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Role of Oleum Jecoris Aselli 6 CH in the Management of Malnutrition of Children: A Clinical Study

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ABSTRACT

Introduction:

Malnutrition is a serious health condition that occurs when your diet doesn't contain the right amount of nutrients, or when your body can't absorb nutrients from food. Malnutrition can include: Stunting, Wasting, Underweight, Micronutrient deficiencies, and Overweight.

Need For Study

In India about 2/3 portion of the under five children of our country is malnourished among them 5-8% is severely malnourished whole rest fall in the group of mild or moderate malnutrition so it can be said that malnutrition one of the most wide spread conditions affecting child health. A significant proportion of these children live in economic and social environment which impedes the child's physical and mental development, this condition include poverty, poor environment sanitation, diseases, infections, inadequate access to primary health care, inappropriate child caring and feeding practices. **According to Holistic Concept of Homoeopathy malnutrition is not only caused by deficiencies but also due to body's inability to absorb and assimilate the food. This is the area where Homoeopathic Medicines plays vital role in the treatment of malnutrition. This itself creates its need to study.**

Materials and Methods:

This clinical study was conducted in the sample of population from Dhwani Homoeo Clinic, Ahmedabad, and Gujarat. Fifty cases of malnutrition were analyzed. The study sample included children aged 3 to 8 years and of both sexes. These cases were analyzed after considering their age, sex, low body weight, poor appetite, thin arms and legs, weakness, faintness, fatigue, irritability and recurrent history of infection in body. The investigations were conducted in necessary cases. The cases were analyzed up to one year with regular interval of follow-ups. All the cases were analyzed under following protocols:

Conclusion:

As a result of study of selected 50 cases it was found that the age groups between [6-8 years] were found to be more prone to such disorders [60%]. Maximum sex incidences of the patients of the study were male children [54.00%]. Out of selected cases 28 children [56%] were belong to nuclear family. It was observed that those children [27 cases] [54%] who were taken care by other family members and not mothers were more prone to develop malnutrition.56% of children [28 cases] were having poor dietary intake as a root cause of malnutrition.54% of children [27 cases] had reduced absorption of macro and micro nutrients.76% [38 cases] had recurrent history of infection, 70% [35 cases] had poor appetite, 64% [32 cases] had irritability of mind, 54% [27 cases] had wasting of muscles. 84% [42 cases] cases were improved by Nutrition as well as Health Education as well as Homoeopathic Medicine.

Keywords: Malnutrition, Homoeopathic Medicine, Clinical Study, Poor Assimilation, Wasting, Poor Appetite.

Introduction:

Your body needs a variety of nutrients, and in certain amounts, to maintain its tissues and its many functions. Malnutrition happens when the nutrients it gets don't meet these needs. You can be malnourished from an overall lack of nutrients, or you may have an abundance of some kinds of nutrients but lack other kinds. Even the lack of a single vitamin or mineral can have serious health consequences for your body.

Malnutrition is a serious health condition that occurs when your diet doesn't contain the right amount of nutrients, or when your body can't absorb nutrients from food. Malnutrition can include: Stunting, Wasting, Underweight, Micronutrient deficiencies, and Overweight.

Need For Study

In India about 2/3 portion of the under five children of our country is malnourished among them 5-8% is severely malnourished whole rest fall in the group of mild or moderate malnutrition so it can be said that malnutrition one of the most wide spread conditions affecting childhealth.In India nearly 75% of the populations reside in the village of the total rural population around 50% is still under the Poverty lines. Majority of children in India are not in a position to get adequate nourishment because of very lower capita income of their families. A significant proportion of these children live in economic and social environment which impedes the child's physical and mental development, this condition include poverty, poor environment sanitation, diseases, infections, inadequate access to primary health care, inappropriate child caring and feeding practices. **According to Holistic Concept of Homoeopathy malnutrition is not only caused by deficiencies but also due to body's inability to absorb and assimilate the food. This is the area where Homoeopathic Medicines plays vital role in the treatment of malnutrition.**

Aims and Objectives:

To assess the role of Role of Oleum Jecoris Aselli 6 CH in the Management of Malnutrition of Children

MATERIALS AND METHODS:

