

CURRENT SCENARIO OF FOOD CONSUMPTION & NUTRITIONAL STATUS OF CHILDREN (1-5 YEARS) IN AES AFFECTED RURAL AREA OF MUZAFFARPUR DISTRICT, BIHAR.

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Abstract:

Children between 1-5 years constitute 13.59% of Indian population. The children from this age group constitute an important valuable segment of population from the nutritional standpoint. The problems of infection and malnutrition are most prevalent in this age group. The rural area of Muzaffarpur has been facing this problem last few years. It is urgent need to reduce the level of malnutrition and micronutrient deficiency among children, as it acts as a contributory factor for the development of disease, because the state of malnutrition in Muzaffarpur, District, a large segment of its population is suffering from various nutritional disorder. Every second child under the age of 5 years in Muzaffarpur district of Bihar is stunted. Between 2016, 2018 at approximately 228 cases of AES were reported and 161 death due to this disease in 2019 in Muzaffarpur district. Claiming WHO, Unicef Report. It is urgent to reduce the level of micro and macro nutrient deficiency among children. One of the best solutions for this nutritional problems to encourage the proper nutritional education and strategies for improving physics access to food materials.

Keyword: Nutritional status, food consumption, AES (acute encephalitis syndrome).

Introduction

Nutrition is a basis human need and prerequisite to healthy life. A proper diet is essential from the very early stages of life for proper growth and development and to remain active.

Health and nutrition are the most important contribution factors for human resource development in the country. India has been classified by the World Bank as a country with “lower middle income”. It ranks 111th in terms of human development report among 125 countries in the Global Hunger Index (GHI) 2023. About 55.7% in rural and 43% in the urban areas are estimated to be below the poverty line in Bihar.

Food consumption, which largely depends on production and distribution, determines the nutritional status of the population. The food consumption pattern of a community varies due to many factors like socio-economic status, availability and access to food, culture factors, geographical environment etc. All these factors, both individually and collectively affect the food consumed which, in turn, affects the dietary behaviour and nutritional status.

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Nutritional status is the condition of health of people which can be attributed to the foods they habitually consume. It is the outcome of many direct and indirect influences of dietary, environmental, social, economic, cultural, genetic and most of other factors. It is, therefore, important to study the dietary behaviour and food consumption pattern in order to understand the nutritional problem of the community.

Malnutrition is a serious problem which threatens the health of the majority of population in the world. The nutritional and health status of the poor section of the society is more alarming. The problems of malnutrition greatly affect young population particularly children under five years who are at a stage when they experience rapid growth and are, therefore, more vulnerable. A vicious cycle of deprivation, a high death rate, a high birth rate and under nutrition are inter-related and their interaction makes the situation worse.

Table-A

Children Nutritional Status fact sheet of Muzaffarpur district(Percentage).	(2015-16) NFHS-4	(2019-20) NFHS-5
#Underweight (Weight for age)* (<5years)	42.3	34.7
#Stunting (height for age)* (<5years)	47.9	42.6
#Wasting (Weight for height)* (<5years)	17.5	19.9
Severely waste (weight for age)* (<5years)	15.6	8.1

Objective:

- To find out the food consumption pattern of 1-5 years old children.
- To access the nutritional status of 1-5 years old children.
- To work out an alternative strategy for improving the nutritional status of target group their socio-economic condition in Bihar.

Methodology:

Muzaffarpur district was selected purposively for conducting the present investigation with main objective of research. The sampling procedure consists of two main aspects 1.Selection of areas, 2.Selection of subjects. Pilki gajpati and Dholi village from the mural block of Muzaffarpur were selected. The subject were selected in such a way to know their socio – economic condition , Awareness about their nutritional requirements of 1 -5 years old children. A door to door survey had also been made and a sample of 180 such respondents from the list were drawn with the help of simple random sampling techniques. Data were collected by having discussions with child mothers of selected family. Anthrometric measurements taken were height and weight.

Result and discussion:

The result of the present study has been presented under various sections, data on socio-economic information, food consumptions pattern and dietary behavior of children were collected. For the successful completion of the study the data were obtained through direct interview, personal observation. These data after suitable statistical analysis has been compiled and presented in the form of appropriate tables and figures for meaningful result.

