

# Concerns of University Students Regarding COVID-19 Lockdown: An Online Cross-Sectional Survey in Karachi, Pakistan

SEEMA MUMTAZ<sup>1</sup>, SAMEERA ALI RIZVI<sup>2</sup>, NIDA SHOAIB<sup>3</sup>, AYESHA TAHIR<sup>4</sup>, NIAZ AHMED<sup>5</sup>, SHEIKH HASSNAIN HAIDER<sup>6</sup>, MUMTAZ ALI<sup>7</sup>

<sup>1</sup>Chair - CHS, KIMS – NUM, Karachi

<sup>2</sup>Assistant Professor Department of Public Health, Faculty of Life Sciences, SZABIST, Karachi

<sup>3</sup>Lecturer, Department of Public Health, Faculty of Life Sciences, SZABIST, Karachi, Pakistan

<sup>4</sup>Senior Lecturer, CHS, United Medical and Dental College

<sup>5</sup>Coordinator, JSI Research & Training Inc, Karachi, Sindh Pakistan

<sup>6</sup>BS Biosciences, MSPH

<sup>7</sup>Director CFM, PMA Karachi

Correspondence to Dr. Nida Shoaib, Email: [Nida.shoaib@szabist.pk](mailto:Nida.shoaib@szabist.pk), Cell: 0322-2012989

## ABSTRACT

**Aim:** To assess the concerns of university students regarding COVID-19 lockdown.

**Methods:** A Cross-Sectional online survey was conducted among student population living in different socio-economical areas of Karachi. Information was gathered on their age, gender, education level, occupation status, area of residence, and knowledge about lockdown due to Covid-19. These variables were examined according to the socio-economic status of the area where students reside.

**Results:** A total of 200 subjects above 20 years were interviewed out of which data was analyzed for 160 subjects. The majority of students were between the ages of 20-25 years, females, Muslims, and unemployed. According to 86.9% of students COVID-19 can be prevented by avoiding contact and almost 74.4% students were in favor of lockdown further 37.5% students wanted no gaps between lockdowns. In this study, 31.3% spent time using phones while 15% spent time reading while 22% of the students spent their time in physical activity. Almost 66.3% of students did not develop any psychological problems. About 77.5% did not face any financial problems.

**Conclusion:** Most of the respondents were in favor of lockdown as COVID-19 spread can be prevented by avoiding contact. Study highlighted COVID-19 lockdown had no effect on mental health of the respondents. This study will help in creating awareness regarding lockdown. It will enlighten new arenas for public health experts and stakeholders to develop new strategies, and interventions and predict a preparedness program plan for future Pandemic.

**Keywords:** Covid-19, severe acute respiratory syndrome (SARS), Lockdown, Karachi

## INTRODUCTION

Coronaviruses are ubiquitous causes of respiratory infection in humans, causing common cold continuing as longstanding pandemics of low severity. Recent outbreaks of higher virulence coronaviruses e.g., those associated with the severe acute respiratory syndrome (SARS), Middle Eastern respiratory syndrome (MERS), and coronavirus disease of 2019 (COVID-19) have resulted in high numbers of deaths and diseases leading towards drastic public health measures, and development of coronavirus vaccines<sup>1,2</sup>.

Pneumonia of unknown origin was first reported in 2019 by the World Health Organization (WHO). Consequently, international flight traffic was greatly affected, and Hubei province was placed under lockdown ~3 weeks after the start of the COVID-19 outbreak. In Wuhan, the imposed lockdown resulted in travel restrictions ensuring quarantine, social distancing was practiced by closing public places, schools, and universities, and outside activities were limited as citizens were given a permission card. Despite this rigorous enforcement in China to contain the COVID-19 spread, it transformed the COVID-19 outbreak into a global pandemic declared by WHO in 2020<sup>3,4</sup>.

Evidence suggested that human-to-human transmission of SARS-CoV-2 occurred through droplets, contacts, tears, and fomites<sup>5</sup>. At the community level, the most important measures for reducing infection spread relied on case detection, isolation, and contact tracing of positive cases, followed by quarantine for those exposed. Other strategies include the closure of places of mass gathering and the suspension of all social events<sup>6</sup>.

