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## Knowledge and awareness of Covid 19 and its impact on mental health

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### ABSTRACT

The coronavirus disease 2019 (COVID-19) pandemic—and the social distancing measures that many countries have implemented—have caused disruptions to daily routines. Mental health support and follow-up should be provided even six months after the release from isolation for those individuals with prior vulnerable mental health status. The main aim of the study is to create awareness and knowledge about COVID – 19 and its impact on the mental health of the public. The self-administered design was designed based on awareness. The questionnaire was distributed through google docs link to 100 numbers of the study population who were in lockdown irrespective of age. Methods of representation of each output variable were represented in the pie chart form. The measure that was taken to minimize the sampling bias was that the validity that was checked both internally and externally. The result was statistically analyzed using SPSS software. The participants were explained about the purpose of the study in detail. From the above Survey conducted, 58% of the total 100 participants' mental health being affected due to lockdown imposed due to COVID -19. This COVID 19 has created stress, anxious and nervous situations for 47% of the total participants. Educated people and health professionals are aware of this infection; they take possible preventive measures. They understand the importance of social distancing. So this lockdown is not affecting their mental health.



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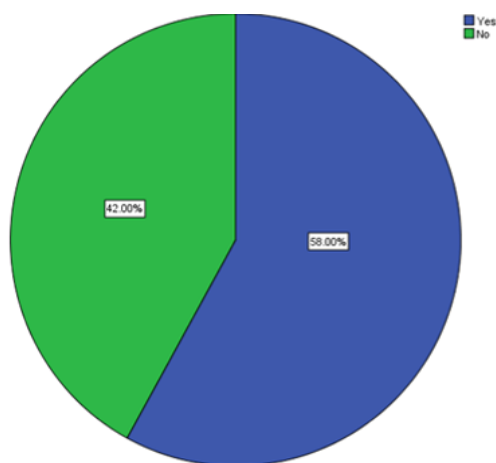
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### INTRODUCTION

The coronavirus disease 2019 (COVID-19) is one of the pandemics—and the social distancing measures that many of the countries have implemented

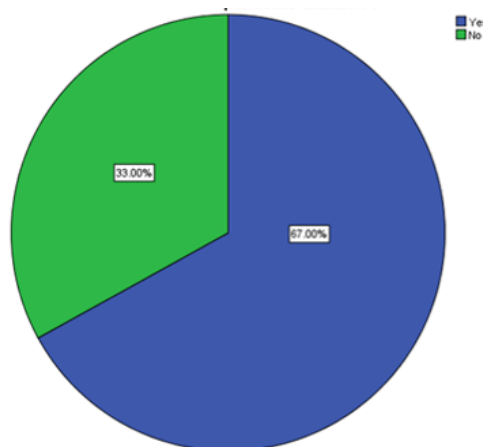
and it has caused disruptions to the daily routine activities. For children and adolescents with mental health needs, such closures mean a lack of access to the resources they usually have through schools (Lee, 2020). During the Korean MERS-CoV outbreak in 2015, the patients were treated with hemodialysis in an isolated environment. Patients have reported decreased values in their hematocrit, calcium and phosphorus levels after two weeks of isolation. Also, the levels of circulating cell-free genomic DNA (ccf-gDNA) and circulating cell-free mitochondrial DNA (ccf-mtDNA), which are indicators of psychophysical stress in humans (Torales, 2020). Support should include accurate information as well as appropriate supplies for the subjects, including food, clothes and accommodation if needed. Mental health support and follow-up should be provided even six months after the release

from isolation for those individuals with prior vulnerable mental health status (Lin, 2007). Mental health problems not only affect understanding, attention, and decision-making capacity of medical workers, which could hinder the fight against COVID-19, but they could also have a lasting effect on their overall well-being (Kang, 2020). Community support might have some effects in reducing PTSD symptoms and psychological interventions, anxiety symptoms and depressive in adults during these stressful events (Purgato et al., 2018). Mental health evaluation of individuals exposed to natural disasters reveals that survivors typically experience various mental health disorders including PTSD, depression, generalized anxiety disorder, panic disorder, and substance abuse (Acierno, 2007; Mason et al., 2010; Norris, 2005). The feeling of anger typically arises in survivors who experience emotional trauma from disasters and this feeling is considered an essential factor in regulating the development of PTSD (Evans, 2001; Galea et al., 2005; Jakupcak et al., 2007).

