



Knowledge, Attitude and Practice of Parents regarding Feeding Pattern of Children

Nabeela Zia, Bushra Tariq, Ahsan Waheed Rathore, Arslan Ahmed Salam

ABSTRACT

Objective: The objective was to determine the frequency of sufficient knowledge, positive attitude and good practice of parents about feeding pattern of children with malnutrition. **Study Design:** It was a Cross-Sectional Study. **Settings:** Department of Pediatric Medicine, Children Hospital Lahore Pakistan. **Duration:** Six-months i.e. December 1, 2018 to June 30, 2019. **Methodology:** Total of 385 children of both genders aged between 2-12 years who presented with malnutrition was enrolled. Demographic features of children and families were noted on a pre designed proforma. The parents were then assessed for their knowledge, attitude and practice about feeding through a structured questionnaire. A written informed consent was taken from parents of each child. **Results:** Of the total, 185 (48.1%) were male and 200 (51.9%) were female with mean age of 6.9 ± 3.2 years. Mean height and weight was 113.2 ± 19.6 cm and 25.1 ± 10.8 Kg respectively. The number of children ranged from 1 to 5 with a mean of 2.7 ± 1.3 children per family. Thirty six percent (n=141) were belonged to middle class, followed by lower class (35.1%) and high class (28.3%). Analysis showed that 228 (59.2%) parents had sufficient knowledge, 209 (54.3%) parents had positive attitude and only 152 (39.5%) parents followed good practice. There was no association was seen between demographic characteristics and knowledge, attitude and practice (KAPs) of parents. **Conclusion:** This study showed that sufficient positive attitude, knowledge and good feeding practice in more or less half of the parents with malnourished children which is alarming and warrants public health measures in this regard to address these issues which might result in reduction of child's malnutrition along with its associated morbidity and mortality.

Keywords: Malnutrition, Parent's feeding practice, Knowledge, Attitude.

Corresponding Author

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DR. NABEELA ZIA, Senior Registrar, Department of Pediatric Medicine, The Children's Hospital and Institute of Child Health Lahore-Pakistan.

Contact / Email: +92 321-6428327, nabeelazia@gmail.com

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INTRODUCTION

Eating behaviors evolve in infancy because biological and behavioral processes are directly linked with the health and growth. In human history, food scarcity is a major threat for existence resulting in evolving of eating behavior and child feeding practices. Generally during scarcity, the family life and resources are concerted for the procurement and availability of foods leading to low in energy, palatability and nutrients.^{1,2} It has been reported that this behavioral change is the modifiable etiology of weight problems. It has been reported that eating behavior and appetite-related traits of the children are directly associated with their BMI.

The role of parents has also been reported as an important influence on eating behaviors of children.³ Child diet and weight are directly linked with the food practices and eating habits of their parents. Similarly, these practices have great influence on children's food intake which have been measured using different instruments.^{4,5}

Role of parents in developing good or bad children's dietary habits is well established. Various public health interventions have designed focusing the parents to improve children's diets. This eventually helped in reducing overall prevalence of obesity and malnutrition during childhood.^{2,6,7} According to a previous study done in Australia, the percentage of sufficient knowledge, positive attitude and good practice about feeding patterns is 54%, 99% and 92 % respectively.⁸

Different studies have been conducted regarding attitude, knowledge and practice of parents about feeding pattern of children and weight of child. But no study contained the percentage of KAPs of parents regarding feeding pattern of their children. So, the rationale of this study is to determine the KAPs of parents regarding feeding pattern of children coming at Children Hospital, Lahore.

METHODOLOGY

Study Design: It was a Cross-Sectional Study.

Settings: Pediatric Medical Wards and Emergency Department of The Children Hospital and The Institute of Child Health Lahore-Pakistan.

Duration: Period of 6 months ranging from December 1, 2018 to June 30, 2019.

Sample Technique: Non-probability consecutive sampling technique.

Sample Size: Sample size of 385 parents was calculated 95% confidence level and with 5% margin of error and assuming percentage of sufficient knowledge i.e. 54% about child's feeding pattern.

Inclusion Criteria: Parents with children of age 2-12 years of either gender presenting with malnutrition (as per operational definition) were included in the study.

