

# A Descriptive Study on Food Related Problem of pre School Children

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**Abstract - Malnutrition is the most overlooked form of human deprivation, particularly among preschool children. Millions of Indian children are denied the right to life, health, nutrition, education, and safe drinking water. Interventions for preschool children (Early Childhood Care and Development) in India must cover three areas: child health, child development/education, and child nutrition. The study's specific objectives are to examine the current nutritional status of preschool children in rural India; to analyse policy priorities related to essential components of early child care and development and its interventions; and to propose strategies to combat malnutrition among preschool children in India. A variety of factors influence child nutrition, either directly or indirectly. Three essential components are required for preschool children's strategies in India. They are the food entitlement system, the child care system, and the health care system. Malnutrition among preschool children must be addressed as soon as possible. This paper is an attempt in that direction.**

**Keywords - Malnutrition, ABC index, Early child care**

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## INTRODUCTION

Malnutrition is the most overlooked form of human deprivation, particularly among preschool children. Following India's independence in 1947, several steps were taken to improve the health and well-being of children. However, malnutrition remains a major issue in India; as per the NFHS-3, 46 percent of children are underweight. Better nutritional status among children is the foundation for current and future generations' child survival and optimal cognitive development. In recent years, one of the most pressing challenges confronting India's development planners has been the prevention of malnutrition. General malnutrition, manifested as underweight in children, is more common in rural children, scheduled castes and tribes, and children with illiterate mothers. The hazard of communicable diseases, as well as prenatal morbidity and mortality, as a result of a significant portion of the population's poor nutritional status. The current challenges of communicable diseases and maternal and child survival highlight the health system's flaws. According to Amartya Sen, "while the case for economic reforms may take good note of the diagnosis that India has too much government interference in some fields, it ignores the fact that India also has insufficient and ineffective government activity in many other fields, including basic education, health care, social security, land reform, and the promotion of social change."

Young child care cannot be left solely to the family; it is also a social responsibility. Social intervention is required, both in the form of assisting parents in taking better care of their children at home and in the direct provision of health, nutrition, preschool education, and related services. Interventions for children under the age of six years (Early Childhood Care and Development) in India must address three dimensions broadly:

- Child health
- Child development/education
- Child nutrition.

These must be provided concurrently in the same health-care system. Furthermore, when planning for early childhood care and development are made, it should must be kept in mind that different age groups require different strategies. The three critical age groups are:

- (1) Children 0-6 months of age-the period of recommended exclusive breastfeeding
- (2) Children 6 months to 3 years-until entry into preschool
- (3) Children 3 years to 6 years-the preschool years, until entry into school

## OBJECTIVES OF THE STUDY

This study is based on following specific objectives:

1. To investigate the current nutritional status of preschool children in rural India.
2. To examine policy priorities related to essential components of early childhood care and development, as well as their interventions.
3. To make recommendations for strategies to combat malnutrition among preschool children in India.

## RESEARCH METHODOLOGY

The primary data for this study were obtained from the National Family Health Survey (NFHS-III) 2005-2006, the FOCUS report, UNICEF reports, the NNMB data from 2002, and planning commission documents. The unit of analysis is children aged 0 to 59 months in India, for whom complete information on health characteristics is available. Child nutrition has been measured in NFHS using anthropometric measures: a child's height-for-age, weight-for-height, and weight-for-age are expressed in standard deviations (Z-scores) from the reference population's median, which is the commonly used US National Center for Health Statistics (NCHS) standard as recommended for use by the World Health Organization (WHO). The height-for-age Z-score is an indicator that reflects the cumulative effects of growth deficiency and is thus intended to measure long-term nutrition. The weight-for-height Z-score measures a child's weight in relation to his or her height; this indicator has been used to monitor children's growth and is typically regarded as a measure of short-term rather than long-term health status. Weight for age is one of the most preferred and widely used anthropometrical indices for assessing nutritional status (underweight). This index reflects body mass in relation to chronological age. It was influenced by both the child's height and weight. This benchmark is frequently used as a comprehensive measure of two other anthropometrical measures, height for age (stunting) and weight for height (wasting). Under nutrition is a sign of chronic deficiency, wasting is a sign of acute malnutrition, and being underweight is a combination of the two. The categorization of a child as undernourished is based on a comparison of its weight for age with a child with same sex and age from the NCHS/WHO international reference population. The results are compared using Z scores or S.D scores. The Z scores for weight for age were used in this study to assess the status of malnourishment.

