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Do older adults of Rohingya community (Forcibly Displaced Myanmar Nationals or FDMNs) in Bangladesh are fearful of COVID-19? findings from a cross-sectional study --Manuscript Draft--

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| Keywords: | Fear; FCV-19S; Rohingya; Forcibly Displaced Myanmar Nationals; COVID-19 |
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Do older adults of Rohingya community (Forcibly Displaced Myanmar Nationals or FDMNs) in Bangladesh are fearful of COVID-19? findings from a cross-sectional study

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Short title: Fear of COVID-19 among Rohingya FDMNs in Bangladesh

Abstract

Aim: This study aimed to assess the fear of COVID-19 and its associates among older Rohingya (Forcibly Displaced Myanmar Nationals or FDMNs) in Bangladesh.

Method: We conducted a cross-sectional survey among 416 older FDMNs aged 60 years and above living in camps of Cox's Bazar, Bangladesh. A semi-structured questionnaire was used to collect information on participants' socio-demographic and lifestyle characteristics, pre-existing non-communicable chronic conditions, and COVID-19 related information. Level of fear was measured using the seven-item Fear of COVID-19 Scale (FCV-19S). A multiple linear regression examined the factors associated with fear.

Results: Among 416 participants aged 60 years or above, the mean fear score was 14.8. Participants who were concerned about COVID-19 (β : 0.63, 95% CI: -0.26 to 1.53) and overwhelmed by COVID-19 (β : 3.54, 95% CI: 2.54 to 4.55) were significantly more likely to be fearful of COVID-19. Other factors significantly associated with higher level of fear were lesser frequency of communication during COVID-19, difficulty in obtaining food during COVID-19, perception that older adults are at highest risk of COVID-19 and receiving COVID-19 related information from Radio/television and friends/family/neighbours.

Conclusions: Our study highlighted that currently there is very little fear of COVID-19 among the older Rohingya FDMNs. This is probably due to lower COVID-19 mortality rate in camp, ack of awareness of the severity of the disease and brutality the older Rohingya adults faced in recent past which outraged this fear. However, further qualitative research is advised to find out the reasons behind this.

Keywords

Fear; FCV-19S; Rohingya; Forcibly Displaced Myanmar Nationals; COVID-19

Introduction

The COVID-19 pandemic is one of the greatest calamities related to public health issue since World War II. The disease continue to spread across the world, with nearly 37 million confirmed cases in 188 countries with more than one million deaths up to 8th October [1]. World Health Organization (WHO) declared the disease as a global health emergency on 30 January 2020 [2]. All countries are implementing public health measures such as mobility restrictions, lockdowns, compulsory mask wearing, among others to reduce the transmission of this highly infectious disease and thus to control the morbidity as well as mortality rate.

However, public health emergencies in times of epidemics and pandemics such as the COVID-19 pandemic may cause intense fear and anxiety particularly among the most at-risk populations including refugees and displaced population, particularly the old age group [3, 4]. This is because refugee camps are transitory settlements that accommodate displaced individuals and families who have fled their home countries as a result of political instability, war and natural disasters [5]. In many refugee camps including the Cox's Bazar refugee camps of Bangladesh where Rohingya refuges are settled, there are poor social and physical conditions such as overcrowding, poor sanitation and absence of basic amenities such as water [5].

Rohingya people (Forcibly Displace Myanmar Nationals or FDMN) are majorly Muslims minority groups who had been exiled from Rakhine State, Myanmar, for the fear of persecution and death. Estimates show that hundreds of thousands of Rohingya people fled during August 2017 due to extreme violence and more than half of the deported were children. They took shelter in Cox's Bazar, a South-Easter district of Bangladesh located about 280 kilometres away from Rakhine state of Myanmar (the place from where they displaced), is now also the world's largest camp for displaced people [6, 7]. Now almost 860,000 FDMNs are living in the 34 camps in Cox's Bazar with 51% being children, 45% adult, 4% older persons and 1% persons with disability [8].

