JNPE, June 2023, Vol.9, Issue 2, pp. 5 – 8 ISSN No. 2395-1974

"An Explorative Survey to assess the Nutrition Level among the Under-Five Children in the Selected Rural Area (Vinayakpur) of Kanpur in a View to Develop Information"

Prarthana Mahapatra

ABSTRACT

Malnutrition may involve under nutrition and include the symptoms of deficiency disease or it may be due to over nutrition arising from excessive intake of nutrition (Varanasi,199) in the case of children under two year they suffer mostly from under nutrition specifically PEM. The objectives of the study was

1. To assess the level of nutrition status among under-five children using anthropometric measurements.
2. To find out the association between the nutritional status & demographic variables.
3. To estimate the prevalence of malnutrition.

The sample was collected from 200 under-five children of Little Light Public school, Kanpur, cross sectional survey method was used for collection of data. In the result it shows that there is significant association of demographic variables with nutrition level at the level of 0.05 & there is a positive correlation between nutrition levels.

1 Introduction

Nutritional deficiency disorders are the major health problems in India and other developing countries. They affect vast majority number of population and responsible for approximately number of 55% of childhood death. They considered as leading illness and significant cause of childhood mortality and morbidity.

In India, there are about 60 million malnourished children and 1lack of children are dying due to effect of malnutrition. About 75-80% of hospitalized children suffer from degree or type of malnutrition. Approximately 25% pediatric beds are occupied patients whose major problem is malnutrition or in whom malnutrition is indirectly responsible malnutrition. People are considering being malnourished when they don't consume adequate calories, protein and nutrients to satisfy their bodies' growth and main requirements. [1]

Children are considered as the future of a nation. The health and nutritional status of the child population is a true reflection of the overall health and economic development of a country. Child malnutrition is a widespread public health problem having national and international consequences as adequate nutrition is an essential input for the well being of children. It is well documented that under-nutrition, particularly among children under the age of five years, is the most tragic form of human deprivation.

Malnutrition in its several forms of under-nutrition, namely wasting, stunting and under-weight has been coined as the "silent emergency" by the United Nations children's fund (UNICEF). It has been associated with endangering the health of women and children across the world. [2] Children below the age of five years constitute the most vulnerable segment of the community. Their nutritional status is a sensitive indicator of community health and nutrition, and under nutrition among them is one of the greatest public health problems in developing countries. [3]

2 Background of the Study

The WHO defines malnutrition as the cellular imbalance between the supply of nutrition and energy and the body'sdemand for them to Growth, maintenance, and specific function. The term PEM applies to a group of related disorder that includes marasmus, kwashiorkor. The term kwashiorkor is taken from the GA language of Ghana and mean "the sickness of the weaning" Williams first used the term in 1933 and it refer to an inadequate protein intake with reasonable caloric (energy) intake edema is characteristic of kwashiorkor but is absent in marasmus.[8]

Malnutrition may involve under nutrition and include the symptoms of deficiency disease or it may be due to over nutrition arising from excessive intake of nutrition (Varanasi,199) in the case of children under two year they suffer mostly from under nutrition specifically PEM. The Africa region has the highest estimated prevalence of stunting (48.1%) and has the lowest rate of improvement (20%) (Volt, 1991) under nutrition and under nourished need insufficient intake of

[1] Lecturer, Dept. of Community Health Nursing, Faculty of Nursing, Rama University Mandhana, Kanpur.Uttar Pradesh, India

food that result in malnutrition could be attributed to varied reasons (Morley and woodland 1992).[9] The WHO published the child growth standard for infant and children up to the age of five years based on a multi country study on growth of health breast feeding children under optimal condition in APRIL 2006. [10]

3 Need of the Study

In India of 2/3portion of the under five children of our country is malnourished among them5-8% is severely malnourished, whole rest fall in group of mild or moderate malnutrion ,so it can be said that Protein Energy Malnutrition one of the most wide spread conditions affecting child health.[14]

