



CRITICAL REVIEW ON ROLE OF LEHANA KARMA IN PEDIATRIC CARE

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ABSTRACT

In Ayurveda the health of a child is considered fundamental to the strength and vitality of a nation. *Lehana karma* which translates to "licking therapy" is an Ayurvedic practice aimed at enhancing the nutrition, immunity and intellect of children. This method involves administering specific formulations to children typically in the form of substances that can be licked or consumed thereby improving their overall health and development. *Lehana karma* serves both prophylactic and therapeutic purposes during infancy and childhood. It is designed to boost immunity, promote growth and enhance cognitive functions. Various Ayurvedic scholars, known as *Acharyas*, have described special *Lehana* formulations to support these objectives. For instance, *Acharya Kashyapa* emphasized that the well-being of a child is closely linked to the practice of *Lehana*, highlighting its importance in ensuring a child's health and happiness. The benefits of *Lehana karma* are manifold. It provides essential nutrients that support physical growth and development, strengthens the immune system to protect against infections and enhances mental faculties, including intellect and speech. By incorporating *Lehana* into a child's routine, Ayurveda aims to establish a strong foundation for health and well-being, contributing to the overall strength of the nation.

KEYWORDS- Ayurveda, *Lehana karma*, *Vyadhikshamatv*, *Lehana yoga*, *Acharya*, *Swarnapashana*.

INTRODUCTION

Lehana is the act of licking, tasting or lapping with the tongue. When extract, decoction etc of drugs are made dense with the help of mild fire and which can be licked by the tongue. Likable, that is given to the child in a semisolid form by increasing the palatability, concentration, potency and nutritional values can be called as *Lehana*. *Lehana* is a type of potential prophylactic as well as therapeutic treatment recommended during infancy and childhood. In our Ayurvedic texts, various *Acharyas* described certain *lehanas* (formulations in likable form) in detail with special emphasis on child health with indications and contraindications which improving intellect, digestion, metabolism, physical strength, immunity, complexion, fertility and life span of children. But in *Kasyapa Samhita* there is detailed description of *lehana* and its uses in children is mentioned.¹

In modern terms "*Lehana Karma*" from Ayurveda can be understood as a holistic approach to child development through dietary and nutritional practices, primarily focusing on providing nutrient-rich substances to enhance a child's immunity, physical growth, cognitive abilities and overall well-being, often utilizing herbs and spices with medicinal properties, similar to the concept of "nutritional supplementation" with a focus on holistic health development in early childhood.

LEHANA KARMA IN CHILDREN

Lehana derived from the Sanskrit words “*Lih*” and “*Ghaj*,” means licking or passing the tongue over something. This traditional method involves administering drugs mixed with honey or *Ghrita* to children, making it an ideal way to increase palatability and ease of administration.²

The purposes of *Lehana karma* include.

- Health promotion
- Nutritional supplement
- Growth and development
- Promotion of intellect
- Building immunityual power

INDICATIONS OF LEHANA KARMA

- Lactational failure or absence of breast milk
- Children with *Vata-Pitta Padhan Prakruti*
- Children who cry after drinking milk
- *Anidra* (insomnia)
- *Mahashana* (excessive consumption of breast milk)
- *Alpa Mutra Purisha* (elimination of urine and feces in very less quantity)
- *Diptagni* (good appetite)
- *Niramyasch Tanavo* (child is not having any diseases, but still the baby is weak/thin)
- If the infant is not receiving enough breast milk
- Suitable for *Vata* and *Pitta* predominance in small illnesses affecting children.
- Examples of herbs used: *Manjistha* (*Rubia cordifolia*) for slight *Pitta* sickness..
- Excessive Crying in children^[3-5]

CONTRAINDICATIONS OF LEHANA KARMA

1. Mother's Conditions-- If the mother consumes a balanced diet (*Sarva rasa yukta ahara*) . The mother has unhealthy breast milk (*Stanya dushti*) due to *Kapha dosha*. The timing of *Lehana Yoga* depends on the condition being treated and the individual child's needs. *Lehana Karma* should only be performed under the guidance of an experienced Ayurvedic practitioner, taking into account the individual's unique constitution and health conditions.

