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Exploring physical and phycological condition of Jahangirnagar University students residing near university area during COVID-19 pandemic

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ABSTRACT

Background: Due of the closure of all educational institute as well as lockdown, the pandemic has affected physical and psychological health of all level students specifically university level students. Although the online based education was started but that brought different challenge to them. Thus, the study aimed to explore the physical and psychological problems faced by Jahangirnagar University students who resides near university area.

Methods: Data was collected through an online questionnaire (Google form) from Jahangirnagar University students who reside near the university area using convenient sampling method. To analyse the data, descriptive statistics, Chisquare test and ordinal logistic regression was executed along with graphical representations.

Results: The study showed about 92.5% (moderately: 41.2%, extremely severe: 18%, severe: 24.7%, mild: 8.6%) students were depressed while 94.8% extremely severe: 49.8%, mild: 2.2%, moderate: 15.4% and severe: 27.3%) students were suffering from anxiety problems during pandemic. Chi-square and ordinal logistic suggested "infected by COVID-19", "sleeping time", and "time usually spent on physical activity" were the risk factors for depression and anxiety. The study revealed 73.8 percent of respondents have long-term health-related complications where half (52.8%) of the respondents think that the COVID-19 pandemic has had an effect on their physical health.

Conclusions: This study shows that throughout the COVID-19 period, a substantial percentage of Jahangirnagar University students experienced physical and psychological health issues. Proper initiatives should be taken by government and policymakers to boost up the mental and physical health condition of students.

Keywords: Bangladesh, Chi-square, COVID-19, DASS-21, Ordinal logistic, University students

INTRODUCTION

The first outbreak of COVID-19 caused by the novel SarsCov2 coronavirus was reported in December 2019 in Wuhan, China and thereafter the whole world was experiencing a life-threatening situation due to this pandemic. The disease spread rapidly in 2020, and the virus subsequently took the form of the global COVID-19 pandemic which was declared as pandemic by the World Health Organization (WHO) in March 2020. Like other countries, Bangladesh was also affected by the viral

disease COVID-19. A total number of 2,025,197 people have been infected and 29,363 people have died from this deadly virus in Bangladesh so far.⁴

The government of Bangladesh had taken various steps to deal with COVID-19, such as segregation of suspects and segregation of infected patients, local or regional lockdown, closure of all government and private offices, raising public awareness, cancellation of all international and domestic flights, enforcing social distance and academic institutions, etc.⁵ The COVID-19 disease has

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severely disrupted education at all levels.⁶ It also affected transportation, tourism, business, trade, and other sectors, but the education and health sectors have suffered the most

According to UNESCO, the widespread closure of schools, colleges, universities, and other academic institutions due to COVID-19 affects more than 60% of the global student population (2020b). Recently, online or digital learning has been viewed as an alternative to traditional learning.⁷ As a result, educational institutions must adhere to government regulations and standards, and participants must be motivated to adopt the remote learning system.⁸

Due of the closure of all educational institute as well as lockdown, the pandemic has affected physical and psychological health of all level students specifically university level students very badly. 6,9 Although the online based education has started but that was a different challenge for them again. To get continuous internet service for joining online classes, students preferred to reside in rented house near university area. Also, a large percent of university students does tuition to bear their monthly expense, therefore, they needed to remain near university area. COVID-19 situation was a huge pressure itself which became doubled as students needed to reside far away from their family near university area. All these factors made students to go through by feelings of anxiety, insomnia, anger, loneliness, dread, helplessness, blame, remorse, shame, and stigma. Therefore, the aim of this study was to explore the physical and psychological health issues of students of Jahangirnagar University who resides near Jahangirnagar University area.

METHODS

Participants

To explore the physical and psychological health condition of Jahangirnagar University students who resides nearly university area, a cross-sectional study was performed from October 18, 2021, to January 18, 2022. Using Cochran's formula, the sample size was calculated by taking consideration of 5% level of significance and 6% margin of error.

$$n = \frac{Z^2 p(1-p)}{d^2}$$

The study considered the proportion of sample as 0.5 since it provides the maximum sample size. The estimated sample size was 267 therefore the questionnaire was collected from 267 students and was considered for final analysis.

