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A SURVEY ON IMPACT OF LOCKDOWN DUE TO CORONAVIRUS 2 (SARS-CoV-2) PANDEMIC, 2019 (COVID-19) ON PSYCHOLOGICAL, MENTAL AND SOCIAL LIFE OF STUDENTS

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ABSTRACT

The COVID-19 (corona virus illness) is a public health emergency of global concern that has posed a strong challenge to rescue the psychological, economic and social health of people. The pandemic has created an adverse disturbance in social lives not only in elders, businessman, employed but also among students. To tackle such situations, a consolidated research data is required to develop policies to study, analyze and interpret the impact of this illness on the mental health of students. The aim of the current study was to better understand and assess the psychological thoughts of the students that includes anxiety levels, fear, panic, stress, depression during this lockdown period. This research data will also help us to explore the potential risk factors associated with impact of COVID-19. The results of our study revealed that 60.1% respondents suffered anxiety and changes in the mood, along with a feeling loneliness (57.7%), low motivation (68%), mental stress (49.5%), stress about their family health (92.5%). Many (87.5%) of them believe that lockdown has affected their academic performance and preparation strategies and it will have a long term affect in their future, if COVID-19 lockdown continues. Further,

majority of the respondents (82.2% & 61.9%) believe this lockdown has provided them more time to review themselves psychologically to work on their future endeavors and moreover 83.6% believed that this unusual long lockdown has made them more strong and patient to live a stress free life. The respondents also believe that they feel more connected with their families now and have more time to rejuvenate themselves. Shockingly, 69.4% respondents agreed that they were afraid of getting COVID-19 tested due to trauma and social stigma associated with it. However, a majority of 93.2% respondents agreed that they would go for COVID-19 testing if they or any of their family member show symptoms recommended by WHO. A Majority of 97.2% respondents felt worried about the way Government tackled this problem initially. The present study strongly suggested the students must keep themselves busy and engage in various extracurricular activities along with academics to cope with this first time ever encountered lockdown stress due to novel coronavirus. This study will also help policy makers in developing subsequent research strategies and mental health counseling for students particularly post lockdown period.

Keywords: Coronavirus, pandemic, anxiety, stigma, depression, students, lockdown, strategies

INTRODUCTION

COVID-19, a pandemic, (Global Health Emergency) is having a serious impact on mental health of public all over the World (**World Health Organization, 2020; Xiang et al., 2020**). WHO designated this new disease as severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) on 11th February, 2020 and it was officially declared as pandemic on 11th, March 2020 (WHO, 2020). This Global threat is a kind of respiratory illnesses that have turned pandemic throughout the World (**Wang, 2020**), caused by a novel virus (new coronavirus, SARS-CoV-2). It is by far the largest outbreak in the World, and was first detected in Wuhan Province of China around a seafood market (**Nishiura, 2020**). Just like

SARS, COVID-19 also belongs to category of family of beta coronaviruses. According to **Paules, et al., 2020**, a beta-coronavirus can be transmitted to humans through intermediate hosts such as bats. The virus shows contact transmission between people in close contact (less than 6 feet), through droplet infection (coughs, sneezes or talks). However, other transmission methods are also under speculation such as airborne transmission and oro-fecal transmission. The common symptoms include high fever with chills, dry cough, and fatigue. Other symptoms include sore throat, shortness of breath, vomiting, nausea, diarrhea, loss of taste or smell, rash on skin or discoloration of fingers/toes, which progress in few days

(about 6-8 days) and may further evolve to cause severe respiratory illness and multiple organ failure leading to mortality. That is why it has been named as Severe Acute Respiratory Syndrome –Corona Virus (SARS-CoV2) or novel Coronavirus (2019-nCoV). WHO has also recommended that older people (above age 65) and those with underlying pre-existing comorbidities like high blood pressure, cardiac and lung problems, diabetes, or leukemia are more susceptible of developing serious damage through the infection of this virus (**Chen, 2020; Holshue, 2020**). This virus shows average incubation period of around 5.2 days, but significant variation have been witnessed among different patients all over the World (**Li, 2020**). The virus has also shown the ability to spread asymptotically (**Rothe, 2020**). Till now, no medicine, therapeutic or vaccine has been developed and moreover there is no pre-existing immunity in the human population. The COVID-19 infection ranges from being completely asymptomatic to severe pneumonic that can lead to death within few days. WHO reported the conditional casualty rate of this disease to be around 2%, but some researchers have speculated it to range from 0.3% to 0.6% (**Nishiura, 2020**). In view of this pandemic, a complete lockdown was

imposed by all the countries to prevent the spread of COVID-19.

