

The challenges and coping of Rohingya refugees: a comparative study of registered and nonregistered Rohingya refugees in Bangladesh

The challenges of Rohingya refugees

95

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Abstract

Purpose – This research aims to determine to what degree registered and nonregistered Rohingyas differ in their difficulties and coping strategies.

Design/methodology/approach – Kutupalong registered and one nonregistered camp (Camp 2E) were selected as the study area, and a mixed-methods approach was followed to collect the data. Six in-depth interviews and two focus group discussions (FGDs) were conducted first, and then the questionnaire survey was conducted on 315 Rohingyas, comprising 116 registered and 199 non-registered refugees.

Findings – The results indicate a substantial difference in the difficulties and coping techniques of registered and nonregistered refugees in food, residence, health and security. Except for the health and security issue, the registered Rohingyas (RRs) have a relatively better life than the nonregistered Rohingyas (NRRs). The main problem registered refugees undergo is economic, followed by health service, food, residence, social and security issue. For nonregistered refugees, economic and social issues receive maximum attention, while security is their last concern. The coping strategies show that all strategies against difficulties significantly differ between registered and nonregistered Rohingyas.

Practical implications – Based on their registration status, this research may assist humanitarian workers and policymakers in better understanding of Rohingya refugees' livelihood strategies and challenges in Bangladesh. The findings may also help practitioners and policymakers build new programs and services to assist complex and difficult refugee groups in improving their livelihoods and access to essential amenities.

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The authors would like to thank the authority for permitting them to enter the Rohingya camp. Then, we thank the Rohingya people who gave their valuable time for the interview. Without their assistance, this research would not have been possible. Next, we want to show our gratitude to the office of the United Nations High Commissioner for Refugee (UNHCR) and Refugee Relief and Repatriation Commission (RRRC), the Camp in charge, and the Upazila Nirbahi Officer (UNO), who gave the interview as key informants. We are also thankful to the local people who helped as interpreters during the interview.

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Author's contribution statement: The first two authors contribute to conceptualizing, developing methodology, and designing the study. Then, Neegar Sultana conducted the literature review, prepared the original draft and revised the manuscript. Shahana Sultana, on the other hand, analyzed and interprets data and assisted in manuscript writing. The third and fourth authors did the data entry and made preliminary data tables. All authors were involved in data collection from the field.

Conflict of interest: On behalf of all authors, the corresponding author states no conflict of interest.



Originality/value – Previous research shows little attention to the variations between registered and unregistered refugees. However, almost no studies have compared the challenges and coping methods of registered and unregistered Rohingya refugees in Bangladesh and other regions. This research was meant to define and offer an in-depth analysis of the Rohingya refugees' livelihood strategies in the Kutupalong registered and nonregistered camp in Bangladesh to fill the knowledge gap.

Keywords Registered Rohingya, Nonregistered Rohingya, Challenges, Coping, Bangladesh

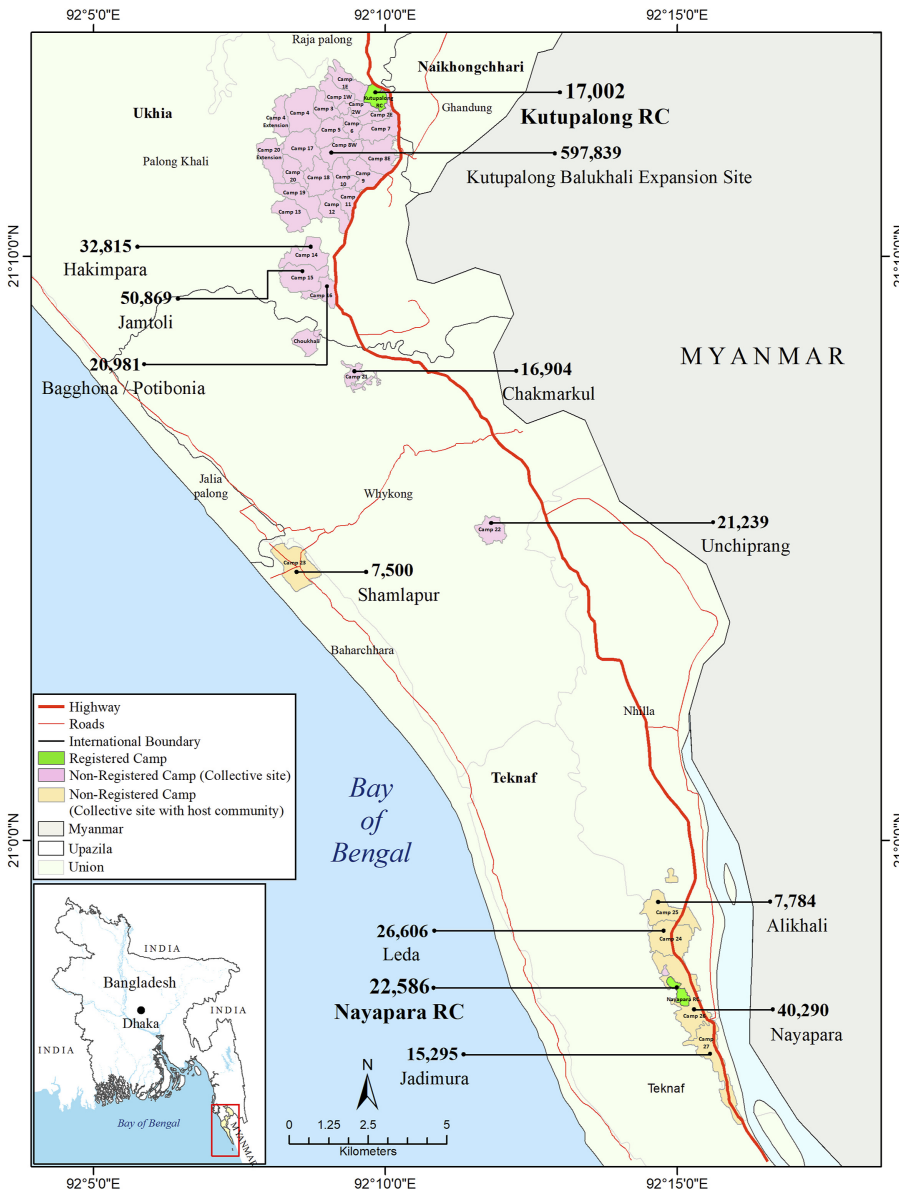
Paper type Research paper

1. Introduction

Bangladesh currently shelters over one million Rohingya migrants (Momem, 2021), accounting for 4.7% of the world's refugees (Sattar, 2019). The Rohingyas are a stateless ethnic, linguistic and religious minority group of Myanmar, forced to flee their homes internally and externally due to political and communal strife. Statelessness is one of the most challenging issues to address in humanitarian action and the development and enforcement of legal safeguards for those most vulnerable to man-made threats and human rights violations (Barash, 2000). Therefore, stateless people suffer significant repercussions regardless of where they reside. Moreover, many fundamental human rights (food, apparel, accommodation, schooling, healthcare, vaccine facilities, freedom of travel, etc.) are difficult to acquire (Shohel, 2020).

The Immigration Act 1974 of Myanmar refused the Rohingyas' right to citizenship (Hamzah, Daud, & AzizanIdris, 2016), and its Citizenship Law of 1982 (UN-ACT, 2014) did not recognize them as part of any 'ethnic race' (Mohsin, 2020). The Rohingyas thus became stateless and exposed to decades of persecution and state-sanctioned violence (Parnini, Othman, & Ghazali, 2013). Subsequently, thousands of Rohingyas have crossed multiple international boundaries to seek refuge and avoid brutal discrimination, racism, terror, torture, arbitrary punishment, assassination and extreme poverty (UNHCR, 2019). Hence, the United Nations (UN) considers the Rohingyas the most oppressed ethnic Muslim community and a humanitarian tragedy (Milton *et al.*, 2017; Momem, 2021). Three out of four Rohingyas residing outside Myanmar lack UN refugee status (Mahmood, Wroe, Fuller, & Leaning, 2017), restricting their access to essential services and enhancing their vulnerability to abuse and abduction (Milton *et al.*, 2017). Bangladesh first attempted to resolve this problem but received insufficient international funding to enable Rohingya refugees to return home (Myanmar) (Khan, Rahman, Molla, Shahjahan, & Abdullah, 2020). The present study examines the various challenges of Rohingya refugees in Bangladesh and their coping mechanisms.

