



Data Article

A nationwide dataset on the mental health of the Bangladeshi population due to the COVID-19 pandemic



Md. Rabiul Islam^{a,*}, Sohel Daria^a, Rajesh Das^a, Md. Rakib Hasan^b

^a Department of Pharmacy, University of Asia Pacific, 74/A Green Road, Farmgate, Dhaka 1205, Bangladesh

^b Department of Pharmacy, Jahangirnagar University, Savar, Dhaka 1335, Bangladesh

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ABSTRACT

The data presented here concerns the article entitled “Impact of COVID-19 pandemic on mental health among general Bangladeshi population: a cross-sectional study” [1]. This article represents a unique dataset on the mental health status among the Bangladeshi population during the early stage of the COVID-19 pandemic. We collected the data from April 15 to May 10, 2020, when the government of Bangladesh imposed lockdown and quarantine approaches. Total 672 (381 men, 291 women) responses were collected using Google survey tools (Google Forms) from the Bangladeshi population aged between 15–65 years. We obtained electronic consent from all participants to participate in this study and publish their anonymous data. We assessed people’s sociodemographic profiles and different psychometric measures in this study. We used UCLA-8, PHQ-9, GAD-7, and PSQI scales to assess loneliness, depression, anxiety, and sleep disturbance, respectively. This article provides a descriptive analysis of variables along with socioeconomic factors. The presented dataset gives a platform for future research for psychometric assessments of subjects using the above scales. We collected the survey data from the whole country regardless of socioeconomic factors. Therefore, policymakers of government and non-government organizations can use the data to

* Corresponding author at: Department of Pharmacy, University of Asia Pacific, 74/A Green Road, Farmgate, Dhaka 1205, Bangladesh.

E-mail addresses: robi.ayaan@gmail.com, mrislam@uap-bd.edu (Md.R. Islam), soheldaria.pharm@gmail.com (S. Daria), rajeshdas4764@gmail.com (R. Das), rakibju38@gmail.com (Md.R. Hasan).

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develop different programs to promote the mental health of the Bangladeshi population.

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Specifications Table

Subject	Public health
Specific subject area	Mental health
Type of data	Psychology Primary data Tables Figure
How data were acquired	Data was collected using an online survey platform (Google Forms).
Data format	Raw Analysed
Parameters for data collection	We collected responses from participants aged between 15–65 years who were of Bangladeshi ethnicity and living in Bangladesh. Inclusion criteria were social media users who were willing to participate in this study irrespective of background or socio-demographic variables.
Description of data collection	We conducted this concurrent cross-sectional study from April 15, 2020, to May 10, 2020, using Google survey tools (Google Forms). At first, we designed the structured questionnaire to collect general information about the participants. Moreover, we applied different scales (UCLA-8, PHQ-9, GAD-7, and PSQI) for psychometric measurements. We used the purposive sampling technique to collect primary data from the respondents. For doing this, we sent a self-reported questionnaire to the participants through e-mail and social networking sites. We provided the questionnaire as a supplementary file (supplementary file 1).
Data source location	Researchers from the University of Asia Pacific, Dhaka, have collected data from across Bangladesh.
Data accessibility	We supplied the dataset as a supplementary file (supplementary file 2).
Related research article	Das R, Hasan MR, Daria S, Islam MR. Impact of COVID-19 pandemic on mental health among general Bangladeshi population: a cross-sectional study. <i>BMJ Open</i> . 2021;11(4):e045727. https://doi.org/10.1136/bmjopen-2020-045727 .

Value of Data

- The data is essential as it addresses the four major mental health issues such as loneliness, depression, anxiety, and sleep disturbance among the general Bangladeshi population during the COVID-19 pandemic.
- The dataset is useful for researchers in measuring the prevalence of loneliness, depression, anxiety, and sleep disturbance during any public health crisis.
- Provides further insights for researchers to conduct comparative studies on the gravity of mental health issues during and after public health emergencies.
- Provides insights for researchers on mental health status to research the general population in other countries in a public health crisis.
- The dataset ensured rapid data collection during pandemic situations and suitability for context-specific mental health programs.
- The dataset is helpful for policymakers to take suitable measures to grow confidence among the general population in public health emergencies.

