyle, and psychological stress disturb mental equilibrium and contribute to ADHD-like symptoms.

Ayurvedic management focuses on balancing Vata Dosha, enhancing cognition, and strengthening the nervous system through Medhya Rasayana, Panchakarma, and Sattvavajaya Chikitsa. Herbs such as Brahmi, Shankhapushpi, Mandukaparni, and Yashtimadhu improve memory, attention, and mental stability. Therapies like Shirodhara, Abhyanga, and Nasya help calm the mind and improve concentration. This review highlights the Ayurvedic perspective, etiopathogenesis, and management of ADHD for better cognitive and behavioral outcomes.

### **Keywords**

ADHD, Ayurveda, Vata Dosha, Manovaha Srotas, Medhya Rasayana, Sattvavajaya Chikitsa, Brahmi, Shankhapushpi.

### **Introduction**

Attention Deficit Hyperactivity Disorder (ADHD) is one of the most frequently encountered childhood neurodevelopmental disorders seen in childhood and is characterized by persistent patterns of inattention, hyperactivity, and impulsivity that interfere with functioning or development. The prevalence of ADHD has been increasing globally, affecting approximately 5–7% of school-aged children. The disorder can significantly impact academic performance, social relationships, and emotional well-being if not properly managed. Although the exact

34 etiology remains unclear, modern science suggests that genetic factors, neurochemical  
35 imbalance, and environmental influences play a major role in its pathogenesis.<sup>1</sup>

36 Conventional management mainly involves behavioral therapy, psychological counseling,  
37 and pharmacological agents such as stimulants. However, long-term use of such medications  
38 may be associated with side effects, leading to increasing interest in complementary and  
39 traditional systems of medicine for safer and holistic management.<sup>2</sup> ADHD is not described  
40 as a specific disease entity in classical Ayurvedic texts, its clinical features closely resemble  
41 conditions involving Vata vitiation, Rajo-guna predominance, and disturbances in  
42 ManovahaSrotas. The imbalance of Dhi (intellect), Dhriti (retention), and Smriti (memory) is  
43 considered a key factor in the manifestation of abnormal behavioral patterns and cognitive  
44 impairment.<sup>3</sup>

45 Ayurveda emphasizes that improper diet, irregular lifestyle, excessive exposure to sensory  
46 stimuli, psychological stress, and lack of proper nurturing during childhood may disturb the  
47 equilibrium of mind and body. Such factors may lead to aggravation of Vata Dosha, which is  
48 responsible for neurological and mental functions. Disturbed Vata can manifest as  
49 restlessness, poor concentration, unstable behavior, and impaired cognitive functions—  
50 features that closely resemble ADHD.<sup>4</sup>

51 The Ayurvedic approach to management focuses on restoring balance through Medhya  
52 Rasayana (nootropic herbs), Panchakarma therapies, dietary regulation, lifestyle  
53 modification, and Sattvavajaya Chikitsa (psychotherapy). Herbs such as Brahmi,  
54 Shankhapushpi, Mandukaparni, and Yashtimadhu are widely described for improving  
55 memory, concentration, and mental stability. These therapies aim not only at symptomatic  
56 relief but also at strengthening cognitive functions and promoting overall mental well-being.<sup>5</sup>  
57 This review article aims to analyze ADHD from an Ayurvedic perspective, focusing on its  
58 conceptual correlation, etiopathogenesis, and therapeutic approaches described in classical  
59 Ayurvedic literature.<sup>6</sup>

60

## 61 **Aim**

62 To explore Attention Deficit Hyperactivity Disorder (ADHD) from an Ayurvedic perspective  
63 and to analyze its correlation with Ayurvedic concepts such as ManovahaSrotas Dushti, Vata  
64 Prakopa, and impairment of Dhi, Dhriti, and Smriti. It also aims to review Maternal health  
65 such as physical and mental effect on child. The study also aims to review the role of

66 Ayurvedic therapeutic approaches including Medhya Rasayana, Panchakarma, Pathya-  
67 Apathya, and Sattvavajaya Chikitsa in the management of ADHD.