2. Infant's Conditions

- *Mandagni*- Infants with weak digestive fire
- *Arochaka* (Anorexia)
- Production of *Ama* (undigested food).
- Excessive production of waste products (*Malamutra/Bahuvidmutra*).
- Poor weight gain despite eating
- Respiratory and Digestive Issue
- Conditions like vomiting, asthma, cough, and abdominal discomfort.
- Systemic Diseases- Systemic diseases in children require specialized care and treatment, making them contraindicated for *Lehana Yoga*.
- Examples of contraindicated diseases include heart disease, anemia, jaundice, edema and diseases caused by micro-organisms.

3. Environmental Factors - *Lehana Yoga* should be avoided during unfavourable conditions (*Na Durdin*).⁶

PRINCIPLE FOR ADMINISTRATION OF *LEHANA YOGA*

Lehana Yoga is a treatment that requires careful consideration of the child's individual needs and health conditions. Precautions and contraindications should be carefully evaluated to ensure safe and effective treatment.

- *Na Ahnyahni* - *Lehana Yoga* not be performed should regularly
- *Na ashitam* - A gap should be maintained between *Lehana Yoga* and meal administration
- *Na Asatmya* - Stop *Lehana Yoga* if any adverse reactions occur after administration
- *Na Atimatra* - Avoid excessive dosages as *Lehana Yoga* is intended to promote gradual immune system development and cognitive enhancement.⁷

BENEFITS OF *LEHANA KARMA*

- Palatable and Easy to Consume: *Lehana* is a semisolid mixture that can be made palatable with *Madhu* (honey) and *Ghrita* (Ghee) making it easier for children to consume.
- Long-Term Administration: *Lehana* should be administered for a prolonged period, such as a month, two months, six months or even longer for desirable effects.
- Supplementary Feed for Growth and Development: *Lehana* serves as a supplementary feed for proper physical and mental growth and development in children.
- Enhances Intelligence: *Lehana* drugs are mostly *Medhya* (intellect-enhancing) in nature, which supports the rapid growth of nervous tissues in the first five years of life.
- Corrects Nutritional Deficiencies: *Lehana* can help correct nutritional deficiencies in children and increase energy, vitality and mental clarity.
- Influences Happiness and Sorrow: According to *Aacharya Kashyap*, *Lehana* is believed to influence happiness and sorrow in children.⁸

DOSAGE OF *LEHANA KARMA*

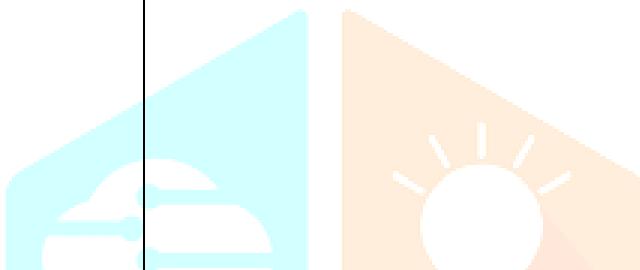
The dosage for *Lehana* is not specifically defined by *Acharya Kashyapa*. However, he provides general guidelines for children's dosages based on age: 1/4th to 1/8th *Ratti* (15-30 mg) of *Swarna Bhasma* can be administered daily without any toxic effects and given to childrens according to age. *Madhu* and *Ghrita* in various dosages ought to be given to the infant in *Vidangaphala Matra* interestingly. Then at that point the portion ought to be expanding month to month however it ought not surpass *Amalak Matra*.⁹⁻¹⁰

LEHANA FORMULATIONS IN AYURVEDIC TEXTS

1. KASHYAPA SAMHITHA

Kashyapa Samhitha provides in-depth information on child health care in *Sutrasthana Lehana Adhyaya*

