



VACCINATION IN AYURVEDA POINT OF VIEW-A REVIEW ARTICLE

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ABSTRACT

‘Swasthasya Swasthya Rakshanam’ is the very first aim of Charaka Samhita.^[1] In other words Ayurveda has given much priority to live healthy and disease free life. Vaccination plays a crucial role in preventive medicine by providing protection against infectious diseases. It has been instrumental in controlling and eradicating numerous diseases that once posed significant threats to public health. However, despite the effectiveness of vaccines, the prevention of all diseases remains a challenge. Microorganisms, such as bacteria and viruses, continually evolve and adapt, sometimes acquiring resistance to existing vaccines or mutating into new strains. For prevention of diseases, Ayurveda had advocated the adherence to concepts like dina charya (Daily regimen), ritu charya (Seasonal regimen), sadvritta (code of good conduct for mental health and social behavior), Na vega dharana (Non-suppressible natural urges) etc. these measures are useful in preventing the lifestyle related diseases but for preventing the Aupsargika rogas (communicable diseases), Janapadadhwansa rogas (epidemic diseases), Krumija Roga (Infectious diseases), Asatmyaj roga (allergic disorders), the concept of Vyadhikshamtva (Immunity) is propagated by the Ayurvedic science.^[2]

KEYWORDS: Vaccination, Vyadhishamatwa, Immunity, Immunization.

INTRODUCTION

A Vaccine is a substance that introduced into the body to stimulate the body's immune response. It is given to prevent an infectious disease from developing and the person becoming ill.^[3] Vyadhikshamatva is explained as ‘Vyadhibala Virodhitwam and Vyadhi Utpadaka Pratibandhakatwam’. It refers to biological defensive power of the body to resist and prevent the development of disease.^[4]

Acharya Charaka, mentioned certain factors that contribute to the development of robust immunity. According to him, individuals who consume a favorable and suitable diet, who refrain from indulging in excessive sensual pleasures, who possess fairness and impartiality in their judgments, who uphold truthfulness, who exhibit compassion and kindness, and who remain faithful to learned individuals are more likely to enjoy a state of freedom from diseases.^[5]

The Sanskrit word bala means strength. A reduced susceptibility to diseases as also the body's ability to

recover from them - vyadhikshamatva - are dependent upon it.^[6]

Vagbhata, has mentioned Bala classifies into three types:^[7]

SAHAJA BALA

The constitutional strength present since birth It depends on the healthiness of *shukra* (sperms) and *artava* (ovum). According to Ayurvedic concept of Genetics, if two parents' genetic makeup is healthy, then children are similar healthy. If parents is susceptible to certain diseases, those diseases may be carried over into the next generation.^[8] This concept indicates congenital abnormalities which occur due to abnormal changes at genes or chromosomal levels.

KALAJA BALA

Temporal strength is the one which is based on division of seasons and age of the person. In *Adana kala* (late winter, spring and summers) Bala of individual will be less and in *Visarga kala* (rainy seasons, autumn and winter) it will be more.

YUKTIKRITA BALA

Acquired strength is the one which is achieved by the combination of diet and physical activities. This is what an individual develops by paying careful attention to the three pillars of health namely, healthy food habits, restful night-time sleep and mental hygiene.^[9]

Immunity is the ability of the body to resist pathogens, the failure of which results in diseases. It is basically of two types: innate and acquired. The inborn ability of the body to resist pathogens is called 'innate immunity'. It is the initial and generalized defense mechanism, hence also known as non-specific immunity. The specific resistance developed by the body in the course of life against specific pathogens is called acquired or specific immunity. Immunization is the process of preparing the body to fight against pathogens or disease. Two types of immunization exist: passive and active. Passive immunization involves supplementing the body of a non-immune person with antibodies. These antibodies are taken from an immune person. Hence, these do not challenge the immune system of the recipient. On the contrary, active immunization is the process wherein a disease or disease-like condition occurs or is induced in the body. It demands the body itself to produce antibodies.

Active immunization triggers the recipient's immune system to produce its own antibodies. This is achieved by introducing a weakened or inactivated form of the pathogen, its components, or a similar disease-like condition through vaccination. The body recognizes the foreign antigens present in the vaccine and mounts an immune response. This response involves the production of specific antibodies and the development of immunological memory, which enables a rapid and effective defense against future encounters with the pathogen.