Lockdown has impact on every one of us. The Lockdown measures imposed travel restrictions, the obligatory closure of schools, Colleges, Research Institutes, complete shutdown of Air and railways and all nonessential commercial activities. Social isolation or social distancing became the prime rule to make the lockdown a success. Lockdown has lead to damaging and long lasting psychosocial effects on people of all ages, specially the elders and the students. The fear and anxiety, long duration of social isolation, the blues of undergoing quarantine and the misinformation through social media and elsewhere (**Dong and Bouey, 2020**) has made this disease more detrimental and created acute stress and fear among large number of population. Self Quarantine or Government quarantine has been strongly associated with depression (**Hawryluck et al., 2004**), acute stress levels (**DiGiovanni et al., 2004, Bai et al., 2004**), irritability and insomnia (**Lee et al., 2005**), and trauma-related (**Wu et al., 2009**) disorders.

Similarly, the unexpected, sudden and long tenure of lockdown has dramatically affected the global higher education system. This has surely affected the psychological condition and thoughts of our students. Therefore, it

becomes absolutely necessary to read the pulse of the students as how they are dealing this crisis. The aim of the current study was to assess the mental health of the students during this lockdown period that will help us to explore the potential risk factors associated with impact of COVID-19. This study will help in developing subsequent research strategies and mental health counseling for the stakeholders on higher education institutions for student's post lockdown.

Timings of Lockdown period in India:

- Phase 1: 25 March 2020 – 14 April 2020 (21 days)
- Phase 2: 15 April 2020 – 3 May 2020 (19 days)
- Phase 3: 4 May 2020 – 17 May 2020 (14 days)
- Phase 4: 18 May 2020 – 31 May 2020 (14 days)
- Phase 5 (only for containment zones): 1 June 2020 – ongoing (11 days); scheduled to end on 30 June 2020

Materials & Methods:

The present survey was conducted by preparing a questionnaire and the information from 281 undergraduate and postgraduate students was collected. The questionnaire was formed in the form of google form and comprised of 22 questions. The survey was

conducted to assess the concerns of these students related to the impact of lockdown due to pandemic caused by COVID-19. The motive was to analyze the psychological health of students in lockdown and precautionary measures that could be taken to improve the mental and physical health of the students, during and post lockdown period. The data collected was tabulated, analyzed and interpreted. The consent of the people under study was taken and the purpose of the study was explained to them.

RESULTS & DISCUSSION:

The data shown in **Figure 1**, reveals that majority of the respondents (60.1%) suffered anxiety and mood swings during the current lockdown period. However, 39.9% responses showed no such signs. The data of **Figure 2** showed that 57.7% respondents felt loneliness and further 72.6% respondents faced difficulty in concentrating on their studies and hobbies (**Figure 3**).

The data of **Figure 4**, revealed that 68% respondents felt low motivation and state of distraction from working on their academic and day to day activities. About 49.5% respondents were more mentally stressed and majority of 80.1% faced negative stressed emotional stressed moments during mild symptoms of cough and sneeze during lockdown period.

The data from **Figure 7** clearly revealed that 59.8% respondents feared and panicked about this novel coronavirus. One of the main reason for this fear could be related to increased financial stress on their families as revealed by data of **Figure 8**, where an equal amount of 59.8% respondents showed such worries.

The pandemic has obviously stressed the students about the future which was clearly discovered by data of **Figure 9**, where majority of 92.5% respondents were extremely worried about their future. Similarly, 92.5 % respondents from **Figure 10** revealed that the respondents were more stressed and worried about the health of their family members.

However, as revealed by **Figure 11**, a majority of 78.3% respondents felt happy as they got more time to rejuvenate themselves so that they could indulge in extracurricular activities other than academics.

The data from **Figure 12** revealed that majority of respondents (87.5%) agreed that COVID – 19 lockdown will surely affect the academic performance of students. However, just 12.5% believed that online classes can rescue and secure the future of students. Also, 82.6% respondents felt that their preparation for upcoming national level entrance examinations particularly UG and

PG admissions have suffered a lot (**Figure 13**).