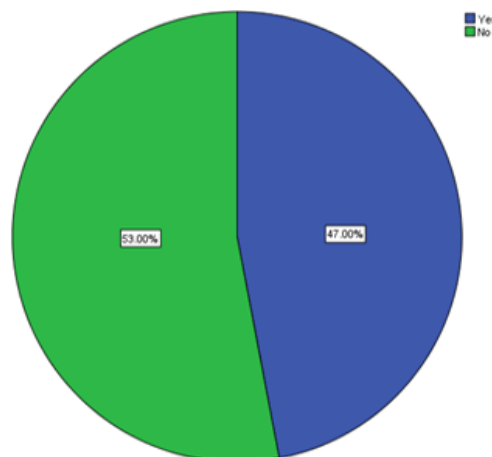


**Figure 1: Pie chart shows the impact of lockdown on their mental health due to COVID 19.**

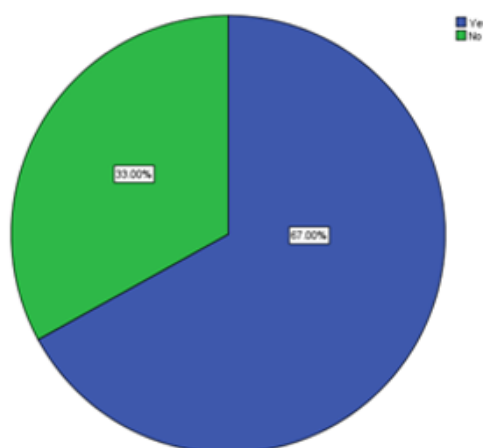
In the previous researches that were carried out by authors, (Han, 2020) in the study they conducted a survey and in that 1,692 individuals were the total number of participants, the results were 16.6%, of the total population were angry during quarantine days. For 3.0% of the population, people faced the anxiety symptoms. Even the other authors (Chua, 2004) in the study he evaluated 271 HCWs from SARS units and 342 healthy control subjects, using the Perceived Stress Scale (PSS) to assess stress levels and the results that he got was Stress levels were raised in both groups (PSS = 18). Still, they were not relatively increased in the HCWs. HCWs reported significantly more positive (94%, n = 256) and more negative psychological effects (89%, n = 241) from



**Figure 2: Pie chart shows the number of people suggesting to get mental health help in lockdown and no of people thinking it's not anecessary one.**



**Figure 3: Pie chart shows the number. of people are feeling nervousness due to this COVID 19.**



**Figure 4: Pie chart shows the number of people who think that it would be a beneficial thing.**

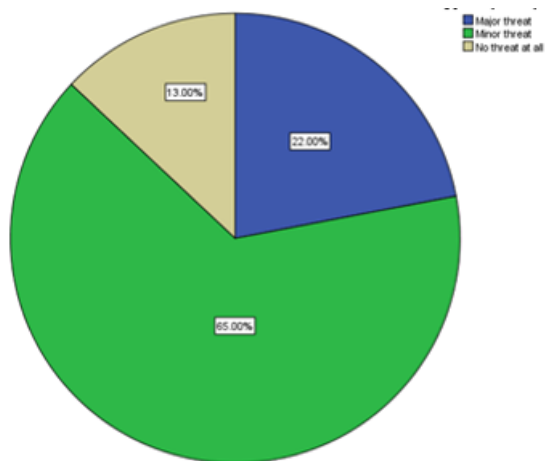


Figure 5: Pie chart shows the threat people faced due to COVID 19.

