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A Study to Assess the Knowledge and Attitude Regarding Dietary Practices in Prevention of Malnutrition Among Mothers with Under Five Children at Selected Area Jaipur

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Abstract

Introduction: Healthy citizens are essential to the nation's health. A healthy child grows into a healthy adult. Children are invaluable assets, and if the country disregards their health, it will have a population of sick people. Because the foundation for our lifetime, health, strength, intelligence, and energy is established during this time, the nutrition of children under five is extremely important. As the new millennium dawns, India is confronted with a weight of illnesses where dietary inadequacies are more prevalent. and mortality, it also permanently impairs the physical and mental development of children who survive.

Methodology: The study was conducted at Kheri Gukulpura and Ashawala village of Jaipur. Target population were mothers with under five children from selected areas of Jaipur. The research scholar selected sample of 400 mothers with under five children from selected areas of Jaipur. Non-Probability convenient sampling technique is used in this project to select area as well as samples.

Results: In this study result shows that Mean knowledge (Mean ± SD) score of studied mothers with under five children found to be 9.39 ± 2.82 points. This was identified that 154 (38.5%) mothers with under five children observed with average (9-16) level of knowledge. Further, analysis indicated that 13 (3.3%) mothers with under five children showed good (17-24) level of knowledge about Dietary practices in prevention of malnutrition. Mean attitude score (Mean ± SD) of studied mothers with under five children found to be 22.02 ± 7.44 points. I revealed that there was a significant positive correlation ($r= 0.50$, $p<0.05$) between knowledge and attitude regarding dietary practices in prevention of malnutrition, which indicate that as knowledge level increases attitude level also increase.

Conclusion: There will be no significant correlation between the knowledge and attitude scores regarding dietary practices in prevention of malnutrition among mothers with under five children is rejected. There will be a significant correlation between the knowledge and attitude scores regarding dietary practices in prevention of malnutrition among mothers with under five children is accepted. There will be no significant association between the knowledge scores regarding dietary practices in prevention of malnutrition among mothers of under five children with their selected demographic (age, educational status, occupation, number of children in family, types of family and sources of information) variables is rejected.

Keywords: Malnutrition, Under five children, Knowledge, Attitude, Practice, Balance diet.

Introduction

In India, protein energy deficiency has been recognised as a serious nutritional and health issue. It mostly affects infants during their first year of life. If the mother is malnourished, it is characterised by low birth weight. According to estimates, poor growth and high mortality rates in children aged 12 to 24 months account for 30% of deaths in children under five[1].

According to current theories, malnutrition manifests clinically as marasmus and kwashiorkor. In India, 1-2 percent

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of preschoolers suffer from protein energy malnutrition. All states are affected, and nutritional marasmus is more common than kwashiorkor. The condition known as malnutrition arises when the body does not receive the necessary quantity of nutrients to maintain good health[2].

It is estimated that over 500,000 infants and children in India die from gross malnutrition each year. Given that almost three-fourths of our children suffer from some form of nutritional insufficiency, this is rather understandable. Malnutrition affects between 75 and 80 percent of youngsters who are admitted to hospitals. Patients with malnutrition as their primary issue or whose hospitalisation is indirectly caused by malnutrition make up about 25% of the paediatric beds. Since morbidity, mortality, and malnutrition all occur simultaneously, these three factors are now taken into account collectively[3].

The idea of a "food gap" has replaced the idea of a "protein gap." The main causes of protein energy malnutrition are insufficient food intake (food gap), both in terms of quantity and quality, and infections such as intestinal worms, respiratory infections, diarrhoea, and measles, which raise the need for calories, proteins, and other nutrients while lowering their absorption and utilisation.It is a vicious cycle in which hunger causes illness and infection causes malnutrition, both of which work in concert[4].

Poverty, low birth weight, diseases like pneumonia and diarrhoea, population expansion, cultural and religious dietary fads, illiteracy, misinformation, and financial obstacles are risk factors for malnutrition. When children are malnourished, it begins to impact all bodily systems, including muscle atrophy, growth failure, loss of weight, impaired mental development, lack of learning skills and integrative functions, psychomotor changes, immune system impairment, gastrointestinal system impairment, cardiac dysfunction, respiratory dysfunction, decreased renal function, and psychosocial functioning[5].

