

## Role of Ayurveda In Pediatric Care

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### Abstract:

Ayurveda is one of the oldest health sciences with a motive of promoting a longer life span by maintaining a positive health. But due to the fast forward generation and improper lifestyles, the long standing motive is being suppressed day by day. Childhood is the pillar of adulthood. The emotional, social and physical development of young children has a direct effect on their overall development and on the adult they will become. That is why understanding the need to invest in very young children is so important, so as to maximize their future well-being.

**Keywords:** Ayurveda, pediatrics, pediatric care, childhood, development

### Introduction:

Ayurveda, the ancient Indian holistic medical science, practiced since 1500 B.C deals with body, mind and spirit and aims at preservation-promotion of health and prevention-cure of diseases. Nowadays, a number of newer diseases are arising due to various microbial mutations leading to almost availability of no treatment at all. Therefore, a strong immunity should be developed amongst children to fight against such diseases and providing special care in prevention of upcoming diseases as well. Here, Ayurveda plays a major role in promoting safe and effective measures to not only treat disease but also to maintain the health by improving one's immunity of the body<sup>(1)</sup>. Hence the long standing motive of Ayurveda of maintaining health as well as curing the diseases in children will not be suppressed despite of fast forward generation and improper lifestyles.

### Materials & Methods:

Pediatric care needs different therapeutic approaches for the management of various diseases as compared to diseases of adult age. Ayurveda suggests different modalities for the prevention, diagnosis and treatment of pediatric disease. Therefore, preventive aspects include *stanyapaan*, role of *dincharya* and *ritucharya*, etc<sup>(2)</sup>. Diagnostic features include external symptoms considering *stanya dushti*, *beeja dushti*, *graha roga* and lifestyle associated with mother and child. To study the Role of Ayurveda in Pediatric care as per classical guidelines, the literature search was performed using the following electronic database: Google, Google Scholar, PubMed, Science Direct, Cochrane Library, Different Research Journals using keywords like Ayurveda, immunity, *balroga*, immunization, *doshas* and its effects as per age in *Ayurveda*, *Kaumarbhritya*. Articles containing research done on pediatric care were reviewed, screened and used for deriving conclusion in this article.

### Discussion:

*Vyadhikshamatva*:

WHO states that "Health is a state of complete physical, mental and social well-being and not merely the absence of disease and infirmity"<sup>(3)</sup>. But Ayurveda has defined health in a very subtle way that health is a state where the *tridoshas*, *agni*, *saptadhatu*, *mala* are all in a balanced state along with a pleasant state of *aatma* (self), *indriya* and *mana*<sup>(4)</sup>. Therefore, the *vyadhikshamatva* also depends on all of these factors. In the case of children, their immunity depends on various factors apart from mere eating habits and vaccination schedules. Other factors are pre conception care; optimum quality of reproductive organs of parents for a better progeny; lack of proper sleep patterns, socialization, parenting, etc.

#### 1. Pre-conception care

Physical features of a child, their behavior, etc. all depend on the child's parents. Therefore, it concludes that all the features of a child are decided at the time of conception. As per modern science, genetics play a major role in inheritance of traits from their parents. In the same way, diseases can also be inherited through the genes. Gene mutation can take place due to chromosomal abnormality. These abnormalities can get developed due to improper lifestyle of the parents like consuming heavy amount of junk food on a regular basis, late night sleep patterns, alcohol, smoking, etc. leading to the same traits getting inherited by the child. As per Ayurveda, *shukra* and *shonit* are responsible for the formation of *garbha*<sup>(5)</sup>. Therefore, optimum quality of the sperm and ovum is important for a better progeny. Proper counseling of the parents is required before family planning. Healthy lifestyle like consumption of green leafy vegetables, milk, home-made food is to be inculcated in their daily routine. Getting adequate sleep is an important change required in today's generation. It has been shown that women who receive

preconception counseling are likely to develop positive health behaviors; therefore preconception care may be an effective means to improve pregnancy outcomes. All healthcare providers for adolescent girls and women of reproductive age should recognize the importance of the continuum of care even before pregnancy, to improve the immunity of mother as well as children<sup>(6)</sup>.

### 2. Breastfeeding

Every infant and child has the right to good nutrition according to the “Convention on the Rights of the Child”. Under-nutrition is associated with 45% of child deaths. Globally in 2020, 149 million children under 5 were estimated to be stunted (too short for age), 45 million were estimated to be wasted (too thin for height) and 38.9 million were obese<sup>(7)</sup>.

Infant and young child feeding is a key area to improve child survival and promote healthy growth and development. The first 2 years of a child's life are particularly important, as optimal nutrition during this period lowers morbidity, reduces the risk of chronic diseases and fosters better development overall.