Study design

This cross-sectional study was conducted among Jahangirnagar University students who resided in rented

house near university area just after COVID-19 from March 2022 to June 2022, through an online questionnaire (Google form). The respondents in the target population were sampled following a convenient sampling strategy. The questionnaires were unidentified to guarantee the secrecy and consistency of the data. Formal consent was obtained from each respondent before completing the questionnaire and the objective of the research was informed. The online form was shared with students through social media (Facebook, WhatsApp, and Instagram). Being a student at Jahangirnagar University and residing near university area was the only eligible criterion.

Sections of questionnaire

The questionnaire consists of four parts: sociodemographic information, physical health-related information, psychological health-related information, and psychological health-related some other relevant questions.

Socio-demographic information

Demographic information portion consists of some questions including age, marital status, living status, monthly income, type of job, area of working, place of working, get salary regularly, have children or not, have an elder person at home.

COVID-19 related information while working from home

This section contained working women's information related to COVID-19 while working from home: level of knowledge about COVID-19, if any member of family or relative were affected, for household work if they are dependent on a servant or not, they needed extra time to finish their household work or not, they got any kind of domestic help or not and if she takes any nutritious food to improve her immunity system. It also provided information about the opinion of working women such as they have worked more than normal hours, work from home is more challenging than working outside, able to catch deadlines via working from home; categorized as scales 0-2 (0= always, 1= sometimes, 2= never).

COVID-19 related information while working at office

Query about working women while working outside during COVID-19: if their colleagues were affected or not, fear of being affected with COVID-19, actual cause of being affected, was in this section. This portion also provided information about preventive measures such as if she washes her hands, use mask or hand gloves, maintain social distance, participate in household chores or not, involved herself in religious activities or not, and did physical exercise; classified as 0-2 scales (0= always, 1= sometimes, 2= never). We also included some questions like if bad dreams woke her up from sleep,

misbehaved with members of family, beat her child; classified as 0-2 scales (0= always, 1= sometimes, 2= never).

Assessment of psychological health

From DASS-21 (depression, anxiety and stress scale) scale, only depression and anxiety scale were used to assess the mental health condition. Where 7+7 questionswas in depression and anxiety scale. DASS-21 is a 4-point scale (0= never, 1= sometimes, 2= often, and 3= almost always), where total scores represented as 0-9= normal, 10-13= mild, 14-20= moderate, 21-27= severe, and 28+ = extremely severe. ¹⁰

Statistical analysis

Frequency table and graphs have been used to express percentages of different variables. For identification of significant variables, ordinal logistic regression was used. The data was tabulated in Excel before being analysis with statistical software [Statistical Package for the Social Sciences (SPSS) version 26.0].

RESULTS

There was a slight predominance of male participants (n=150, 56.2%) compared to female participants (n=117, 43.8%). A total of 267 respondents shared their living places during COVID-19 through a questionnaire, where 34.8% of people lived in Ambagan, which is more than any other living area. From the table also, we can observe lots of students' responses to this analysis of those who lived in other living places during COVID-19, which was 16.5%. A total of 22.8% of respondents are married, and 77.2% of respondents are unmarried. In this table, a total of 22.5% of respondents of the faculty of mathematical and physical sciences responded to this analysis, which was the most response of the rest of the faculty. On the other hand, the Institute of Remote Sensing and GIS respondents had given a 1.1% response, which was less than any other institute (Table 1).

Table 1: Demographic and COVID-19 related information of university level students.

