

Exploring the Health Care Seeking Behavior of Rohingya Community during COVID-19 Pandemic



Sayem Hossain Chowdhury¹, Md. Habibul Islam², Md. Amdadul Haque¹, Nikkon Ranjan Das¹, Sajjad Hossain¹, Marufa Hasin Heya³, Md. Motiur Rahman⁴

¹World Health Organization (WHO), Cox's Bazar, Bangladesh

²Circle ASP, Chatmohor, Pabna, Bangladesh

³Ullapara Care Hospital, Sirajganj, Bangladesh

⁴Sheikh Sayera Khatun Medical College Hospital, Gopalganj, Bangladesh

ABSTRACT

Introduction: COVID-19 was declared a 'pandemic,' and it was the most horrific diseases the world.

Objective: The study aimed to explore the healthcare-seeking behavior of Rohingya people during the COVID-19.

Materials and methods: It was conducted as a cross-sectional study involving a sample size of 200 participants. Respondents were chosen through convenience sampling methods. The study population was the Rohingya population residing in Cox's Bazar. A well-designed and pretested set of structured questionnaires was used to collect the information. The total study duration was for 3 months. Informed consent was taken from the participants, and Ethical clearance was taken from the IRB of AIUB. Data were analyzed using IBM STATA 16.

Place and period of study: The study was conducted at Cox's Bazar Rohingya Camp in Bangladesh.

Results: Majority (40%) of the respondents was aged between 30 to 49 years and 51% of them were female. A significant majority, 88%, expressed a preference for treatment at a Refugee health camp, while 9% opted for a Pharmacy and 3% chose a Traditional healer. Overall, 88% of respondents demonstrated positive behavior, in contrast to 12% who exhibited negative behavior. The results of a multivariate logistic regression analysis indicated that factors such as low educational attainment, fear of visiting health facilities, and a lack of awareness regarding COVID-19 prevention were significantly associated with negative health-seeking behavior.

Conclusion: The healthcare-seeking behavior exhibited by the Rohingya community in Bangladesh during the COVID-19 pandemic has been observed to be commendable.

Keywords: COVID-19, Rohingya community, Healthcare-Seeking Behavior

1. INTRODUCTION

The Rohingya community in Myanmar is currently among the most marginalized groups globally (1). Following the events of August 25, 2017, nearly 700,000 Rohingya fled to Bangladesh, with approximately half residing in the refugee camps of Cox's Bazar district. The Bangladeshi government does not classify the Rohingya as refugees; instead, they are referred to as Forcibly Displaced Myanmar Nationals (FDMN) (2).

The literacy rate among the Rohingya population is alarmingly low. Although various humanitarian organizations have attempted to provide education, many individuals struggle to maintain basic personal hygiene due to insufficient access to soap and water. Practices such as hand washing and wearing facemasks are not commonly observed within this vulnerable group (3). Furthermore, there appears to be a significant lack of awareness regarding the novel virus and its consequences. Humanitarian efforts to inform the community about COVID-19 have been severely hindered by the Bangladeshi government's internet restrictions, which began in September 2019 and limit access to data and communication on smartphones within the refugee camps (4). This information blackout has obstructed the flow of essential knowledge about COVID-19, leading to the proliferation of misinformation and confusion. Community health workers face challenges in identifying individuals exhibiting symptoms associated with COVID-19, such as illness, cough, fatigue, or dyspnea, which is critical for assessing and reporting cases to the appropriate authorities. Rumors related to COVID-19 have become widespread among the refugee population, with fears of abduction or death while attempting to reach isolation centers (5).

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The decline in patient turnover at health centers has raised alarms regarding the potential for increased infection rates. A random telephone survey conducted among the host community and migrant population in Cox's Bazar revealed that 24.6% of 365 refugees reported experiencing at least one of the three primary symptoms of COVID-19 identified by the World Health Organization: fever, dry cough, and fatigue. Among the 120 refugees who sought medical attention, 42.3% visited a pharmacy, while 35% consulted health information specialists within the camps (6). COVID-19 was declared a 'pandemic,' and it turned out to be among the most horrific diseases the world has seen in recent memory (7). Prior to the development of effective vaccines, the World Health Organization's (WHO) recommendations for COVID-19 prevention included quarantining, wearing masks, self-isolating, keeping social distance, and lockdown (8). The Rohingya in Bangladesh, who were compelled to leave Myanmar's Northern Rakhine State due to horrific persecution, rapes, and murders, are everywhere (9). There are around 1.2 million Rohingya immigrants living in 34 camps outside Cox's Bazar, a district in southeast Bangladesh (10). They are at an increased risk of contracting COVID-19 because to their squalid living circumstances and highly crowded settlements. They lack proper health care, shelter, drinking water, and sanitation, all of which pose significant obstacles to their efforts to protect themselves against the virus (11).