Table no.1. *Lehana* formulations in *Kashyapa Samhitha*¹

<i>Lehana</i> yoga	Ingredients	Mode of action/Benefits
1. <i>Swarnapashana</i>	<ul style="list-style-type: none"> ● <i>Swarna</i> (Gold) ● Little water ● <i>Sarpi</i> (Ghee) 	<ul style="list-style-type: none"> ● Enhancement of intellect: cognitive function, memory and concentration. ● Digestive fire (<i>Agni</i>): Stronger digestion, absorption and assimilation of nutrients. ● Strength of the body: Increased physical vitality, endurance and overall well-being. ● Complexion: Glowing, radiant skin, reflecting overall health and balance. ● Power refresh: Renewed energy, vitality and mental clarity.
2. <i>Kusthadi Gritha</i>	<ul style="list-style-type: none"> ● <i>Saussurea Lappa</i> ● <i>Vatankura</i><i>Ficusbenghalensis Linn.</i> ● <i>Pitasarshapa- Brassicacampestris L.</i> ● <i>Pippali-Piper longum</i> ● <i>Triphala- Kustha</i>(<i>Amalaki- Emblica Officinalis</i> ● <i>Vibhithaki-Terminalia bellerica</i> ● <i>Harithaki-Terminalia chebula</i>) ● <i>Vacha- Acorus calamus Linn.</i> ● <i>Saindhava lavana- (rock salt)</i> ● <i>Madhu (bee honey)</i> ● <i>Ghrita(Ghee)</i> 	<ul style="list-style-type: none"> ● Memory enhancement ● Antistress ● Anti anxiety ● Anti allergic ● Anti fungal and anti bacterial ● Rasayan effect ● Anti oxidant and neuroprotective properties ● Anti inflammatory effect ● Appetizer ● Health monitor
3. <i>Abhaya Ghrita</i>	<ul style="list-style-type: none"> ● <i>Brahmi- Bacopa monnieri</i> ● <i>Sarshapa- Brassica campestris L.</i> ● <i>Kustha- Saussurea Lappa</i> ● <i>Sandhava-(rock salt)</i> ● <i>Sariva- Hemidesmus indicus.</i> ● <i>Vacha- Acorus calamus Linn.</i> ● <i>Pippali- Piper longum</i> ● <i>Madhu (bee honey)</i> ● <i>Ghrita (Ghee)</i> 	<ul style="list-style-type: none"> ● Memory enhancement, protection from infestations of <i>Graha</i> (microorganisms) ● Improve cognitive functions, memory, intelligence, learning capability ● Speech and language development

4. Samvardhana Ghrita	<ul style="list-style-type: none"> ● <i>Khadira- Senegalia catechu</i> ● <i>Prushniparni- Uraria picta</i> ● <i>Syandana- Ougeinia oojeinensis</i> ● <i>Saindhava- rock salt</i> ● <i>Bala-Sida cordifolia</i> ● <i>Atibala- Abutilon indicum</i> ● <i>Kebuk- Abutilon indicum</i> ● <i>Kshira- Ipomoea paniculata R. Br. Burm.</i> ● <i>Madhu (bee honey)</i> ● <i>Ghrita (Ghee)</i> 	<ul style="list-style-type: none"> ● Preventive purpose, enhancement of growth and development, In cases of developmental delay ● Can help improve language, speech and motor skill in children with cerebral palsy ● Help restore pathologies like <i>Shosha</i> and <i>Dhatukshaya</i>
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2. CHARAK SAMHITA

The ancient medicinal discipline of India known as *Ayurveda* is described in the *Charaka Samhita*, which is the oldest and most reliable book on the subject. It provides useful information about the geographical, social and economic situations of India in addition to information on medical disorders and how they are treated. According to *Charaka Samhitha Sharirasthana*, *Gritha* and *Madhu* combination should be administered before offering the newborn infant its first breastmilk. Additionally *Charaka* listed a few other *Gritha* preparations such as *Panchgavya ghrita* and *Brahmi ghrita* for boosting a newborn's immunity and memory.

