

Complementary Feeding Practices and its Impact on Nutritional Status of under Two Old Children in Urban Areas of the Kathmandu, Nepal

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Abstract

Introduction Magnitude of the malnutrition is very high in Nepal. Child nutrition problem due to faulty child feeding practice is widely observed in many parts of the country including Kathmandu valley. Complementary feeding practice among the young children has been found very critical in urban areas of Kathmandu valley.

Objectives Conduct qualitative study to investigate the existing situation of “Complementary feeding practices and its impact on nutritional status of under 2 years old children in urban areas of the Kathmandu valley.

Methods The study was based on primary data collected by applying the 30 cluster sampling method. Target populations of the study were young children aged 0-24 months. Interview was taken with the mothers of the children. A set of questionnaire was used for interview of the respondents 150 households. Anthropometric assessment, focus group discussion, twenty-four hours dietary recalls, nutrient analysis of the complementary foods and market survey were adopted as a research methodology for data collection.

Results Finding of the study indicated that traditionally about 92 percent households were found practicing traditionally complementary feeding practices (TCFP) were 8 percent households were found practicing commercial Complementary Feeding Practicing (CCFP). Traditional complementary foods given to the children were found lacking in macronutrient carbohydrate and protein severely, therefore, not fulfilling the nutritional requirement of the children. Among traditional complementary food fed children, 63 percent of children were found suffering from mild to severe form of malnutrition whereas among commercial food fed, only 41 percent of children were found suffering from such form of malnutrition. About 33 percent of the children suffering from severe malnutrition were come from the household of employees. Children from Newar ethnicity of Lalitpur district were found more suffering from severe type of malnutrition compared to other ethnic groups. In addition baby boys were found suffering more from severe type of malnutrition compared to baby girls.

Conclusion Nutritional status of children from Kathmandu district found better compared to young children from other district. Children from Lalitpur district were found more severely malnourished. Surprisingly baby boys found more severely malnourished compared to baby girls. Traditional foods fed children were found more severely malnourished compared to commercial complementary food fed. Finding of this study clearly indicated that complementary feeding practices have direct impact on nutritional status of young children.

Keywords Nutrition status, Feeding practices, Children, Urban areas, Nepal.

Introduction

Hunger and malnutrition is the one of the heart broken hurdles in the growth and development of the children. Regarding hunger and malnutrition problem it was reported that over 780 million people of the world are

undernourished and about 13 million under the age of five die each year due to malnutrition and other disease in the world¹. In addition about 100 million children sleep hungry at night.

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The problems are more serious in developing countries, each year 120 million infants were born, the great majority of whom (85%) live in developing countries². Ten percent of these children died before their first birthday and another 4 percent died before they were five. Nepal is very pathetic and malnutrition is aggravating it.

Magnitude of the malnutrition problems is very high in Nepal. Child nutrition problem is widely observed in many parts of the country. Faulty feeding practice among the young children was the one of the major cause of malnutrition in Nepal³. Complementary feeding practices among the young children also have been found very critical in the urban cities of the country. Nutritionally unbalanced complementary food may cause nutrition deficiency disease. Timely initiation of complementary feeding practices among young children helps to promote their Nutritional status minimizing the chances of nutrition deficiency disease⁴.

Nutrition has a great impact in child's life and feeding practices has direct impact on the nutritional status and well being of a child. It was indicated that nutrition has direct impact in social educational, mental and physical development of young children⁵. Feeding practices like other forms of behavior is reset of complex personal, social cultural and economic influences, which is one of the determinants of the nutritional status of the children⁶. This research study was thus conducted focusing on child feeding practices especially complementary feeding practices of the urban areas of Nepal.

General objectives of the study were to identify the existing situation of "complementary feeding practices and its impact on nutritional status of less than 2 years old children in urban areas of the Kathmandu valley". Specific objective were to find out existing feeding practices in various ethnic groups as well as to find out nutritive values of practices complementary foods, 24 hours recall and anthropometric assessment to find out the impact of complementary feeding practices on nutritional status of young children.

Methodology

The study was based on the urban areas of the Kathmandu valley. Thirty-cluster sampling was aborted for the study. Study site was selected from 30 urban wards of the Kathmandu valley from three districts Kathmandu, Bhaktapur and Lalitpur. From each district, 10 wards were selected for the study. Thus all together 30 wards were taken as sampling unit.

The study was carried out focusing on two stage stratified sampling method. Interview on feeding practices and anthropometric assessment as well as 24 hours dietary recall was conducted to find out the nutritional status of the children. Nutrients of local complementary foods were analyzed in food research laboratory to find out the nutritive value of the traditional complimentary foods. Focus group discussion and market survey were conducted to collect data for the study. Mothers of the complementary food fed babies aged 0-24 months were the respondents. The research was based on primary data collected by interview of 150 households of 30 wards.

The methodology aborted for this study was the result of interview with the various respondents. Necessary precautions were taken to minimize sampling errors. The reason for the selection of urban areas was the availability of commercial complementary food. Since the pattern of availability of commercial food in the district was assumed to be more or less similar thereby making the population more homogeneous. This selection procedure seemed to reduce the possibility of any serious biasness.