1. Data Description

World Health Organization declared coronavirus disease 2019 (COVID-19) as a pandemic on March 11, 2020. The situation is deteriorating by increasing the daily infection and mortality rates [2]. The government of Bangladesh imposed a country-wide lockdown on March 26, 2020, to curb the spreading of the virus. The general population of Bangladesh has witnessed a dramatic shift in their personal life, professional life, and daily activities that severely impacted their mental health status [3,4]. The survey questionnaire was designed in separate sections to assess the mental health status among the general Bangladeshi population by four internationally validated scales: the UCLA Loneliness Scale-8 (UCLA-8), Patient Health Questionnaire-9 (PHQ-9), 7-item Generalized Anxiety Disorder (GAD-7) Scale, and Pittsburgh Sleep Quality Index

Table 1

Distribution of responses based on the UCLA Loneliness Scale-8 (UCLA-8).

Indicate how often each of the statements below is descriptive of you.	Frequency (n)	Percentage (%)
1. In the past 30 days, I lack companionship.		
Never (1)	177	26.34
Rarely (2)	118	17.56
Sometimes (3)	263	39.14
Often (4)	114	16.96
2. In the past 30 days, there is no one I can turn to.		
Never (1)	251	37.35
Rarely (2)	120	17.86
Sometimes (3)	252	37.50
Often (4)	49	7.29
3. In the past 30 days, I feel left out.		
Never (1)	192	28.57
Rarely (2)	139	20.68
Sometimes (3)	255	37.95
Often (4)	86	12.80
4. In the last 30 days, I feel isolated from others.		
Never (1)	211	31.40
Rarely (2)	105	15.63
Sometimes (3)	204	30.36
Often (4)	152	22.61
5. In the last 30 days, I am unhappy being so withdrawn.		
Never (1)	170	25.30
Rarely (2)	141	20.98
Sometimes (3)	247	36.76
Often (4)	114	16.96
6. In the last 30 days, people are around me but not with me.		
Never (1)	211	31.35
Rarely (2)	128	19.10
Sometimes (3)	187	27.76
Often (4)	146	21.79
7. In the last 30 days, I am an outgoing person.		
Never (1)	291	43.30
Rarely (2)	150	22.32
Sometimes (3)	160	23.81
Often (4)	71	10.57
8. In the last 30 days, I can find companionship when I want it.		
Never (1)	147	21.88
Rarely (2)	189	28.12
Sometimes (3)	176	26.19
Often (4)	160	23.81

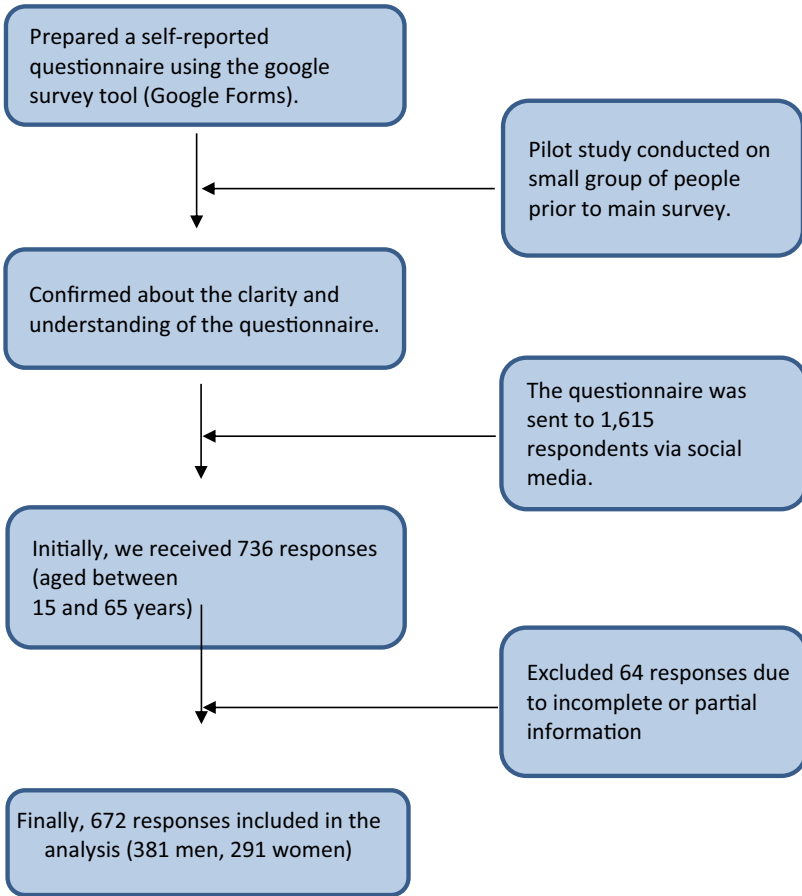


Fig. 1. Flowchart of collecting responses from the participants.

