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Health care facilities for Rohingya population in Kutupalong refugee camp

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Abstract

After the influx of Rohingya refugees into Bangladesh, health sectors have been concerned that a challenges of health issues of the refugees especially women, children and elderly would arise. Many health-related issues were occurred such as mental health has deteriorated, food- and water-borne diseases were spread, infectious diseases were emerged, malnutrition is prevalent and reproductive health for women and girls were also at risk. This study was done to assess the health care facilities of Rohingya population of different camps in Cox's Bazar, Bangladesh. A cross-sectional study was carried out at Kutupalong Rohingya refugee camps at Ukhiya in Cox's Bazar among all the Rohingya refugee population living here. The study was conducted during the period from September, 2019 to December, 2019. Systematic random sampling method was used for this study. The samples were selected in a specific pre-determined interval. Following statistical technique, a total of 422 samples were selected for this study. The findings from this study revealed that among all, 37.76% were underweight, 39.84% were stunted and the rest 15.10% were suffering from wasting. A total of 32.18% (124) respondents had eye disease, 41.52% (159) respondents had oral disease, 24.62% (95) respondents had respiratory disease, 43.36% (167) respondents had gastrointestinal disease. There are 80 health sector partners a total of 1.4 million targeted population. A total of 12.97% respondents were very satisfied and 53.60% were satisfied with overall quality of service. From the study findings, it can be recommended that the health service authority should work in a more comprehensive way to increase the level of satisfaction of the respondents.

Keywords: Health care facilities, disease information, service quality, treatment type, disease history, vaccination

Introduction

725,000 Rohingya refugees have entered Bangladesh from Myanmar as of August 25, 2017, adding to the 194 000 who had escaped in prior waves of emigration. The overall number of Rohingya refugees increased to 919,000 as of July 22nd, 2018. (ISCG situation report; 5 September 2018). There are still 1.3 million people who require health services overall, including those in host communities [1]. The Rohingyas are a Muslim minority in Myanmar who are seen as illegal Bangladeshi immigrants by many Myanmar Buddhists. Generations of Rohingyas have resided in Myanmar, and the Bangladeshi government has urged Myanmar to accept the refugees [2]. They have been called the most oppressed group in the world and are refused citizenship in Myanmar. Rohingyas are not being persecuted, according to Myanmar [3]. An ethnic, linguistic, and religious minority that once resided in Myanmar's old Arakan State is known by the moniker "Rohingya." The Myanmar government claims that Rohingyas are not Myanmar nationals and that they are descended from Bangladesh, hence they are officially stateless and disowned by Myanmar.

Since this refugee movement has continued for almost 40 years, the forced migration of Rohingyas from Myanmar's Rakhine State (formerly known as Arakan) to Bangladesh is not a recent problem in South and Southeast Asian migration history [4]. However, the international community and the concerned regional governments have recently begun to pay more attention to the problem. The Rohingyas, who lack a nation, are not only mistreated in their place of

origin but are also not given protection by Bangladesh from abuse, violence, corruption, and poverty [5]. The health sector consists of 126 partners who have addressed the needs in a variety of ways, such as by providing direct services from primary, secondary, and specialized health facilities (both static and mobile health facilities in both Ukhia and Teknaf); creating extensive networks of community health workers; creating risk communication materials; assisting government health facilities with human resources, renovations, and medical supplies; and ensuring availability of health care [6-8].

The health sector has been worried about the problems of health concerns of the refugees, especially women, children, and elderly, since the fast migration of Rohingya refugees into Bangladesh began in 2017. As expected, a number of health-related problems have arisen, including mental health concerns, the growth of water-and food-borne illnesses, the emergence of infectious diseases, the prevalence of malnutrition, and risks to the reproductive health of women and girls [9]. In Cox's Bazar, there are thought to be 909,000 Rohingya refugees, according to the most recent ISCG situation report (9 January 2019). This number includes the 33,956 previously registered refugees from Myanmar in the camps of Kutupalong and Nayapara. Although the overall influx of Rohingya migrants has significantly decreased since the crisis began in late August 2017, Rohingya refugees still arrive in Bangladesh on a regular basis. New migrants from India have recently arrived. All migrants, fresh arrivals included, confront a variety of risks, including health. Since September 2017, WHO and other health-related organizations have begun addressing this situation [10]. There is a high prevalence of various communicable and non-communicable diseases in Rohingya refugee camps, including acute respiratory infection, measles, diphtheria, acute jaundice, cholera, AWD, HIV, tuberculosis, and other chronic diseases, according to various surveys conducted by UN agencies and government and non-government health organizations [11-12]. In order to evaluate the health care resources available to the Rohingya people in the several camps in Cox's Bazar, Bangladesh, this research was carried out.

