

Knowledge, attitude, and practice of mothers regarding nutrition of under-five children: A cross-sectional study in rural settings

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ABSTRACT

Background: Nutrition of the under-five children is of greatest importance because the foundation of our lifetime health, strength, intelligence, and vitality is laid during this period. Our country faces the burden of diseases in which nutritional deficiencies are the most common. The prevalence of underweight children in India is among the highest in the world. Knowledge of mothers has an important role in the maintenance of nutritional status of the children. For this mother has to be made more aware about feeding practices of children and other health-care practices. **Objective:** This study was undertaken with an aim to evaluate knowledge, attitude, and practices (KAP) of mothers regarding nutrition of under-five children and prevention of malnutrition. **Materials and Methods:** This cross-sectional community-based study was conducted among 300 mothers with under-five children. A structured questionnaire based on KAP survey guidelines but relevant to local conditions was developed. The KAP questionnaire comprised three parts which assessed the KAP regarding nutrition of under-five children and prevention of malnutrition. **Results:** A total of 300 mothers were enrolled in the study. Majority of mothers had fair to good KAP regarding nutrition of under-five children and prevention of malnutrition. **Conclusion:** Adequate knowledge of mothers regarding dietary patterns of under-five children will enhance the attitude and practice to prevent malnutrition.

KEY WORDS: Knowledge; Attitude; Practice; Dietary Practices; Under-five Children


INTRODUCTION

Good nutrition is the fundamental pillar for the maintenance of positive health.^[1] A nation's health depends on the healthy citizen. A healthy adult emerges from a healthy child.^[2] Nutrition of the under-five children is of greatest importance because the foundation of our lifetime health, strength, intelligence, and vitality is laid during this period.^[3]

Malnutrition encompasses both undernutrition and overnutrition (obesity).^[4] However, mostly, it refers to

undernutrition resulting from improper feeding practices, impaired utilization of nutrients due to infections and parasites, inadequate food and health security, poor environmental conditions, and lack of proper child care practices.^[5] Our country faces the burden of diseases in which nutritional deficiencies are most common.^[6] The prevalence of underweight children in India is among the highest in the world and is nearly double that of Sub-Saharan Africa.^[7] Each year approximately 2.3 million deaths among 6–60 months aged children in developing countries are associated with malnutrition, which is about 41% of the total deaths in this age group.^[8] The burden of undernutrition among under-five children has not changed much even though various intervention programs are in operation in India.^[9]

Healthy eating and physical activity are essential for growth and development in childhood. Hence, to help children develop healthy eating patterns from an early age, it is important that the food and eating patterns to which they are exposed

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(both at home and outside) are those which promote positive attitudes to good nutrition.^[10] Here, knowledge of mothers has an important role in the maintenance of nutritional status of the children and protection of their nutritional needs to ensure sound foundation and secure future of any healthy society.^[11] For this mother has to be made more aware about feeding practices of infant and other health-care practices and this will go a long way in reducing the severity of malnutrition.^[12] Hence, this study was undertaken with an aim to evaluate knowledge, attitude, and practices (KAP) of mothers regarding nutrition of under-five children and prevention of malnutrition.

MATERIALS AND METHODS

This cross-sectional community-based study was conducted among 300 mothers who visited the Primary Health Centre (Miran Sahib) and had children under the age of 5 years. This study was carried out from July 2018 to January 2019. Approval from block medical officer was taken before commencing the study. The participants were briefed about the nature of the study and consent was taken. A structured questionnaire based on KAP survey guidelines but relevant to local conditions was developed. Data that were recorded included general data comprising age, religion, occupation, education status, and type of family. The KAP questionnaire regarding dietary practices of mother on prevention of malnutrition comprised three parts. The first one had six sections which assessed the mothers' knowledge about breastfeeding, introduction of complementary feeds, management of diarrhea, balanced diet, immunization, and purpose of growth charts. The second part had four sections assessing the attitude toward their own and their children's diet (confidence in preparing meals, perceived benefits of breastfeeding, and seeking health care). The third part had five sections exploring practices (exclusive breastfeeding, immunization, and hand washing).

