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Nutritional Status of Under-5 Children of Forcibly Migrated People Living in Ukhia, Cox Bazar, Bangladesh

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Abstract

In today's print and electronic media, terms like 'forced migration' and 'refugee' are some of the most frequently used words. Globally there have been an outrageously large number of forced migrations, rendering hundreds of thousands of people homeless and stateless. Starting with the Syrian war in 2011 to the latest round of military atrocity in Myanmar in August 2017, millions of people have sought refuge in neighboring countries. The Rohingya is a group of refugees from Myanmar who have been residing in Bangladesh since the 1970s. At present, there is no published information on health and nutritional status of refugee children in Bangladesh. This study was conducted to assess nutritional status of the Rohingya children aged 6 months to 5 years old (n=114). Children were measured for weight and height while their guardians were interviewed. About 86% of the Rohingya children were underweight, 64.9% stunted, 82.1% thin and 1.8% at risk of overweight. Severe acute malnutrition (MUAC<11.5 cm) children was 68.5%. As refugees have limited access to health care services, they are at greater risk of health and nutritional problems. This study sheds light on the refugee under-5 children situation through a nutrition lens.

Keywords: Nutritional Status; Under 5 Children; Forcibly Migrated People

Background

Children are vulnerable segment and tend to fall risk group in the developing countries because 50% of all deaths were occurring during the first 5 years of life [1]. Child under nutrition is a big and urgent deal for all. Neglecting child under nutrition affects both health and development [2]. The issue of forced migration is of global concern today. Millions of people flee from their homelands in various Asian and African countries and seek shelter in other countries particularly neighboring country. Due to recent outbreaks of military massacres in the Rakhine state of Myanmar, thousands of Rohingyas are pouring into Bangladesh every day. According to World Food Programmer in 2013, typically, refugees lack access to markets and are unable to afford nutritious foods. Most importantly very few accessible studies have been done regarding nutritional issues of refugee people. Evidence suggests that children with high morbidity and mortality are the most vulnerable group among migrants and need special care [3]. Moreover, these works do not cover all areas of nutritional status of under 5 years of children of refugee people. No systematic research, to my best knowledge, has been conducted on nutritional status among the refugee (Rohingya) people in Cox bazar district. Thus, the present study has been designed to comprehend nutritional status of under 5 years of children of refugee people in Bangladesh. Also, this research may facilitate the visibility of this community to policy makers, NGO workers and donors, therefore increasing understanding of the main causes of malnutrition and encourage the improvement of their health and nutritional status among refugee (Rohingya) peoples in Bangladesh generally, and particularly in the Cox bazar area. In addition, my research can be an attempt to fill the gap of resources for upcoming researchers and contribute to academic discourse on nutritional status within the discipline of nutrition science.

Materials and methods

It was a cross sectional study to see the nutritional status of under five years children through questionnaire. The study was mainly based on primary data, however prior to collect primary data; relevant documents were reviewed and collected. The study was carried out in one Upazila of Cox Bazar district. The Upazila was Ukhiya. The camps under this area were Kutupalong and

Balukhali. The study populations were children (0-59 months) of Cox Bazar district. Before conducting the main study, piloting was done to find out the validity of the questionnaire and to have an idea about their characteristics. This also helped to decide the way for approaching the ultimate study samples and to modify the questionnaire. In selecting the individual children, purposive sampling technique was applied. A structured questionnaire was created to gather information through face-to-face interview with the respondents. Children were weighed with light underclothes without shoes. Children stood upright in the middle of the scale, facing the field worker and looking straight ahead. They stood with feet flat and slightly apart until the measurement was recorded on the Personal Information questionnaire. The scale was calibrated to zero reading before each weighing session by the researcher. Body weight was recorded to the nearest 100 g (0.l kg) repeated and the average of the two measurements recorded. The weight measurements were taken before breakfast to avoid diurnal variations. A modified tape measure was used to measure the height of the study children. MUAC was measured by detecting less active hand and measured at the mid-point between the tips of the shoulder and elbow. The data set was first checked, scrutinized, cleaned and entered into the computer from the numerical codes on the form. The data was edited to check if there was any discrepancy (double entry, wrong entry). The frequency distribution of the entire variable was checked using SPSS 21 windows program. It gave overall information about the variables. Both qualitative and quantitative aspects of data were analysis followed descriptive to inferential statistics. For tabular representation Microsoft Word and Microsoft Excel were used. For calculation of Z-score Anthro Plus software were used.

