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RESEARCH ARTICLE

HEALTH OF MALNOURISHED CHILDREN

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ABSTRACT

Childhood under nutrition includes fatal growth retardation, stunting, wasting and deficiency of vitamins along with sub-optimum breastfeeding is a cause if majority of all children death. Childhood under nutrition is known to be at an increased risk of death. Nutritional status indicators especially bio-markers can be used to identify to those infants and children at a higher risk of dying due to morbidity and mortality. The level of education is often viewed as an indicator of the development of any country. The main reason for law level of education among rural women is a peculiar nature for their habitations. Due to lack of education specially related to proper nutritional practices and the importance and the knowledge of nutrient dense locally available foods which contribute to normal growth and development of children. The objective of this study is :to assess biochemical parameters (biomarker identification) of children; to explore dietary pattern of children.

INTRODUCTION

The health of children is of fundamental importance. Without ensuring optimal child growth and development significantly will be unsuccessful. Good nutrition of is a basic requirement for good health. Malnutrition among under five children is a major public health problem in India. This is reflected by the fact that the prevalence of under-weight children in India. This is reflected by the fact that the prevalence of under-weight children in India is among the highest in the world, and is nearly double that of Sub Saharan Africa. The dietary management of children with moderate acute malnutrition is based on the optimal use of locally available foods to improve nutritional status and prevent severe acute malnutrition. In situations of food shortage, or where some nutrients are not sufficiently available through local foods, supplementary foods have been used to treat children with moderate acute malnutrition. Indigenous people living in rural areas possess food resources that are usually not completely consumed by agriculture and health sectors. Indigenous people are often the most marginalised and disadvantaged regarding health care and other resources for well being, and extreme poverty is often the result. Successful food systems in transition effectively draw on locally available food, and traditional food culture. Lack of nutritional and agronomic information, a negative attitude towards traditional indigenous food (termed 'foods for poor'), policies that do not recognise sufficiently the important role of these foods in food security and health improvement and lack of advocates of such tools promote traditional and indigenous foods for all constraints. There is an urgent need to promote food based approaches that draw on indigenous food systems relevant to the problem of malnutrition especially regards to rural population. Promoting the production and strengthening usage of potential nutrients in strategic actions to improve food security and nutrition including the emerging health concerns. The level of education is often viewed as an indicator of the development of any country. The main reason for law level of education among rural women is a peculiar nature for their habitations. Due to lack of education specially related to proper nutritional practices and the importance and the knowledge of nutrient dense locally available foods which contribute to normal growth and development of children. Infant and young child feeding practices in particular continue to be a serious challenge to reduce malnutrition among children. In spite of unprecedented economic growth, improvements in childhood nutritional status in India over the last decade have been slow. The various aspects of nutrition among children points towards urgent need to take the call for aggressive awareness campaigns along with improved health care facilities with special privileges for the weaker sections of the society.

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Objective

I. To assess biochemical parameters (biomarker identification) of children
II. To explore dietary pattern of children.

Methodology

Period of study

The time taken for the study was one year that is July 2016 to may 2017.

Study design- The approach for this study was purposively one by using questionnaire schedule.

Sampling procedure

Sampling size- The sample size of the study was restricted up to 100 samples.

Sampling design- Purposive random sampling method was used to collect the sample for this study. Sample comprise of 100 school going children's including boys and girls from Chandraval (Bijnaur) and Noorpur Bhadrasa (Bijnaur).

Analysis of the data

The analysis of the data was tabulated with reference to the objective of the study and relevant statistic techniques will be used and the data will be analyzed using suitable SPSS software version 20.

Tools of the study

Food Frequency Method: The children were given the list of food items and mother were asked to mention the frequency of consumption by the children in the age group of 1-6 years .It is an inexpensive, more representative and easy to use tool to assess dietary pattern of an individual.

RESULTS AND DISCUSSION

Description of biomarker identification & immunization-

Table 1. Distribution of respondent on the basis of medical check-up

S. no.	Response	Rural children				Total
		Boys		Girls		
		N	%	N	%	
1.	Yes	18	32.14%	13	29.55%	31
2.	No	38	67.86%	31	70.45%	69
	Total	56	100	44	100	100

The below figure shows that only 18 (32.14%) boys respondent out of 56 were go for medical check-up and only 13 (29.55%) girls respondent were go for medical check-up. Majority of the children 69 respondents (38 boys (67.86%) and 31 girls (70.45%) did not go for medical check-up.