[12-15]

3. SUSHRUTA SAMHITA

In the 10th chapter of the *Sharirsthana*, *Garbhiniyakaranashariram*, Acharya *Susruta* elucidated the infant's *Jatakarma Vidhi* or the birth rituals. *Swarnaprashana* was also mentioned by Acharya *Sushruta*. At the time of new birth give instance *Madhu* and *Sarpi (Ghee)* with *Ananta Churna (Hemidesmus indicus* root powder) to new born. The baby should be Administered *Swarna Bhasma* (powder of gold) using the little finger. Acharya *Sushruta* had Outlined four strategies (including *Swarna bhasma*) that provide all-around immunity, Physical resistance, support for growth and advancement, as well as improving insight. These are.

[16 – 17]

1. *Swarna bhasma* with *Ghrita*, *Vacha (Acorus calamus)*, *Madhu* (bee honey) and *Kustha(Saussurea lappa)*.

2. *Swarna bhasma* with *Ghrita* and *Madhu*, together with *Brahmi (Bacopa monnieri)* and *Shankhapushpi (Convolvulus pluricaulis)* adhesive.

3. *Swarna bhasma*, *Arkapushpi (Leptadenia reticulata)*, *Vacha (Acorus calamus)*, *Madhu* and *Ghrita*.

4. *Swarna Bhasma*, *Khaidarya (Murraya Koenigii)*, *Shweta Durva (Cynodon dactylon)*¹⁸

4. ASTANGA SAMGRAH SAMHITA

The *Ashtanga Samgraha* describes different *Lehana yoga* (medicated *Ghee*) for various seasons.

- Winter and Spring: *Ghrita* medicated with the decoction of *Aragvadhadi gana*
- Summer: Milk treated with the decoction of *Jeevaniya gana* or *Sattu* mixed with *Ghrita* and sugar.
- Rainy Season: *Ghrita* medicated with the decoction of *Vidaryadi gana* and paste of *Rasna, Sarala, Varshabhu, Hingu, Saindhav* and *Devdaru*.
- Autumn: *Ghrita* processed with herbs like *Madhuka, Priyala, Vidari* and *Jeevaka* [19-21]

5. ASTANGA HRIDAYAM SAMHITA

One of the most important ancient root books of *Ayurveda* is the *Ashtanga Hridaya* often Known as the “Heart or Essence of all the Eight Branches of *Ayurveda*.” The *Ashtanga Hridaya* Still serves as the foundation for *Ayurvedic* philosophy and procedure today offering precise Instructions for all facets of health And *Bala* (power)

Acharya Vaghbata provides guidance on promoting the health and well-being of children, including:

- Healthy life: Promoting overall health and well-being
- *Bala* (power): Building physical strength *Medha* (intelligence): Enhancing cognitive function and mental clarity
- *Ayu* (happy and resilience)²²

To achieve these benefits, the Acharya recommends a preparation called *Kalka*, a fine paste made from:

1. *Bacopa monnieri* (*Endri*), *Centella asiatica* (*Brahmi*), *Acorus calamus* (*Vacha*), *Convolvulus pluricaulis* (*Shankhapushpi*), *Madhu* (honey), *Ghee* (clarified butter)

This *Kalka* preparation is likely administered to children in a specific dosage and frequency to promote their overall health, Physical and Intellectual Development

2. *Swarna Bhasma* (gold powder) with *Vacha* (*Acorus calamus*), *Brahmi* (*asiatica Centella*), *Tapis* (copper pyrite) and *Haritaki* (*Terminalia chebula*) alongside *Madhu* (honey) and *Ghrita* (ghee).

3. *Amalaki* (*Emblica officinalis*) with *Swarna Bhasma*.

4. *Brahmi Gritha*: A formulation containing *Brahmi* (*Bacopa monnieri*), *Sarsapa* (*Brassica juncea*), *Vacha* (*Acorus calamus*), *Shariva* (*Hemidesmus indicus*), *Saindhava* (rock salt), and *Pippali* (*Piper longum*).

