



Status of Rohingya Refugees in Bangladesh: A Comparative Study with Emphasis on Aspects of Women and Girls in Camps of Kutupalong, Cox's Bazar, Bangladesh

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Abstract

A continuous flow of Rohingya refugees in Bangladesh because of violence in Rakhine State in Myanmar causes consequence to the world's largest refugee camp where most of the refugees are women and children. This study was conducted in 2018 in Bangladesh to understand the comparative status of registered and newly arrived Rohingya people in Kutupalong camps of Cox's Bazar focusing the present conditions of women and girls. This research explores the comparative information of registered and newly arrived Rohingya refugee from different perspectives: basic demographic and socio-economic characteristics, shelter, food, water and sanitation, safety and security concerns, knowledge and education. In addition, this research also addressed the urgency of coping strategies of refugees in camps and all of the identified issues in this paper were also analysed from gender perspective too. This study will help different level stakeholders to take proper steps regarding the management of Rohingya refugees in Kutupalong of Cox Bazar, Bangladesh.

Subject Areas

Sociology

Keywords

Rohingya Refugees, Bangladesh, Women and Girls, Shelter, Food, Safety and Security, Coping Strategy

1. Introduction

Violence in Rakhine State in Myanmar which commenced on 25th August 2017 imposed people to move into Bangladesh as Rohingya refugees where refugees are still entering the country border of Bangladesh. The intensity and level of the refugee inflow have turned into a serious and demanding humanitarian emergency. The refugees, who have reached in Bangladesh since 25th August of 2017, arrived with very few resources. They are now dependent on humanitarian assistance for all kinds of life maintaining needs including food, clothes, water and sanitation facilities, etc. [1].

Movement of the population in Cox's Bazar remains flowing where density is increasing in Ukhia. Government of Bangladesh allotted 2,000 acres of land for a camp for refugee. Kutupalong-Balukhali site is currently identified as world largest refugee camp with about 602,400 population. Humanitarian partners are constructing different types of facilities including required infrastructures to fulfill the needs of people as a huge number of people arrived Bangladesh when there were no facilities to maintain life and before services could be established and it is a challenge for all [1]. The Government of Bangladesh with different types of national and international Non-Government Organizations (NGOs) have done a response to save life including ensuring protection and necessary humanitarian assistance and tried to balance the overall condition. The overall condition includes critical protection, accommodation, sanitation facilities, health and nutrition supports including considerable physical and engineering infrastructure are organized to ensure sustainable settlements and other necessary public service networks [2]. Although the Government of Bangladesh along with different NGOs is working hard to manage the situation, the monsoon season emerged urgency of impacts like flooding and landslides which will affect about 150,000 refugees [2].

According to the Inter-Sector Coordination Group (ISCG) report on Gender Profile No.1, 2017, "*approximately 52% of the Rohingya refugee population is women and girls with the largest gender discrepancy being among the population of working age (age 18 - 59) where 55% are female. Overall 80 percent of the Rohingya population is women and children.*" [3].

This report also stated that crisis condition seriously affects women, girls, and older persons, a person with disabilities, children, adolescents, female-headed households, single women, single parents, religious minorities, persons of diverse gender identities and sexual orientations are considered as a most vulnerable group of people to different forms of gender-based violence. Women and girls are most vulnerable as they also face barriers to access to relief where it is important to ensure gender friendly environment in a refugee camp in the perspective of getting equitable access to all forms of humanitarian assistance [3]. A background of extensive violence, rape, and psychological disturbances are still alive in their mind where women and girls are mostly victims of the attack of the Myanmar Army. As consequence, more than three-quarters of the refugees in

the camp are women and children where they are most vulnerable and unsecured due to severe crowding and squalor because of food, space, nutrition, and water and sanitation status [4].

Since 25 August 2017, due to violence against the Rohingya people in Rakhine State, Myanmar, about 693,000 Rohingya refugees have reached where 52 percent of refugees are women and girls. Furthermore, 55 percent are female among the population of working age (age 18 - 59). In addition, 11 percent spotted as a single mother [3] [5]. Moreover, according to ISCG, (2017a), 4% of the people arrived with serious medical condition and risk of older persons was also 4%. On the other hand, percentage (%) of a person with disabilities, child-headed household, an older person with a child, separated children, unaccompanied children, single fathers, and male headed-households is 4, 3, 2, 2, 1, 1 and 84, respectively [3]. There are several studies conducted on Rohingya refugees of Bangladesh [6]-[13] but research work present condition of Rohingya refugees in the perspective of different socio-economic status including safety and security aspects of gender groups is not available. Given the above problems, the study was conducted for identifying the challenges and development patterns as well as to streamline the interventions in a better way. Moreover, it will analyze the gender issue in the refugee camps to identify the ground realities that have a different impact on men, women, girls, and children.

2. Methodology

2.1. Study Area

According to population information graphic of UNHCR as of 18th March, a total of 8, 69, 994 refugees came to Bangladesh from Myanmar in different periods where only 33,784 are registered (only 4%) and rest 836,210 are treated as Myanmar nationality [14]. Kutupalong is one of the Mega Camps which consist of 22 camps where 602,400 people live. The research study was conducted in 3 selected camps (1W, 03 and KRC) from 22 camps in Kutupalong under Ukhia Upazila of Cox's Bazar (Figure 1).

Camp 1W contains 534, 393 m² area where Camp 3 and Camp KRC occurring 453,561 m² and 381,339 m², respectively (Table 1). On the other hand, about 9086 households with 39,114 individuals were presented in Camp 3 wherein Camp KRC there were about 3784 households with 18,893 individual.

