

Knowledge regarding Malnutrition among the Mothers of under Five Children

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Abstract: *Nutrition is important for everyone, and it is more important for children because it is directly linked to all aspects of their growth and development, India is one among the many countries where child malnutrition is severe and also malnutrition is a major underlying cause of child mortality in India. Various studies and surveys have been conducted to find out the root causes of child malnutrition. ¹ The rural India is witnessing more malnutrition among children < 5 years as higher percentage of stunted, wasted and underweight children were reported from rural areas. Most common causes of malnutrition included faulty infant feeding practice, impaired utilization of nutrients due to infection and parasites. Inadequate food and health security, poor environment condition and lack of proper child care practice. ² The overall knowledge of the subjects in regards to malnutrition under five children showed that 43 mother of under five children poor knowledge i.e. less than 33 % (0-10), 102 mother of under five children who had good knowledge i.e. between 34-67% (11-20) and 55 mother of under five children had excellent knowledge i.e. above 67% (21-30) about the malnutrition. Mothers need special knowledge regarding malnutrition to better health of child. The study revealed that majority of mothers belonged to 22-25 years of age group and had inadequate exposure to child. This study gave mothers entry in involvement in nourishment of children and shapes their early transition to motherhood.*

Keywords: Malnutrition, Mother's of under five children, Knowledge, Assessment, Information booklet

1. Introduction

Child health is the foundation of the family and wealth of a nation. Good nutrition is a key component of growth and development which is required for maintenance of health throughout the life.³ "Nutrition is defined as combination of dynamic process by which the consumed food is utilized for nourishment, structural and functional efficiency of every cell of the body." Under five children require balanced nutrition to become healthy for national growth and economic development.⁴

According to the world health organization (who), 10.5 million children younger than 5 yr died in 1999. Of these, 99% lived in developing countries. Causes of death were attributed to malnutrition (54%), For centuries, India has been a country which faced a numbers of natural calamities and epidemics that manifested into a series of health problems for the country. During the British rule in India, a numbers of draughts and famines plagued the country side, which resulted poverty and malnutrition particularly of women and children.

Malnutrition results due to imbalance between the body's needs and the intake of nutrients, which can lead to syndromes of deficiency, dependency, toxicity, or obesity. Most of the malnutrition indicates under nutrition, in which nutrients are undersupplied. Under nutrition can result from inadequate intake, malabsorption, abnormal systemic loss of nutrients due to diarrhea, hemorrhage, infection and it is associated with poverty or social deprivation. The risk of under nutrition is also greater at certain times in a person's life, i.e., infancy, early childhood, adolescence, pregnancy and lactation, and old age. Malnutrition is the outcome of many factors i.e. as inadequate food intake and frequent illness. (Inadequate food intake arises from poor access to food). Inappropriate feeding, caring practices, insufficient health services and poor environment sanitation and poverty.

Improvement of nutritional status of children is an essential component of primary health care, prevention of malnutrition require comprehensive and systematic analysis and planning.⁵

Mother's education can generate different types of intra household effects and thereby reducing the risk of nutritional deficiency E.g. Malnutrition. The effects which will bring through mothers' education were;

- 1) Improvement in health and nutrition knowledge.
- 2) Psychological changes
- 3) Shift of power relations within the household in favor of better nutrition which includes breast feeding, weaning practices and child feeding and pregnancy diets may lead to more effective dietary behaviour on the part of mother's who manage food resources within the household.

2. Literature Survey

According to the World Health Organization, Malnutrition is estimated to contribute to more than one third of all child deaths, although it is rarely listed as the direct cause (**WHO Nutrition 2013**). According to the Food and Agricultural Organization (FAO) hunger statistics, 870 million people in the world have not enough food to eat. Although this number has fallen by 130 million since 1990 but the progress has been slowed after 2008. The same statistics shows that vast majority of hungry people live in developing countries (98 percent) and among them 15% of the population is undernourished. This has resulted to 2.6 million deaths of children under five each year, which is one third of the global total number of children (**FAO 2012**). From the Millennium development report, countries in Africa and Southeast Asia are most vulnerable to malnutrition. Very slow progress rate shows that most effort and commitments are required to achieve the aim by the set target of 2015 (**MDG 2011**).⁶

