

## Mothers' Experience and Perceived Barriers to Practice Healthy Feeding to Their School Going Children

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### Abstract

A cross-sectional study was conducted between January and December of 2018 in some randomly selected schools under Dhaka City Corporation, Bangladesh, to examine mothers' experience and their perceived barriers to practice healthy feeding to their school going children. We adopted convenient sampling technique. A total of 120 mothers participated in this study who had children aged between six and eight years. A pre-tested, semi-structured questionnaire was used for data collection. Questionnaire was formatted in both Bangla and English language. However, the participants chose Bangla version for filling up the survey questionnaire. A modified Likert's scale was used. Socio-demographic variables, mothers' feeding practice and perceived barriers were analysed using descriptive statistics. 58.2% of the participants belonged to 30-35 years age group, while 41.8% to 36-40 years age group. Among them, higher secondary passed 3.4%, while 35.3% had their university graduation, and 61.3% completed postgraduation. 6.7% had poor economic status, while 73.3% were semi-elite and 20% were from elite income group. Among them, 75% were Muslim, 14.2% Hindu, 7.5% Christian and 3.3% Buddhist. 21.7% of the mothers found availability of healthy food as 'very easy' and 66.7% found it 'easy', while 9.2% found it 'difficult'; only 2.5% found it 'very difficult'. Only 11.6% of the mothers found preparation of healthy meal inconvenient, while 71.7% found it convenient and 16.7% found it very convenient. Regarding taste of a healthy meal, 2.5% reported as 'very monotonous', 37.5% as 'monotonous', 54.2% reported as 'charming and only 5.8% stated it as 'very charming'. Preparation cost of a healthy meal was reported as costly by only 15.8% of the mothers, while cost effective by 76.7%, and very cost effective by the rest 7.5%. 42.4% of the mothers stated that their children have the habits of taking meal sitting with the family members, while 48.8% were fed while watching TV, and 8.8% reported that they fed their children while they were playing. Only 37.5% of mothers reported that their children found it pleasant taking healthy food. Regarding time spent on feeding the children, 17.5% stated 'very time consuming', while 68.3% stated 'time consuming', and only 14.2% found it 'timesaving'. Only 20.8% of mothers reported that they could conveniently feed their children healthy food. Difficulties experienced by the mothers were strong aversion (15.8%), fast food preference (22.5%), varieties of food preference (61.7%).

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## Introduction

Nutritional knowledge of parents is very important to promote a healthy dietary practice from childhood, but only nutritional knowledge is not enough to change dietary practices.<sup>1</sup> Response of parents is conceptualized as parental eagerness which refers to extent to parental intentionally bringing up its individuality, self-regulation, and self-assertion by being modulated, supportive and acquiescent to children's special needs and demands. Parents rearing on children to become integrated into the family by their demands, supervision, disciplinary efforts, and willingness to confront the child who disobeys.<sup>2,3</sup>

Bangladesh is a South Asian country undergoing rapid urbanization which results in changing lifestyles and dietary habits. The increasing problem of obesity has been observed in many countries including Bangladesh during last three decades.<sup>4</sup> In urban areas, less food scarcity is observed among middle- and high-income families. For that reason, we have seen a remarkable change among dietary habits of children living in urban areas.<sup>5</sup> Dietary habits have been shifted towards a higher in fat and protein content but lower in carbohydrates, fibres, and minerals.<sup>5-7</sup> Underweight, or overweight is an important public health problem, as the condition tends to have a chronic character and causes a huge range of future morbidity. Underweight leads to severe form of protein energy malnutrition (PEM) and vice versa. Overweight in children is associated with future cardiovascular diseases, diabetes, cancer, and psychosocial problems.<sup>5-8</sup>

Parent feeding and child eating are central to the fabric of family life and are strongly rooted in

culture and tradition.<sup>6</sup> However, many parents experience stress and anxiety related to this ubiquitous parenting task and perceive their young child as a "difficult feeder, especially in urban settings".<sup>7</sup> Tensions and battles related to feeding young children are common and have the potential to impact on the quality of family meal times, parent confidence and broader family dynamics and well-being.<sup>8,9</sup> Hence, we proposed this study to examine mothers' experience and their perceived barriers to practice healthy feeding to their school going children in urban settings.

## Methods

This cross-sectional study was conducted between January and December of 2018 in some randomly selected schools under Dhaka City Corporation, Bangladesh. Our study population was mothers of the school going children. However, we adopted convenient sampling technique. A total of 120 mothers participated in this study who had children aged between six and eight years. A pre-tested, semi-structured questionnaire was used for data collection. Questionnaire was formatted in both Bangla and English language. However, the participants chose Bangla version for filling up the survey questionnaire. A Modified Likert's scale was used. Collected data were analysed using Statistical Package for the Social Sciences (SPSS) version 21.0. Socio-demographic variables, mothers' feeding practice and perceived barriers were analysed using descriptive statistics. This study was approved by the Institutional Review Board (IRB) of Bangabandhu Sheikh Mujib Medical University (BSMMU), Dhaka, Bangladesh.

## Results

Among 120 participants, 70(58.2%) were in 30-35 years and 50(41.8%) were in 36-40 years age group. Among them, higher secondary passed 3.4%, while 35.3% had their university graduation, and 61.3% completed post-graduation. 6.7% had poor economic status, while 73.3% were semi-elite and 20% were from elite income group. Among them, 75% were Muslim, 14.2% Hindu, 7.5% Christian and 3.3% Buddhist (Table-I). 21.7% of the mothers found availability of healthy food as 'very easy' and 66.7% found it 'easy', while 9.2% found it 'difficult'; only 2.5% found it 'very difficult'. Only 11.6% of the mothers found preparation of healthy meal inconvenient, while 71.7% found it convenient and 16.7% found it very convenient.