Materials and Methods

This cross-sectional descriptive study was conducted at Kutupalong Rohingya refugee camps in Ukhiya, Cox's Bazar, targeting the Rohingya population aged over 18 years living in the study area. Exclusion criteria included severely ill individuals, mental health patients, and those unwilling to participate. Data were collected using a pre-tested, structured, interviewer-guided questionnaire, comprising variables necessary to meet the study's objectives. Face-to-face interviews were conducted, and responses were recorded on answer sheets. Quality control measures included thorough checking and avoidance of repetitive questions. The questionnaire, prepared in English, was evaluated for acceptability, respondent reaction, and completion time. Data management and analysis were performed using SPSS version 20.0, with results processed into dummy tables and presented as tables and charts. Ethical approval was obtained from the Ethics Review Committee of the Faculty of Allied Health Sciences, Daffodil International University. Participants were informed about the study's aims, objectives, procedures, risks, and benefits in the Rohingya language, and informed consent was obtained. Confidentiality was assured, and findings were intended solely for research and further implementation.

Results

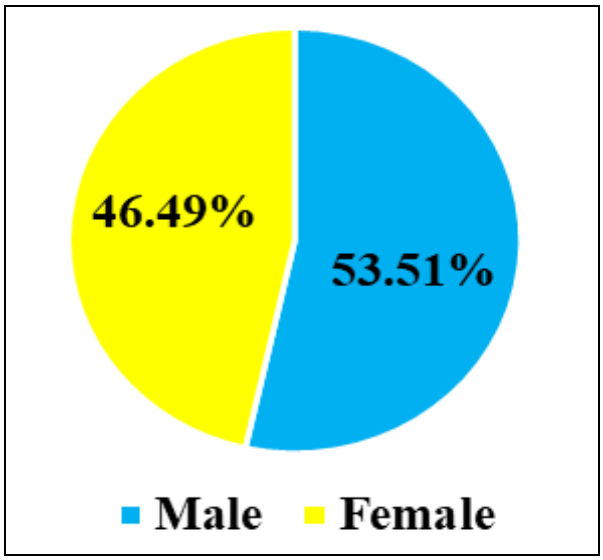

Fig 1: Distribution of the respondents according to their sex

Table 1: Distribution of the respondents by sociodemographic characteristic (N=384)

Age of the respondent	Frequency	Percent
15-25 years	115	29.95
26-35 years	113	29.54
36-45 years	156	40.51
Total	384	100.00
Mean ± SD	17.29 ± 5.52	
Mother's level of education		
No formal education	30	7.81
Madrasha/Moulovi/Hifj	347	90.28
Up to Class 2	7	1.91
Total	384	100.00
Father's level of education		
No formal education	42	11.00
Up to Class 2	145	37.87
Up to Class 5	95	24.64
Madrasha/Moulovi/Hifj	102	26.49
Weight in Kg		
≤55	312	81.19
>55	72	18.81
Total	384	100.00
Mean ± SD	50.65 ± 1.47	
Height in cm		
<70	115	29.95
70-80	243	63.19
>80	26	6.86
Total	384	100.00
Mean ± SD	73.69 ± 5.49	
Malnutrition profile		
Underweight	145	37.76
Normal	153	39.84
Overweight	86	22.4
Total	384	100.00

