



A STUDY TO ASSESS THE HEALTH STATUS OF UNDER-FIVE CHILDREN RESIDING IN SELECTED VILLAGES OF SARBHON PHC, BARDOLI WITH A VIEW TO DEVELOP AN INFORMATION BOOKLET

Nursing

Ms.Dhanya George*

Assistant Professor, Maniba Bhula Nursing College,Uka Tarsadia University Maliba Campus, Gopal Vidyanagar, Barodli, Gujarat 394350. *Corresponding Author

Dr.Rani Shetty

Dean ,Maniba Bhula Nursing College,Uka Tarsadia University Maliba Campus, Gopal Vidyanagar, Barodli, Gujarat 394350.

ABSTRACT

A descriptive study was conducted to assess the health status of under-five children residing in selected villages of Sarbhon PHC, Bardoli. The purpose of study was to prepare the health profile of under-five children in selected villages of Sarbhon PHC, classify the children as per their level of nutritional status and to develop an information booklet for mothers of under-five children regarding prevention of malnutrition. Sample size comprised of 489 under five children. Samples were selected by purposive sampling technique and physical assessment tool was used to collect the data. The gathered data was analysed using descriptive and inferential statistics. Results depicts that, out of 489 children, there was a significant association found between health status of children with dietary pattern, education of the mother, income and type of family. No significant association found between health status of children with age, gender and occupation of the mother. To educate the mothers, the investigator developed an information booklet to increase the knowledge level of mothers on prevention of malnutrition, and therefore to improve the health and nutritional status of under-five children.

KEYWORDS

Health status, Under-five children, Malnutrition

INTRODUCTION

Good nutrition is essential for children to achieve their full developmental potential. Under nutrition have critical consequences for physical and cognitive growth and development. Malnutrition refers to the situation where there is an unbalanced diet in which some nutrients are in excess, lacking or wrong proportion¹. Simply put, we can categorize it to be under-nutrition and over-nutrition. The primary cause of malnutrition is inadequate and faulty diet. Apart from poverty and socio-economic factors, environmental factors also play an important role in the dietary deficiency diseases. Malnutrition is not due to deficiency of a single nutrient, but is often a result of inadequate intake or poor utilization of food². This leads to various degrees of growth retardation. When growth retardation is severe, functional deficiencies like resistance to infection, poor intellectual development, and frequent infections contribute to malnutrition. A decline in the practice and duration of breast feeding combined with inadequate weaning practices are the important causes of malnutrition. There are a host of factors that influence the nutritional needs and nutrition intake of children. These factors can be categorized as being both biological and non-biological. Biological factors include age, gender, growth, disease states, and genetic makeup. Among the non-biological factors, socio-economic status is the most important. Poverty is one of the major socio-economic causes of variation in nutrient intake, and it also impacts nutrient requirements. Poverty imposes constraints to live in environments that are less food secure and that have greater potential health risks, including environmental contaminants such as lead, and other heavy metals. Parasites, especially hookworms, malaria, cause blood loss, which increases nutrient needs. These parasites generally are more prevalent in poor environments. Socio-cultural factors, such as religion, food, and social status, also influence nutritional intake and needs³. Religion and culture influence what people understand to be edible foods, what they eat, and as such has an impact on which nutrients are consumed and which nutrients may be needed in higher amounts (Cultural Foods, 2000).

The **objectives** of the study were preparing the health profile of under-five children in selected villages of Sarbhon PHC, classify the children as per their level of nutritional status and to develop an information booklet for mothers of under-five children regarding prevention of malnutrition. The study was based on the assumption that, mothers may have some knowledge regarding the nutritional status of under-five children and the informational booklet may help the mothers to enhance their knowledge towards prevention of malnutrition. It was hypothesized that, health status of under five children will be influenced by their age, gender, religion, type of family, dietary pattern, birth order and education, occupation, income, age at marriage, age at first delivery, number of children and source of health information of mothers.

MATERIALS AND METHODS

Using a descriptive research design, 489 children from villages of Sarbhon PHC, were surveyed. Target Population of the study were under five children in the age group between 2-5 years and purposive sampling technique was used to recruit them in the study.

Mothers who consented to be a part of this study and having a male and female child between the age group of 2-5 years and these mothers who can comprehend Gujarati, Hindi and English languages were included. The mothers of children who are suffering with chronic diseases or illness were excluded from the study.

Development and description of the tool The tool consisted of socio-demographic data such as age, gender, religion, type of family, dietary pattern, birth order and education, occupation, income, age at marriage, age at first delivery, number of children and source of health information of mothers and physical assessment checklist consisted of head-to-toe examination including height, weight, BMI, head circumference, chest circumference, mid arm circumference, abdominal girth to find out any abnormalities in the body⁴. The level of malnutrition have categorised as mild, moderate and severe malnutrition on the basis of Gomez classification.

Results:

Major findings of the study were presented as follows:

The health profile of under-five children in selected villages of Sarbhon PHC.