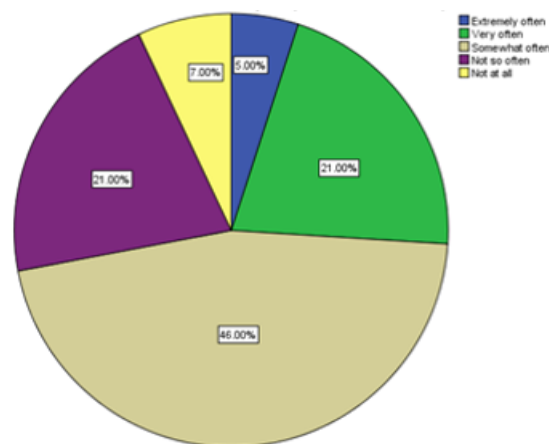


Figure 8: Pie chart shows the frequency of mental health interfering in personal relationships.

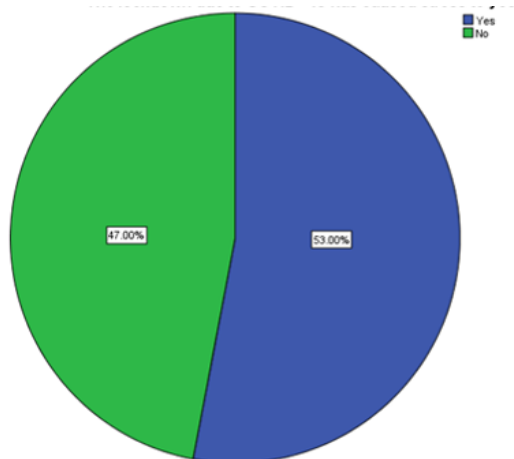


Figure 6: Pie chart shows the number of people stressed due to this lockdown.

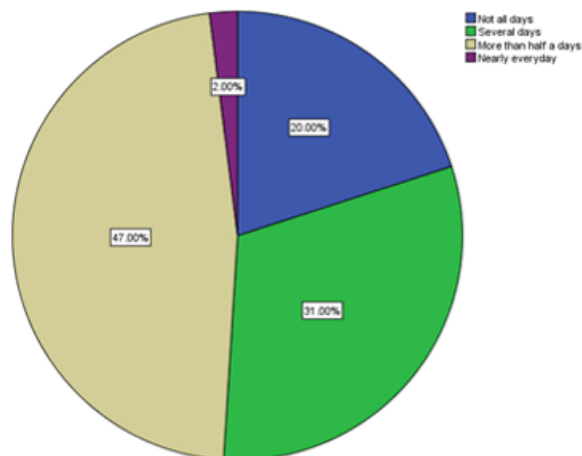


Figure 9: Pie chart shows the number of days people get annoyed easily.

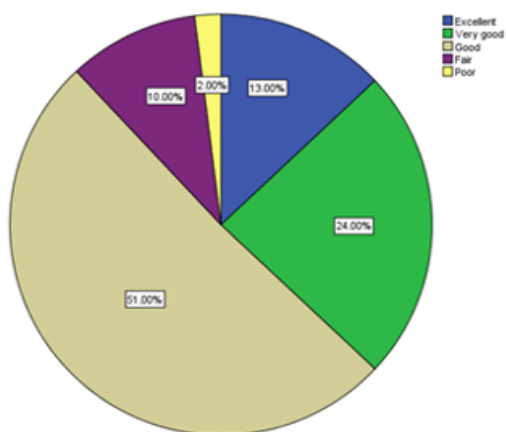


Figure 7: Pie chart shows the mental health of the people during quarantine days.

