

# Assessment on Mental Health Status during Post Covid-19 Pandemic

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## ABSTRACT

**Aim:** This study aim to assess changes in the mental health status among adolescents and middle-aged adults during the post-Covid-19 epidemic.

**Methods:** The study's data were gathered using a cross-sectional methodology using an online survey of 60 adults and adolescents. A cross-sectional survey was conducted online using a google form, and participants were sent the surveys via Facebook, WhatsApp, and email.

**Result:** Maintaining one's mental and physical health is a vital topic that worries people During the Covid-19 epidemic, everywhere. The covid-19 epidemic was found to have an effect on people's mental health and lifestyle choices after the pandemic. Less than 15% of participants reported mental health issues like anxiety, stress, depression, sleeplessness, PTSD (post-traumatic stress disorders), and lower levels of happiness. The majority of participants stated that they occasionally or briefly encountered mental health disorders, whereas the remainder of the subjects stated that they had no such problems following the COVID-19 epidemic. 42% of subjects reported that their mental status were good after covid-19. 8.3% were poor mental health and 7% of subjects didn't any idea about their mental health status.

**Conclusion:** Globally, and especially among adults and adolescents, people's mental health has been significantly impacted by the COVID-19 pandemic. The pandemic has made many people feel more stressed, anxious, depressed, and socially isolated, which has greatly affected their mental health. Social abilities of adolescents and development have been impacted by the isolation brought on by lockdowns and other social exclusionary practices, which may have long-term effects. Especially among adults and teenagers, who are more susceptible to the pandemic's impacts. In order to assist people in coping with the pandemic's continued effects on their mental health, it is imperative that these difficulties be addressed with prompt treatments and support.

**Keywords:** Mental health status, Stress, Anxiety, Isolation, PTSD (Post traumatic stress disorder), Insomnia, Tiredness, Pandemic after COVID-19.

## 1. Introduction

The COVID-19 pandemic was proclaimed on March 11, 2020, by the World Health Organization. This spurred the adoption of harsh public health measures that had an impact on larger populations of adults and adolescents [1-3]. The symptoms of COVID-19 infection include tiredness, a sore throat, difficulty breathing, chest pain, nausea, diarrhea, and nasal congestion [4-7]. The first important thing to understand is that our mental health is a complex and multidimensional aspect of our general wellbeing. Mental health includes aspects of our psychological, social, and emotional well-being. Numerous elements, including our genetics, environment, and life events, might have an impact on our mental health. People's bad lifestyles, such as sleeping in late, eating poorly, and not exercising, were on lockdown during the COVID-19 crisis. All of these behaviours have had an adverse effect on lifestyle and led to mental disease, insomnia, rage, and other problems with both physical and mental health. The COVID-19 epidemic has had a serious influence on people's mental health worldwide, especially adolescents and middle-aged people. Screaming, stress levels have climbed, feelings of loneliness have grown, post-traumatic stress disorder (PTSD) has developed, and sleep and eating routines have changed as a result of the pandemic's disruption of daily life, loss of loved ones, financial strain, and social isolation. According to studies, people who have healed from COVID-19 may nevertheless struggle with their mental health and encounter some physical restrictions [8-12]. Post-traumatic stress disorder (PTSD), sadness, or anxiety symptoms have been seen in COVID-19 survivors, for example. In a follow-up investigation, it was found that patients with a mild form of COVID-19 were less likely than those with an acute form of the infection to have mental illness six months after recovery [13-14]. To make sure people are getting the help they require, it is crucial to evaluate their mental health. Our study will look at the occurrence of emotional mental health conditions like stress, melancholy, and anxiety as well as the general population's high-risk demographics. In light of these extraordinary and difficult circumstances, we are convinced that our study will assist governments and mental health professionals in organizing and providing mental health support to the high-risk population while also preserving the psychological welfare of Indians. Previous data claimed that more than 40% of Korean participants in a prior survey said the epidemic had caused clinically significant levels of sadness, anxiety, or stress [15-19]. There have been further reports of findings about the decline in mental health brought on by COVID-19. The COVID-19 epidemic in Italy has also been linked to an increase in the prevalence of mental health issues, such as depression, insomnia, and high levels of perceived stress. The psychological well-being of the general population was found to be declining, and those who had pre-existing mental disease reported their psychiatric symptoms getting worse. Adolescence is a crucial time for identity formation as well as a moment of transition to adulthood. Adolescents may also go through a number of lifestyle changes during this time, making them susceptible to the impact of their social circumstances. They may struggle with emotional regulation, and they are more likely to develop mental diseases like anxiety and depression [20-22]. When an adolescent's mental health declines, it can negatively impact all aspects of everyday life, including academic performance, and last far into adulthood. The pandemic has made it impossible for adolescents to consistently attend school, and restrictions that may significantly impact adolescents' daily life have persisted. Even in the best of circumstances, middle adulthood can be a difficult stage of life, yet the COVID-19 pandemic has increased anxiety and uncertainty to a completely new level. As the epidemic has spread, mental health has been an increasing worry for many individuals, especially for middle-aged persons who may be dealing with a variety of difficulties like job loss, financial stress, and family obligations. All of these essential self-isolation techniques could have a detrimental effect on people's lives, including their mental health and