Exclusion Criteria: Parents could not understand local language and children with eating disorder (on history) were excluded from the study.

Data Collection: Children fulfilling the selection criteria were enrolled from OPD at Children Hospital and The Institute of Child Health, Lahore after taking informed consent from parents. Demographics (including name, age, sex, weight, height) were recorded. Then parents were asked about the feeding pattern of their children. Questions regarding, Knowledge, attitude and practice of were asked from parents as per questions already designed in proforma. Sufficient knowledge, positive attitude and good practice of parents were noted (as per operational definition). All this information was recorded through proforma (attached).

Data Analysis: Data was entered, cleaned and analyzed through SPSS version 20.0. Numerical variables were taken age, weight and height have been presented by mean \pm SD. Whereas, categorical variable i.e. gender, number of children per family, sufficient knowledge, positive attitude and good practice has been presented by frequency and percentage. Data has been stratified for age, gender, weight, height of child, number of children of a particular couple, education level of

parents, parent's current age and socioeconomic status. Chi-square test was used for post-stratification association. A p-value ≤ 0.05 was considered as significant.

RESULTS

Of total 385 enrolled children, 185 (48.1%) male and 200 (51.9%) were female children. The height and weight of children was 113.2 ± 19.6 (80 to 150) cm and 25.1 ± 10.8 (8 to 43) Kg. Educational status of the parent showed that 33.8% fathers and 183 (47.6%) mothers were illiterate. About a quarter (n=141, 36.6%) were belonging to middle class followed by lower class (35.1%) and high class (28.3%). More than fifty percent (59.2%) parents had sufficient knowledge feeding of the children while 54.3% parents had positive attitude. However, 39.5% parents followed good practice.

Analysis showed that knowledge, attitude and practice have no association with different demographic features including age, gender, literacy, socio economic status of the parents (Tables).

Table: Association of Demographics with Knowledge Attitude and Practices (KAPs)

Subgroups	N	Sufficient Knowledge (n=228)	Positive Attitude (n=209)	Good Practice (n=152)
Father's Age (years)				
28-37 years	194	118 (60.8%)	110 (6.7%)	84 (43.3%)
38-47 years	191	110 (57.6%)	99 (51.8%)	68 (35.6%)
P Value		0.519	0.338	0.122
Mother's Age (years)				
22-30 years	230	140 (60.9%)	127 (5.2%)	98 (42.6%)
31-38 years	155	88 (56.8%)	82 (52.9%)	54 (34.8%)
P Value		0.423	0.655	0.126
Father's Education				
Illiterate	130	75 (57.7%)	72 (55.4%)	49 (37.7%)
Under Matric	141	79 (56.0%)	70 (49.6%)	57 (40.4%)
Matric and above	114	74 (64.9%)	67 (58.8%)	46 (40.4%)
P Value		0.325	0.331	0.877
Mother's Education				
Illiterate	183	105 (57.4%)	100 (54.6%)	75 (41.0%)
Under Matric	101	61 (60.4%)	54 (53.5%)	43 (42.6%)
Matric and above	101	62 (61.4%)	55 (54.5%)	34 (33.7%)
P Value		0.774	0.981	0.336
No. of Siblings per Family				
1-2	185	112 (60.5%)	95 (51.4%)	69 (37.3%)
3-5	200	116 (58.0%)	114 (57.0%)	83 (41.5%)
P value		0.612	0.266	0.339
Socio-economic Status				
Lower Class	135	79 (58.5%)	68 (50.4%)	57 (42.2%)
Middle Class	141	84(59.6%)	80(56.7%)	53 (37.6%)
High Class	109	65(59.6%)	61(56.0%)	42 (38.5%)
P Value		0.979	0.522	0.713

Chi-square test, observed difference was statistically insignificant

DISCUSSION

Overall, 26% children in the world under five years age are living in South Asia. Around 38% have stunting which is an outcome of biological and/or psychosocial deprivation in early age. This results into multiple health and societal issues.⁹⁻¹⁰ The global impact of childhood malnutrition is staggering.