Results

Table 1 shows the age and sex distribution pattern in three study districts – Kathmandu, Lalitpur and Bhaktapur.

Table 1

Character istics	Districts			Total
	<i>KTM</i>	<i>LTP</i>	<i>BKP</i>	
<i>Age of children</i>				
0-12 months	21(42%)	27(54%)	26(52%)	74(49.3%)
12-18 months	17(34%)	16(32%)	16(32%)	49(32.7%)
18-24 months	12(24%)	7(14%)	8(16%)	27(18%)
Total	50	50	50	150
<i>Sex of children</i>				
Male	25(50%)	24(48%)	23(46%)	72(48%)
Female	25(50%)	26(52%)	27(54%)	78(52%)
Total	50	50	50	150

KTM - Kathmandu, LTP- Lalitpur, BKP- Bhaktapur

About 92 percent households found with Traditional Complimentary Feeding Practices (TCFP) where as only 8 percent of the households were found with Commercial Complementary Feeding Practices (CCFP) (table 2).

Table 2

Types of Feeding Practices	Children		Total
	Males	Females	
TCFP	64(46.4%)	74(53.6%)	138(92%)
CCFP	8(66.7%)	4(33.3%)	12(8%)
Total	72(48%)	78(52%)	150(100%)

Traditional complementary foods given to the children were found lacking in Macronutrient carbohydrate and protein severely. Table 3 shows the nutritional status of children followed by their feeding practices.

Table 3

<i>Types of Feeding</i>	<i>Nutritional Status</i>		<i>Total</i>
<i>Practices</i>	<i>Normal</i>	<i>Malnourished</i>	
TCFP	52(37.7%)	86(62.3%)	138(92%)
CCFP	7(58.33%)	5(41.66%)	12(8%)
Total	59(39.33%)	91(60.67%)	150(100%)

The amount of traditional complementary foods given to the children was also found not fulfilling the nutritional requirements of the children but the sex of the child showed no statistically significant deference on energy gain per day ($P>0.05$).

Income had found positive contribution to the expending behaviour. Mother's employment status was found to have little impact on frequency of feeding traditional complementary food. Monthly family income showed an important impact on nutritional status of children.

Twenty-four hour's dietary recall showed that a large numbers of children aged 6-12 months were found underfed. Gender discrimination was also found clearly in feeding of commercial complementary foods. Baby boys found more enjoyed commercial complementary foods compare to the baby girls.

About 84 percent children aged 0-12 months were found suffering from mild to moderate form of malnutrition. Among complementary food fed children 63 percent were found suffering from mild to moderate form of the malnutrition whereas it was 41 percent among commercial food fed. Thirty three percent of the children belonging to the household of employees were suffering from severe form of malnutrition. Children from Newar ethnicity of Lalitpur district were found severe form of malnutrition in comparison with other district. Surprisingly baby boys were found more suffering from severe form of malnutrition (55%) as compared to baby girls (44%).

Discussion

Systemic efforts had been made to reduce nutrition problems in the country since 1975 by various sectors in Nepal. Few studies have been also conducted to identify nutritional situation in Nepal but studies on child feeding practices especially in complementary feeding were felt lacking since a long time. In this regard, present study was conducted to address the present need

of the country. This study indicated that most of the children of the study area were suffering from mild to severe form of malnutrition. Although commercial complementary food fed children were found slightly better in nutritional status, but this was not affordable for majority of the households.

A large segment of the population was found with traditional complementary feeding practices. Traditional complementary food given to the children found low in quantity as well as quality, which was a very serious problem. Traditional foods given to the children found unbalanced from the point of view of its nutritive value. Feeding of nutritionally unbalance food could cause protein energy malnutrition, Iodine deficiency disorder, Iron deficiency anaemia and Vitamin 'A' deficiency disease, which might lead to malnutrition, disability and even to death of young children.

Conclusion

Nutritional status of the children from Kathmandu district found better as compared to Lalitpur district where more severely malnourished children were found. Surprisingly, baby boys were severely malnourished as compared to baby girls. Traditional food fed children was found severely malnourished in compared to commercial food fed ones. Findings indicated that children those taking traditional foods were the most under fed, most malnourished and mostly prone to severe type of malnutrition, infectious diseases and even death. Findings clearly indicated that family member specially parents needs to be provided knowledge and skill on child feeding practices so that they could adopt correct feeding practices to overcome of possible casualties of child's death by controlling malnutrition problems.

Recommendations

- Traditional complementary foods provided to children need to be improved quantitatively as well as qualitatively.
- Nutrients such as Iron, Vit A need to be fortified in traditional complementary foods through concern sectors.
- Mothers should be encouraged for traditional complementary feeding practices through popular media to promote nutritional status of the children.
- Knowledge and skill should be provided to practice nutritionally balanced traditional complementary foods in household levels.

- Scientific study on complimentary feeding practices needs to be conducted in national level by concern sectors.
- Issues on child nutrition especially in feeding practices should be given high priority in national plan.

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