2.2. Data Collection and Analysis

A total of 99 face-to-face interviews were done in the household level of Camp KRC, 1W and 3 using a close-ended questionnaire where target groups for household surveys were women and adolescent girls from old refugee camps and the new arrival camps from June to August 2018. In addition, 6 FGDs (2 FGDs in each camp) were conducted where each group consisted of 10 to 15 women and girl participants. Also, 3 KIIs and 3 case studies were also conducted to obtain information on different issues such as risk factors, needs, gaps, suggestions

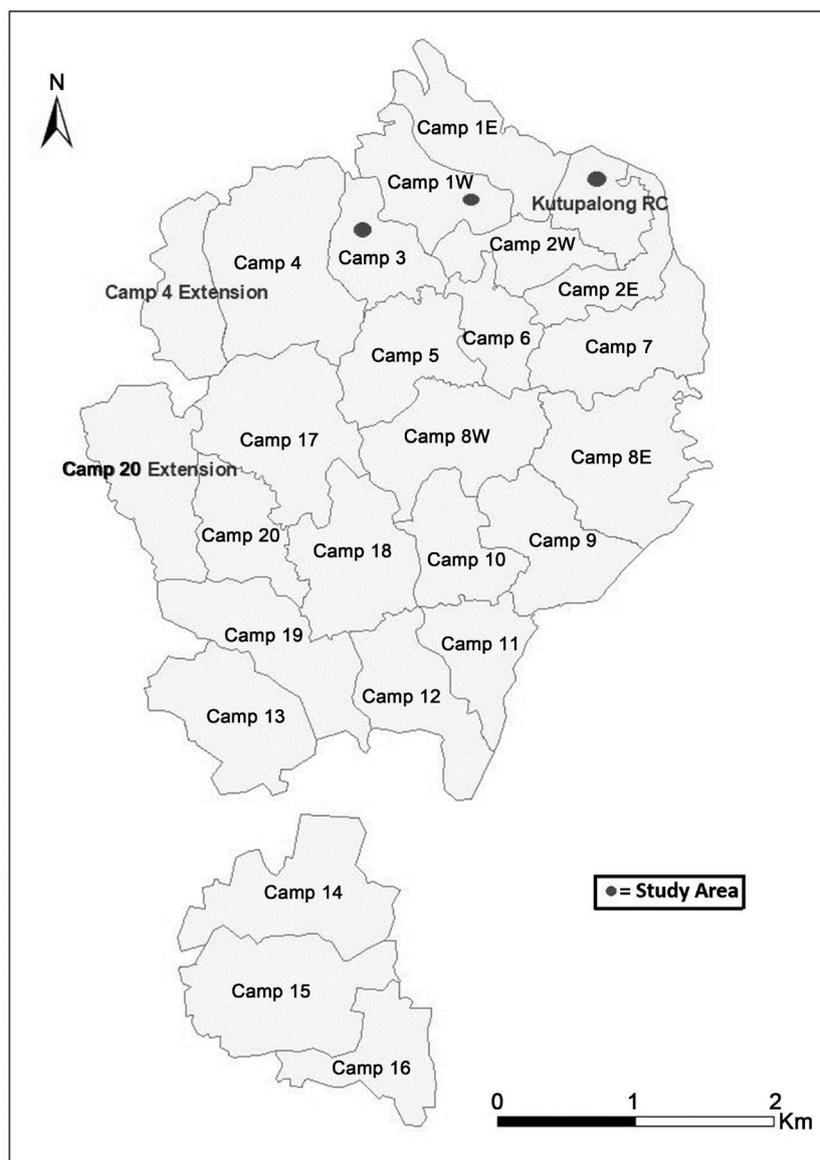


Figure 1. Camp 3, Camp 1W and Kutupalong RC in Kutupalong camp (Study area).

Table 1. Profile of studied camps (Camp 1W, Camp 3 and Camp KRC) in Rohingya refugee in Kutupalong camp (as of September 2018).

Aspects	Information in numbers		
	Camp 1W	Camp 3	Camp KRC
Camp area (m ²)	534,393	453,561	381,339
Total households	9349	9086	3784
Total individuals	40,516	39,114	18,893
Population density (m ²)	11	9	18
Children (less or equal to age 17)	21,656	21,255	9651
Female	21,170	20,358	9832
Male	19,346	18,756	9061

regarding areas of improving the status of Rohingya women staying in the camps. The Key Informant Interviews were conducted with respective Gender in Humanitarian Action (GiHA) working group for refugees, humanitarian aid worker and UNHCR official who are working in the camps.

After the data had been collected, it was verified, processed and analyzed using Excel software. The interpretation of the primary data was carried out keeping in mind the overall objectives of the research.

3. Findings

3.1. Demographic and Socio-Economic Characteristics

In the registered camp, 60% are female-headed households whereas 40% are male-headed (**Table 2**). In contrast, 59% of households are male-headed while 41% are female-headed in the new camp.

All of the respondents (100%) in male-headed and female-headed household in registered or old refugee part have no Family Counting Number (FCN) where all of the males headed and female-headed household in new arrivals have FCN (**Table 3**). In the registered camp, there is the prevalence of large families having more than 5 family members (85%) both among male headed and female-headed households. In the new camp, 51% male-headed households and 48% of female-headed households have 3 - 5 family members. Large families having more than 5 family members are less in the new camp, 26% both in male and female-headed households.

With regard to the occupation of the Rohingya refugees in the registered camp, 77% of the male-headed households are involved in different occupation but none among the female-headed households (**Table 3**). On the other hand, in the new camp, no one has an occupation or earning source. In the registered camp, the family members of both male and female-headed households came to Bangladesh more than 5 years ago while in the new camp, they came to Bangladesh one year or less than a year. In the present study, 61% of male-headed households from the registered camp have children under the age of five compared to 60 percent among female-headed households (**Table 3**).