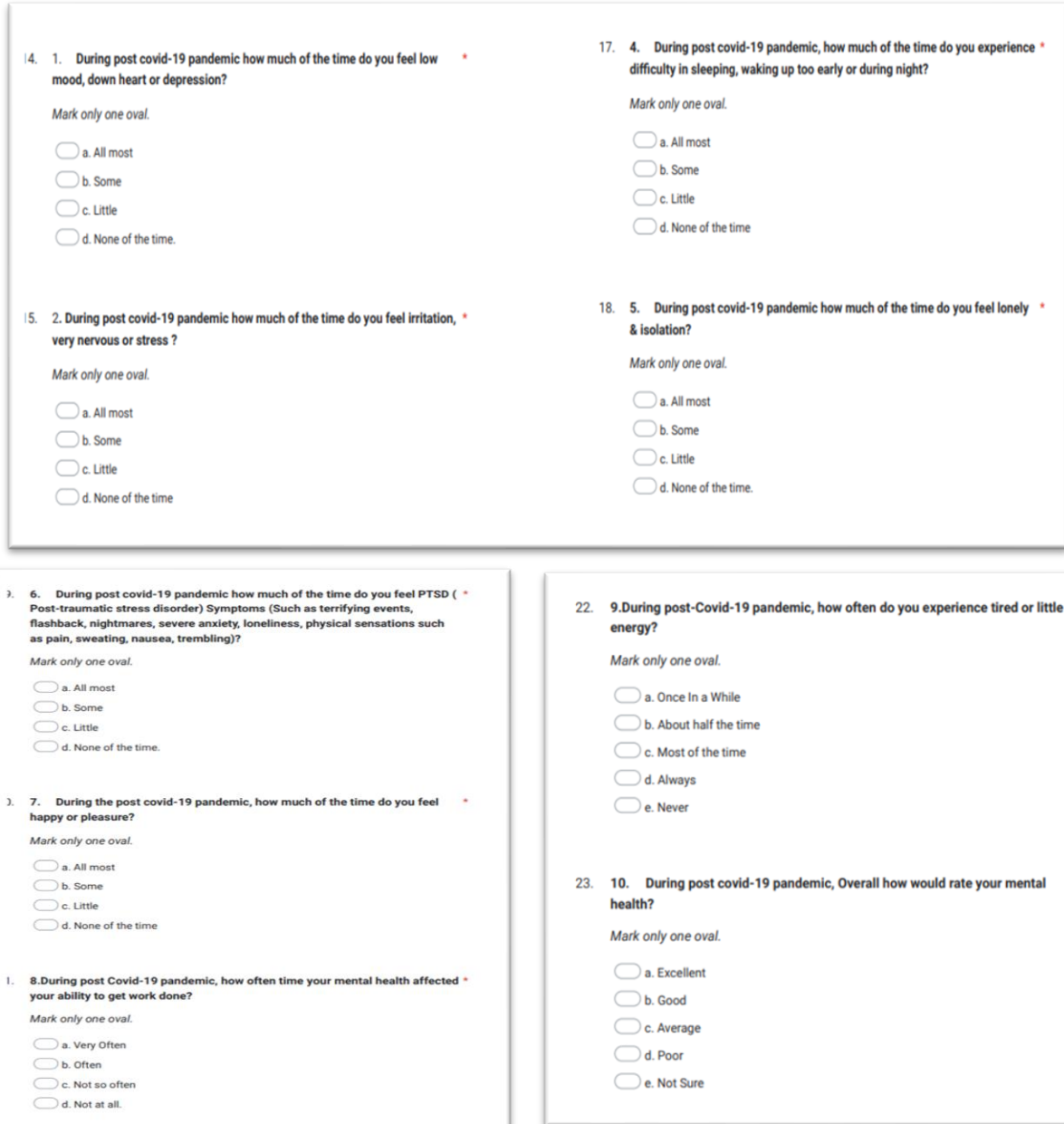
lifestyle-related behaviours [23-26]. The majority of public surveys show higher symptoms of sadness, worry, and stress linked to COVID-19 as a result of psychosocial pressures including life disruption, fear of illness, or concern of negative economic effects. The contradictory results of these polls are probably due to the different techniques, research locations, and timings in relation to the pandemic's development. There have been instances of phobia anxiety, panic buying, binge-watching television (which has been connected to self-control impairment, mood disturbances, sleep disturbances, and exhaustion), and social media exposure has been connected to increased anxiety as well as depression and anxiety when combined [27-30]. In this paper we'll look at the different ways that middle-aged persons' mental health and adolescent mental health status can be evaluated in the time after the COVID-19 epidemic. The process of determining a person's mental health state entails gathering data regarding that person's wellbeing. Online surveys (questionnaire approach) can be used to collect this data. The evaluation procedure seeks to spot the existence of mental health illnesses, gauge the severity of symptoms, and assess how mental health affects a person's life. Taking into account the particular difficulties presented by the pandemic is one of the most important parts of assessing mental health in the aftermath of COVID-19 pandemics. Suffering a loved one's passing, being admitted to the hospital, or being quarantined are just a few examples of the horrific occurrences that people may have gone through as a result of COVID-19. These events have the potential to cause PTSD (post traumatic disorder) and other mental health disorders that need for specialized evaluations and treatment.

