Observation of mental health on the university students during lockdown due to Covid-19 pandemic

Submitted By

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A thesis submitted to the Department of Pharmacy in partial fulfillment Of the requirement for the degree of Bachelors of Pharmacy (Hons)

> Department of Pharmacy Brac University

©2021 Brac University All rights reserved **Declaration**

It is hereby declared that

1. The thesis submitted is my/our own original work while completing degree at Brac University.

2. The thesis does not contain material previously published or written by a third party, except where

this is appropriately cited through full and accurate referencing.

3. The thesis does not contain material which has been accepted, or submitted, for any other degree

or diploma at a university or other institution.

4. I have acknowledged all main sources of help.

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Approval

The thesis/project titled "Observation of mental health on the university students during lockdown due to covid-19 pandemic" submitted by Musfica Tabassum Swarna(ID-16346009) of Spring 2020 has been accepted as satisfactory in partial fulfillment of the requirement for the degree of bachelors of pharmacy (Hons) on January 2021

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Ethics Statement

No harm to any animals was done on this survey. All the surveys were collected from individuals via online with their full consent and willingness.

Abstract/Executive Summary

Mental health is as important as our physical health because mental illness can cause serious diseases like

depression, schizophrenia which can even lead to suicidal cases and this lockdown due to Covid-19

pandemic has a great impact on the mental health of the students especially on the university students.

This study was carried out to find out any effects of the lockdown due to Covid-19 pandemic on the

mental health of the university students. A well stated and reviewed questionnaire was distributed among

students aged between 18-30 of different universities to collect data about their mental health condition,

satisfaction, happiness and enjoyable capacity of life, quality of relationships, knowledge related to

covid-19 and other necessary parameters. According to our findings, it is evident that maximum

participants responded to be in moderate level (response range 4-7) in terms of some parameters like

satisfaction (51.4%), happiness (50.1%), worthwhileness of things doing in life (59.1%) and enjoyable

capacity of life (49.8%) during lockdown and this lockdown has both some positive effect in terms of

increasing the quality of relations among family member (46.5%) and negative effects in terms of some

parameters like feeling lonely (27.69%), lack of companionship (36.35%), left out (27.3%) and isolated

from others (25.38%).

Keywords: Mental health, lockdown, Covid-19, knowledge, depression, happiness, satisfaction

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	Dedication:	
Dedicated to my Parents and my younger sister who helped me and supported me continuously regarding my education.		e continuously regarding

Acknowledgement

I am grateful to the most merciful and gracious Almighty Allah as He is the reason for our strength and courage and guided me to continue my studies so far. I pray and hope to reflect my potential in this project in a positive way.

The survey would have been hard to complete without the assistance of many people who are going to be acknowledged here.

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I wish to put forward my keen and sincere thanks to our honorable chairperson Dr. Eva Rahman Kabir for being an inspiration and support to all of us.

Lastly, I would also proffer my admiration and regards to all the participants including Brac University who have given their valuable time, information and helped me to complete my project.

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List of Acronyms

WHO World Health Organization

SARS-CoV-2 Severe Acute Respiratory Syndrome Coronavirus 2

COVID-19 Corona Virus disease of 2019

ICTV International Committee on Taxonomy of Viruses

RF Respiratory Failure

CHAPTER 1: INTRODUCTION

1.1 Background

Covid-19 disease is an infectious disease caused by a newly discovered virus called coronavirus which is found in China in December 2019. People who are infected by this disease experience mild to moderate respiratory illness but will recover from this without any special treatment except who are old and have health issues like cardiovascular disease, chronic respiratory disease, chronic kidney disease, diabetes etc. The virus that causes Covid-19 is mainly transmitted through droplets generated when an infected person coughs, sneezes. People can easily be infected by this virus through some transmission like touching the contaminated surface and then touching the eyes, nose or mouth. To prevent the spread of this disease, many countries imposed lockdown and also banned all types of public gathering for a long time. This lockdown has a great impact on the mental health of the general population. Due to this lockdown, there is a huge change in the mental health condition of the people in general. Mental health is a state of wellbeing in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community. It also includes our emotional, psychological, and social well-being. Emotional and mental health is important because it's a vital part of our life and impacts our thoughts, behaviors and emotions. Being healthy emotionally can promote productivity and effectiveness in activities. As the lockdown became activated, there was a change in the routine of a person's normal life specially for people who used to work in different institutions. As all the institutions were closed due to lockdown, there is a huge change in the people's normal life. People became locked in the home for a longer time and it affected them a lot than any other previous conditions.