Results

Age group (month)	Percentage	Frequency
0-11	20.14	23
12-23	24.3	28
24-35	15.97	18
36-47	27.09	31
48-59	12.5	14
Total	**100.0**	**114**

Table 1: Distribution of age group

The age distribution of the under-5 children shows that 20.14% from 0-11month age group, 24.3% from 12-23 months, 15.97% from 24-35 months, 27.09% from 36-47 months and 12.5% from 48-59 months (Figure 1) (Tables 1,2,3,4,5 and 6).

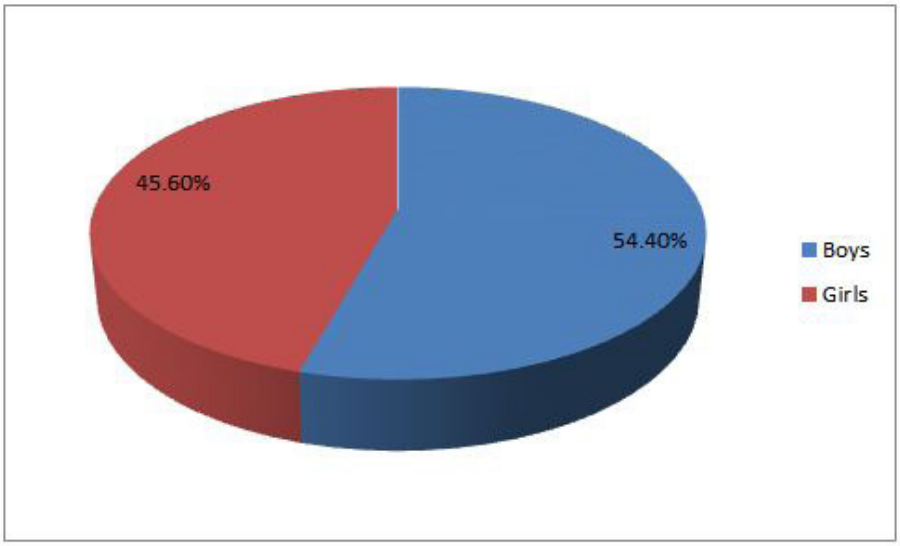

Figure 1: Gender of the children
Boy and girl distribution was 54.40% and 44.60%.

Indicator	Number	Percentage	Normal %
Stunting	74	64.9	33.3
Underweight	98	85.96	12.3
Wasting	94	82.46	17.5

Table 2: Prevalence of malnutrition
Prevalence of stunting, underweight and wasting was 64.9%, 85.96% and 82.46% respectively.

Indicator (Z-score)	Number	Percentage
Severely stunted (< -3SD)	62	54.4
Moderately stunted (-3SD to – 2SD)	12	10.5
Normal height (>-2SD to 2SD)	38	33.3
Above normal (>+2SD)	2	1.8

Table 3: Prevalence of stunting of children
Severe and moderate stunted were 62% and 12%.

Indicator (Z-score)	Number	Percentage
Severely underweight (<-3SD)	68	59.6
Moderately underweight (-3SD to <– 2SD)	18	15.8
Mildly underweight (>-2SD to <-1SD)	12	10.5
Normal (>-1SD to +1SD)	14	12.3
Overweight (>+1 SD)	2	1.8

Table 4: Prevalence of underweight of children
Severe and moderate underweight were 68% and 18%.

Indicator (Z-score)	Number	Percentage
Severely wasted (<-3SD)	60	52.6
Moderately wasted (-3SD to <-2SD)	20	17.5
Mildly wasted (>-2SD to <-1SD)	14	12.3
Normal (>-1SD to +1SD)	20	17.5

Table 5: Prevalence of wasting of children
Severe and moderate wasted were 60% and 20%.