Globally, the COVID-19 outbreak has a significant impact on people's mental health. It is essential to evaluate the level of mental health in order to provide the appropriate interventions and support during post-COVID-19 pandemics. In order to evaluate the state of a person's mental health, mental health practitioners might employ a variety of techniques, such as clinical interviews, behavioral observations, and self-report assessments. When evaluating the state of one's mental health, it's crucial to take into account the particular difficulties brought on by the pandemic, such as traumatic experiences, financial hardship, and social isolation. A comprehensive approach is necessary to adequately assess the state of mental health during post-COVID-19 pandemics. However, the purpose of this article is to evaluate adolescents and middle-aged adults' mental health following the COVID-19 pandemic.

## 2. Material and Methods

- **Research Design-** A cross-sectional method and Observative test used for this survey. And this investigation conducted from 1-February 2023 to 20- February 2023.
- **Study Sample-** Population (Adolescents and middle adulthood).
- **Sample size-** 60 participants.
- **Permission-** Every person who took part in the survey gave their approval by receiving a questionnaire virtually via email and WhatsApp.
- **Study Tool-** Following a thorough analysis of the situation and a lengthy debate with the experts in my academic department, created a Google Forms questionnaire to collect responses from each respondent. It was conducted using Google Forms, a web survey application. Facebook, Instagram, and WhatsApp were among the social media platforms that were utilized to share information about the online survey. The questionnaire was available in English and took about 10-15 minutes to complete. The survey could be completed on a desktop, tablet, or mobile device to reach the widest possible audience of participants. The questionnaires consists 10 questions (multiple choice questions, one option) based on the Mental health status.

- Mental health status-**Mental health Status of the respondents was assessed by using questionnaire relating to Anxiety, Stress, Depression, Insomnia all related to Post traumatic disorders (PTSD), and mental health status after Covid-19 pandemic using self-assessment method (Fig 1). The questionnaires included 10 items which consists different options such as (Almost, sometimes, little and never etc.).