5. *Sarasvata Gritha*: A formulation containing *Aja Kshira* (goat milk), *Haritaki* (*Terminalia chebula*), *Trikatu* (*Piper longum*, *Zingiber officinale*, *Piper nigrum*), *Pata* (*Cissampelos pareira*), *Sigru* (*Moringa oleifera*), *Sahindhava* (rock salt), and *Vacha* (*Acorus calamus*).²³

Methods for Newborn Care

- Immediate Post-Natal Care: Administration of *Madhu* (honey) and *Sarpi* (Ghee) with *Swarna Bhasma*.
- *Lakshmana Siddha Ghrita*: Administration of *Ghee* made with *Ipomoea sepia* on the second and third day.
- *Navneeta* and Breast Milk: Administration of butter with breast milk.²⁴

DISCUSSION

Children are particularly vulnerable to infections and illnesses because their immune systems are still developing and maturing. During this crucial stage of life our primary focus should be on proactively preventing diseases and fostering robust physical and mental development in children. Traditional *Ayurvedic* principles specifically the concepts of "*Rasayana*" (rejuvenation) and "*Lehana*" (licking/administration of medicated pastes) offer valuable tools for achieving these goals. These *Ayurvedic* approaches not only contribute to strengthening a child's natural defenses against infections but also play a significant role in promoting healthy growth and overall development. By incorporating "*Lehana*" formulations, administered in appropriate dosages, alongside established National Nutritional Programmes and other national health initiatives, we can significantly enhance the well-being of children. This integrated approach has the potential to yield superior outcomes in terms of physical growth, cognitive development, and social well-being. Furthermore, the use of these *Ayurvedic* therapies can effectively aid in the elimination of various childhood ailments, contributing to a healthier and more resilient generation. In essence, utilizing the wisdom of *Ayurveda*, particularly through *Rasayana* and *Lehana*, in conjunction with modern nutritional and healthcare programs, provides a comprehensive strategy for safeguarding and nurturing the health and development of children, ensuring they reach their full potential.

CONCLUSION

The vulnerability of children to infections can be attributed to their immune systems being in a nascent stage of development. As a result it is imperative that our principal objective should be to concentrate on preventive measures against diseases and to nurture their overall well-being, encompassing physical, mental and social health. Fortunately, the ancient Indian system of medicine, *Ayurveda*, offers two valuable concepts, namely *Lehana* and *Rasayana*, which have been proven to be efficacious in preventing recurrent infections and providing essential nutritional supplements necessary for optimal growth and development. When administered in judicious doses, complemented by suitable vehicles or adjuvants (*Anupan/Sahapan*), *Rasayana* and *Lehana* drugs have been found to be devoid of adverse effects. Moreover, incorporating these concepts into national health programs, such as the National Nutritional Programme, could potentially lead

to enhanced outcomes, including improved growth and development, as well as a significant reduction in the incidence of infectious diseases among children.

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9. Brain function affected

Smartphone addiction has significant negative effects on brain structure, function and overall well-being. Neuroimaging studies reveal that it alters brain regions responsible for attention, decision-making, emotional regulation and cognitive control. It is linked to increased impulsivity and reduced grey matter volume in critical executive areas like the prefrontal cortex and anterior cingulate cortex. Additionally, addiction disrupts inhibitory control and white matter integrity, leading to impaired connectivity between brain regions. Dopamine-related dysfunctions in the brain's reward system further contribute to addictive behaviours, similar to substance abuse. This addiction negatively impacts cognitive function, academic performance, mental health and even physical well-being, causing stress, anxiety and postural issues.

Ayurveda Approach in Smartphone Addiction

Hetu

1. Asatmeindriyarthasamyoga

Excessive gadget use can lead to sensory overload, causing subjective experiences that can cause ill effects, anger, delusions, memory loss and intellect destruction, ultimately affecting decision-making. *Asatmyendriyarthas Samyoga*³¹: Overexposure to violent or inappropriate content disturbs the natural *Manas Prakriti* (mental constitution) and increases aggression, social withdrawal, and reduced empathy

2. Pradnyaparadh³²

The terms *Pradnya* (intellect) + *Dhruti* (control) + *Smriti* (memory) and *Aparadh* (misdemeanour) combine to form the word *Pradnyaparadha*. Thus, disturbed cognition, control and memory lead to *Pradnyaparadha*. Additionally, (which could be of any kind), the addict's mental capacity is impaired, which in turn impairs their ability to make morally sound decisions.