Because of uncertainty about future admissions, about 82.9% respondents believed that they had to change their study plans due this ongoing pandemic (**Figure 14**). On the other hand, the data from figure 15 revealed that 61.9% respondents felt that they got new opportunities with generous time to prepare for future endeavors with new inputs.

The data shown in **Figure 17** showed that 82.2% of respondents felt that this lockdown have given a chance to review them psychologically, emotionally and mentally. At the same time, Figure 18 data indicated that 83.6% respondents agreed that this long lockdown has made them more strong and patient to deal with such atypical and sudden stressed situations. The pandemic has also made over all communication of respondents with the family and relatives much better and open as revealed by 89% respondents (**Figure 16**).

The data form **Figure 19** suggested that 79.9% respondents completely believed that the NGO'S and welfare trusts in India have played a satisfactory role in present COVID-19 lockdown situation in combating the stress faced by economically weaker sections of the society. However, 23% respondents

opined that these have not played a satisfactory role as many poor and deserving people have not been helped and rescued because of some NGO's biasing towards some specific community and state.

A good amount of 97.2% respondents (Figure 21) felt that government should facilitate more testing of COVID -19 to control the transmission of virus (Figure 20).

The data from Figure 21 revealed that majority of respondents 69.4% were of agreement that they were afraid of getting

tested for this novel virus i.e. COVID – 19, while 30.6% respondents stated that they were not afraid of getting tested as it will help them to save themselves and their families from further spread and prevention of the disease. As per analysis, 93.2% respondents agreed that they would go for COVID-19 testing of themselves and their families if they show any one of the symptoms as recommended by World Health Organization (WHO) (Figure 22).

Figure 1: Did you suffered any anxiety and mood swings during the lockdown?

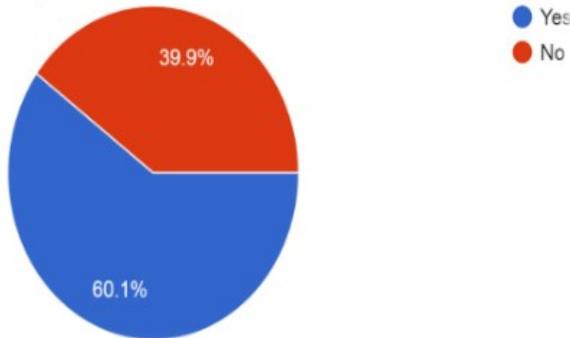


Figure 2: Did you feel loneliness during the lockdown period?

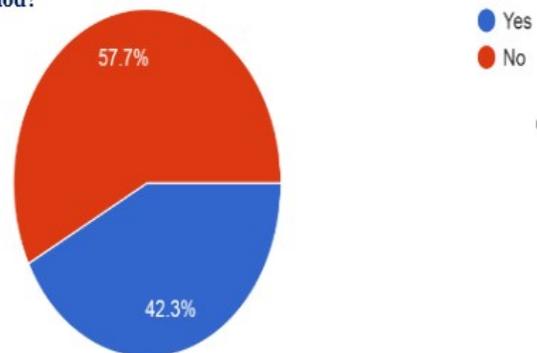


Figure 3: Did you face difficulty in concentrating on your studies/hobbies?

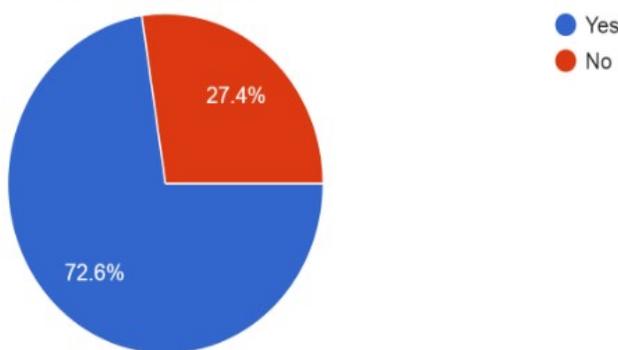


Figure 4: Did you feel low motivation and state of distraction?

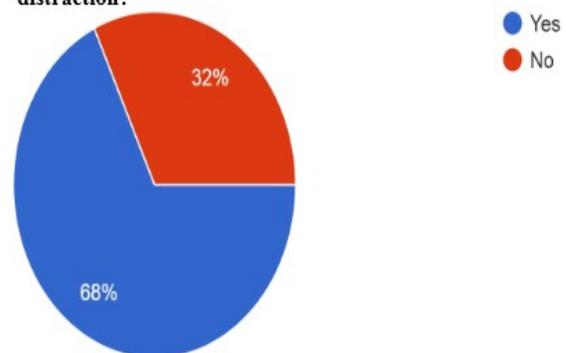


Figure 5: Did you feel more stressed mentally in this lockdown period?