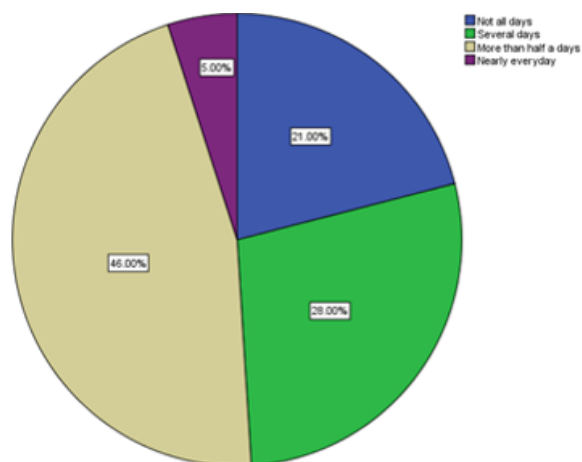


Figure 10: Pie chart shows the number of days people think that something awful might happen.

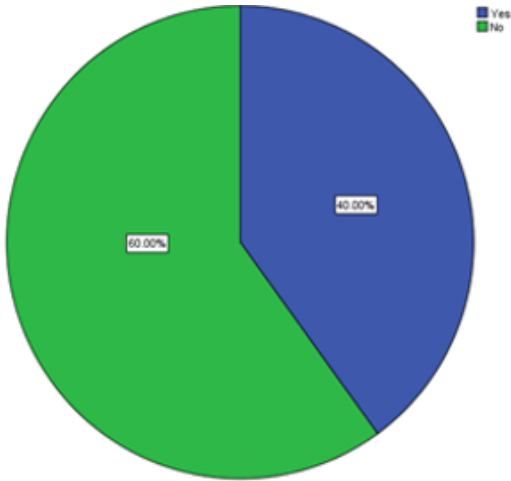


Figure 11: Pie chart shows the number of people worrying in quarantine days.

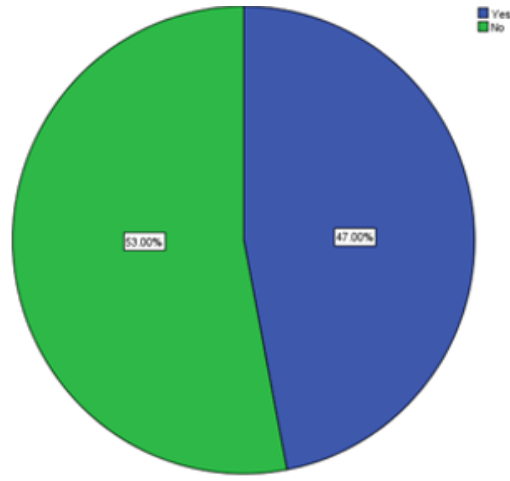


Figure 14: Pie chart shows the number of people who dropped their activity of interest.

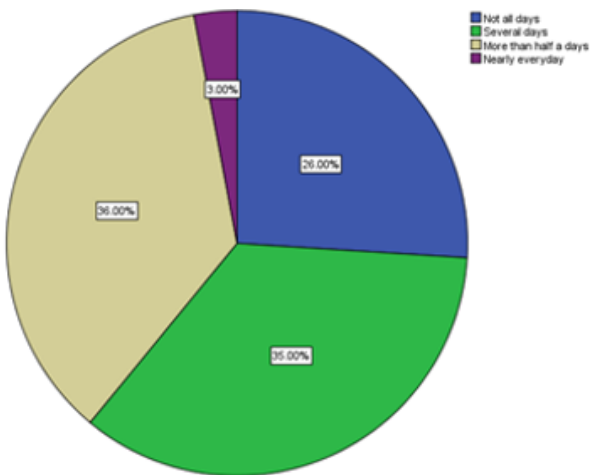


Figure 12: Pie chart shows the number of days people felt anxious or nervous on edge during quarantine days.

