

# Impact of COVID-19 Lockdown on Mental Health and Social Life of University Students of Delhi

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## ABSTRACT

**Background:** Student mental health in higher education has been an increasing apprehension. The COVID-19 pandemic situation has brought this susceptible population into renewed focus.

**Objective:** Our study aims to conduct a timely assessment of impact of Covid-19 lockdown on mental health and social life of university students of Delhi.

**Methods:** We conducted a cross sectional study to assess the concerns about COVID-19, impact of COVID-19 on Mental health of the students of different courses who were studying at Delhi Pharmaceutical Sciences and Research University, New Delhi in lockdown and precautionary measures taken against COVID-19. The data were analyzed by using SPSS version 23 by using simple descriptive analysis i.e. using frequency and percentage.

**Results:** The data collected from 400 respondents (male=200 and female=200) was analysed and presented as Washing hands after touching contaminated objects majority of the respondents (male=61.5%, female=58.5%) reported always. Always wearing a mask regardless of the presence or absence of symptoms, majority of the respondents (male=35.5%, female=39.5%) reported occasionally. Always covering mouth when coughing and sneezing, majority of the respondents (male=79.5%, female=82.5%) reported always. Always washing hands immediately after coughing sneezing or rubbing nose, majority of the respondents (male=43.5%, female=40.5%) reported occasionally. Always avoiding sharing utensils (e.g., chopsticks) during meals, majority of the respondents (male=33.5%, female=29.5%) reported occasionally.

**Conclusions:** Due to the long-lasting pandemic situation and onerous measures such as lockdown and stay-at-home orders, the COVID-19 pandemic brings negative impacts on higher education. The findings of our study highlight the urgent need to develop interventions and preventive strategies to address the mental health of college students.

**Keywords:** COVID-19, Mental health, Student, lockdown.

## INTRODUCTION

A pandemic is the world wide spread of a new disease and currently COVID-19 has become one of the major catastrophes. A pandemic is defined as “an epidemic occurring worldwide, or over a very wide area, crossing Inter - national boundaries and usually affecting a large number of people.” Human corona viruses constitute a large family of viruses that usually cause mild to moderate upper respiratory illnesses in people such as the common cold.

Coronavirus infections have since been described in multiple animal species as well, including bats, camels, cattle, cats, chicken, dogs, pigs, rabbits, rats and turkeys. Bats account for the largest group of animal reservoirs. While many different corona viruses exist, seven types are known to cause disease in humans. Three of the viruses have been associated with causation of more severe illnesses and worse outcomes in humans. The first of these to appear was named severe acute respiratory

syndrome (SARS). It subsequently disappeared in 2004. This was followed by Middle East Respiratory Syndrome (MERS). The third being COVID-19 and is caused by the SARS-COV-2 that was first described in Wuhan China in December, 2019. The first case of COVID-19 in India, which originated from China, was reported on 30 January 2020. On February 11, 2020, the WHO has officially declared the COVID-19 as “pandemic” from the previous status of global health emergency.

On 24 March 2020, the Government of India under Prime Minister Narendra Modi ordered a nationwide lockdown for 21 days, limiting movement of the entire 1.3 billion population of India as a preventive measure against the COVID-19 pandemic in India. As the end of the first lockdown period approached, state governments and other advisory committees recommended extending the lockdown. On 14 April, Prime Minister Narendra Modi extended the nationwide lockdown until 3 May, with a conditional relaxation after 20 April for the regions where the spread had been contained or was minimal. On 1 May, the Government of India extended the nationwide lockdown further by two weeks until 17 May. The Government divided all the districts into three zones based on the spread of the virus- green, red and orange- with relaxations applied accordingly. On 17 May, the lockdown was further extended till 31 May by the National Disaster Management authority. On 30 May, it was announced that the on-going lockdown would be further extended till 30 June in containment zones, with services resuming in a phased manner starting from 8 June. It is termed as "Unlock 1". The worldwide rapid increase of infected cases has created a sense of uncertainty and anxiety about what is going to happen. It has also caused a tremendous level of stress among the students. This stress may lead to unfavourable effects on the learning and psychological health of students. Students who managed to go home are worried about being unable to return to their respective