Variables	Categories	Frequency	Percentage
Sex	Female	117	43.8
Sex	Male	150	56.2
	Ambagan	93	34.8
Living place	Gerua	59	22.1
Living place	Islamnagar	71	22.6
	Others	44	16.5
Marital status	Married	61	22.8
Marital Status	Unmarried	206	77.2
	Bangabandhu Institute of Comparative Literature and Culture	21	7.9
	Faculty of arts and humanities	24	9
	Faculty of biological sciences	37	13.9
	Faculty of business studies	25	9.4
Educational	Faculty of law	28	10.5
faculty	Faculty of mathematical and physical sciences	60	22.5
	Faculty of social sciences	30	11.2
	Institute of business administration	14	5.2
	Institute of information technology	25	9.4
	Institute of remote sensing and GIS	3	1.1
	Hons. 1 st year	14	5.2
	Hons. 2 nd year	29	10.9
Academic year	Hons. 3 rd year	54	20.2
	Hons. 4 th year	98	36.7
	Masters	72	27
	<10,000	20	7.5
	10,000-20,000	18	6.7
Family income	20,000-30,000	29	10.9
-	30,000-40,000	39	14.6
	More than 40,000	161	60.3
Staying in	Family home	91	34.1
during	Relative's home	49	18.4
COVID-19	Rented apartment outside campus	60	22.5

Continued.

Variables	Categories	Frequency	Percentage
	Rented house outside campus	55	20.6
	University residency/hall	12	4.5
	Family home	29	10.9
Currently	Relative's home	16	6
staying after	Rented apartment outside campus	17	6.4
COVID-19	Rented house outside campus	19	7.1
	University residency/hostel	186	69.7

Table 2: Physical health-related information comparison.

	Category	Frequency	Percentage
Do you have any long-term health-related	Yes	197	73.8
complications?	No	70	26.2
	Asthma	39	19.8
	Diabetes	16	8.2
	High blood pressure	25	12.7
If was then sub at is it?	Low blood pressure	14	7.1
If yes, then what is it?	Respiratory disease	34	17.3
	Skin disease	31	15.7
	Heart disease	10	5.1
	Others	28	14.1
H 1 1 1 1 1 1 100	Yes	170	63.7
Have you been infected with COVID-19?	No	97	36.3
II	High active	50	18.7
How was your physical activity level during the COVID-19 pandemic period?	Low active	96	36.0
during the CO v1D-19 pandenne period?	High active Low active Moderate active Yes No Yes No 6 hours Less than 6 hours More than 6 hours Yes No Yes No	121	45.3
D	Yes	105	39.3
Do you smoke?	No	162	60.7
D Jl 12 Jfl1.19	Yes	76	28.5
Do you drink any kind of alcohol?	No	191	71.5
	6 hours	101	37.8
How long do you sleep daily?	Less than 6 hours	48	18.0
	More than 6 hours	118	44.2
Does the COVID-19 pandemic have any	Yes	141	52.8
effect on your physical health?	No	126	47.2
The COVID-19 emergency, did you	Yes	107	40.1
regularly exercise?	No	160	59.9
Does your home have outdoor spaces for	Yes	117	43.8
physical activity?	No	150	56.2
During The COVID-19 emergency, how	<30	159	59.6
much time did you usually spend on	30-40	46	17.2
moderate physical activity on one day of the	40-50	34	12.7
week? (Indicate the number of minutes)	More than 50	28	10.5
	I am a student	185	69.3
Indicate what kind of work you do during	I work at my workplace	27	10.1
this period	Working from home	36	13.5
	Others	19	7.1
	In a good mood	48	18.0
During The COVID-19 emergency, how	In an excellent mood	35	13.1
have you generally felt?	In a good mood most of the time	61	22.8
	With many ups and downs of mood	74	27.7
	Low in spirits most of the time	49	18.4
During The COVID-19 have you felt	Yes	206	77.2
active, strong, or slow, sluggish?	No	61	22.8

Table 3: Comparison of basic information and information related to COVID-19 with different clusters.

