



A Childhood Malnutrition Deficiency in India- A Review on *Karshya*

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Article Info

Article history:

Received on: 22-05-2022

Accepted on: 19-06-2022

Available online: 30-06-2022

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ABSTRACT:

Ayurveda prioritises prevention over cure. The first of the three pillars, *Ahara* (Food), is followed by *Nidra* and *Brahmacharya*. A balanced diet can help you avoid a lot of common health concerns. Food is significant as a nutritional source, as well as having therapeutic value, and it plays a crucial part in regaining strength lost due to the disease's detrimental effects throughout the post-treatment phase. *Ayurvedic* scriptures haphazardly explain nutritional issues. Childhood malnutrition is thought to be the cause of 35% of all fatalities in children under the age of five, as well as 21% of total worldwide disability-adjusted life years lost in children under the age of five. *Karshya* is a childhood malnutrition-like illness. Similarly, diseases described by diverse *Ayurvedic* authors as *Parigarbhika*, *Phakka*, *Balashosha*, and *Shuska Revati* might be linked to undernutrition based on clinical symptoms. These illnesses were linked to one another. The *Ayurvedic* perspective on dietary disorders such as protein-energy deficiency is highlighted in this article.

Keywords- *Karshya*, under nutrition, Protein-energy childhood malnutrition etc.

INTRODUCTION

Undernutrition occurs when nutrients are consumed insufficiently, absorbed poorly, or lost excessively. Childhood malnutrition is a phrase that encompasses both under and over nutrition. Childhood malnutrition and protein-energy childhood malnutrition (PEM) are terms that are occasionally used interchangeably with undernutrition¹. Children who are still growing are the ones who are most affected. Their nutritional condition is a sensitive indicator of the health and nutrition of their community². *Ahara* is one of life's three sub-pillars³. Various explanations for this crucial pillar of life have been included in Indian traditional medicine. The 'Agni' or digestive fire, which forms the architecture upon which the

Ayurvedic system is founded, is the converting unit from 'food' into nutrition⁴. According to *Acharya Charaka*, over lean (*Atikrushya*) people, as well as overfat (*Medasvi*) people, are classified as eight vile people (*Ashtau-ninditiya Purusha*).

Growth and development are physiological processes that occur when all of the components that influence it are in good health. When these components are missing, failure to flourish or being undersized for age occurs, which is referred to as *Karshya* in *Ayurveda*.

Deficiencies, excesses, or imbalances in a person's intake of energy and/or nutrients are referred to as malnutrition. Malnutrition refers to two major categories of diseases.



One is "under-nutrition," which encompasses micronutrient deficiencies or insufficiencies as well as stunting (low height for age), wasting (low weight for height), and underweight (low weight for age) (a lack of important vitamins and minerals). The other is non-communicable illnesses linked to overweight, obesity, and food (such as heart disease, stroke, diabetes, and cancer).

METHODOLOGY

The material related to the *Karshya* article was collected from Department of Kaumarbhritya, Rajiv Gandhi Ayurvedic College and Hospital, Bhopal, MP

Epidemiology

Childhood malnutrition is thought to be the cause of 35% of all fatalities in children under the age of five, as well as 21% of total worldwide disability-adjusted life years lost in children under the age of five. India's population's health and nutritional condition have not significantly improved, according to the National Family Health Survey (NFHS) 2019–21, the fifth in the series. According to the most recent data⁶, 7.7% of kids are extremely wasted, 19.3% are wasted, and 35.5 percent are stunted.⁷ Rural regions have a greater prevalence of undernutrition (53%) than urban areas (33 per cent). Twenty to thirty per cent of children are malnourished during their first six months of life, frequently as a result of low birth weight. Because of the introduction of unclean food consumption after 4-6 months of age, the proportion of undernourished children begins to rise, leading to an increase in the risk of childhood malnutrition⁸.

Nidana Of *Karshya*-

Excessive exposure to evacuative therapy), *Shoka* (Grief), *Chinta* (Worries), *Bhaya* (Fear), *Shrama* (excessive physical and mental activity), *Vega- Nidra-Trusha* – *Kshudha - nigraha* (Suppression of natural urges, such as sleep thirst and hunger), *Atishrama*, *Ati maithuna*, *Atisnana abhyasa* (Excessive Physical exertion, over-saturation, hunger, thirst sickness, and narcotics, as well as excessive cold, heat, and sexual intercourse, are not tolerated by the slim person¹⁰).

