

AYURVEDA VIEW TOWARDS IMMUNITY IN CHILDREN; AN ESSENTIAL NEED OF
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ABSTRACT

Children are hope not only for parents but for nation also as they are the future citizens. Modern world witness ed change in lifestyle & diversified environmental condition which hamper health of the parents as well as their children. They are more prone to the various types of infectious and developmental disorders due to the underdeveloped immune system. Vyadhikshamatva (immunity) is the power of the body to fight against various foreign matters and to protect the body from diseases. It has been reported that more than one million children (under five years) die annually due to the various infectious diseases around the world. Ayurveda has given a lot of importance to Vyadhikshamatva .This concept of Ayurveda has similarity to the modern medical science in various ways. Good immunity provides strength, improves intelligence and helps child to live a healthy and happy life.

KEYWORDS: Ayurveda, Children, Bala Roga, Vyadhikshamatva, Immunity.**INTRODUCTION**

Kaumarbhritya is a branch of *Ayurveda* which deals with the antenatal, postnatal care, various diseases of infants, their treatment and healthy upbringing of children. *Balyavastha* (Childhood) is a very crucial period of the development as it is the phase of physical, mental and emotional development of the child. It is the period of the growth spurts and thus named it as *Vivardhamana Dhatu Awastha*. Development of immune system is a continuous process which starts from *Balyavastha* only. With increasing pollution, improper lifestyle, *Viruddh Ahara*, unhygienic conditions; rate of occurrence of infectious diseases is also increasing. Children being the vulnerable group; are easily exposed to various pathogens and thus get affected badly. This exposure to diseases in the early age; can affect the whole life and sometimes result in the chronic disorders. Thus development of a strong immune system is the need of the hour as we are seeing in the corona pandemic phase also. All the medical associations, governments are suggesting to makes the immune system strong so that the person can be protected from viral infection.

Ayurveda emphasizes on maintenance, promotion of healthy living and also prevention from various diseases. Human body posses a protective mechanism which is called as immune system. It helps in curing and healing of the body by its own in-built mechanism. Immune

system of the body is a complex system whose types are shown in **figure 1**.

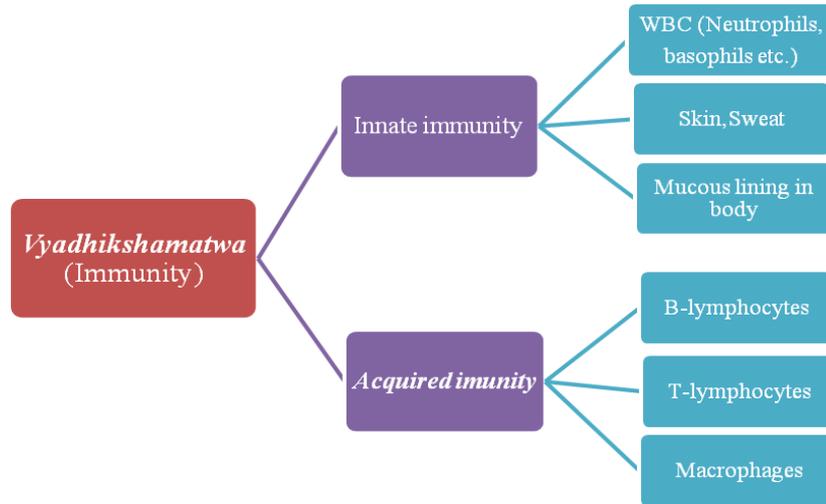


Figure 1: Types of Vyadhikshamatwa (immunity).

Innate immunity is also known as natural immunity which is not specific in nature and is present at the time of birth. Its components are physical barriers such as skin, sweat, tears, mucus lining inside the body and neutrophils etc. In the *Garbhavastha*, fetus's immune system is not so active but as soon the birth takes place it becomes active to fight the various pathogens for whole of the life. Still the immune system of a newborn is weak and show poor response towards various pathogens thus the infant is more prone to diseases. After birth, in early stage, protection is given by the antibodies provided by the mother's milk. With time and age immune system gradually develops providing the protection to the body.

