



Malnutrition In Children And Homoeopathic Constitutional Medicines: A Comprehensive Review

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ABSTRACT

Malnutrition, predominantly undernutrition, is a significant health issue affecting the children in developing countries, including India. It has serious long-term concerns, impacting both the child's development and the overall progress of the nation. Malnutrition in children, especially in the under-five age group, imposes a heavy burden on civilization and the economy of the country. As causes and consequences of malnutrition are multifaceted so it requires an integrated and holistic method of treatment. At present Homoeopathy is gaining popularity as a rational, holistic and alternative treatment for various health conditions in children. Homoeopathic constitutional remedies address nutritional imbalances by correcting underlying constitutional issues in nutrient absorption, assimilation and utilization, particularly when deficiencies recur after supplement use. This comprehensive review aims to highlight the potential role of Homoeopathic constitutional medicines in improving the growth standards of children suffering from Malnutrition.

KEYWORDS: Homoeopathy, Malnutrition, Children, Homoeopathic Constitutional Medicines.

INTRODUCTION

Malnutrition affects all age groups but undernutrition is more common among children. Malnutrition in children is widely prevalent in developing countries including India. More than 33% of deaths in 0-5 years are associated with malnutrition. [1] The government of India has strongly committed to achieving the 2030 Sustainable Development Goals (SDGs) by 2030. End hunger, achieve food security and improved nutrition and promote sustainable agriculture, all these nutrition-related factors are included in sustainable development goals (SDGs). [2] So, Indian Government has announced many projects under the National Health Scheme such as ICDS (Integrated Child Development Scheme), Mid-Day Meal Program, National Nutrition Supplementation Program and many more such Program. In 2018, Indian government launched POSHAN ABHIYAN with an objective to reduce stunting across districts with the highest malnutrition burden by improving utilization of key Anganwadi Services and improving the quality of Anganwadi Services delivery. [3] At present, along with nutritious diet there is need of holistic and integrated approach to actually treat the root cause of Malnutrition. Because apart from diet, it is also important to look other possible causes such as mal-absorption, defective assimilation or defective digestion with underlying illness that causes Malnutrition in children.

Homoeopathy is a unique scientific system of medicine discovered by Dr Samuel Hahnemann. Homoeopathic system is based on cardinal principles and the selection of similimum is done using the totality of symptoms along with constitutional basis. In Aphorism no. 5 Dr Hahnemann had mentioned to consider the physical constitution of patient, especially when the disease is chronic. [4] A child whether he is thin, obese, stunted or wasted is determined by hereditary factors and genetic code along with his nutritional status. Hence physical constitution should never be neglected while selecting the similimum. Homoeopathic Constitutional Medicines plays valuable

role through constitutional approach in homeopathy. This constitutional approach treats the whole person, addressing fundamental imbalances rather than just isolated signs and symptoms, aiming to restore harmony between mind, body, and spirit.^[5]

EPIDEMIOLOGY- In India, according to the National Family Health Survey (NFHS 5) 2019-21, 36% of under 5yrs of children are stunted, 19% are wasted while 32% are under-weighted.^[6] Each year approximately 2.3 million deaths among 6-60 months aged children in developing countries are associated with malnutrition, which is about 41% of the total deaths in this age group.^[7] The UNICEF State of the World's Children 2019 report reveals alarming statistics on child nutrition. At least one in three children under five is either undernourished (stunted, wasted, or both) or overweight, with over half suffering from micronutrient deficiencies.^[8] One child dies every five seconds, 700 every hour, 16 000 each day or 60 % of all child deaths occur due to malnutrition.^[9]

PATHOPHYSIOLOGY - Inadequate energy intake results in several physiological adaptations, such as growth limitation, loss of fat, muscle, and visceral mass, as well as a decreased basal metabolic rate and total energy consumption.^[10,11,12]

Malnutrition leads to slow metabolic rate, abnormal lipid metabolism and immunologic deficiency which make prone a child to infections.^[13] Malnourishment significantly lowers a child's immune system, increasing their vulnerability to infectious diseases. Without adequate nutrients, the body struggles to fight off infections, contributing to higher rates of illness and complications.^[14]

CLINICAL FEATURES- Pathophysiological characteristics of malnutrition have been well categorized in children, namely Marasmus, Kwashiorkor, and a mixture that is Marasmic-kwashiorkor.^[10]