Furthermore, women face gender-barriers which limit their access to and participation in livelihood activities. While there are currently Cash-for-Work activities, most women do not take part because of homemaking activities where livelihood condition of women is very bad due to restriction on work imposed by the government (Source: KIIs). They have various skills but they didn't get a job as per their skill. Limited job opportunity created in the camp *i.e.* labor,

Table 2. Percentage (%) of male headed and the female-headed households of Rohingya refugee in Kutupalong camp.

Aspects		Registered/Old Refugee (%)	New arrivals (%)
Type of household head	Male-headed household	40.00	59.00
	Female-headed household	60.00	41.00

Table 3. Information on having Family Counting Number (FCN), number of family members, family structure, occupation and the arrival in Bangladesh of Rohingya refugee in Kutupalong camp

Aspects		Registered/Old Refugee (%)		New arrivals (%)	
		Types of household		Types of household	
		Male headed	Female-headed	Male-headed	Female-headed
Family Counting Number (FCN)	Yes	-	-	100	100
	No	100	100	-	-
Number of family members	1 - 2	-	-	23	26
	3 - 5	15	15	51	48
	>5	85	85	26	26
	Single	-	-	-	11
Family structure	Nuclear	23	-	85	70
	Joint	77	100	15	19
Household head any occupation	Yes	77	-	-	-
	No	23	100	100	100
The arrival of household head in Bangladesh	≤1 year	-	-	100	100
	>5 years	100	100	-	-
Whether the family have children under 5	Yes	61	60	72	74
	No	39	40	28	26

retailer for different items, street-vendor, food and firewood collector from hills, etc. But women and girls are not involved with those works. However, they make homemade food and sell to the neighbors living within their blocks. Women and girls, mostly involve collecting relief items. They have to rely on assistance from different NGOs in the camp (Source: FGDs). Ameena Begum, 30 years old women in Camp 3 in Kutupalong camp stated that,

“Women are so vulnerable because we can't get enough access to get work to earn for the family. A single mother has to maintain social and religious belief and for that, we can't go outside of the camp.” (Source: Case Study 1)

3.2. Shelter

With regard to the type of building material for shelter, 31% respondents of the male-headed family from registered camp built their shelter by using a bamboo frame with external mud walls, bricks and cement (Table 4). About 35% female-headed household from registered camp built their shelter by using a bamboo frame with external mud walls while 20% also built their shelter with bricks and cement and another 20% with CGI sheet. Hundred percent family members of both male and female-headed households of the new arrivals built their shelter by using a bamboo frame with bamboo lattice walls covered in plastic sheeting.

Table 4. Type of building material for shelter, building material used for the roof of shelter and padlock on the shelter door of Rohingya refugee in Kutupalong camp.

Aspects		Registered/Old Refugee (%)		New arrivals (%)	
		Types of household		Types of household	
		Male-headed	Female-headed	Male-headed	Female-headed
Type of building material used to construct the shelter where the family currently lives	Bamboo frame with external mud walls	31	35	-	-
	Bricks and cement	31	20	-	-
	Corrugated Galvanized Iron (CGI) sheet	24	20	-	-
	Bamboo frame with bamboo matting walls	7	5	-	-
	Bamboo frame with a combination of bamboo lattice walls and mud walls	7	15	-	-
	Bamboo frame with bamboo lattice walls covered in plastic sheeting	-	5	100	100
Type of building material used to construct the roof of the shelter	Tarpaulin with plastic sheeting	62	75	100	100
	Sheet metal/ CGI sheet	38	25	-	-
Whether the shelter door has a padlock	Yes	100	100		
	No	-	-	100	100

According to respondents, the housing condition is not hygienic and they have to live in a small space with all their family members. It is a tiny house made by tarpaulin with bamboo where we cook and bath together in the same place. It became hot during day time and no ventilation exists in the house. During cooking, smokes become unbearable. Sometimes, they have to make a partition for privacy. There is no veranda in the living space. They received a solar lamp that provides light for a few hours but not enough to cover the whole night. Moreover, the scarcity of cooking fuel is making our lives horrible. If there is fire, no escape root available in the camp. Miseries go really high when it starts raining. The camp, adjacent areas, and roads become slippery that makes it difficult to move or walk. Moreover, there is land erosion due to a flash flood that causes landslides. As a result, many of their families need to relocate from the present location to Camp 4 extension. There is no safe place for taking shelter during an emergency. All the camp area is overcrowded. In Myanmar, they have plenty of lands and their house was big, separate toilet, a place to take bath, and homes were made of wood and roof were with CGI sheet (Source: FGDs). On the shelter issue of camp, Nur Alam (38) is a resident of the registered camp at Kutupalong describe that,

“My house wall is made of mud, roof by CGI sheet and the floor is cement with mud. So it has become risky to stay in such a mud wall shelter but there is no alternative or better option.” (Source: Case Study 2)

3.3. Food

The Food and Agriculture Organization of the United Nations (FAO), with gov-

ernment accomplices, civil society and other United Nations offices, is attempting to meet early reaction needs and add to longer-term answers for the district's endemic neediness. By expanding on effective work with accomplices through the Safe Access to Fuel and Energy (SAFE) activity, FAO is tending to vitality needs amid this emergency to construct versatility. The organized reaction is guided by the Food Security bunch, co-led by FAO and the World Food Program (WFP). In the present study, both male and female-headed household family members from registered and new camp receive food assistance. The households of the registered camp receive food ration from WFP by E-voucher. However, the family members of both male and female-headed households from registered and new camp did not receive a donation of BMS (Breast Milk Substitute)/infant formula or baby bottles (Source: FGD & KII).