The figure shows a Google Form questionnaire with 10 items. Each item is a multiple-choice question with four options (a, b, c, d) and a 'Mark only one oval' instruction. The items are:

1. During post covid-19 pandemic how much of the time do you feel low mood, down heart or depression?
  - a. All most
  - b. Some
  - c. Little
  - d. None of the time.
2. During post covid-19 pandemic how much of the time do you feel irritation, very nervous or stress ?
  - a. All most
  - b. Some
  - c. Little
  - d. None of the time
3. 6. During post covid-19 pandemic how much of the time do you feel PTSD ( Post-traumatic stress disorder) Symptoms (Such as terrifying events, flashback, nightmares, severe anxiety, loneliness, physical sensations such as pain, sweating, nausea, trembling)?
  - a. All most
  - b. Some
  - c. Little
  - d. None of the time.
4. 4. During post covid-19 pandemic, how much of the time do you experience difficulty in sleeping, waking up too early or during night?
  - a. All most
  - b. Some
  - c. Little
  - d. None of the time
5. 5. During post covid-19 pandemic how much of the time do you feel lonely & isolation?
  - a. All most
  - b. Some
  - c. Little
  - d. None of the time.
6. 7. During the post covid-19 pandemic, how much of the time do you feel happy or pleasure?
  - a. All most
  - b. Some
  - c. Little
  - d. None of the time
7. 8. During post Covid-19 pandemic, how often time your mental health affected your ability to get work done?
  - a. Very Often
  - b. Often
  - c. Not so often
  - d. Not at all.
8. 9. During post-Covid-19 pandemic, how often do you experience tired or little energy?
  - a. Once In a While
  - b. About half the time
  - c. Most of the time
  - d. Always
  - e. Never
9. 10. During post covid-19 pandemic, Overall how would rate your mental health?
  - a. Excellent
  - b. Good
  - c. Average
  - d. Poor
  - e. Not Sure

**Fig 1: Google form as questionnaire used to assess mental health status among respondents post covid-19 pandemic.**

- Other Measures:** In this study, the affective components of the participant's mental health, such as anxiety, depression, and stress are assessed. To assess depression, anxiety, and stress, Lovibond and Lovibond created the Depression Anxiety Stress Scale 21 (DASS21). The DASS21 is a suitable method that can not only quantify but also distinguish between the three negative emotional states in

clinical and nonclinical samples [31]. The sub-scores for stress, anxiety, and tension were combined and categorized as "average," "mild," "moderate," "severe," and "highly severe."

- **Sociodemographic data-** Information was gathered based on age, gender, education level, occupation, income, address, and way of life.
- Before the analysis, a number of socio-demographic characteristics were categorized. Three coteries of ages (16–20 years, 21–30 years, and 31–40 years) were created based on the respondents' ages. Additionally, there are three classifications for life styles: Sedentary, Moderate, and Heavy.
- **Anthropometric data-**The BMI was calculated from self-reported measurements of height and weight using the Quetelet equation (body mass (kg)/height (m<sup>2</sup>)), and it was then assessed in accordance with WHO guidelines (underweight is less than 18.5 kg/m<sup>2</sup>, normal weight is 18.5 to 24.9 kg/m<sup>2</sup>, and overweight is more than 25 kg/m<sup>2</sup>).

### 3. Result and Discussion

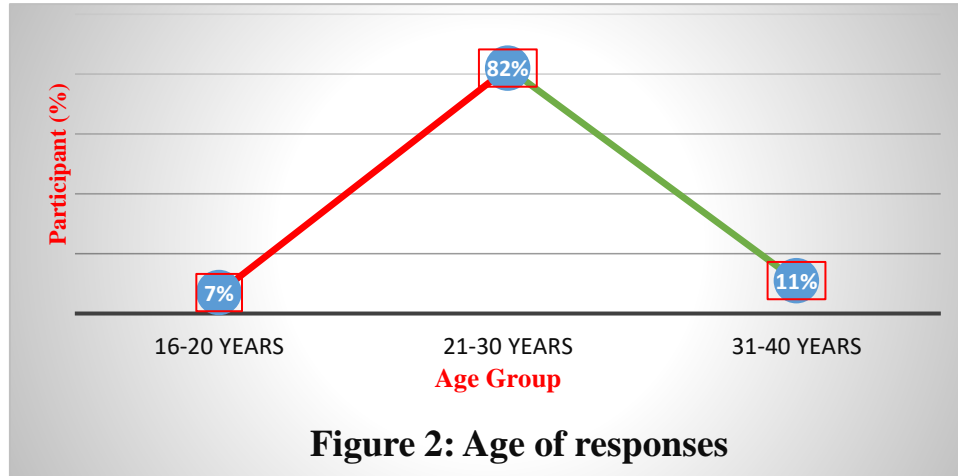
**Table1: Demographic characteristics of participants**