institutions for further studies. The global prevalence rate of anxiety among medical students was 33.8% (95% Confidence Interval: 29.2– 38.7%). The COVID-19 pandemic may have a serious impact on the careers of this years' pre-medical and medical students as well. They are experiencing major interruptions in teaching and assessment in the final part of their studies. Further, the students are going to face the severe challenges of the global recession caused by the COVID-19 crisis. So, with this background the present study has been planned to assess the Impact of covid-19 lockdown on mental health and social life of university students of Delhi

## **METHODS**

### ➤ **Study design**

A cross sectional study was conducted to assess the concerns about COVID-19, impact of COVID-19 on mental health of people in lockdown and precautionary measures taken against COVID-19.

### ➤ **Study area**

The study was carried out in a Government Educational institute named “Delhi Pharmaceutical Sciences And Research University (DPSRU)”, Pushpvihar, Saket, New Delhi, situated in South Delhi area of National Capital of India.

### ➤ **Study participants**

All the students of different courses who were studying at Delhi Pharmaceutical Sciences and Research University, New Delhi.

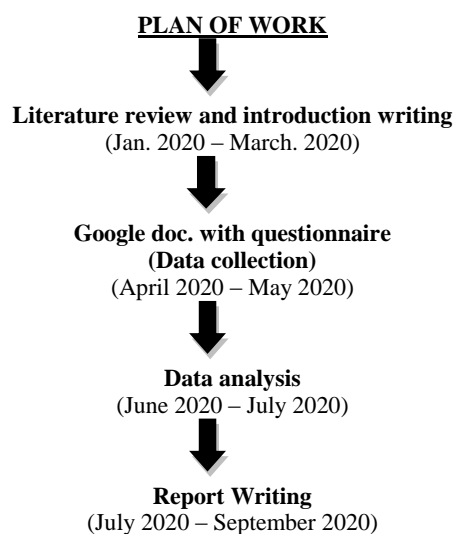
### ➤ **Inclusion criteria**

- All students of various courses.
- All the students age between 18 year and 35 years old

### ➤ **Exclusion criteria**

- Students of Age below 18 year and above 35 years old.

### ➤ Study Framework



### ➤ Sample size

Sample size ( $n = 400$ ) was determined using the Fischer formula ( $n = 4Pq^2/L^2$ ) (Fischer, Laing, Stoeckel & Townsend 1991).

### ➤ Sampling technique

Convenient sample technique was performed for the study.

### ➤ Data collection Tool

The study used questionnaire method of data collection; thus, primary data was used in the study. Data was collected by using a well-developed pretested questionnaire to collect the information from sample of 400 students selected using convenient sampling technique through Google Doc, Social media (Facebook and WhatsApp). The people under study were explained the purpose of our study prior to get their consent.

The survey was conducted to assess the concerns about COVID-19, impact of COVID-19 on mental health of students in lockdown and precautionary measures taken against COVID-19.

Students were requested to participate in the survey on a voluntary basis and to fill the questionnaire. Participation was voluntary and participant's identity remains anonymous.

### ➤ Subjects

Overall, the participants were the students of various courses studying in Delhi Pharmaceutical Sciences and Research University (DPSRU), including students from courses Diploma or lower, undergraduate and postgraduate or Doctorate students.

### ➤ Statistical analysis

Statistical data analysis was carried out by using SPSS version 23 by using simple descriptive analysis i.e. using frequency and percentage.