Exclusive breastfeeding for 6 months has many benefits for the infant and mother. Primary among these is immunity against gastrointestinal infections which is observed not only in developing but also industrialized countries. Early initiation of breastfeeding, within 1 hour of birth, protects the newborn from acquiring infections and reduces newborn mortality. Breast milk is an important source of energy and nutrients in infants and newborns. It can provide half of more of a child's energy needs. According to Charak samhita, *maatrustanya* (breast milk) is enlivening, nourishing, nutrition rich, congenial to human body, etc<sup>(8)</sup>. But if due to carelessness by the mother, the breast milk can get vitiated like chewing of betel nut, all types of *kashaaya rasaatmak dravya*, *rookshana* therapies, etc. which in turn can affect the health of the child. It is referred to as *stanya dushti*. This can lead to various types of disorders like excessive faeces and urination, retention of urine and faeces, burning sensation, excessive crying, etc. in children<sup>(9)</sup>. So to prevent these disorders, the mother should take proper care of herself which will help in formation of good quality of breast milk. Hence to conclude, breastfeeding may, in addition to the well-known passive protection against infections during lactation, have a unique capacity to stimulate the immune system of the offspring possibly with several long-term positive effects.

### 3. Lack of proper sleep pattern

Proper sleep pattern applies to both parents as well as children. It is because the children learn from their parent's daily routine and inculcate the same in their life as well. Without proper sleep, the body doesn't get enough rest to properly function on the next day. This cycle continues and

gets habituated slowly by the child which impacts on his daily routine, affecting his/her health simultaneously. Some of the impacts seen are difficulty in concentrating, mood swings, behavior problems, insomnia and learning problems. Hence proper sleep pattern should be taught to the child right from the childhood to prevent further degradation of health in the future. An average time duration of sleep for an infant is 14-16 hours, toddler is 11-14 hours, school age is 9-12 hours and teen is 8 hours. As per Ayurveda, *nidra* is considered in one of the *trayopasthambha* (3 pillars of life)<sup>(10)</sup>. The pros and cons of *nidra* are happiness/misery, nourishment/malnourishment, sexual urge / impotency, activeness of brain/disorientation of brain and sluggish senses and life/death; all depend on the *nidra*. *Nidra* is an *adhaaramiya vega* (non-suppressible urge)<sup>(11)</sup>. Therefore it shouldn't be avoided and one should take proper sleep at proper time. The children should be encouraged to set a bedtime that allows for the full hours of sleep needed at their age. In today's world, mobiles, Television, etc. have become a very essential need. But considering turning off all the screens at least 1 hour before bedtime can be a very important step towards the betterment of child. As per researches, sleep disturbances can increase the risk of inflammation in body. Therefore, adequate sleep can reduce the risk of inflammatory actions in body thereby improving immunity<sup>(12)</sup>.

### 4. Diet

Nutrition for children is based on the same principle as nutrition of adults. Everyone needs the same type of nutrition – such as carbs, proteins, fats, vitamins and minerals. Children however, need different amounts of specific nutrients at different ages. Nutrition is equally important in a child's life to reach their developmental milestone at the proper age. Or else, it can have various effects on their body leading to diseases like PEM, etc. Therefore, consumption of a balanced diet is a necessary step nowadays to prevent diseases. Apart from this, avoidance of junk food should be taken into consideration. Of potentially greatest concern, our poor dietary behaviors are encoded into both our DNA scaffolding and gut microbiome, and thus these harmful immune modifications are passed to our offspring during their most critical developmental window. Hence improvement in diet can build a better immunity in the children as well<sup>(13)</sup>.

### 5. Implementing Suvarnaprashan amongst children

*Suvarnaprashan* being a very unique concept in Ayurveda has become one of the popular procedures beneficial for young age groups over the recent years. Kashyap Samhita, one amongst the oldest literatures in Ayurveda in the subject of pediatrics mentions about *suvarnaprashan*<sup>(14)</sup>. Clinical and

pharmacological studies show immunomodulatory, nootropic as well as therapeutic effects of Suvamprashana therapy. Through electuaries, this medicine is administered and immunity is improved<sup>(15)</sup>.

#### 6. Panchakarma procedures for children

In Ayurveda, *Panchakarma* procedures play a major role in purifying the body not only in adults, but also in children. Amongst those procedures, *Abhyanga* is one of them<sup>(16)</sup>. *Abhyanga*, one of newborn care protocols are very scientific; of present era prove the scientific background protocols and very effective to gain weight, reduces pain, enhances immunity and accelerates the healthy growth and development of baby. *Abhyanga* has been told as a part of *Dinacharya* (daily regimen) as well.