According to a study done in **Kwara state Nigeria, Babatunde (2011)** reported that there was a significant relationship between sex of a child and malnutrition, Male children were more likely to be malnourished than their female counterparts. This is probably due to increased attention paid to female children unlike the male children. Another study done in Botswana revealed that stunting, wasting and underweight were also significantly more prevalent among boys than girls (**Salah and Nnyepi., 2006**).⁷

According to National Council of Educational Research & Training's latest report (2005) children covered under MDM have higher achievement level than those who were not covered under it. Situational analysis of MDMP in Rajasthan showed MDM to be contributing to gender equity and women employment. CORD study in Delhi reported that the impact of attendance was more likely on girls, who often came to school without breakfast. A study on rural area of Karnataka revealed reduced absenteeism in 64% of the schools (Naik 2005). In Madhya Pradesh 15% increase in enrollment was seen which was more marked in the case of SC and ST children (43%) (Samaj Pragati Sahyog 2005)⁸

Problem Definition

A descriptive study to assess the knowledge regarding malnutrition among mothers of under five children in Gopeswar Basti Bikaner, with a view to develop an information booklet.

3. Methodology/ Approach

Research Design

The research design selected for present study was non-experimental descriptive research design

Variables

Study variables: Knowledge regarding malnutrition among mother of under five children

Attributes Variables:- Age of mother, religion, type of family, number of under five children, mother education level, mother occupation, monthly income of family and dietary pattern of family.

Setting of the study

The area selected for data collection was Gopeswar Basti Bikaner district situated north west in Rajasthan

Population

The population of the study was comprised of mothers' of under-five children who are residing in Gopeswar Basti Bikaner.

Sample and sampling technique

In this study non-probability purposive sampling technique was used to select the samples based on inclusive and exclusive criteria.

Criteria for selecting of sample

Inclusion criteria

- Have children up to 5 year of age
- Live in selected areas.

- Available at time of data collection
- Willing to participate in the study
- Able to understand languages Hindi/English/Local.

Exclusion criteria

- Not having children up to 5 year of age.
- Not willing to participate in the study

Development of tools

After an extensive review of literature and discussion with the expert, structure knowledge questionnaire for mother of under five children regarding malnutrition was developed and validated

Reliability

Reliability of the structured knowledge questionnaires was found to be reliable assessed by formula $kr 20$ and was found $r = 0.882$. It shows that the tool was found highly reliable.

Procedure for data collection

Formal permission to conduct study was obtained from concerned authorities. The study was conducted during the month of May-June 2015 with 200 mothers selected as sample using purposive sampling technique. After introducing about self and purpose of the study, written consent from the samples was obtained assuring maximum anonymity, investigator conducted study by assessing knowledge using structured knowledge questionnaire, after 30 to 45 minutes was spent by each subject for answering the questions each time.

Plan of data analysis

Descriptive statistics

- 1) Frequency distribution and percentage distribution was used to describe knowledge and socio demographic variables
- 2) Mean, median, range and standard deviation used to describe level of the knowledge scores.

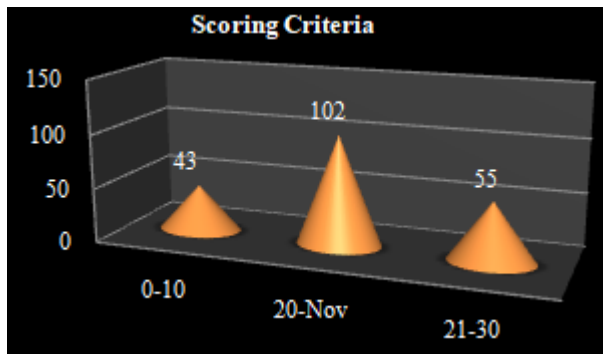
Inferential statistics

Inferential statistics such as chi-square test was used to identify the relationship between the knowledge with selected socio demographic variables and for testing the hypothesis.