Socio-demographic variable	Number of cases (%)
<b>Age in years</b>	
16-20	7%
21-30	82%
31-40	11%
<b>Gender</b>	
Male	41.7%
Female	58.7%
<b>Occupation</b>	
Education	43.3%
Employ	56.7%
<b>Life style</b>	
Sedentary	31.7%
Moderate	65%
Heavy	3.3%
<b>BMI</b>	
Underweight	19%
Normal weight	48%
Over weight	33%

The participant's anthropometric and demographic information was displayed. Three age groups were created from the participants, whose ages varied from 16 to 40 years. 16 to 20 years, 21 to 30 years, and 31 to 40 years. The individuals in the 31 to 40years age group were older than those in the other groups. There were more female participants than male participants. There were 58.7% female participants and 41.7% male participants. And whereas 56.7% of participants were in employment, 43.3% of participants were students and unemployed. A sedentary lifestyle were adopted by 31.7% of participants, a moderate

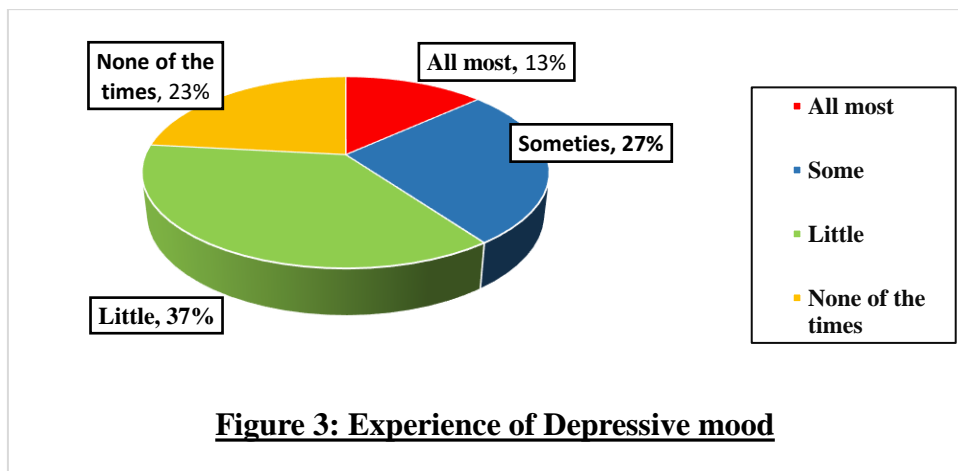
lifestyle by 65%, and a heavy lifestyle by 3.3%. 48% of individuals were of a normal weight, 33% were overweight, and 19% were underweight.

**Age of responses**



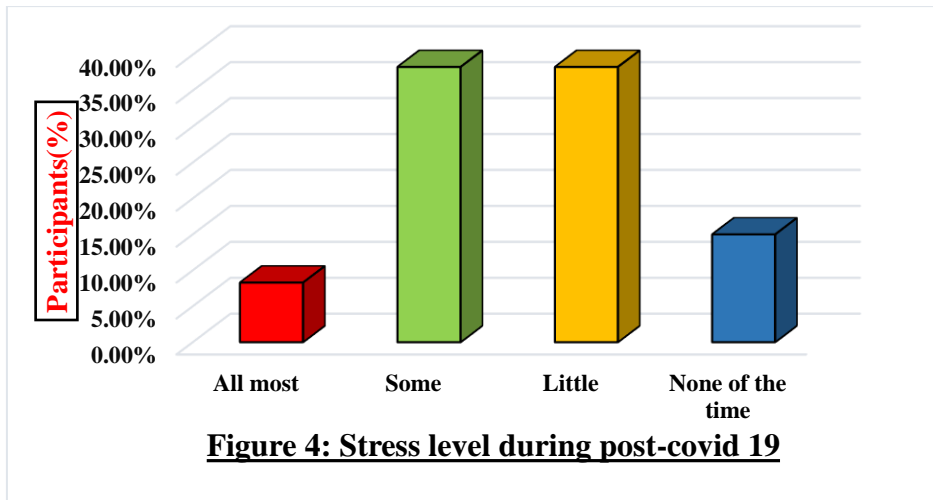
**Figure 2: Age of responses**

**Figure2:** The results provided a breakdown of replies from survey respondents by age. The individual's age ranged from 16 to 40. Overall, 82 percent of respondents were between the ages of 21 and 30 years.