1.2 Research gap

Majority of the studies based on mental health were done on individuals of developed countries and our study focuses primarily on individuals from one of the developing countries which is deprived of such research due to huge diversity in the population. Hence, our study covers one of the many diversities in Bangladesh which is the university student group (age 18-30), who are the most sensitive age group regarding mental health. Previously most of the studies and research based on mental health conditions were specially done among the adolescent groups and overall on the general people. A very limited study was done on the university adults but in this lockdown no study was done particularly on the university students. Moreover, as our country is a developing country, there also lies a huge question on whether the certain age group is aware of their mental health condition. Thus our study will also conclude whether parameters which were found can put a severe effect on university students who were locked in the home due to lockdown caused by Covid-19 pandemic.

1.3 Objectives

The main objective of this study is to see how this lockdown due to Covid-19 pandemic has affected an individual's mental health among the different university students of Bangladesh. The purpose of this study was also to find out whether this lockdown has a positive or negative effect on the university students. However, the purpose of the study was limited to few parameters which affect mental health in a wide range. The survey was conducted fairly among the university students whose age was between 20-30 of Bangladesh and to link the lockdown due to Covid-19 pandemic.

1.4 Significance of the study

Mental health is important because it is a vital part of our life and it impacts our thoughts, behaviors and emotions. Being healthy emotionally can promote productivity and effectiveness in daily activities although this mental health condition usually does not get much importance in a developing country like Bangladesh. However, effective measures should be taken by the government and public awareness should be increased regarding good mental health conditions. It was found that mental health problems among university students of Bangladesh is a source of psychological suffering and increases the risk of suicidal behaviors.

CHAPTER 2: LITERATURE REVIEW

2.1 Coronavirus outbreak and Covid-19 pandemic

The covid-19 disease became a global pandemic which was originated from Wuhan a city of China and now it spreads over the whole world with over 2.5 million confirmed cases and 166 000 deaths worldwide (as at 20 April 2020) (Chan et al., 2020).Covid-19 has been known as fifth documented pandemic in the history of flu pandemic. It was first revealed in Wuhan, China and eventually proliferated around the whole world. The corona virus was officially titled severe acute respiratory syndrome coronavirus 2(SARS-CoV-2) by the International Committee on Taxonomy of Viruses. This virus is highly transmissible which can be evolved in the human population rapidly(Liu et al., 2020). The corona virus mainly spreads from person to person. When a corona virus infected person coughs or sneezes, the contaminated droplets easily spread out in the air. At that time, if another person breathes or swallows them then he can be infected by the virus easily. Apart from this a person can also be infected by corona virus if he touches any surface contaminated with the virus and then touches his nose, mouth or eyes with his contaminated hands. All these are some direct ways by which a person can be infected by corona virus (Pathak, 2020).

2.2 Signs and symptoms:

The symptoms of coronavirus normally appear 2-14 days after exposure. According to some research it is said that the average time for the coronavirus symptoms to appear is 4-5 days. Some common symptoms of covid-19 are fever, headache, body ache, coughing, shortness of breath, fatigue, sore throat, runny nose, nausea, diarrhea etc. All these symptoms are mild initially but the condition of the infected person can worsen over days (Nazario et al.,2020). Apart from all these symptoms this coronavirus infection can cause diseases like pneumonia, respiratory failure, heart disease and eventually can cause death (Pathak,2020).

2.3 Preventive measures:

The most common strategy of preventing coronavirus transmission is washing hands frequently at least for 20 seconds and using portable hand sanitizer. People should avoid touching their face and mouth without cleaning their hands after interacting with a possibly contaminated environment. People should refrain themselves from close contact with other people and should avoid handshakes. People should also stay away from crowded places as it contains high risk of transmission of coronavirus. Social distancing should be maintained properly. Face masks should be worn when contacting another suspected person to cover the nose and mouth(Güner et al., 2020).

Although all these mentioned preventive measures have proved effective to control the transmission of Coronavirus disease, maintaining some of these preventive measures are really challenging in a densely populated country like Bangladesh. Social distancing is one of the most significant ways by which infectious diseases can be controlled. Many countries imposed social distancing to reduce the transmission of coronavirus disease. But in Bangladesh it is quite impossible to enforce social distancing as it is a densely populated country and there are so many poor people who live in the slum where maintaining social distancing is unthinkable as they live in such close quarters. Again washing hands with soap or hand sanitizer frequently is another way of preventing coronavirus infections but in Bangladesh. Many people's income is so low that they could not afford to buy soap or hand sanitizer that much Moreover a huge number of people use public transport in Bangladesh where maintaining social distancing is impossible (Nuruzzaman, 2020).

2.4 Importance of lockdown to prevent transmission :

Lockdown is an emergency situation which indicates preventing people from leaving their homes or a specific area for a certain time. When a lockdown is imposed people are not permitted to travel or go outside their homes as usual (Bhatia et al.,2020). In the lockdown condition, people cannot go out to work or they cannot go out to shopping malls or cinema halls or parks to spend their free time. At this time

they need to stay at home for their safety. Only some emergency functions are permitted in these critical times for example medicines, groceries, banking activity etc (Bhatia et al.,2020).