The refugee camps are the most densely populated area where an average population density is about 40,000 inhabitants per square kilometre, with some areas approaching 70,000 inhabitants [7]. As a result, there is a high risk of transmission of COVID-19 in the area [9]. As of 30th September 2020, a total of 4479 COVID-19 positive cases have been confirmed in the Cox's Bazar district, of which 252 are in the Rohingya camps and the numbers are rapidly increasing [2]. People of all age groups are at risk of getting infected by this virus but older adults and people with pre-existing conditions are at higher risk of infection by COVID[10]. The emerging evidence shows that mortality related to COVID-19 is higher (15%) among the older adults worldwide, where almost 74% of the total death occurred among those above 65 years of age [11].

The UN Refugee Agency (UNHCR) indicates there are more than 31,500 FDMNs aged 60 years or older in the camps [12]. Therefore, age being a critical variable posing a major risk for COVID-19 may create serious emotional disturbances, insecurity anxiety and depression among old, aged people in the camps. The effect of COVID-19 among the Rohingya older FDMNs might be devastating because of the prevalence of multiple health challenges in the refugee camp like lack of healthcare facilities and services, existing higher prevalence of infectious and non-communicable chronic diseases, and poor knowledge of hygiene and practices [13]. Again, a contagion disease outbreak like the COVID-19 creates fear that can cause people to sometimes worry about their own health and the health of the loved ones, financial situation, changes in sleep or eating patterns, difficulty in concentrating, worsening physical and mental health problems [10].

It is worth mentioning here that older people from the refugee camp in Rohingya community may have experiences of fear of military brutality which may exacerbate the situation of their mental/psychological condition mix with the fear of pandemic COVID-19. In this line, few media reports highlighted the COVID fear among the Rohingya community of Cox's Bazar. However, there has been none scientific studies that measured the COVID-19 fear among this vulnerable group of population. Therefore, the current study was conducted to access the COVID-19 related level of fear and its associates among FDMN older adults aged 60 years or above in Bangladesh.

Materials and Methods

Study design and participants

This was a cross sectional study carried out among 416 FDMNs older adults aged 60 years and above residing in Rohingya refugee camps situated in the Cox's Bazar district in the South-Eastern part of Bangladesh in October 2020.

The sample size of 460 was calculated with the following assumptions: (unknown) prevalence of COVID-19 related fear=50%, sampling error=5%, Confidence Interval=95% and non-response rate=20%. A total of 416 Rohingya older adults aged 60 years and above responded to the study from 457 who were approached (response rate 91%). There is a total of 34 Rohingya camps located in Cox's Bazar district, from which Camp 08E (SSID CXB-210), located at *Ukhia* sub-district was conveniently selected (Figure 1). In absence of the list of the older adults in Rohingya camps, a convenience sampling technique was employed to identify the eligible participants from the selected camp. The enumerators continued visiting the households starting from one side of the camp and stopped once desired sample size was achieved. In the absence of an eligible participant in the approached household, the enumerators moved to the next one and if the household had

more than one older adult all of them were interviewed. The inclusion criteria included aged ≥ 60 years and FDMN status, he exclusion criteria included adverse mental conditions (clinically proved schizophrenia, bipolar mood disorder, dementia/cognitive impairment), a hearing disability, or unable to communicate.

Figure 1: Geographical location of the study area

Measures

Outcome measure

COVID-19 related fear was the primary outcome, which was measured using the seven-item Fear of COVID-19 Scale (FCV-19S) developed and validated by Ahorus et al. among the general Iranian population []. Participants' agreement/disagreement with the seven items was assessed using a five-point Likert-scale (ranging from 1= "strongly disagree," 3= "neither agree nor disagree," and 5= "strongly agree"). Hence, the cumulative score ranged from 7 to 35, where the higher the scores, the greater the fear of COVID-19. Reliability or the internal consistency of the scale among Rohingya older adults was acceptable (Cronbach's $\alpha = 0.89$).

