A Study to Assess the Knowledge regarding Factors Causing Malnutrition among Mothers of Malnourished Under-Five Children Attending IYCF Clinic at a Selected Hospital of West Delhi

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Abstract

Nutrition of under-five children is of paramount importance because it can lead to long-lasting effect on the mental and physical health of the children. India faces the burden of diseases in which nutritional deficiencies are most common. A study was conducted to assess the knowledge regarding factors causing malnutrition among the mothers of malnourished under-five children. Quantitative approach with a descriptive research design was adopted. Thirty mothers of malnourished under-five children attending IYCF clinic at DDU Hospital, New Delhi, were selected using convenient sampling technique. The tool used was the structured interview schedule. The results of the present study revealed that overall mean knowledge score was 13, which was 43.34% of total score revealing average knowledge of the mothers regarding factors affecting malnutrition.

Keywords: Malnutrition, Under-five children, IYCF

Introduction

Protein energy malnutrition (PEM) is one of the prime nutritional health problems in India. PEM leads to poor growth and high level of mortality among children between 12 and 24 months, which is a major cause of 30% of deaths among under-five children. Globally, the child deaths related to under nutrition in 2011 are 3.1 million annually or 45%. The prevalence of stunting is higher in South-Asian region. Globally, in 2011, 165 million children were affected by stunting and 52 million children by wasting.

According to 2005-06 National Family Health Survey, 42.5% of under-five children were underweight, 48% were stunted, and 20% wasted. The Rapid Survey on Children conducted in India from 2013 to 2014 reported the prevalence of underweight among under-five children as less than 30%. Every third child in India is considered underweight.

Malnutrition is a major public health problem. Almost half of India’s under-five children are malnourished and it remains a major health problem to achieve India’s target of achieving the Millennium Development Goal (MDG). The key to overcome this problem is prevention. Education is important to create awareness among the public in modification of practice and behavior.

A study was conducted to assess the knowledge regarding factors causing malnutrition among the mothers of malnourished under-five children attending IYCF and to develop and distribute information guidelines on Care of Child with Malnutrition.

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Materials and Methods

Research approach used for this study was quantitative. The research design selected for the study was descriptive research design. Setting of the study was Infant and Young Child Feeding (IYCF) clinic at Deen Dayal Upadhyay Hospital, New Delhi. Study population was mothers attending IYCF clinic for their malnourished children below 5 years of age.

Total sample size was 30 and convenient sampling technique was used for selecting samples.

The tool used to collect data from the samples was structured interview schedule. The tool comprised of two parts: Part A and Part B. Part A contained demographic and socioeconomic information of mothers and children such as age, education level of mother, monthly family income, birth place, birth weight and birth order. Part B comprised of 30 questions regarding knowledge on factors causing malnutrition in children classified in three areas of prenatal factors, feeding practices and common illnesses and immunization. Content validity was done. Formal administrative approval was obtained from hospital authorities. Data was collected by interviewing the mothers from 1st December to 20 December 2015. Data was analyzed using descriptive statistics. The demographic variables of the mothers were described using frequencies and percentages. Knowledge scores were analyzed using mean, mean scores and mean percentage scores.

Results

Table 1. Frequency and Percentage Distribution of Demographic Characteristics of Mothers of Malnourished Children

| Sample Characteristics          | Frequency | Percentage |
|--------------------------------|-----------|------------|
| Age of mother (years)          |           |            |
| 20–25                          | 16        | 53.34      |
| 26–30                          | 4         | 13.33      |
| 31–35                          | 6         | 20         |
| Above 35                       | 4         | 13.33      |
| Religion                       |           |            |
| Hindu                          | 20        | 66.66      |
| Muslim                         | 6         | 20         |
| Sikh                           | 2         | 6.67       |
| Christian                      | 2         | 6.67       |
| Education of mother            |           |            |
| Illiterate                     | 9         | 30         |
| Primary                        | 4         | 13.33      |
| 10th                           | 3         | 10         |
| 12th                           | 6         | 20         |
| Graduate                       | 8         | 26.66      |
| Place of living                |           |            |
| Urban                          | 15        | 50         |
| Rural                          | 6         | 20         |
| Slums                          | 9         | 30         |
| Occupation of mother           |           |            |
| Employed                       | 13        | 43.33      |
| Unemployed                     | 17        | 56.66      |
| Family income per month(Rs.)   |           |            |
| Below 5,000                    | 11        | 36.66      |
| 5,000–10,000                   | 13        | 43.33      |
| 10,000–20,000                  | 6         | 20         |
| Type of family                 |           |            |
| Nuclear                        | 19        | 63.33      |
| Joint                          | 11        | 36.66      |
| Number of children             |           |            |
| 1                              | 3         | 10         |
| 2                              | 14        | 46.66      |
The data presented in Table 1 shows that majority of the mothers (53.34%) were in the age group of 20–25 years. Place of living showed that 15 (50%) mothers lived in urban area and 9 (30 %) lived in slum area. Most of the mothers, i.e., 20 (66.66%) were Hindu and 2 (6.67%) were Sikh. Educational data showed that 9 (30%) mothers were illiterate and 8 (26.66%) were graduates. 19 (63.33%) mothers were living in nuclear family and 11 (36.66%) mothers were living in joint family. Regarding the family income, 11 (36.66%) mothers belonged to families with monthly income of less than Rs. 5,000 and 6 (20%) belonged to families with monthly income between Rs. 10,000 and 20,000. 12 (40%) mothers were non-vegetarian and 7 (23.33%) mothers were vegetarian. Regarding place of delivery, 18 (60%) children were delivered at the hospital and 10 (33.33%) children were delivered at home. Majority of the children 18 (60%) were delivered by doctors.

Area-wise, highest mean score was 5.1, which is 56.66 mean percentage score. This shows that mothers had the highest knowledge related to prenatal factors causing malnutrition as compared to other areas. Mean percentage score for feeding practices was 36.9, which was lowest of all three areas. This shows that mothers had least knowledge on feeding practices leading to malnutrition in children. Mean percentage score for common illnesses and immunization was 38.89. Knowledge scores obtained were summed up and overall mean score was 13 which, was 43.34% of total score revealed average knowledge of the mothers regarding factors affecting malnutrition.

### Discussion

Kavitha et al. in August 2015 conducted a study which revealed that mothers had 65.59% as mean percentage score for knowledge regarding malnutrition. This study
finding is similar to the present study in which the mean percentage score was 56.66.

Subhash in 2009 conducted a study among 30 mothers of under-five children, which showed that 26.67% of mothers had poor knowledge, 53.33% had moderate knowledge and 20% had good knowledge regarding protein energy malnutrition.

A study conducted by Aweil in east and north countries of South Sudan on knowledge regarding malnutrition showed that 29 (58%) of the sample said it was a disease and 31 (62%) said that it was due to lack of food.

A cross-sectional community study conducted to assess the knowledge of mothers of under-five children on nutritional problems and its prevention showed poor knowledge among 27 (54%), average knowledge 19 (38%) and good knowledge among 4 (8%) mothers. Findings of the study revealed that inappropriate child caring and feeding practices were strongly associated with under-five malnutrition.  

**Conclusion**

Findings of the study revealed that mothers had least knowledge regarding feeding practices contributing to malnutrition among under-five children. Based on the findings, the researcher feels that there is a strong need to educate mothers on child care and feeding practices by health workers and mass media through organized efforts.

**Conflict of Interest:** None

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