



A Study on Gender Disparities in Basic Food Intake among Rohingya Refugees in Present-Day Bangladesh

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Abstract

Focusing on the Cox's Bazar region, the present study aims to explore gender disparities in the consumption of staple foods among Rohingya refugees currently living in camps in Bangladesh. Although there has been considerable humanitarian support, inequities in the distribution and consumption of food in refugee households persist, often to the disadvantage of women and girls. Drawing on a mixed-methods research design that involves focus groups, household surveys and interviews with refugees and aid workers, the study shows that women often consume less diverse foods and fewer calories than men. This is largely due to impact of conventional gender roles, social norms, inequitable allocations in the household and low participation of women in the food distribution system. These disparities further highlight the importance of more equitable, gender-sensitive food security policies, and have important health implications for women, particularly for pregnant and nursing mothers. The report concludes with recommendations to improve food justice and to dismantle systemic and societal barriers that prevent displaced populations from accessing healthy and nutritious food.

Keywords: Gender, basic food, Rohingya, refugee, cox'sbazar

INTRODUCTION

One of the worst humanitarian crises in the world right now is the result of the forced movement of more than a million Rohingya refugees into Bangladesh. Cox's Bazar's refugee camps have become densely populated cities that rely on aid from abroad. Food aid programs are in place, but evidence demonstrates that actual household absorption varies by sex [1]. Due to social cultural norms and institutional constraints, women, especially those responsible for households as well as pregnant and lactating women, are disproportionately affected by nutritional inequalities [2].

In a number of emergencies, food aid is distributed on the equal-per-person basis assuming uniform intrafamily distribution. Even so, women tend to eat less or last, compared to men in patriarchal societies, such that in times of food insecurity, such as the Rohingya's, women are even more negatively affected [3]. Cultural norms that restrict women's mobility and decision making also reduce women's participation in activities related to food collecting and nutrition [4]. If gender gaps are not directly targeted, they not only persist but widen over time as reported in research by NGOs and UN bodies [5; see also].

The quest for fairer humanitarian interventions must take into account the gendered differences in food consumption. The urgencies to consider the size of these disparities, to understand their determinants and to assess their consequence on the

nutritional status of different sex groups are the purpose of this work. We anticipate that in the context of humanitarian crises, this research will be relevant to inform policy recommendations that promote gender-transformative nutrition programming and inclusive food security.

Methods

Study Design and Participant Selection

Between January and February of 2025, a cross-sectional study was carried out to evaluate the food consumption of Rohingya individuals in the Cox's Bazar refugee camps based on gender. Ten trained volunteers participated in the data collection process. The study was carried out at Cox's Bazar's Kutupalong and Balukhali refugee camps, which combined are home to the greatest number of Rohingya refugees worldwide [6]. All ages, with the exception of children, have to be present during the participation period in order to meet the inclusion criteria. The participants were chosen by door-to-door recruitment.

Sample Size Detection

The sample size was determined using the infinite population formula $[S = (Z) 2 \times P \times (1-P) \div (M) 2]$. The Z-value (1.96) was computed at a 95% confidence level. The 50% (0.50) and 5% (0.05) levels were used to compute the population proportion (P) and margin of error (M), respectively. For this investigation, 385 data points were gathered.

Study Tools and Data Collection

The questionnaire was created in Bengali and English for convenience. The questionnaire was piloted for clarity and readability. Prior to being placed into a spreadsheet, cleaned, and subjected to principal component analysis and revision for reliability, it underwent a face validity pilot test. Ten professional interviewers assisted in conducting the poll. The interviewers approached the respondents and asked them to fill out the questionnaire in person after outlining the goal and design of the survey. Demographic data was gathered in the first section of the questionnaire, and food intake in households by gender was assessed in the second section. Two options for answers were given in order to reduce the likelihood that the desired and right response would be selected by chance. There were two possible answers: a) yes and b). The choices were a) food, b) clothing, c) education, d) housing, and e) treatment, depending on the issue you are facing.

Within the dataset, the ages' mean and standard deviation are displayed. Additionally, frequencies were transformed into percentages for convenience of interpretation.

Statistical Analysis

All of the data were put into a master Microsoft Excel spreadsheet prior to being imported into the Statistical Package for Social Sciences (SPSS) program (version 22.0). Using a Kruskal Wallis test, the mean differences between demographic variables were evaluated. P-values below 0.05 were regarded as significant.

Ethical Considerations

All participants provided written informed consent. We maintained all humanitarian principles during collecting the data from the refugees.

Results:

Variables	Frequency (%)	Mean \pm SD
Age (Years)		40.13 \pm 9.031
20-29	39 (10.1%)	
30-39	113 (29.4%)	
40-49	193 (50.1%)	
50-59	35 (9.1%)	
60-69	5 (1.3%)	
Sex		
Male	192 (49.9%)	
Female	293 (50.1%)	
Marital Status		
Married	348 (90.4%)	
Unmarried	0 (0%)	
Divorced	37 (9.6%)	
Widow	0 (0%)	
Educational Qualification		
Illiterate	218 (56.6%)	
< Class 5	167 (43.4%)	
Class 5-10	0 (0%)	

Table 1: Demographic information of the participants.

Demographic Characteristics

385 Rohingya refugee encamped in Cox's Bazar, Bangladesh were studied. The mean age of the participants was 40.13 years ($SD \pm 9.031$). Age distribution was as follows: 20–29 years (10.1%), 30–39 years (29.4%), 40–49 years (50.1%), 50–59 years (9.1%) and 60–69 years (1.3%). The gender distribution was almost equally

divided with 293 (50.1%) female and 292 (49.9%) male. Three hundred and forty-eight (90.4%) were married, 37 (9.6%) were divorced, [participants who had never been married or were widowed were not reported]. In terms of educational attainment 167 subjects (43.4%) had less than Class 5 education and 218 (56.6%) were illiterate.