Therefore, in light of these findings, the study intends to investigate the healthcare-seeking behaviors of the Rohingya population and the factors influencing these behaviors to enhance the overall health situation within the Rohingya community.

2. MATERIALS AND METHODS

A cross-sectional survey was conducted at Rohingya Refugee Camp, Cox's Bazar, Bangladesh. The proposed study was conducted from October 2021 to December 2021. The study population was the Rohingya Community of Cox's Bazar. Respondents were selected by convenience sampling technique with sample size of 200 participants. A well-designed and pretested set of structured questionnaire was used to collect the information. Data was collected by face to face interview. Collected data was sorted, cleaned, maintained with accuracy and was preserved for statistical analysis. Data was analyzed by STATA 16 version. Chi-square test was used to compare the proportions of categorical variables and student t-test to compare the mean of continuous variables. A logistic regression model was run to find out the factors associated with the healthcare-seeking behavior of Rohingya people during the COVID-19 pandemic. A P value < 0.05 will be considered statistically significant. Ethical clearance was obtained from the Institutional Review Board (IRB) of AIUB.

3. RESULTS

Table 1: Socio-demographic and clinical characteristics of study participants

Variables	Characteristics	Frequency	Percentage
Age group (years)	18 to 29	66	33
	30 to 49	80	40
	≥50	54	27
Sex	Male	51	102
	Female	49	98
Educational Qualification	Below secondary education	114	57
Occupation	Secondary education or above	86	43
	Day laborer	52	26
	Volunteer	28	14
	House Wife	52	26
	Primary Teacher	14	7
	Imam	10	5
	Others	44	22
Monthly income	≥10000 taka	99	49.5
	<10000 taka	101	50.5
Fear of visiting health facilities		52	26
Aware/conscious enough to prevent covid-19		154	77

Out of 200 respondents, majority (40%) of the respondents was aged between 30 to 49 years followed by 33% were aged between 18 to 29 years and 27% of the respondents was ≥50 years. Among the respondents 51% were Female and 49% were male. Regarding education 57% of the respondents had below secondary education. Among all, 26% were day laborer and 26% women was housewife. Majority (50.5%) had monthly family income <10000 taka. Fear of visiting health facilities was observed in 26% cases and 77% of the respondents were conscious enough to prevent COVID-19.

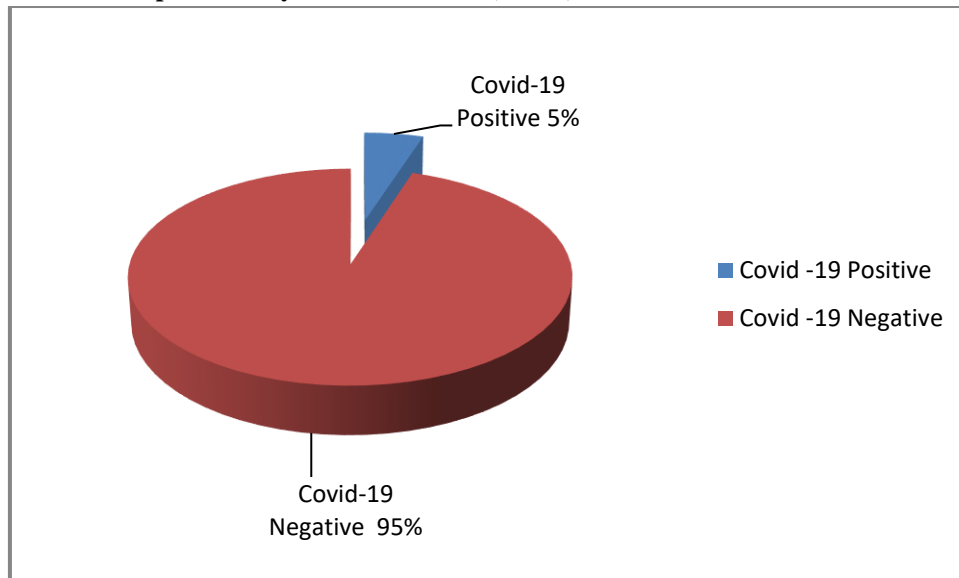
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Table 2: Comorbidities among the respondents (n=200)

Comorbidities	Frequency (n)	Percentage (%)
Hypertension	24	12
Diabetes mellitus	16	8
COPD/Asthma	8	4