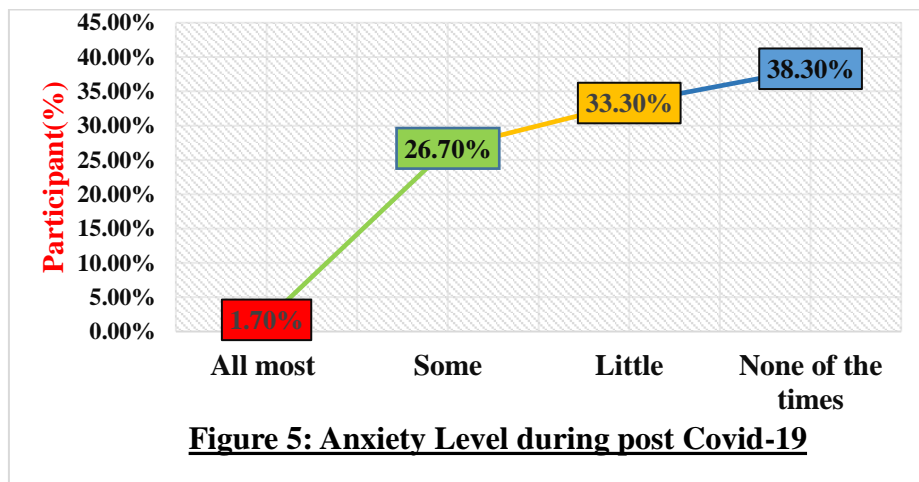


**Figure 3: Experience of Depressive mood**

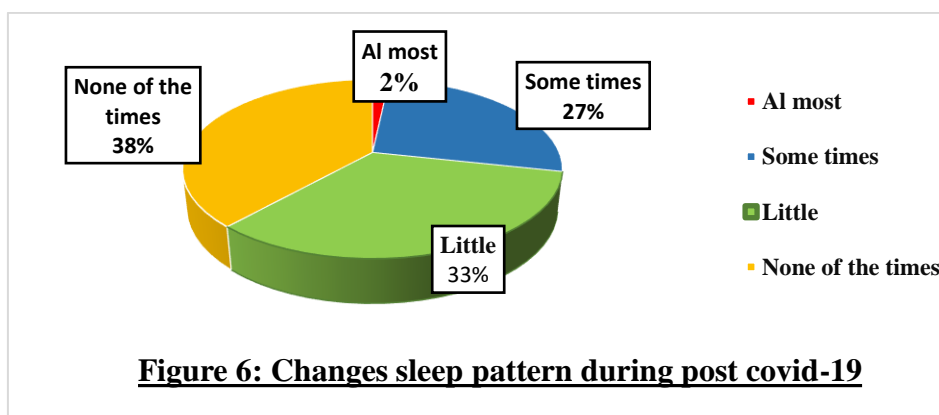
**Figure 3:** Result showed that 13% participants experienced low mood and depressive mood, 27% of participants experienced some times, 37% of participants experienced little times and 23% participants experienced none of the times of low & depressive mood during post covid-19 pandemic.



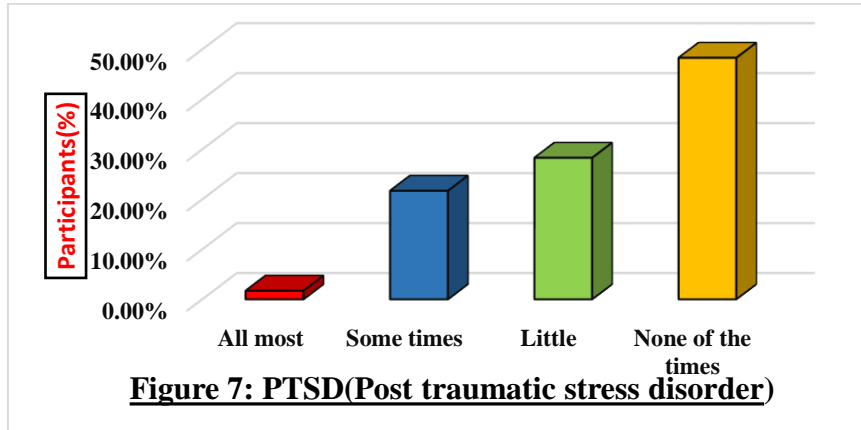
**Figure 4:** Result showed that 8% of participants felt stress most of the time stress , 38.3% of participants felt stress some times, 38.3% of participants felt little and 15% participants felt none of the times stress during post covid-19 pandemic.