Since the late 1970s, thousands of Rohingyas have fled from Myanmar to Bangladesh (Nyukuri, 2021). Recently, over 900,000 Rohingya refugees, 741,000 of whom left Myanmar on August 25, 2017, reside in cramped camps in Cox's Bazar district of Bangladesh (UNHCR, 2019). Bangladesh has two registered camps (RCs): 'Nayapara' in Teknaf and 'Kutupalong' in Ukhiya Upazila (Skretteberg, 2019) (as portrayed in Figure 1). The UN has granted refugee status to 39,588 Rohingyas in these two camps, known as "registered Rohingyas (RRs)" (UNHCR, 2021). However, after the massive Rohingya exodus from Myanmar, about 200,000 Rohingyas are living in 34 temporary camps in Ukhiya (i.e. Kutupalong Balukhali Expansion Site, Hakimpura, Jamtoli and Bagghona) and Teknaf (Chakmarkul, Unchiprang, Shamlapur, Alikhali, Jadimura, Nayapara and Leda) Upazila without official identification, legal status or external support (Islam *et al.*, 2019). Residents of these unofficial camps (called "Nonregistered camps – NRCs"), known as "nonregistered Rohingyas (NRRs)" are in an untenable situation since they have not officially asserted refugee status with the United Nations High Commissioner for Refugee (UNHCR) (Akhter *et al.*, 2020; Rahman, Shindaini & Husain, 2022). The Government of Bangladesh (GoB) and various nongovernmental organizations (NGOs) have provided Rohingya humanitarian assistance in those areas;



Source(s): Prepared by Authors

Figure 1. Rohingya refugee camps in Bangladesh along with population (UNHCR, 2021)

however, the aid is insufficient and varied for registered and nonregistered refugees. Under this background, registered and nonregistered Rohingyas in Bangladesh must be viewed in a larger context as their challenges and coping techniques are dissimilar and diverse.

However, past research focused little on the variations between registered and unregistered refugees. In most countries, RRs get more significant benefits than NRRs. For example, housing and health services are primarily supplied in the Syrian registered camp,

while nonregistered refugees face severe obstacles (Akar & Erdoğan, 2018). Conversely, registered Syrian refugees confront language and classroom space limitations to education (İçduygu & Şimşek, 2016). Similarly, nonregistered refugees face obstacles due to a lack of appropriate documents, high education costs, school distance, safety concerns and language barriers (Berti, 2015). Additionally, Nabulsi *et al.* (2020) examined the livelihoods, coping methods and access to healthcare among registered and unregistered Syrian refugees in the Beqaa region of Lebanon. Still, little knowledge is available considering the life of registered and nonregistered Rohingya refugees (Melnikas, Ainul, Ehsan, Haque, & Amin, 2020).

Previous literature primarily emphasizes the Rohingya issue in a historical context (Islam, 2020). UN agencies and NGOs have also established that Rohingya refugees are denied livelihood opportunities and forced to subsist in congested camps in Bangladesh (UNICEF, 2018). However, few studies identified the status of RRs living in Bangladesh and their specific challenges (Karin, Chowdhury, Hasnat, & Tarin, 2020; Karin, Chowdhury, & Shamim, 2020). For example, Khan *et al.* (2020) identified that refugees in RC have better access to medical treatment, shelter, water, sanitation and legal protection. Previous studies also revealed insufficient food supply, limited access to schooling and restrictions on movement as the critical challenges of Rohingya living in the registered camp (Knight, 2013; Riley, Varner, Ventevogel, Taimur Hasan, & Welton-Mitchell, 2017). On the other hand, Shohel (2020) recently assessed Rohingya children in RC and found many barriers to their education, including a lack of learning space, qualified teachers, funding, language barriers and psychosocial, cultural and political issues. In contrast, Rahman *et al.* (2022) investigated the structural barriers to delivering primary education to refugees in the nonregistered Kutupalong camp and discovered that more than half of Rohingya children lack access to elementary education. Moreover, clean water, adequate sanitation, hygiene and waste disposal facilities are critically inadequate in overcrowded nonregistered Rohingya camps (Amin, 2018; Khan, 2017).

Additionally, some scholars identified specific challenges such as drinking water security challenges (Akhter *et al.*, 2020), livelihood strategies regarding economic challenges (Crabtree, 2010) and opportunities and challenges for the education of refugee children (Hossain, 2021). Some studies are also available related to healthcare systems (Harrison *et al.*, 2019; Tarannum, Elshazly, Harlass, & Ventevogel, 2019) and coordination nutrition sector responses (Nyukuri, 2021) in the Rohingya refugee settings of Bangladesh. On the other hand, few experts addressed host community security issues from the Rohingya refugee crisis (Choudhury, 2020; Khuda & Scott, 2020; Momem, 2021). Moreover, few researchers assessed the impact of COVID-19 on the Rohingya migrants (Banik, Rahman, Hossain, Sikder, & Gozal, 2020), socio-environmental challenges during the COVID-19 pandemic (Shammi, Robi, & Tareq, 2020) and identified their capabilities (Guglielmi *et al.*, 2019) in Cox's Bazar district. However, almost no studies compare the challenges and coping methods of registered and unregistered Rohingya refugees in Bangladesh and other regions.

To fill that knowledge gap, this study was designed to frame and provide a holistic understanding of the variations in livelihood strategies among the Rohingya refugees living in the Kutupalong registered and nonregistered camp in Bangladesh. Two distinct objectives have been investigated to meet the overall research goal. First, the research intends to identify the fundamental, social, economic and security challenges faced by registered and nonregistered Rohingya refugees in Bangladesh. Second, the research seeks to identify the coping techniques used by both registered and nonregistered refugees in Bangladesh. Based on their registration status, this study may help humanitarian workers and decision-makers better comprehend Rohingya refugees' livelihood tactics and obstacles in Bangladesh. The results can also help practitioners and policymakers design new programs and services to help complicated and demanding refugee groups improve their livelihoods and access essential amenities.