A lockdown is effective to suppress the Covid-19 pandemic transmission. Worldwide lockdown quarantine, initially proved effective to decrease the Covid-19 transmission cases and death rate (Atalan, 2020). If lockdown is applied properly then it helps to reduce the disease transference by decreasing peoples communication at a high rate of scale. Historical research claims that there is a strong connection between lockdown and reduced peak mortality rates and death rates which happened in the 1918-19 flu pandemic (Melnick & Ioannidis, 2020).

According to tribune news service of India, The Covid-19 transmission cases decrease at present then the previous time. The doubling rate of coronavirus cases was 3 days in March while it increased to 9 days at present. The mortality rate is 3 percent which is quite less than other countries and also the recovery rate of patients due to Covid-19 infection is higher in the world. All of these are the positive effects of imposing lockdown strictly.

By analyzing all this information it can be said that a strict lockdown is necessary to control the transmission of any pandemic like Covid-19 and others. Despite having some long term side effects, the benefits of imposing lockdowns are higher to control infectious disease like coronavirus disease.

2.5 Effects of lockdown on the lifestyle of University student:

For imposing this lockdown due to Covid-19 pandemic, school, college, university along with all other educational institutions remain closed for a longer time since the lockdown started worldwide. Closure of these educational institutions have a terrible effect on the lifestyle of the students worldwide. Students are not able to go to their educational academy and are facing problems to continue their study. Although the online education system has been started in many countries over the world but still it is not a good

alternative to the direct education system as a lot of students do not have the technological advantages to take part in the online education system (Sharma,2020).

The lockdown which is imposed due to Covid-19 pandemic has an adverse effect on the lifestyle of the student especially on the students at the university stage. Students are not able to use their immense potential that they used to do previously (Arafat et al., 2020). Before Covid-19 lockdown, students used to go to campus where they used to engage with many learning and studious activities which is not possible with online learning systems. In educational institutions, students had the chance to communicate with other students, classmates, friends and also with teachers regarding study material and other stuff. Apart from study and learning lessons, students have the facility to engage themselves with indoor and outdoor games and activities which are not possible to perform in online classes. Though there are many alternative communications systems like email, phone calling, social groups and apps still there are a lot of differences between direct and indirect communication modes which have an impact to change the lifestyle of students (Roy, 2020).

University lockdown and social distancing negatively affecting the university students' lifestyle. Many students are at a higher risk of social isolation and it causes mental health problems development into them. Particularly students who live by themselves alone facing a lot of problems like less contact with close family members and friends, receive less social support, having weaker communications with the social networks of students. Female students are the most susceptible group who are at the risk of danger to face mental health repercussions due to this long term lockdown (Elmer et al., 2020).

For continuing the education system in this pandemic condition, an online learning system is being introduced as an alternative way of learning system. But it has so many disadvantages that can affect badly on the students' life and career. For instance, students need to spend long hours in front of a blue screen of computers, laptops and other necessary gadgets which can cause great harm to students' physical conditions like eyesight problems, decreased concentration power, back pain and so many. There are also other disadvantageous factors like examinations cannot be taken properly in an online education

system and students are getting marks by evaluating their others skills which might have a bad impact on their future career. Again, there are lots of underprivileged students who don't have access to advanced technological equipment—like laptops, computers. As a result they are getting deprived of the online learning opportunities which is a discrimination towards them (Mallidi et al.,2020).

Due to this lockdown students face moderate to severe mental health problems like stress, anxiety and female students suffer most among them. One of the reasons behind this problem is students are more attached with social media and the information that spreads in those social media has an effect to increase the anxiety and stress level. However, higher education institutions can play a vital role to help the students to cope up with these mental health problems (Sundarasen et al., 2020).

A study was conducted on the university going students to find out the effect of lockdown on them and they found that some factors that changed their lifestyle like disruption in their previous university going routine, disturbance in their education system, lack of socialization slot, absence of physical activity and other factors also changed which have a negative influence on the psychological aspects of the students (Singh et al., 2020). They also found that cancellation of examination, changes in educational events and academic programs also contributed to increase the anxiety and stress level into the students life as students are concerned about their academic life (Singh et al., 2020).

2.6 Factors affecting mental health of university students during lockdown:

A great number of factors are responsible for altering the mental health condition of the university students. Many studies and surveys are already performed on this perception and the results on influencing the students mental condition are terrible.

1. Social isolation and loneliness: Social isolation means keeping social distancing and isolated oneself from the social surrounding which has been practiced due to pandemic lockdown situations. It is claimed that as humans are social animals and being socially isolated for longer times can have an adverse effect

on their health (Ivanov,2020). A research which is performed in the USA on socially isolated people found that people are suffering from symptoms like depression, heart troubles, weak immunity system due to being socially isolated. Another study found that the risk of having coronary artery disease and stroke can increase up to 30% due to loneliness of the people (Kelly,2020). If the social isolation period gets longer then the risk of having symptoms like anxiety, loneliness, depression and other mental consequences increases higher which would have a bad effect on the physical and mental health of the students (Ivanov,2020).