#### 7. Yoga or Exercises

Nowadays, a lot of cases are seen regarding cancer, diabetes, stroke or even heart disease. These major illnesses are mainly caused due to lack of physical activity. Research also shows that regular physical activity can boost our self-esteem, mood and sleep quality, making us less prone to diseases. But because of our modern lifestyles and an increasing reliance on technology, we are less active nowadays, both as adults and as children.

As per researches, inactive children are likely to become inactive adults, putting younger people at risk of developing life-threatening conditions. Yoga resists the autonomic changes and impairment of cellular immunity seen in examination stress. This is why it is important to encourage exercise or yoga and keeping fit from a young age<sup>(17)</sup>.

#### 8. Rakshoghna karma

“Prevention is better than cure.”

Ayurveda has always given a prime importance in prevention of diseases. Measures of prevention include *Aahar*, *Vihar*, *Dinacharya*, *Ritucharya*, etc. *Dhoopan* (fumigation) is one of the parts of preventive measures. It is practiced for purifying the environment by eradicating micro-organisms; therefore it has an importance to prevent infection.

According to Ayurveda, *Dhoopan* is described especially as a part of *Rakshoghna karma*. *Acharya Kashyap* has dedicated one whole chapter for *Dhoopan* in detail. In *Dhoopakalpadhyaya*, *Acharya Kashyap* has described various *Dhoopan* yogas, and types of *Dhoopan* and *Dhoopan* dravyas.

*Dhoopan* is an Ayurvedic preventive and therapeutic procedure in which fumes are produced from specific Ayurvedic formulations. In today's era, there is a major risk of spreading airborne diseases with hospital acquired infections

and to control such infections, *Dhoopan* is a safe practice and very effective to control it. The constituents of *Dhoopan* yogas are antimicrobial, analgesic, antipyretic, antitoxic, anti-inflammatory, antiseptic, etc. in nature. The actions of these drugs have been proven to the efficacy for improving health as well as prevention and control of diseases<sup>(18)</sup>.

Recently, *Dhoopan* is rarely used as a fumigation method. Therefore re-publicizing the advantages of *Dhoopan* karma is the need of an hour in today's generation.

#### 9. Socializing and Ideal parenting

Socialization is tied to many other parts of the child's development in their early years. It starts when the baby is born and continues into adulthood, shaping each stage of development all the while. Every single interaction the child has, no matter how big or small, helps them learn language skills, cope with emotions and work within social norms. As the child grows, they begin to learn how to identify their thoughts and emotions. They will also recognize the feelings of others around them, being able to decipher whether a person is happy or sad. They learn how to manage stress, resolve conflict, and fit in by communicating with others in their surroundings<sup>(19)</sup>.

The family plays a huge role in a child's socialization. The shared values, behaviors and beliefs of the family structure the child's early experiences. They observe others for ways to handle each and every situation and every emotion they may feel. Children learn to trust as they watch family members handle happiness, difficult situations, celebrations, etc.

By socializing outside the family world, the child learns to empathize, improve language skills, discover the concepts of sharing and teamwork, grow confident and get better prepared for school. Socialization does not always mean hanging out with friends and talking amongst each other. Children may be playing and talking with their friends, but it fosters so much more in their development. Allowing them to bloom will prove to be beneficial for the remainder of their lives. As per Ayurveda, codes of conduct called as *Achar rasayan* acts by preventing the vitiation of *Doshas* and hence process of occurrence of the disease is prohibited as vitiation of *Doshas* is called for having *Vyadhi*<sup>(20)</sup>.

Raising kids is one of the toughest and most fulfilling jobs in the world. But it's not just about raising; it's about good parenting as well. Good parenting helps foster empathy, honesty, self-reliance, self-control, kindness, cheerfulness, etc. It helps protect children from developing anxiety, depression, anti-social behavior, alcohol and drug abuse; in turn it promotes intellectual curiosity, motivation and desire

to achieve. There is never a right way for a good parenting, but keeping the child on right path is a characteristic feature of good parenting<sup>(21)</sup>.

### Conclusion:

After discussing above mentioned points, it can be concluded that adopting treatment modalities like *dhoopan*, *suvarnprashan*, exclusive breast feeding, *dincharya* and *ritucharya*, etc. can have a major impact on the child by uplifting its immunity mentally and physically both; thereby preventing and curing most of the diseases with faster recovery. Ayurveda depict different approaches for the prevention, diagnosis and management of pediatric diseases. Therefore implementing preventive methods can help maintain discipline lifestyle to retain healthy life.

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