In India nearly 75% of populations reside in the village of the total rural population around 50% is still under the poverty line. Majority of children in India are not in a position to get adequate nourishment because of very low per capita income of their families. A significant proportion of these children live in economic and social environment. Sanitation, diseases, infections, inadequate access to primary health care, inappropriate child caring and feeding practice.[15]

"As per the report of the national family health survey (NFHS)-4 IN 2015-16, 35.7%children under 5 years of age are underweight and 38.4% stunted, indicating a reduction from the previous NFHS-3 conducted in 2005-6 , which reported 42.5% children under 5 years of age underweight and 48% stunted," Kumar said. Further, 22.9% woman (15-49years of age) has chronic energy deficiency (BMI less than 18.5) – a decline from the previous NFHS-3 level which reported 35.5% woman having chronic energy deficiency. The important determinants of malnutrition included inadequate food frequent infection, poverty, low access to health, education, and so on[17]

4 Aims & Objectives

Statement of the problem

"An explorative survey to assess the nutrition level among the under-five children in the selected rural area (Vinayakpur) of Kanpur in a view to develop information"

Title of the study

"Assessment of nutrition among the under-five children in selected area of Kanpur.''

Objectives of the study

1. To assess the level of nutrition status among under-five children using anthropometric measurements.
2. To find out the association between the nutritional status & demographic variables.
3. To estimate the prevalence of malnutrition.

Hypothesis

H_0: There is no significant association between the nutritional status & demographic variables.

H_1: There is significant association between the nutritional status & demographic variables.

Assumption

The researcher assumes that:

- Under-five children may have varying degree of nutritional status.
- Nutritional status will be measurable.

Delimitation

The study is delimited to

- **U**nder-five children.
- 200 sample

5 Methodology

Research approach:

Quantitative research approach was adopted in the present study.

Research design

In the view of nature of the study and to accomplish the objectives of the study, cross-sectional design was appropriate to assess the nutritional status.

Variable

A. Research variables:
Nutritional status of the under-five children.

B. Demographic variables:
Age of the parents, education of parents, no of children, monthly income of family, religion, dietary pattern, type of family, economic class, occupation of parents, source of information in family.

Population

Population of the present study will be the under-five children.

Sample: Sample of the present study will be the under-five children who will fulfill the inclusion criteria.

Sample size: Sample will comprise of 200 under-five children.

Sampling Technique:

Purposive sampling technique will be used

Inclusion criteria

- Children between the age group 0–5 years residing.
- Whose parents were willing to participate in the study?

Exclusion criteria
Children who are critically ill and those with congenital diseases.

Development and description of the tools used for the study-
Tools consist of two parts:

Section A : Will be consisting of demographic data Age of the parents, education of parents, no of children, monthly income of family, religion, dietary pattern, type of family, economic class, occupation of parents, source of information in family.

Section B: Will be consisting of tools related to anthropometric measurement & diet habit.

Scores: There was 20 items, each items have option with one most appropriate criterion. The maximum score was 60 & minimum score was 20.

Table no: 1 regarding nutritional of score:

S. N.	Level of Neutrino	Score	Percentage
1	Adequate	48-60	80-100%
2	Moderate	34-47	56-79%
3	Inadequate	20-33	33-55%

Method of the data collection-
Self-reporting

Ethical consideration
Ethical clearance certificate will be obtained from research ethical committee of RCN, Kanpur after presenting the research proposal with condition not to violate the rights of human beings/animals.

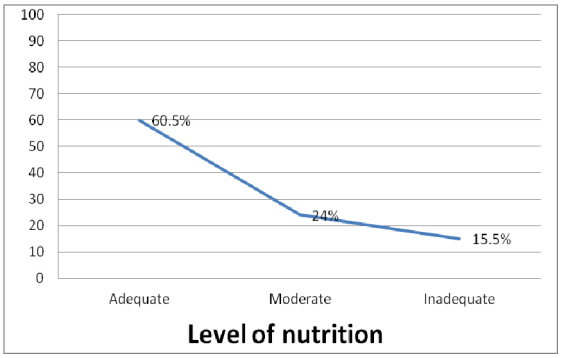
Plan for data Analysis
The data obtained from 200 samples & analyzed by appropriate statistical methods.