1. This clinical study was conducted in the sample of population from Dhwani Homoeo Clinic, Ahmedabad, Gujarat. Fifty cases of malnutrition were analyzed.
2. The study sample included children aged 3 to 8 years and of both sexes.
3. The sampling technique used for the present study was convenient sampling technique.
4. These cases were analyzed after considering their age, sex, low body weight, poor appetite, thin arms and legs, weakness, faintness, fatigue, irritability and recurrent history of infection in body.
5. The investigations were conducted in necessary cases.
6. The cases were analyzed up to one year with regular interval of follow-ups. All the cases were analyzed under following protocols:

PROTOCOL FOR ASSESSMENT AND MANAGEMENT OF MALNUTRITION IN CHILDREN

Step-1: Growth Monitoring
Step-2: Appetite Test for Severe Acute Malnourished Children
Step-3: Medical Assessment
Step-4: Decide level of care
Step-5: Nutritional Management:
Step-6: Nutrition, Health Education and counseling including WASH practices
Step-7: Duration of Monitoring
Step-8: Follow-up Care

Inclusion criteria:

1. All children between 3-8 years
2. No history of recent malaria, jaundice, or other hematological disorders.
3. No history of recent medications.

Exclusion criteria:

1. Those that does not fulfill any inclusion criteria
2. Individuals or guardians unwilling to participate voluntarily in the study.

Review of Literature:

India is the largest contributor of undernourished people in the world with around 194.4 Million people, or 14.37% of its population not receiving enough nutrition.

India has one of the worst rates of child malnutrition in the world, with one third of malnourished children globally being Indian. As per the Government of India's National Family Health Survey 5 (NFHS 5), 'Thirty-six percent of children under age five years are stunted; 19 percent are wasted; 32 percent are underweight; and 3 percent are overweight.

Geographically, Maharashtra followed by Bihar and Gujarat have the worst levels of malnourishment in children in the country. Madhya Pradesh, Andhra Pradesh, and Jharkhand have very high rates of under nutrition. Incidentally, these regions also have the highest population of children, and the highest poverty rates. Even states with the lowest percentage of under nutrition, such as Mizoram, Sikkim and Manipur have much higher malnutrition rates than developed nations.

In India, lots of socio-economic factors play a major hand in the malnourishment levels. In general, those who are poor are at risk for under-nutrition

Under nutrition is common in rural areas, mainly due to the low social and economic status of the inhabitants. Contrarily, in urban areas, overweight status and obesity are over three times as high as compared to rural areas.

Populations more at risk of under nutrition include:

- **Poor and low income:**, Poor communities have less access to adequate nutrition.
- **Children:**. Children have greater nutritional needs than adults in order to grow and develop. Disadvantaged children are especially at risk of under nutrition and its consequences.
- **Chronically ill:** Many chronic illnesses can directly affect appetite and/or calorie absorption. Some increase your caloric needs. Spending time in the hospital is also a risk factor for under nutrition.

- **Macronutrient under nutrition:** (protein-energy under nutrition) deprives your body of energy to sustain itself. To compensate, it begins breaking down its own tissues and shutting down its functions. This begins with its body fat stores and then proceeds to muscle, skin, hair and nails. People with protein-energy under nutrition are often visibly emaciated. Children may have stunted growth and development.

Causes of malnutrition

- Reduced dietary intake.
- Reduced absorption of macro- and/or micronutrients.
- Increased losses or altered requirements.
- Increased energy expenditure (in specific disease processes).

Dietary intake:

Probably the single most important aetiological factor in disease-related malnutrition is reduced dietary intake. This is thought to occur due to reductions in appetite sensation as a result of changes in cytokines, glucocorticoids, insulin and insulin-like growth factors.[6] The problem may be compounded in hospital patients by failure to provide regular nutritious meals in an environment where they are protected from routine clinical activities, and where they are offered help and support with feeding when required.

Malabsorption

For Children with intestinal failure and those undergoing abdominal surgical procedures, malabsorption represents an independent risk factor for weight loss and malnutrition.

Increased losses or altered requirements

In some circumstances, such as enterocutaneous fistulae or burns, patients may have excessive and/or specific nutrient losses; their nutritional requirements are usually very different from normal metabolism.