68

## 69 **Methodology**

70 This study is a conceptual review based on classical Ayurvedic texts and modern medical  
71 literature. Relevant information was collected from Ayurvedic compendia such as Charaka  
72 Samhita, Sushruta Samhita, Ashtanga Hridaya, and various Nighantus, along with published  
73 research articles, journals, and online scientific databases. The collected data were analyzed  
74 to understand the etiopathogenesis, symptom correlation, and therapeutic principles of ADHD  
75 according to Ayurveda.

76

## 77 **Detailed Review**

78

### 79 **1. Concept of ADHD**

80 Attention Deficit Hyperactivity Disorder (ADHD) is a neurodevelopmental disorder  
81 characterized by persistent symptoms of inattention, hyperactivity, and impulsivity. It  
82 commonly begins in childhood and may continue into adolescence and adulthood. ADHD  
83 affects cognitive functions such as attention span, working memory, emotional regulation,  
84 and behavioral control.

85 From the Ayurvedic perspective, ADHD can be correlated with disturbances of Manas (mind)  
86 and Manovaha Srotas, along with predominance of Vata Dosha and Rajo Guna. These  
87 disturbances may impair the normal functioning of Dhi (intellect), Dhriti (self-control), and  
88 Smriti (memory), resulting in poor concentration and unstable behavior.

89

### 90 **2. Ayurvedic Concept of Mind and Cognitive Functions**

91 Ayurveda explains mental functions through the concept of Manas, Atma, Indriya, and  
92 Sharira. The mind acts as a bridge between the sensory organs and the soul. Proper  
93 functioning of the mind is dependent on the balance of Triguna:

<b>Guna</b>	<b>Function</b>
Sattva	Clarity, intelligence, stability of mind
Rajas	Activity, stimulation, restlessness
Tamas	Inertia, dullness, ignorance

94 In ADHD-like conditions, Rajo Guna predominance along with Vata Dosha aggravation leads  
95 to symptoms such as restlessness, impulsive behavior, and poor attention.

96

### 97 **3. Nidana (Etiological Factors)**

#### 98 **Aharaja Nidana (Dietary factors)**

- 99 • Excess consumption of Ruksha, Laghu, and Vata-aggravating foods
- 100 • Irregular food habits
- 101 • Excess intake of processed food

102

#### 103 **Viharaja Nidana (Lifestyle factors)**

- 104 • Lack of proper sleep
- 105 • Irregular daily routine
- 106 • Excessive screen exposure

#### 107 **Manasika Nidana (Psychological factors)**

- 108 • Emotional stress (Maternal stress in Garbhini Avastha and child stress)
- 109 • Lack of parental attention
- 110 • Psychological trauma
- 111 • Disturbance in mental equilibrium

112 These factors mainly aggravate Vata Dosha and disturb the ManovahaSrotas, leading to  
113 behavioral abnormalities.

114

### 115 **4. Samprapti (Pathogenesis)**

116 The pathogenesis of ADHD from an Ayurvedic perspective can be understood as follows:

- 117 1. Intake of improper diet and lifestyle habits.
- 118 2. Aggravation of Vata Dosha and increase in Rajo Guna.
- 119 3. Disturbance in ManovahaSrotas.
- 120 4. Impairment of Dhi, Dhriti, and Smriti.
- 121 5. Manifestation of symptoms such as hyperactivity, impulsivity, and poor attention.

122 Thus, ADHD can be considered a functional disturbance of the nervous system and mind due  
123 to Vata imbalance and Rajas predominance.