In the case of Non-Food Items Kits (NFI), it was reported by the respondents that family members from registered and new camp got NFI kit since arriving in Bangladesh. However new arrivals are getting NFIs from the different organization along with UNHCR but registered refugee gets only NFI from UNHCR (Source: FGD & KII). Moreover, responses on food issue are mixed among the people in camps especially women. Amena Begum in Camp 3 in Rohingya refugee in Kutupalong camp stated that,

“After reaching in Bangladesh from Myanmar, I got food and free medical services from different humanitarian assistance organizations like the World Food Programme (WFP) and Medicine Saints Frontiers (MSF).” (Source: Case Study 1)

3.4. Water and Sanitation

In the perspective of the main source of drinking water, 100% male and female-headed households in registered and new arrival camp have access to the tube well (Source: Field level survey). Although germ containing or polluted water needed treatment before use, since the respondents from both registered and new camp drink tube well water, it is not necessary to treat the water. Tube well water is safe, pure and germ-free (Source: FGD and KII).

In the present study, it was observed that almost all of the respondents both in registered and new camp use soap for their bathing and daily purposes. All the male and female-headed households have designated bathing facility in registered camp. A similar scenario was found with regard to the bathing facility of male-headed households in new arrival camps but no bathing facility exists in the female-headed households in new arrival camps. Women in the new arrival camp use a small corner of the shelter for bathing (Source: FGD & KII). On the other hand, all the family members of both camps use a communal toilet. There is a separated toilet for women in the registered camp while there are a very few toilets designated for women in the new arrival camp too but used by both men and women (Source: FGD & KII).

About 38% male-headed household and 10% female-headed household have

no problems with a latrine in registered camp (Table 5). In the new camp, about 31% male headed and 30% female-headed household have no problems with latrine. However, 23% of male-headed and 45% of female-headed households in registered camp found latrine too crowded, followed by 23% of male-headed and 35% of female-headed households found latrine unclean and unhygienic while only 2% revealed that they found the toilet full.

Moreover, there are some water points in camps where Rohingya refugee used to collect water. They collect water from communal tube wells for drinking, domestic use, etc. They do not know how to maintain it and who is the responsible person to maintain. They came from a conservative society, so children, edged women and men are responsible to collect water and preserve it at the household level. Adolescent and women do not use a common bathing place. They make a small bathing place inside the house and use minimum water during bathing. Therefore, they are not used to use a communal toilet. They make small toilets inside the living space and use minimum water during defecation. As a result, it remains unhygienic (Source: KIIs).

Furthermore, women are participating in various activities related to water and sanitation. For instance, the health sector has included women as assistants in the health facilities for health message dissemination, psychosocial support, assistants to midwives and doctors. In the WASH sector, women are involved in hygiene promotion, encouraging communities to have safe drinking water from tube-wells, proper use of aqua-tabs, and promotion of latrine use. The condition of the toilet is very unhygienic and overcrowded. There are very few separate toilets for girls and women. Unfortunately, these are not demarcated and not properly maintained. To describe the sanitation facilities in the aspect of women and girls, Nabi Hossain a 50 years old man in Kutupalong camp stated that,

Table 5. The Bathing facility for household members and problems with the existing toilet of Rohingya refugee in Kutupalong camp.

Aspects		Registered/Old Refugee (%)		New arrivals (%)	
		Types of Household		Types of Household	
		Male-headed	Female-headed	Male-headed	Female-headed
Nature of bathing facility	Have designated shower/bathing facility	100	100	100	-
	Do not have a designated bathing facility	-	-	-	100
Problems with existing toilet	No problems with latrines	38.00	10.00	31.00	30.00
	There is not enough facilities/too crowded	23.00	45.00	25.00	15.00
	Latrines are unclean/unhygienic	23.00	35.00	13.00	17.00
	Toilet is full	16.00	10.00	3.00	7.00
	Latrines are not safe (no door, no lock, etc.)	-	-	5.00	12.00
	Absence/insufficiency of water	-	-	13.00	12.00
	Lack of privacy/no separate latrine for men and women	-	-	10.00	7.00

“Women have to wait with men for a long time especially in the morning for the toilet. There are no lights in front of the majority of the toilets. Where there are lights, it becomes the hub of gossiping place for a male at night.” (Source: Case Study 2)

3.5. Safety and Security Concerns

Safety and security is the most important component to live a good life. But there are some existing security concerns among the residents of the registered and new camp, especially in the case of women and girls. In the registered camp, about 69% among male-headed households and 5% among female-headed households gave priority on the access to civil documentation compared to more than 60% among new arrivals (Table 6). In addition, male-headed households of the registered camp reported family separation (77%), fear of harassment especially in the case of girls (62%) and lack of proper lighting (39%).

Furthermore, in the registered camp, 47% male-headed households and 50% female-headed households think access to legal assistance will improve their family’s sense of safety and security followed by the increased presence of police or army (16% among male-headed households and 5% among female-headed households (Table 6). About 16% male-headed households and 40% of female-headed household members think that lights around critical infrastructure will improve their safety and security in the registered camp.

In addition, women and girls face different types of risks in the camp, for example, sexual and gender-based violence, physical harassment, sexual exploitation

Table 6. Safety and security concerns for family members and interventions to improve the family’s safety and security of Rohingya refugee in Kutupalong camp.