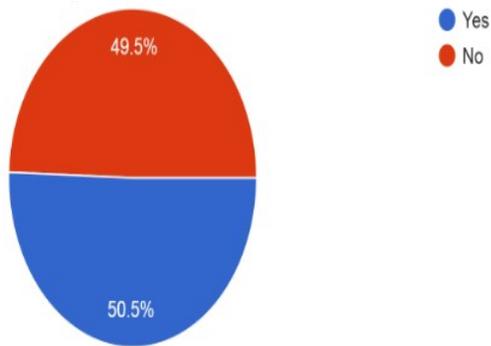


Figure 6: Did you faced any negative emotional stressed moments regarding mild symptoms of cough and sneeze at times?

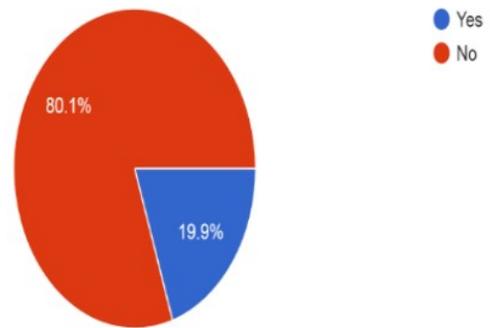


Figure 7: Did you face panic and fear of this virus?

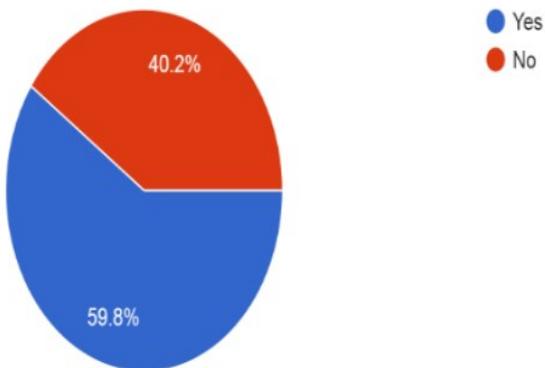


Figure 8: Did you feel increased financial stress on you and your family?

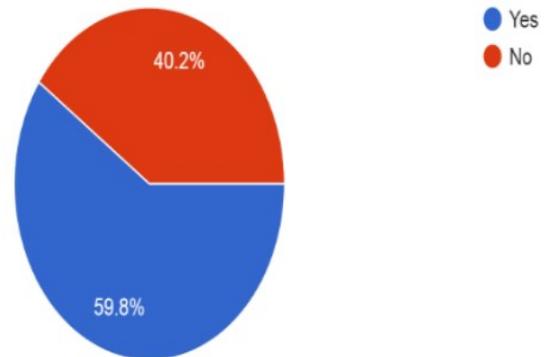


Figure 9: Were you worried about your future?

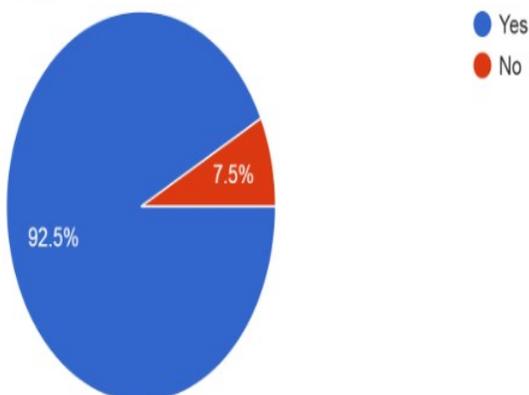


Figure 10: Were you more worried & stressed about the health of your family members?

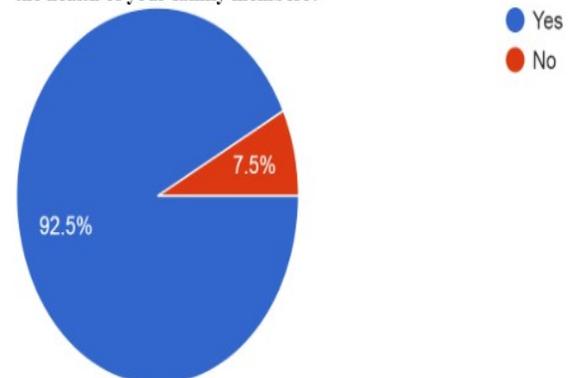


Figure 11: Did you feel happy that you got more time to rejuvenate yourself and indulge in extracurricular activities?