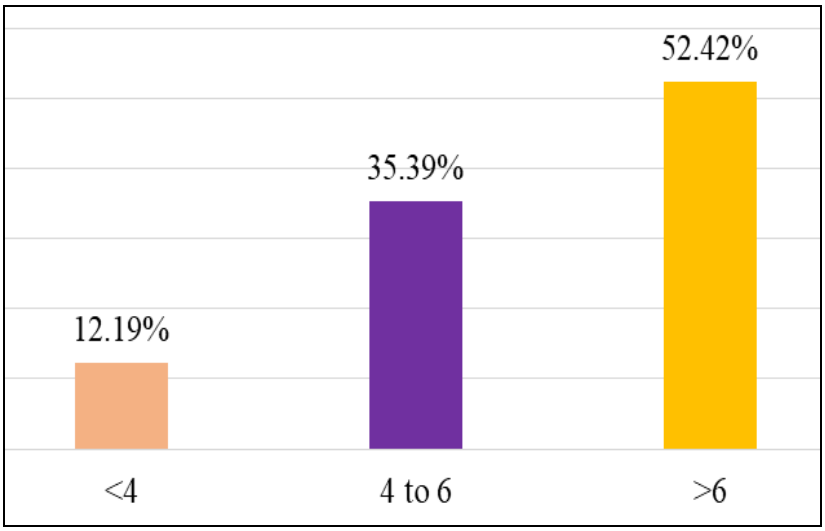

Fig 2: Distribution of the respondents according to their family size

Table 2: Distribution of the respondent by presence of different types of disease

Variables	Frequency	Percent
Presence of eye disease (N=384)		
Yes	124	32.18
No	260	67.82
Type of eye disease symptoms (N=124)		
Single ED symptoms	166	43.19
Multiple ED symptoms	218	56.81
Presence of oral disease (N=384)		
Yes	159	41.52
No	225	58.48
Type of oral disease symptoms (N=159)		
Single oral health symptoms	124	77.83
Multiple oral health symptoms	35	22.17
Presence of respiratory disease (N=384)		
Yes	95	24.62
No	289	75.38
Type of respiratory disease symptoms (N=95)		
Single RD symptoms	52	54.59
Multiple RD symptoms	43	45.41
Presence of gastro-intestinal disease (N=384)		
Yes	167	43.36
No	217	56.64
Type of gastro-intestinal disease symptoms (N=167)		
Single GI symptoms	55	32.79
Multiple GI symptoms	112	67.21

Table 3: Information on health facilities and services provided from there (From secondary sources)

Health sector	
Number of health sector partners	80
Targeted population	1.4 M
Number of Health service worker	
Doctors	834
Nurses	1,667
Midwives	453
Paramedics	379
Medicine delivered to the health facilities/partners health facilities	
Primary health centers	42
Health posts	93
Health action	
OPD consultations	903,951
Assisted deliveries	5,222
Referrals	6,152
Vaccination against	
Polio	30,564
Measles	14,588

Table 4: Assessment of the quality of services in the health facilities

Statement	Very satisfactory		Satisfactory		Neutral		Dis-satisfactory		Very dissatisfactory	
	N	%	N	%	N	%	N	%	N	%
Interpersonal skill	34	27.46	69	55.73	7	5.52	10	7.74	4	3.55
Doctor's attitude & behavior	33	26.85	67	54.19	8	6.24	9	7.11	7	5.61
Nurse & other staff's behavior	27	21.64	77	62.45	10	8.44	5	4.19	4	3.28
Explanation of condition	31	24.83	68	54.75	12	9.64	9	6.93	5	3.85
Doctor's level of care	16	12.73	79	64.09	10	8.19	10	8.00	9	6.99
Technical skills	38	30.61	58	47.02	14	11.25	8	6.21	6	4.91
Hospital equipment	18	14.73	63	51.19	21	17.04	12	9.48	9	7.56
Overall quality of services	16	12.97	66	53.60	24	19.36	10	8.14	7	5.93