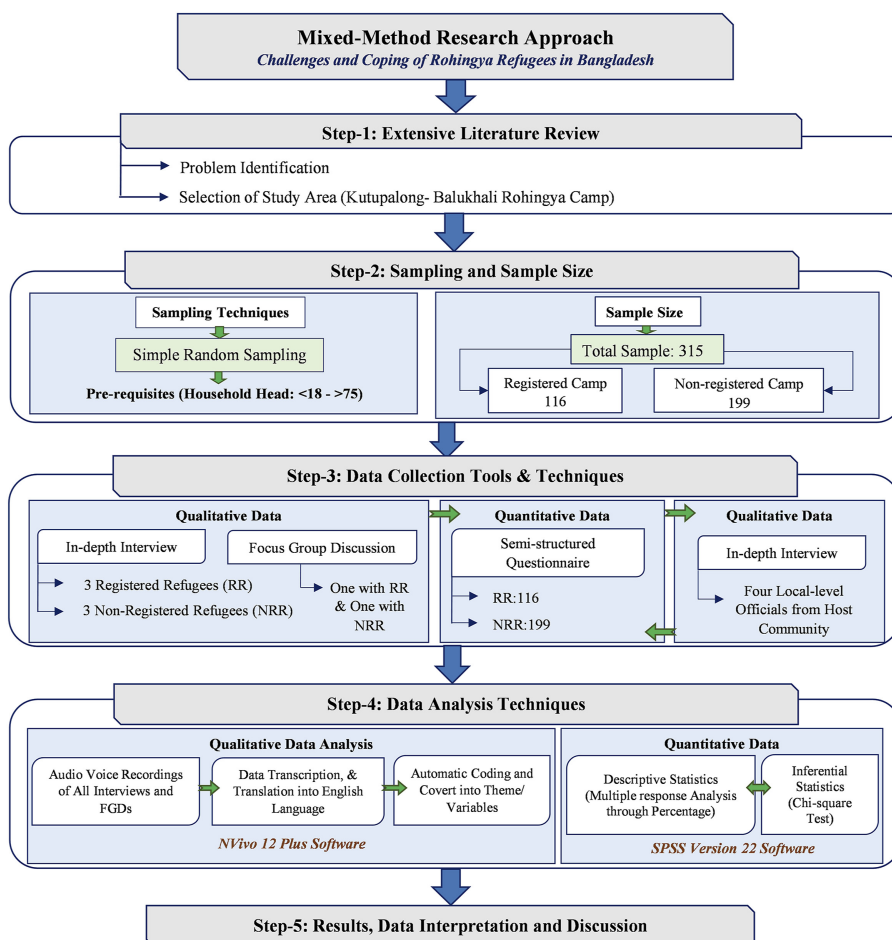
2. Methods and materials

A mixed-methods approach was used to demonstrate the numerous challenges Rohingya refugees encountered and their coping strategies across multiple dimensions. The complete methodology, including camp selection and sample techniques, data sources, data collecting and analytic procedures, is shown in Figure 2.

2.1 Study area and camp selection technique

The Kutupalong Rohingya Camp (KRC) has been selected as the research site for this study. The authors purposely chose Kutupalong (the world's largest refugee camp) since most refugees are battling to survive in the makeshift camp, and the mass of them are highly vulnerable refugees who are not registered with the UNHCR (Rahman *et al.*, 2022).

The KRC, officially known as 'Kutupalong – Balukhali Rohingya Camp,' is situated at the Ukhia Upazila (sub-district) of Cox's Bazar district on a 13 square kilometer landmass. The camp was formerly recognized as the 'Kutupalong RC'; however, it ceased registration for



Source(s): Prepared by Authors

Figure 2. Methodological framework of the research

Rohingyas who fled in 1992. Over the subsequent years, Rohingya refugees continued to arrive, and they eventually established settlements around the Kutupalong RC, which became known as the “Kutupalong Makeshift Settlement (KMS).” After the August 2017 Rohingya influx, the majority settlement was formed a few kilometers south in the KMS and Balukhali Makeshift Settlement, called the “Kutupalong Balukhali Extension Site” or “Kutupalong NRC. Since there was no pre-existing system when the refugees arrived, the Kutupalong NRC experienced more detrimental living conditions than the RC. Kutupalong RC and NRC occupy an estimated population of 17,002 and 5,97,839, respectively.

In this study, there must be proximity between chosen camps to understand better the differences in problems and coping mechanisms experienced by RR and NRR refugees. Based on proximity, the authors chose Kutupalong RC and Camp 2E out of 23 NRC at Kutupalong (exhibited in [Figure 3](#)). Camp 2E was also investigated due to security concerns since the GoB mandated all visitors to leave the camp by 4 pm each day, and its closeness to the highway made it easy for surveyors to get there during the survey.

2.2 Data collection techniques

Based on multiple fieldworks from mid-2017 to the end of 2019, primary data were gathered through in-depth interviews, focus group discussion (FGD) and a semi-structured questionnaire survey. Data collection was approved by the Ministry of Home Affairs, Ministry of Foreign Affairs and Office of Refugee Relief and Repatriation. The authority specified the data collecting duration and extended it daily from 9 am to 4 pm. Eight Rohingya youth were hired to help the 20 research assistants (RAs) collect data from the camps. The engaged Rohingya young people had previous knowledge of their culture and interpreted unfamiliar dialects.

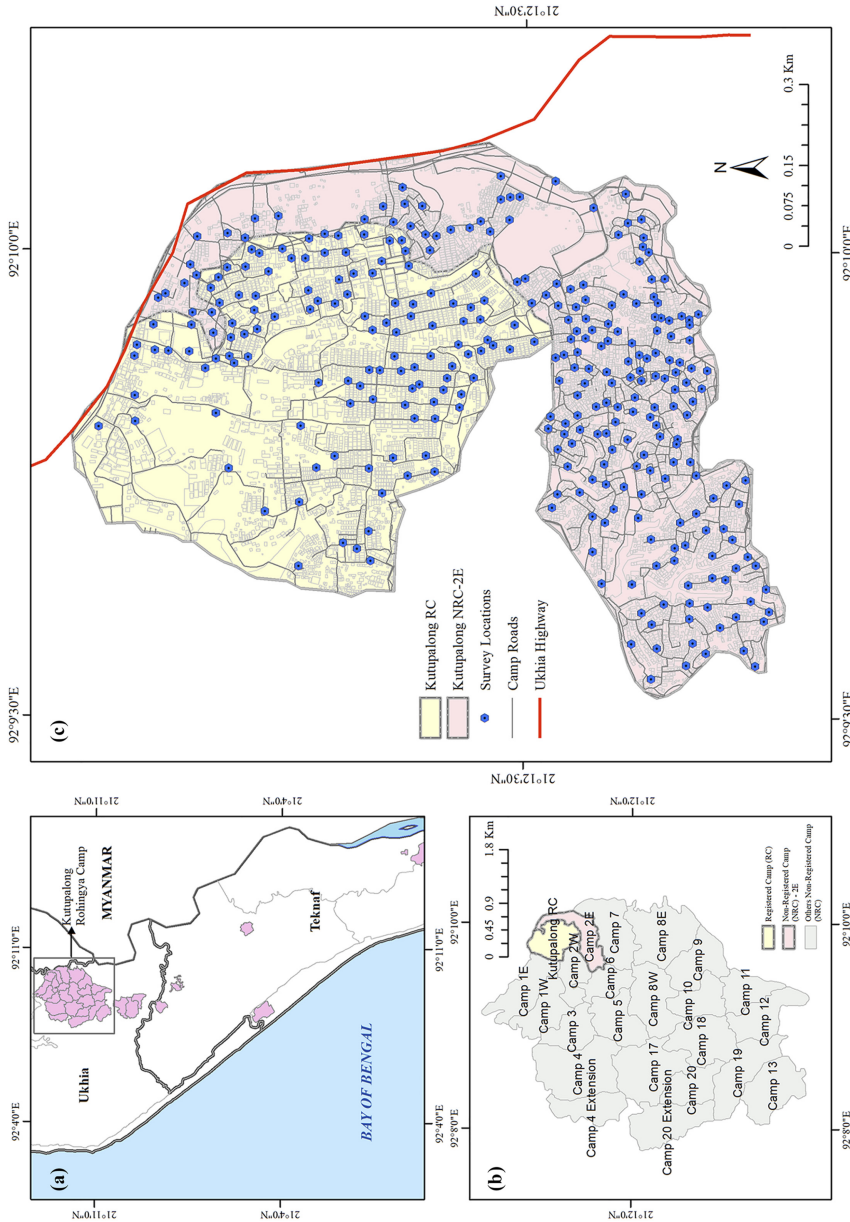
2.3 Data collection tool preparation: a semi-structured questionnaire

The sample survey used a semi-structured questionnaire to acquire primary data. The questionnaire was initially prepared based on previous literature, which was further tested, modified and finalized through conducting six in-depth interviews and two FGDs with the refugees.

The open-ended qualitative interviews enable the researchers to unforeseen problems to arise ([Ullah, 2011](#)), which aligns with the study goal of investigating how Rohingyas cope with their difficulties. Rohingyas were interviewed in Bengali by local interpreters. In practice, the RAs used the regional language of Cox’s Bazar district, which is 30% similar to the Rohingya language ([Rahman et al., 2022](#)). All interviewees acknowledged the intent of the interview, its voluntary existence and its potential application. The discussions were tape-recorded, scripted, translated and then categorized under seven dimensions of challenges and coping mechanisms: *food, residence, education, health, social, economic and security*.