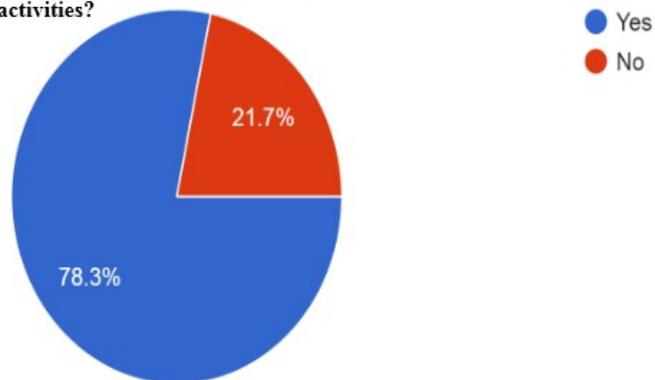


Figure 12: Do you feel that lockdown will affect the academic performance of students?

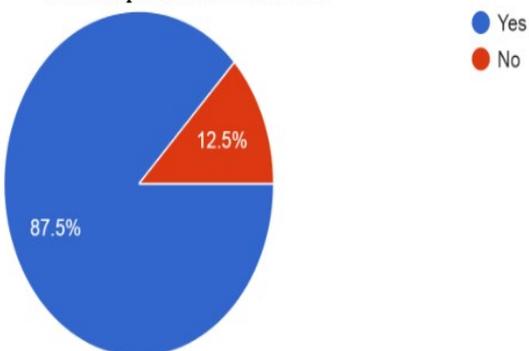


Figure 13: Do you feel that your preparation for upcoming entrance exams have suffered?

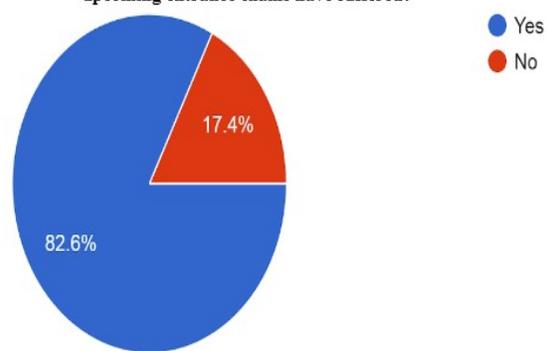


Figure 14: Did you change your study plans due to the virus outbreak?

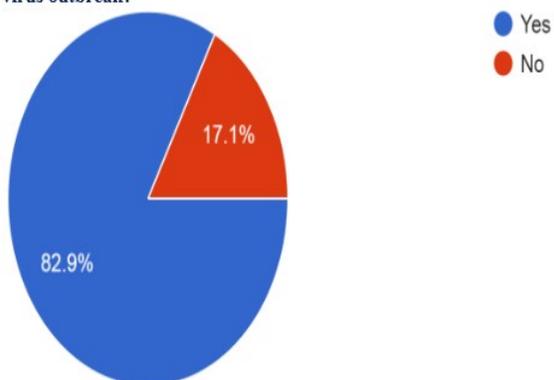


Figure 15: Do you feel that this lockdown has given you opportunity with more time to prepare for your future endeavours?

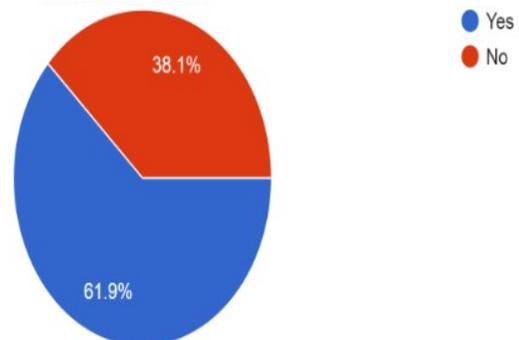


Figure 16: The lockdown has made communication better with your family and relatives?