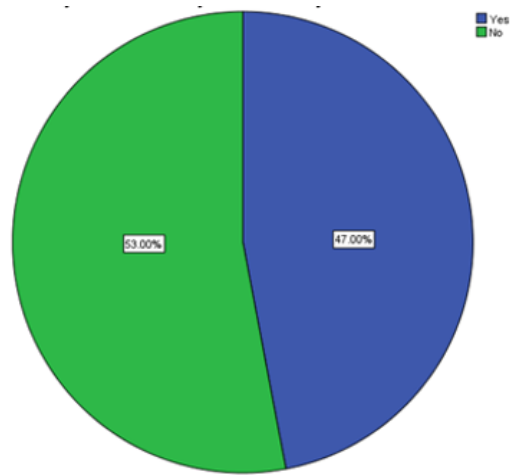


Figure 15: Pie chart shows the number of people felt emotionally drained during lockdown days.

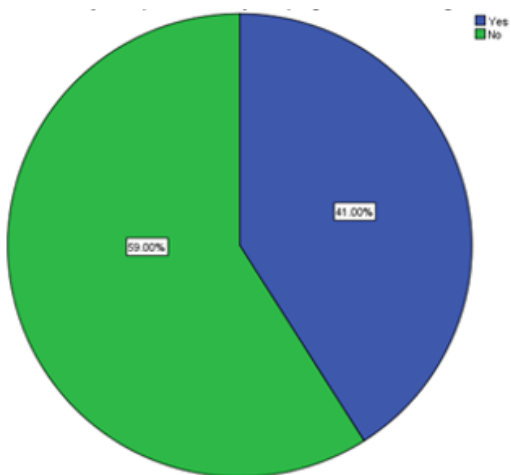


Figure 13: Pie chart shows the number of people faced with sleeping disorder during quarantine days.

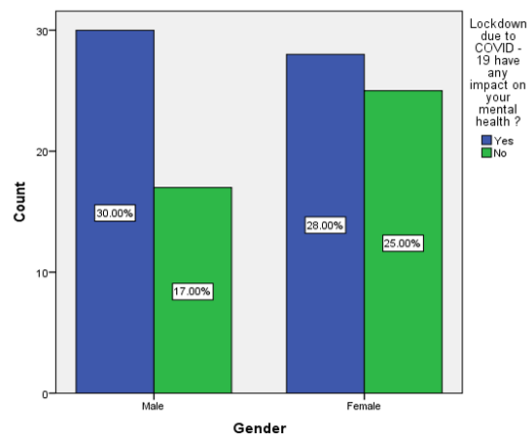
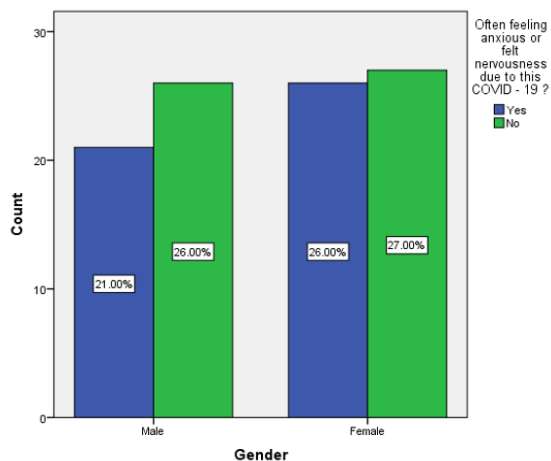
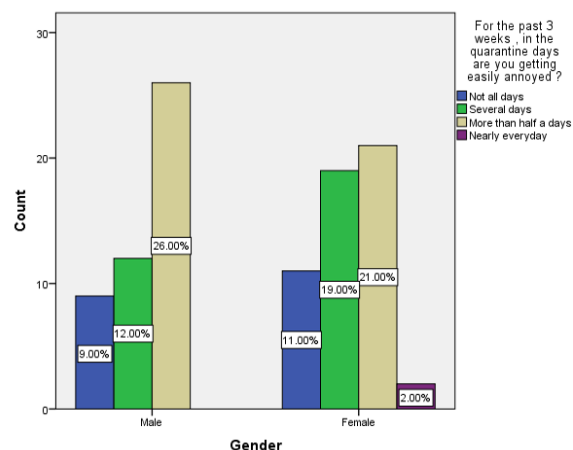