- 2. Unemployment or financial problems: There is a correlation between financial problems and mental health problems and in these pandemic conditions it has been a crucial factor specially for students who used to do part time jobs or belong to the family with financial hardship (Morin,2019). A study which was performed in the Royal college of psychiatrist in the UK found that students who are suffering from financial problems like debt are three times more suffering from the symptoms like anxiety, depression and eventually this debt is linked with suicidal tendencies. Another study was conducted on the relationship between financial problems and mental health consequences among the university students of the UK and that study found that students who face more financial crisis they suffer from anxiety, depression, stress at a higher range than others which eventually made them alcohol dependent (Richardson et al., 2017). Moreover, another study which was conducted on the students of the UK who were doing part time jobs beside their academic study found that almost 47% students lost their part time job opportunities due to the lockdown of this Covid-19 pandemic (Rowley, 2020).
- 3. Domestic and family violence: Due to this lockdown students all over the world are being locked in their home and it is not a new thing that students can be attacked by their domestic violence which is a common scenario in a developing country like Bangladesh as well as other developed countries worldwide.(Abramson, 2020). In many families students suffered from domestic violence which can occur due to financial pressure, disaster related delicacy, social isolation and others which impacted negatively on the psychological aspects of the students. As a result mental health problems like

aggressiveness, self harm, suicidal tendencies developed for those students (shokair & Abo Hamza, 2020).

- **4. Academic pressure:** Excessive academic stress impacts negatively on the psychological and mental condition of the students as well as it decreases the motivation among the students and also increases the fear of dropout from academia (Kevin, 2020). Academic stress which include getting worried for good grades, workload, study pressure, competition and others can give rise to mental health problems like depression and suicidal behavior (Dunne et al., 2010). In this pandemic condition this factors plays a vital role as students are getting introduced to a new learning system which is online learning system and they need to adjust themselves with this new system which is also creating a risk of increasing anxiety among the students to cope up with this new education system (Reddy, 2020).
- **5. Sleeping problems**: A proper sleeping time and sleeping pattern is important to maintain a good and normal physical as well as mental health condition. Due to this lockdown, a lot of things changed in the lifestyle of the students along with their sleeping time. The sleeping routine they used to follow previously is no longer controlled by them due to this new lifestyle in lockdown (Marelli et al., 2020). A research study found that students who have sleeping problems and do not get a proper sleep, developed the risk of having poor mental health condition including symptoms like depression, anxiety and failed to control their emotional regulations (Krystal, 2012)
- **6. Other factors :** Apart from all the above described factors, there are also some other factors that have the influence to alter the mental health condition of the university students. For example- use of alcohol or misuse drugs, grief or loss of something precious, being abused or suffering from any trauma condition etc.

2.7 Disorders that can occur due to Mental illness:

All the factors and symptoms of mental illness that are described eventually can cause mental disorders

among the university students. Some common mental disorders are given below:

- a. Depression: It is a common mental disorder which is affecting the students worldwide at a higher rate due to this pandemic and it is identified that a person is suffering from depression if he loses the interest of enjoying the life activity or remains in a sad mood persistently for a longer period of time. The rate of depression increased due to Covid-19 pandemic then the previous time which should be a matter of concern (Steven, 2020). Depression also can occur if the lifestyle of students changes suddenly and quality of life decreases within time. However, there are treatments like anti depressant medicine, psychotherapies for the patients suffering from depression and there is also a range of suffering like moderate to severe range so students should be taken under treatment according to their severity of sufferings from depression and the higher educational authority should maintain their responsibility towards their students regarding this issue (Cuijpers et al., 2020).
- **b. Bipolar disorder**: Among all the mental health disorder students at university level who suffer from problems like anxiety, stress eventually develop having bipolar disorder which affect most in their academic career. A study found that students who are vulnerable to bipolar disorder face problems like disabilities of learning new things and also failed to complete any multiplex assignment (Elizabeth et al.,2007). Moreover students facing bipolar disorder should be taken under treatment because bipolar disorder can be treated easily at an early stage and administration can play an indispensable role for the improvement of these students (Smitha, 2020).
- **c. Schizophrenia :** Numerous study found that all the other symptoms of mental illness is linked to mental disorder like schizophrenia from which students can be suffer in their adulthood and it also have some identical symptoms like the patient faces problems like delusion, hallucinations which furthermore can develop suicidal tendency in extreme level (Lambrini et al., 2014).