Energy expenditure

It was thought for many years that increased energy expenditure was predominantly responsible for disease-related malnutrition. There is now clear evidence that in many disease states total energy expenditure is actually less than in normal health. The basal hyper metabolism of disease is offset by a reduction in physical activity, with studies in intensive care patients demonstrating that energy expenditure is usually below 2,000 kcal/day. The exception is patients with major trauma, head injury or burns where energy expenditure may be considerably higher, although only for a short period of time.[8,9]

Signs and symptoms of malnutrition:

- Low body weight, prominent bones, depleted fat and muscle.
- Thin arms and legs with edema (swelling with fluid) in your belly and face.
- Stunted growth and intellectual development in children.
- Weakness, faintness and fatigue.
- Irritability, apathy or inattention.

- Dry, inelastic skin, rashes and lesions.
- Brittle hair, hair loss and hair pigment loss.
- Frequent and severe infections.
- Low body temperature, unable to get warm.
- Low heart rate and blood pressure.

Diagnosis of Malnutrition:

Physical observation and a history of your diet and health conditions are often enough to diagnose protein-energy under nutrition or over nutrition.

Healthcare providers may measure your BMI or measure a child's arm circumference to help understand the extent of the problem. If possible, they will take a blood sample to test for specific micronutrient imbalances.

Treatment:

Under nutrition is treated with nutritional supplements. This might mean individual micronutrients, or it might mean refeeding with a custom, high-calorie nutritional formula designed to restore everything your body is missing. Severe under nutrition can take weeks of refeeding to correct.

Prevention of Malnutrition:

Malnutrition is a global problem. In both the developed world and the developing world, poverty and a lack of understanding of nutrition are the leading causes. We can help control the disease of malnutrition with better worldwide education and support for the disadvantaged, including access to clean water, nutritious whole foods and medicine. Children and elders who may not be able to advocate for themselves are especially at risk and may need closer attention paid to their diet and health condition.

The best way to prevent malnutrition is to eat a well-balanced diet with a variety of nutritious whole foods in it. If you have enough of all the nutrients your body needs, you will be less likely to overeat trying to satisfy those needs. Some micronutrient deficiencies are common even with a fairly standard diet. A blood test is one way to find out if you could benefit from micronutrient supplements. Your healthcare provider can help you determine the correct dose to take.

Outlook / Prognosis

Malnutrition is treatable, but some effects can linger. Effects of severe under nutrition, such as blindness from vitamin A deficiency, soft bones from vitamin D deficiency and stunted growth from protein-energy under nutrition in children may not be reversible, even after rehabilitation. Secondary effects of long-term over nutrition, such as insulin resistance and carotid artery disease, may last even after weight loss. However, with earlier intervention and good follow-up support, people can make full recoveries.

Role of Homoeopathy in Mal nutrition:

According to Holistic Concept of Homoeopathy malnutrition is not only caused by deficiencies but also due to body's inability to absorb and assimilate the food. This is the area where Homoeopathic Medicines plays vital role in the treatment of malnutrition.

Homeopathy offers supportive help in managing these cases. Firstly, a nutritious and well balanced diet needs to be started in these cases.

Along with this and conventional help these medicines can be taken to treat the effects that have occurred from malnutrition (like weight loss, low immunity, weak bones, loss of fat, muscle mass, dry hair, dry skin).

Homoeopathic medicines will work by improving the body's power to assimilate the food properly. Oleum Jecoris Aselli is the Homoeopathic medicine prepared from cod liver oil .it is indicated in the cases of Emaciation, lassitude, scrofulous diseases, and rheumatic affections. Atrophy of infants; emaciation with hot hands and head; restless and feverish at night.