The data were entered and percentages were calculated in Microsoft Excel. We categorized mothers' KAP scores into three categories based on the percentage of the maximum possible scores: "Poor" (0%–50%), "fair" (51%–75%), or "good" (76%–100%).

RESULTS

Altogether 300 mothers were enrolled in the study. Table 1 shows the distribution of sample characteristics in numbers and percentage. The knowledge scores revealed that 135 (45%) mothers had good knowledge, 96 (32%) mothers had fair knowledge, and 69 (23%) mothers had poor knowledge regarding under-five nutrition and prevention of malnutrition [Table 2]. The attitude scores revealed that 91 (30.3%) mothers had good attitude, 167 (55.6%) mothers had fair attitude, and 42 (14%) mothers had poor attitude regarding under-five nutrition and prevention of malnutrition

Table 1: Demographic characteristics of the sample

Variables	n (%)
Age (years)	
18–22	40 (13.33)
23–27	105 (35)
28–32	125 (41.66)
33–38	30 (10)
Education	
Illiterate	20 (6.66)
Primary school	92 (30.66)
High school	105 (35)
Graduate	83 (27.66)
Occupation	
Housewife	150 (50)
Self-employed	67 (22.33)
Government employed	83 (27.66)
Type of family	
Nuclear	130 (43.33)
Joint	170 (56.66)
Religion	
Hindu	180 (65.5)
Muslim	50 (14)
Others	70 (20.5)

Table 2: Distribution of knowledge scores among mothers

Knowledge scores	n (%)
Good	135 (45)
Fair	96 (32)
Poor	69 (23)

[Table 3]. The practice scores revealed that 131 (43.6%) mothers had good practices, 165 (55%) mothers had fair practices, and 12 (4%) mothers had poor practices regarding under-five nutrition and prevention of malnutrition [Table 4].

DISCUSSION

This study was conducted to assess the KAP among mothers of under-five children regarding nutrition and prevention of malnutrition. The results revealed that regarding nutritional practices and prevention of malnutrition, 45% of the mothers had good knowledge, 32% had fair knowledge, and 23% had poor knowledge. The attitude scores revealed that 30.3% of the mothers had good attitude, 55.6% had fair attitude, and 14% had poor attitude. The practice scores showed that 43.6% of the mothers had good practices, 55% had fair practices, and 4% had poor practices. The findings of this study are supported by a study conducted in South India among 200 mothers which had slightly higher good and fair scores.^[13] Similar results regarding knowledge were reported by a previously conducted study on 30 mothers.^[14] A study conducted by Shettigar *et al.* reported a very low

Table 3: Distribution of attitude scores among mothers

Attitude scores	n (%)
Good	91 (30.3)
Fair	167 (55.6)
Poor	42 (14)

Table 4: Distribution of practice scores among mothers

Practice scores	n (%)
Good	131 (43.6)
Fair	165 (55)
Poor	12 (4)

level of knowledge among mothers which is in contrast to our findings.^[15] This may be due to differences in the levels of literacy and other sociodemographic factors among the respective study populations.

Malnutrition is a very complex phenomenon with numerous causes, manifestations and is intergenerational. Like an iceberg, it affects the community both directly as nutritional deficiency diseases and indirectly by leading to high morbidity and mortality among young children.^[15] Maternal knowledge, their attitude, and practices all can have an effect in changing the child's nutritional pattern. It is thus essential that mothers have proper knowledge on dietary practices in prevention of malnutrition, which, in turn, can help them to have good attitude toward the dietary practices so that they can change their behavior and harmful practices.^[13]

Limitations of this study include the small sample size, absence of any intervention and that the relationships between sociodemographic factors with KAP were not explored.

CONCLUSION

Majority mothers had fair to good KAP regarding under-five nutrition and prevention of malnutrition. Adequate knowledge of mothers regarding dietary patterns of under-five children is of paramount important as it will enhance their attitude and help them change the harmful practices which would go a long way in solving the nutritional health problems in our settings.

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