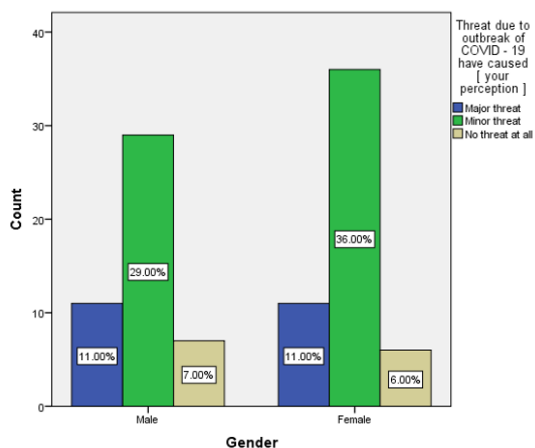
Figure 16: Bar chart represents the association between gender and knowledge regarding the impact on mental health due to COVID19.



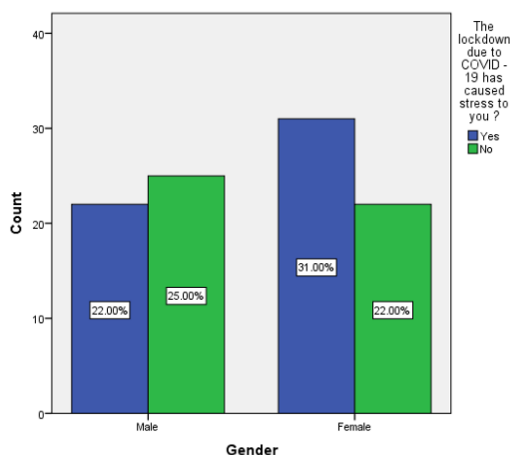
**Figure 17:** Bar chart represents the association between gender and feeling of anxiousness and nervousness.



**Figure 20:** Bar chart represents the association between gender and how often people in lockdown get annoyed.



**Figure 18:** Bar chart represents the association between gender and threats that were being faced due to COVID 19.



**Figure 19:** Bar chart represents the association between gender and Stress due to COVID - 19.

SARS than did control subjects. HCWs declared confidence in infection-control measures.

Covid 19 have created a pandemic situation all over the world, and the best way to stop this is imposing the lockdown so that social distancing will be followed by the public, but not being stressed during this time and not having anxiety symptoms. All will be in the hands of the individual. Meditation, engaging yourself with work, seeking help from a doctor to reduce anxiety symptoms and all to be followed. Even in optimal seated postures, more than one-half of the muscles of the body are contracted statically (Abigail et al., 2019). Physical fitness is vital for any profession they are in (David, 2019). Risk factors associated with increased rates of fear were the following: concern about public transportation use, difficulty going outside, a perception that the state is not protecting the people, helplessness in situations that cannot be controlled, and fear of infection. Kernicterus is a bilirubin-induced brain dysfunction (Harsha, 2015), and people who have diabetes will have a higher risk (Iyer et al., 2019). But these fears have to be overcome.

FET can act as an indicator for upper airway obstruction (R and G, 2018). New drugs are needed because those that are currently available cannot control symptoms and hinder the patients and can cause adverse reactions (Dave and Preetha, 2016). Statistics show that many countries of the world were severely attacked during the nutritional privations of war (Samuel and Devi, 2015). Little is known about the changes in thyroid function in obese people (Fathima and P, 2016). The main aim of the study is to create awareness and knowledge about COVID - 19 and its impact on the mental health of the public.

## MATERIALS AND METHODS

The self-administered design was designed based on awareness. The questionnaire was distributed through online Google docs to 100 people who are in lockdown due to COVID 19. The participants were explained about the purpose of the study in detail. The questions were carefully studied, and the participants marked the corresponding answers, it was a prospective administrative study. Survey participants were randomly selected, avoiding asking irrelevant questions, restriction on particular population and age group. This Survey was conducted in April 2020.