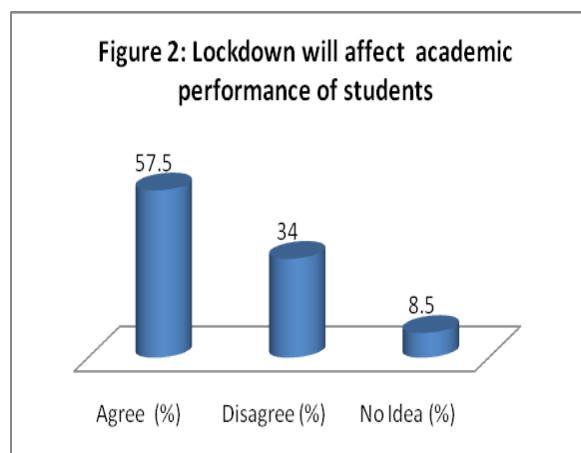
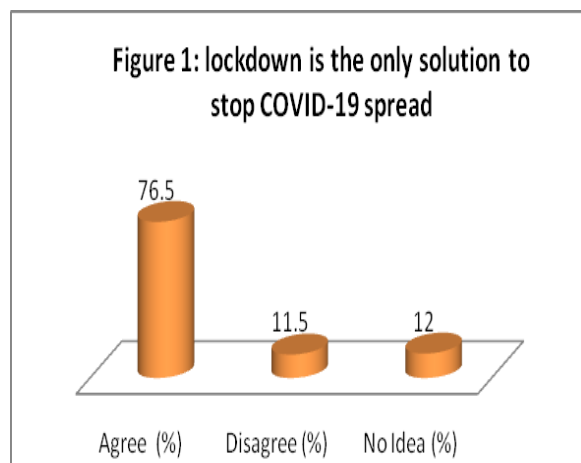
## RESULTS AND DISCUSSION

The data collected from 400 respondents (male=200 and female=200) was analysed and presented in Tables and Figures.

- The data shown in Table 1, reveals that in response to statement i.e., Washing hands after touching contaminated objects majority of the respondents (male=61.5%, female=58.5%) reported always.
- In response to statement 2 i.e., Always wearing a mask regardless of the presence or absence of symptoms, majority of the respondents (male=35.5%, female=39.5%) reported occasionally.
- In response to statement 3 i.e., in response to statement, Always covering mouth when coughing and sneezing, majority of the respondents (male=79.5%, female=82.5%) reported always.
- In response to statement 4 i.e., Always washing hands immediately after coughing sneezing or rubbing nose, majority of the respondents (male=43.5%, female=40.5%) reported occasionally.
- In response to statement 5 i.e., Always avoiding sharing utensils (e.g., chopsticks) during meals, majority of the respondents (male = 33.5%, female = 29.5%) reported occasionally.

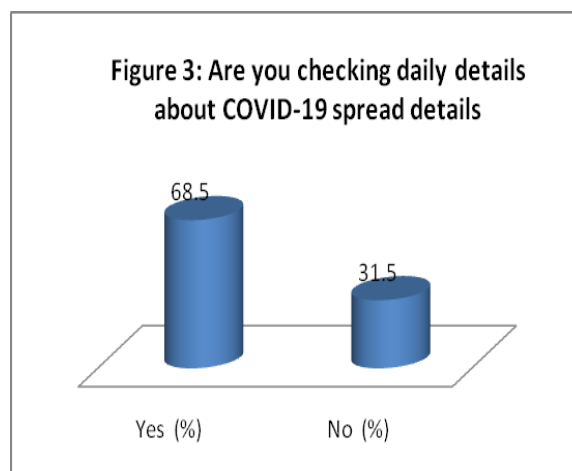
**Table 1: Precautionary Measures adopted by study population in current COVID-19 Lockdown**