Marasmus-It simply means severe wasting.^[15,16] Marasmus is a form of severe malnutrition characterized by significant loss of subcutaneous fat and muscle wasting due to energy deficiency.^[10,17] In this form of severe undernutrition, the child is severely wasted and has the appearance of "skin and bones" due to much loss of muscle and fatty tissue.^[18] Clinically, children with marasmus may present with a gaunt appearance, looking like an old man due to the loss of facial fat, while their eyes can still appear alert. The ribs are prominently visible, and excess skin folds gives look like a "baggy pants" appearance around the buttocks and thighs.^[18] These children appear emaciated, weak and lethargic, with associated bradycardia, hypotension, and hypothermia. Their skin is lax, xerotic, and wrinkled, because of the loss of subcutaneous fat, but without any characterized or specific dermatosis.^[10]

Kwashiorkor-Kwashiorkor simply means malnutrition with edema. It is characterised by oedema associated with protein deficiency.^[19,20] Typically, it occurs after weaning when breast milk is replaced by a diet low in protein.^[21] Kwashiorkor is a severe form of undernutrition characterized by muscle wasting and edema, which can obscure weight loss. Affected children often appear irritable, showing symptoms such as a rounded face due to swelling, thin and scanty hairs, and discolored skin with patches that can crack and peel. While they are typically underweight, but presence of edema may mask their true weight.^[18]

In kwashiorkor, despite adequate energy intake, there is a significant decrease in protein consumption. This leads to reduced production of visceral proteins, reflecting the symptoms such as edema and muscle wasting.^[22] It is characterised by oedema due to lack of protein often accompanied by abdominal distention. This condition reflects the body's inability to maintain fluid balance and is a sign of severe malnutrition.^[10,20] Kwashiorkor compromises physical as well as cognitive growth, and changes in immune system such as loss of delayed hypersensitivity, diminished lymphocyte response, fewer T lymphocytes, and weakened phagocytosis due to decreased cytokines and secretory immunoglobulin.^[23] These immune change can make a child more vulnerable to severe and chronic infections such as; infectious diarrhea, which subsequently causes anorexia, decreased nutrient absorption, increased metabolic demands, and direct nutrient loss.^[21, 23]

Marasmic kwashiorkor- It is defined as severe wasting in the presence of edema.^[15,16] It involves severe upper body wasting typical of marasmus, alongside the edema with skin and hair changes characteristic of kwashiorkor.^[24] The child's upper body is wasted, but the lower limbs are swollen with oedema.^[18] It is the combination of both bilateral oedema and wasting, highlights the challenges in definitively distinguishing between these two conditions in practice.^[22,19,20]

APPROACH THROUGH HOMOEOPATHIC CONSTITUTIONAL MEDICINES

From Homoeopathic point of view, Malnutrition caused mainly by two distinct conditions, first one is insufficient nutritional intake while second one is due to improper absorption. When malnutrition develops from the body's incapacity to utilize and absorb the nutrients that are available, rather than from a lack of nutrients, this is stated to as a constitutional defect in the body and is recommended to be improved with Homoeopathic constitutional medicines prescribed on the basis of totality of symptoms of the child.

Homoeopathic Therapeutics

Antimonium Crudum – Suited to children with great sadness. Child cries when looked at or washed. ^[25]Hypoactive and non-destructive child. The mother is very protective of the child, doesn't permit anyone to lift the child and slowly develops a typical "touch me not" child state. Child gets angered at every little attention. ^[26]Chilly and thirstless. A thick milky-white coating on the tongue. Child is fretful, peevish, does not wish to speak or be spoken to. Desire for pickles and acids. Alternate complaint of constipation and diarrhoea. ^[27]Complaints worse by bathing with cold water, after eating and better in the open air, and after a warm bath. ^[26]

Argentum Nitricum -Arg. Nit child looks like a withered old man. Emaciation progressing every year, most marked in lower extremities. Great craving for sweets. ^[27]Fearful and nervous child; impulse to jump out of window. ^[28]Hyperactive, Non-destructive, Happy optimistic, Lively and talkative child. ^[29]Need constant support to do anything, wants to pass stool just before going to school. *Nervous*, Hurried and impulsive. ^[30]Very fast, hurried so makes mistakes in school (poetries, alphabets). Curious child with kleptomania, Cowardice, Fear of crowd, public places. ^[31]Fear high places and closed narrow rooms, Cravings- sugar (eat as such-which disagrees), salt, ice cream. ^[32]