Explanatory variables

Explanatory variables considered in this study were age (categorized as 60-69, 70-79, and \geq 80 years), gender (male/female), marital status (currently married/widow), family size (\leq 4 and more than 4), literacy (Illiterate/literate), living arrangements (living with other family members/living alone), dependence on family for living (yes/no), memory or concentration problem (no problem/low memory or concentration), pre-existing non-communicable chronic conditions

(yes/no), source of COVID-19 related information (Radio/Television, health workers, and friends/family/neighbors), concerned about COVID-19 (hardly, sometimes/often), overwhelmed by COVID-19 (hardly, sometimes/often), frequency of communication during COVID-19 (less than previous/same as previous), difficulty obtaining food during COVID-19 (no difficulty/faced difficulty), difficulty getting medicine during COVID-19 (no difficulty/faced difficulty), difficulty getting medicine during COVID-19 (no difficulty/faced difficulty), difficulty and perceived that older adults at highest risk of COVID-19 (yes/no).

Self-reported information on the presence of pre-existing non-communicable conditions such as arthritis, hypertension, heart diseases, stroke, hypercholesterolemia, diabetes, chronic respiratory diseases, chronic kidney disease and cancer was also collected. This information was verified with health records of the participants (where these were available) and/or with family members. We did not collect information on the income and occupation as the participants were all unemployed and dependent on aid.

Data collection tools and techniques

A pre-tested semi-structured questionnaire in Bengali language was used to collect the information through face to face interview. Data were electronically recorded in Survey CTO mobile app (<u>https://www.surveycto.com/</u>) by two surveyors, who were local residents of Cox's Bazar, fluent in Rohingya dialects, and had previous experience of administering health survey in electronic platform. The enumerators were trained extensively before the data collection through half-day Zoom meeting.

The English version of the questionnaire was first translated to Bengali language and then back translated to English by two researchers to ensure the contents' consistency. The Bengali version of the tool was piloted among a small sample (n=10) of Rohingya older adults from the selected camp to refine the language in the final version. The participants approved the tool designed by research team without any corrections or suggestions.

Statistical analysis

Mean (SD) and frequency (%) was used to depict participants' characteristics. Independent t-tests and ANOVA evaluated the mean differences in the FCV-19S score by participants' characteristics. A multiple linear regression model was performed where variable selection was based on the backward elimination with Akaike Information Criterion (AIC) approach. Adjusted betacoefficient (β) and 95% confidence interval (95% CI) are reported. All analyses were performed using the statistical software package Stata (Version 14.0).

Ethical approval

The study protocol was approved by the institutional review board of Institute of Health Economics, University of Dhaka, Bangladesh (Ref: IHE/2020/1037). Both written and oral informed consents was sought from the participants (thumb impressions from those who were not able to read and write) before administering the survey. Participation was voluntary, and participants did not receive any compensation. Written approval was also sought from the Office of the Refugee Relief and Repatriation Commissioner (RRRC) prior to accessing the camps and conducting the survey.

Patient and public involvement

Patients and/or public were not involved in development of research question, study design, conducting study and result dissemination.

Results

Participants' characteristics

Table 1 describes the socio-demographic characteristics of participants. Of 416 studied participants, 74% were aged 60-69 years, about 60% were male, 93% were married and almost 60% of them were residing with a household of more than four members. Nearly all the participants (98%) were functionally illiterate. A large number (87%) of the participants were living with the family members but half of them (46%) were not depending on their families for a living. Participants received information related to COVID-19 from different sources including Radio/Television (42.8%), health workers (72%) and friends/family/ neighbours (64%).

| Characteristics | n | % |
|-----------------|-----|-------|
| Total | 416 | 100.0 |
| Age (year, %) | | |
| 60 - 69 | 308 | 74.0 |
| 70-79 | 83 | 20.0 |
| >= 80 | 25 | 6.0 |
| Sex | | |
| Male | 251 | 60.3 |
| Female | 165 | 39.7 |
| Marital status | | |
| Married | 389 | 93.5 |
| Widow | 27 | 6.5 |
| Family size | | |
| 0-4 | 167 | 40.1 |
| >4 | 249 | 59.9 |