Category	Number	Percentage
Normal (>13.5cm)	16	14
At risk of malnutrition (12.5 to13.4cm)	6	5.2
Moderate acute malnutrition	38	33.3
(>11.5cm and <12.4cm)	14	12.3
Severe acute malnutrition (<11.5cm)	78	68.5

Table 6: Nutritional status of Rohingya children (<5 years) based on their MUAC

From the above table, 5.2% children were at risk of malnutrition, 12.3% of them were at moderate malnutrition and 68.5% children suffered from severe malnutrition.

Discussion

This study was about nutritional status of Rohingya children whose age was less than 5 years. Nutritional status depends on many things like nutritional knowledge of caregiver, hygiene practices and sanitation behavior. In those makeshift camps of Ukhia the Rohingya women living were less educated and their nutritional knowledge was very poor. UNHCR set up objectives to prevent malnutrition among the refugee populations [4]. Despite the efforts to address malnutrition, the problem still persists especially among those residing in protracted refugee camps. Some refugee children from Myanmar lived in Thailand camps and their under nutrition rate was 33.7% underweight, 36.4% stunted and 8.7% wasted [5]. In a cross-sectional survey of refugee children in Syria under nutrition and over nutrition coexisted in that 17.9%, 9.7% and 49.6% of the children were overweight, stunted and anemic respectively [6]. As they are forcefully displaced their income level, housing condition, sanitary condition is poor indeed. Not only that their food practice is also changed. They had to take what they get; absent preferences of foods. Even sometimes they did not get three times meal in a day. In general, the Rohingya children have relatively poor growth status [7]. In this present study, 85.96% of Rohingya children aged less than 5 years were underweight, 65% stunted and 82% wasted. This report also shows that 1.8% of the Rohingya children were at risk of overweight. This high percentage rate indicates that severe food insecurity is there; immunization and de-worming status may be worse. Congested living standard and unprotected sanitation make this scenario more devastating. Literature reveals that Rohingya families feel confusion to seek medical care because they think that they may be detained and high medical costs [8]. In addition to this expression of speech and communication may be another barrier. Psychological trauma, mental shock, uncertainty of future provoking their mind continuously. This study is not without its limitations. Anthropometric measurement approaches might not be accurate to reflect the actual nutrition conditions of the children. The small sample size and the use of purposive sampling in this study could limit the generalization of the study findings to the Rohingya population in this country. Finally, there might be errors or biases related to recall information.

Conclusion

It can be concluded that under nutrition in the form of underweight, stunting and wasting of under-five Rohingyas children was too high that might fall these vulnerable children in long term morbidity as well as mortality. Immediate nutrition action is necessary to save them.

References

1. Park K (2011) Preventive Medicine in Obstetrics, Paediatrics and Geriatrics In: Park's textbook of preventive and social medicine (21st Edn) Banarasidas Bhanot Publisher.

2. Islam S, Mahanta TG, Sarma R, Hiranya S (2014) Nutritional Status of under 5 Children belonging to Tribal Population Living in Riverine (Char) Areas of Dibrugarh District, Assam. Ind J Commun Med 39: 169-74.

3. Biswas T, Mandal PK, Biswas S (2011) Assessment of Health, Nutrition and Immunization status amongst under -5 children in migratory brick klin population of peri urban Kolkata, India. Sudanese J Public Health 6: 7-13.

4. UNHCR/WFP (2006) Acute malnutrition in protracted refugee situations: A global strategy. United nations High Commissioner for Refugees (UNHCR) and World Food Programme (WFP).

5. Banjong O, Menefee A, Sranacharoenpong K, Chitchang U, Eg-cantrong P, et al. (2003) Dietary assessment of refugees living in camps: a case study of Msae La Camp, Thailand. Food Nutr Bull 24: 360-7.

6. Abudayya A, Thoresen M, Abed Y, Holmboe-Ottesen G (2007) Overweight, stunting and anemia are public health problems among low socio-economic groups in school adolescents (12-15 years) in the North Gaza Strip. Nutr Res 27: 762-71.

7. Zililah MS, Bond JT, Johson NE (2000) Nutritional status of primary school children from low income households in Kuala Lumpur. Mal J Nutr 6: 17-32.

8. Human Rights Watch (2000) Malaysia/Burma Living in Limbo Burmese Rohingyas in Malaysia.