Factors	Categories	Mild N (%)	Moderate N (%)	Normal N (%)	Severe N (%)	Extremely severe N (%)	Total N (%)	P value	
Any long-term	Yes	14 (7.3)	82 (42.9)	7 (3.7)	54 (28.3)	34 (17.8)	191 (71.5)		
health-related complications	No	9 (11.9)	28 (36.9)	13 (17.1)	12 (15.9)	14 (18.2)	76 (28.5)	0.003	
Infected by	Yes	10 (5.9)	76 (44.7)	7 (4.1)	42 (24.7)	35 (20.6)	170 (63.7)	0.006	
COVID-19	No	13 (13.4)	34 (35.1)	13 (13.4)	24 (24.7)	13 (13.4)	97 (36.3)	0.000	
Smoking	Yes	12 (11.4)	46 (43.8)	12 (11.4)	22 (21.0)	13 (12.4)	105 (39.3)	0.050	
habit	No	11 (6.8)	64 (39.5)	8 (4.9)	44 (27.2)	35 (31.6)	162 (60.7)	0.030	
	6 hours	7 (6.9)	47 (46.5)	7 (6.9)	24 (23.8)	16 (15.8)	101 (37.8)		
Sleeping time	<6 hours	4 (8.3)	29 (60.4)	3 (6.3)	7 (14.6)	5 (10.5)	48 (18.0)	0.031	
	>6 hours	12 (10.2)	34 (28.8)	10 (8.5)	35 (29.7)	27 (22.9)	118 (44.2)		
Time usually	<30	10 (6.3)	66 (41.5)	9 (5.7)	35 (22.0)	39 (24.4)	159 (59.6)		
spends on	30-40	7 (15.2)	21 (45.7)	4 (8.7)	11 (23.9)	3 (6.5)	46 (17.2)	0.016	
physical	40-50	5 (14.7)	13 (38.2)	4 (11.8)	7 (20.6)	5 (14.7)	34 (12.7)	0.010	
activity	>50	1 (3.5)	10 (35.7)	3 (10.7)	13 (46.4)	1 (3.6)	28 (10.5)		
	I am a student	16 (8.6)	82 (44.7)	6 (3.2)	48 (25.9)	33 (17.8)	185 (69.3)		
Working	I work at my workplace	5 (18.5)	10 (37.0)	3 (11.1)	1 (3.7)	8 (29.6)	27 (10.1)	0.001	
place	Working from home	0 (0.0)	13 (36.1)	7 (19.4)	10 (27.8)	6 (17.6)	36 (13.5)		
	Others	2 (8.7)	5 (26.3)	4 (21.1)	7 (36.8)	1 (5.3)	19 (7.1)		

Table 4: Ordinal logistic regression analysis of factors influencing university student's psychological health problems(depression).

Variables	Categories	Frequency	SE	OR	P value	OR (95%CI)
Any long-term health-	Yes	191				
related complications	No	76	0.308	0.289	0.349	(-0.316, 0.894)
Infected by COVID-19	Yes	170	-	-	-	-
Infected by COVID-19	No	97	0.281	0.254	0.367	(-0.297, 0.804)
Smoking habit	Yes	105	-	-	-	-
Smoking nabit	No	162	0.265	0.204	0.442	(-0.723, 0.316)
	6 hours	101	0.274	0.477	0.082	(-0.060, 1.014)
Sleeping time	<6 hours	48	0.361	1.052	0.004	(0.344, 1.760)
	>6 hours	118	-	-	-	-
	<30	159	0.425	0.589	0.166	(-0.244, 1.421)
Time usually spends on	30-40	46	0.479	0.890	0.063	(-0.049, 1.829)
physical activity	40-50	34	0.513	0.729	0.155	(-0.276, 1.733)
	>50	28	-	-	-	-
	I am a student	185	0.360	-0.131	0.716	(-0.838, 0.575)
Working place	I work at my workplace	27	0.500	0.153	0.760	(-0.827, 1.133)
Working place	Working from home	36	0.566	-0.058	0.919	(-1.168, 1.052)
	Others	19	-	-	-	-

During the COVID-19 period, family income of 7.5% of respondents was less than 1000 taka, 6.7% of respondents were between 10000 and 20000-taka, 10.9% of respondents were between 20000 and 30000 takas, 14.6% of respondents were between 30000 and 40000 takas, and 60.3% of respondents were more than 40000 takas. That is, the family income of most of the respondents was more than 40000 taka (60.3%), which was very high compared to the rest of the respondents' family income