Table 1: Sociodemographic characteristics of the participants (N=416)

| Literacy | | |
|---|-----|------|
| Illiterate | 406 | 97.6 |
| Literate | 10 | 2.4 |
| Living arrangement | | |
| Living with other family members | 362 | 87.0 |
| Living alone | 54 | 13.0 |
| Dependent on family for living | | |
| No | 191 | 45.9 |
| Yes | 225 | 54.1 |
| *Source of COVID-19 related information | | |
| Radio/Television | 178 | 42.8 |
| Health worker | 298 | 71.6 |
| Friends/family/neighbour | 267 | 64.2 |

Fear among the participants

Mean fear score was 14.8 among the participants which indicates low level of fear among the participants. Table 2 shows the bivariate analysis with participants' characteristics and fear score of COVID-19. Here we found that age, gender, family size, dependence on family for a living, having problem in memory did not play a role in being afraid of COVID-19. Marital status of the participants, living arrangement, source of COVID-19 information from family/ friends and feeling overwhelmed by COVID-19 had a significant impact on the score of fear (P<0.001). Those who live with family members had higher fear score than those who were living alone (P<0.001). On the other hand, knowing information from friends/ family/ neighbours was responsible (P<0.001) for increasing the fear score than those who learned it from health workers or other media.

Difficulty in obtaining food or in receiving routine medical care during COVID-19 was statistically significant (P<0.001) with mean fear score of 17.0 and 16.1 respectively. The respondents who

were suffering from pre-existing chronic conditions had low level of COVID-19 related fear compared with those who hadn't had any such conditions (P<0.001).

| Characteristics | COVID-1 | COVID-19 fear score | | |
|--|---------|---------------------|--------|--|
| | Mean | SD | Р | |
| Overall | 14.8 | 4.3 | | |
| Age (year, %) | | | | |
| 60 - 69 | 15.0 | 4.5 | 0.083 | |
| 70-79 | 14.2 | 3.9 | | |
| >= 80 | 14.8 | 3.3 | | |
| Sex | | | | |
| Male | 14.7 | 4.2 | 0.356 | |
| Female | 15.1 | 4.4 | | |
| Marital status | | | | |
| Married | 15.0 | 0.2 | < 0.00 | |
| Widow | 11.6 | 0.4 | | |
| Family size | | | | |
| 0-4 | 14.6 | 4.0 | 0.298 | |
| >4 | 15.0 | 4.5 | | |
| Living arrangement | | | | |
| Living with other family members | 15.2 | 4.3 | < 0.00 | |
| Living alone | 12.6 | 3.6 | | |
| Dependent on family for living | | | | |
| No | 14.7 | 4.2 | 0.545 | |
| Yes | 14.9 | 4.4 | | |
| Memory or concentration problems | | | | |
| No problem | 14.9 | 0.2 | 0.242 | |
| Low memory or concentration | 14.2 | 0.6 | | |
| Pre-existing non-communicable chronic conditions | | | | |
| No | 15.6 | 4.2 | < 0.00 | |
| Yes | 12.9 | 4.0 | | |
| *Source of COVID-19 related information | | | | |
| Radio/Television | 15.3 | 3.4 | 0.076 | |
| Health worker | 14.5 | 4.8 | 0.029 | |
| Friends/family/neighbour | 16.4 | 4.0 | < 0.00 | |
| Concerned about COVID-19 | | | | |
| Hardly | 14.4 | 3.2 | 0.006 | |

Table 2: Fear score and bivariate analysis (N=416)

| Sometimes/often | 15.6 | 5.6 |
|---|------|------------|
| Overwhelmed by COVID-19 | | |
| Hardly | 12.0 | 3.3 <0.001 |
| Sometimes/often | 16.0 | 4.3 |
| Frequency of communication during COVID-19 | | |
| Same as previous | 15.1 | 5.6 0.206 |
| Less than previous | 14.6 | 3.1 |
| Difficulty obtaining food during COVID-19 | | |
| No difficulty | 13.7 | 4.1 <0.001 |
| Faced difficulty | 17.0 | 4.1 |
| Difficulty getting medicine during COVID-19 | | |
| No difficulty | 14.6 | 4.5 0.165 |
| Faced difficulty | 15.3 | 4.1 |
| Difficulty receiving routine medical care during COVID-19 | | |
| No difficulty | 14.2 | 4.6 <0.001 |
| Faced difficulty | 16.1 | 3.7 |
| Perceived that older adults at highest risk of COVID-19 | | |
| No | 13.4 | 4.4 <0.001 |
| Yes | 15.6 | 4.0 |