6 Results
Section-B
This section deals with the association between the nutritional status & demographic variables.

Demographic variables	Category	X^2	Df	Inference
1. Age of child	<1yr 1yr-3yr 3yr-5yr	0.74	4	N.S at 0.05 level T=9.49
2. No of Siblings	0 1 2 3 or more	17.53	6	S at 0.05 level T=9.49
3. Gender of child	Male	3.59	2	N.S
	Female			at 0.05 level T=5.99
4. Monthly income	<10,000/- 10,001-20000/- >20001/-	7.2	6	N.S at 0.05 level T=12.59
5. Education of parents	Primary Secondary Higher secondary Graduation or above	28.3	6	S at 0.05 level T=12.59
6. Diet pattern	Vegetarian	10.7	2	S at 0.05 level
	Non vegetarian			T=5.99
7. Family type	Nuclear Joint Extended	5.7	4	N.S at 0.05 level T=9.49
8. Occupation	Home based	7.82	4	N.S
	Private job			at 0.05 level
	Government job			T=9.49
9. Information	Senior family member	11.42	4	S
	Health care workers			at 0.05 level T=9.49
	Mass media			

SECTION -C

This section shows the prevalence of malnutrition.
Percentage wise distribution of the under-five children according their Level of nutrition.



7 Discussion

In this study it shows that there is significant association of demographic variables with no of siblings, education of parents, diet pattern, and source of information at the level of 0.05.

A cross sectional study was conducted "Nutritional status of rural primary school children and their socio demographic correlates from Varanasi". In that study it shows that Eight hundred and sixteen students from four schools were involved in the study. Out of total 816 study subjects 429 or 52.6% (201 boys and 228 girls) were underweight and 75 or 9.2% (39 boys and 36 girls) were stunted, educational status of parents of the was found to be significantly associated with the nutritional status of school children as the literacy status of the parents has been revealed to be strongly associated with nutritional status of children.

8 Conclusion

Nutritional deficiency disorders are the major health problems in India and other developing countries. They affect vast majority number of population and responsible for approximately number of 55% of childhood death. They considered as leading illness and significant cause of childhood mortality and morbidity.. In this study it concluded that there is significant association of demographic variables with no of siblings, education of parents, diet pattern, and source of information at the level of 0.05.

References

[1] Datta P. Pediatric nursing. 3rd edition. Jaypee brother's medical publishers [p] LTD; 2015.page no 204-207.
[2] Cuneo N and Baumgartner R. CTC model for treating acute childhood malnutrition. Medical Missionaries. (April 2009). [Available from; Medmissionaries.org.idsl.html.]
[3] Begam R, Textbook of foods. Nutrition and deities. 3rd edition. Sterling publisher private limited; 2007. Page no.7-49,103-105.
[4] Kandala NB, MadunguTP, EminaJBO, Nazita, KPD, cappuccino FP. Malnutrition among children under the age of five in the democratic republic of Congo [DRC]: BMC public health 2011; Page no.261.
[5] Agrawal M. Text book of pediatrics. 2nd edition. CBS publisher; 2017. Page no.72-74.
[6] Claydener L. Illustrated textbook of pediatrics. 2nd edition. Elsevier health science publisher; Page no. 35.
[7] Ramachandran P,Gopalon HS. Assessment of Nutritional status in India preschool children using WHO 2006 Growth standards. Indian J.Med publisher2011; page no. 47-53[PMC free article]
[8] UNICEF, Child info.The causes and effect of malnutrition among ages between 1-15 years. Journal of united nation FAO, 2007; Available athttps://www.grossarchive.com//html.
[9] Nabukera SK, Wingate MS, Salihum K. Child malnutrition in India; a greater issue. Loksabha, Answered on media 17.2017 .[https:// Unicef .in>story>child under nutrition in India.]
[10] Family Health survey 2015-16; [http://wap.business-staaandard.com/article/news-cm/as-per-the-National 117082201085-1.html.]