NUTRITIONAL STATUS OF TRIBAL PRE-SCHOOL CHILDREN (SP. REFERENCE TO BANKURA DISTRICT, WEST BENGAL, INDIA)

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Abstract: ***Nutrition and health were the most important contributory factors for human resource development in the country. But still, undernourishment continued to be a major public health issue and caused of a substantive proportion of all child deaths in every years specifically in developing countries like India. The large sections of Indian publication were suffered from varying of energy deficiency. The most vulnerable group regarding health and nutritional status was pre-school children living in rural as well as in urban slum areas, within the tribal pre-school children were the main victims of under nourishment. This paper carried out to assess the nutritional status of Bankura District. Different types of Tribal populations are belongs to the Bankura District. These are Sabar, Kheria, Santal (Mandi, Kisku, Murmu, Soren, Baskey , Tudu) Sardar, Kora, Bhumich , Sing Sardar etc.***

Keywords: Nutrition, Ethnographic and cultural, Clinical signs

Introduction

Children below the age of five years constitute nearly 15% of the total population of country and from the nutritional standpoint constitute a vulnerable segment and suffer the highest rate of morbidity and mortality for almost a decade evidence that more children die from malnutrition and it is does serious damage to the physical growth and intellectual performance in the later life. India has variety of tribal population they constitute about 8% of total population; these are considered to be aboriginals and confined to living in hilly and dense forest area isolated from the main stream. A great majority of them inhabitant in the east India Tribal inhabitant in east India mainly in west Bengal are included as schedule tribe and listed as economically backward tribe. Cultivation and other labour like unskilled labour is the main occupation.

MATERIAL AND METHODS

Bankura district has an area of 6,882 sq. kilometers and a population of 35,96,292, Male 18,40,504, Female 17,55,788 as per Census, 2011. The area of the district is large and it is thinly populated. This makes it quite difficult to make quality health services available to the community. Traditionally Bankura has been known for the problem of leprosy, malaria, filarial and fluorosis. Research setting is the specific place where data collection occurs. The selection of setting was done on the basis of feasibility of conducting study availability of the subject and co- operation from the villagers. The study was conducted at Barjora Block, Chatna Block & Gangajal Ghati Block in the District of Bankura. (W.B).

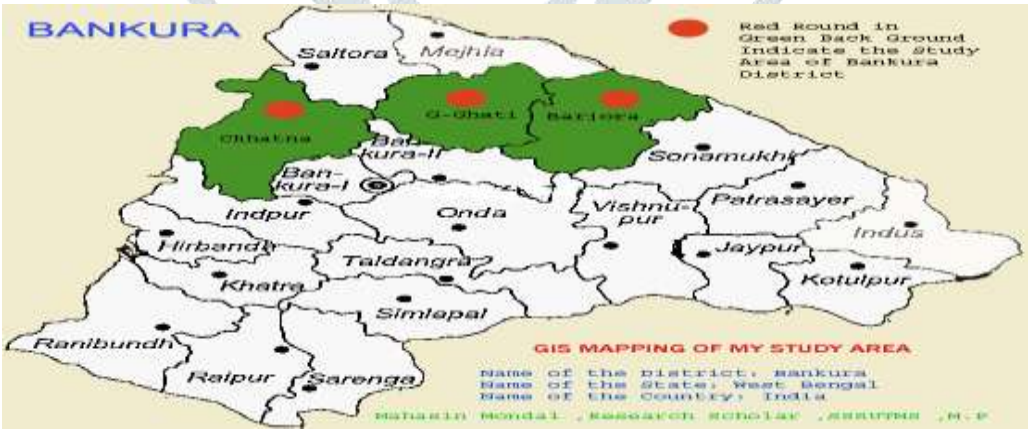

FIGURE 1.1 GIS MAPPING OF MY STUDY AREA

Research approach

Collection of data regarding health and nutritional issues of tribal pre-school children in Barjora, G-Ghati and Chatna block is very much necessary for evidence of research. It has not been done before in this region. In view of the problem selected in study area need to be fund for further research. Nutrition takes a major role to pretent or prevent the health hazarads on nutritional education.

Research Design

A research design is a blueprint for conduction a study that maximizes control over factors that could interfere with the validity of the findings. It is the plan and structure and strategy of reinvestigation of answers the research questing. It helps the research in deferring the attribute,

selection of population and type of statistical analysis to interpret the data. The investigative design selected for this study is descriptive correlative design. The purpose of descriptive Co-relation design is to describe variable and examine relationships.

Sampling Technique

To conduct the survey I shall be use stratified random sampling method in this method will be classified the total tribal children (1- 6 age group) into 4 groups or strata: -

1. School Children for 1 – 3 years of age group(male)
2. The School Children for 1 – 3 years of age group(female)
3. The school children for 3 – 6 age groups(male)
4. The school children for 3 – 6 age groups(female)

Ethnographic and cultural profile

The ethnographic and cultural aspect of the tribal communities of Bankura district in West Bengal have been enumerated by interviews with the key information's and the data have been supplemented from the available literatures.