Frequency and percentage distribution of samples according to demographic variables

Demographic characteristics of the children revealed that, majority 205 (41.9%) of the children belonged to the age group between 3-4 years are and 129(26.4%) were belonged to the age group between 4-5 years of age. 304(62.4%) of subjects were male children and rest 185 (37.8%) were female children. Most 365 (74.6%) of the children were consuming mixed diet (veg.& non veg.) and rest 124 (25.4%) were having vegetarian dietary pattern. The majority 262(53.6%) of mothers were having primary education and only 3(0.6%) were graduates. Most 405(82.8%) of the mothers are housewives and 21(4.3%) having private job. Most 170(82.8%) mothers have income below 5000 rupees and 21(4.3%) were having between 75,000 to 1,00,000 rupees. The majority 395 (80.8%) of children were residing at nuclear family and rest 94 (19.2%) were residing at joint family.

Table 1: Frequency and percentage distribution of samples according to level of malnutrition

Level of malnutrition	BMI score	Frequency	Percentage
Normal	≥ 18	61	12.5
Mild	15- 17.99	338	68.3

Moderate	12- 14.99	76	15.5
Severe	< 12	18	3.7

1/7/2017]; Springer International Publishing AG: Vol. 73, Issue 5, p. 417-421. Available from URL: <https://link.springer.com/article/10.1007%2FBF02758565?LI=true>

As per the BMI scores of children assessed, 338(68.3%) of them were having Mild level of malnutrition, 76(15.5%) of them in Moderate level of malnutrition, and only 18(3.7%) of them had severe level of malnutrition. 61(12.5%) students BMI were normal⁸.

Association between health status of under-five children with their selected socio demographic variables.

There was a significant association found between health status of children with dietary pattern (χ^2 value = 44.645, $p < 0.001$) education of the mother (χ^2 value = 19.781, $p < 0.019$), income (χ^2 value = 14.950, $p < 0.020$) and type of family (χ^2 value = 14.221, $p < 0.002$). Age, gender and occupation of the mother did not have significant influence on the health status of the children⁷.

DISCUSSION

The present study was under taken to assess the health status of under-five children in selected villages of Sarbhon PHC, Bardoli. The **objectives** of the study were preparing the health profile of under-five children in selected villages of Sarbhon PHC and classify the children as per their level of nutritional status. Target Population of the study were under five children in the age group between 2-5 years and purposive sampling technique was used to collect the data.

The above findings were supported by findings of the study conducted by Rakhav Chani, *Pratibha Kohli (2018)* to assess the health status of under five children with the objective to assess health status of under five children in rural areas of Kolkata⁵. Purposive sampling technique was adopted to select the children. Out of 170 children studied, 82 (48.23%) were boys and 88 (51.77%) were girls. Mild malnutrition found in 63 (37.05%) children with 95% CI (33.35- 40.75) and was statistically significant ($p < 0.05$) with boys 29.27% and girls 44.31%. Moderate malnutrition was found in 65 (38.23%), boys were 32.92% and girls 43.18%. Severe malnutrition was seen in 17 (10%) children, boys were 6.10% and girls 13.63%. **The study concluded that the effective strategy with good monitoring and evaluation is important to improve the nutritional status of the under-five children**¹⁰.

CONCLUSION

The findings of the study revealed that malnutrition is prevalent away and children in rural areas irrespective of different approaches taken by Government to reduce it. However severe level of malnutrition is minimum which is encouraging. Educating mothers regarding importance of malnutrition in growing children is the need and community health nurse should pay special attention to this area.

Conflict of Interest

The author declare that there is no conflict of interests relevant to this work.

Recommendations

- A similar study on a large sample using an interview schedule may help to draw more definite conclusions and make generalizations of findings.
- A similar study can be conducted to find out awareness of parents among larger number of samples.

REFERENCES

1. Venom J. Impact of malnutrition on immunity and infection. [online]; [cited on 01/07/2017]; Journal of Venomous Animals and Toxins including Tropical Diseases; vol.15 no.3 Botucatu 2009.; Available from URL: <http://dx.doi.org/10.1590/S1678-919920>.
2. Malnutrition. Childhood malnutrition is a significant health problem in developing countries; Wikipedia [online]; [cited on 30/06/2017]; Available from URL: <https://en.wikipedia.org/wiki/Malnutrition>
3. UNICEF report on hunger and related protein energy malnutrition [online]; [cited on 24/06/2017]; Available from URL: <http://unicef.in/Story/1124/Nutrition> Basavanthappa BT; Community Health Nursing. 2nd ed. Jaypee Brothers Medical Publishers; New Delhi ; 2008: P.526.
4. Abraham (2001) "Text Book of Pediatrics Nursing" Singapore, MC caraw hill international company page no: 46-93
5. Malnutrition in India. Wikipedia[online]; [cited on 27/06/2017]; Available from URL: https://en.wikipedia.org/wiki/Malnutrition_in_India
6. Basavanthappa (1998) "Community Health Nursing" 7th edition, Culcutta, jaypee brothers, page no: 64-74
7. Suresh K. Sharma (2012), "Nursing Research And Statistics" published by Elsevier a division on rad Elsevier India (p)Ltd, page no:232-240.
8. Pelletier D. L., Frongillo E. A., Schroeder D. G. The effects of malnutrition on child mortality in developing countries. Bulletin World Health Organ. 1995[online]; [cited on 08/07/2017] Available from URL <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2486780/>
10. Rakhav Chani, *Pratibha Kohli et.al.* Influence of health status and nutritional status of under-five children (2018) The Indian Journal of Pediatrics [Online]; [Cited on