The pros for this Survey was Online setting platform and random selection of the population. The cons for this Survey were the same homogeneous study-population were selected and Questionnaire- error options may be present. Simple Random sampling method was the sampling method used in this Survey. Spss is the statistical software used for this Survey. The list of independent variables for this particular topic was height, skin tone, weight, gender and the list of dependent variables used for this Survey is a profession, education, occupation, food habits, area of living and age. Descriptive analysis was the type of analysis being used.

## RESULTS AND DISCUSSION

The Survey was conducted among a small scale population. The results were statistically analyzed and studied, when participants were asked about the COVID 19 and its effect on mental health, the results that we got from our Survey were very similar to the other studies. Lockdowns were imposed due to the spread of COVID 19, and this lockdown had an impact on mental health for 58% of the population and 42% of the people have no impact on mental health [Figure 1]. 67% of the people suggest that it is necessary to take mental health help instead of the pandemic situation and 33 % of the people think it's not needed [Figure 2]. 47% of the participants felt nervousness due to this Covid 19, and its lockdown and 53 % of the participants didn't feel the nervousness [Figure 3]. 67% of the survey participants think that it would be beneficial if mental health professionals are going to help people to deal with this pandemic situation 33% of the people think it is not the need of the hour [Figure 4]. This COVID - 19 was a significant threat for 22% of the people and 65% of the people thinks it is a minor threat [Figure 5]. This lockdown has caused stress to 53% of the people and for 47% of the people it was not a stress [Figure 6]. For 13% of the 100 people they

had excellent mental health during these quarantine days, and for 24 % of the people it was very good, and for 51 % of the people it was right during these days, and 2 % of the participants had poor mental health [Figure 7]. During lockdown days how often the mental health interfered with the personal health, for that 5 % people said too often, 21% of the people said very often, and 46 % of the people said somewhat often [Figure 8]. 20% of the participants are not getting annoyed, 31% of participants getting annoyed several days; 47% of people getting annoyed more than half days [Figure 9]. No of days people thinking that something awful might happen in these quarantine days are 21% of the participants thought not all days, 28% people thought these several days and 5 % of the people thought every day [Figure 10]. 40% of the total participants said that they are worried about several things during quarantine, and the rest of the people are not worrying about different things [Figure 11]. 26% of the people not all days felt anxious or nervous on edge these days, 35% felt nervous or anxious several days and 3 % people felt this every single day of the lockdown [Figure 12]. 41% of the participants faced sleeping disorder during these quarantine days, and 59% of the people have not faced any sleeping disorder [Figure 13]. A common manifestation of Obstructive Sleep Apnea (OSA), a potentially life-threatening condition (Shruthi and Preetha, 2018).

47% of the study population dropped their activities of interests during these quarantine days Figure 14 shows that 47% of the people said Yes it is represented in blue colour and 53% of the people said no. People might feel emotionally drained due to the bad mental health during quarantine days, that is 47% of the people felt so, and the remaining 53 % of the people did not feel emotionally drained Figure 15 shows that 47% of the people said yes it is represented in blue color and 53 % of the people said no and it is represented in green colour. In the Chi-square analysis between the gender and impact on mental health due to COVID - 19, The P-value that was obtained was about 0.266, and it was not statistically significant Figure 16 shows that Hence male are more aware of knowledge regarding the impact on mental health due to COVID 19 than women. In the Chi-square analysis between the gender and feeling anxiousness and nervousness, The P-value that was obtained was about 0.662, and it was not statistically insignificant Figure 17 shows that Hence women are more aware about the feeling of anxiousness and nervousness in lockdown than men. In the Chi-square analysis between gender and threats that were being faced due to COVID 19, The P-value that was obtained was about 0.790, and it was



not statistically significant Figure 18 shows that Hence the women are more aware about the threats that were being faced due to COVID 19 than men. In the Bar Graph representing Chi-square analysis between gender and stress due to COVID - 19, The P-value that was obtained was about 0.243, and it was not statistically significant Figure 19 shows that Hence , women are more aware about the knowledge regarding the Stress due to COVID - 19. In the Chi-square analysis between gender and how often people in lockdown get annoyed, the P-value that was obtained was about 0.265, and it was not statistically significant Figure 20 shows that Hence , women are more aware about how often people in lockdown get annoyed than men.