4. Results and Discussion

In the current study the researchers identified

- The overall **mean** knowledge score obtained by the mother of under five children was **16.13** and **median** was **16.5** with **standard deviation 6.50** and knowledge score were in the **range of 3-29**.
- The scoring criteria there was **43 mother of under five children poor knowledge** i.e. less than 33 % (0-10), **102 mother of under five children had good knowledge** i.e. between 34-67% (11-20) and **55 mother of under five children had excellent knowledge** i.e. above 67% (21-30) about the malnutrition.



There is a significant association between the knowledge score of mothers and selected demographic variables like **religion** of participants $\chi^2 = 16.77$, **mother education** of the participants $\chi^2 = 120.01$, **monthly income of family** of participants $\chi^2 = 101.67$ and **dietary pattern of family** $\chi^2 = 17.71$. Hypothesis is accepted.

There is no significant association between the knowledge level of mothers and selected demographic variables like **Age** $\chi^2 = 1.134$, **type of family** $\chi^2 = 1.034$, **No of under five children** $\chi^2 = 3$, and **mother occupation** $\chi^2 = 8.46$ hence the null hypothesis is accepted at the 0.05 level of significance.

5. Conclusion

The present study assessed the knowledge regarding malnutrition among mothers of under-five children. The following conclusions were drawn on the basis of the present study i.e., to assess the knowledge of mothers of under-five children regarding Malnutrition.

- 1) Mother of under five children belong to 22-25 year, 26 % (52) belong to above 30 year, 24.5% (49) belong to 26-29 year and 11 % (22) belong to 18-21 year.
- 2) Among 200 mothers 72.5% mothers were belonging to Hindu family, 25.5% belong to Muslim, and 0.5% belongs to Christian family
- 3) Among 200 mothers 61.5% (123) belongs to joint family and 38.5% (77) belongs to nuclear family
- 4) 61% (122) mothers were having one under five children, 34% (68) mothers having two under five children and only 05% (10) mothers having three under five children
- 5) 39% (78) mothers were illiterate, 41% (82) mothers were up to secondary level, 10% (20) mothers were up to graduate level and 10%(20) were post graduate level
- 6) Most of mother 80.5%(161) were house wife ,15%(30) were self business ,3%(06) were government servant and only 1.5%(03) were private servant
- 7) 31.5 % (63) family income were Rs 3001-8000, 30.5 % (61) family income were Rs8001-13000, 24 % (48) family income were Rs >13000 and only 14 % (28) family income were Rs <3000
- 8) 127) dietary pattern of family were vegetarian, 31%(62) were non-vegetarian and 5.5%(11) were vegetarian with egg
- 9) The mean score was 16.13 with standard deviation 6.50. Over all maximum knowledge score of mother was 29 and minimum knowledge score of mother was 03
- 10) The scoring criteria there was 43 mother of under five children poor knowledge i.e. less than 33 % (0-10), 102 mother of under five children who had good

knowledge i.e. between 34-67% (11-20) and 55 mother of under five children had excellent knowledge i.e. above 67% (21-30) about the malnutrition

- 11) By means of chi-square test it was proved that, there was significant relationship between **religion, mother education, monthly income of family and dietary pattern of family.**
- 12) No significant relationship was found between **age of mother, type of family, number of under five children and mother occupation.**
- 13) Mothers have special needs for knowledge regarding malnutrition to better health of child. The study revealed that majority of mothers belonged to 22-25 years of age group. Mothers had inadequate exposure to child. This study gave mothers entry in involvement in nourishment of children and shapes their early transition to motherhood.
- 14) This study is focused on better support for mothers that more resources are given to care so the public has to be made aware of importance of education on under five children. Hence the nurses coming in contact with mothers should take the initiative to provide necessary information to the mothers regarding malnutrition, so as to improve the quality of child care services amongst mothers of under five children.

6. Future Scope

Child is precious to his parents, to his family, community, and nation and to the world at large. Malnutrition is widely recognized as a major health problem in developing countries. Growing children in particular are most vulnerable to its consequences. The current nutritional status of children not only reflects their well being of the present time but also reflects future outcomes in terms of their health and development. Prevention is better than cure, so in order to prevent malnutrition we need to focus on improving the mother's knowledge regarding source of healthy nutritious diet for children, education level of mothers and identify early stage of malnutrition. As a health professionals we should do research studies on prevention of malnutrition.

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