(PSQI) [5-8]. The dataset provides insightful information based on the survey data on the mental health status of the general Bangladeshi population during the pandemic. The data collection was conducted between April 15, 2020, and May 10, 2020, using the Google survey tool (Google Forms) at the early stage of the COVID-19 outbreak in Bangladesh. After screening, we got a total of 672 valid responses (381 men, 291 women) between 15 and 65 years for the analysis. We used two sets of questionnaires in this survey. The first one was a structured questionnaire designed by the researchers to collect sociodemographic information and the second set was a self-reported structured questionnaire of different psychometric assessment scales.

The dataset provides (i) assessment of loneliness (UCLA-8) in Table 1, (ii) assessment of depression (PHQ-9) in Table 2, (iii) assessment of anxiety (GAD-7) in Table 3, (iv) assessment of sleep disturbances (PSQI) in Table 4, (v) distribution of different psychometric parameters among the respondents in Table 5, (vi) the severity of different psychometric parameters among the respondents in Table 6. It also presents a flowchart of the collection and exclusion procedure of survey data from the respondents illustrated in Fig. 1.

Table 2

Distribution of responses based on the Patient Health Questionnaire-9 (PHQ-9).

Indicate how often each of the statements below is descriptive of you.	Frequency (n)	Percentage (%)
1. In the last two weeks, little interest or pleasure in doing things.		
Not at all (0)	162	24.11
Several days (1)	308	45.83
Half of days (2)	101	15.03
Nearly every day (3)	101	15.03
2. In the last two weeks, feeling down, depressed or hopeless.		
Not at all (0)	218	32.44
Several days (1)	288	42.86
Half of days (2)	58	8.63
Nearly every day (3)	108	16.07
3. In the last two weeks, trouble falling or staying asleep, sleeping too much.		
Not at all (0)	215	31.99
Several days (1)	233	34.67
Half of days (2)	54	8.04
Nearly every day (3)	170	25.30
4. In the last two weeks, feeling tired or having little energy.		
Not at all (0)	227	33.78
Several days (1)	264	39.29
Half of days (2)	84	12.50
Nearly every day (3)	97	14.43
5. In the last two weeks, poor appetite or overeating.		
Not at all (0)	325	48.36
Several days (1)	207	30.75
Half of days (2)	62	9.25
Nearly every day (3)	78	11.64
6. In the last two weeks, feeling bad about yourself-or that you are a failure or have let yourself or your family down.		
Not at all (0)	302	44.94
Several days (1)	218	32.44
Half of days (2)	50	7.44
Nearly every day (3)	102	15.18
7. In the last two weeks, trouble concentrating on things, such as reading the newspaper or watching television.		
Not at all (0)	261	38.84
Several days (1)	230	34.23
Half of days (2)	42	6.25
Nearly every day (3)	139	20.68
8. In the last two weeks, moving or speaking so slowly or the opposite-moving around a lot more than usual.		
Not at all (0)	356	52.98
Several days (1)	204	30.36
Half of days (2)	56	8.33
Nearly every day (3)	56	8.33
9. In the last two weeks, thoughts that you would be better off dead, or of hurting yourself in some way.		
Not at all (0)	490	72.92
Several days (1)	95	14.14
Half of days (2)	28	4.16
Nearly every day (3)	59	8.78

2. Experimental Design, Materials and Methods

The research conducted a nationwide cross-sectional online survey to assess the impact of the COVID-19 pandemic on mental health among the Bangladeshi population. The online survey was conducted from April 15 to May 10, 2020, using Google survey tools (Google Forms) to construct the dataset at the early stage of the government-imposed lockdown and movement restriction. Here, we applied the purposive sampling technique to collect primary data from the

Table 3

Distribution of responses based on the 7-item Generalized Anxiety Disorder (GAD-7) Scale.