Rodolfo et.al assessed rates of mental health outcomes in the Italian population three to four weeks into the lockdown and related potential risk factors. Selected outcomes were PTSS, depression, anxiety, insomnia, high perceived stress and adjustment disorder were 6604(37%), 3084(17.3%), 3700(20.8%),

1301(7.3%), 3895(21.8%) and 4092(22.9%), respectively. Being a woman, younger age, stressful life events, quarantine, discontinued working activity or working more than usual, deceased loved one by COVID-19 were potential risk factors. This concluded high rates of negative mental health outcomes that warranted further monitoring of the population's mental status<sup>7</sup>.

Timon et.al did research on assessing change in social networks and mental health among Swiss undergraduate students during the COVID-19 crises. The study deduced that students' levels of stress, anxiety, loneliness, and depressive symptoms got worse. Exploratory analyses suggest that COVID-19 specific worries, isolation in social networks, lack of interaction and emotional support, and physical isolation were associated with negative mental health trajectories. This offered starting points to identify and support students at higher risk of social isolation and negative psychological effects during the pandemic<sup>8</sup>.

A descriptive study conducted in India analyzed health-related anxiety in respondents during the lockdown. Regarding coping mechanisms, respondents displayed high engagement with social media and connect with their loved ones using technology. Respondents felt responsible for disease control, prevention, spread, and healthy protective behavior. The study provided preliminary insights into people's perception of Health Anxiety, Locus of Control, and Coping mechanisms<sup>9</sup>.

A cross-sectional survey was conducted in the Gujrat population on the psychological effects of lockdown and mitigating factors for it. People developed psychological stress and disorders like stress, anxiety, anger, insomnia, low mood, irritability, depression, emotional exhaustion, and post-traumatic stress symptoms. 60.89% of people showed anger, 73.7% believe that their work efficiency was decreased, 39.5% people believe that their family income reduced, 54.9% people have increased negative thoughts during a lockdown. 49.6% of people were using electronic media and the internet, 43.2% people spend their time reading and doing their favorite hobbies as a mitigating factor against psychological effects<sup>10</sup>.

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Pakistan has the world's sixth-largest population, estimated at 220 million. For a country of this size, public opinion polling offers an efficient method of ascertaining the views and perceptions of public in a meaningful way, especially during crisis.

The researchers wanted to know the importance and limitations of lockdowns and researchers wanted to give a plan for future such pandemics and lockdown. The study assessed the concerns of university students during COVID-19 lockdown.

**MATERIAL AND METHODS**

A community-based cross-sectional survey was conducted in a public university of Karachi, Pakistan from March-September 2020. This study was conducted online during the complete lockdown in Karachi using convenience sampling technique due to lockdown situation of Pakistan. Students between 20-30 years were selected. A total of 200 students were contacted, out of whom 175 students agreed to provide us with the required information. After cleaning of data for missing information a total of 160 responses were used for this study. Information was gathered age, education, monthly income, ethnicity and employment status of students, area of residence, and their concerns about lockdown due to Covid 19.

The study principal investigator developed a pre-coded structured questionnaire in English. Data was collected using a structured and pretested questionnaire in English. Data were cleaned and analyzed using Statistical Package for Social Sciences (SPSS) version 20. Frequency, mean and standard deviation were obtained for continuous variables while the categorical variable was assessed by computing frequencies. The written informed consent was taken from each respondent. Ethical approval was provided by the Department of Community Health Sciences, through Ethical Research Committee.