## CURRENT SITUATION OF INDIAN CHILDREN

Malnourishment and starvation India is home to one out of every three malnourished children in the world. According to the UNICEF report 'Childhood under Threat,' millions of Indian children are denied the rights to survival, health, nutrition, education, and safe drinking water. According to reports, 63% of them go to bed hungry, and 53% suffer from chronic malnutrition. According to the report, 147 million children live in kucha houses, 77 million do not drink from a tap, 85 million are not immunized, 27 million are severely underweight, and 33 million have never attended school. A girl child is the most vulnerable victim because she is frequently neglected and discriminated against due to the preference for a boy child. There is a serious problem throughout the country, but there are significant differences between states and groups. More than 43 percent of all underweight children live in Bihar, Madhya Pradesh, Uttar Pradesh, and Rajasthan. Under nutrition is concentrated in a small number of districts, with 10% of villages and districts accounting for nearly 30% of all underweight children; a quarter of districts and villages account for more than half of all underweight children. The nutritional status of children under the age of six can be assessed. The FOCUS report (2006) developed a 'Achievement of Babies and Children (ABC) index based on the three important indicators of infant mortality rate (IMR), percentage of children who are underweight, and immunization. While the ABC index increased by 6.7 points (18.4 percent) between NFHS-1 and NFHS-2, the increase in the subsequent period was only 5.7 points (13.1 percent). Other indicators also point to a worsening of children's conditions between NFHS-2 and NFHS-3. The percentage of children under the age of three who are classified as wasted has increased in 18 of the 22 states for which data is available (the only states reporting a decrease in wasting were Assam, Chhattisgarh, Himachal Pradesh, Karnataka, Maharashtra, and Orissa), with the overall incidence rising from 14 to 17 percent. The proportion of children suffering from anemia increased from 74% to 79%. (the states where the percentage increased are Andhra Pradesh, Assam, Gujarat, Karnataka, Kerala, Madhya Pradesh, Orissa, Tamilnadu and Uttar Pradesh).

**Table 1: Child indicators from NFHS**

Indicators	NFHS-1	NFHS-2	NFHS-3
IMR( per' 000 births)	77.3	67.3	55.5
% of children under weight (age<3 years)	51.1	46.7	43.3
Children fully immunized (%)	38.3	44.2	46.0
ABC Index	36.6	43.3	49.0

Source: Various rounds of NFHS

In rural India, approximately 26 percent of children are severely stunted, 7 percent are severely wasted, and 18 percent are severely underweight. Approximately 49, 79, and 54 percent of children are stunted, wasted, or underweight, respectively. Between the ages of 25 and 36, approximately 22% of children in rural India are severely stunted. Severe wasting is seen in children under the age of 12 months, whereas severe underweight children range in age from 13 to 48 months. The child's gender does not provide a clear picture. It has also been discovered that children of Muslim faith have poor indicators, whereas those of other faiths have positive results. Age in months in weight-for-age in comparison to other groups, as well as overall percentage In comparison to the other categories, a higher percentage of severely malnourished male children (26.1) are found to be tall for their age. In the weight-for-age category, female children outnumber male children. According to height-for-age, the proportion of normal children is lower in the other category, while the proportion of severe children is higher in the other category. The same study found the same thing in weight-for-age (table 2).

According to all three measures, children from scheduled castes, scheduled tribes, or other backward classes have relatively high levels of under nutrition. On almost every metric, children from scheduled tribes have the worst nutrition status. Average children from the richest economic quintile have a low percentage of undernourished children, while children from the poorest economic quintile have a higher proportion of severely malnourished children. This holds true for all three anthropometric measurements. There is an indirect relationship between mothers' educational attainment and the severity of malnourishment. In short, the higher the educational level of the mother, the better the child's health.