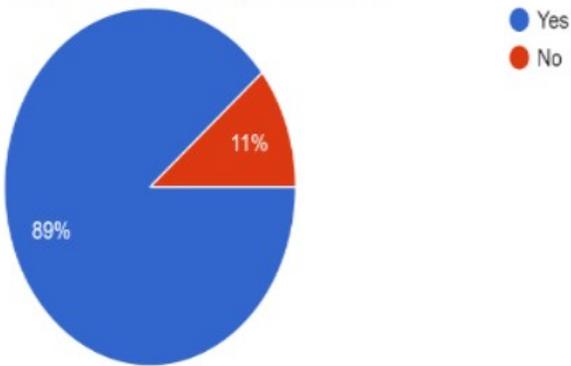


Figure 17: Do you feel that this lockdown has given you a chance to review yourself psychologically?

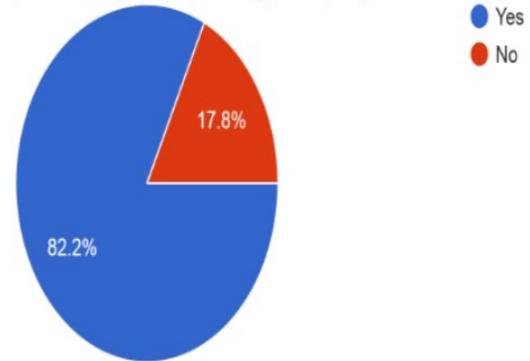


Figure 18: Do you feel that this lockdown has made you more strong and patient to deal such stressed situations?

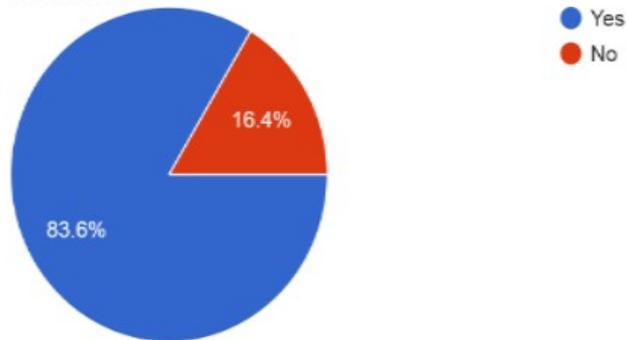


Figure 19: Did you feel that the NGO'S and welfare trusts have played satisfactory role in present COVID-19 lockdown?

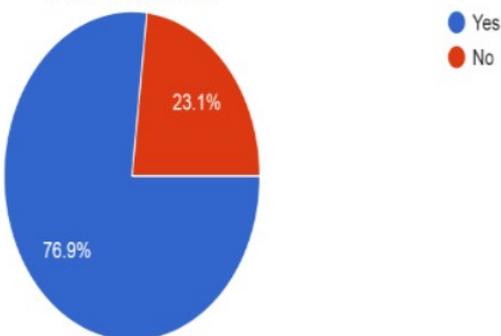


Figure 20: Do you feel that Government should facilitate COVID -19 testing to control its spread?

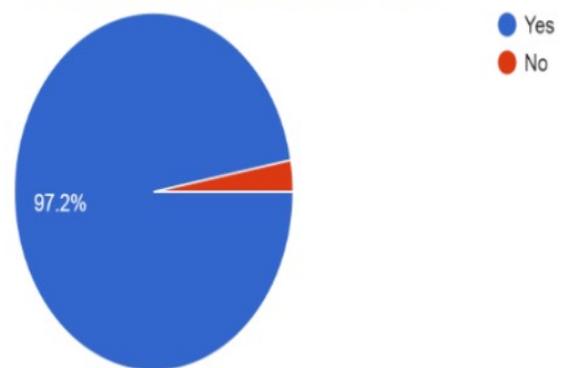


Figure 21: Are you afraid of testing for COVID-19??