**RESULTS**

We interviewed a total of 200 university students with an overall response rate of 80%. After the cleaning of data for missing information, the sample of 160 students was analyzed. Majority of students were between the ages 20-25 years. Approximately 66.9% were between 20-25 years, while 30-40 years were few. Our sample consisted of 63.8% females and about 77% students were undergraduates. Almost 93.1% were single while only 8.8% were married students. All most all the students enrolled were Muslims further approximately 83% students were not employed. (Table 1)

Table 1: Socio-Demographic characteristics of university students

Characteristics	(n = 160)	Percent%
<b>Age</b>		
15-20 years	36	22.5
20-25 years	107	66.8
25-30 years	17	10.6
<b>Gender</b>		
Male	58	36.3
Female	102	63.8
<b>Education</b>		
Undergraduate students	124	77.5
Graduate students	36	22.5
<b>Marital Status</b>		
Single	146	91.3
Married	14	8.8
<b>Religion</b>		
Islam	159	99.4
others	1	0.6
<b>Employment status</b>		
Unemployed	133	83.2
Employed	27	16.8

Out of 160 students about 96.9% were aware of COVID-19 while only 2.5% reported that they don't know about this infection. According to 86.9% students COVID-19 can be prevented by avoiding contact. Almost 93% students agreed with effectiveness

of social distancing. 47.5% have negative impact on their life due to COVID-19. (Table 2)

Table 2: Information about COVID-19 prevention among university students

Information about COVID-19 prevention	n = 160	Percent %
<b>Knowledge about COVID-19</b>		
Yes	155	96.9
Little knowledge	1	0.6
Do not know	4	2.5
<b>Possibility of prevention of COVID-19 by avoiding contact</b>		
Yes	139	86.9
No	3	1.9
Maybe	18	11.3
<b>Effectiveness of social distancing</b>		
Yes	148	92.5
No	6	3.8
Maybe	6	3.8
<b>Negative impact on life</b>		
Yes	76	47.5
No	68	42.5
Do not know	16	10.0

Out of 160 students who were included in the study 74.4% were in favor of lockdown. According to 48.3% people, COVID-19 caused more deaths during this pandemic while almost 50% reported that poverty and unemployment caused more deaths during this period. Approximately 60.6%, reported that it is right decision to extend lockdown and 64.6% students reported that there is improvement in the number of cases due to lockdown. 77.5% of the selected students faced no financial problem during this time due to lockdown. Almost 54.4% students want lockdown to end. Approximately 66.3% did not develop any psychological problems and 53.8% had no effect on mental health. In our sample 87.5% students believe that lockdown is destroying economy (Table 3).

Table 3 Concerns about lockdown to prevent COVID-19 among students

Student concerns about lockdown	n = 160	Percent %
<b>Favor of Lockdown</b>		
Yes	119	74.4
No	26	16.3
Do not know	15	9.4
<b>Cause of increased deaths during pandemic</b>		
Covid19	70	43.8
Poverty	57	35.6
Unemployment	24	15.0
Other reasons	9	5.6
<b>Right decision to extend Lockdown</b>		
Yes	97	60.6
No	27	16.9
Do not know	36	22.6
<b>Decrease in number of cases due to lockdown</b>		
Yes	103	64.4
No	27	16.9
Do not know	30	18.7
<b>Financial problems faced due to lockdown</b>		
No	124	77.5
Yes	21	13.1
Do not know	15	9.4
<b>Development of psychological problems</b>		
No	106	66.3
Yes	44	27.5
Do not know	10	6.3
<b>Effect on mental health</b>		
No	86	53.8
Yes	66	41.3
Do not know	8	5.0
<b>Lockdown destroying the economy</b>		
Yes	140	87.5
No	9	5.6
Do not know	11	6.9

Almost 54% of students want lockdown to end and 37.5% students want no gaps between lockdowns while 30% were not sure. Approximately 46.3% follow the lockdown rules nearly all time while 34.4% completely follow the lockdown rules. Almost 67.5% of the students were in favor of quarantine (Table 4).

Table 4: Student views about Lockdown

Student views about Lockdown	n = 160	Percent %
<b>Want lockdown to end</b>		
Yes	87	54.4
No	47	29.4
Do not know	26	16.3
<b>Want gaps between lockdown</b>		
No	60	37.5
Yes	50	31.3
Do not know	50	30.6
<b>Follow the lockdown rules</b>		
Completely	55	34.4
Nearly all time	74	46.3
Hardly anytime	18	11.3
Cannot say for sure	13	8.1
<b>Favor of quarantine</b>		
Yes	108	67.5
No	31	19.4
Do not know	21	13.1

In this study 31.3% spent time using phone while 15% spent time in reading while 22% of the students spent their time in physical activity that included exercising and cleaning/washing/cooking. This study was done during the lockdown state of COVID-19 where the researchers wanted to know the perception of university students regarding the correct decision or otherwise for lockdown. The results of this study showed that 74% of the university students of Karachi were in favor of lockdown.