Dosha

ManasDosha

Raj Guna is associated with the clinical symptoms of gadget addiction, while *TamoGuna* is the predominant feature.³³

Dehadosha

Vata: *Vata Dosha* controls the mind; with gadget addiction, the mind's ability to restrain itself is retarded.³⁴

Pitta: In *Sadhaka Pitta*, gadget addiction causes a delay in intelligence.³⁵

Dushya: *Buddhi* - *Buddhi*'s function is to influence a person's intellect, restraint, and memory. We can infer from the aforementioned clinical aspect that the primary *Dushya* in gadget addiction is *Buddhi*. *Adhishtan – Manas (Mind)*

Preventions

Ayurvedic Safety Protocols to reduce Smartphone Harm in children

Ayurveda is known as leading science and describe way to prevent the harmful effect of smartphones. Various modalities according to *ayurved* for prevention of smartphone harm are following: -

a. Limiting Screen Time and Following *Dinacharya* (Daily Regimen)

Follow *Brahma Muhurta Jagran* (Waking up early at 4-6 AM) and avoid screen exposure immediately after waking.³⁶

Encourage *Vyayama* (exercise), *Pranayama*, and Sunlight exposure to counteract the effects of sedentary screen time.³⁷

b. Eye Protection Measures

Netra Prakshalana (Eye Washing): Wash eyes with *Triphala Kashaya* (herbal decoction) to prevent dryness and strain.³⁸

Netra Tarpana (Eye Nourishment Therapy): Application of cow ghee or *Triphala ghee* for lubrication and rejuvenation.³⁹

c. Diet and Herbal Remedies for Brain Health

Medhya Rasayana (Cognitive Boosting Herbs): *Brahmi*, *Shankhpushpi*, *Guduchi*, and *Yashtimadhu* enhance memory and reduce mental fatigue.⁴⁰

Nidra (Proper Sleep Routine): Encourage *Shiro Abhyanga* (head massage with oil) and warm milk with *Ashwagandha* before bed to prevent digital insomnia.⁴¹

Preventive measures for staying safe when using smartphones (As per conventional system)

The IAP Guidelines and Recommendations Regarding Children's Media Use in 2022: ⁴²

Table :01

Age	Minimal time spent on screens
0-23 month	Children below 2 years age should not be exposed to any type of screen
24-59 month	Limit screen time to a maximum of 1 hour per day (with each session not more than 20-30 min); the lesser, the better.
5-10 year	Limit screen time to less than 2 hours per day; the lesser, the better. This includes recreational screen time, and time spent on screen at home to complete educational and extra-curricular assignments.
10-18 years age	Balance screen time with other activities that are required for overall development.

As children grow up, it is crucial to take the proper precautions to protect their mobile phone safety.⁴³

- As adults, parents and other household members should limit their phone use while they are near children. This will prevent radiation exposure and establish a habit of behaviour.
- Don't give child younger than sixteen cell phones. Due to their immature skull bone density and lack of brain-protective tissue, young children are more susceptible to the radiation's effects.
- Promote outside play activities that will teach him how to interact with other children.
- Strictly prohibit your child from bringing phones to class. In the event of an emergency, keep the school's phone number handy and provide it to them.
- Before going to bed, don't let your child use their phones.
- Keep an eye on how they use their phones to prevent them from developing a bad habit. Alike are addicted to cell phones.