Independent factors associated with fear score

The full model included the socio-demographic characteristics and COVID-19 related variables (Table 1) deemed to be associated with COVID-19 related fear. The final model based on the lowest AIC are presented in table 3. In the adjusted model, Radio/Television as source of COVID-19 related information, friends/family/neighbour as source of COVID-19 related information, overwhelmed by COVID-19, difficulty obtaining food during COVID-19 and frequency of communication during COVID-19 were significantly associated with COVID-19 related fear among study participants (Table 3).

COVID-19 related fear was 1.07 units higher among participants who received COVID-19 related information from Radio/Television (β : 1.07, 95% CI: 0.19 to 1.95) and 2.62 units higher among

those who received COVID-19 related information from friends/family/neighbour (β : 2.62, 95% CI: 1.44 to 3.79). Similarly, the fear scores were 3.54 units higher among those who were overwhelmed by COVID-19 (β : 3.54, 95% CI: 2.54 to 4.55). On the other hand, the fear scores were 4.41 units lower among participants who had less communication with others during COVID-19 than previous (β : -4.41, 95% CI: -5.69 to -3.13). Meanwhile, the fear scores were 2.16 units higher among participants who had difficulty in obtaining food during COVID-19 (β : 2.16, 95% CI: 1.08 to -3.23).

| Characteristics | β | Р | 95% CI |
|--|-------|---------|--------------|
| Radio/Television as source of COVID-19 related information | | | |
| No | Ref | | |
| Yes | 1.07 | 0.017 | 0.19, 1.95 |
| Friends/family/neighbour as source of COVID-19 related | | | |
| information | | | |
| No | Ref | | |
| Yes | 2.62 | < 0.001 | 1.44, 3.79 |
| Concerned about COVID-19 | | | |
| Hardly | Ref | | |
| Sometimes/often | 0.63 | 0.166 | -0.26, 1.53 |
| Overwhelmed by COVID-19 | | | |
| Hardly | Ref | | |
| Sometimes/often | 3.54 | < 0.001 | 2.54, 4.55 |
| Frequency of communication during COVID-19 | | | |
| Same as previous | Ref | | |
| Less than previous | -4.41 | < 0.001 | -5.69, -3.13 |
| Difficulty obtaining food during COVID-19 | | | |
| No difficulty | Ref | | |
| Faced difficulty | 2.16 | < 0.001 | 1.08, 3.23 |
| Perceived that older adults at highest risk of COVID-19 | | | |
| No | Ref | | |
| Yes | 1.26 | 0.064 | -0.07, 2.59 |

Table 3: Factors associated with fear among the participants (N=416)

Discussion

To our knowledge, this is the first study to assess the level of fear and its associates among Rohingya FDMNs older adults in Cox's Bazar refugee camp. This study revealed two major findings. First, there was a relatively low level of fear among participants. Secondly, fear was associated with some socio-demographic characteristics of the participants and COVID-19 related factors.

Our study provides evidence to contradict the general assumption that COVID-19 has created enormous fear among all population groups, especially among the aged population in the world [15-17]. Although our findings are somewhat different with previous studies, it is worth mentioning that the included studies were not only performed with refugees in camps, but also used different measures and scales. Fear remains one of the key causes of stress, anxiety and mental problems (WHO, 2020a). Thus, our participants not fearing COVID-19 can be considered a positive condition for their mental and psychological wellbeing. However, this finding is particularly interesting and needs some explanations considering evidence that older adults are more likely to be infected and die from COVID-19 [18-21]. There can be several reasons for less fear for COVID-19 among the older Rohingya participants, such as poor health literacy about this infectious disease, previous brutal experience back in Myanmar, low COVID-19 cases in camp , low exposure to media in the camps and so on.

