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Research Article

COVID-19 Related Knowledge, Attitude, Practice and Mental Status among the People of Rohingya Refugee Camps in Cox's Bazar, Bangladesh - ৯

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ABSTRACT

The rohingya refugee people in Bangladesh are now in great risk of COVID-19 because of their habitant and avoiding COVID-19 related practices. The main focus of this study is to present the real scenario about COVID-19 related knowledge, attitude and practices among the rohingya refugee people and their mental status in Cox's Bazar. It was across-sectional study. This study was completed with a total of 385 responses. A questionnaire was created to assess demographic characteristics (5 items), knowledge (9 items), attitude (5 items), practices (5 items), and mental status (2 items). Aside from the KAP findings, the result are also presented based on demographic variables. The practice of the respondents were not satisfactory. At the same time their mental status are now improved drastically after pandemic. In conclusion, this study emphasizes the importance of COVID-19 practices that focuses on behavioral changes and also mental status right now for the rohingya people in Bangladesh.

Keywords: COVID-19; Rohingya; Refugee; Vaccine; Pandemic; KAP; Mental

INTRODUCTION

Since its discovery in China in December 2019, the coronavirus disease 2019 (COVID-19) has raised concerns about global public health. A brand-new coronavirus called severe acute respiratory syndrome coronavirus 2 (SARS-COV-2) is the culprit [1,2]. COVID-19 is mostly spread from person to person through respiratory droplets, and symptoms include fever, exhaustion, breathing difficulties, and respiratory problems [3]. Like the rest of the world, Bangladesh is witnessing the eradication of this deadly virus. In cases like this, the poorest individuals suffer the most. Among those who are disadvantaged, displaced refugee populations may be at the top of the list. The WHO has deemed the COVID-19 pandemic a global health emergency, and rohingya refugees in Bangladesh are at serious risk from the virus.

Cox's Bazar, Bangladesh, is currently home to a sizable number of rohingya refugees who have poor access to water and sanitary facilities [4]. The first COVID-19 case was discovered on March 8, 2020, in a rohingya refugee camp in Cox's Bazar [4]. Lack of infrastructure for health and hygiene, as well as a lack of a health information system, could all be factors in the spread of this disease within the camps. Given the current telecoms embargo, the lack of Internet connectivity in the camp region, and the illiteracy of the rohingya population, fear and misinformation about COVID-19 may exacerbate the situation in the camps [5]. The entire Cox's Bazar refugee settlement area possesses traits that make it likely for an infection to propagate there. For the successful prevention and control of this coronavirus illness, people must adhere to the World Health Organization's control measures [6]. The knowledge, attitude, and practices (KAP) of an individual have a significant impact on the efficacy of preventive measures [7,8]. A KAP study is conducted with a particular demographic to learn more about their concepts, way of thinking, and application to a particular object [9]. According to several studies, the prevention of the earlier SARS outbreak was somewhat influenced by people's attitudes and awareness of infectious diseases [10,11]. Additionally, there is a dearth of knowledge on the COVID-19 pandemic that followed the rohingya refugee crisis in Bangladesh. In light of the aforementioned, we determined that it was essential to evaluate the COVID-19-related knowledge, attitude, and practices of the rohingya community following the epidemic. The current study's objective was to assess the KAP and mental status of the rohingya population in Bangladesh following the COVID-19 outbreak there.

METHODS

Study design and participant selection

A cross-sectional study was conducted to assess the knowledge, attitude, practices and mental status of rohingya people and their

COVID-19 vaccination status in refugee camps of Ukhiya and Teknaf in Cox's Bazar between November and December, 2022. We took the interview only who are not affected by COVID-19. We contacted the participants in door to door.

Sample size detection

The infinite population formula was used to calculate sample size [$S = (Z)^2 \times P \times (1-P) \div (M)^2$]. A 95% confidence level was used to calculate the Z-value (1.96). The population proportion (P) and margin of error (M) were calculated at the 50% (0.50) and 5% (0.05) levels, respectively. We took the calculated 385 samples for the study.

Study tools and data collection

For better understanding the questionnaire were made in English. For better clarification we collected the rohiongya interviewer Family Attestation Card in which their full information we got. The survey was continued by 25 trained interviewers. We collected all the information by going door to door of the refugees' house. The first part of the questionnaire was demographic information, second part was COVID-19 related KAP and the third part was for mental status of the participants. We prepared two answering options here. The answering options in the knowledge section were a) true and b) false, whereas in the attitude section the options were a) agree and b) disagree and in the Covid-19 practices section the options were a) yes, b) no. For knowing the mental status we observed the participants face when we asked them their thinking about COVID-19. By getting their facial expression and their answering approaches we classified their mental status into four parts. These are a) normal, b) had courage, c) panic and d) depressed. We also asked them about their previous thinking comparing the present thinking on COVID-19. For ease of interpretation, results were converted into percentages.