Methodological of Statistical Analysis

For the statistical analysis I shall use 't'-test here't' is calculated by using the following formula:

$$\delta X = \frac{\delta s}{\sqrt{n}}$$

Data collection process

The data collection was from 15.03.2014 to 31.12.2014 and 02.05.2015 to 21.06.2015. Permission was obtained from the Block Development Officer. The investigator administered the tool to 501 children who were selected by using random sampling technique often introducing and explaining the purpose of the study. The anthropometric measurements of their children were taken and recorded however few difficulties arose during the data collection period. Some houses mothers had gone for work leaving their children with relative.

RESULT

A Structured interview schedule was used to assess the nutritional status of tribal pre-School children. The research design adopted for the study was descriptive co-relative design. Random samples technique was used to select 501 tribal pre-School children (1-6 age groups) from Backwards District. Main Finding of the study was discussed under the following tables.

Age in year	MALE			FEMALE		
	Mean wt. in kg	Less wt. in kg	% of under nourish children	Mean wt. in kg	Less wt. in kg	% of under nourish children
1	9.2	3.0	60.12	8.5	3.7	64.18
2	11.0	1.2	59.27	9.9	2.3	63.27
3	11.1	1.1	60.07	11.05	1.15	64.11
4	13.5	5.5	59.81	11.26	7.74	64.05
5	13.5	5.5	59.69	14.24	4.76	63.56
6	15.8	3.2	60.32	15.25	3.75	63.97

Table-1.1 Showing the under nutrition (weight for age) of some tribal pre-School children in the district of Bankura

Age in year	Height				Weight			
	Male		Female		Male		Female	
	Mean height in cm	Normal height in cm	Mean height in cm	Normal height in cm	Mean weight in kg	Normal weight in kg	Mean weight in kg	Normal weight in kg
1	72.75	73.9	72.24	72.5	9.2	8.4	8.5	7.8

2	82.83	81.6	79.25	80.1	11.0	10.1	9.9	9.6
3	87.82	88.8	88.96	87.2	11.1	11.8	11.05	11.2
4	95.81	96.0	95.85	94.5	13.5	13.5	11.26	12.9
5	109.23	102.1	108.74	101.4	13.5	14.8	14.24	14.5
6	115.44	107.2	114.56	105.33	15.8	15.3	15.25	15.20

Table-5.2 Showing the mean height & weight of tribal pre- School children in the district of Bankura

The table no. 1.2 shows that the excess height of female children than normal. But some male children are less height than normal height. On the other hand it shows that some male children are excess weight and some male children are less weight than normal weight. It also shows that some female children are excess weight and some female children are less weight than normal weight.

Deficiency signs	1 to 6 age group		3+ to 6 age group	
	% of Male	% of Female	% Male	% of Female
•Lake of lusture	35.89	28.20	18.88	10.48
•Sparse hair	10.35	12.23	11.75	15.25
•Dis pigmentation hair	7.21	12.60	9.27	13.17
•Flag sign	6.27	9.32	5.67	7.29
•Easy pluck ability	31.62	21.36	14.68	21.77
•Moon face	23.93	14.52	7.69	8.06
•Paleness of eye	5.12	10.25	9.79	10.48
•Angular stomatitis	9.40	11.11	11.88	12.09
•Chilosis	10.53	7.32	9.25	6.65
•Oedemas	5.53	4.27	1.25	2.41
•Atropicpapillac	12.26	15.70	1.39	8.26
•Mottled enamel	5.98	8.54	12.29	3.22
•Dental carries	30.25	26.24	3.39	2.41
•spongy germ	10.25	11.96	9.79	11.29
•Bleeding germ	4.27	5.12	4.89	8.06
•Xerosis	25.25	31.57	33.30	4.03
•Thyroid enlargement	5.21	1.70	13.10	2.41

Table 1.3 Percentage of prevalence of nutritional deficiency signs in 1 to 6 age group tribal pre-school children in the district of Bankura
Clinical signs of malnutrition

High prevalence nutritional deficiency signs among both male and female pre-school children show in table no.2. The maximum percentage of 1 to 3 age group males was suffered by xerosis, Dental carries, Moon face, and easy pluck ability and lack of lusture. But the maximum females in same age group were suffered by xerosis, Dental carries, easy pluck ability and lack of lusture. On the other hand maximum 3+ to6 age group males were suffered by xerosis, thyroid enlargement and lack of lusture. But the maximum female in same age group was suffered by Angular stomatitis, Depigmentation, sparse hair, easy pluck ability and spongy gum.

Conclusion

This research aimed to correlate the Malnutrition & Nutritional status by the measuring weight for age, Height for age & weight for height of tribal pre-School children which calculated by BMI. The study was conducted in 1 to 6 years of age group tribal pre-School children in the District of Bankura in 3 Blocks in West Bengal, India.

A structured interview scheduled was used to assess the nutritional study of tribal pre-School children by questionary method. The research design adopted for the study was descriptive correlation design Random sampling technique was used to selected 501 tribal pre-School children (1-6 age group) from Bankura District in West Bengal.

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