Discussion:

Distribution of cases of Malnutrition according to their Age:

Age [In years]	No of cases	Percentages
3-5	20	40.00
6-8	30	60.00

Distribution of cases of Malnutrition according to their Sex:

Sex	No of cases	Percentages
Male	27	54.00
Female	23	46.00

Distribution of cases of Malnutrition according to their Family:

Family	No of cases	Percentages
Nuclear Family	28	56.00
Joint Family	22	44.00

Distribution of cases of Malnutrition according to their Caretaker:

Caretaker	No of cases	Percentages
Mother	23	46.00
Other Family Member	27	54.00

Distribution of cases of Malnutrition according to their Causes:

Causes	No of cases	Percentages
Reduced dietary intake.	28	56.00
Reduced absorption of macro- and/or micronutrients.	27	54.00
Increased losses	06	12.00

or altered requirements.		
Increased energy expenditure	05	10.00

Distribution of cases of Malnutrition according to their Manifestations:

Manifestation	No of cases	Percentages
Low Body Weight	23	46.00
Depleted Fat and Muscles	27	54.00
Thin arms and Legs	22	44.00
weakness	12	24.00
Fatigue	14	28.00
Poor Appetite	35	70.00
Irritability	32	64.00
Poor Attention	28	56.00
Dry Skin	10	20.00
Recurrent History of Infection	38	76.00

Distribution of cases of Malnutrition according to their Criteria of Improvement:

Criteria of Improvement	No of cases Improved	Percentages
Only Nutrition	24	48.00
Only Health Education or Counseling	16	32.00
Only Homoeopathic Medicine	36	72.00
Nutrition as well as Health Education	28	56.00
Nutrition as well as Health Education as well as Homoeopathic Medicine	42	84.00

Distribution of cases of Malnutrition according to their Results:

Result	No of cases	Percentages
Improved	44	84.00
Not Improved and Left the treatment	06	16.00

Conclusion:

As a result of study of selected 50 cases it was found that the age groups between [6-8 years] were found to be more prone to such disorders [60%]. Maximum sex incidences of the patients of the study were male children [54.00%]. Out of selected cases 28 children [56%] were belong to nuclear family. It was observed that those children [27 cases] [54%] who were taken care by other family members and not mothers were more prone to develop malnutrition.56% of children [28 cases] were having poor dietary intake as a root cause of malnutrition.54% of children [27 cases] had reduced absorption of macro and micro nutrients.76% [38 cases] had recurrent history of infection, 70% [35 cases] had poor appetite, 64% [32 cases] had irritability of mind, 54% [27 cases] had wasting of muscles.

48% [24 cases] were improved by only nutrition. 32% [16 cases] were improved by only counseling. 72% [36 cases] were improved by only homoeopathic medicine, 84% [42 cases] cases were improved by Nutrition as well as Health Education as well as Homoeopathic Medicine. Study shows that along with counseling and Nutrition if Homoeopathic medicines are given it becomes more effective to the cases of Malnutrition.84% [44 cases] were improved in general and 16% [6cases] left the treatment..

References

1. Elia M, editor. *Guidelines for detection and management of malnutrition*. Malnutrition Advisory Group, Standing Committee of BAPEN. Maidenhead: BAPEN, 2000.
2. Stratton R, Green CJ, Elia M. *Disease-related malnutrition: an evidence-based approach to treatment*. Oxon: Cabi Publishing, 2003.
3. Elia M, Stratton RJ. How much undernutrition is there in hospitals?. *Br J Nutr* 2000;84:257–9. 10.1017/S0007114500001525
4. Russell CA, Elia M. *Nutrition Screening Survey in the UK in 2008*. Redditch, Worcestershire: BAPEN, 2009.
5. Finch S, Doyle W, Lowe C, et al. *National diet and nutrition survey*. London: The Stationery Office, 1998.
6. Jackson AA. Severe malnutrition. In: Warrell DA, Cox TM, Firth JD, Benz EJ, *Oxford textbook of medicine* 2003. 4th edn vol 1. Oxford: Oxford University Press; 1054–61. 10.1093/med/9780199204854.003.1103
7. Age Concern *Hungry to be heard. The scandal of malnourished older people in hospital*. London: Age Concern, 2006.
8. Elia M. Changing concepts of nutrient requirements in disease: implications for artificial nutrition support. *Lancet* 1995;345:1279–84. 10.1016/S0140-6736(95)90929-X
9. Green CJ. Existence, causes and consequences of disease-related malnutrition in the hospital and the community, and clinical and financial benefits of nutrition intervention. *Clin Nutr* 1999;18(Suppl 2):3–28
10. Stratton RJ, King CL, Stroud MA, Jackson AA, Elia M. 'Malnutrition Universal Screening Tool' predicts mortality and length of hospital stay in acutely ill elderly. *Br J Nutr* 2006;95:325–30.