(Table 1). From Table 2, we can observe, 73.8 percent of respondents have long-term health-related complications. Among them, 19.8 percent of respondents have asthma and 17.3 percent have respiratory diseases. Again, during COVID-19 situations, 63.7 percent of respondents have been infected with COVID-19, which was huge in size. About 45.3 percent of respondents were moderately active in their physical activity level during the COVID-19 pandemic period. Interestingly, 60.7 percent and 71.5

percent of respondents do not smoke and did not drink any kind of alcohol. The sleeping hours of most of the respondents are more than 6 hours (44.2 percent) during the pandemic. Again, from Table 2, most of the respondents think that the COVID-19 pandemic has had an effect on their physical health (52.8%). Because of the lack of home outdoor spaces for physical activity (56.2 percent), respondents did not regularly exercise in the

emergency of COVID-19 (59.9 percent). During the COVID-19 emergency, most of the respondents (59.6 percent) usually spent less than 30 minutes doing moderate physical activity on one day of the week. Since they didn't do any kind of work during the COVID-19 emergency, most of them (27.7 percent) usually suffered from mood swing issues.

Table 5: Comparison of basic information and information related to COVID-19 with different clusters.

Factors	Categories	Mild N (%)	Moderate N (%)	Normal N (%)	Severe N (%)	Extremely severe N (%)	Total N (%)	P value
Any long-	Yes	2 (1.0)	29 (15.2)	5 (2.6)	55 (28.8)	100 (52.2)	191 (71.5)	0.007
term health-	No	4 (5.26)	12 (15.78)	9 (11.9)	18 (27.7)	33 (43.5)	76 (28.5)	
related								
complications								
Infected by	Yes	2 (1.2)	23 (13.5)	6 (2.9)	48 (28.8)	92 (54.1)	170 (63.7)	0.040
COVID-19	No	4 (4.1)	18 (18,6)	9 (9.8)	25 (25.8)	41 (42.3)	97 (36.3)	
Sleeping	6 hours	4 (4.0)	14 (13.9)	3 (3.0)	32 (31.7)	48 (47.5)	101 (37.8)	0.040
time	<6 hours	0(0.0)	8 (16.7)	3 (6.3)	20 (41.7)	17 (35.7)	48 (18.0)	
	>6 hours	2 (1.7)	19 (16.1)	10 (8.5)	8 (6.8)	68 (57.6)	118 (44.2)	
Time	<30	1 (0.6)	16 (10.1)	8 (5.0)	47 (29.6)	87 (54.4)	159 (59.6)	0.020
usually	30-40	1 (2.2)	10 (21.7)	3 (6.5)	15 (32.6)	17 (37.2)	46 (17.2)	
spends on	40-50	2 (5.9)	11 (32.4)	2 (5.9)	6 (17.6)	13 (38.2)	34 (12.7)	
physical activity	>50	2 (5.7)	4 (14.3)	1 (3.6)	5 (17.19)	16 (57.1)	28 (10.5)	
Working	I am a student	2 (1.1)	29 (15.2)	4 (2.2)	52 (28.1)	98 (53.0)	185 (69.3)	0.003
place	I work at my workplace	1 (3.7)	7 (25.9)	2 (7.4)	7 (25.9)	10 (37.0)	27 (10.1)	
	Working from home	2 (10.5)	4 (21.1)	2 (10.5)	3 (15.8)	17 (47.2)	36 (13.5)	
	Others	1 (2.8)	1 (2.8)	6 (16.7)	11 (30.6)	8 (42.2)	19 (7.1)	

Table 6: Ordinal logistic regression analysis of factors influencing university student's psychological health problems (anxiety).