In sample of 160 students, 96.9% were aware of COVID-19 infection. Most people believed that COVID-19 can be prevented by avoiding contact. Almost 47.5% had negative impact on their lives. Most people were in favor of lockdown and believed it will decrease the number of new cases. 77.5% had no financial problem. 87.5% people believed that lockdown is destroying the economy of the country.

## DISCUSSION

This study showed the concerns of students from a public sector university regarding the lockdown situation faced by them during COVID-19 pandemic and its importance. Overall data showed that majority of the participants were females and single participants. Most of the respondents were undergrad students and were not working. While assessing the concerns about the lockdown in order to prevent the COVID-19 pandemic. The study revealed that most of the study participants had the knowledge about COVID-19.

Almost 87% believed that avoiding contact can prevent the spread of disease and social distancing was accepted to be effective in 93% students. Similar results were shown in the studies conducted in India and New Zealand<sup>9</sup>.

On one hand 74.4% participants agreed that lockdown was a crucial step and that extension in the lockdown period improved the prevalence of the disease, these results are in line with the study conducted in New Zealand that showed the trust people living there have in the government regarding decisions related to health and well-being of the community. While on the other hand 54.4% of the students suggested to end the lockdown, and 88% believed that economy had suffered due to prolonged periods of shutdown, as these results were consistent with the results of a study conducted in New Zealand that showed that prolonged lockdown can cause a threat to the economy<sup>11</sup>.

According to the present study 66.3% revealed no psychological problem development and 53% agreed to have no mental health related issues, these results are in line with the Swiss study that showed that individuals with family support were less likely to develop psychosocial issues<sup>8</sup>.

Students' insights about the lockdown were mixed. 38% wanted gaps in the lockdown while 31% wanted continuation in the process of lockdown in the current study.

According to the study conducted in India participants abide by the lockdown rules laid by the government in controlling the

pandemic<sup>9</sup>, current study also displayed the similar results, 46.3% complied by the lockdown rules nearly all the time.

As described in an Italian study the participants felt more depressed due to quarantine the results were contrasting from the current study that showed 67% were in favor of quarantine, as they believed that this will reduce the disease spread<sup>7</sup>. Coping strategies included increased the use of mobile phone i.e., 31%, these results are similar to the studies conducted in India and Switzerland which showed increased usage of online devices<sup>8,9</sup>.

Current study showed that physical activities including household chores accounted for 22%, while 15% preferred spending their time reading as coping strategies, a study conducted in Gujrat showed similar results in order to mitigate the psychosocial effects of lockdown<sup>10</sup>.

This study will help in understanding the perception of general public of Pakistan for the correct decision taken by the government for the lockdown. It also will help for the future pandemic strategies and planning in advance for lockdown issues. The researchers understand the complexity of getting data from all the population of Pakistan through online system, as there was lockdown in the country. The sample size is too small to reach to a valid conclusion but the truthfulness of the issue is highlighted.

## CONCLUSION

This study showed the concerns of university students regarding the lockdown situation faced by them during COVID-19 pandemic and its importance.

The study revealed that most of the respondents were in favor of lockdown as COVID-19 spread can be prevented by avoiding contact without any gaps. The participants believed that lockdown can be extended and students faced no financial problem during this time. The study also highlighted that COVID-19 lockdown had no effect on mental health of the respondents and did not face any psychological problems.

This study will help in creating awareness regarding lockdown as well the challenges and benefits faced by university students for future pandemic situation. It will enlighten new arenas for public health experts and stakeholders to develop new strategies, interventions and predict a preparedness program plan.

**Conflict of interest:** Nil

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