Aspects	Registered/Old Refugee (%)		New arrivals (%)		
	Types of household		Types of household		
	Male-headed	Female-headed	Male-headed	Female-headed	
Safety and security issues	Access to civil documentation	69	5	70	63
	Family separation	77	-	-	-
	Fear of harassment (for girls)	62	-	-	-
	Lack of light	39	-	31	37
Interventions to improve the family’s safety and security	Access to legal assistance	47	50	39	26
	The increased presence of police or army	16	5	16	19
	Lights around critical infrastructure	16	40	5	7
	Street signs	7	-	5	19
	Improved camp/site leadership	7	5	22	11
	Government permission to move around freely	7	-	5	7
	Warning system for animal attacks or natural disaster	-	-	5	4
	Locks in shelter	-	-	3	7

and abuse by humanitarian workers, and domestic violence by husbands, fathers, and other males. Moreover, women and girls also face risks of fire, landslides, monsoon, and cyclone where lack of knowledge on human rights, gender-based violence, and sexual and gender-based violence, and lack of services also increase the vulnerability of girls and women in the camp. Women and adolescence girls have threats because of trafficking and bonded labor where the long distance to public facilities e.g. schools, distribution centers, camp management offices, and the clinic as well as the communal toilets also (Source: KIIs). Furthermore, the gender-based violence sub-sector has a total of 78 GBV entry points and 52 women-friendly spaces which provide information and services for women and girls. However, 120 additional case management entry points are needed. Hence not all women are fully covered. Not always though multi-sectoral services *i.e.* safety and security, health, physio-social support, legal and justice, etc. are available in the camp (Source: FGDs).

In addition, in the case of disasters, people living in the camp get cyclone warning messages on and off, but they are not sure where to go for shelter in times of crisis. Maybe men go to the nearby mosque to take shelter but women do not know where such a place is safer for women (Source: FGDs). On the issue of security of women and girls, Nabi Hossain in Kutupalong camp said that,

“There are lots of army and police persons deployed by the government for their safety and security. Not only that “Maji (Local leader)”, block committee, mosque committee, etc. are existing in the camp too for safety and security purposes”. (Source: Case Study 2)

3.6. Knowledge and Education

In the registered camp, all the girls attend primary schools. The same scenario was found in the new arrival camp where girls are studying at a temporary learning center. Since old arrivals are living in the registered camp for many years, they have access to education in mainstream primary schools which is up to class 8. All children go to school for their primary schooling. In contrast, new arrivals have no school facility except for temporary learning centers (Source: FGD & KII). In the male-headed household, 84% girls and in female-headed household 85% girls are going to the temporary learning centers while 16% girls in male-headed household and 15% girls in the female-headed household are going to the Madrassas (Table 7).

In the present study, it was found that 53% of the male and 40% of female-headed households from registered camp are capable of speak and read the Burmese language (Table 8). Amongst them, a sizable number can speak but cannot read or write Burmese (31% among male and 35% among female-headed households) followed by few who do not understand the Burmese language at all (16% among male and 25% among female-headed family members). In the case of new arrivals, 44% of male-headed family members can speak and read Burmese compared to 45% among female-headed family members. On the other

Table 7. Learning center for girls of Rohingya refugee in Kutupalong camp.

Aspect		Registered/Old Refugee (%)		New arrivals (%)	
		Types of household		Types of household	
		Male-headed	Female-headed	Male-headed	Female-headed
Type of learning center for girls	Public primary school (free)	100	100	-	-
	Temporary learning centres	-	-	84	85
	Madrassas	-	-	16	15

Table 8. Level of understanding of Burmese language of Rohingya refugee in Kutupalong camp.

Aspect		Registered/Old Refugee (%)		New arrivals (%)	
		Types of household		Types of household	
		Male-headed	Female-headed	Male-headed	Female-headed
Level of understanding of Burmese language	Can speak and read Burmese	53	40	44	45
	Can speak but cannot read or write Burmese	31	35	56	55
	Do not understand Burmese at all	16	25	-	-

hand, the majority can speak but cannot read or write Burmese. In addition, Ameena Begum, in camp 3 described that,

“Medium of instruction in the learning center is Burmese, whereas my daughter likes to study in Bangla. All the books are in Burmese language and English because Bangla language is the band for Rohingyas.” (Source: Case Study 1)

Furthermore, most Rohingya cannot read and write. Therefore, they cannot easily understand the humanitarian messages on the poster. There are a knowledge gap on human rights, risk protection, sexual and reproductive health, nutrition issues, GBV and SGBV. Refugees are not also aware of social and family benefits of gender equity and equality and there are educational, humanitarian knowledge, community governance, health and hygiene, women empowerment engagement gaps in the camps. Furthermore, there is also an existing gap in the perspective referral system and descriptions of clear roles and responsibilities of actors (Source: FGDs and KIIs).

Nowadays, a cell phone is a good medium of communication. In the registered camp, an overwhelming majority use cell phones with Bangladeshi SIM card (77% among male and 75% among female-headed households) while 23-25% does not have any cell phones (Table 9). However, in the new camp, the prevalence of cell phone with Bangladesh SIM card is more among male-headed household (77%) than among female-headed households (51%) as there is a restriction on the use of cell phone.

From the qualitative tools of the research work, it is also found that, although men have the most access to use a cell phone women have less access to use a mobile phone. In addition, they have less number of people to communicate as they have no relatives outside the camp border. In most of the cases, men got

SIM card in Bangladesh and they use in most of the cases to communicate others but men think that women have limited reasons to use a mobile phone in Camp (Source: FGDs and KIIs).

3.7. Needs and Coping Strategies of Households

With regard to the top priorities of family members staying both at the registered and new camps, first priority need is access to food followed by fuel and last priority need is access to income-generating activities or employment (Table 10).

Furthermore, to a certain extent through community volunteer workers and have access to radio and are able to listen to broadcasted messages but the majority of women are limited to living space in the camp and do not travel far. Women and girls have limited access to information and essential services as they are not comfortable to go out in different points for information and essential services due to their religious beliefs and gender-based barriers (Source: FGDs and KIIs).