By using appropriate preventive interventions for malnutrition, we can prevent 61% cases of wasting and save the lives of almost 350,000 child deaths annually. Various key international initiatives including No Wasted Lives are working hard to achieve these ambitious targets.¹¹

Parent food practices and feeding style influence child diet and/or weight and contribute to the development of under nutrition or malnutrition.⁸

Our study showed that 59.2% parents had sufficient knowledge, 209 (54.3%) parents had positive attitude but only 39.5% followed good practice. Our results are comparable to those of Tan *et al.*¹² (2010) who reported similar frequency of sufficient knowledge (52.2%), positive attitude (56.9%) and good practice (37.7%) among non-parent caregivers in rural China. Mehrabani *et al.*¹³ (2009) in another similar study involving families from Tehran reported comparable frequency of sufficient knowledge (59.6%), positive attitude (60.8%) and good practice (33.8%) in children with malnutrition. Oli *et al.*¹⁴ (2018) observed comparable frequency of sufficient knowledge and positive attitude in Nepalese families and reported to be 58.1% and 44.6% respectively. Moaadel *et al.*¹⁵ (2015) and Lombardi *et al.*⁸ (2013) reported comparable frequency of 61.5% and 54.0% respectively for sufficient knowledge in parents with malnourished children.

Child malnutrition is common in Pakistan and ranked among the countries having highest rate in the world. It has been shown that progress in child nutrition and health remained slower as compared to other South Asian countries.¹⁶ The National Nutrition Survey (NNS) 2011 showed that there had been no major improvement in last ten years in terms of childhood nutrition indicators. In 2011, the percentage of children under five-year age with stunting and wasting 44% and 15% which was almost similar of 2001 i.e. 41% and 14% respectively. Similarly, no change has been seen in percentage of underweight from 2001 to 2011.¹⁷

In the present study, we observed sufficient knowledge, positive attitude and good feeding practice in more or less half of the parents with malnutrition children which is alarming and warrants public health measures in this regard to address these issues which might result in reduction of child's malnutrition along with its associated morbidity and mortality.

In the present study we found that none of the socio demographic factor of the parents affected sufficient knowledge, positive attitude and good feeding practice significantly; establishing independent nature of these parameters. In order to reduce child malnutrition, the interventions must target both all societal elements including both rich and poor, young and the old, male and female alike.

CONCLUSION

Though parents have sufficient knowledge and positive attitude but their practices are not and good feeding practice in more or less half of the parents with malnourished children which is alarming and warrants public health measures in this regard to address these issues which might result in reduction of child's malnutrition along with its associated morbidity and mortality.

LIMITATIONS

There are some potential limitations that we didn't compare the parent's knowledge, attitude and feeding practice with control group i.e. children without malnutrition which could have enabled estimation of relative risk.

SUGGESTIONS / RECOMMENDATIONS

Such a study is highly recommended in future research. Moreover, there is need for a study addressing effect of intervention in the form of parent's education about feeding practice upon child's nutritional status which would help in policy making and strategic planning to decrease the likelihood of malnutrition.

CONFLICT OF INTEREST / DISCLOSURE

No conflict of interest is involved.

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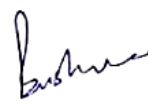
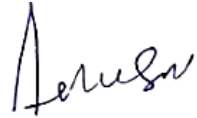
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AUTHORSHIP AND CONTRIBUTION DECLARATION

AUTHORS	Contribution to The Paper	Signatures
Dr. Nabeela Zia Senior Registrar, Department of Pediatric Medicine, The Children's Hospital and Institute of Child Health Lahore Pakistan	Main Author, Data Collection, Data Analysis	
Dr. Bushra Tariq Registrar, Department of Pediatric Medicine, The Children's Hospital and Institute of Child Health Lahore Pakistan	Drafting the article, References Collection, Data Analysis	
Dr. Ahsan Waheed Rathore Professor of Pediatrics, Department of Pediatric Medicine, The Children's Hospital and Institute of Child Health Lahore Pakistan	Helped Manuscript Writing, Approved the Final Draft	
Arslan Ahmed Salam Research Officer, Pakistan Health Research Council, (PHRC) Islamabad Pakistan	Literature Review	