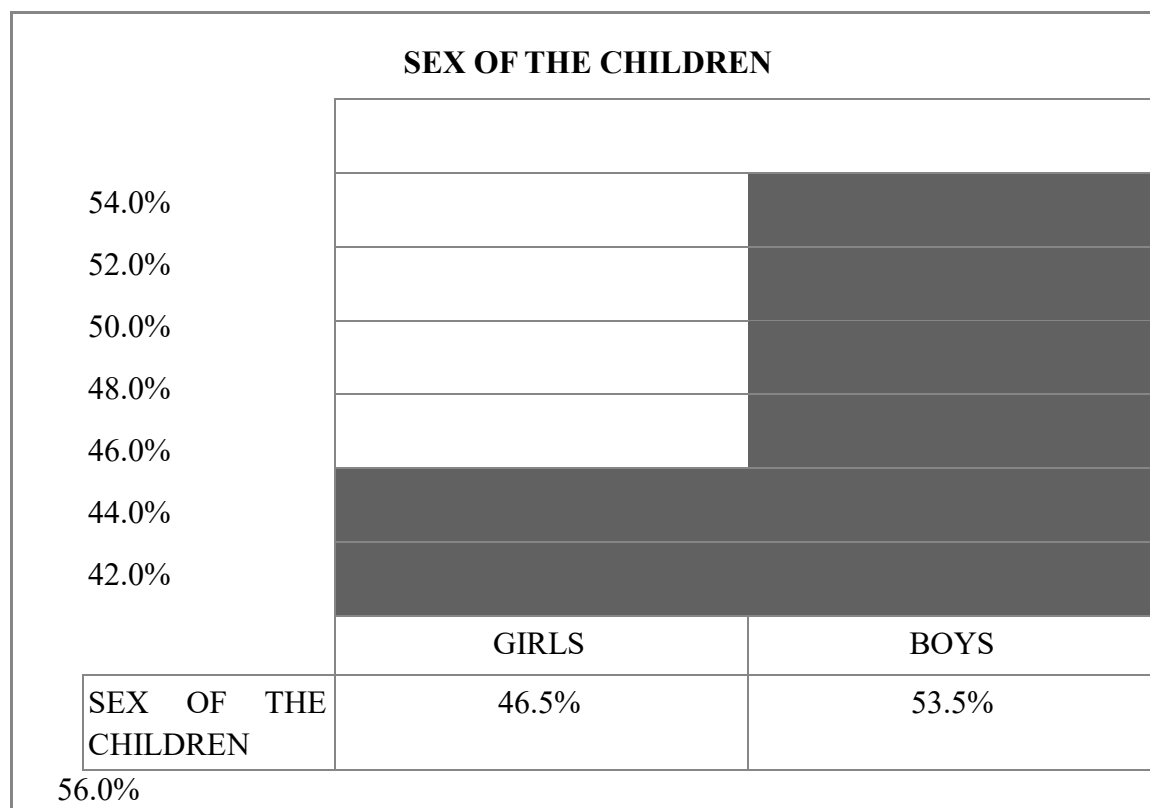
SOCIO-ECONOMIC PROFILE OF THE RESPONDENTS.**Figure – 1**

Figure – 1 revealed the data on sex of the between 1 – 5 years. According to the data 53.50 percent of the respondents were male while rests of them (46.5percent) were female respondents.

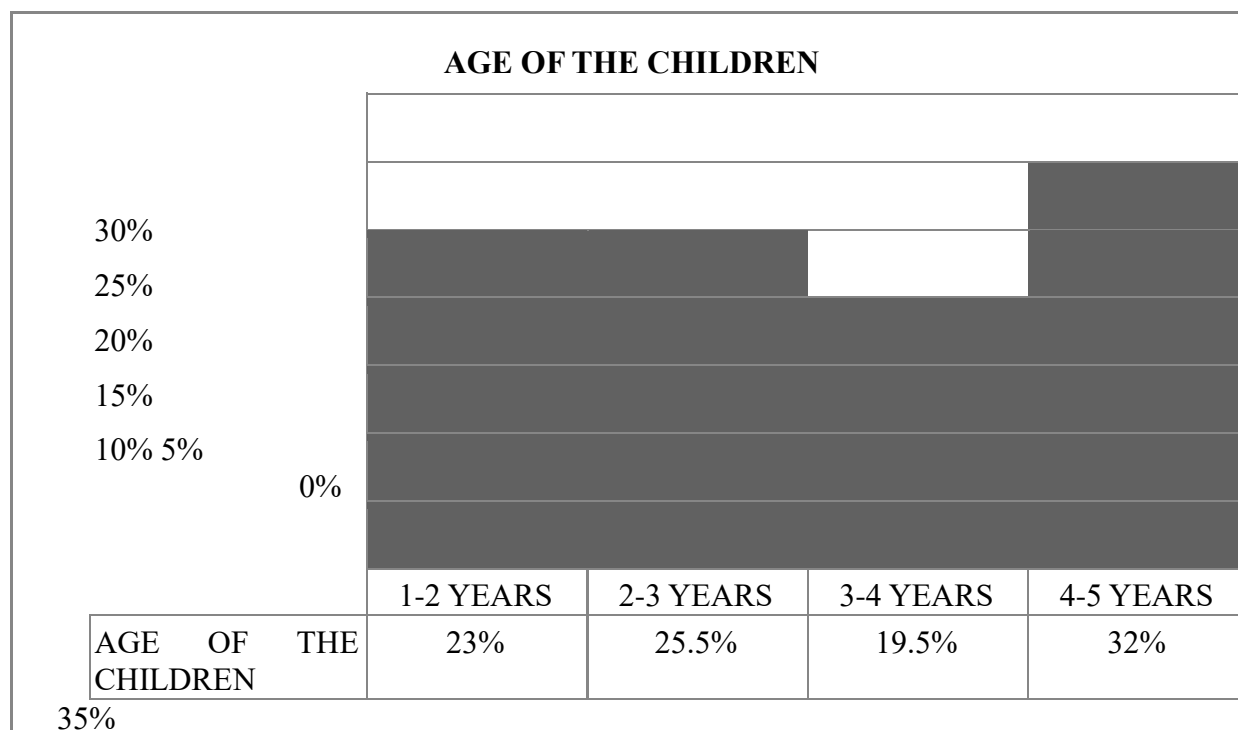
**Figure – 2**

Figure – 2 represent the age of the respondents. It is clear from the table that the majority of them (32 percent) were 4 – 5 years old. 19.5 percent of them were 3 – 4 years old. 25 percent and 23 percent of the respondents were 2 -3 years and 1 – 2 years old respectively.