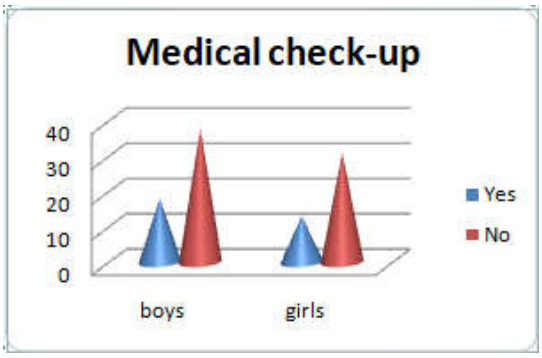

Figure 1. Distribution of respondent on the basis of medical check-up

Table 2. Distribution of respondent on the basis of frequency of medical check-up

S. no.	Frequency of medical check-up	Rural children				Total
		Boys		Girls		
		N	%	N	%	
1.	After 3 months	2	11.11%	1	7.69	3 (9.68%)
2.	After 6 months	5	27.78%	4	30.76%	9 (29.03%)
3.	After one year	11	61.11%	8	61.55%	19(61.29%)
	Total	18	100	13	100	31 (100%)

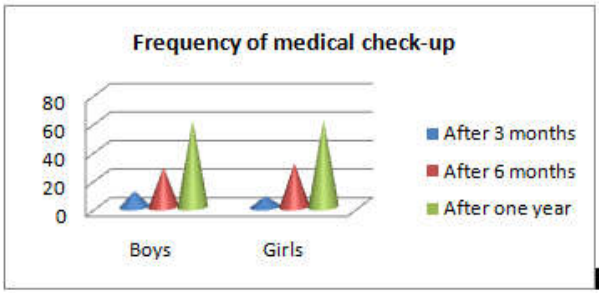

Figure 2. Distribution of respondent on the basis of frequency of medical check-up

Above figure shows that only 3 respondent (9.68%) whereas 2 boys (11.11%) & 1 girls (7.69%) were go for medical check-up after three months. 6 (29.03%) respondents whereas 5 boys (27.78%) and 4 girls(30.76%) were go for medical check-up after six months. 19 respondent (61.29%) whereas 11 boys (61.11%) and 8 girls (61.55%) were go for medical check-up annually.

Distribution of respondent on the basis of frequency of medical check-up

The above figure shows that 13 (13%) respondent were found anaemic, only one respondent (1%) was suffered from PEM, 17 (17%) respondent were found diarrheal disease and

Table 3. Distribution of respondents on the basis of morbidity status

S.no.	Morbidity	Yes		NO		Total
		N	%	N	%	
1.	Anaemia	13	13%	87	87%	100
2.	PEM*	1	1%	99	99%	100
3.	Diarrheal disease	17	17%	83	83%	100
4.	Cold	57	57%	43	43%	100

*PEM= Protein Energy Malnutrition

Table 4. Food consumption of pattern among rural children

Food Source	Never		Strong seasonal fluctuations		Monthly		Monthly more than once		Weekly		Weekly more than once		Daily	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Cereals[1]	-		-		-		-		-		3	3%	97	97%
Legumes[2]	-		-								86	86%		
Processed food[3]	-		-		7	7%	29	29%	34	34%	16	16%	14	14%
Meat	47	47%	-		28	28%	16	16%	9	9%				
Egg & egg product	47	47%	-		19	19%	6	6%	16	16%	7	7%	5	5%
Milk & milk product	-		-		-		-		37	37%	33	33%	30	30%
Green leafy vegetables	-		46	46%	23	23%	14	14%	9	9%	6	6%	2	2%
Other Vegetables	-		13	13%	21	21%	11	11%	7	7%	4	4%	44	44%
Fruits	-		43	43%	26	26%	13	13%	11	11%	5	5%	2	2%