The study analyzed demographic, educational, nutritional, health, and healthcare service characteristics of respondents in the Kutupalong Rohingya refugee camps. The age distribution showed 29.95% were aged 15-25 years, 29.54% aged 26-35 years, and 40.51% aged 36-45 years. Among respondents, 53.51% were male, and 46.49% were female. Family sizes predominantly exceeded six members (52.42%). Regarding parental education, 90.28% of mothers studied in Madrasha/Moulovi/Hifj sections, while fathers had varied education levels, with 37.87% completing up to class 2. Nutritional data revealed 81.19% of respondents weighed under 15 kg, and 63.19% measured 70-80 cm in height. Malnutrition was prevalent, with 37.76% underweight and 15.10% overweight. Health data showed eye diseases (32.18%), oral diseases (41.52%), respiratory diseases (24.62%), and gastrointestinal diseases (43.36%), with significant proportions exhibiting multiple symptoms. Healthcare facilities, supported by 80 health sector partners, provided services through 42 primary health centers and 93 health posts, staffed by 834 doctors, 1,667 nurses, and others. Free medicines, polio, and measles vaccinations were available. Satisfaction with healthcare services was moderate, with 55.73% satisfied with interpersonal skills and 53.60% satisfied overall. The findings highlight critical health challenges and the need for targeted interventions in the refugee population.

Discussion

The study provides an extensive overview of the demographic, health, and service quality conditions in the Rohingya refugee camps in Cox's Bazar, Bangladesh. Among the respondents, age distribution showed that 29.95% were aged 15-25, 29.54% were 26-35, and 40.51% were 36-45 years old, indicating a significant representation of working-age adults [11]. Gender distribution revealed that 46.49% were female, and 53.51% were male, reflecting a nearly balanced gender ratio [11]. Family size analysis showed that most respondents (52.42%) had families with more than six members, a demographic factor often associated with economic and resource strain in refugee settings [14].

Educational levels varied between parents, with 7.81% of mothers and 11% of fathers having no formal education, highlighting limited educational access, particularly for women. Notably, 90.28% of mothers and 26.49% of fathers had studied in Madrasha/Moulovi/Hifj sections, showcasing a strong reliance on religious education within the community [12, 13].

Health indicators revealed that 81.19% of respondents were under 15 kg in weight, and 29.95% were less than 70 cm tall, signaling widespread malnutrition (15). In terms of malnutrition profiles, 37.76% were underweight, 39.84% were normal weight, and 15.10% were overweight, reflecting a concerning double burden of malnutrition [15, 16].

Disease prevalence was notable, with 32.18% having eye diseases, 41.52% with oral diseases, 24.62% with respiratory diseases, and 43.36% with gastrointestinal issues. Of these, multiple symptoms were reported in more than half of the cases across all disease categories, signifying complex health challenges [17, 18]. The significant burden of gastrointestinal diseases (67.21% reporting multiple symptoms) underscores the need for improved sanitation and hygiene [14, 17].

The health facilities serving this population were supported by 80 sector partners targeting 1.4 million people. Staffing included 834 doctors, 1,667 nurses, 453 midwives, and 379 paramedics, providing services such as vaccinations and free medicines from 42 primary health centers and 93 posts [14, 18]. Despite these efforts, the quality-of-care assessments showed room for improvement: while over half of the respondents were satisfied with various aspects of care, fewer than a third expressed high satisfaction, particularly regarding technical skills and equipment [14].

This study underscores the multifaceted challenges faced by the Rohingya refugees, including malnutrition, high disease prevalence, and limitations in health service quality. Addressing these issues requires targeted interventions in healthcare delivery, sanitation, and nutrition support, alongside sustained international collaboration [18, 19].

Conclusion

The study highlighted significant health and nutritional challenges among the respondents, with 37.76% underweight, 39.84% stunted, and 15.10% suffering from wasting. Common health conditions included gastrointestinal (43.36%), oral (41.52%), respiratory (24.62%), and eye diseases (32.18%). The healthcare sector comprises 80 partners targeting 1.4 million people, supported by 834 doctors, 1,667 nurses, 453 midwives, and 379 paramedics across 42 primary health centers and 93 health posts, which also provide vaccinations for polio and masles. While 12.97% of respondents were very satisfied and 53.60% satisfied with health services, there remains room for improvement. The findings underscore the need for enhanced healthcare delivery and broader studies to better inform interventions.

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declaration of any conflict of interest related to the work

Conflict of Interest
Not available

Financial Support
Not available

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