Afterward, two FGDs were conducted with the RRs and nonregistered Rohingyas (NRRs) in the registered and nonregistered camps to modify and finalize the semi-structured questionnaire for the sample survey. Conversely, the FGDs allow the authors to confirm the validity and reliability of the variables explored from the interviews. The FGDs comprised nine (five female and four male) and eight Rohingya refugees (four female and four male) who lived in the RC and NRC, respectively. In the RC, the respondents of FGD were selected purposively by the Kutupalong Camp in-charge, whereas the researchers picked NRRs after an informal discussion. During FGDs, participants were asked specific questions to elicit their opinions and thoughts on the pre-identified dimensions (food, residence, education, health, social, economic and security).

Challenge and coping-related variables were sorted using the seven categories from interviews and FGDs used in constructing the final survey instrument, a semi-structured



Source(s): Prepared by Authors

Figure 3. Location of the study area: a) Kutupalong Rohingya Camp (KRC); b) selected camps – registered camp (RC) and nonregistered camp (NRC) – 2E and c) survey locations

questionnaire. The questionnaire was finally divided into three sections, i.e. a) socio-demographic and migration information, b) dimensions of challenges and c) coping techniques for solving their challenges.

2.4 Sampling and sample size

A total of 315 Rohingyas (116 registered and 199 nonregistered refugees) were selected as sample size at a 95% confidence level and 10% confidence interval for the sample survey. Using OpenStreetMap data ensure a random distribution of sample households across the camps. Therefore, the household head was prioritized in choosing respondents; however, if unavailable, the next-oldest member was interviewed. Conversely, respondents under 18 and above 75 were excluded from the sampling frame to ensure accurate and reliable information. Accordingly, community and religious representatives were chosen mostly as respondents based on their responsibilities and leading roles.

2.5 Data validity and reliability

Four local-level officials were interviewed to cross-check the information and better understand the actual scenario of refugee camps regarding registered and nonregistered. The officials are accountable for managing the refugee crisis in host communities, such as camp in-charge, an official from the Refugee Relief and Repatriation Commission (RRRC), the UNHCR and the Upazila Nirbahi Officer (UNO). Additionally, the authors use several cross-checks, follow-up inquiries and data triangulation to ensure the quality and consistency of the data at each step of data collection.

2.6 Data analysis techniques

The qualitative data were collected and analyzed by defining the key themes from the interview and FGD narratives. During data collection, all interviews were taped with the consent of the respondents. Verbatim transcriptions were developed for each interview, written in the original language source. The researchers then carefully translated the interviews into English, retaining the same content, and transcribed them into a text file uploaded into NVivo 12 Plus software to automate coding. Finally, key themes were discovered, codes were assigned, and responses were categorized into the main themes. Besides, content analysis was used to scrutinize the qualitative data.

For analyzing quantitative data, descriptive and inferential statistics were performed. Simple descriptive statistics were used to compare respondent composition and distribution by variables. On the other hand, analytical statistics (chi-square test) were conducted to find the association between camps regarding challenges and coping mechanisms of Rohingya refugees. Quantitative data were analyzed through Statistical Package for the Social Sciences (SPSS), version 22.

3. Results and discussion

3.1 Respondents' socio-demographic and migration profile

Table 1 represents the demographic, socioeconomic and migration history of the respondents. The age–sex structure presents that 53% of RRs are in the 21–40 age groups, whereas this amount is 61% for NRRs. The average household size is 4.88, greater than the national household size. Early marriage is prevalent for Rohingyas, whether registered or nonregistered, especially for females. The result also reveals that the illiteracy rate is high among the NRRs. In terms of occupation, NRRs more likely to engage in basic economic activities such as farming and fishing. Females are mostly homemakers although other jobs such as day labor (9%), maidservant (6.7%) and small business (3.7%) are also

Domain	Variables	Registered Rohingyas (RRs)	Nonregistered Rohingyas (NRRs)	
Demography	Average age	39.5	35.4	
	Sex ratio	182.9	114	
Socio-economic	Household size	5.2	4.7	
	Illiteracy (%)	54	74	
	Married below 25 (%)	50	74	
	Prime occupation	Small business	Daily labor	
	Unemployed (%)	41	34	
Residence	Monthly income (US\$)	81.3	39.2	
	Monthly expenditure (US\$)	75.7	38.2	
	Housing structure	Tin-walled polythene-made roof	Polythene-made house	
Migration	Water supply (mostly tube well) (%)	80	84	
	Source of electricity (%)	Funnel Solar energy Candle	83 – 28	
	Duration of living in Bangladesh (years)	24.6	3.7	
	Average duration of living in a current place (years)	20.8	3.2	
	Previous location	53% change location (Among them, 34% were in Ukhia)	5.5% change location (among them 2.5% were in Cox's Bazar Sadar)	
	Causes of migration (%)	Physical torture	90	84
		Genocide	68	70
		Threats of killing	–	70
	Causes of choosing Bangladesh as destination	Geographical proximity (%)	85	73
		Religion (%)	82	77
Mode of migration	Road (%)	57	82	
	River (%)	43	18	
	By themselves (%)	78	48	
Medium of migration	With the help of Middleman (%)	22	52	
	Preference regarding repatriation	Willing to repatriate (%)	66	46

Table 1.
General demographic,
socio-economic, and
migration profile of the
respondents

Note(s): 1 US\$ = 80 BDT
Source(s): Field Survey, 2017

apparent in the camps. More males are found unemployed (14.4%) than females (6%). Although the unemployment rate in RCs is greater, the average income of RRs is higher than in NRRs.

The housing condition varies little and is primarily *jhupri* type (made by bamboo or plastic/polythene structures) with inadequate floor space, utility facilities and an unhealthy environment. Hence, the temporary dwellings are ill-equipped to withstand the early monsoon and cyclone seasons, and thousands of these shelters are submerged or swept away throughout the monsoon season (Figure 4). Regarding sanitation, the respondents claimed that the cleanliness and bathhouses were not gender balanced. One registered female refugee mentioned:

The sanitation system is deplorable and inadequate. More than 20 persons use a single latrine. As there are very few latrines, we must share the toilet with males, and frequently people knock at the



Figure 4.
Education, residence,
drinking and electricity
facilities in Kutupalong
RC and NRC

Source(s): Field Study, 2017

door while using the toilet, which is very unpleasant. This scenario is terrible for us since it adversely affects our security and privacy, particularly at night.

The survey found that over 40% of Rohingya lived in Bangladesh for over 20 years, and 93% reside in the registered camp. On the other hand, refugees in Bangladesh less than a year mostly live in the nonregistered center. However, the nature and causes of migration are almost the same for registered and nonregistered Rohingyas.

3.2 Variation of challenges

The study identified three types of responses (no, single and multiple) regarding the challenges and coping strategies of Rohingya refugees living in the study area (Table 2).

First, the study found that more than 90% of refugees have faced food, residence, social and economic-related problems, whether they are RRs or NRRs. However, the intensity of the challenges is higher in non-RCs than in registered ones, except for health and security.

3.2.1 Challenges: food, residence, education and health. Figure 5 elucidates the innumerable challenges of Rohingya refugees regarding fundamental rights, i.e. food, residence, health and education, with their intensity. The results show that registered and unregistered Rohingyas struggle to maintain their daily calorie intake regarding nutrition, sufficiency, variation and certainty. NGOs monitor food delivery, hygiene, nutrition, early education, vocational training, seed and poultry distribution, newborn vaccination and non-edible item distribution in the RC, whereas NRRs lack these amenities (Frontières-Holland, 2002). Insufficient food (64%) is the main problem for RRs (Knight, 2013), whereas NRRs worry about food uncertainty (69%). Food diversity was the least reported issue by NRRs, whereas one-third of RR were concerned with food uncertainty. For example, one RR claimed that

For some of us, it is hard to have meals twice a day. We cannot make sufficient money to feed ourselves adequately. My family relies largely on the inadequate government ration. Additionally, most of the time, we must consume the same kind of food.