Arsenicum Album- Best suited to child who feels tired after the slightest activity. Great prostration, with rapid sinking of the vital forces. Great anguish and restlessness, driving from place to place. ^[25]Anxiety, restlessness, prostration, burning and cadaveric odors are prominent characteristics. ^[32]Indigestion on consuming acidic food, ice cream or drinking ice cold water. Great thirst for cold water; drinks often, but little at a time. ^[31]Diarrhoea, after eating or drinking. ^[27]Worse from cold, cold drinks, or food and in wet weather, after midnight. Right side. Better from heat, from elevated head, warm drinks. ^[26]

Aurum Metallum - suited to children having profound despondency, with thorough disgust of life, and thoughts of suicide. ^[26]Uneasy, hurried, and great desire for mental and physical activity; cannot do things fast enough. ^[27]Ailment from grief, disappointed love, fright, anger, contradiction, mortification, ^[32]Wants to attain good position in society, so study all the time. Insomnia in bright students. Reserved and alone; no friends or just a superficial acquaintances. ^[28]Chilly and thirsty child. Over sensitive to noise, music, taste, odors, to all pain. ^[31]Aggravation in cold air, when getting cold, while lying down, mental exertion, many complaints come on only in winter. While child feels better in warm air, when growing warm, in the morning and during summer. ^[27]

Baryta Carbonica -suited to scrofulous children, especially mentally and physically dwarfish, with swollen abdomen, take cold easily and get swollen tonsils. ^[26]Torpid, dwarfish or marasmic child. Throat and glands affected by every cold. ^[33]Overall debility, both mental and physical, with a painful throat, stiff neck, and often diarrhoea. ^[27]Child is forgetful, inattentive and deficient in memory, with threatened idiocy. ^[27]Idiotic with delayed milestones (h/o of birth trauma, umbilical cord strangulation), Children are late coming into usefulness or activity, late with their studies, late learning to talk, late learning to read, late learning of their activities. ^[32]Offensive sweat on the feet. The head is disproportionately large for the body. ^[25]Shy and timid child with aversion to strangers. The baryta carb child hides behind the furniture when strangers enter in room, Child doesn't want to play but sits in the corner doing nothing. Thinks that one is being laughed at and made fun of him. ^[28]Chilly and thirsty child, having habit of biting nail. Talking in sleep; awakens frequently, twitching during sleep. ^[26]

Calcareo Phosphorica – Suited to anemic children who are peevish, flabby, have cold extremities and feeble digestion. ^[32]Delicate, erethistic, tall or scrawny children; with dirty, brownish skins. ^[33]Emaciated child, who are unable to stand; slow in learning to walk. Cranial bones thin and brittle, fontanels and sutures remain open for long time, or close and reopen; delayed or complicated dentition. ^[27]Feeble minded children with dread of mental exertion with sluggish mind, imbecility. Thinking of complaints causes them to appear or increase. Extremely fretful child. ^[32]Forgetfulness, great hunger with thirst, easy vomiting in children. Involuntary sighing. Sunken and flabby abdomen. Unable to support head. All symptoms are worse from any change of weather. ^[26]

Calcareo Carbonica - Children with red face, flabby muscles, who sweat easily and take cold readily in consequence. Fontanelles and sutures open; bones soft, develop very slowly. ^[27]profuse perspiration, while sleeping, wetting pillow far around. Emaciated children with big head and big belly. Children crave eggs and eat dirt and other indigestible things; are prone to diarrhoea. ^[26]All discharges such as stools, sweats, odor of body and saliva are sour. ^[33]Diseases arising from *defective assimilation*; *imperfect ossification*; difficulty in learning to walk or stand because legs are too weak. ^[27]Deformed, crooked extremities, with softening of the bones. ^[25]Complaints aggravate from Cold air, wet weather, cold water and from washing. Child feels better in dry weather and lying on painful side. ^[27]

Cina - Adapted to children with dark hair, very cross, irritable, ill-humored, want to be carried, but carrying gives no relief, does not want to be touched. Face is pale; sickly white and bluish appearance around mouth; sickly, with dark rings under the eyes; one cheek red, the other pale. ^[27]The child is continually rubs and bore into nose, even until it bleeds. ^[31]Hungry soon after a full meal; craving for sweets and different things; refuses mother's milk.