**Table 2: Percentage of preschool children years classified by nutritional status and selected background characteristics for Rural India, 2005-06.**

Selected background characteristics	Height-for-Age			Weight-for-Height			Weight-for-Age		
	Normal	Moderate	Severe	Normal	Moderate	Severe	Normal	Moderate	Severe
Age in Month									
0-12	72.9	15.9	11.3	69.2	18.8	12.0	64.0	22.1	13.9
13-24	42.6	27.4	30.1	75.9	16.5	7.6	52.1	28.7	19.2
25-36	40.5	28.0	31.5	82.5	12.4	5.1	50.8	29.3	19.9
37-48	42.1	27.0	30.9	84.0	11.2	4.8	50.9	30.4	18.7
49-59	46.7	27.7	25.5	83.6	12.0	4.4	52.1	31.2	16.7
Sex									
Male	49.1	24.7	26.1	78.3	14.6	7.1	54.8	28.3	16.9
Female	48.8	25.6	25.5	79.9	13.7	6.4	53.2	28.3	18.5
Religion									
Hindu	49.2	25.3	25.6	78.5	14.5	7.0	53.2	28.8	17.9
Muslim	46.8	25.2	28.1	81.4	12.6	6.0	55.5	27.4	17.1
Others	54.2	23.3	22.5	81.6	12.9	5.5	63.2	21.6	15.2

Caste									
SC	44.0	26.3	29.7	78.0	15.1	6.9	49.0	30.8	20.2
ST	45.2	24.2	30.7	71.3	18.8	9.9	43.5	30.4	26.1
OBC	48.5	25.0	26.5	79.4	13.7	6.9	53.9	28.6	17.5
Other	55.9	24.5	19.6	82.6	12.1	5.3	63.0	24.5	12.4
Wealth Index									
Poorest	39.8	25.8	34.3	74.9	16.3	8.8	43.2	31.8	25.1
Poorer	45.8	26.3	27.9	77.5	15.6	6.9	50.4	30.0	19.6
Middle	51.4	25.5	23.1	81.0	12.9	6.1	58.7	27.0	14.3
Richer	60.6	24.3	15.1	84.1	11.4	4.6	66.8	24.7	8.6
Richest	75.7	17.1	7.2	88.6	7.6	3.9	80.9	15.2	4.0
Mother's Education									
No education	42.1	25.8	32.1	76.6	15.2	8.2	47.1	30.0	22.9
Primary	50.3	26.1	23.7	79.6	14.6	5.8	55.5	29.4	15.2
Secondary	60.3	24.0	15.7	83.2	12.1	4.7	65.4	25.4	9.2
Higher	66.6	19.9	13.5	83.7	11.6	4.7	71.4	19.1	9.5
Overall	49.0	25.2	25.8	79.0	14.2	6.8	54.0	28.3	17.7

Source: NFHS-3,2005-06.

Children from scheduled castes, scheduled tribes, or other backward classes have relatively high levels of undernutrition, according to all three measures. Children from scheduled tribes have the worst nutrition status in almost every metric. Average children in the richest economic quintile have a low proportion of undernourished children, whereas children in the poorest economic quintile have a higher proportion of severely malnourished children. This is true for each of the three anthropometric measurements. Mothers' educational attainment and the severity of malnourishment have an indirect relationship. In short, the higher the mother's educational level, the better the child's health.

## EARLY CHILDHOOD EDUCATION COMPONENTS

Three essential components are required for preschool children's strategies in India. A food entitlement system that ensures that every child receives adequate food, not only in terms of quantity, but also of quality, diversity, and

acceptability. A child-care system that supplements family care and empowers women. Such care must be provided by informed, interested adult caregivers who have access to appropriate infrastructure. A health-care system that provides prompt, locally accessible care for common but life-threatening illnesses. A system like this must address both the prevention and management of malnutrition and diseases.