Vyadhikshamatwa in Ayurveda

It is a Sanskrit terminology which states that *Vyadhi* is a condition which arises when there is imbalance between *Doshas*, *Dhatu*s and *Malas* (excretory products). Some persons irrespective of taking *Viruddh Ahara*, following improper lifestyle does not fall sick and some even after

taking precautions get diseases. Here immunity appears as an important factor, for this body need to be in the balanced state of *Tridosha*. They help in maintaining equilibrium in the body. In the disturbed condition *Shleshma* is considered as *Mala* and *Roga*. In the children, immunity is determined by the *Kapha* which in turn is dependent on the digestion. Digestion occurs with the help of various enzymes and secretions resembling *Agni* and *Jatharagni*. This helps in the formation of healthy and strong body through the nutrient rich fluid. This nutritive fluid through a series of metabolic procedure, results in formation of *Dhatu*s (body tissue) as shown in **Figure 2**. There occurs formation of several tissues like *Mamsa* (muscle), *Rakta* (haemoglobin), *Rasa* (blood plasma), *Shukra* (reproductive cells), *Majja* (nervous system), *Asthi* (bone) and *Meda* (fat). Any disruption in the process results in formation of weak tissues. Thus *Tridosha* balance is important as it provides immunity, strength, power and stability to the body.

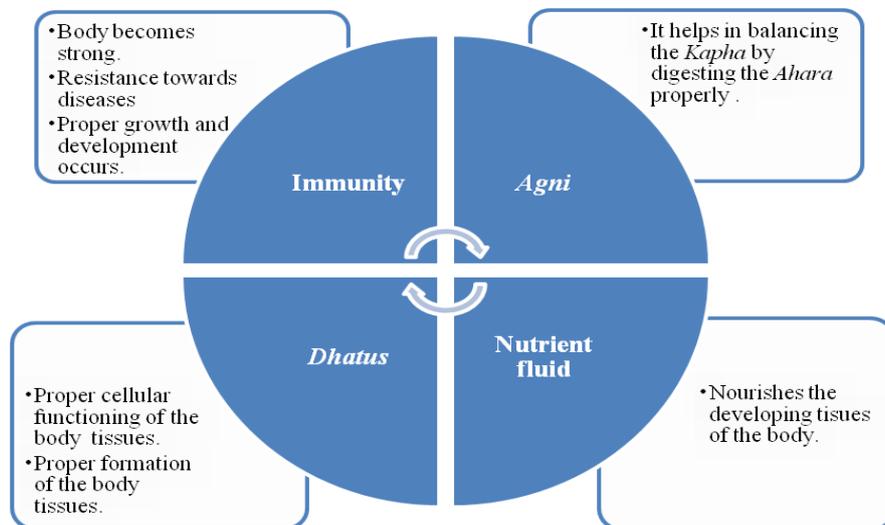


Figure 2: Cycle showing development of Immunity through Agni (digestive system).

When digestion is impaired in the body, it leads to the formation of the *Ama* (toxic products). These toxic products block the channels in the body and make tissues weak. They provide a favorable environment for the pathogens to grow and thus person become susceptible to diseases.

Oja is the end product, formed after proper digestion and transformation of the *Agni* at various stages. According to some scholars, *Oja* appears first in the body during embryogenesis. It is the basic defense system of the body which resides in the *Hridaya* (heart), circulated all over the body and is responsible for balancing the *Dhatu*s and *Doshas*. It is viscous, clear, smooth, soft and reddish yellow in colour residing between the tissues. It is the basic need for life, controlling the functioning of the body and without it, body is unable to survive. Sometimes due to continuous stress, anger, grief, malnutrition; condition of *Ojakshaya* (loss of *Oja*) arises which makes the person unhealthy physically as well as mentally.

Bala is the strength of the body which imparts natural healing process and fastens recovery from disease. There exist a close relation between *Bala* and *Oja*. The final essence of the *Rasa* to *Shukra* is considered as *Oja* which is again similar to *Bala*. It helps body to perform the various physiological functions, provides strength to muscles, improves the physique and makes the person beautiful.