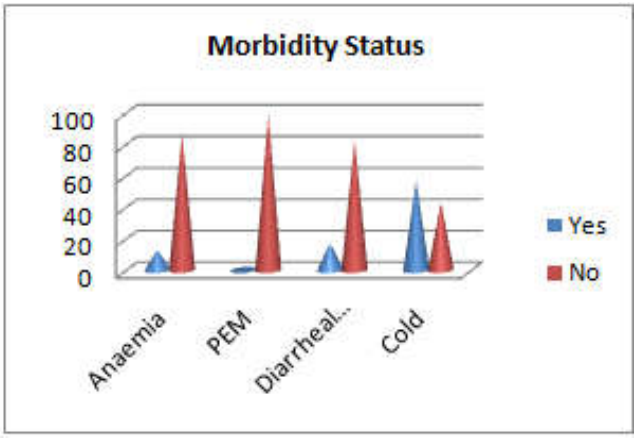

Figure 3. Distribution of respondents on the basis of morbidity status

majority of respondent 57 (57%) were suffering from cold, cough & running nose. Above table 4 indicates the percentages of consumption of food by using rural children that 47% respondent were never eating meat & meat products and egg & egg products. 86% respondent were eat legumes weekly more than once, only 14% respondent were eat processed food daily, 34% respondent were eat processed food weekly, 28% respondent were eat meat monthly, only 5% respondent were eat egg daily, Only 30% respondent were drink milk daily, 46% respondent were eat green leafy vegetables seasonally, only 2 % respondent were eat green leafy vegetables daily, 43% respondent were eat fruits seasonally & only 2 % respondent were eat fruit daily.

Conclusion

Children are the vanguard and supreme powers of the world of tomorrow. The health of children is of fundamental importance. Without ensuring optimal child growth and development their progress was significantly unsuccessful. Good nutrition is a basic requirement for good health. Therefore, sound knowledge of the needs of children is essential for guiding them properly. Traditional and indigenous food systems once lost are hard to recreate, underlining the imperative for timely documentation, compilation and dissemination of diminishing knowledge of biodiversity and the use of food culture for promoting sustainable diets. Indigenous food neglected and derided by many in the agriculture and food industries as well as by urban consumers, can be an important component in alleviating hunger, malnutrition and protecting the environment.

Recommendation

1. Nutritional awareness programmes should be organized for mothers in the rural areas of Bijnaur, Lucknow district

2. Repeated exposure is most critical during the early years of life, and it can take five to ten exposures to a new food before a child will accept it. In addition, parents should consider smaller portion sizes, encourage children to stop eating when they fell full, and avoid using food as a reward.
3. Increase in maternal childcare knowledge through nutrition/health education may contribute significantly to child's nutritional status if there is concurrent improvement in socioeconomic circumstances of women living in deprived rural communities.
4. Physicians, nurses and other health care professionals should actively discuss their parents immunization, weight and BMI with parents. Convesations about health at a physician's office can be difficult because of concerns about stigmatiztion and reluctance to recognise a challenging problem.
5. Health professionals training program and professional organisations should require that knowledge and skills related to malnutrition prevention be incorporated into their curricula and examinations so that health professionals have the awareness and skills to tackle this issues.

REFERENCES

Mishra *et al*. 2014. Malnutrition among School Children of Lucknow Sunita *International Journal of Science and Research (IJSR),* ISSN (Online): 2319-7064 Impact Factor (2012): 3.358

Mishra S. 2013. "Food". UGC net study manual home Science. Selective and scientific book publisher & distributer. PP. 2-7.

Mishra S. *et al*. 2007. "Nutritional anthropometry and preschool child feeding practices in working mother of central Orissa." Study of home community science.

Mishra S. 2005. "Assessment of malnutrition and remedial measures to improve the quality of life of children of Central Orissa" *Indian Journal of Preventive & Social Medicine,* 37(1&2),25-31.

Mishra *et al*. 2014. "Fast food Consumption pattern and Obesity among school going in Lucknow District" *International Journal of Science & Research (IJSR)*, 3 1672-1674

Mishra, 2007. "Nutritional anthropometry and preschool child feeding practices in working mothers of cetral Orissa" *Stud Home Comm Sci*., 1(2) 139-144

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