Statistical analysis

Before importing to the Statistical Package for Social Sciences (SPSS) software (version 22.0), all data were entered on a master Microsoft Excel spread sheet. To assess the differences in KAP between demographic variables.

RESULTS

In the demographic information dataset we found more than 75% participants got the COVID-19 third dose vaccine (Table 1). At the same time the important thing is that all the participants are vaccinated. So, we can say all the adult people of rohingya refugee are now vaccinated.

In the data sheet we have seen that maximum male parsons have good knowledge about COVID-19 and at the same time maximum female participants have no knowledge regarding COVID-19. That is why the knowledge about COVID-19 among rohingya community is



not spread household level properly. Half of the population still now have no idea about COVID-19 (Table 2).

As their knowledge level is not in satisfactory level, so their attitude towards COVID-19 also not good (Table 3). Some who have knowledge are not show their attitude perfectly.

Peoples practicing level is very much disappointing us. Most of the people do not care the hygiene practice (Table 4). As they are living in very congested area, so they have very much possibility to spread the virus in their community.

In the data sheet we have seen that during pandemic most of the people were in panic/depressed condition (Table 5). But after pandemic maximum people are in normal mental status now (Figure 1).

In the above table 6 we see the percentage of natural feeling over COVID-19 is increasing according to vaccination dose taken. In this community almost all adult people are vaccinated. That is why they are now not panic about COVID-19.

DISCUSSION

With the help of other refugee studies and more general rohingya KAP studies, we try to discuss and contrast our results with theirs. A KAP survey may be helpful if it is carried out early on in a situation [12]. For the prevention and control of disease outbreaks, better sanitation facilities are essential as well as very good knowledge, a

Table 1: Demographic information of the participants.

Variable	Frequency	Percentage (%)
Age (Years)		
Mean ± SD	32.28 ± 11.25	
Median (Min-Max)	28 (20-59)	
Age Category		
20-29	209	54.3%
30-39	116	30.1%
40-49	21	5.5%
50-59	39	10.1%
60-69	0	0
Sex		
Male	231	60%
Female	154	40%
Marital Status		
Married	346	89.9%
Unmarried	20	5.2%
Divorced	19	4.9%
Widow	0	0
COVID-19 Vaccination		
1 st Dose	20	5.2%
2 nd Dose	76	19.7%
3 rd Dose	289	75.1%
Educational Qualification		
Illiterate	231	60%
< Class 5	116	30.1%
Class 5-10	38	9.9%

Table 2: COVID-19 related knowledge of the participants.

	Have Knowledge Frequency (%)	No Knowledge Frequency (%)
COVID-19 is caused by Virus	251 (65.2%)	134 (34.8%)
Fever, cough are the major symptoms of COVID-19	192 (49.9%)	193 (50.1%)
COVID-19 can spread through respiratory droplets	77 (20%)	308 (80%)
People with heart disease, diabetes and high blood pressure are more likely to be infected by COVID-19	155 (40.3%)	230 (59.7%)
COVID-19 cannot penetrate the cloth mask	228 (59.2%)	157 (40.8%)
Isolation and treatment of the infected people are effective methods of limiting virus spread	57 (14.8%)	328 (85.2%)
COVID-19 is same as flu virus	133 (34.5%)	252 (65.5%)
Not everyone infected with COVID-19 will develop severe symptoms	77 (20%)	308 (80%)
Vitamin C is effective to prevent COVID-19	133 (34.5%)	252 (65.5%)

Table 3: COVID-19 related attitude of the participants.

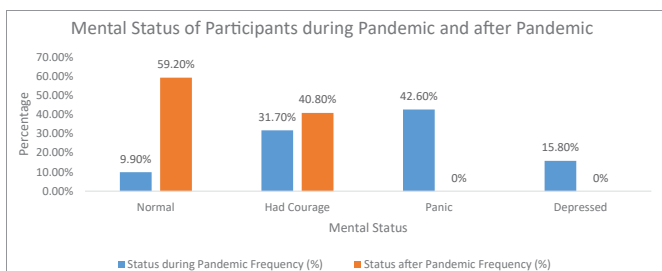
	Positive Attitude Frequency (%)	Negative Attitude Frequency (%)
Corona virus is very serious	211 (54.8%)	174 (45.2%)
Corona virus is preventable	96 (24.9%)	289 (75.1%)
Spatial distance is mandatory to prevent COVID-19	155 (40.3%)	230 (59.7%)
It is crucial to wear a face mask in crowded place	230 (59.7%)	155 (40.3%)
It is important to maintain home quarantine after getting COVID-19	290 (75.3%)	95 (24.7%)

Table 4: Practice regarding COVID-19.

	Good Practice Frequency (%)	Bad Practice Frequency (%)
Using tissue or hanker chips during coughing/ sneezing	116 (30.1%)	269 (69.9%)
Wearing face mask when outing	193 (50.1%)	192 (49.9%)
Washing hands frequently by using water and soap	230 (59.7%)	155 (40.3%)
Eating healthy food focusing on outbreak	76 (19.7%)	309 (80.3%)
Often go in a crowded place	79 (20.5%)	306 (79.5%)

Table 5: Mental status of participants during pandemic and after pandemic.