CHAPTER 3: METHODOLOGY

3.1 Methodology

3.1.1 Research Design

This descriptive study was carried out as a final year project of the Department of Pharmacy, Brac University, Dhaka in the year 2020. Participants of both sexes (male and female) were included in the project. Around 522 undergraduate students between the age group 18-30 from different universities of Bangladesh randomly participated in this project. This survey was solely done with the purpose to find out any related association of lockdown due to covid-19 pandemic and the participant's mental health.

3.1.2 Data Collection

A structured and well reviewed questionnaire was made and circulated among the diverse group of students via online who were willing to participate in the project from may 2020 to june 2020. The questionnaire was made to collect and keep a records of information regarding the participant's gender, age, health condition, satisfaction about life in the lockdown, financial changes due to pandemic lockdown, relationships with family member in this lockdown, household responsibilities, consciousness regarding Covid-19 infection, working status during lockdown and other necessary data required for finding out mental health conditions were also asked. A sample of the questionnaire is given in the appendix.

3.1.3 Data Analysis

After proper collection of all the required data and information about participants, we analyze different parameters related with mental health in different categories. For some selective parameters we classified them into a scale like low level (0-3), moderate level (4-7) and high level (8-10).

CHAPTER 4: RESULTS AND DISCUSSION

4.1 Results

4.1.1 Participant's general characteristics:

The survey was carried out between 522 individuals of different sex (Male and Female) from different universities of Bangladesh among which 273 was male and 249 was female and maximum participants' age range was between 18-30. Different types of questions were asked in the survey form which is related to mental health condition during this Covid-19 lockdown.

From the survey result we found that 52.3% (Table-1) of the participants was male and 47.7% (Table-1) was female participants that means the number of male participants was greater than the female. Among the all participants, maximum's health condition was good (50%) in general (Table-1). We also analyzed the working condition of the participants and found that 28.9% worked fully, 33.1% worked partly and 37.9% did not work at all during this lockdown. Apart from this, the participant's family also faces financial difficulties and among them 17.8% faces severe difficulties, 36.2% did not face any difficulties and 46% were able to manage their financial difficulties due to lockdown (Table-1).

Table-1: General characteristics of the participants

Variables	percentage
Gender	
Male	52.3%
Female	47.7%

General health condition	
Very good	11.3%
Good	50%
Fair	30.3%
Bad	6.5%
Very bad	1.9%
Working condition during lockdown	
Full time working	28.9%
Partly working	33.1%
Not working	37.9%
- 121	
Financial difficulties of family	
During lockdown	
Severe difficulties	17.8%
Manageable difficulties	46%
No difficulties	36.2%

4.1.2 Knowledge related to Covid-19:

From the survey result we found that 514 people among all the participant's did not go for testing covid-19 which is 98.5% of the total participants though it was a serious issue during the lockdown. Only 1.5% (Table-2) people means 8 persons among the participants went for testing Covid-19. We also found that 31.6% people were extremely worried regarding getting contact with corona virus and 35.1% were somewhat worried regarding this. However, 8.6% people among the total participants were not worried at all regarding get infected with coronavirus. Again, in case of taking care of patients with Covid-19 disease, only 4% people had inside household responsibility and 6.9% people had outside household responsibility. We also found that among all participants, 323 students talked everyday with family members about covid-19 and 29 students never talked regarding this issue.

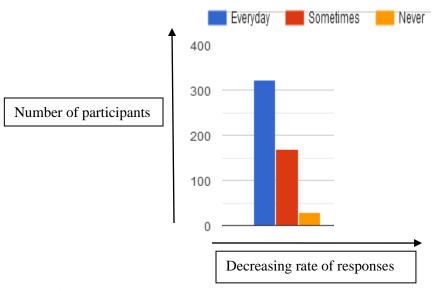


Figure 1: Responses of participants regarding talking to family members about covid-19

Table 2: Knowledge related to Covid-19

Variables	Percentage
Tasted for Covid-19	
V.	1.50/
Yes	1.5%
No	98.5%
Worriedness of catching	
Coronavirus	
Extremely worried	31.6%
Somewhat worried	35.1%
Little worried	24.7%
Not worried	8.6%
Not worned	0.070
Responsibility of caring Covid-19 patient	
Inside household	4%
Outside household	6.9%

4.1.3 Perceptions about life during lockdown due to Covid-19:

In the survey form there were some questions regarding people's perception about life during lockdown.

The question was related to happiness and satisfaction about life, enjoyable capacity of life, worthwhileness of things doing in life during lockdown. By analyzing the responses we classified them into three categories- low (0-3), moderate (4-7), high (8-10) level.

By analyzing the responses we concluded that in terms of satisfaction about life during lockdown 29.3% were in low stage,51.4% in moderate stage and 19.4% were in high stage respectively (Table-3).