Variables	Categories	Frequency	SE	OR	P value	OR (95%CI)
Any long-term health-	Yes	191	-	-	-	-
related complications	No	76	0.308	0.273	0.375	(-0.330, 0.875)
Infected by COVID-19	Yes	170	-	-	-	-
Infected by COVID-19	No	97	0.281	0.254	0.367	(-0.297, 0.804)
Smoking habit	Yes	105	-	-	-	-
Smoking nabit	No	162	0.279	0.229	0.412	(-0.318, 0.775)
	6 hours	101	0.270	0.510	0.059	(-0.020, 1.040)
Sleeping time	<6 hours	48	0.344	1.134	0.001	(0.460, 1.807)
	>6 hours	118	-	-	-	-
	<30	159	0.423	0.561	0.185	(-0.268, 1.390)
Time usually spends on	30-40	46	0.478	0.901	0.059	(-0.036, 1.838)
physical activity	40-50	34	0.512	0.720	0.160	(-0.284, 1.723)
	>50	28	-	-	-	-
	I am a student	185	0.359	-0.157	0.661	(-0.860, 0.546)
Working place	I work at my workplace	27	0.500	0.139	0.781	(-0.840, 1.118)
Working place	Working from home	36	0.564	-0.018	0.975	(-1.13, 1.088)
	Others	19	-	-	-	-

Psychological health-related information comparison

To find the significant differences in different characteristics among the five groups, the chi-square test was used. There were significant differences in the longterm health-related complications; in the moderate depression group, long-term health-related complications 82 (42.9%). However, significant differences were found "infected by COVID-19", "sleeping time", "time usually spends on physical activity". Among those who were infected by COVID-19; 24.7 percent students were in severe depression, 20.6 percent students were in extremely severe depression. Among students who have sleeping hour more than 6 hours, 29.7 percent have severe depression (Table 3). Ordinal logistic regression analysis suggested that students who slept for less than six hours were more likely to experience depression than those who slept for six hours or more (p<0.05) (Table 4).

Long-term health-related issues varied significantly depending on anxiety level; in the group with severe anxiety, they increased to 55 (28.8 percent). However, there were substantial variances for "infected by COVID-19", "sleeping time", and "time usually spent on physical activity". Among those who are infected by COVID-19, 54.1 percent of students are in extremely severe anxiety and 28.8 percent of students are in severe anxiety. 18% of students who slept for longer than six hours had extremely severe anxiety (Table 5). Ordinal logistic regression analysis recommended that students who have a sleeping time of less than six hours in this pandemic situation suffering from anxiety (p=0.05, Table 6).

Psychological health-related figure

From Figure 1, it is seen that 41.2 percent of students at Jahangirnagar University who reside in the university area during the COVID-19 pandemic have moderate depression, 24.7 people were in severe depression, and only 7.5 percent of students are free from depression. It was also seen that 18 percent of students were going through extremely severe depression levels.

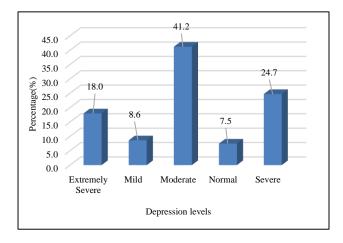


Figure 1: Bar diagram for depression levels.

According to Figure 2, 49.8 percent of Jahangirnagar University students who lived in the campus neighbourhood during the COVID-19 epidemic suffered extremely severe anxiety. 24.7% of students have moderate anxiety. Only 5.2 percent of students report being anxiety-free. Additionally, 27.3 percent of kids are said to be experiencing severe anxiety.

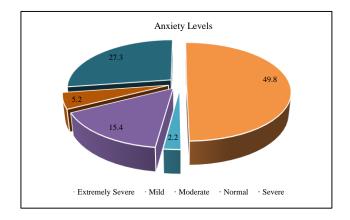


Figure 2: Pie chart for anxiety levels.

DISCUSSION

The COVID-19 pandemic has affected the health behaviors of university students both physically and psychologically. Thus, the aim of this study was to explore the physical and psychological health issues of students of Jahangirnagar University who resides near Jahangirnagar University area.