	Status During Pandemic Frequency (%)	Status After Pandemic Frequency (%)
Normal	38 (9.9%)	228 (59.2%)
Had Courage	122 (31.7%)	157 (40.8%)
Panic	164 (42.6%)	0 (0)
Depressed	61 (15.8%)	0 (0)

**Figure 1:** Bar diagram shows the comparison among the Rohingya refugee peoples' mental status during pandemic and after pandemic.**Table 6:** Relation between vaccination and feeling against COVID-19.

Vaccination	Feeling after Vaccination against COVID-19	
	Natural Frequency (%)	Have Courage Frequency (%)
1 st dose	16 (4.16%)	4 (1.04%)
2 nd dose	29 (7.53%)	47 (12.21%)
3 rd dose	183 (47.53%)	106 (27.53%)

positive attitude, and, most importantly, the consistent and accurate application of hygiene and sanitation practices [13]. The rohingya participants in the current study showed very negative attitudes and behaviors against COVID19, although their understanding was shown to be slightly better when compared to these two. Similar findings in the total knowledge scores were discovered in a recent study on rohingya people in the Cox's Bazar camps addressing Water, Sanitation, and Hygiene (WASH) [14]. We discovered that in nine questions from the knowledge part, nearly half of the respondents gave incorrect responses. The efficiency of cloth masks, comorbidities, the severity of newly emerging symptoms, and if COVID-19 is similar to the flu virus were also topics of discussion. In a related study, participants were unable to provide accurate answers to questions about transmission [15]. In these COVID-19 questions, respondents with some educational background seemed to do well [16-21]. The majority of the study's participants lacked any formal education. Another study on the rohingya population in Bangladesh found a greater prevalence of illiteracy among respondents (79.6%) [22]. The same author also noted that an educational foundation is necessary for a decent impact on knowledge and behavior [22]. Another potential factor during the period of rapid increase may have been a lack of knowledge [15].

Our findings indicate that the respondents from the rohingya community had a poor general view of the COVID-19. They showed a comparably favorable attitude toward issues including home isolation as well as mask use.

The rohingya research participants' cleanliness practices go counter to the results of a recent study [23]. The rohingya population's hygiene practices are unaffected by their literacy rate or family size

[22]. Finding a connection in such a case is also pointless because the community as a whole is in desperate need of aid [22]. Items for hygiene and sanitation are scarce inside the camps. Notably, to meet their basic needs, about 88% of rohingya people rely on outside assistance from UN agencies and other non-governmental organizations [24]. This can be one of the factors preventing people from maintaining good sanitation and hygiene. Two-thirds of them seemed unconcerned with contaminating the camps with the illness. They also exhibit this mindset in their behaviors. Nearly 80% of respondents claimed that they frequently shake hands with strangers and enter busy areas. In a recent study [23], these dangerous habits of the rohingya people were also mentioned. Furthermore, the results revealed that more than half of the study participants frequently went outside, participated to social events, and did not keep their distance from others [23]. But this is totally different from the mothers of Syrian refugees. They practiced in social distance and large groups and showed a really optimistic attitude. Seventy-seven percent of mothers believed that sneezing and eighty percent of mothers believed that shaking hands were effective ways to transfer COVID-19 [25]. A recent study found that Cox's Bazar refugees trust NGOs as information sources [23]. However, one study found that among Syrian refugee women, Facebook, Whatsapp, and other social media sites were the most widely used venues for finding out about COVID-19 [25]. Due to their active involvement in the COVID-19, NGOs served as the main informational resource for camp occupants. However, the research supports the use of print and social media within the camps to disseminate health-related information [26]. Lack of social distance, food insecurity, and a lack of information and awareness of COVID-19 are all current camp circumstances. Even fundamental medical consultation is made difficult by a shortage of personal protective equipment for health workers in Ukhiya, Teknaf, and other camp health facilities [26]. The rohingya people's understanding, attitude, and practices regarding COVID-19 may be impacted by these circumstances.

Following the pandemic, the mental state of the rohingya population has significantly changed. Most people throughout the pandemic were anxious or sad. However, they now live a regular life.

CONCLUSION

In the rohingya refugee camps we saw the area where they live are very narrow and at the same time these area are densely populated. So the risk of transmission of COVID-19 is very common here. Government, NGO/INGO, UN Bodies are trying their best to disseminate the messages regarding COVID-19. But the regretful thing is most of the people do not maintain the messages. The knowledge level of the rohingya people regarding COVID-19 is good but the attitude towards COVID-19 and practices are very poor. By understanding their situation UN Bodies took a great step to vaccinate all the adult rohingya refugees and they completely succeeded on this. Overall their mental status is now good than the time of Pandemic because all adult people are now vaccinated.

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