Dietary analysis is an integral part in most of nutritional surveys. The main objective of any dietary assessment is to discover what the person under investigation in the habit of eating over the long range and in the short run. Dietary data on individuals are usually collected either to obtain information concerning average food intake or to know food habits of a particular individual.

In the present investigation, a 24 hours recall method carried out of to determine the food intake of respondents in the project area on the basis of information obtained from representative sample. The food intake was obtained for 180 children (from both groups). Data of food intake of children in presented in Table – 1

Table-1**Distribution of children according to body mass index (BMI)**

S.No.	Age Group (In Years)	Number	Normal BMI	Low BMI	Over Wt.
Male	2-3	25	10	15	-
	3-4	30	13	17	-
	4-5	25	10	14	1

	Total	80	33	46	-
Female	2-3	35	14	21	-
	3-4	20	09	17	-
	4-5	25	13	12	-
	Total	80	36	50	-

Body mass Index (BMI) is good index to assess the current forms of malnutrition in a community. Different level of B.M.I. given in Table no. 1 from stunning and under weight. very considerably by mothers education and land holding status of households. Children of mothers with no schooling 61% are under weight. compared with 29% of children whose mothers have secondary education out of total number of underweight. children 52% of children of mothers with no schooling are under weight. compared to 25% of children of mother having educated up to secondary level in both the groups of respondents children belongs to rural families. Taking the B.M.I. in consideration the children from female were more chronic energy deficient than other group. The reason of more prevalence of energy deficiency was probably due to the lack of supplementary food and other essential food.

Distribution of children according to mother's education

Table: - 2

Sr. N.	Mother's Education	Respondents
		%
1.	Illiterate	18.50
2.	Read and write only	16.00
3.	Primary	20.50
4.	Upper primary	19.50
5.	High school	13.50
6.	Intermediate	08.00
7.	Graduate & above	04.00
Total		100.00

Table – 2 revealed the data on mother education of the respondents such as illiterate, primary, upper primary, high school, and above high school. According to the table majority (20.5 percent) of the respondent's mothers have primary education, while 18.5 percent of the mothers were read and write only? 19.5 percent, 13.5 percent and 08 percent of the respondent's mother education was upper primary, high school and intermediate education respectively, 18.50 percent of them were illiterate, while 04 percent of the respondent's mother had graduated or above degree.

Table – 3

Food Group	1-5 children (M)		FEMALE
	Main Intake	RDA (gm)	Mean Intake
Cereals	210.66	175.00	190.02
Pulses	14.08	45.00	11.11
Green leafy Vegetable	3.28	62.22	3.30
Other Vegetable	47.54	40.00	54
Roots & Tuber	182.79	40.22	180
Fruits	-	50.00	-
Oil & Fat	4.92	22.50	18.63
Milk & Milk Products	23.36	200ml	
Sugar & Sweets	3.23	35	3.01

Table no. 3 Food intake of children (g/day)

From above table it may be observed that the intake of cereals, other vegetables and roots and tubers were more for both the categories of children than their respective RDA (recommended dietary allowances). The intake of pulses, green leafy vegetables, oil and fats, milk and juggery were comparatively low for both groups of children that their respective RDA.

Summary and conclusions

The main focus of the study was investigating nutritional status of children in rural families of Muzaffarpur. The comparative analysis shows no significant differences in health status of male and female children from rural family. The level of stunting and underweight are higher in children residing in lowest wealth quintile households in project area. Underweight and micronutrients deficiencies especially in preschool children were high due to poor environmental hygiene and lack of access to and to safe drinking water resulted in a high prevalence of infections lowered immunity due to under nutrition led to higher infection rates, resulting in further under nutrition. One of its major example is Encephalitis which occur in every year

during summer (April to July), among children in rural areas of Muzaffarpur District. Many Children die due to this disease since last few years. Around 1600 children were affected by this lethal disease. While analyzing their pathological report, two main points come into highlight firstly, they were severely malnourished and secondly their sugar level was very low. On this basis we can say that the malnutrition is one of the major cause of AES (acute encephalitis syndromes), as all the affected children belong to lower income group.

The most rational sustainable and long-term solution for this problem is ensuring available, accessibility and consumption of adequate amount of foods for both groups. Nutrition knowledge and nutritional awareness help to achieve the objective of proving optional nutrition to the population.

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