The results of this study were similar to the previous researches done by various authors. For example, Heather Mowbray, 2020 in his study he has found that the prevalence in the general population of PTSD has been ranging from 4% to 41%; the prevalence of major depression increased by 7% after the outbreak. Some factors that may increase the risk of developing such PTSD and depression state are lower socioeconomic status, female sex, frequent social media use, interpersonal conflicts and lower resilience and social support (Torales, 2020). Even the others like Joyce Lee, 2020 in his study which comprises of 2111 participants, 83% of the people reported that the pandemic has made their life miserable and 22% of the total survey participants faced it has a significant threat, and 65% of the people faced it has a minor threat (Lee, 2020).

Novel Coronavirus Disease (COVID-19) originating from China has rapidly crossed borders, infecting the people throughout the whole world. This phenomenon has led to a massive public reaction, and the media has been reporting continuously across borders to keep all informed about the pandemic situation (Roy, 2020). Post-traumatic stress disorder (PTSD) is one of the most prevalent long-term psychiatric diagnoses among survivors of the severe acute respiratory syndrome (SARS) (Mak, 2010). Elevated stress in the population may be an important indicator of future psychiatric morbidity (Chua, 2004). Most of the habits of today's sedentary lifestyle, such as excessive stimulant consumption and extensive late-night usage of electronic media and gadgets hurt both the quality and quantity of sleep (Rj and R, 2016). Acupuncture is mainly the best effective in relieving pain (Swathy and Sethu, 2015). Previously, when SARS occurred in South Korea, no psychological guidelines existed for large-scale quarantine and isolation situations during the pandemic period, and the awareness regarding dealing with the mental health issues related to infec-

tious diseases was low (Phua, 2005). It has also been shown that healthcare workers experience burnout, traumatic stress, anxiety, and depressive symptoms even after the outbreak (Lancee et al., 2008). In past days, stem cell therapy in regeneration after MI was impossible (Renuka and Sethu, 2015). Expiratory rate flow also has to be noted (Timothy et al., 2019). Previous research has found that the prevalence of post-traumatic stress disorder (PTSD) was also increased among survivors of infectious diseases like COVID 19, SARS etc. (Hong, 2009). As the obesity epidemic continues to spread, more and more people are being affected both in the short term and in the long term by consequences (Baheerati and Devi, 2018). In the coming decades, it promises to be the leading cause of liver disease in industrial countries (Choudhari and Jothipriya, 2016).

This study which was conducted was limited only to the people who had smartphones, e-mail IDs and the ability to English that is the literacy level. So it should not be generalized to the whole population; this represents only the educated population of the country. The awareness, anxiety, attitude, and perceived mental healthcare need in uneducated people may be different from the findings of our study.

Regarding more specific therapeutic strategies, proposals include the development of teams of specialists qualified to address emotional distress; the training of community health personnel in basic aspects of mental health care (Duan and Zhu, 2020); the use of online surveys to assess the scope of mental health problems (Liu et al., 2020); the development of online materials for mental health education; the provision of online counselling and self-help services; the use of structured letters as a form of asynchronous telepsychiatry consultation (Xiao, 2020).

## CONCLUSIONS

The current focus on the transmission of COVID-19 infection all over the world may probably distract public attention from psychosocial consequences of the outbreak in the affected individuals and the general population. The emerging mental health issues related to this global event may evolve into long-lasting health problems, isolation and stigma. Global health measures should be employed to address psychosocial stressors, particularly related to the use of isolation/quarantine, fear and vulnerability among the general population.

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### Conflict Of Interest

The author declares that there is no conflict of interest in the present study.

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