The present study further noted the factors associated with the higher level of fear among the older Rohingya population. We found that the participants who frequently become overwhelmed by the lethality of COVID-19 were more fearful than those who were indifferent to it. This is expected as people often become anxious and stressful of a disease when they are overwhelmed by its deadly effect, which in turn make them fearful of it. Evidence suggests that older adults are more vulnerable to COVID-19 related death and disabilities than their younger counterpart in part due to the presence of several co-morbidities [22]. Thus, knowing that presently there is no cure for COVID-19 and that they are more vulnerable of facing its lethal outcomes they might have been fearful of being infected with it [23, 24].

Interestingly, the findings revealed that the participants who had relatively lesser communication with others during the pandemic than before was less fearful than those who had no effect with communication. This is probably because frequent discussion of the severity of COVID-19, its global reach and the number of deaths and disabilities it is causing around them and globally with friends, family and other acquaintances can make a person more fearful of it [25]. Our findings also support this, as we found that the participants who were receiving COVID-19 related information from their family/friends/neighbours were more fearful than those who are not getting information from them. In line with this, the present research also reports that receiving COVID-19 information from popular media sources i.e., Radio/Television also makes the participants fearful of it. Again, the similar explanation applies as the participants are getting several information related to the lethality of the disease through Radio/Television making them fearful of it.

We also found that the participants who had difficulty in obtaining food during this pandemic were more fearful than those who had not difficulty. Like many other countries of the world earning members in many of the families lost their job in Bangladesh during the lockdown imposed due to COVID-19, particularly among the production workforce [26]. Also, crops and vegetables were not harvested in time or couldn't transport to the market in time which caused food shortage and hiked off the price [27]. Peoples earning are reducing day by day due to the disease outbreak on one side, on the other hand, the price of the foods are increasing playing a significant role making them fearful of deadly effect of the disease.

Moreover, we found that the participants who believed that older adults are at highest risk of COVID-19 were more fearful. The possible explanation could be that the participants who had a feeling that they are at highest risk of being infected by COVID-19 and infection with COVID could be very lethal may have greater level of fear. Moreover, participants with such feeling would have been very anxious of being infected with the diseases and remain fearful of it [28].

To the best of our knowledge, this is the first study carried out among Rohingya older adults providing an insight of fear amid this COVID-19 pandemic. However, our study has some limitations too. First, we prepared our sampling frame based on the available household-level information in our data repository; thus, selection bias is possible. Second, in the absence of prepandemic estimates, we cannot assert that the increased prevalence of fear noted in our study could be attributed to the COVID-19 pandemic.

Some limitations of the present study worth remarking despite its novelty and strength. Firstly, the tool used to measure the level of fear was not developed with refugees. Second, recall bias and social desirability could be potentially inevitable in this study as all items and measures used were self-reported. Moreover, the relationship between fear and socio-demographic and lifestyle factors can be complex however our analysis was based on a cross-sectional survey data, which may not

be able to establish causation links. Our data prohibit making any causal and directional conclusions since we could not eliminate the potential effect due to reverse causality. These and other limitations may affect the veracity of the findings that may limit the representation and generalizability of the findings.

Conclusion

Low fear of COVID-19 pandemic among the oldest refugees in the Rohingya camp suggests that they are less concerned about the devastating appearance of the current pandemic. This may be due to not apprehending the actual situation, illiteracy/lack of knowledge about this infectious disease, previous brutal experience, and so forth. Fearlessness, though good in a sense of not having mental pressure among the most vulnerable peoples, could exacerbate the situation in the camp all in a sudden as they won't take any precautionary steps to combat the virus infection. Dissemination of the actual information, withdrawn the restriction on accessing media/ internet, availability of the health care facilities including the test, facilities will improve knowledge among the older Rohingya in the refugee camp will prevent further deterioration of the condition due to this COVID-19. Further qualitative study should have to be conducted to depict the real picture or the reasons behind the fearless situation of the older Rohingya FDMNs.

Supplementary file

S1. Data file of the study

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Contributors

SKM, AMI and UNY conceived and contributed to the design of the study. SKM and AMI carried out the data collection and analysis. SKM, AMI, FA, PP, SR, and SP contributed in writing the first draft of the manuscript. UNY commented extensively and edited the draft of the manuscript to finalize it. All authors read and approved the final version of the manuscript.