#### **(a) Age 0–6 months: Early Initiation and Exclusive Breast feeding**

According to the most recent guidelines (WHO guidelines and National Guidelines for Infant and Young Child Feeding IYCF), breastfeeding should begin within one hour of birth and continue exclusively until the child is six months old. According to studies, exclusive breastfeeding alone provides nutrition that meets all of the infant's needs at this age. It has also been demonstrated that this is the only preventive and best treatment for the major neonatal killers (e.g. diarrhoea, pneumonia etc). The majority of studies have found that starting breastfeeding within one hour of birth can help reduce the risk of neonatal mortality by nearly a third. Continued breastfeeding for two years or more, as well as the introduction of adequate and appropriate complementary feeding beginning in the seventh month, can reduce the risk of death even further. Despite the fact that breastfeeding is a critical means of reducing infant mortality and ensuring children's optimal growth and development, policymakers place little emphasis on encouraging and supporting mothers to adequately breastfeed their babies. The National Maternity Benefit Scheme (NMBS), which provides a one-time payment of Rs.500 to pregnant women living below the poverty line, addresses maternity entitlements as well as the nutritional needs of pregnant women and breastfeeding children to some extent. Breastfeeding counselling and support are entirely dependent on the Accredited Social Health Activist's skills, training, and time (ASHA), who has many other tasks. This age group of children also requires growth monitoring, immunisation, newborn care, and referral services to the health system.

#### **(b) Age 6 months to 3 years: Complementary Feeding and Day Care**

Complementary foods should be introduced to children as early as the seventh month, with breastfeeding continuing for at least two years. Children can eat 'normal home' food (in mashed or semi-solid form), but because they can only eat small amounts at a time, they must be fed frequently (about five times per day) and given food that is high in calories, proteins, and micronutrients. Some of the interventions needed for this age group are as follows: Assuring that children receive adequate meals on a regular basis. This food must contain sufficient nutrients in the form of animal proteins (milk, eggs, meat, fish), fats, fruits, and vegetables.

As 'supplementary nutrition,' nutritious and carefully designed take-home rations (THR) based on locally procured food, delivered once a week, should be provided for children in this age group. Crèches with trained staff must be provided to ensure that these children receive adequate care and development opportunities, especially if there are no adult caregivers at home due to increased female labor participation. Regular immunization and growth monitoring, treatment for anemia and worms, prompt care for fever, diarrhoea, coughs, and colds, and referral services for the sick and severely malnourished child are additional services children in this age group require. The Accredited Social Health Activist (ASHA) and Anganwadi workers can provide the majority of the above (AWW).

#### **(c) Age 3 to 6 years: Focus on Pre school**

It is well established that preschool education plays a significant role in preparing children for formal schooling. Preschool education helps children both enter and remain in the school system. A child's right to an education cannot be fully realized unless she has access to high-quality early childhood care and education. The interventions required for children aged 3 to 6 years (until they start school) are as follows: A center-based play-school facility staffed by a teacher trained in preschool activities. Hot cooked meals that serve the same general purposes as the primary school midday meal programme. These include not only nutritional assistance but also improving child attendance, promoting social equity, providing income assistance to low-income households, and acting as a form of nutrition education.

#### **Table 3: Essential Components of Early Child Care**

	0-6months	6 months to 3 years (until joining pre school)	3 years to 6 years(until joining school)
<b>Food</b>	Exclusive Breast feeding – Counselling and Support for Breast feeding; supplementary nutrition and maternity entitlements for Lactating mother	Supplementary nutrition in the form of nutritious take home rations (THRs), nutrition counseling, nutrition and health education	Nutritious hot cooked meal at the centre
<b>Child Care and Development</b>	Crèches at worksites and maternity entitlements to ensure proximity of mother and child	Crèches; expanding existing crèche schemes and convert 10% Anganwadis into Anganwadi cum crèches	Preschool at the Anganwadi centre, Crèches/ day care facilities for those whomightne edit
<b>Health Care</b>	Immunization, Growth monitoring, Home based neo-Natal care, Prompt referral when required	Immunization, growth monitoring, prompt care For childhood illnesses, referral care for sick and Malnourished children, de-worming, iron supplementation	Immunization, growth monitoring, prompt care For childhood illnesses, referral care for sick and Malnourished children, de-worming, iron Supplementation

Source: Strategie sfor Under Six: A framework for the 11<sup>th</sup> plan; Planning Commission, 2007, p.10.