Management as per Ayurveda

1. Cognitive Behavioural Therapy

Cognitive Behavioural Therapy (CBT) is the most effective method for managing smartphone addiction. It helps individuals recognize addictive behaviours, develop coping strategies and prevent relapse. The therapy follows five stages: pre-contemplation (breaking denial), contemplation (acknowledging the need for change), preparation (planning for change), maintenance (gaining control over gadget use) and termination (preventing relapse). CBT not only reduces addiction but also improves mental and physical health. However, it is costly, time-consuming, and requires trained professionals, making accessibility a challenge, especially in rural and developing areas. According to *ayurveda Chitta Prasadana* (Mind Purification) – Achieved through *Japa* (Chanting), *Pranayama*, Meditation, and Yogic Practices, which resemble mindfulness and relaxation techniques in CBT. *Ahara-Vihara* (Diet & Lifestyle Modification) – Just like CBT integrates behavioural changes, *Ayurveda* emphasizes *Sattvic Ahara* (pure diet) and *Dincharya* (daily routine) to support mental stability.

2. Padamshika karma

This method offers a gradual transition from unwholesome to wholesome habits by reducing them in increments. Over time, negative habits should be completely abandoned, while positive habits are gradually adopted. This method was given by *Acharyas* in managing *Apathyas* of patients. In case of smartphone addiction if a child is using smartphone for 4 hours daily then the *Padamshika Karma* can be as follows:

Table:2

Day	<i>Padamshika karma</i>
1	3 hours smartphone, 1 hour other activity
2	4 hours smartphone
3	3 hours smartphone, 1 hour other activity
4	2 hours smartphone, 2 hours other activity
5	3 hours smartphone, 1 hour other activity
6	3 hours smartphone, 1 hour other activity
7	2 hours smartphone, 2 hours other activity
8	1 hour smartphone, 3 hours other activity
9	2 hours smartphone, 2 hours other activity
10	2 hours smartphone, 2 hours other activity
11	2 hours smartphone, 2 hours other activity
12	1 hour smartphone, 3 hours other activity
13	4 hours other activity
14	1 hour smartphone, 3 hours other activity
15	4 hours other activity

3. *Satvavajaya chikitsa*

Satvavajaya Chikitsa is a psychological approach aimed at gaining control over the mind. It includes techniques like reassurance, emotional replacement, guidance, patience control and decision-making support. *Acharya Charaka* emphasized various psychological methods under this therapy, which can be useful in managing gadget addiction by reshaping children's thinking. This therapy requires minimal infrastructure and family members can easily be trained to apply it. Additionally, it has been traditionally practiced, making it widely acceptable. Studies suggest that *Satvavajaya Chikitsa* improves short-term memory and helps manage anxiety (*Chitodvega*).

4. *Yoga therapy*

Acharya Patanjali defines *Yoga* as *Yogah Chitta Vritti Nirodhah*, meaning it helps control the mind and thought process. *Yoga* is not just physical exercise but consists of eight steps: *Yama* (self-regulation), *Niyama* (self-discipline), *Asana* (posture), *Pranayama* (breathing control), *Pratyahara* (sense withdrawal), *Dharana* (concentration), *Dhyana* (meditation) and *Samadhi* (self-realization). *Yoga* detoxifies the mind, body and soul, helping with addiction cravings, compulsive behaviour and emotional regulation. Regular practice activates brain waves linked to better memory and mood. It also increases grey matter volume, counteracting the effects of internet addiction. Thus, *Yoga* is beneficial for de-addiction and managing gadget addiction.

5. Aachara Rasayana

Aachara Rasayana is an ethical guideline that prevents wrong actions and avoids *Pragyaparadha*, *Asatmendriyarthasamyog* and *Parinam* by emphasizing do's and don'ts for maintaining physical and mental well-being. It helps achieve balance in daily life. Behavioural medicine, influenced by *Aachara Rasayana*, plays a crucial role in addressing modern challenges like smartphone addiction in children, which often arises from stress and an unhealthy lifestyle.