Data sharing statement

All relevant data are within the manuscript and its Supporting Information files.

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Competing interest

The authors declare that they have no conflict of interest to disclose.

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Tables

 Table 1: Sociodemographic characteristics of the participants (N=416)

| Characteristics | n | % |
|-----------------|-----|-------|
| Total | 416 | 100.0 |
| Age (year, %) | | |
| 60 - 69 | 308 | 74.0 |
| 70-79 | 83 | 20.0 |
| >= 80 | 25 | 6.0 |
| Gender | | |
| Male | 251 | 60.3 |
| Female | 165 | 39.7 |
| | | |

| Marital status | | |
|---|-----|------|
| Married | 389 | 93.5 |
| Single | 27 | 6.5 |
| Family size | | |
| 0-4 | 167 | 40.1 |
| >4 | 249 | 59.9 |
| Literacy | | |
| Illiterate | 406 | 97.6 |
| Literate | 10 | 2.4 |
| Living arrangement | | |
| Living with other family members | 362 | 87.0 |
| Living alone | 54 | 13.0 |
| Dependent on family for living | | |
| No | 191 | 45.9 |
| Yes | 225 | 54.1 |
| *Source of COVID-19 related information | | |
| Radio/Television | 178 | 42.8 |
| Health worker | 298 | 71.6 |
| Friends/family/neighbour | 267 | 64.2 |

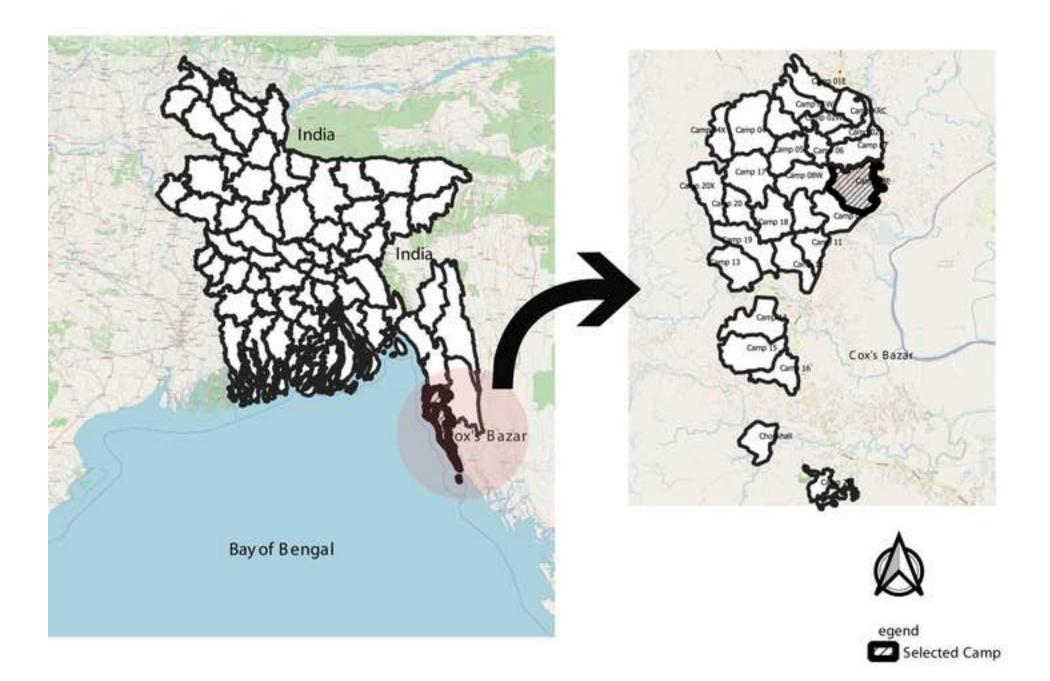
| Characteristics | COVID-19 fear score | | ore |
|--|---------------------|-----|--------|
| | Mean | SD | Р |
| Overall | 14.8 | 4.3 | |
| Age (year, %) | | | |
| 60 - 69 | 15.0 | 4.5 | 0.083 |
| 70-79 | 14.2 | 3.9 | |
| >= 80 | 14.8 | 3.3 | |
| Gender | | | |
| Male | 14.7 | 4.2 | 0.356 |
| Female | 15.1 | 4.4 | |
| Marital status | | | |
| Married | 15.0 | 0.2 | < 0.00 |
| Single | 11.6 | 0.4 | |
| Family size | | | |
| 0-4 | 14.6 | 4.0 | 0.298 |
| >4 | 15.0 | 4.5 | |
| Living arrangement | | | |
| Living with other family members | 15.2 | 4.3 | < 0.00 |
| Living alone | 12.6 | 3.6 | |
| Dependent on family for living | | | |
| No | 14.7 | 4.2 | 0.545 |
| Yes | 14.9 | 4.4 | |
| Memory or concentration problems | | | |
| No problem | 14.9 | 0.2 | 0.242 |
| Low memory or concentration | 14.2 | 0.6 | |
| Pre-existing non-communicable chronic conditions | | | |
| No | 15.6 | 4.2 | < 0.00 |
| Yes | 12.9 | 4.0 | |
| *Source of COVID-19 related information | | | |
| Radio/Television | 15.3 | 3.4 | 0.076 |
| Health worker | 14.5 | 4.8 | 0.029 |
| Friends/family/neighbour | 16.4 | 4.0 | < 0.00 |
| Concerned about COVID-19 | | | |
| Hardly | 14.4 | 3.2 | 0.006 |
| Sometimes/often | 15.6 | 5.6 | |
| Overwhelmed by COVID-19 | | | |
| Hardly | 12.0 | 3.3 | < 0.00 |
| Sometimes/often | 16.0 | 4.3 | |
| Feeling of loneliness | | | |