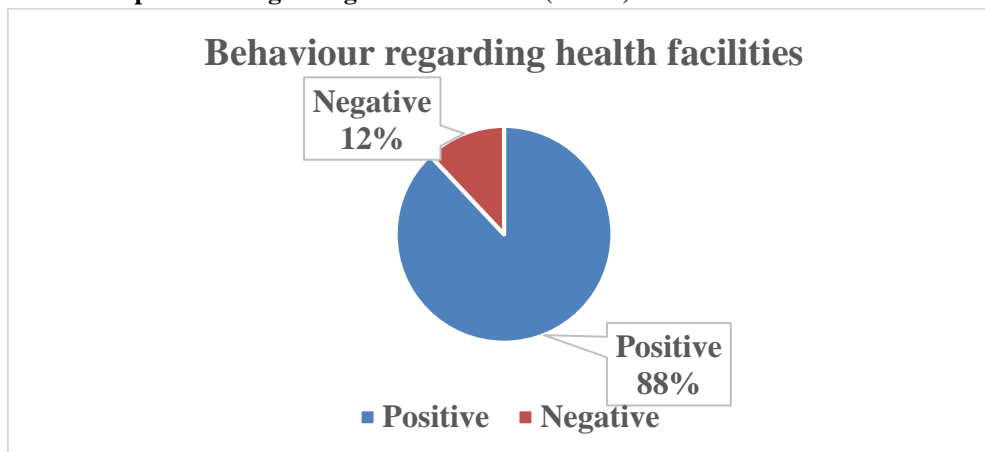
Among all, 12% had Hypertension, 8% had Diabetes mellitus and 4% had COPD/Asthma.

Figure 1: Distribution of the respondents by H/O COVID-19 (n=200)



5% of the respondents had H/O COVID-19 positive.

Figure 2: Behavior of the respondents regarding health facilities (n=200)



Those who had preferred refugee health camp for treatment was considered as positive behavior and rest of places was considered as negative behavior. Among all, 88% had positive behavior and 12% had negative behavior.

Table 3: Clinical presentation of the study participants (n=200)

Clinical presentation	Frequency (n)	Percentage (%)
Fever	68	34
Cough	98	49
Headache/body ache	66	33
Shortness of breath	14	7
Anosmia	8	4

Among all, 34% had fever, 49% had Cough, 33% had headache/body ache, 7% had shortness of breath and 4% had Anosmia.

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Table 4: Preferable place for treatment among the participants (n=200)

Preferable place for treatment	Frequency (n)	Percentage (%)
Refugee health camp	176	88
Pharmacy	18	9
Traditional healer	6	3

88% of the respondents preferred Refugee health camp, 9% preferred Pharmacy and 3% preferred Traditional healer for treatment.

Table 5 : Association of Health seeking behavior with Socio-demographic status of the respondents (n=200)

Socio-demographic profile		Positive	Negative	P value*
		(n=176)	(n=24)	
		n (%)	n (%)	
Age group (years)	18 to 29	62 (35.2)	4 (16.7)	0.111
	30 to 49	70 (39.8)	10 (41.1)	
	≥50	44 (25)	10 (41.7)	
Gender	Male	86 (48.9)	12 (50)	0.544
	Female	90 (51.1)	12 (50)	
Marital status	Married	160 (90.9)	22 (91.7)	0.631
	Unmarried	16 (9.1)	2 (8.3)	
Educational status	Below secondary education	92 (52.3)	22 (91.7)	<0.01
	Secondary education or above	84 (47.7)	2 (8.3)	
Occupational status	Day laborer	46 (26.1)	6 (25)	0.090
	Volunteer	28 (44.10)	0 (0)	
	House Wife	44 (25)	8 (33.3)	
	Primary Teacher	10 (5.7)	4 (16.7)	
	Imam	10 (5.7)	0 (0)	
	Others	38 (21.6)	6 (25.0)	
Monthly income	≥10000 taka	93 (52.8)	6 (25)	0.009
	<10000 taka	83 (47.2)	18 (75)	
H/O Diabetes mellitus		14 (7.9)	2 (8.3)	0.599
H/O Hypertension		18 (10.2)	6 (25)	0.048
H/O COPD/Asthma		8 (4.5)	0 (0)	0.353
H/O COVID-19 positive		8 (4.5)	2 (8.3)	0.342
Fear of visiting health facilities		30 (17)	22 (91.7)	<0.01
Aware/conscious enough to prevent covid-19		148 (84.1)	6 (25)	<0.01

Health seeking behavior was significantly positive among the respondents those who had higher education, higher family income, H/O hypertension and those who were aware/conscious enough to prevent COVID-19. Fear of visiting health facilities and family member >4 was significantly higher in negative Health seeking behavior people.