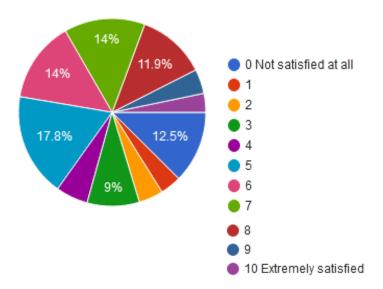


Figure 2: Responses regarding satisfaction about life during lockdown

Again, by analyzing the responses in terms of worthwhileness of things done in life during lockdown, we concluded that 29.9%,59.1%,11.1%(Table-3) were in low, moderate and high level respectively.

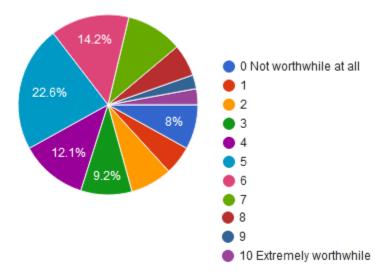


Figure 3: Responses regarding worthwhileness of things doing in life during lockdown

We also analyzed the responses regarding happiness about life during covid-19 lockdown and we concluded that 30.9%, 50.1%,19% (Table-3) were in low, moderate and high level respectively. It also indicates that the maximum number of people(50.1%) were in moderate level of happiness during this lockdown.

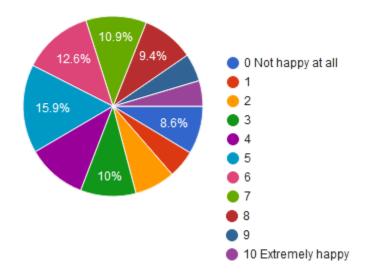


Figure 4: Responses regarding enjoyable capacity of life during lockdown

Again, by analyzing the responses in terms of enjoyable capacity of life during this lockdown, we concluded that 35.6%, 49.8%, 14.5% (Table-3) were in low, moderate and high level respectively.

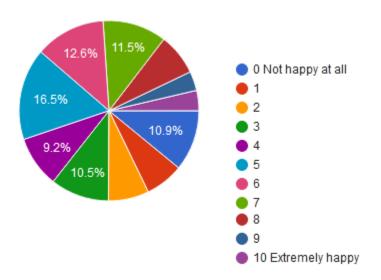


Figure 5: Responses regarding enjoyable capacity of life during lockdown

Table 3: Perceptions of the participants about life during Covid-19 lockdown

Perceptions about life during	Responses			
lockdown	low	moderate	high	
Satisfaction about life	29.3%	51.4%	19.4%	
Worthwhileness of things doing in life	29.9%	59.1%	11.1%	
Happiness	30.9%	50.1%	19%	
Enjoyable capacity of life	35.6%	49.8%	14.5%	

4.1.4 Quality of relations among family members:

By analyzing the responses in terms of quality of relations among family members of the participants we found that before lockdown 10.3%, 48.5%,41.2% (Table-4) were in low, moderate and high level respectively. Moreover, since lockdown 9.6%, 43.9%, 46.5% (Table-4) were in low, moderate and high level respectively. It also indicates that in this lockdown, the quality of relations among family members increased as the maximum percentage (46.5%) was in high level since lockdown while before lockdown the maximum percentage (48.4%) was in moderate level. As all the family members became locked in the house due to this lockdown, they got enough time to spend together and it helped to improve their quality of relationship among family members.

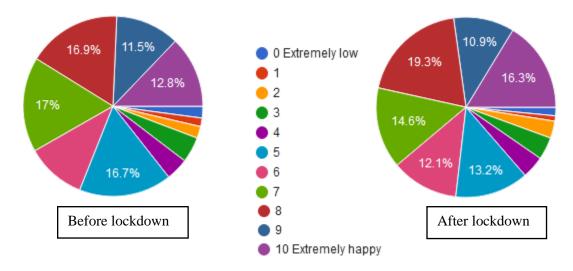


Figure 6: Responses regarding Quality of relations among family members

Table 4: Comparison of quality of relations among family members before lockdown and after lockdown

Level	Before lockdown	Since lockdown
Low	10.3%	9.6%
Moderate	48.4%	43.9%
High	41.2%	46.5%

4.1.5 Others factors:

In the survey we asked some questions to the participants like if they felt left out or if they felt a lack of companionship. There were also questions like if they felt isolated from others or if they felt lonely during this whole lockdown period. By analyzing the responses we found that many students often felt a lack of companionship (36.35%), left out (27.3%), lonely (27.69%) and isolated from others (25.38%) during this lockdown period which had a negative impact on their mental health condition. (figure-7)