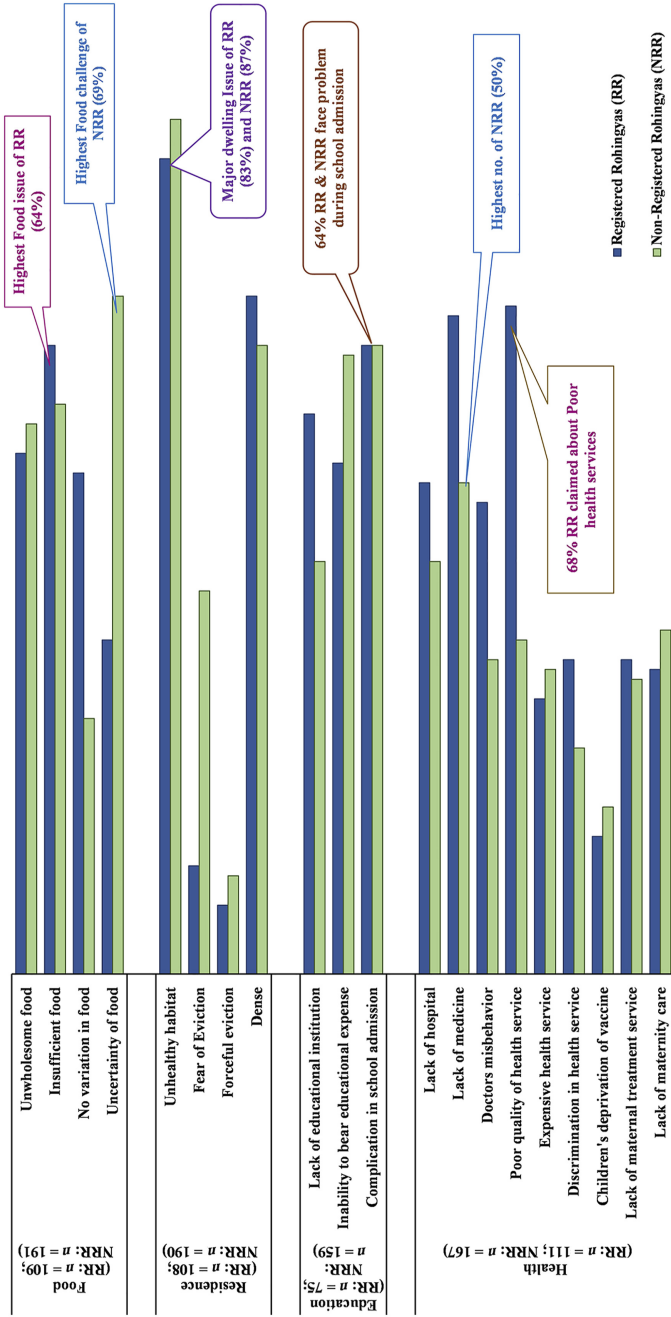
The findings reveal that over 50% of the RRs and 70% of the NRRs gave multiple responses, indicating that residence facilities are unsatisfactory for both Rohingyas. They are forced to live in squalid camps, which are overcrowded and unhygienic due to the excessive heat and lack of ventilation. The houses are made mainly of tin and polythene in the RC, whereas in the NRC, mostly made of polythene with mud floors. Due to the usage of plastic sheets, tarpaulin, clay, brick and bamboo, they are often vulnerable to coastal disasters. On average, each refugee occupies a space of 9.5 square meters, while the normal dwelling area, according to Sphere, should be 30 square meters under camp conditions, excluding gardens (Karin, Chowdhury, & Shamim, 2020). The survey also found that women were disadvantaged in bathing and toilet services due to a lack of water, hygiene, privacy and male assault (Akhter & Kusakabe, 2014). RRs and NRRs listed space limitations and congestion regarding their dwelling structures; however, NRRs live in a more vulnerable situation. A participant from the nonregistered camp stated:

My home condition is very unhealthy, and I am forced to share a tiny area with my six family members without privacy. Besides, the house is constructed entirely of mud, has a polythene roof, and a cement floor covered in mud, which is very risky, but there is no other or better option.

Dimensions of challenges	Registered (%) N = 116			Respondents with problems	Nonregistered (%) N = 199			Respondents with problems
	No response	Single response	Multiple responses		No response	Single response	Multiple responses	
Food	6	28	66	94	4	23	73	96
Residence	7	35	58	93	5	24	72	95
Education	35	28	36	65	20	35	45	80
Health	4	11	84	96	16	20	64	84
Social	9	8	83	91	3	11	86	97
Economic	3	8	89	97	3	6	91	97
Security	29	19	52	71	35	21	44	65

Source(s): Field Study, 2017

Table 2. Types of responses regarding food, residence, education, health, social, economic and security challenges of registered and nonregistered Rohingyas



Source(s): Field Study, 2017

Figure 5. Challenges of registered and nonregistered Rohingyas regarding food, residence, education and health facilities

Although Rohingya refugees in Bangladesh have a constitutional right to primary education, they have little access. Lack of educational institutions, high education costs and, especially, school admittance issues are recognized as academic concerns in this study. Additionally, about two-thirds of the RRs and NRRs reported the complexity of the admission process. Besides, nearly 60% of RRs mentioned insufficient educational institutions (Karin, Chowdhury, Hasnat *et al.*, 2020). For NRRs, education expense is a bigger problem than the number of educational institutions. In the RC, children attend primary schools until class eight with various educational materials (textbooks, writing paper, pens, pencils, etc.) (Hammond & Milko, 2019); however, kids are cared for in a temporary learning center in the NRC. A registered refugee explained this context during FGD:

Our students get an elementary education to the eighth grade. Burmese is the medium of instruction at the learning center. Each book is available in Burmese and English. This education is, in my opinion, a total waste of time because it is inapplicable in Bangladesh.

The results indicate that RRs are experiencing more health-related problems than NRRs. The UNHCR, through its member organizations, the RRRC Office's Refugee Health Unit and other NGOs, is responsible for providing medical services at the 24 health facilities in the RC. However, this study identified inadequate medical facilities from camp hospitals and physicians. In addition, the RRs claimed that the medicine supply and vaccines often exceed the requirement. Besides, accessing the health centers for RRs is challenging due to the long distances and few roads inside the camp (Tarannum *et al.*, 2019). Furthermore, both categories of Rohingya have mentioned doctor misbehavior, discrimination in services, expensive treatment, vaccination deprivation and inadequate maternal care. However, most NRRs claimed RC has more medical support than NRC. Particularly, insufficient medicine and a lack of hospitals are prioritized by NRC. In addition, clean water, adequate sanitation, hygiene and waste disposal facilities are severely neglected in the congested NRC, which is compatible with prior studies (Amin, 2018). In this context, one NRR contended that