Child has alternating canine hunger and no appetite at all ^[25]Screams and talks in sleep, grinding of teeth. Bedwetting due to worm Child cannot sleep unless on the belly or in constant motion. ^[32]

Hyoscyamus - Suited to child with sanguine temperament; who is irritable, nervous, hysterical. ^[27] Convulsions of children, especially from fright. The child becomes sick after eating, vomits and goes into convulsions from worms. Shrieks and becomes insensible. Convulsions during sleep. He has fear of water. ^[32] Child is very suspicious and jealous. ^[25] Child awakens from sleep with a scream. ^[30] Extraordinary forgetfulness and weakness of memory. Fears being alone, being pursued. ^[33] He feels jealous of the new born, and becomes angry and destructive. ^[28]

Iodium - Persons of scrofulous diathesis, with dark or black hair and eyes; a low cachetic condition, with profound debility and great emaciation. ^[27] Weak children with enlarged lymphatic glands, has voracious appetite but gets thin. Rapidly losing flesh, even with a good appetite. Ravenous hunger with much thirst. ^[26] Scrofulous and syphilitic indurations, effusions and tumours, and especially goitre. Emaciation of single parts. ^[34] Great exhaustion, child becomes extremely exhausted from walking and sweats copiously even from slight exertion. There is the an impulse to do violence and strange things, child is warm-blooded, wants a cool place to move in. ^[32]

Lycopodium Clavatum - Suited to dark-complexioned child; emaciated in face and upper parts, bloated or swollen in lower; intellectually keen but feeble muscular development. ^[25] Child with memory; well-developed heads but puny, sickly bodies, irritable, nervous, and unmanageable when sick. ^[34] Chiefly right sided complaints < 4 to 8 P.M. Affects right side, or pain goes from right to left. Baby cries all day, sleeps well all night ^[27] Sensitive to noise and odors. Intolerant of cold drinks; craves everything warm. Dyspepsia due to farinaceous and fermentable food, cabbage, beans, etc. Excessive hunger. Aversion to bread, Desire for sweet things. ^[26] The child emaciates above, especially about the neck, while the lower extremities are fairly well nourished. The pains are ameliorated from warmth except of the head and spine. The child wakes up in the morning with sadness and gloom. ^[32] Timidity and cowardice best seen in children, fear of facing new situations, meeting new people, and will try and avoid the same. Aversion to play due to timidity, and also because of the physical weakness. ^[35]

Medorrhinum – best indicated for the inherited complaints of obstinate children with the history of father was treated for gonorrhoea. Child Forgetful of facts, figures and names; of what he has read. Makes mistakes in writing, of spelling, and words. ^[32] Profuse, acrid discharges causing itching and Fishy odors. Hurried, anxious, irritable, sensitive and impulsive child. ^[33] Stunted growth and arrested development in children, due to latent gonorrhoea and syphilis. ^[34] Difficult concentration. Ravenous hunger soon after eating. Very thirsty. Cravings for liquor, salt, sweets, and warm drinks. ^[26]

Natrum Muraticum - suited to Melancholic, depressed, sad and weeping child. ^[25] Unquenchable thirst. Sweats while eating. Craving for salt. Mapped tongue. ^[26] Aversion to bread, to fats and rich things. Fear or dreams of robbers. Consolation aggravates. Wants to be alone to cry. ^[32] Heavy, difficult speech in children with slow in learning to walk. Awkward, hasty, drops things from nervous weakness. ^[27] It is a grand remedy for marasmus. Marked emaciation; descending, of neck or abdomen. Throat and neck of child emaciate rapidly during summer complaint. Child is thin thirsty poorly nourished on account of digestive disturbances with distended abdomen. Mouth and throat are dry. Complaints aggravates from sunrise to sunset. ^[33]

Phosphorus - Tall, slender, narrow-chested, phthisical child with delicate eyelashes, soft hair, nervous and weak child who like to be magnetized. Waxy, half anæmic, jaundiced persons. ^[25] Apathy or indifference; indifferent to his friends and surroundings. Everything looks dark; he is weary of life, gloomy and says nothing. ^[32] Great susceptibility to external impressions, to light, sound, odors, touch, electrical changes, thunder-storms. ^[26] Worse by touch, physical or mental exertion, warm food or drink, change of weather, from getting wet in hot weather, during a thunder-storm. Better by lying on right side, cold food; cold; open air. ^[27]

Pulsatilla - Adapted to child of indecisive, slow, phlegmatic temperament; sandy hair, blue eyes, pale face, easily moved to laughter or tears with affectionate, mild, gentle, timid, yielding disposition. Pains: drawing, tearing, erratic, rapidly shifting from one part to another. Thirstlessness in nearly all complaints. ^[27] Symptoms ever changing. Chilly and peevish child. Discharges thick, bland, and yellowish-green. Dry mouth, without thirst. Crack in middle of lower lip. Yellow or white tongue, covered with a tenacious mucus. ^[26] Aversion to water or fats. Chilly, yet averse to heat; in a warm room; with the pain; on lying down at night. ^[33] Digestion is slow, and the child goes to the next meal hungry; eating does not satisfy; assimilation is bad. Aggravation from fats and rich foods. ameliorated by slow walking in the open air. ^[32]