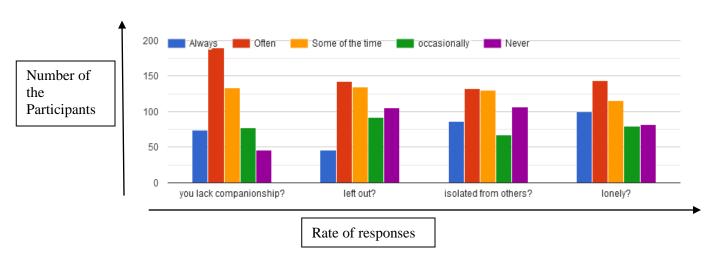


Figure 7: Responses of the participant's regarding some others parameters

CHAPTER 5: CONCLUSION

5.1 Findings

According to our findings we can conclude that the maximum number of participants were in moderate level means their responses were between (4-7) in the scale of (0-10) in terms of some parameters like satisfaction about life (51.4%), happiness about life (50.1%), enjoyable capacity about life (49.8%) and worthwhileness of things doing in life (59.1%) in this lockdown which had a great impact on their mental health condition. It also indicates that maximum participants were in average condition in case of mental health that means though they suffered mentally due to Covid-19 lockdown but that was not in extreme level. Only 29.3%, 29.9%, 30.9% and 35.6% participants were in low level means they suffered extremely in terms of satisfaction, worthwhileness, happiness and enjoyable capacity of life during lockdown respectively.

We also found that there were some positive effects of this lockdown on the participants like their quality of relationship among family members increased as it was 41.2% before lockdown and became 46.5% since lockdown. Moreover, there were also some negative effects of this lockdown on the participants like many students often felt left out (27.3%), lack of companionship (36.35%), lonely (27.69%) and isolated from others (25.38%) due to this lockdown.

5.2 Limitations

- 1) The survey was done only among 500 participants which is a very small population. So the result we got is only for a small proportion. It does not reflect the whole scenario of the topic.
- 2) Our participants were mainly from the students of Dhaka city not from the rural area. So the result we got did not represent the actual condition of the students of the country.

5.3 Recommendations

- 1) The survey could be more selective. We could have focused on some selective crucial parameters related with mental health.
- 2) The other collected responses for different parameters can be used for future analysis for further research purposes.
- 3) The number of participants could have been expanded. If we could have received data from around 1000 participants than the result would be more relatable with the topic.

5.4 Future research design and aspects

In the future more feedback will be added to the given questionnaire to get a more precise and accurate result on the parameter's relationship with mental health. Having a large participants' responses will make the findings more convincing and relatable.

Furthermore, more surveys need to be done on this issue so that people become more conscious about their mental health. Authors and researchers should work together along with many other parameters which might be responsible for poor mental health conditions and prevent the people from the disastrous consequences which are related to poor mental health conditions. Nevertheless, it is seen that many authorization all around the earth have taken necessary steps, providing instructions and suggestions to people for being mentally healthy.

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Appendix

A Survey Form

Social media survey

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Project name: Observation of mental health on the university student during lockdown due to Covid-19 pandemic Name: Musfica Tabassum Swarna ID - 16346009 University - Brac University Participants: Current university student Project Supervisor: Dr.Afrina Afrose, PhD, Assistant Professor, Department of Pharmacy, Brac University.
*Required
Disclaimer
All the data for this survey will be used for research purposes only. The subject's name and identity will not be disclosed in any research publication.
I acknowledge that I have been asked to participate in a survey regarding social media usage. This survey is conducted by Musfica Tabassum Swarna. I understood the disclaimer and agreed to participate willingly.*
Email address:
Name of the participant :
1. How is your health in general? Would you say it is:
○ Very bad
Bad
° Fair
Good
C Very good
2. Since the lockdown, how satisfied have you been with your life? Please choose a number below.
O Not satisfied at all
\circ 1
° 2

•	\circ	4
•	0	5
•	\circ	6
•	0	7
•	\circ	8
•	0	9
•	3.S	10 Extremely satisfied ince the lockdown, to what extent have you felt the things you are doing in your life are rthwhile? Please choose a number below
•	0	0 Not worthwhile at all
•	0	1
•	\circ	2
•	0	3
•	\circ	4
•	0	5
•	\circ	6
•	0	7
•	0	8
•	0	9
•	\circ	10 Extremely worthwhile
	4. S	ince the lockdown, how happy would you say you are? Please choose a number below
•	0	0 Not happy at all
•	0	1
•	0	2
•	0	3
•	0	4
•	0	5
•	0	6
•	0	7
•	0	8
•	0	9
•	0	10 Extremely happy
	5. S	ince the lockdown, to what extent have you found life enjoyable?
•	0	0 Not enjoyable at all
•	0	1

° 7									
C 8									
10 Extremely enjoya	able								
6. How much would you agree with each of the following statements? 'Since the lock down, I feel									
oviion muon nomu yo	Strongly agree	Somewhat agree	Neither agree no disagree		Strongly disagree				
People around me understand my feelings.	c	0	o	0	0				
I have someone with whom I can share my personal experiences and feelings.	0	0	0	0	0				
In case I become sick, my family will take care of me.	0	0	0	0	0				
I have some friends who will offer support when I need it.	c	0	o	0	О				
				,	•				
7.Since the lockdown, h	now often do yo	ou feel	G 0						
	Always	Often	Some of the time	Occasionally	Never				
you lack companionship?	0	С	0	0	0				
left out?	0	0	0	0	0				