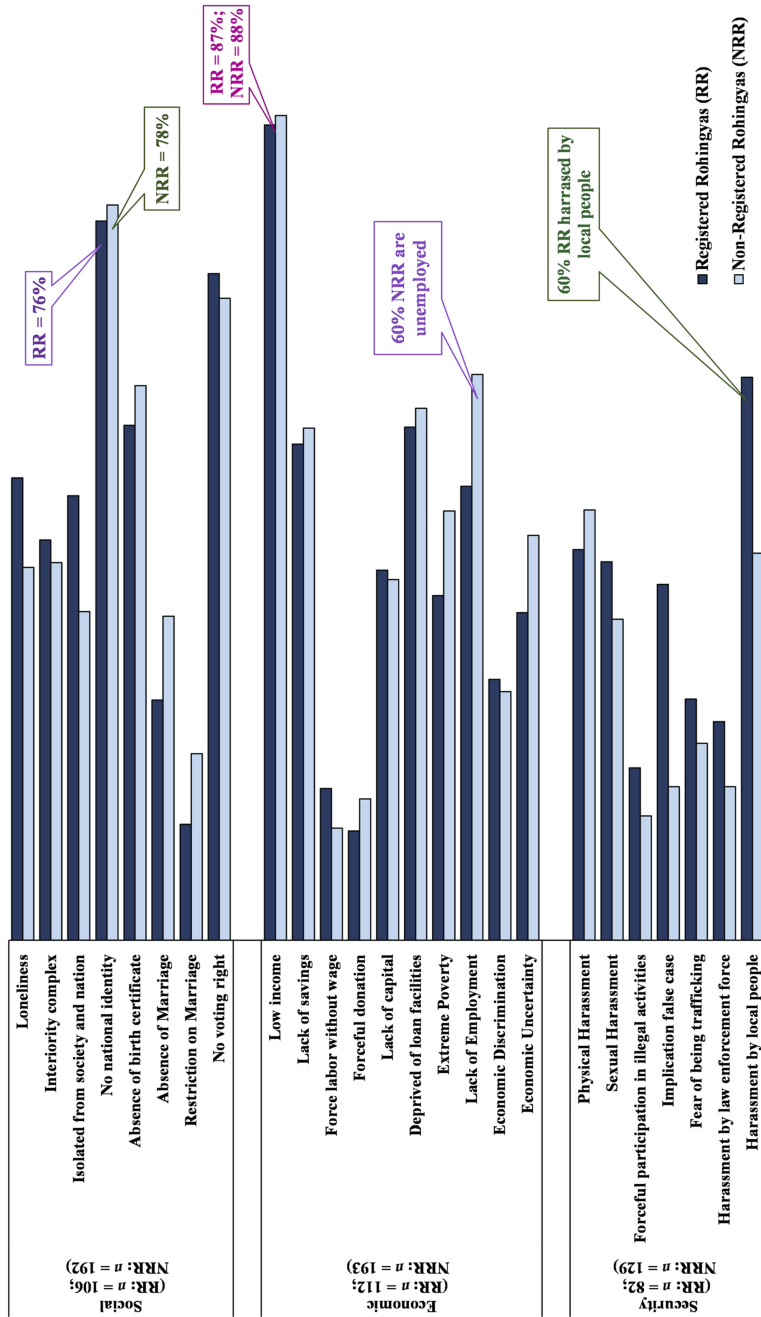
In comparison with registered Rohingyas, we are constantly deprived of medical treatment. We don't have access to a hospital or receive enough medication when we're sick. Therefore, in my opinion, health cards must not be distributed depending on the registration status.

3.2.2 Social, economic and security issues. The results revealed that all the respondents face at least one problem, whether it is social, economic or security. National identity crisis and the absence of voting rights are highly reported as social problems by more than 70% of RRs and NRRs. Then, birth certificates, loneliness, inferiority, social isolation and marriage are found as their common social concern (Figure 6). Between these two groups, Rohingyas living in the RC suffer more from an inferiority complex, isolation and loneliness, while NRRs suffer more from birth certificates and marriage issues.

The study confirmed that Rohingya refugees in Bangladesh confront severe social isolation and loneliness (Mistry *et al.*, 2021). The data also showed that about half of the RRs experienced isolation and loneliness due to restricted movement and camp confinement (Riley *et al.*, 2017). Besides, Bangladeshi laws and administrative circulars ban Rohingya-Bangladeshi marriages and limit marriage registration (UNHCR, 2018). Thus, they are certain to marry within the camps, reducing their chances of developing acquaintances with locals. One participant from RC explained that

I'm constantly isolated since I can't leave the camp. I have no national identification, voting rights, or job opportunities, and I am even forced to select my wife inside this camp. In a restricted camp border, I always experience loneliness. For me, these are very frustrating.

Most respondents cited multi-diversified economic challenges; however, NRRs indicated more complexity than RRs. The study finds the NRC has fewer job opportunities than the RC.



Source(s): Field Study, 2017

Figure 6.
Social, economic and security related challenges of registered and nonregistered Rohingya refugees

However, both Rohingya groups endure difficulties with acute poverty, economic instability, capital shortage, forced work without wages and coerced donations while NRRs noted economic insecurity with greater frequency, as RRs frequently noted economic discrimination. Rohingya refugees in Malaysia also suffer financial hardship due to restricted access to host job markets (Nungsari, Flanders, & Chuah, 2020).

The study also discovered that RRs and NRRs have unique safety vulnerabilities. Despite being at the camp, registered people reported false case implications, sexual assault and harassment by locals and law police. An earlier study has also documented violent attacks in the RCs, including kidnappings and abductions (Khan *et al.*, 2020). This group even indicated more fear of human trafficking and forced illegal activities than NRRs, showing RRs are in more life-threatening conditions. However, nonregistered women and girls are especially vulnerable to sexual and physical assaults.

3.2.3 Statistical analysis of challenges faced by registered and non-registered Rohingyas. The statistical analysis found significant variations between registered and unregistered refugees regarding fundamental rights, social, economic and safety problems. The chi-square test shows that fundamental rights, food, residence and health have a significant association (0.000*) with the camp type (Table 3). The food uncertainty and limited variation in food are found to be highly substantial between RRs and NRRs. In addition, the fear of eviction from residence has been linked to the camp category. There is also a statistically significant difference between camp types in medicine supply, health services and doctor behavior.

Additionally, the chi-square test found that Rohingyas' social and economic problems are not influenced by registered or nonregistered status. However, the scarcity of employment indicates a relationship (0.044*) with the camp category. While considering security, it shows a significant association (0.003*) with refugee type. The false case against Rohingya and harassment by local people are associated with the registration status. Thus, camp classifications show varied food security, housing, health and safety concerns. The other problems present no association with registered and nonregistered refugee types.

3.3 Variation of coping strategies

Although NRRs face more significant challenges, they respond less when adopting coping strategies to address their problems (Table 4). However, NRRs who are commencing tactics adopt more strategies than RRs to address their housing, health, education and economic issues. RRs have more health service issues than NRRs; however, their coping strategies are less diverse. RRs use more coping methods than NRRs to address food, social and security challenges. Since RRs reported higher security issues, they used various management techniques.

3.3.1 Coping techniques: food, residence, education and health problems. The survey found that 100 of the 109 RRs with food-related issues used various approaches to address them.

Challenges	Chi-square	Degree of freedom (df)	Level of significance
Food	55.662	4	0.000*
Residence	28.757	4	0.000*
Education	7.236	3	0.65
Health	50.407	9	0.000*
Social	13.018	8	0.111
Economic	9.862	9	0.362
Security	21.962	7	0.003*

Source(s): Calculated by Authors

Table 3. Chi-square analysis for food, residence, education, health, social, economic and security challenges of registered and nonregistered Rohingyas

While 191 NRRs have experienced food insecurity, only 161 deal with it with coping mechanisms. According to the study, the vast majority of registered (65%) and nonregistered (78%) refugees work as domestic servants in return for food (as shown in Figure 7). Half of both groups reported cutting and selling wood from the neighboring forest to raise money and buy food. Besides, the RRs rarely beg since they depend significantly on their surroundings unless the camp's assistance is inadequate. RRs also reported borrowing food, relying on neighbors and seeking humanitarian relief other than World Food Programme (WFP) food vouchers to cope with food challenges. With the aid of local collaborators, the WFP delivered food cards to Rohingya families in the RC. Cardholders can collect rice, lentil and oil once or twice a month, depending on household size.

UNHCR, WFP and Action Contre La Faim (ACF) provided nutrition services in the RC (Nyukuri, 2021), while WFP and ACF provided minimal nutrition programs in the NRC. However, Rohingya refugees have accused the host community and UNHCR of inadequate humanitarian aid, notably food (Momem, 2021). The survey revealed that NRRs managed food primarily by chopping trees from the hills to sell at the market (Tani & Rahman, 2018) or catching fish in local waterways (Rahman, 2018) to subsidize home expenses and deal with their primary concern, food uncertainty. The study further includes consuming cheaper food or spending days without eating as food-related coping methods, which Syrian refugees in Lebanon adopt (Nabulsi *et al.*, 2020).

