

Clinical Trial Of Gopiyush Tablet Against Malnourishment

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Submission : 20.02.2024

Acceptance : 11.04.2024

Publication : 31.05.2024



Abstract:

Ayurveda is mainly based on preventive aspects first rather than curative. *Ahara* (Food) is considered the first pillar among the three *Nidra* and *Abrahmacharya* is the other two. Many common health problems can be prevented through a nutritious diet. Childhood undernutrition is an underlying cause of an estimated 35% of all deaths among children under five and 21% of total global disability-adjusted life years lost among less than 5 children. A balanced diet provides all nutrients in the required amounts and proper proportions. According to Acharya Kashyap, proper *Ahara* helps to improve *Kanti* (luster), *Bala* (strength), *Smriti* (memory), *Medha* (wisdom), and *Anga Vriddhi* (growth). *Acharya* Charaka further emphasized that if nutrition is lacking in balance, one might suffer from *Karshya* or *Atikarshya*. In this trial retrospective observational study was planned using routinely collected data to see the effect of Gopiyush Tablet against malnourishment. The study found that the tablet not only helped with malnourishment but also improved immunity.

Keywords: Nutrition, Malnourishment, *Ahara*, *Karshya*, Gopiyush Tablet.

Introduction

Many diseases are known to afflict human beings, and these include infectious, genetic, and nutritional deficiency disorders. Of these, the nutritional disease is by far the most common throughout the world, and among them, malnutrition is the most common one. India is home to 40% of the world's malnourished children and 35% of the developing world's low-birth-weight infants⁽¹⁾. Every year 2.5 million children die in India, accounting for one in five deaths in the world⁽²⁾. India is one of the countries with the highest proportion of malnourished children in the world⁽³⁾.

According to Ayurveda, *Karshya* /*Atikarshya* (emaciation) shows all forms of malnutrition that are mild, moderate, and severe. *Karshya* is a *Vata Pradhana Vyadhi* (disease dominant of *Vata Dosha*)^(4,5). According to Acharya Kashyap, proper *Ahara* helps to improve *Kanti* (luster), *Bala* (strength), *Smriti* (memory), *Medha* (wisdom), and *Anga Vriddhi* (growth)^(6,7). The study is conducted to observe the result of the Gopiyush tablet against malnourishment. In this study retrospective observational study was planned using routinely collected data. The children were selected from Balwadis of Bhagini Nivedita Utkarsh Mandal, in the Khodala region of Thane District. A total of 560 children were selected and 510 were prescribed with Gopiyush tablets along with a regular diet and 44 children were fed with a normal diet to know the result.

Materials And Method

Method of Study : A Retrospective observational study was carried out systematically on children selected from

Balwadis of Bhagini Nivedita Utkarsh Mandal, in the Khodala region of Thane District. Bhagini Nivedita Utkarsh Mandal is an NGO working in the fields of education, and social improvement of economically deprived children and needy women. A total of 560 children were selected and 510 were advised with Tablet Gopiyush along with a regular diet and 44 children were fed with a normal diet only.

Dosage: 3-7 years: 1 tablet two times a day ; 7-12 years: 2 tablets two times a day.

Anupana:- Gopiyush tablets are chewable tablets hence no *Anupana* is needed, if required lukewarm water can be consumed.

Time of Administration: - Morning And Evening After Food

Inclusion Criteria :

- Children from the age of 3-12 years of either sex
- Children who matched the symptoms of *Karshya* (emaciation)

Exclusion Criteria:

- Children below 3 years and above 13 years.
- Children having systemic disorders, congenital anomalies, neurological disorders, endocrine disorders, anatomical defects, etc.
- Children with more than 80% and less than 60% of ideal weight for age.

Criteria For Assessment:**A] Subjective Criteria:**

The assessment will be based on the growth pattern and improvement in general health.

B] Objective Criteria:

- 1] Physical & Anthropometric measurements: Weight in kg.(Wt)
- 2] Investigations: Nil

Method Of Preparation:

Colostrum milk was collected from Indian Cows within the first 16 hours after post-perpetuation. Colostrum milk is transferred to the processing unit through a cold chain where

it is tested for quality. After passing through quality parameters, colostrum milk was subjected to cream separation. After cream separation, preservative is added as per – Butylated hydroxyl Anisole- 0.01% & Sodium Benzoate- 0.1% Then Colostrum milk is subjected to a spray dryer to prepare colostrum powder. Colostrum powder is tested for quality parameters, then it is mixed with icing sugar and other excipients as per the batch sheet to prepare granules. After proper drying granules are passed to prepare chewable tablets.

Selection of the formulation is based on the nutritional values of the ingredients which is supported by evaluation of combination by the drugs controller laboratories pharmacogenosy division laboratory.

Sr.No.	Parameters	Units	Methods	Results of Analysis
1.	Iron	mg/100g	SOP-CHM-27-00	0.73
2.	Molybdenum	mg/kg	SOP-CHM-27-00	BLQ
3.	Selenium	mg/kg	SOP-CHM-27-00	BLQ
4.	Energy	Kcal/100g	SOP-CHM-29-00	472.71
5.	Carbohydrate	g/100g	SOP-CHM-28-00	15.27
6.	Protein	g/100g	By FSSAI Manual - 3 (8.7)2016	48.12
7.	Fat	g/100g	By FSSAI Manual - 3 (14.5)2016	24.35
8.	Vitamin A as retinol	mcg/100g	SOP-CHM-40-00	BLQ

Results and Discussion:

The goal of the current study was to assess the impact of Gopiyush tablets on 510 children Data was been collected and was observed that no negative effects were noted with Gopiyush Tablet 250 mg. When compared to children on a conventional diet, a notable increase in weight was seen in just three months. Compared to children on a regular diet alone, children were less susceptible to infections such as colds, coughs, etc. The average weight gain of children who take Tablet Gopiyush is 0.98 kg, which is higher than the 0.33 kg growth of children who do not take it. Furthermore, children's quality of life was improved, boosting their immunity.

Humans have traditionally consumed cow's colostrum, and several studies have looked into the possible uses of this substance for human nutrition and wellness. On the whole, colostrum is a complex biological fluid that contains important natural anti-microbial elements such as higher levels of fat, protein, peptides, non-protein nitrogen, ash, vitamins and minerals, hormones, growth factors, cytokines, nucleotides and little lactose than mature milk. Immunoglobulin G (IgG) and Immunoglobulin A (IgA) concentrations in colostrum are exceptionally high, which strengthens the immune system. Moreover, colostrum

influences the GI tract's growth and functionality. The bioactive proteins included in colostrum not only strengthen the immune system but also help build and repair skeletons and muscles, among other numerous health advantages⁽⁸⁾.

Therefore, Colostrum's inclusion in Gopiyush pills is mostly responsible for the study's positive outcome.

Conclusion:

Once Gopiyush tablets were added to a malnourished child's regular diet, their weight improved significantly. Children who use Gopiyush have seen an average weight growth of 0.98 kg, which is greater than the 0.33 kg average growth of children who do not take Gopiyush. Additionally, the children's quality of life was improved, strengthening their immunity, while previously, they were more susceptible to coughs and the common cold.

Therefore, Gopiyush tablets are a beneficial supplement to a child's diet to promote growth and immunity.

Conflict of Interest: Nil

Source of Support: Nil

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