				T	
isolated from others?	0	0	0	0	0
lonely?	0	0	0	0	0
8.What is your age gro	oup?				
^O 18 - 30					
O 31 - 40					
41 - 50					
51 - 60					
61 - 70					
71 - 80					
81 or older9.What would you say	vour gender i	₂ 9			
Male	your genuer is) 			
C Female					
Other					
10.What was your ann	ual household	income (befor	e tax) before t	he lockdown?	
O Under 20 thousand					
21 to 30 thousand					
\circ 31 – 40 thousand					
$^{\circ}$ 41 – 50 thousand					
$^{\circ}$ 51 – 60 thousand					
$^{\circ}$ 61 – 70 thousand					
$^{\circ}$ 71 – 80 thousand					
$^{\circ}$ 81 – 90 thousand					
91 – 100 thousand					
Above 101 thousand	d				
11.What is your annua	l household in	come (before t	tax) since the le	ockdown?	
O Under 20 thousand					
21 to 30 thousand					
$^{\circ}$ 31 – 40 thousand					
$^{\circ}$ 41 – 50 thousand					
$^{\circ}$ 51 – 60 thousand					
\circ 61 – 70 thousand					
71 - 80 thousand					
$^{\circ}$ 81 – 90 thousand					

•	\circ	91 – 100 thousand
•	0	Above 101 thousand
•		Have you or anybody of your family experienced any financial difficulties because of the kdown? Yes, I/we are in severe financial difficulties Yes, but I/we can still manage No, financially I/we are fine.
	wh	Before the lockdown, on the scale of 0 to 10, with 0 being extremely low and 10 extremely high, ich number would you choose to represent the overall quality of relations among your family mbers?
•	\circ	0 Extremely low
•	0	1
•	0	2
•	0	3
•	0	4
•	0	5
•	0	6
•	0	7
•	0	8
•	0	9
•	0	10 Extremely high
	wh	Since the lockdown, on the scale of 0 to 10, with 0 being extremely low and 10 extremely high, ich number would you choose to represent the overall quality of relations among your family mbers?
•	0	0 Extremely low
•	0	1
•	0	2
•	0	3
•	0	4
•	0	5
•	0	6
•	0	7
•	0	8
•	0	9
•	0	10 Extremely high

	Always	Most of the time	About half the time	Son	netimes	Never	Not applicable
between all people living in your household?	С	0	0	0		0	0
you have with your spouse/partner/lover?	0	0	0	0		0	С
you have with your children?	0	0	0	0		0	С
you with your parents	0	0	0	0		0	0
	1				l		
16.Do you think you before with	have ha	d rows o	or conflicts	more	e or less	s often si	nce the lockdo
	Less oft	en	About same	the	More o	ften	Not applicable
your spouse/partner/lover?	Less oft	en		the	More o	ften	Not applicable
•		en	same	the		ften	
spouse/partner/lover?	0	en	same	the	С	ften	0
your children? your parents? 17.How often do you go Every day	C C co to park		same	the	0	ften	0
your children? your parents?	C C co to park		same	the	0	ften	0

•		People with chronic illnesses
•		Frail older people
•		Disabled individual
•		Young children
•		None of above
		Do you have caring responsibilities for any of the following outside your household? Please tick that apply
•		People with COVID-19
		People with chronic illnesses
•		Frail older people
•		Disabled individual
•		Young children
•		None of above
	20.	Have you been tested for having Covid-19?
•	0	Yes
•	О	No
	21.	How much are you worried that you will catch the COVID-19 virus?
•	\circ	Extremely worried
•	0	Somewhat worried
•	0	A little worried
•	0	Not worried
	22.	Have you been working remotely at home since the lockdown?
•		Yes
•	0	Partly
•		No
	23.	How often have you had 6 or more alcohol drinks, on a single occasion in the last year?
•	-	Never
•	0	Less than monthly
•	\circ	Monthly
•	0	Weekly
•	0	Daily or almost daily
	24	Have you had more alcohol drinks since the lockdown than you had before?
•	0	Yes, very much so
_		100, 101, 111001100

•	0	Yes, slightly
•	\circ	No, about the same
•	0	No, had fewer alcohol drinks

25.How often during the past week did you

23.110w often during the past wee	Everyday	Sometimes	Never
do moderate or vigorous physical exercises?	0	C	c
do mindfulness/meditation/praying ?	C	С	С
do gardening?	C	0	0
care for and play with pets?	C	0	0
play games (including video and online) with family members?	0	C	0
talk to family members about COVID-19?	0	C	c
talk to family members about any serious issue not related to COVID-19?	0	C	0