In a registered camp, male-headed family members with less income bought food on credit (38%) followed by spending savings (31%) and selling household assets (31%) (Table 11). On the other hand, female-headed households reduced expenditures on essential non-food items (60%) followed by spending savings (25%) and selling household assets (15%) as their coping strategies.

Food is the most important fundamental need for human civilization. In

Table 9. Use of cell phone to communicate of Rohingya refugee in Kutupalong camp.

Aspect		Registered/Old Refugee (%)		New arrivals (%)	
		Types of household		Types of household	
		Male-headed	Female-headed	Male-headed	Female-headed
Whether a cell phone is used to communicate	Yes - with a Bangladesh SIM card	77.00	75.00	77.00	51.00
	No cell phone is used	23.00	25.00	23.00	49.00

Table 10. Items for which received money is spent on Rohingya refugee in Kutupalong camp.

Aspect		Registered/Old Refugee (%)		New arrivals (%)	
		Types of household		Types of household	
		Male-headed	Female-headed	Male-headed	Female-headed
Items for which received money is spent	Food	38.00	50.00	37.00	45.00
	Medical services and medicine	22.00	5.00	18.00	11.00
	Clothing	16.00	20.00	21.00	19.00
	Fuel	8.00	15.00	3.00	7.00
	Education materials/school fees	8.00		11.00	11.00
	Shelter materials/upgrade	8.00	5.00	3.00	7.00
	Household/cooking items	-	5.00	6.00	-

Table 11. Coping strategies to meet the health services of Rohingya refugee in Kutupalong camp.

Aspects		Registered/Old Refugee (%)		New arrivals (%)	
		Types of household		Types of household	
		Male-headed	Female-headed	Male-headed	Female-headed
Coping strategies	Bought food on credit	38	-	11	26
	Spent savings	31	25	-	-
	Sold household assets	31	15	64	45
	Reduced expenditures on essential non-food items	-	60	25	29
Most health services needed when the inability to finance on health expenditures	Use the health facilities of UN agencies/NGOs/charitable organizations	38	40	100	100
	Borrow money from family/ friends/neighbours	31	25	-	-
	Sell assets to meet healthcare expenses	23	20	-	-
	Take out a loan to cover medical expenses	8	15	-	-

registered camp, both male and female-headed family rely on less preferred and less expensive food (*i.e.* cheaper, lower quality food). In new camp, both male and female-headed family borrow food or relied on help from relatives or friends, or seeking additional humanitarian assistance excluding WFP food vouchers (Source: FGD & KII).

As for coping strategies, common livelihoods-based coping mechanisms used by refugee communities are: 1) Borrowing money to buy food, 2) Spending savings and 3) Selling jewelry is common among both groups, frequency is higher among refugees. In addition, there is a center for children, women and adolescent girls, for example, Child-Friendly Space (CFS), Temporary Learning Centre (TLC), Learning Centre (LC), Adolescent-Friendly Space (CFS) and Women Friendly Space (WFS). Besides all of these different kinds of the center, women, youth, Imam and “Majhi” are working for awareness. In addition, women and girls are participating in awareness and community sessions including life skill sessions. Women can share their feelings and do a consultation at WFS or CFS as they get family and community support and facility to engage in different voluntary work (Source: FGDs).

3.8. Major Concerns for Bangladesh about Rohingyas

Both male and the female-headed family members are registered and the new camp is indifferent to leave their present shelter. Moreover, the registered refugees are not interested to leave the country whereas the new arrivals are interested to return to Myanmar if they get citizenship (Source: FGD & KII). One of the outstanding worries for Bangladesh is the lack of sustenance. In spite of the fact that it has certain nourishment stockpiling for its own particular individuals, it is hard to bolster an extra 8 million individuals. Also, the region, where the Rohingyas have been shielded, is a vacationer put and topographically conveys huge significance. As the Rohingyas are entering through the method for going

to St. Martin Island of Bangladesh, the tourism business is relatively closed because of the wiping out of ship benefit according to security concern. The earth of the Cox's Bazar, in addition, is extremely harmed by the Rohingyas as there are deficient sterile lavatories. Safe drinking water and toilets are in "frantically short supply" in the riotous, abounding camps and settlements. Moreover, the security concern is most important. As the national decision of Bangladesh is coming soon, the passageway of Rohingya would be an unmistakable risk to the country. This won't be a fleeting issue. It won't end at any point in the near future. As it is completely important that the fringes stay open and that security for kids is given similarly that kids conceived in Bangladesh have their introduction to the world enlisted (Source: FGD & KII).

4. Discussion

A continuous flow of Rohingya refugees in Bangladesh due to violence in Rakhine State in Myanmar consequence to world largest refugee camp where mostly women and children fled since savagery emitted on 25th August 2017 and most of the refugees are women and children [1]. Having higher number of female-headed family than male-headed family in the old Rohingya refugee camp and more than five members in family of both old and new arrivals refugee camps, children more than 5 years old are more in the registered or old refugee camp is observed where less than 5 years are maximum in new arrivals group of refugee and a research it is found that most of the children in the camp are not already registered [8]. Moreover, from another research it is found that about 59 percent of the population in camp is children and about more than half of the children born in Bangladesh [6]. To control the increasing rate of new birth in camps, local family arranging experts have propelled a drive to give contraception, but they feel hesitant to use any birth control mechanism e.g. dispatch vasectomies for Rohingya men and tubectomies for women. A study on Rohingya in Cox Bazar conducted also identified that, refugees are started using contraceptives where all of the individuals trusted that anti-conception medication was an awesome sin since it was restricted by the Almighty Allah [13].