124

### 125 **5. Lakshana (Clinical Features)**

126 Symptoms of ADHD that correlate with Ayurvedic descriptions include:

Modern Symptoms	Ayurvedic Interpretation
Inattention	Smriti Vibhramsha
Hyperactivity	Vata Prakopa
Impulsivity	Rajo Guna dominance
Poor concentration	DhiVibhramsha
Emotional instability	ManovahaSrotas Dushti

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## 128 **6. Role of Medhya Rasayana**

129 It improve memory, intelligence, and cognitive functions.

Drug	Botanical Name	Action
Brahmi	Bacopa monnieri	Help to maintain dopamine production. Bramhi leaves contain bacoside which have cognitive and nutropic effect
Shankhapushpi	Convolvulus pluricaulis	Enhances cognitive functions
Mandukaparni	Centella asiatica	Improves intellect and mental clarity. Ascitic acid acts against reduction in neurogenesis in memory deficit induced by valproic acid
Yashtimadhu	Glycyrrhiza glabra	Nourishes nervous system. It contains Glabridin which enhance memory

130 These herbs act as nootropics, neuroprotective agents, and adaptogens, helping to enhance  
131 cognitive performance and mental stability.

132

## 133 **7. Ayurvedic Management Principles**

### 134 **1. Nidana Parivarjana**

135 Avoidance of causative factors such as improper diet, irregular lifestyle, and excessive  
136 sensory stimulation.

### 137 **2. Medhya Rasayana Therapy**

138 Use of cognitive-enhancing herbs to improve memory and concentration.

### 139 **3. Panchakarma Therapy**

140 Important therapies include:

- 141 • **Shirodhara** – Calms the mind and reduces stress
- 142 • **Abhyanga** – Improves nervous system functioning
- 143 • **Nasya** – Enhances brain functions and sensory clarity

144 • **Shirobasti** – Strengthens neurological functions

#### 145 **4. Sattvavajaya Chikitsa**

146 Psychological therapy aimed at controlling the mind through:

- 147 • Meditation
- 148 • Yoga
- 149 • Counseling
- 150 • Behavioral training

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#### 153 **5. Pathya-Apathya**

154 Proper diet and lifestyle regulation play an important role in improving mental health and  
155 cognitive function.

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### 158 **Probable Mode of Action of Ayurvedic Therapies in ADHD**

#### 159 **1. Shirodhara**

160 Shirodhara involves continuous pouring of medicated liquids on the forehead, producing a  
161 calming effect on the nervous system and helping regulate mental functions. Its rhythmic  
162 stimulation may relax the hypothalamus and autonomic system, reducing stress.

163 In Ayurveda, it pacifies Vata and Rajo Guna, easing restlessness, anxiety, and hyperactivity  
164 while improving concentration and emotional stability, which may support conditions like  
165 ADHD.

#### 166 **2. Abhyanga**

167 Abhyanga is a warm oil massage that nourishes the body and nervous system, improving  
168 circulation and neuromuscular coordination.

169 In Ayurveda, it helps balance Vata, reducing hyperactivity and promoting relaxation. It also  
170 improves sleep and supports brain and nerve function, which may aid attention and behavior  
171 in children with ADHD.

#### 172 **3. Nasya**

173 Administration of medicated oils or herbal preparations through the nasal route. Ayurveda  
174 considers the nose as the gateway to the head (Nasa Hi Shiraso Dwaram), and therefore  
175 Nasya directly influences the brain and sensory organs. Medicated oils used in Nasya may  
176 stimulate neural pathways and enhance neurotransmitter activity, leading to improved

177 cognitive functions such as memory, attention, and learning ability. Nasya also helps in  
178 pacifying Vata in the head region and supports the functioning of ManovahaSrotas.

#### 179 **4. Shirobasti and Shiropichu**

180 Shirobasti is a Panchakarma therapy where warm medicated oil is retained on the scalp,  
181 nourishing brain and nervous tissues. Its prolonged contact may improve circulation and relax  
182 neural activity, helping calm the mind.

183 In Ayurveda, it pacifies Vata in the head, improving mental stability, concentration, and  
184 cognition, while reducing irritability, impulsiveness, and fatigue.