S.No	Precautionary Measures	Response	Gender	
			Male (%)	Female (%)
1.	Washing hands after touching contaminated objects	Always	123 (61.5)	117 (58.5)
		Most of the time	25 (12.5)	30 (15.0)
		Sometimes	19 (9.5)	15 (7.5)
		Occasionally	31 (15.5)	27 (13.5)
		Never	7 (3.5)	11 (5.5)
2.	Always wearing a mask regardless of the presence or absence of symptoms	Always	37 (18.5)	13 (6.5)
		Most of the time	39 (19.5)	23 (11.5)
		Sometimes	10 (5.0)	26 (13.0)
		Occasionally	71 (35.5)	79 (39.5)
		Never	43 (21.5)	59 (29.5)
3.	Always covering mouth when coughing and sneezing	Always	159 (79.5)	165 (82.5)
		Most of the time	2 (1.0)	3 (1.5)
		Sometimes	13 (6.5)	12 (6.0)
		Occasionally	21 (10.5)	17 (8.5)
		Never	5 (2.5)	3 (1.5)
4.	Always washing hands immediately after coughing sneezing or rubbing nose	Always	21 (10.5)	25 (12.5)
		Most of the time	35 (17.5)	39 (19.5)
		Sometimes	46 (23)	40 (20)
		Occasionally	87 (43.5)	81 (40.5)
		Never	11 (5.5)	15 (7.5)
5.	Always avoiding sharing utensils (e.g., chopsticks) during meals	Always	15 (7.5)	12 (6.0)
		Most of the time	63 (31.5)	55 (27.5)
		Sometimes	34 (17.0)	47 (23.5)
		Occasionally	67 (33.5)	59 (29.5)
		Never	21 (10.5)	27 (13.5)



The data shown in Figure 1, reveals that majority of the respondents (76.5%) agreed that COVID-19 lockdown is the only

solution to stop the chain of spread of virus. While (11.5%) of the respondents didn't agree that lockdown should be done. And (12%) of the respondents were not able to give any view about its control as the corona virus is the first of kinds of virus to be witnessed by the humans in the world.

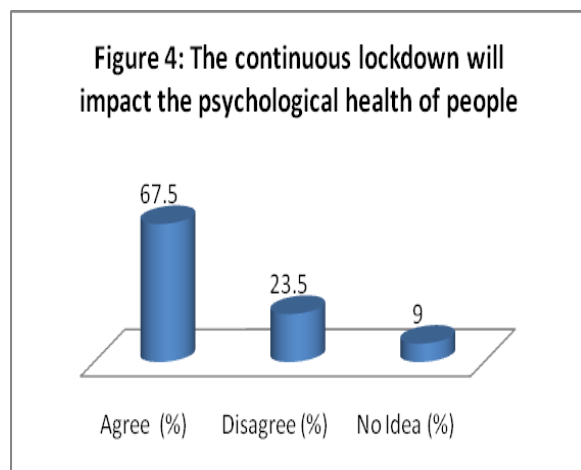


The data shown in Figure 2, reveals that majority of the respondents (57.5%) agreed that COVID-19 lockdown will affect the academic performance of students. However (34%) of the respondents were of the view that through online classes the academic performance of the students can be secured and the future of the students can be saved. A small section around (8.5%) of

the respondents weren't able to express any view regarding the statement.

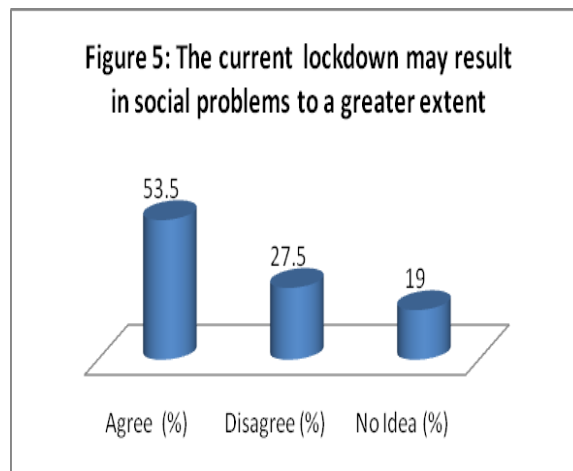
The data shown in Figure 3, reveals that majority of the respondents (68.5%) reported that they are checking daily details about COVID-19 spread. However (31.5%) of the respondents stated that they weren't checking the daily scores of the COVID-19 patients infected as it scared them.