Highest percentage of students (34.8%) were residing in Ambagan where 117 were female and 56.2% were male. And very few people are married. Most of the respondents are from Fourth-year (36.7%). About 60.3% of respondents' family income were more than 40000 takas. The study revealed 73.8 percent of respondents have long-term health-related complications (Table 2) which was obvious. Previous studies also showed the physical complications among people during pandemic.¹¹ Among them, 19.8 percent of respondents have asthma and 17.3 percent have respiratory diseases. Again, during COVID-19 situations, 63.7 percent of respondents have been infected with COVID-19, which probably a significant factor of being mentally unrest. Since previous research showed a strong relationship of mental health issues among Covid recovered patients. The study also showed almost half (45.3%) of respondents were moderately active in their physical activity level during the COVID-19 pandemic period. Though 60.7 percent and 71.5 percent of respondents do not smoke and did not drink any kind of alcohol.

Large portion of the respondent's sleep are more than 6 hours (44.2 percent) during the pandemic. Most responders think that their physical health is impacted by the COVID-19 outbreak (52.8). They think there were no outdoor spaces for physical activity, as most respondents

did not regularly exercise at home (59.9%). There were significant differences in the long-term health-related complications; in the moderate depression group, long-term health-related complications were 82 (42.9%). The indicators of COVID-19 infection included "sleeping time", "time spent typically engaging in physical activity", and "long-term health-related issues". When compared to students who slept for six hours or more, those who slept for less had a higher likelihood of feeling less depressed.

The study showed a very alarming result where about 92.5% (moderately: 41.2 %, extremely severe: 18%, severe: 24.7%, mild: 8.6%) students were depressed while 94.8% (extremely severe: 49.8%, mild: 2.2%, Moderate: 15.4% and severe: 27.3%) students were suffering from anxiety problems during pandemic. However, there were significant differences in "infected by COVID-19", "sleeping time", and "time usually spent on physical activity". 54.1 percent of students who have COVID-19 infection had extremely severe anxiety, while 28.8 percent experience severe anxiety. Students who slept for more than six hours showed extremely acute anxiety in 18% of cases (Table 5). Though ordinal logistic regression analysis suggested that students who slept for less than six hours, as opposed to students who slept for six hours, would experience less worry (p=0.05).

Students have shown a lot of scepticism over the epidemic condition. Due to the COVID-19 pandemic, students across the world have suffered. According to studies, the COVID-19 epidemic caused mental health stress in university students. According to the results of a study on students' anxiety and depression about their future careers, they were quite apprehensive over not being able to secure employment due to Bangladesh's age limits. Students were especially upset by this perpetual lockdown because COVID-19 had a bad impact on their actual education and eliminated opportunities for advancement and employment as well.⁶

According to the results of our study, we observed that most of the students whose families' economic condition is better (more than 40,000 monthly income) can make an effort to live in a rented house near the university during this pandemic situation. Again, we could see a huge number of respondents have long-term health complications including asthma and respiratory disease because of this COVID-19 pandemic, and a huge percent of respondents were infected by coronavirus during this period, and they face physically moderate activity after suffering from COVID-19. The students can not improve their physical condition by performing regular exercise due to a lack of home outdoor spaces. They also suffered from many ups and downs in mood as they didn't have any work during this period, which also increased their anxiety levels. We also saw that a good percentage of students suffered from severe depression. As there was an age restriction for obtaining a government job, most of the students appeared to be abnormally anxious about their future careers and education. Education, employment, and regular physical exercise can help these respondents improve their physical and psychological health.

Due to pandemic situation, face-to-face interview was not possible to collect the data, as a consequent, the study results may have affected from sample selection to some extent. To get more precise result, sample size could be extended. These are the limitations of this study.

CONCLUSION

University students have been affected both physically and psychologically due to COVID-19 which is evident from this research. Mostly students experience physiological culmination, and it is advised that actions should be taken to jointly resolve student difficulties and provide physiological well-being services to Bangladeshi university students. Therefore, the government and policymakers should take major action to reduce mental health issues among university students in Bangladesh.

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