Psorinum - Children are pale, delicate, sickly appearance who will cries, frets, whines all night pitifully. Child is good, plays all day; restless, troublesome, screaming all night. Great sensitiveness to cold air or change of weather; wears a fur cap, overcoat or shawl even in hottest summer weather. Body has a filthy smell, even after bathing. ^[27] Eructations like bad eggs. Very hungry always; must have something to eat in the middle of the night. Profuse,

offensive perspiration; night-sweats. ^[26] Mind dull, clouded, difficult thinking. Head feels separated from body. ^[33] The child dreads to be washed. A dirty, foul look, as if covered with dirt. Sweat profuse, cold, clammy from least exertion. ^[32]

Silica – Suited to weak, puny, scrofulous, rachitic children, with large head, open fontanels and sutures with imperfect assimilation and consequent defective nutrition. ^[26] Child is cross, obstinate, headstrong, cry when spoken kindly. Weak ankles; slow in learning to walk. Great weariness and debility; wants to lie down. Desire to be magnetized. ^[27] Profuse sweat of head, offensive, and extends to neck. Offensive sweat on feet, hands, and axilla. Every little injury suppurates. ^[32] Child is cold, chilly, worse in winter. Skin is pale, waxy, cracks at the end of fingers, crippled nails. Felons, abscesses, boils, eruptions itch only during daytime and evening. ^[30] Night-walking; gets up while asleep. Obstinate constipation. Child feels better in summer by warmth and wrapping up head. ^[25]

Staphysagria - suited to children with suppressed anger, suppressed feelings. The child becomes speechless from suppressed indignation, anger with indignation. ^[32] Desire for sweets and milk. Canine hunger even when stomach is full. Child sleep all day and sleepless all night. Complaints from indignation, suppressed anger, or after being punished. ^[35] Great indignation about things done by others or by him, grieves about the consequences. Very sensitive to what others say about him. ^[31]

Stramonium - Adapted to young plethoric children with chorea, mania and fever delirium. Loquacious. Desires light and company; cannot bear to be alone; worse in the dark. ^[27] Sight of water or anything glittering brings on spasms. Violent thirst yet dread of water. ^[26]

Swallowing difficult and choking on attempting to swallow water, hydrophobia. ^[32] Stammering; has to exert himself a lot before he can utter a word. Fear of water and aversion to all fluids. ^[25] No pain with most complaints, painlessness is characteristic. Sleepy, but cannot sleep. ^[27]

Sulphur- Adapted to children of a scrofulous diathesis with venous congestion, especially of portal system. Dirty, filthy child who prone to skin affections. ^[27] Ravenous hunger at 11am. Sinking, empty, all-gone sensation. ^[34] Aversion to being washed, worse after a bath. Emaciated, big-bellied child who are restless, hot, kick off the clothes at night. Standing is the worst position. ^[27] Child is irritable, depressed, thin and weak, even with good appetite. ^[33] Discharges of Sulphur from every part of the body, besides being offensive, are excoriating. diarrhoea coming on early in the morning. The diarrhea drives him out of bed. ^[32]

Tuberculinum - Adapted to child with light complexion; blue eyes, tall slim, flat, narrow chest; active and precocious mentally but physically weak with tubercular diathesis and history of tuberculosis in the family. ^[27] Desire to travel, that cosmopolitan condition of the mind. ^[32] Rapid emaciation and pronounced with losing flesh while eating well and so hungry must get up nights to eat. Child always tired, aversion to work; wants constant changes. Fear of animals especially dogs. Child never satisfied to remain in one place long; wants to travel. Longs for open air, wants doors and windows open. Desire to use foul language, curse and swear. ^[26]

Conclusion

Constitutional remedies stimulate the body's Vital force, providing eternal relief for nutritional disorders in children and enhancing overall vitality to prevent future illness. Constitutional approach offers individualized treatment based on a child's physical, emotional, mental and personality traits, which increases the odds of success. So, if the child remains malnourished despite of proper nutritious and balanced diet, Homoeopathic constitutional medicinal approach is must needed to improve the physical as well as mental growth and development of malnourished children.

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