Moreover, in the case of financial capability in the camp, there is government restriction on livelihood interventions and women are most vulnerable to this. Those women migrated from Myanmar alone or with children after losing their husband and male guardian of the family, they can't move anywhere from their shelter to manage any livelihood where religious belief also working as a barrier too. Focusing on the financial aspects, findings of a study also support that and highlighted the issues of religious belief e.g. the practice of "Purdah" (inhibiting women from being seen by men) and it is not easy to possible to work in field wearing "Hijab" (Scarf used to cover head) because they believed that they will commit a sin by not using Hijab [9]. Furthermore, in practice, females are heads but in reality they are not heads in registered camp as found during field investigation since they are forced to head the household by their husbands so that

they can be involved in various activities such as relief collection, participate in meetings as they are always to be found in the shelter, etc.

In addition, a living condition in the camp can describe as unhealthy due to congestion, indoor cooking hoves, and imperfect safe houses built with air-impermeable plastic sheets, poor indoor air quality, etc. are increasing different types of irresistible illnesses, for example, intense respiratory diseases, measles, and tuberculosis inside the camps. A report of WHO stated that an intense respiratory disease has remained the essential driver of death for the camp populace living in Cox's Bazar (28%) and for kids under 5 years old (38%) [15]. Moreover, majority of the refugee's inhabitants in camps of Chittagong and Cox's Bazar in Bangladesh are identified as highly vulnerable to cataclysmic events where poor water and sanitation situation has rendered the camp as defenseless against the effects of the storm and flooding. Considering this situation, Bangladesh Water Development Board recommended that proactive calamity readiness and alleviation measures are earnestly required to diminish the populace and ecological defenselessness before the yearly stormy and rainstorm season [16]. The old arrivals in the registered camp do not need to pay any money for their shelter since their arrival in the camp. This trend is also noticeable in the newly established camp since the land they live on is government property. Moreover, both in registered camp and new camp the families do not have to share their living space with other families. Women are most vulnerable to the present condition of the shelter as they have to cook inside their tiny spaces in the shelter. A study on this camp also found that women do not get sufficient space for their own [9]. During rain, water soaks in it and also the area is landslide prone. Besides overall discussion, a study also discussed that new arrivals are living in a shelter made of tarpaulin and bamboo where old arrivals are mostly living in rooms made of mud-wall, CGI walls, a bamboo fence or even brick walls with tarpaulin and CGI rooftop [17]. On average, every refugee is living in a space of 9.5 square meters (sq. m) when the standard housing space according to Sphere should be 30 sq. meter excluding gardening in camp condition.

One of the greatest concerns is the poor sanitation and absence of cleanliness in camps. Development partners have feelings of trepidation over the rise of cholera, which spreads through grimy water. The UN started an immunization program to maintain a strategic distance from a cholera pestilence [18] where measles and suspected diphtheria cases are observed in the camp region [15]. Specifically, one demise from measles and 412 presumed measles cases was accounted for in November 2017, with 82% of cases happening in youngsters under 5 years old. Furthermore, one out of five Rohingya youngsters younger than five is evaluated to be intensely malnourished, requiring restorative consideration. There is a serious danger of flare-ups of water-borne sicknesses, looseness of the bowels and possibly cholera. New camps, settlements, and the host network in Teknaf remain underserved in contrast with Ukhiya where there is a

lack of beds for patients [5]. With the help of UNICEF and the WHO, the Ministry of Health and Family Welfare of Bangladesh propelled the measles and rubella immunization crusade in September-October 2017 [19]. About 55 percent of children under 15 years old have been immunized [20], yet to accomplish the > 95% inclusion required for group invulnerability, the inoculation crusade must be proceeded and extended. Furthermore, Rohingyas are using tube wells but 21 percent need to be repaired. There are a limited number of latrines in the new arrival camps without locks and enough lights. Toilets are overcrowded. Women and girls have to wait a long time in the same queue with men to use the latrine which is not healthy. Also, there is limited and separate communal bathing space for men and children while women have to bath inside the tiny living space allocated for them with insufficient water facilities [21]. Moreover, a report of the UNHCR stated that in camp, health service is well-equipped with clinics and refugees have access to an initial part of free health care where doctors also can refer them to specialists in city area e.g. Cox's Bazar and Chittagong for further treatment [6]. Moreover, women and girls collect water from the nearby tube well but in summer the water table goes down and difficult to pump where water and sanitation facilities are also identified as daily stressors where 75% and 55% of the respondents replied positively, respectively [12].

In the aspect of safety and security concerns, most of the refugee is affected or frightened due to less access to civil documentation, separation from family, different forms of harassment of girls and lack of light in the camp. This study derives that refugees in new arrival camps are more secure than old refugees in camps. Women are mostly responsible to collect fuel woods and during the collection of firewood from the jungle, there is always the risk of wild animals especially elephants. Women conduct an awareness session on GBV or SGBV as volunteers as well as the participant where case Management for survival support is available at camp level. In a study it is also identified that, several numbers of daily stresses in the perspective of security of girls and women e.g. ability to move about freely, fair access to services, safety or protection, harassment by locals, feeling humiliated or disrespected, harassment by police or security forces etc. where significant number of respondents identified with positive responses [12]. Also women, girls, and children in camp mostly being assaulted during the collection of water and firewood [6].