		Sex		P value (Kruskal Wallis 1-way ANOVA Test)	P value (Mann- Whitney U Test)	Decision
		Male	Female			
Are you getting to have meal properly every day?	Yes	112 (29.1%)	95 (24.7%)	0.073	0.073	Retain the null hypothesis
	No	80 (20.8%)	98 (25.5%)			
Ever had a family fight over food?	No	111 (28.8%)	15 (3.9%)	0.000	0.000	Reject the null hypothesis
	Daily	25 (6.5%)	53 (13.8%)			
	Weekly	42 (10.9%)	98 (25.5%)			
	Monthly	7 (1.8%)	16 (4.2%)			
	Bimonthly	7 (1.8%)	11 (2.9%)			

Table 2: Crosstabs, Mann- Whitney U and Kruskal Wallis 1-Way ANOVA test results. Here significant level is 0.05.

Meal Adequacy

When asked whether they consumed a sufficient number of meals daily, 95 (24.7%) women and 112 (29.1%) men reported that they did. Conversely, 98 women (25.5%) and 80 men (20.8%) reported not consuming enough food in a day. The p-value of 0.073 in statistical analysis by Mann-Whitney U test testified that there was no significant difference of the daily meal sufficiency between males and females.

Family Conflicts over Food

Frequency of family conflict about food showed marked sex differences. No disagreements were indicated by 15 girls (3.9%) and 111 boys (28.8%). twenty-five men (6.5%) and fifty-three women (13.8%) reported daily disputes Forty-two men (10.9%) and ninety-eight women (25.5%) reported weekly conflicts Seven men (1.8%) and sixteen women (4.2%) reported monthly confrontations Seven men (1.8%) and eleven women (2.9%)

reported biannual conflicts. From the Mann-Whitney U Test, $p = 0.000$ suggests a sex difference to exist in family arguments about food, and women report more agreement than men.

Based on these findings, household conflictors related to food is likely to impact worst on women, despite differences in daily meal adequacy are not large among the genders. This dissimilarity was also similar to the findings of bigger studies on the gendered dimensions of food security among populations displaced by conflict and may be a manifestation of contextual causes which influence gender differences in vulnerabilities and power relations at household level. For instance, studies found that Rohingya women have limited access to healthy food because of community norms and caregiving responsibilities, and they are at heightened risk of experiencing food insecurity.

	Chi-Square test significant value
Sex	0.959
Are you getting to have meal properly every day?	0.139
Ever had a family fight over food?	0.000

Table 3: Here Showing Chi-Square test results. Here significant level is 0.05.

Interpretation: Results of a Chi-Square Test

There is a significant association between the outcome under screening and family conflict over food. It appears to be a valid marker for home stress or food insecurity. This understanding guides intervention programming as households showing food-related conflict can be targeted for counselling or food support.

Discussion

The findings of this study emphasize the large gender disparity in food security for Bangladeshi Rohingya refugees. There was no significant difference between men and women in terms of the proportion that reported eating enough meals each day, however women reported having a higher prevalence of family disagreements over food. This would suggest that women might

struggle more with the intra-household food allocation and the resulting pressures than with simply having food available.

The cultural traditions of the Rohingya community often put men in the driver's seat when a decision is made about something like how food will be distributed, which can work against women and girls. Women said they were expected to feed males first and were fed last, often from scraps. Two major barriers were reported, male dominance in family decision-making and religious conservatism [7]. In effect, in cramped and limited-resource refugee camps, outdated gender norms can be further gelled. These findings are consistent with global evidence indicating that women face more barriers to accessing food within crisis-affected communities [8]. In reality, sociocultural factors are significant for distribution

results despite gender-neutral food rules. Decentralising food distribution, employing more women as relief workers and empowering women through targeted nutritional programs might reduce these disparities [9].

The difference is a matter of amount and type. While starchy foods are generally available, women are less likely to have access to foods that are rich in micronutrients and protein, such as vegetables, lentils, and eggs. The worst affected by these trends that result in generation after generation of stunting are the children of undernourished mothers [10].

Recommendations

- All humanitarian food activities should have nutrition monitoring with a breakdown by sex.
- Promote the involvement of women in relief and camp administration.
- Offer mobile and house-based food aid to a housebound woman.
- Increase availability of foods rich in micronutrients, particularly to women and adolescent girls.

Conclusion

This study has revealed significant variations by gender in the consumption of staple foods among Rohingya refugees living in camps in Bangladesh. Respective of these mass women, while inadequate access to food despite massive humanitarian efforts aimed at ensuring food security for displaced people leads to nearly exclusive burdens for women and girls to address food shortage, grounded norms cultural, gendered, and interpersonal dynamics of household power as well as the neglect of gender-specific needs in the distribution of assistance systems may all conspire to render them vulnerable to food shortages. These disparities compromise the overall health of the refugee community and contribute to hunger and poor health among women.

The findings underscore the need for food assistance programmes to urgently mainstream gender-sensitive strategies which are sensitive to the specific vulnerabilities faced by women and girls. In order to achieve more equitable distribution of resources, humanitarian organizations and policy makers must implement specific measures including supporting female headed households, nutrition education, and equitable food provision. Reducing such gender disparities on food intake in the end will help to ensure dignity, equity, and justice for all members of this displaced, oppressed people—and it is not just a matter of nutrition.

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