Indicate how often each of the statements below is descriptive of you.	Frequency (n)	Percentage (%)
1. In the last two weeks, I am feeling nervous, anxious, or on edge.		
Not at all (0)	266	39.58
Several days (1)	236	35.12
More than half of the days (2)	54	8.04
Nearly every day (3)	116	17.26
2. In the last two weeks, I am not being able to stop or control worrying.		
Not at all (0)	244	36.31
Several days (1)	237	35.27
More than half of the days (2)	60	8.93
Nearly every day (3)	131	19.49
3. In the last two weeks, I am worrying too much about different things.		
Not at all (0)	187	27.83
Several days (1)	269	40.03
More than half of the days (2)	54	8.04
Nearly every day (3)	162	24.11
4. In the last two weeks, I felt trouble in relaxing.		
Not at all (0)	273	40.63
Several days (1)	235	34.97
More than half of the days (2)	54	8.04
Nearly every day (3)	110	16.36
5. In the last two weeks, I am being so restless that it's hard to sit still.		
Not at all (0)	342	50.89
Several days (1)	186	27.68
More than half of the days (2)	60	8.93
Nearly every day (3)	84	12.50
6. In the last two weeks, I becoming easily annoyed or irritable.		
Not at all (0)	234	34.83
Several days (1)	260	38.69
More than half of the days (2)	47	6.99
Nearly every day (3)	131	19.49
7. In the last two weeks, I am feeling afraid as if something awful might happen.		
Not at all (0)	206	30.65
Several days (1)	258	38.39
More than half of the days (2)	63	9.38
Nearly every day (3)	145	21.58

participants. Initially, we obtained a total of 736 responses. We discarded 64 responses from the analysis due to the partial or incomplete information. After reviewing a brief description of the survey, eligibility requirements, procedures, and electronic consent form, the participant participates in the survey. We used two sets of questionnaires for this self-answered survey. The first section was a structured questionnaire designed by the researchers to obtain the informed electronic consent and sociodemographic information. The second section of the survey was a self-reported structured questionnaire from different psychometric assessment scales.

The second section had four sub-sections for four different psychometric scales. At first, eight questions about how often the respondents feel the below statements in the past 30 days? to figure out their loneliness levels. Each question is scored from 1 to 4, depending on their answer: 1 (never), 2 (rarely), 3 (sometimes), and 4 (often). Then nine questions about how frequently the respondents bothered by any of the below problems since last 30 days? to assess depression. In this case, each question is scored from 0 to 3 depending on the answer: 0 (not at all), 1 (several days), 2 (half of the days), and 3 (nearly every day). The third part contained seven questions about how often the respondents were bothered by the following problems in the last 30 days? to determine the anxiety level among the respondents with the options - 0 (not at

Table 4

Distribution of responses based on the Pittsburgh Sleep Quality Index (PSQI).

Indicate how often each of the statements below is descriptive of you.	Frequency (n)	Percentage (%)
1. During the past month, when have you usually gone to bed at night?		
Before 10.00 PM	9	1.34
10.01 PM to 12.00 AM	310	46.13
12.01 AM to 2.00 AM	166	24.70
After 2.00 AM	187	27.83
2. During the past month, how long (in minutes) has it usually take you to fall asleep each night?		
Less than 15 minutes	211	31.40
16-30 minutes	200	29.76
31-60 minutes	165	24.55
More than 60 minutes	96	14.29
3. During the past month, when have you usually gotten up in the morning?		
Before 5.00 AM	16	2.38
5.00 AM to 7.00 AM	169	25.15
7.01 AM to 9.00 AM	169	25.15
After 9.00 AM	318	47.32
4. During the past month, how many hours of actual sleep did you get at night?		
Less than 4 hours	27	4.02
4 to 6 hours	294	43.75
7 to 8 hours	290	43.15
More than 8 hours	61	9.08
5. During the past month, how many hours do you spend in bed?		
Less than 5 hours	13	1.94
5 to 7 hours	246	36.61
8 to 10 hours	383	56.99
More than 10 hours	30	4.46
6. During the past month, how many times, you cannot get to sleep within 30 minutes?		
Not during last month (0)	246	36.61
Less than once a week (1)	118	17.56
Once or twice a week (2)	147	21.87
Three or more in week (3)	161	23.96
7. During the past month, how many times, you wake up in the middle of the night or early morning?		
Not during last month (0)	243	36.16
Less than once a week (1)	170	25.30
Once or twice a week (2)	133	19.79
Three or more in week (3)	126	18.75
8. During the past month, how many times, you have to get up to use the bathroom?		
Not during last month (0)	205	30.50
Less than once a week (1)	150	22.32
Once or twice a week (2)	171	25.45
Three or more in week (3)	146	21.73
9. During the past month, how many times, you cannot breathe comfortably?		
Not during last month (0)	442	65.77
Less than once a week (1)	111	16.52
Once or twice a week (2)	73	10.86
Three or more in week (3)	46	6.85
10. During the past month, how many times, you cough or snore loudly?		
Not during last month (0)	379	56.40
Less than once a week (1)	170	25.30
Once or twice a week (2)	83	12.35
Three or more in week (3)	40	5.95
11. During the past month, how many times, you feel too cold?		
Not during last month (0)	379	56.41
Less than once a week (1)	148	22.02