The data shown in Figure 4, reveals that majority of the respondents (67.5%) reported that they believe continuous lockdown may affect the mental health of the people. However (23.5%) of the respondents stated that the lockdown will not have any effect on the mental health as people are in the knowledge of the fact that lockdown is much needed for their protection and the mind sets are made in that direction. A small section (9%) of the respondents was unable to express their views either way.

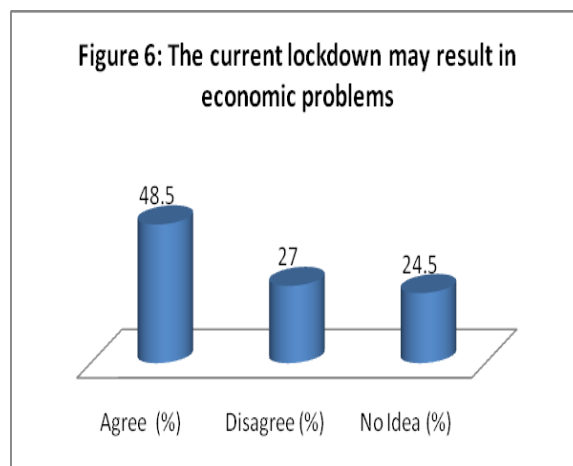


The World Health Organization (WHO) is working closely with global experts, governments and partners to quickly expand scientific knowledge on this new virus to protect health and prevent the spread of this outbreak ([www.un.org/coronavirus](http://www.un.org/coronavirus)). The continuous COVID-19 lockdown causes stress and stress makes other risk factors like high blood pressure, diabetes and high cholesterol worse. The doctors working in different hospitals of Kashmir revealed to authors via online group discussion that there is increase in health issues like

gastrointestinal disorders, respiratory issues and very high increasing rate of mental health issues like anxiety and depression.



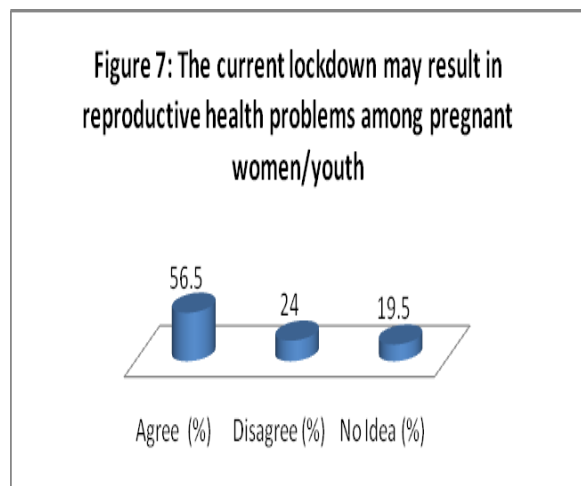
The data shown in Figure 5, reveals that majority of the respondents (53.5%) agreed that the current lockdown may result in social problems to greater extent. However (27.5%) of the respondents didn't agree that the current lockdown will result in social problems as people in lockdown are more in touch with their family members, relatives or friends through various online networking applications. And (9%) of the respondents couldn't express any view either way. The news channels daily report increase in domestic violence due to decrease in income.



The data shown in Figure 6, reveals that majority of the respondents (48.5%) agreed that the current lockdown if continued for a long time may result in economic problems worldwide. The