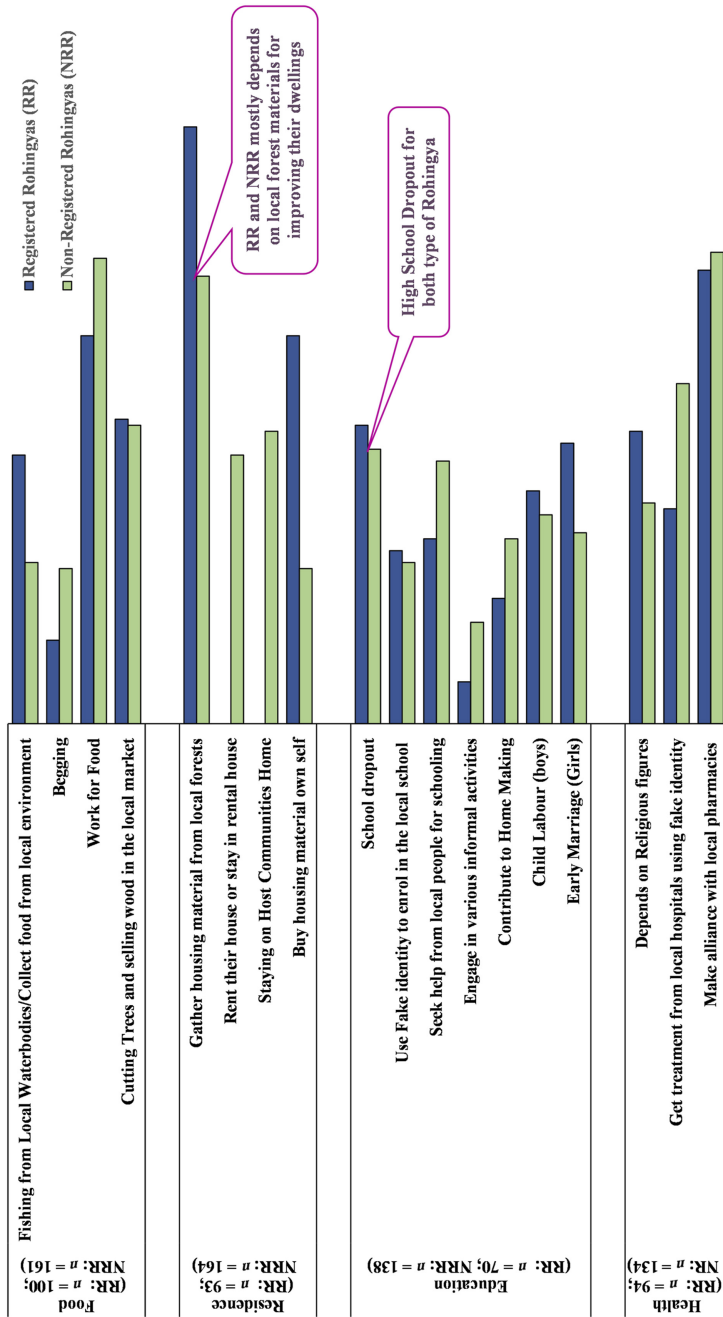
According to the results, RRs have fewer residence options: they may gather natural housing materials from nearby forests and hills or buy construction materials from the market. Furthermore, two-thirds of them invest their own money to improve their residence. Aid agencies have tried to better their situation; however, a confined region with ample population movement has hindered integration. In such a situation, registered and nonregistered migrants collect twigs, trees and branches from the nearby hills to improve their settlement (Yasmin & Akther, 2020). Besides, approximately half of the NRRs reside in local communal rental housing or workplaces. Only a few of them spend their own money on housing.

Many Rohingyas are disinterested in sending their children to school due to inadequate facilities; consequently, the dropout rate is high for both RRs and NRRs. Instead of going to school, they choose early marriage (especially for girls) (Melnikas *et al.*, 2020), followed by child labor and begging as coping mechanisms (ISCG, 2018), comparable with previous studies. For example, most Syrian refugees are illiterate due to the inaccessible education facility and choose to be in the informal sector or beg on the streets to support their families (Kaya & Kırac, 2016). However, 44% of the NRRs mentioned taking help from locals to enroll their children in the local school, compared to only 31% of the RRs. Another coping method

Table 4. Types of responses on coping strategies to food, residence, education, health, social, economic and security problems of registered and nonregistered Rohingya people

Responses regarding coping	Registered (%)				Nonregistered (%)			
	No response	Single response	Multiple responses	Respondents who can cope	No response	Single response	Multiple responses	Respondents who can cope
Food	8	37	55	92	16	32	52	84
Residence	14	30	56	86	15	27	58	85
Education	7	40	53	93	13	28	59	87
Health	15	41	44	85	20	30	50	80
Service								
Social	9	40	52	92	17	48	35	83
Economic	8	21	71	92	10	17	73	90
Security	9	37	54	91	30	44	26	70

Source(s): Field Study, 2017



Source(s): Field Study, 2017

Figure 7. Coping techniques with inadequate basic rights (food, residence, education and health) of registered and nonregistered Rohingya people

mentioned by 29 and 27% of registered and nonregistered Rohingya, respectively, is using fake identity cards to enroll in school.

Nearly 80% of the RRs and NRRs indicated that building good relationships with local pharmacists is the best way to cope with health issues. However, the study demonstrates that NRRs mainly uses local hospitals and pharmacies using false identities. Conversely, RRs mostly rely on religious figures and conventional healers in the camp to manage health-related problems. Many refugees and their families are reluctant to seek treatment because they believe the remedy is not medical (Taranum *et al.*, 2019). Besides, a few respondents quoted reducing non-food expenditures, spending savings and selling household assets as coping methods for health issues (Nabulsi *et al.*, 2020).

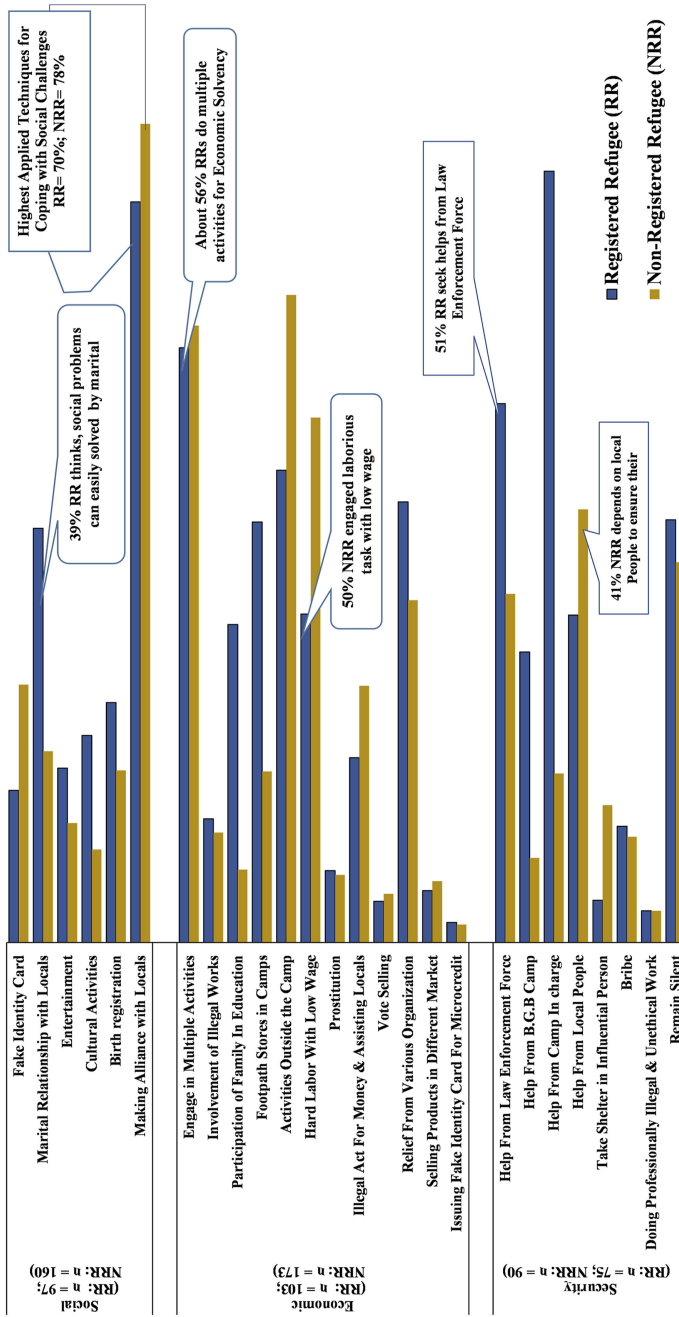
3.3.2 Coping techniques: social, economic and security issues. The results found that about 92% of RRs intend to tackle various social issues, while the proportion is 83 for NRRs. Findings reveal Rohingya migrants confront social challenges by making acquaintances with the host community, fabricating identification cards and birth documents and engaging in local culture (Figure 8). In this context, RRs and NRRs (about 70% and 78% respectively) develop alliances with local people to strengthen their social security. In addition, almost 23% of RRs and 16% of NRRs admitted using fake birth registration as a coping strategy to safeguard their position in Bangladesh. Besides, RRs and NRRs form marriage relationships with locals to combat loneliness, secure social security and permanently settle down, consistent with the prior research (Rahman, 2018).