(continued on next page)

Table 4 (continued)

Indicate how often each of the statements below is descriptive of you.	Frequency (n)	Percentage (%)
Once or twice a week (2)	89	13.24
Three or more in week (3)	56	8.33
12. During the past month, how many times, you feel too hot?		
Not during last month (0)	321	47.77
Less than once a week (1)	184	27.38
Once or twice a week (2)	101	15.03
Three or more in week (3)	66	9.82
13. During the past month, how many times, you had bad dreams?		
Not during last month (0)	245	36.46
Less than once a week (1)	243	36.16
Once or twice a week (2)	116	17.26
Three or more in week (3)	68	10.12
14. During the past month, how many times, you have pain during sleep?		
Not during last month (0)	440	65.48
Less than once a week (1)	115	17.10
Once or twice a week (2)	54	8.04
Three or more in week (3)	63	9.38
15. During the past month, how many times, you have trouble in sleeping because of any other reasons?		
Not during last month (0)	277	41.22
Less than once a week (1)	161	23.96
Once or twice a week (2)	144	21.43
Three or more in week (3)	90	13.39
16. During the past month, how often have you taken medicine to help you sleep?		
Not during last month (0)	573	85.27
Less than once a week (1)	36	5.36
Once or twice a week (2)	41	6.10
Three or more in week (3)	22	3.27
17. During the past month, how many times you did not sleep due to any program or other important case?		
Not during last month (0)	422	62.80
Less than once a week (1)	130	19.35
Once or twice a week (2)	78	11.60
Three or more in week (3)	42	6.25
18. During the past month, how much of a problem has it been for you to keep up enough enthusiasm to get things done?		
Not during last month (0)	398	59.23
Less than once a week (1)	135	20.09
Once or twice a week (2)	77	11.45
Three or more in week (3)	62	9.23
19. During the past month, how would you rate your sleep quality overall?		
Very good (0)	160	23.81
Fairly good (1)	349	51.93
Fairly bad (2)	93	13.84
Very bad (3)	70	10.42

all), 1 (several days), 2 (more than half of the days), and 3 (nearly every day). The last part also contained nineteen structured questions to assess the overall sleep quality. Then, the nineteen questions were grouped into seven different domains to measure sleep quality. We calculated the frequency and percentage of the collected data and presented them in the tables.

Table 5

Different psychometric parameters among the respondents.

Psychometric parameters (total responses, N=672)	Frequency (n)	Percentage (%)
Loneliness		
Yes	478	71.13
No	194	28.87
Depression		
Yes	256	38.10
No	416	61.90
Generalized anxiety		
Yes	429	63.84
No	243	36.16
Sleep disturbance		
Yes	494	73.51
No	178	26.49

Table 6

Severity of different psychometric parameters among the respondents.

Psychometric parameters (total responses, N=672)	Frequency (n)	Percentage (%)
Loneliness	478	71.13
Mild	212	44.35
Moderate	196	41.00
Severe	70	14.65
Depression	256	38.10
Mild	162	63.28
Moderate	76	29.69
Severe	18	7.03
Generalized anxiety	429	63.84
Mild	203	47.32
Moderate	113	26.34
Severe	113	26.34
Sleep disturbance	494	73.51
Mild	334	67.61
Moderate	124	25.10
Severe	36	7.29

Ethics Statement

Ethical approval has not been sought for this work. The present survey did not investigate and analyze human samples for pathophysiology, genetics, and other medical purposes. Moreover, we secured the informed electronic consent from each respondent before participating in this survey. Also, we obtained informed consent from the legal guardians of the underage participants. The respondent's participation was voluntary and anonymous. Finally, we can confirm that this manuscript adheres to ethics in publishing standards.

CRedit Author Statement

Sohel Daria, Rajesh Das and Md. Rakib Hasan: Contributed to data collection, analyzed the data, wrote the initial draft of the data manuscript; **Md. Rabiul Islam:** Conceived and designed the experiments, interpreted the data, revise the data manuscript, gave intellectual inputs on this work, supervised the whole process.

Supplementary Materials

We supplied the survey questionnaire and the answers to the questions in English as a supplementary file.

Declaration of Competing Interest

None.

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Supplementary Materials

Supplementary material associated with this article can be found in the online version at doi:[10.1016/j.dib.2021.107347](https://doi.org/10.1016/j.dib.2021.107347).

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