It is of three types as mentioned below

- **Sahaja Bala** (Innate)-It is the constitutional *Bala* which is present since birth. It depends on the quality of *Shukra* (sperm) and *Artava* (ovum) received from the parents. Thus it deals with the congenital abnormalities also. Different physical, chemical and biological barriers provide the innate immunity.
- **Kalaja Bala**- It is the dynamic *Bala* which changes with seasons, time and age of the person. It is attained at different stages of life. It is based on working of body's own immune system. In *Adana Kala* (spring, summer, evening), *Balyavastha* and in old age, *Bala* decreases but in *Visarga Kala* (winter and rainy season) and in young age it increases. With the increase in age, immunity also increases. In the young age *Bala* is maximum.
- **Yuktikrita**- It is the *Bala* which is acquired during lifetime. It is obtained through *Aahara*, *Yoga*, physical activities and through various *Ausadhi*.

In the *Garbhavastha*, *Garbhini* should focus on the food because it affects the child's immunity directly. Any defect or mutation can lead to congenital immunodeficiency. Nowadays, excessive use of mobiles and television affecting the sleep cycle of the children and *Anidra* results weak immune system.

Various other factors responsible for decrease in immunity are *Ati-Sthoola* (obese), *Anivista-mamsa* (improper muscular system), *Anivista-Shonita* (defective blood), *Durbala* (weak person) and *Alpa-Aaharopachita* (eating very less food), etc.

How to improve Immunity

After above discussion, one can relate how the children are more susceptible towards infections. Due to the increasing rate of occurrence of infectious diseases, it is necessary to increase the resistance towards diseases. World has been facing various *Janapadodhwamsa* like Ebola, swine-flu and recently Covid-19. Thus we can use the science of *Ayurveda* to combat such type of situations.

Rasayana therapy is one of the major specialties of *Ayurveda* which plays important role in immunomodulation. They act at various levels such as, at the *Agni* level (stimulates digestive system) at the *Poshaka Rasa* level (increases availability of nutrients) and at the *Sortas* level (stimulates absorption of nutrients from the food). At the time of administration of *Rasayanas*, one should keep focus on the age, *Kala*, *Roga*, *Dhatu* and *Prakruti*. This therapy helps in stimulation of *Oja* and *Bala* thus ultimately increases immunity. Some *Rasayanas* possess immunomodulatory activity i.e; *Pippali*, *Yashtimadhu*, *Brahmi*, *Guduchi*, *Ashwagandha*, *Amalkii* and *Tulsi* etc. Combination of certain *Rasayana* drugs like *Guduchi*, *Tulsi*, *Amalki* and *Ahwagandha* stimulates *Vyadhibalavirodhitvam* (cellular) as well as *Vyadhi-utpadaka pratibandhaka* (humoral immunity).

Ayurveda has paid special attention towards child immunity thus a special formulation named as *Lehana* was made for the *Ksheerapa* (infant), *Ksheerannada* (2 years old) and *Annada-awastha* (till 16 years of age). They have semisolid consistency and are mixed along with honey. During the *Ksheerannada* stage, development of brain occurs at very fast rate so *Medhya Rasayana* is used to strengthen the central nervous system of the child. This therapy helps in promoting health and strength of the child. It enhances the growth and development as it helps in absorption of nutrition and also provides protection from various diseases. Similarly *Swarnaprashan*, *Swarna* (gold) is used as a *Bhasma* alongwith *Ghrit* (ghee) and honey. Combination of *Ghrit* and honey becomes poison and when introduced in very small quantity for longer duration can trigger the immune response of the child.

CONCLUSION

Ayurveda pays attention towards providing the overall immunity rather than specific immunity for a disease. They focus on using different combination of *Ahara*, medicines, *Rasayanas* to stimulate the immune system of the body. According to *Ayurvedic* scholars, *Garbhini Ahara* during *Garbhavastha*, also affect the immune system of the baby. This shows the broad approach of

Ayurveda starting from the womb. In modern day immunization, weakened or killed pathogens are introduced in the body which shows some side-effects like fever, rashes, tiredness etc. Thus through *Ayurvedic* therapies like *Rasayanas*, *Lehana*, *Swarnaprashan* one can stimulate and strengthen the immune system of the child without any side-effect. There are various other ways to stimulate *Vyadhikshamatwa* such as *Satymya Ahara*, *Swasthavritta Paripalana*, *Yoga* and *Pranayama*, etc.

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