Regarding taste of a healthy meal, 2.5% reported as 'very monotonous', 37.5% as 'monotonous', 54.2% reported as 'charming and only 5.8% stated it as 'very charming'. Preparation cost of a healthy meal was reported as costly by only 15.8% of the mothers, while cost effective by 76.7%, and very cost effective by the rest 7.5%. 42.4% of the mothers stated that their children have the habits of taking meal sitting with the family members, while 48.8% were fed while watching TV, and 8.8% reported that they fed their children while they were playing. Only 37.5% of mothers reported that their children found it pleasant taking healthy food.

Regarding time spent on feeding the children, 17.5% stated 'very time consuming', while 68.3% stated 'time consuming', and only 14.2% found it 'timesaving'. Only 20.8% of mothers reported that they could conveniently feed their children healthy food. Difficulties experienced by the mothers: strong aversion (15.8%), fast food preference (22.5%), varieties of food preference (61.7%) (Table-II).

**Table-I:** Socio demographic characteristics of the respondents (n=120)

Variables	Frequency	Percentage
<i>Age group</i>		
30-35 years	70	58.2
36-40 years	50	41.8
<i>Education</i>		
Higher secondary	4	3.4
Graduation	42	35.3
Post-graduation	74	61.3
<i>Economic condition</i>		
Poor	8	6.7
Semi elite	88	73.3
Elite	24	20.0
<i>Religion</i>		
Muslim	90	75.0
Hindu	17	14.2
Christian	9	7.5
Buddhist	4	3.3

**Table-II:** Experience and perceived barriers to healthy feeding practice

Variables	Frequency	Percentage
<i>Mother's opinion regarding availability of healthy food</i>		
Very easy	26	21.7
Easy	80	66.7
Difficult	11	9.2
Very difficult	3	2.5
<i>Preparation of healthy food</i>		
Inconvenient	14	11.6
Convenient	86	71.7
Very convenient	20	16.7
<i>Taste of the healthy food</i>		
Very monotonous	3	2.5
Monotonous	45	37.5
Charming	65	54.2
Very charming	7	5.8
<i>Cost of the preparation of healthy food</i>		
Costly	19	15.8
Cost effective	92	76.7
Very cost effective	9	7.5
<i>Child's habit of taking regular food</i>		
With family members	53	42.4
Watching TV	61	48.8
Playing	6	8.8
<i>Mothers' experience of children's attitude towards healthy food</i>		
Pleasant	45	37.5
Unpleasant	54	45
Very unpleasant	21	17.5

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Variables	Frequency	Percentage
<i>Time requirement when they feed healthy food</i>		
Very time consuming	21	17.5
Time consuming	82	68.3
Time saving	17	14.2
<i>Feeding healthy food to the child</i>		
Very inconvenient	27	22.5
Inconvenient	68	56.7
Convenient	25	20.8
<i>Difficulties experienced by mothers during feeding healthy food</i>		
Strong aversion	19	15.8
Fast food preference	27	22.5
Variety of food preference	74	61.7

## Discussion

Feeding recommendations for young children must account for their immediate and long-term health and development.<sup>10</sup> However, recent trends among young children of food fussiness or “picky eating” (an eating behaviour as reported by 10–50% of parents, and a source of considerable concern in families)<sup>10</sup> is growing. It is largely a phenomenon of developed countries (not also uncommon in developing countries, where urbanisation is rapidly growing) and involves a complex set of interactions between parents and children centred around food selection and consumption.<sup>1,11-14</sup>

Research revealed that children consumed significant amounts of energy-dense but nutrient poor foods, e.g., potato chips, french fries, some type of dessert, sweet, or sweetened beverage, while almost no servings of vegetables or fruits were in their daily menu.<sup>15,16</sup> Hence, authoritative parenting practices which are warm, protective, and supportive, are positively related to parental attempts to encourage the child to eat fruits, vegetables, and dairy.<sup>17</sup>

Several perceived barriers to healthy eating within the family (e.g., cost, lack of time, energy, accessibility) have been documented.<sup>18-21</sup> Our study revealed that participating mothers mostly found it time consuming effort to feed healthy meal to their children. Among other perceived barriers, strong aversion to healthy diet, fast food preference and varieties of food preference by the children were notifiable. Most of the mothers also reported that their children found it unpleasant/very unpleasant taking healthy food. However, cost of making a healthy diet was identified by only few mothers in our study.

Last but not the least, we advocate for policies that policy approach to the promotion of healthy eating with dietary guidance and attempt to work through improving nutritional knowledge and perceptions of healthy eating among families and communities. Evidence emphasised the need to empower parents especially mothers to make healthy changes within the family and the importance of taking children into account in programming so that the whole family is involved in making healthy changes in their dietary patterns.<sup>20-22</sup>

This study has some limitations. Its cross-sectional nature makes it difficult to establish causality. The use of urban settings may affect the generalisability of the findings to other settings. Social desirability and recall bias may be present due to the use of a self-report instrument that required participants to recall. However, the findings will add evidence regarding feeding practices on young children and thereby help us increase our understanding of the current feeding practices and design interventions to improve the practice.

## Conclusion

Our study revealed that participating mothers mostly found it time consuming effort to feed healthy meal to their children. Among other perceived barriers, strong aversion to healthy diet, fast food preference and varieties of food preference by the children were notifiable. Health education focusing on nutrition to improve mothers' nutrition knowledge regarding feeding school going children is recommended and social support should be enhanced for mothers to overcome barriers to feed their children with adequate nutritional diet.

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