Table 2: Fear score and bivariate analysis (N=416)

| Hardly | 14.7 | 4.5 0.268 |
|---|------|-------------|
| Sometimes/often | 15.3 | 3.6 |
| Frequency of communication during COVID-19 | | |
| Same as previous | 15.1 | 5.6 0.206 |
| Less than previous | 14.6 | 3.1 |
| Difficulty obtaining food during COVID-19 | | |
| No difficulty | 13.7 | 4.1 <0.001 |
| Faced difficulty | 17.0 | 4.1 |
| Difficulty getting medicine during COVID-19 | | |
| No difficulty | 14.6 | 4.5 0.165 |
| Faced difficulty | 15.3 | 4.1 |
| Difficulty receiving routine medical care during COVID-19 | | |
| No difficulty | 14.2 | 4.6 < 0.001 |
| Faced difficulty | 16.1 | 3.7 |
| Perceived that older adults at highest risk of COVID-19 | | |
| No | 13.4 | 4.4 < 0.001 |
| Yes | 15.6 | 4.0 |

| Characteristics | β | Р | 95% CI |
|--|-------|---------|--------------|
| Radio/Television as source of COVID-19 related information | | | |
| No | Ref | | |
| Yes | 1.07 | 0.017 | 0.19, 1.95 |
| Friends/family/neighbour as source of COVID-19 related | | | |
| information | | | |
| No | Ref | | |
| Yes | 2.62 | < 0.001 | 1.44, 3.79 |
| Concerned about COVID-19 | | | |
| Hardly | Ref | | |
| Sometimes/often | 0.63 | 0.166 | -0.26, 1.53 |
| Overwhelmed by COVID-19 | | | |
| Hardly | Ref | | |
| Sometimes/often | 3.54 | < 0.001 | 2.54, 4.55 |
| Frequency of communication during COVID-19 | | | |
| Same as previous | Ref | | |
| Less than previous | -4.41 | < 0.001 | -5.69, -3.13 |
| Difficulty obtaining food during COVID-19 | | | |
| No difficulty | Ref | | |
| Faced difficulty | 2.16 | < 0.001 | 1.08, 3.23 |
| Perceived that older adults at highest risk of COVID-19 | | | |
| No | Ref | | |
| Yes | 1.26 | 0.064 | -0.07, 2.59 |

Table 3: Factors associated with fear among the participants (N=416)



Data file

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