Numerous nutritional programs, including the Balwadi nutrition program, the applied nutrition program, the special nutrition program, the midday meal program, the integrated child development service, and the prophylactic against nutritional anaemia, have been introduced by the central government of India for children under five[6].

The (NRC, Madurai, which was founded in 1971, has demonstrated the critical role that nutrition rehabilitation centres play in both preventing malnutrition and acting as training facilities for rural health care initiatives. These facilities are vital adjuncts to the child health department. Since many children who are released from hospitals after receiving proper treatment go back to their homes and continue to suffer from malnutrition, these centres are also crucial in preventing relapses of the disease[7].

In comparison to other Indian states, Rajasthan does quite poorly and has a very high rate of malnutrition. Given that 23 percent of babies are born with low birth weight (NFHS-4) and half of pregnant mothers are anaemic, providing basic nutrition and health inputs becomes of utmost importance. In Rajasthan, almost 40% of children suffer from stunting.

In Rajasthan, Twenty-three percent of children under five are wasted, and 39 percent are stunted. Anaemia affects 46.8% of women in the reproductive age range (NFHS-4). Both the mother's and the children's health are negatively impacted by such dietary inadequacies[8].

In Rajasthan, the rate of malnutrition is incredibly high. Rajasthan was placed 22nd out of 30 states in the Comprehensive National Nutrition Survey (CNNS) report for the prevalence of underweight children under the age of five. According to the research, 40.9 percent of children under five in Jaipur are underweight, and 44.4 percent are anaemic, despite attempts to combat malnutrition. In order to tackle this issue, the State has focused on the Community-based Management of Acute Malnutrition (CMAM) approach in 2018 under the POSHAN Abhiyaan. This approach makes it possible for community volunteers to spot children suffering from acute malnutrition and start treating them before they get really sick. (New NDTV, 2023)

During the clinical experience the investigator had done the nutritional assessment for under five children and found that many of the children were malnourished due to lack of knowledge of mothers regarding malnutrition. This probed the investigator to do the study[9].

Objectives of the Study

- To assess knowledge score regarding Dietary practices in prevention of malnutrition among mothers with under five children.
- To assess attitude towards Dietary practices in prevention of malnutrition among mothers with under five children.
- To correlate the knowledge and attitude scores regarding dietary practices in prevention of malnutrition among mothers with under five children
- To find out the association between selected demographic variables with knowledge score of mothers with under five children.

Hypothesis

- H_{01} There will be no significant correlation between the knowledge and attitude scores regarding dietary practices in prevention of malnutrition among mothers with under five children.
- H_1 There will be a significant correlation between the knowledge and attitude scores regarding dietary practices in prevention of malnutrition among mothers with under five children.
- H_{02}: There will be no significant association between the knowledge scores regarding dietary practices in prevention of malnutrition among mothers of under five children with their selected demographic variables.
- H_2: There will be a significant association between the knowledge scores regarding dietary practices in

prevention of malnutrition among mothers of under five children with their selected demographic variables.

Methodology

- Quantitative evaluative research.
- Target Population- Mothers of under five children in Jaipur.
- Accessible Population- Mothers with under five children in selected areas of Jaipur.
- Sample Techniques- Non probability convenient sampling techniques.
- Sample Size- 400 mothers with under five children.
- Tools and Data collection- Self structured knowledge questionnaire.
- Setting for this study- Kheri Gukulpura and Ashawala village of Jaipur

Inclusion Criteria

- Mothers who have under five-year children.
- Mothers with under five children are present at time of the data collection.

Exclusion Criteria

- Mothers with under five children who are serious ill during the data collection period.
- Mothers with under five children who are not willing to participate

Instrument

A structured questionnaire schedule has been developed to judge cognizance of mothers with under five children regarding Dietary practices in prevention of malnutrition. Extensive review of literature, expert opinion & investigator's professional experience & informal questions to Dietary practices in prevention of malnutrition provide basis for construction of structured questionnaire schedule. Consisted of 32 knowledge items questionnaire, score of one (1) was allotted to exact reply & zero assigned to each incorrect response. Total score of knowledge was 30. Level of knowledge was measured in terms of knowledge scores. Level of knowledge was measured namely poor, average, good, & excellent. Average time given to answer one question was 40 minutes.