Table 6: Risk factors analysis of negative health seeking behavior by Univariate logistic regression (n=200)

Risk factors	Odds ratio	95% CI	P value*
Educational status (below SSC)	10.043	1.292-44.008	0.002
Income (<10000 taka)	1.297	1.113-7.785	0.014
Family member (≥4)	3.300	1.122-4.739	0.009
H/O Hypertension (no)	1.342	1.120-2.971	0.044
Fear of visiting health facilities	1.019	1.004-9.084	<0.01
Unaware to prevent covid-19	1.063	1.023-5.173	<0.01

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Low educational status, low monthly family income, higher number of family member, H/O Hypertension, Fear of visiting health facilities and unaware to prevent covid-19 were significantly associated risk factors for negative health seeking behavior.

4. DISCUSSION

In Bangladesh due to high population density, poor hygiene, insufficient health facilities, Rohingya refugees are residing in Cox's Bazar camp areas though government has started a process to relocation a part of them to Bhasanchar. According to the history of previous epidemic responses, such as Ebola that highlight the perceptions of people on health-seeking behavior, trust in humanitarian responders, and the willingness of affected communities to comply with public health measures. As the entire nation, as well as Bangladesh, is struggling to fight against COVID-19, refugees are one such population who are extremely vulnerable to the effects of this outbreak. If symptoms associated with this disease are not recognized early its effects will be disastrous. The current study aimed to understand the overall state of health-care-seeking behavior of the Rohingya community during the COVID-19 pandemic. A total of 200 refugees were enrolled in the study.

The majority (40%) of the respondents were aged between 30 to 49 years with a mean age was 39.3 ± 15.5 years. Among all, 51% were female and 49% were male. In the study of Masud et al. mean age of the participants was $45.52 (\pm 19.28)$ years and 82 (55%) were female (12). In the study of Karim et al. among the study population, 45.8% were of 13-49 years of age and it is noteworthy to mention that the age-sex distribution in the cumulative Rohingya population residing in Cox's Bazar (Old camps) and the newly arrived Rohingyas were almost similar (13).

Among the Rohingya refugee's majority of them had educational status below secondary with monthly income below 10000 takas and the majority of the respondents were married. A similar finding was observed by the previous study Masud et al. (12). Barua et al. also unveiled that the literacy level of the Rohingya population is very low (13).

Among all the respondents, 5% of the respondents had H/O COVID-19 positive. Previously a total of 981 tests have been conducted on Rohingya refugees, which have led to 57 confirmed COVID-19 cases and five deaths among the refugee population. there may be a possibility of a large number of cases being undetected in the camps due to limited testing capacities and a lack of social distancing measures in the camp (13).

Thirty-four percent of the refugees had a fever, 49% had Cough, 33% had headache/body ache, 7% had shortness of breath and 4% had Anosmia. Among all, 88% of the respondents preferred Refugee health camp, 9% preferred Pharmacy and 3% preferred Traditional healer for treatment. Among all, 88% had positive behave and 12% had negative behave. Low educational status, low monthly family income, a higher number of family members, H/O Hypertension, Fear of visiting health facilities, and unaware to prevent covid-19 were significantly associated risk factors for negative health-seeking behavior. All the factors are directly or indirectly depending on literacy. As education level of the Rohingya refugees was downcast, their thinking was full of superstition. In a telephonic survey conducted randomly among the host community and refugee population in Cox's Bazar, 24.6% refugees reported having at least one symptom out of fever, dry cough, and fatigue. Out of 365 refugees only 120 refugees took treatment and among them 42.3% searched treatment at a pharmacy, followed by 35% by health information providers in camps (6). Refugees fear being abducted or even killed while being taken to isolation centers. These rumors have prevented many refugees from seeking healthcare despite suffering possibly from COVID-19 symptoms (14). Health services provided by humanitarian agencies in the camps are generally viewed negatively by Rohingya with high levels of distrust and skepticism about quality. The baseline relationship that Rohingya are found to have with the healthcare system in the camps is characterized by a lack of trust (15). Besides, low levels of literacy and lack of awareness among the population also play a major role.

In this pandemic situation, symptoms associated with COVID-19 cannot be ignored. Rohingya community is a crowded area and literacy level was not enough among the people which makes them prejudiced. Health-care-seeking behavior must be improved to enrich the quality of life and prevent the disastrous outcome of the nations. Increasing awareness among the peoples can help to change the health seeking behavior.

CONCLUSION

A significant proportion of the Rohingya population sought primary healthcare services from refugee camps during the COVID-19 pandemic, reflecting a commendable healthcare-seeking attitude within the community. Nevertheless, factors such as low educational attainment, apprehension regarding visits to health facilities, and a lack of awareness about COVID-19 prevention measures were notably linked to adverse health-seeking behaviors.

Statement of Ethics

Ethical clearance was taken from the IRB of AIUB.

Conflict of Interest

Authors have declared that no competing interest exists.

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