Lakshana Of *Karshya*

Shushka-sphic, *under*, *greeva* (dried up buttocks, abdomen, neck), *Dhamanijala santataha* (prominent vascular network), *Twagasthi shesho*, *Ati krusha* (remnant of skin and bone), *Sthoola Parva* (thick joints), *Vyayam Atisauhityam* (the over lean does not tolerate the physical exercise, over saturation).

Samprapti

Those who engage in *Vata*-promoting diet, physical exercise, excessive sexual intercourse, strenuous study, anxiety, wakefulness at night, thirst, hunger, taking of astringents, partial starvation, etc., circulating *Rasa* being reduced in quantity fails to nourish the tissue due to insufficiency; thus, extreme *Karshya* (leanness/emaciation) occurs¹². (Flow Chart 1)

Factors Involve In *Karshya*

Dosha – *Vata*, *Dushya* – *Rasa*, *Srotas* – *Rasavaha*, *Srotodushti* – *Sanga*, *Adhishthana* – *Pakvashaya*, *Vyaktisthana* – Whole body are all factors that play a role in the aetiology of *Karshya* (*Samprapti Ghatak*). Spleen (enlargement), cough, wasting, dyspnea, gaseous tumours, piles, abdominal sickness, and *Ghrahani* (Gastro-intestinal track) disease are all complications of *Karshya* disease¹³. children up to the age of five who have significantly less physical development than their peers of the same age and gender.¹³ Weight below the 3rd or 5th centile, inability to gain weight over time or a shift in growth rate that has crossed two major centiles, e.g., 75th to 50th, during a period are all examples of failure to thrive.¹⁴

Karshya Description According To *Samhita*

Balashosha and *Kshiraja Phakka* are two separate descriptions of a nutritional deficiency illness.¹⁵ *Balashosha* is caused by *Shlaimika anna sevana* (excessive energy-packed food), *Shitambupana* (drinking cold water), and *Diva Swapna* (excessive day sleep), as well as consuming *Slesma*-vitiated breast milk, which causes *Kapha* to obstruct the *Rasa* (first fluid liquid) channel.^{16,17} *Arochaka* (reduced digestive capacity), *Pratishaya* (runny nose), *Jwara* (fever), and *Kasa* (cough) are clinical symptoms; if not diagnosed early, these conditions might progress to *Shosha* (emaciation) with unctuous (grassy) and white eyes^{18, 19}. Wet nurses with *Kapha*-vitiated breast milk are said to have *Phakka*-causing milk in the *Kshiraja Phakka*. Because of emaciation, a youngster that consumes milk develops *Phakka* (marasmic condition)²⁰.

Parigarbhika / *Garbhaja Phakka* occurs when a child is fed *Alpa Poshaknsha* (nutrient deficiency) breast milk from a pregnant mother. The *Garbhaja Phakka* condition occurs when a child's mother becomes pregnant, and the kid becomes malnourished or even dies as a result of the early discontinuation of breast milk. This marasmus is caused by the embryo/effect²¹. fetus's

Vyadhi Sambhavaja Phakka is a starvation state caused by a chronic ailment. On the whole, *Vyadhija Phakka* refers to severe forms of childhood malnutrition, where the child

suffers from fever, endogenous and exogenous disease, and his flesh, strength, and lustre deteriorate. *Shuska Sphik* and *Shuska Bahu* (wasting of buttocks and upper limb), *Shuska Uru* (wasting of thigh), *Mahaudara* (abdomen becomes protuberant), *Mahoshiara* (comparatively skull, the face becomes more *Kaya Nischeshta Adho* (lower body part is emaciated, weak), discharges too much urine daily, the lower body becomes inert or crawls with hand and knee, the lower body has less activity owing to weakness, and the lower body is overpowered by flies, insects, and worms, resulting in sickness. This marasmic has dry, erect, and stiff body hair, large nails, bad Odour, dirty, irritable, dyspneic, feels as if entering the dark, passes copious faeces, urine, and abnormal thick nasal discharge²².

Shuska Revati: is a *Graha* (devil) that affects children and reflects the sickness spectrum that results from *Sarvangakshya* (infection) (emaciation). Even when the child eats a variety of foods, he or she grows underweight and has shrunken eyes. When a youngster experiences hair loss, dislike to eating, a feeble voice, *Vivarnata* (Discolouration/loss of lustres), *Nanavidhashakrita* (variegated colour stool), *Udara granthi* (abdominal nodular enlargement), depression in the centre of the tongue, and the palate turns black²³. At the start of the clinical disease, which might be abdominal tuberculosis, the child displays gradual emaciation.