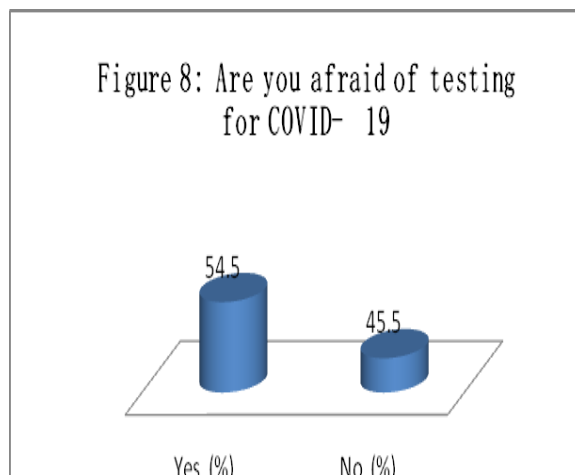
pandemic has already resulted in income loss due to job loss or reduced income due to lockdown. However, (27%) of the respondents expressed an contrary view holding that the economic problems existed prior to the spread of the pandemic virus and the people serving in government sector are getting salaries so they don't have any problem. Another section (24.5%) of the respondents was completely in doubts to express their views either way.

The data shown in Figure 7, reveals that majority of the respondents (56.5%) agreed that the current lockdown if continued for a long time may result reproductive health problems among pregnant women/youth. The absence of medical as well as transport facilities is the main causes. However (24%) of the respondents expressed their views in contrary way as according to them government has maintained ambulance facilities which are available to the patients including the pregnant women, so there can't be such sufferance in the reproductive health sector. Another section of (19.5%) of the respondents didn't express any view either way.

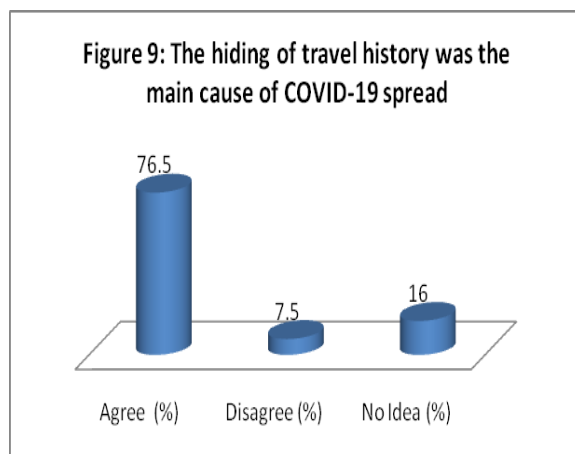


The data shown in Figure 8, reveals that majority of the respondents (54.5%) agreed that the they are afraid of testing for COVID-19 where as (45.5%) stated that they weren't afraid of the testing as it helped to save their lives by a pre-detection of the virus and its prevention of being spread to

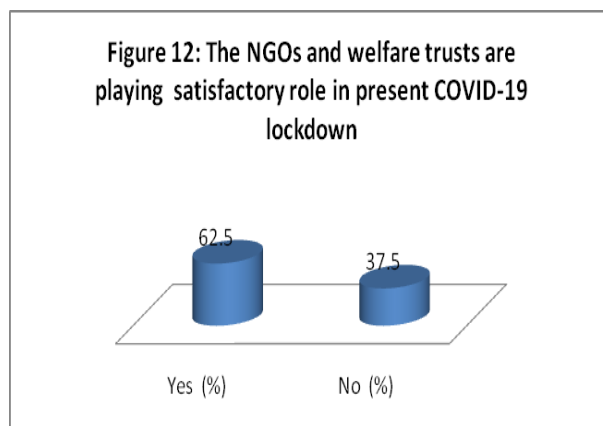
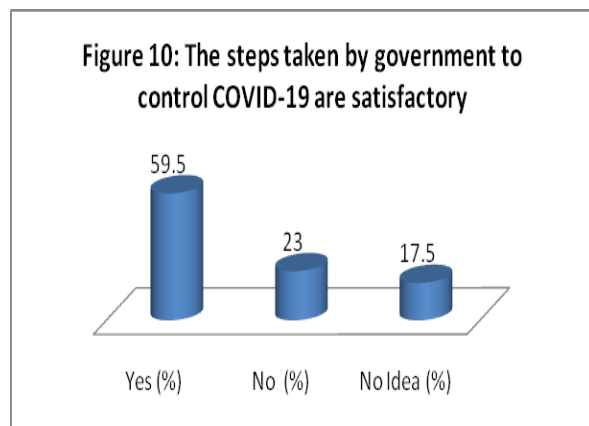
other people. The lack of medical facilities as per respondents is a big issue.