185

#### 186 **Probable Mode of Action of Sattvavajaya Chikitsa**

187 Sattvavajaya Chikitsa refers to Ayurvedic psychotherapy, which focuses on strengthening the  
188 mind and controlling negative mental influences. It aims to restore the balance of Sattva,  
189 Rajas, and Tamas and improve mental discipline.

#### 190 **Meditation**

191 Meditation promotes mental calmness and increases attention span and emotional regulation.  
192 Regular practice helps reduce stress hormones and improves brain activity related to focus  
193 and memory. It enhances Sattva Guna, which supports clarity of mind and stable cognition.

#### 194 **Yoga**

195 Yoga combines physical postures, breathing techniques, and relaxation practices. These  
196 activities improve mind–body coordination, nervous system balance, and stress management.  
197 Yogic practices help regulate Vata Dosha and promote better concentration and self-control.

#### 198 **Counseling**

199 Counseling provides emotional support and guidance to children and their families. It helps  
200 identify behavioral triggers, improve communication, and develop coping strategies. This  
201 psychological support helps in stabilizing the mind and promoting positive behavioral  
202 patterns.

#### 203 **Behavioral Training**

204 Behavioral training focuses on developing self-discipline, attention control, and structured  
205 routines. Through positive reinforcement and guided behavioral techniques, children learn to  
206 manage impulsivity and improve task completion. This approach strengthens Dhriti (self-  
207 control) and improves overall mental functioning.

208

#### 209 **Discussion**

210 ADHD is a common neurodevelopmental disorder characterized by inattention, impulsivity,  
211 and hyperactivity, affecting academic, social, and behavioral functioning. Modern medicine  
212 attributes it to neurochemical imbalance involving dopamine and norepinephrine, whereas  
213 Ayurveda explains it through ManovahaSrotas Dushti, Vata Dosha aggravation, and Rajo  
214 Guna predominance.

215 Vata governs neurological functions, and its aggravation leads to restlessness, poor  
216 concentration, and impulsive behavior. Rajas further contributes to hyperactivity and  
217 emotional instability. Impairment of Dhi, Dhriti, and Smriti results in cognitive and  
218 behavioral dysfunction.

219 Ayurvedic management focuses on restoring Dosha balance and improving mental stability.  
220 Medhya Rasayana drugs such as Brahmi, Shankhapushpi, Mandukaparni, and Yashtimadhu  
221 enhance memory and cognition. Panchakarma therapies (Shirodhara, Nasya, Abhyanga,  
222 Shirobasti) help calm the mind and improve neurological function. Sattvavajaya Chikitsa,  
223 including meditation, yoga, and counseling, aids in behavioral regulation.

224 Diet and lifestyle modifications, including Sattvika Ahara, proper sleep, and routine, are  
225 essential. Ayurveda thus offers a holistic approach addressing the root cause and promoting  
226 cognitive and behavioral well-being

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## 229 **Conclusion**

230 ADHD is a neurodevelopmental disorder affecting cognitive, behavioral, and social  
231 functioning. While modern medicine uses pharmacological and behavioral therapy, Ayurveda  
232 offers a holistic approach addressing physical and psychological aspects.

233 It correlates with Vata Dosha aggravation, Rajo Guna predominance, ManovahaSrotas  
234 disturbance, and impairment of Dhi, Dhriti, and Smriti, leading to cognitive and behavioral  
235 dysfunction.

236 Management includes Nidana Parivarjana, Medhya Rasayana, Panchakarma, Sattvavajaya  
237 Chikitsa, and lifestyle modification. Herbs like Brahmi, Shankhapushpi, Mandukaparni, and  
238 Yashtimadhu, along with therapies such as Shirodhara, Nasya, and Abhyanga, improve  
239 cognition and mental stability.

240 Ayurveda provides a safe, integrative approach promoting mental well-being and better  
241 quality of life

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