Education is an important tool for improving living condition and coping strategies of refugees especially girls with an adverse situation. In the registered camp, most of the boys attended the primary schools wherein the new arrival camp, similar learning trend was found for education. In registered camp, as old arrivals are living for many years, their children have the facility to enroll themselves in local public primary school. Almost all of them go to school for their primary education. On the contrary, new arrivals have no such type of school facility. Most of the boys go to the Madrassas and temporary learning center for their schooling. Moreover, the Rohingya also have very defined entry to second-

ary and higher education as well as other available public services in Bangladesh [6]. In contrast, new arrivals have no school facility except for temporary learning centers. Lack of adequate teachers and inadequate education services for adolescents between 15 to 24 years of age remains a major concern for all the camps. Furthermore, not only that most Rohingya cannot read and write but also cannot easily understand the humanitarian messages in the posters [5]. Although a language barrier is barriers for refugees with other humanitarian assistance in the camp, they are used to communicate among them. Although the majority of the respondents in both types of camps have their own SIM card and mobile where female-headed household have less access. Although UNHCR is trying to provide service regarding education software, English language, typing, mobile repairing training but a large portion of the refugees are using mobile internet illegally [6].

Among the various forms of items for which money spent in Kutupalong camp, food is one of the main issues for both of the registered and new arrivals refugees where single mother, children, and orphan are suffering due to less access to food and other necessary supports. Most of the members in the protection emergency response units (PERU) and mobile protection teams of the Protection Sector are women and are well trained in basic first aid, psychological first aid and emergency protection response. Women have been included among trained refugee volunteers, including Community Outreach Members (COMs), Safety Unit Volunteers (SUVs), and Community Health Workers (CHWs) to provide support to the monsoon and cyclone emergency response. In addition, women's participation in camp activities and leadership roles exists at camp level, *i.e.* participating in local government system in camp level and informal Majhi structure where a limited number of women are members of the Majhi, SUV and other social committees. Also, social level protection for girls and women is mandatory to ensure through ensuring participation of community leaders, security persons and "Majhi" where other basic needs also get priority *e.g.* food, the quantity of fuelwood, water, etc. [6]. Though Rohingya people have less experience of the cyclone so that they do not understand the meaning of flags of the cyclonic signal. Still, there are no cyclone shelters found in camps [5]. Moreover, registered refugees are receiving food aid that includes rice, cooking oil and lentils through e-voucher. New arrivals are receiving food aid of similar items and quantity from the General Food Distribution points (GFD) [22]. Furthermore, in total 240,000 stoves will be distributed enough to reach all refugee families and a significant number of vulnerable people in heavily impacted communities. The recently launched SAFE Plus (Safe Approaches to Fuel and Energy Plus Landscape Restoration and Livelihoods) project a partnership between IOM, FAO and the UN World Food Programme (WFP) began the distribution of LPG stoves to 125,000 families in September 2018 [23].

Furthermore, focusing on the coping strategies in the perspective of a humanitarian crisis situation, to ensure gender friendly environment in camp, it is

important to find different forms of coping strategies with proper implementation at the community level through community consultation including confirming the participation of women to ensure livelihood options too. Similar to this, signified livelihood option as a priority among different aspect of coping issues. Moreover, the promotion of leadership and meaningful equal representation of women and girls should include gender awareness and analysis training to humanitarian field staff and support personnel [6]. Diversify and strengthen the services provided at WFS/ AFS/CFS to include economic empowerment and livelihoods and skills development activities.

Moreover, risks of hampering of access to basic human rights, GBV, SGBV is observed in camps. Awareness sessions need to be increased in order to increase the refugees' knowledge of human rights, GBV, SGBV, Referral system, the responsibilities of their clear roles including the integration of gender awareness and gender sensitivity training in capacity building activities, targeting humanitarian actors, Police, Armed Forces as well as camp and religious leaders. To resolve all of the gender aspect issues in the camp, the active role of women should be confirmed including ensuring a position in a leader where they can help to address the specific issues women or female household faces [24]. Furthermore, the Gender-Based Violence sub-sector has a total of 78 GBV entry points and 52 women-friendly spaces which provide information and services for women and girls. Over 187,318 females (108,732 women and 78,586 girls) have been reached through GBV prevention programs including engagement and empowerment interventions for women and girls. Freedom of mobility is one of the biggest problems that adolescent girls are faced. Women headed households and unaccompanied children are the most vulnerable to the risk of sexual and labor exploitation. Bangladesh Police, RAB, Ansar /VDB, Bangladesh Army and all intelligence agency have been working to ensure maximum security for Rohingyas [5] [25].

5. Conclusion

There are one million people in the camp live in a very crowded environment. Issues like domestic abuse and sexual harassment are ongoing problems in the camps. As the men are mostly idle and do not have many activities to do in the camp, they are frustrated and women are being subjected to domestic violence women-headed households and unaccompanied children are the most vulnerable to the risk of sexual and labor exploitation. Freedom of movement and other cultural concerns are the biggest problems that adolescent girls and women face in camps. In registered camp, refugee considers as a registered refugee while new arrival considers as Myanmar nationality. Furthermore, as refugees are concentrated in the cyclonic zone, despite using CGI sheet as housing materials, CGI sheets are rampantly used in these camps where there is not enough ventilation system which causes different health-related problems, especially to women. To reduce reliance on firewood for fuel, prevent further deforestation and allow

forest rehabilitation to be carried out, humanitarian agencies are simultaneously providing LPG stoves to refugee and local families in the area. Women are faced with gender-barriers which limit their access and participation in livelihood activities. While there is currently Cash for work activities, most women are not taking part because of the burden of work at the household level. However, some women are participating in various activities *i.e.* health workers, hygiene promoter, women volunteers for door to door surveys. To ensure the sustainable living condition of refugees in both old and new camps, it is necessary to ensure their access to all essential services at a minimum distance to the public facilities, e.g. schools, distribution centers, camp management offices, and the clinic as well as the communal toilets. Moreover, it is a precondition to increase awareness of women and girls to confirm their safety and engagement with livelihood options in camps.

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Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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