DISCUSSION

In the *Ayurveda Samhita*, *Karshya* is classified as *Rasaprodoshaja vikara*, which might be linked to malnutrition in modern science. It might be a primary cause of a variety of disorders. *Karshya* is a discrete illness entity, as well as a causative cause, premonitory symptoms, characteristic, and consequence, as well as an unfavorable prognosis indicator, according to *Ayurveda (Arishta)*. *Sthaulya and karshya*, according to *Acharya Sushruta*, are both dependent on *Rasa dhatu*, but *Ahara and Nidra* are dependent on the *Trayoupsthambha*, according to *Acharya Charaka*. It's difficult to tell the difference between *Karshya* and *Shosha* and *Kshaya*. *Rasa dhatu vikriti* and *Vata* vitiation cause *Karshya*, whereas *Kshaya* and *Shosha* are *Tridoshaja*.

Karshya is a nutritional illness listed in the *Ayurveda Samhita*, which may be linked to childhood malnutrition. Children under the age of five accounts for 35% of all fatalities and 21% of all global disability-adjusted life years. *Acharya Charaka*, according to him *Ashtauninditiya* (eight nasty people) and excessively fat (*Ati Sthula*) people

are both characterized as *Ati Karshya* people. *Shushka-sphic*, *Udara*, *Greeva* (dried up buttocks, abdomen, neck), *Dhamanijala santataha* (prominent vascular network), *Twagasthi Shesho*, *Ati Krusha* (remainder of skin and bone), and *Sthoola Parva* (remainder of skin and bone) are all symptoms of an overly slim individual (thick joints). *Karshya* is not well described in *Ayurveda*, particularly in children. *Vyadhi Sambhavaja Phakka* is a condition akin to childhood malnutrition, according to *Acharya Kashyap*.

Acharya Vagbhata and Acharya Kashyap, respectively, cite nutritional deficiency disorders *Balashosha and Kshiraja Phakka*. Similarly, *Parigarbhika and Garbhaja Phakka* are induced by a kid who is fed *Alpa Poshakansha* breast milk by a pregnant mother (poor nutrients). *Shuska Revati*, one of the *Grahas* (demons) that affects the kid, indicates an infectious spectrum of sickness that results in *Sarvanga Kshaya* (emaciation), and the infant becomes emaciated despite eating a variety of foods. All of the diseases listed in Ayurvedic scriptures are linked to one another and can be linked to childhood malnutrition, such as protein-energy deficiency (PEM).²⁴ The key etiological causes for *Karshya* include *Dosha* such as *Alpashana* and *Vishamashana*; *Vihara Dosha* such as *Atishrama*; and *Manasika Bhava* such as *Shoka*, *Bhaya*, and *Krodha*.

Karshya is a term that refers to a wide range of disorders caused by starvation. Childhood malnutrition nowadays is classified by weight, BMI, and other factors. *Karshya* can be a sign or consequence of various ailments, and it can also be a *Swatantra Vyadhi*.²⁵ This is how *Karshya's* Samprapti looks: All *Dhatu Uttpati Alpa Karshya Uttpati Nidana Sevana Vata Prakopa Shoshita, Rasadhatu* History, Subjective Parameters – clinical symptoms, anthropometry, and Hematological and Biochemical Investigations are all used to determine the severity of the disease. *Karshya* is a *Janya Vyadhi* who belongs to the *Apatarpana* family. As a result, *Santarpana –Brumhana* is in charge of it.

CONCLUSION

Childhood malnutrition is a term used in contemporary medicine to represent a condition that is related to Ayurveda's *Karshya*, *Phakka*, and *Balshosha* nutritional disorders. A holistic examination of these illnesses provides insight into the dangers of nutritional insufficiency and reflects many elements of nutritional deficiency, as well as a good knowledge of the pathophysiology of the condition, which is crucial for efficient care.

Acknowledgements- Nil
Conflict of Interest – Nil
Source of Support -None

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How to cite this article: Nigam SK, Khare A, Patel SP, Kumar S “A Childhood Malnutrition Deficiency In India- A Review On *Karshya*” IRJAY.[online]2022;5(6); 163-167. Available from: <https://irjay.com>
DOI link- <https://doi.org/10.47223/IRJAY.2022.5625>

FLOW CHART 1