The data shown in Figure 9, reveals that majority of the respondents (76.5%) agreed that the main cause of COVID-19 spread in country was hiding of travel history by the people. However (7.5%) stated that it can't be the main cause of the spread of the disease, as there are many other ways for its spread as well. And another section (16%) of the respondents was unable to express their views either way

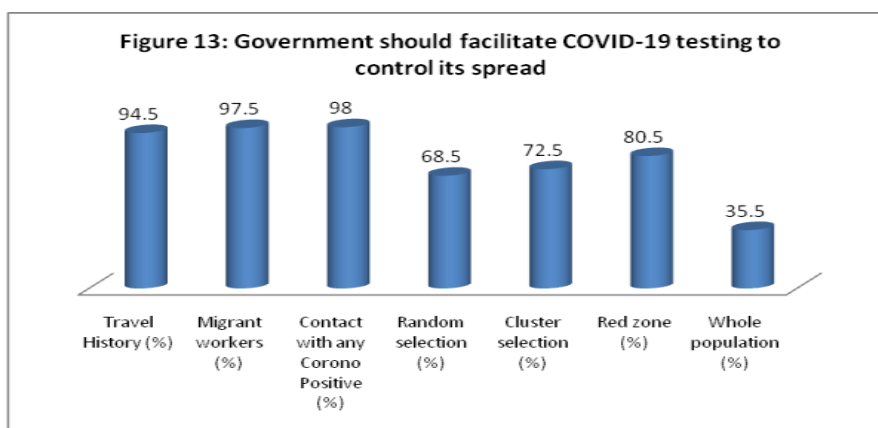


The data shown in Figure 10, reveals that majority of the respondents 59.5% agreed that the steps taken by the government to control COVID-19 are satisfactory. However, 23% respondents don't agree that steps taken by the government were satisfactory and 17.5% of the respondents didn't response in any way.



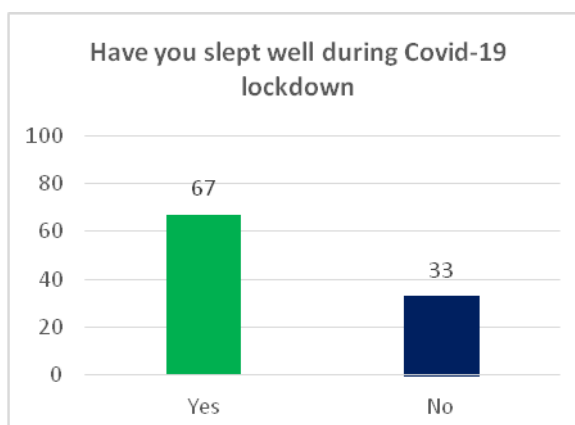
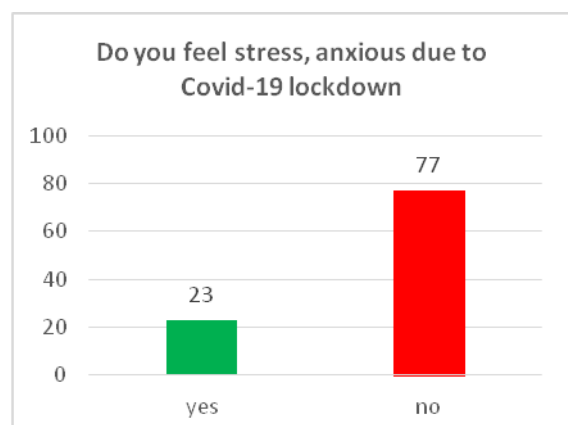
The data shown in Figure 12, reveals that majority of the respondents (62.5%) agreed that the NGOs and welfare trusts are playing satisfactory role in present COVID-19 lockdown. However, 37.5% respondents