S. No.	Level of Knowledge	Score
1	1-8	Poor
2	9-16	Average
3	17-24	Good
4	25-32	Excellent

Reliability

Karl Pearson's coefficient method stability of tool was assessed; by using split half method the internal consistency of the tool also finds. These tests shows that the tool constructed for assessing the knowledge were reliable.

Data Analysis

Following are notations used to present significance of observed probability value for scores before & after administration of Customized awareness program on knowledge:

⊗ Insignificant/not significant (p value: p>0.05)
^ Suggestively/poorly significant (p value: p<0.06-p<0.08)
* Moderately significant/significant (p value: p<0.02-p<0.05)
# Highly/strongly significant (p value: p<0.01-p<0.001)

Ethical Consideration

- Written approval was got from authority of chosen selected areas of Jaipur.
- Informed on paper consent was got from each mother with under five children.
- Confidentiality was maintained.

Table 1: Measurement of knowledge score of mothers with children under five between baseline

Parameter	*Sampling stage*	*Scattering of mean*
		Mean ± SD
Knowledge about Dietary practices in prevention of malnutrition	Knowledge score	9.39 ± 2.82

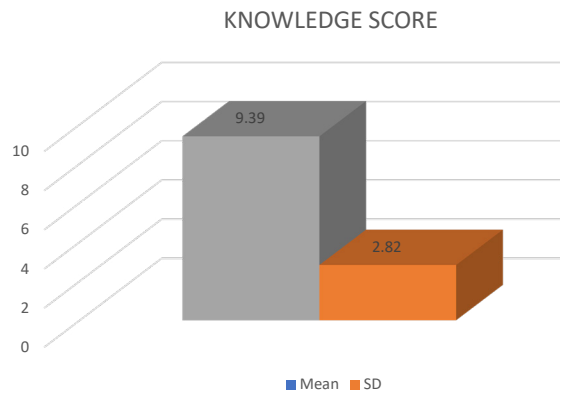

Figure 1: Column diagram presents the knowledge scoring at baseline stage about Dietary practices in prevention of malnutrition among mothers with children under five

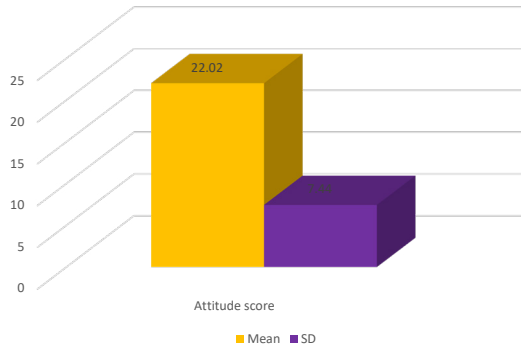

Figure 2: Column diagram presents the attitude scoring at baseline stage about Dietary practices in the prevention of malnutrition among mothers with children under five

Table 2: Assessment of attitude score of mothers with children under five about dietary practices in prevention of malnutrition between pre and post administration

Parameter	*Scattering of mean*
	Mean ± SD
Attitude about Dietary practices in prevention of malnutrition	22.02 ± 7.44

Table 3: Assessment of correlation between knowledge and attitude of mothers with children under five regarding dietary practices in the prevention of malnutrition

Parameter	*Correlation between knowledge and attitude*
	r
Correlation between knowledge and attitude	-0.50

Table 4: Assessment of attitude score of mothers with children under five

Stage	*Attitude score of Dietary practices in prevention of malnutrition*		*Frequency (n=400)*	*Percentage (%)*
	Scoring	*Category*		
Baseline	0-20	*Poor*	290	72.5
	21-40	*Average*	70	17.5
	41-60	*Good*	40	4.0