6. Pharmacotherapy

a. Medhya Rasayana

Medhya Rasayana consists of *Medha* (intellect) and rejuvenation, meaning it enhances cognitive functions. It strengthens *Dhee* (intelligence), *Dhriti* (patience) and *Smriti* (memory), preventing *Smritibhramsha* (memory impairment) and promoting righteous decision-making. Gadget addiction shares similarities with *Raja* and *Tama Guna* predominance, leading to mental imbalance. To restore equilibrium, increasing *Satva Guna* through *Medhya Rasayana*, counselling, ethical practices (*Sadvritta Palana*), and meditation (*Dhyana*) is essential. Studies confirm that stress, depression and anxiety are linked to addiction. *Medhya Rasayana* acts as a natural antidepressant, anti-stress and anti-anxiety remedy with no side effects, making it a suitable option for managing smartphone addiction in children.

b. Drug and yoga

Drugs (Herbal & Ayurvedic):

- *Brahmi* (*Bacopa monnieri*) – Enhances cognitive function, reduces anxiety.
- *Ashwagandha* (*Withania somnifera*) – Lowers stress and improves mental clarity
- *Shankhpushpi* (*Convolvulus pluricaulis*) – Helps in memory enhancement and relaxation
- *Tagara* (*Valeriana wallichii*) – Induces calmness and reduces hyperactivity
- *Jatamansi* (*Nardostachys jatamansi*) – Supports nervous system and improves sleep

Yoga Practices:

- *Padmasana* (*Lotus Pose*) – Calms the mind and improves concentration
- *Vajrasana* (*Thunderbolt Pose*) – Aids in relaxation and reduces restlessness
- *Anulom-Vilom Pranayama* – Balances nervous system and relieves stress
- *Bhramari Pranayama* – Reduces anxiety and enhances mental peace
- *Shavasana* (*Corpse Pose*) – Deep relaxation and stress relief

DISCUSSION

This review highlights the growing concerns associated with smartphone usage among children, emphasizing both physical and mental health implications. While smartphones offer numerous benefits, such as enhanced communication and accessibility, their overuse presents significant challenges, including radiation exposure, addiction, cognitive impairments and behavioural issues. The study effectively links smartphone addiction to neurological disorders, sleep disturbances, and behavioural problems such as ADHD and Autism Spectrum Disorder. It also sheds light on the negative impact of excessive screen time on children's academic performance, social interactions and physical health. The discussion on radiation exposure is particularly relevant, as children's developing brains are more vulnerable to electromagnetic waves. Ayurvedic interventions such as *Satvavajaya Chikitsa* (psychotherapy), *Padamshika Karma* (gradual withdrawal from addiction), *Medhya Rasayana* (cognitive-enhancing herbal remedies) and *Aachara Rasayana* (ethical conduct) offer natural and sustainable solutions. Additionally, *Yoga* and mindfulness practices are emphasized as effective strategies to reduce impulsivity and improve emotional regulation. One of the key takeaways is the need for early intervention and parental control. The article suggests limiting screen time, encouraging

outdoor activities and maintaining strict guidelines for smartphone use, aligning with recommendations from the American Academy of Paediatrics. While the study presents compelling arguments, a few areas require further exploration. For instance, while the dangers of smartphone radiation are mentioned, a deeper discussion on scientific evidence supporting these claims would add more credibility. Additionally, the article could explore how technological advancements, such as blue-light filters and parental control apps, can mitigate some negative effects. Overall, this review underscores the necessity of balancing technology use with mindful regulation. Integrating *Ayurvedic* principles with modern interventions presents a promising approach to managing smartphone addiction in children.

CONCLUSION

Nowadays due to modernization, the changes in life style observed and day to day regimen described in *Ayurveda* do not follow properly. So childrens are suffering from these type of harmful effect. The widespread use of smartphones among children has introduced both benefits and significant health risks. While these devices facilitate communication, learning and entertainment, excessive usage has been linked to physical, psychological and cognitive issues. Radiation exposure, behavioural disorders, sleep disturbances, academic decline and mental health challenges are among the primary concerns associated with prolonged smartphone use. This review highlights the urgent need for preventive measures, including parental supervision, screen time and lifestyle modifications. The *Ayurvedic* perspective provides a holistic approach to managing smartphone addiction through practices like *Satvavajaya Chikitsa*, *Medhya Rasayana*, *Padamshika Karma*, and *Yoga therapy*, which promote cognitive balance, emotional stability and self-regulation.

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