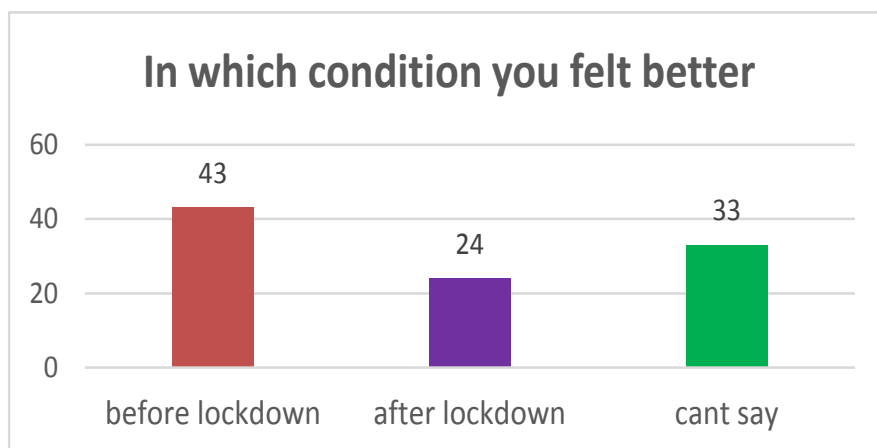
were of the opinion that they are not playing satisfactory role as so many deserving help poor people are not helped because of NGOs biasness.



The data shown in Figure 13, reveals that respondents were of the opinion that Government should facilitate COVID-19 testing to control its spread. The respondents were of the opinion that those who have travel history (94.5%), who are migrant workers (97.5%), who contact with any corona positive (98%), those living in

red zones (80.5%) should be tested on priority basis. Further, the responded feel that COVID-19 testing using random selection (68.5%), cluster selection (72.5%) and testing of whole population (35.5%) is needed for the safety of the people of any state.





## CONCLUSION

The current COVID-19 pandemic is causing widespread concern, depression and anxiety among the people all over the world. The mental problems caused by COVID-19 lockdown impacted the psychological wellbeing of individuals from the entire community including students, casual labours, healthcare professionals and the general population. The elders, females, students, people living in stress condition, healthcare professionals at front-line, and those who are with underlying chronic conditions are at a higher risk. The respondents under study were following precautionary measures to avoid COVID-19 as per WHO and state guidelines on pandemic that is physical distancing and staying home as the only feasible therapy to control the spread of pandemic.

The study revealed that majority of students spent maximum time at home checking daily details about COVID-19 spread, worried about their family members and was not satisfied the way Government tackled this problem at the initial stage of COVID-19 spread. The respondents of our study were of the opinion that Government should facilitate COVID-19 testing for the safety of the people using random selection (68.5%), cluster selection (72.5%) and testing of whole population (35.5%) in red zones at least. The respondents understudy in majority want that people who have travel history (94.5%), who are migrant workers (97.5%), who contact with any

corona positive patient (98%), those living in red zones (80.5%) should be tested on priority basis. The respondents understudy in majority were of the opinion that COVID-19 lockdown is a temporary solution to control COVID-19 spread and if it continues for a long time may result in many problems like psychological problems, social problems, economic problems and religious problems. The pandemic resulted in income loss due to job loss or reduced income due to COVID-19 lockdown gave birth to domestic problems. The studies show that fear causes stress and when we are stressed the hormones cortisol and adrenaline increase and they suppress the effectiveness of the immune system. The suppression of immune system leaves the body vulnerable to disease and infection. It is important to aware people that with fear we are at risk of developing a severe disease. COVID-19 does not see race, religion, caste, creed, language before striking so it is important we fight together with COVID-19. The researchers finally suggested that policy makers, mental care health providers and religious scholars provide mental support as is needed at this time to the vulnerable group. Further, it was suggested that to cope with COVID-19 lockdown stress, people should keep themselves busy in physical activities, religious activities and social work.

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