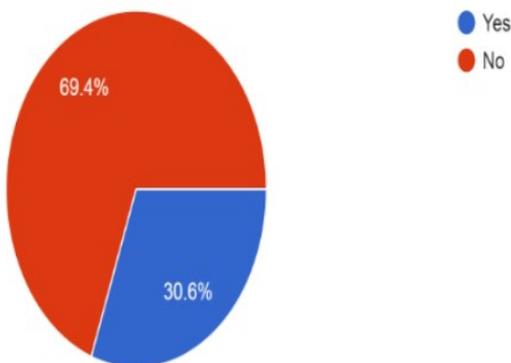
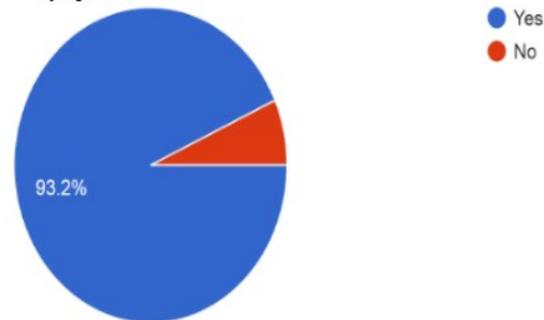


Figure 22: Will you go for COVID-19 Testing if you and your family members show WHO recommended symptoms?



CONCLUSION:

The present study was able to report the impact of novel virus – COVID – 19, on the psychological health of students. The study was prepared to get the insights and thoughts of mental health of students that are grounded at their homes due to pandemic caused by the coronavirus in the country. The present results showed high prevalence of anxiety & mood swings (60.1%), loneliness (57.7%), low motivation and distraction (68%), negative thoughts (80.1%) among respondents. One of the main reason for this high frequency of anxiety among students could be because it is the for the first time that this type of lockdown has been encountered by them. Moreover, this pandemic has already impacted a population with many hard challenges such as lack of employment, salary cuts, family issues, domestic violence, frustration and other

forced changes in lifestyle, which are significant reasons for manifesting high anxiety levels. Since the present study included only undergraduate and postgraduate girl students, and mostly unmarried. This makes them more vulnerable to anxiety and mood swings due to more fear, panic and stress. Scientifically, the stress causes quantitative change in release of hormones such as epinephrine, non-epinephrine, cortisol, that leads to suppression of our immune system, making it more susceptible to any kind of infection. The high level of stress has ultimately lead to decrease in concentration power of these students towards academics and even extracurricular activities. However, majority of respondents feels happy to get extra leisure time to peruse their extracurricular endeavors, to rejuvenate themselves, whether it includes their hobbies or indulging in

fitness track. The students strongly believe that this lockdown has affected their strategic plan of study, be it the semester examination or national entrance examinations, due to which they have to change their study plans. The worries about their future has gained a sharp toll during this period.

On a positive note, majority of respondents believe that they have gained better communication with their family and relatives, and now they have a chance to make themselves spiritually more sound, strong and more patient to tackle such stressful situations. Most of the respondents under study believe that the NGO'S and other welfare trusts have played a satisfactory role in combating the pandemic situation for needy people. However, at the same time, a colossal number of 97.2% respondents believe that Indian government should facilitate more COVID-19 testing, to ensure the safety of people, as they were worried about the unusual ways adopted by the government to tackle the situation in rural areas of the country. It was shocking to observe that 69% of respondents under study were afraid of getting tested for COVID-19. The longer duration of quarantine, fear of infection, boredom, financial loss, frustration, stigma, panic, may lead into depression and suicidal thoughts. The trauma

and stigma of being diagnosed as COVID-19 and the conditions at quarantine centers as displayed by social media have been one of the reason of getting afraid of tested for the virus. In spite of the fear, majority of respondents (93.2%) were sure that they will go for COVID-19 testing if they or their any family member would show the symptom of this novel viral infection.

At the time of conducting the survey, the number of cases was rising up sharply. Therefore, the present study suggests that it is very important to spread awareness about the disease. Since, the fear, anxiety, panic, trauma and social stigma are associated with this disease, the researchers must provide some policies that will improve the mental state of students. It is strongly suggested that university authorities and higher education administration must take pivotal measures to spread awareness, and help students to remain calm, patient and mentally strong at this testing times. It is also believed that students should keep themselves busy in various activities, like physical activities, religious or spiritual activities, gaming, gardening, and other extracurricular activities to cope with this long lockdown stress.

Inspite of the limitations, this online study offers the first cross-sectional data on the impact of the pandemic on actual mental and

psychological health among the students. The study has included online self-administered questionnaire as an effective way of assessing the problems faced by students related to mental health. This kind of study becomes a far-sighted method to conduct research in this period of lockdown. Since these results pertain to the initial period of pandemic in India, there is a need to conduct larger longitudinal study in the present time to help policy makers in understanding the psychological impact of this lockdown stress on our students.

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Source of Conflict: All the authors declare that are no conflict of interests.

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