Active immunization offers long-term protection as the immune system actively generates antibodies and memory cells. Multiple doses or booster shots may be required to optimize and sustain immunity over time. The duration of protection can vary depending on factors such as the type of pathogen, vaccine formulation, and individual characteristics.^[10]

Discussion(Ayurvedic view in Vaccination)

A vaccine serves as a powerful tool in conferring active immunity against specific harmful agents by stimulating and engaging the immune system's defenses. Through the administration of a vaccine, a process known as vaccination, individuals are empowered to develop immunity or resistance to infectious diseases. As per Acharya Charaka has explained that, *Ahara* and *shatmya* are the two serve the purpose of *vyadhishamatwa*, this is we can call as a Acquired immunity which is get by *shatmya prayoga*. Those to whom *ghrita*, milk, oil, meat soup are suitable and all the *rasas*(tastes) are also suitable are strong, have endurance

to with stand pain or trouble, and long life.^[11] *Vayadhisamatwa* deals with interaction between disease causing factor and body tissues.

Active immunity and passive immunity again divided by Natural and Artificial. In this concept if we can see, our Acharya has mentioned in our samhita also. Acharya has mentioned, an interaction between the antigenic substances(*Dehadhatu pratyanka dravya*)and body tissues(*dehadhatu*) i.e the substances which are opponent or like an enemy to *deha* (body) and *dhatu*s and be have with the body and *dhatu*s are *vairodhika* (i.e. antagonistic). This antagonism may be in few substances in their properties, some due to combination, others due to processing, and in others due to *deśa* (place), *kala* (time/period), *matra* (dose) or due to natural composition.^[12] Also he has mentioned that, victory is gained over the weaker by the stronger one in collision of two opponents.

When a person gets modified by virtue of opposing powers (to fight against) to morbid doshas i.e Antibody, poisons (toxic factors) or antigens; he is enabled to resist those factors in his future life if he were to come across them abruptly.^[13] we can take as a concept of acquired active artificial immunity, it can helpful as a *vyadhiutpada pratibandhaka*.

Another concept of Acquired artificial passive immunity is explained in charaka samhita where, Antibodies prepared against the antigen are introduced into the body for neutralising disease causing factors. Passive immunity helpful as a *vyadhi virudhitwa*.^[14]

In ayurveda immunity can be understand under the shelter of *vyadhikshmatwa*. Immunity can be achieved by *swarnaprashana* in children, consuming *nityasevaniya dravyas*, *rasayana* etc which will enhance the *ojas* ultimately useful in increasing the *bala* in an individual.

One such practice is "Swarnaprashana," which is a method of administering gold ash mixed with honey and herbal extracts to children. *Swarnaprashana* is believed to strengthen the immune system, improve digestion, and promote healthy growth and development.^[15]

Additionally, Ayurveda recommends the consumption of "*Nityasevaniya Dravyas*" or daily-use substances that are beneficial for maintaining and enhancing immunity. These may include herbs, spices, and natural ingredients known for their immune-boosting properties. For example, herbs like tulsi (holy basil), turmeric, and *ashwagandha* are often used in Ayurvedic formulations to support immune function. Ayurvedic immunity-building is the use of "*Rasayana*" therapies. *Rasayana* refers to rejuvenation treatments and practices that aim to enhance vitality, promote longevity, and strengthen the body's natural defense mechanisms. *Rasayana* therapies often involve the use of specific herbs, dietary

guidelines, lifestyle modifications, and cleansing techniques to optimize overall health and immunity.^[16]

CONCLUSION

Vyadhikshamatva, also known as *swastha*, *bala*, and *ojas*, is a concept well-documented in Ayurvedic literature. In today's world, where new diseases are constantly emerging, *Vyadhikshamatva* holds great significance. It refers to the inherent resilience and strength of an individual, which can be influenced by factors such as *oja* (vitality), *bala* (physical strength), season, diet and regimen, *anupana* (consumables), *rasa* (taste), and *jaatkarma* (birth circumstances).

Widespread vaccination has played a crucial role in eradicating diseases like smallpox and controlling others such as polio, measles, and tetanus. It has been instrumental in providing widespread immunity and reducing the burden of these diseases. However, it is important to acknowledge that vaccination efforts can face challenges, especially in peripheral parts of India where access and complications may arise. These challenges can sometimes result in adverse outcomes, including the unfortunate death of a child. In light of this, exploring alternative measures such as incorporating Ayurvedic immunization into the existing vaccination schedule could offer potential benefits. By combining traditional Ayurvedic practices with modern medical knowledge, we can strive to develop comprehensive prevention strategies against various diseases. This approach could help bridge gaps in vaccination coverage and provide additional options for disease prevention, ensuring better overall healthcare outcomes for all.

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