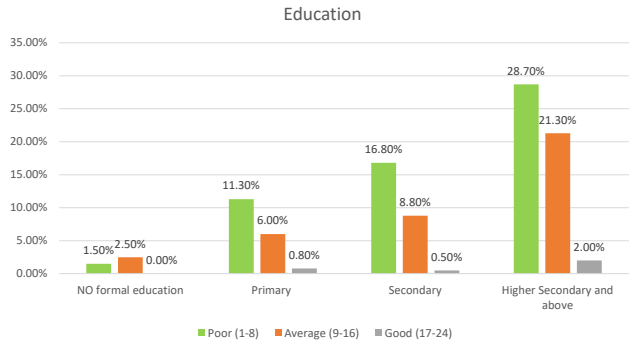

Figure 3: Column diagram displaying the level of knowledge according to the educational status of the studied mothers with children under five

Results

The result are shown in Tables 1-6 and Figures 1-3.

Discussion

Demographic information of mother with under five children showed that (28, 7.0%) of the population of mothers with under five children were most commonly belonged to the lower age group of 22 years and that followed by age group of 23-30 years that consisted of 247 (61.8%) mothers with under five children. Lastly, this was also noted that the higher age group of more than 30 years consisted of 125 (31.3%) mothers with under five children. Demographic information reported that large chunk (320, 80.0%) of population of studied mother with under five children's mothers were more frequently house wife. Lastly, this was noticed that (80, 20.0%) of population of studied mother with under five children's mothers were working also included in present study[10,11].

Table 5: Association of age of mothers with children under five with knowledge level at baseline stage

Age of mothers with children under five	*Knowledge Level about Dietary practices in prevention of malnutrition*			*Total*
	Poor (1-8)	*Average (9-16)*	*Good (17-24)*	
Below 22 years	16 4.0%	11 2.8%	1 0.3%	28 7.0%
23-30 years	135 33.8%	103 25.8%	9 2.3%	247 61.8%
Above 30 years	82 20.5%	40 10.0%	3 0.8%	125 31.3%
Total	233 58.3%	154 38.5%	13 3.3%	400 100.0%

p>0.05 (Insignificant)

Table 6: Association of educational qualification of mothers with children under five with knowledge levels at baseline stage

Educational qualification	*Knowledge Level about Dietary practices in prevention of malnutrition*			*Total*
	Poor (1-8)	*Average (9-16)*	*Good (17-24)*	
NO formal education	6 1.5%	10 2.5%	0 0.0%	16 4.0%
Primary	45 11.3%	24 6.0%	3 0.8%	72 18.0%
Secondary	67 16.8%	35 8.8%	2 0.5%	104 26.0%
Higher Secondary and above	115 28.7%	85 21.3%	8 2.0%	208 52.0%
Total	233 58.3%	154 38.5%	13 3.3%	400 100.0%

and p>0.05 (Insignificant)

Limitation

- The Sample size taken by researcher is limited to 400.
- Study is conducted only in selected community area of Jaipur, Rajasthan.
- Study is limited for choosing mothers of under five children as it were.
- Data gathered by non-probability convenient sampling procedure.
- The examples under investigation might be pre-busy with household work

Recommendations

- Comparative examination should be possible among mothers of under five children at rural and urban area.
- Studies to evaluate the impact of teaching program with mothers of under five children.
- Studies in future might be completed with enormous no. of sample and this may be including varieties of techniques.
- Studies may be done on to evaluate the efficacy of STP on knowledge regarding Dietary practices in prevention of malnutrition.
- Studies executed for assessing efficacy of SIM on knowledge regarding Dietary practices in prevention of malnutrition.

Conclusion

There will be no significant correlation between the knowledge and attitude scores regarding dietary practices in prevention of malnutrition among mothers with under five children is rejected. There will be a significant correlation between the knowledge and attitude scores regarding dietary practices in prevention of malnutrition among mothers with under five children is accepted. There will be no significant association between the knowledge scores regarding dietary practices in prevention of malnutrition among mothers of under five children with their selected demographic (age, educational status, occupation, number of children in family, types of family and sources of information) variables is rejected. There will be a significant association between the knowledge scores regarding dietary practices in prevention of malnutrition among mothers of under five children with their selected demographic (religion, family income and types of diet) variables is accepted.

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Conflict of Interest

The author declares that they have no conflict of interest with regard to the content of the report.

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