As a result, the primary focus should shift to quality preschool education, with nutrition and health services playing roles similar to the midday meal scheme and the School health scheme in primary schools. Based on the preceding discussion, it is clear that different strategies are required to address the health, nutrition, care, and development needs of children under the age of six. Table 3 summarizes the components of the services required by the three age groups among children under the age of six:

### THE 3 APPROACH TO COMBATMAL NUTRITION

Malnutrition can be combated using the three 'A' approach – awareness, accessibility and affordability.

**Awareness:** Not only must awareness be raised in the community, but also among providers – politicians, bureaucrats, non-governmental organizations, and medical professionals. Innovative methods of raising community awareness are required. The media and school education can both play critical roles. The NRHM emphasizes the importance of providing universal access to equitable and affordable health care that is accountable and responsive to rural poor and marginalized people, particularly children and women. The National Nutrition Mission was established in 2003 with the primary goal of addressing the problem of malnutrition holistically.

**Accessibility and Affordability:** The Indian government has been implementing a wide range of nutrition intervention programmes in order to achieve food and nutritional security at the household and individual levels. These include I supplementary feeding programmes for vulnerable groups, (ii)

micronutrient distribution such as iron, folic acid, and vitamin A, and (iii) food fortification. Finally, efforts must be made to allow the community to feed itself. The targeted public distribution system (PDS) can go a long way toward meeting the poor's food needs. To ensure dietary diversity, PDS should include millets, pulses, oil, and, if possible, vegetables, fruits, and animal products (milk, eggs, fish powder) in addition to cereals. Decentralized production of a variety of foods (cereals, millets, pulses, vegetables, fruits, and animal products) at the block or village level can greatly improve access to a balanced and diverse diet to ensure food and nutrition security at the household and individual levels. Such people's planning can improve household nutrition security as well as national food security, as well as generate income. It has been discovered that the diet of preschool children within a household is deficient when compared to that of adults, implying that it is not just affordability, but also knowledge of a child's nutritional needs and feeding.

### CONCLUSION

The high levels of child malnutrition in India reflect the country's continued disregard for health, the insufficient reach and efficacy of health and child care services, and the failure of strategies to reach newborns and children under the age of six.

These deficiencies must be addressed immediately. Even at the household level, the most serious barriers to improving child nutrition do not directly relate to food availability. Food distribution within the household, child-rearing practices, nutritional quality of food, clean water, and infection reduction all necessitate a much more comprehensive and integrated approach to implementing all "nutrition safety net schemes" on a life-cycle basis. Nutritional aspects of 'food and nutrition security' require more attention. This applies to both decreasing the number of malnourished people and hastening the rate of decline. Economic growth and the continuation of existing programmes will not be enough to address the issue of child malnutrition in particular. It will also necessitate more differentiation and emphasis at the state, district, and even village levels. As economic growth accelerates, the risk of growing inequality between groups, districts, regions, and so on grows. This necessitates concentrated attention in poor districts, as well as increased focus on 'forward-looking' vulnerability reduction and risk management by households targeting specific livelihood profiles. Environmental sanitation, personnel hygiene, proper child rearing, breast feeding, and weaning practices must be taught to the community, especially in light of India's changing rural lifestyle. A comprehensive child survival programme that includes supplemental feeding, growth and development monitoring, and early detection and treatment of illness must be developed and implemented with community

participation. To improve the state of malnutrition and thus health services, female education, and poverty, the government must spend more money on quality nutritional programmes.

There is a need for a paradigm shift in specific goals from:

- From childhood survival to childhood health.
- From food safety to nutrition safety (household and individual).
- Women's literacy, education, and skill development
- From a pregnancy and lactating women-only approach to a lifecycle approach that includes girl children, adolescents, and the elderly, and aid to empowerment through livelihood security for women.

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