Furthermore, the findings revealed that Rohingya people supported local political parties to get their security and worked as vote banks to earn money throughout the election process (Masud, 2018). The study also confirms a link between political and administrative agencies, facilitating the acquisition of counterfeit Bangladeshi birth certificates, national identity cards and, in certain instances, a 'Bangladesh Passport' (Wolf, 2017). In this way, tens of thousands of Rohingyas, mostly registered, have migrated to the Middle East and Malaysia, using Bangladesh as a transit nation (Lewa, 2009) and working as Bangladeshis (Yesmin, 2016). One official (UNO) admitted that

Yes... this is probable that Rohingyas try to make fake birth certificates and national identity cards with the help of some influential local people. They actually want to blend in with us. However, we are always cautious about this.

On the other hand, both RRs and NRRs work outside the camp (45% RRs and 61% NRRs), accept low-paying jobs (31% RRs and 50% NRRs) and construct small retail stores on the footpath (40% RRs and 16% NRRs) to overcome economic challenges (Figure 9). The study finds about half of the registered and nonregistered refugees engage in informal jobs to supplement their income, and most are temporary (Sattar, 2019); similar behavior is also apparent among Rohingya refugees in Malaysia (Nungsari *et al.*, 2020). Additionally, about 30% of RRs enrolled their children in educational institutions to strengthen their economic position. The study also finds that RRs get financial assistance from various organizations. About 2% of RRs and NRRs fabricate false identification cards to get microcredit in this context.

Similar to prior research, the current study identified that Rohingyas engage in a variety of illegal activities (Tani & Rahman, 2018). The economic survival of Rohingya refugees is seriously harmed by a mixture of constraints and abuses (Mollah, Rahman, & Rahaman, 2004). In this case, Rohingyas use violence to safeguard their economic interests, and their financial demands are often linked to violence (Momem, 2021). Hence, several women-headed households are compelled to partake in begging and sex labor to survive (Zetter & Ruauadel, 2016). One official from RRRC mentioned that



Source(s): Field Study, 2017

Figure 8. Coping with social, economic and security challenges of registered and nonregistered Rohingya refugees



Figure 9.
Different informal
activities in registered
refugee camp

Source(s): Field Visit, 2017

Male Rohingya are involved in a wide range of criminal activities, including robbery, drug trafficking, abduction, and murder, while female Rohingya are proactive in prostitution. Unemployment, I think, is the primary cause.

The result also shows that the RRs are more likely to engage in criminal behavior than the NRRs (Momem, 2021), which was confirmed by one of the officials from the local GoB. For instance, security officials in Bangladesh seized over ten million *Yaba* tablets from Kutupalong RC after the August 2017 influx (Alsaafin, 2018). However, NRRs are forced to rely on hazardous illicit migratory routes, falling prey to smugglers and traffickers or risking their lives on dangerous boat journeys. The data also show that family needs and financial restrictions drive child marriage for both Rohingyas (Melnikas *et al.*, 2020).

For security, Rohingyas rely on the assistance of government forces, camp authorities and the local community. The results reveal that local people are the primary savior of NRRs, whereas camp-in-charge and law enforcement bodies are the prime protectors of RRs. The camp officials imposed curfews inside the RC and increased law enforcement patrols, especially at night. Conversely, as a coping tactic, NRRs have settled in places where social and physical camouflage is less complicated. They also socialize with Bangladeshi families by renting and staying in their houses to ensure their security, and some of them exchange their safety for illegal work, including sex labor. However, respondents are unwilling to reveal sexual assault due to their difficult access to the police or legal system, making them more susceptible to harassment. Hence, the result showed that almost 40% of RRs and NRRs accept their hazardous status and remain silent (Rahman, 2018). In some cases, they often stay in huts in remote forests owned by the government (Bari & Dutta, 2004).

3.3.3 Statistical analysis of coping techniques. While assessing coping strategies, the chi-square test is highly significant in all cases taken by Rohingya refugees (Table 5). The statistical analysis shows that camp categories and coping techniques for education, social and economic concerns are strongly associated. Although RRs and NRRs attempted various tactics to address challenges with food, residence, education, and healthcare, there was slight variation across camps. For example, school dropouts, using fake IDs to attend local schools, early marriage, child labor and working in local households do not indicate the camp type.

Relationships with locals and participation in cultural events significantly differ between RRs and NRRs regarding addressing social issues. In addition, different approaches for overcoming economic challenges vary by camp type, including child education, shopping inside and outside the camp and low-wage labor. Finally, dealing with safety and security issues (i.e. remaining silent and cooperation with law enforcement agencies) is strongly associated with camp type.

4. Conclusion

The Rohingyas are one of the world’s most vulnerable populations (Pugh, 2013; Ullah, 2014, 2016; Ullah, Mallik, & Maruful, 2015). The study addresses the multi-dimensional challenges of Rohingya refugees living in Bangladesh and their techniques to cope with those challenges. The present research is the first to concentrate solely on the difficulties and coping mechanisms addressed by registered and nonregistered refugees of KRC in Bangladesh.

The study revealed significant differences between these two kinds of refugees regarding crisis and coping. The results indicate a substantial difference in the difficulties and coping techniques of registered and nonregistered refugees in food, residence, health and security. Additionally, due to displacement and living in refugee camps, whether registered or nonregistered, the Rohingyas need humanitarian assistance and protection, including food, shelter, medicine and education. However, the situation is much more difficult for NRRs since they have no access to legal status, legal protection or necessities.

Therefore, diversifying and enhancing humanitarian aid services through economic empowerment, livelihoods and capacity-building programs is essential. Additionally, the number of trained doctors, medications and other necessary equipment should expand in the registered camp. The relevant authorities may establish income-generating enterprises such as handicrafts, food processing, dairy products, livestock and poultry operations and shopkeeper activities in registered and NRCs. These items can be sold to locals to avoid becoming involved in unethical activities or crimes. Counseling is also recommended for individuals who suffer from inferiority complexes, loneliness and depression. Diverse coping strategies must be developed and implemented at the community level, including ensuring gender equality. Inter-sector collaboration must be operationalized, requiring adequate

Strategies for coping	Chi-square	Degree of freedom (df)	Level of significance
Food	20.122	4	0.000*
Residence	185.489	4	0.000*
Education	14.207	7	0.048*
Health service	13.493	3	0.004*
Social	28.708	6	0.000*
Economic	65.100	11	0.000*
Security	79.742	8	0.000*

Source(s): Calculated by authors

Table 5. Chi-square analysis for coping strategies to food, residence, education, health, social, economic and security problems of registered and nonregistered Rohingyas

resources, capacity and transparent procedures. From the outset of the emergency, timely coordination and communication with local government agencies at multiple levels are necessary to facilitate joint response preparation and delivery, which is essential to a quick, appropriate and aligned response. However, future research on Rohingya refugee issues, such as health, education and food, may focus on field surveys or expert opinions. The surge of Myanmar Rohingya refugees also imposed tremendous pressure and development challenges (socioeconomic, cultural, political and environmental) on the Cox's Bazar District's host communities, requiring additional study. Finally, the Bangladesh government should try with international organizations to repatriate Rohingya refugees since serving many refugees for an extended period is challenging.

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