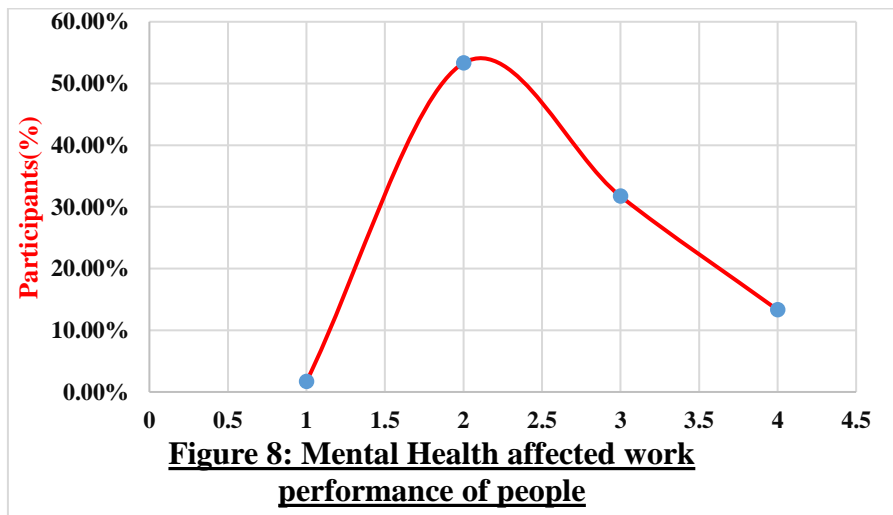
**Figure5:** Result found that only 1.7% of participants suffered from anxiety during post covid-19 pandemic and rest of participants 33.3% of participant suffered little , 26.7% of participants suffered some times and most of the participants 38.3% were reported none of the times.



**Figure 6:** Result found that 2% of participants were changed in sleep pattern and felt difficulties in sleeping in night. 27% of participants were changed some times, 33% of participants were changed little and rest of 38% of participants didn't change in their sleep and they didn't feel any difficulties in sleeping in night after covid-19 pandemic.

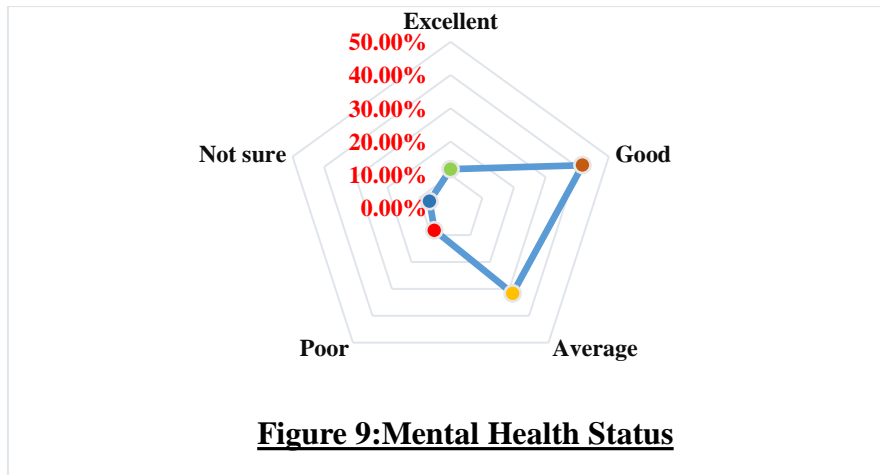


**Figure 7:** Result showed that during the post-COVID-19 epidemic, 2% of individuals suffered from the majority of PTSD (post-traumatic stress disorder). In the aftermath of the COVID-19 pandemic, 22% of participants reported occasionally experiencing PTSD symptoms, 28% of participants reported experiencing only minor symptoms, and 48% of participants reported no symptoms at all.



**Figure 8:** Result showed that 1.7% of participants reported that their mental health condition affected their work performance after covid-19. 53.3% of the participants reported mental health affected often, 31.7% of participants reported not so often and 13.3% of individuals said that their work performance were unchanged during the post- COVID-19 pandemic.





**Figure 9: Mental Health Status**

**Figure 9:** Above following data depict that 11.7% of respondents reported that have excellent mental health status. 41.7% of respondents have good mental health status, 31.7% of respondents have average mental health, 8.3% of respondents reported that have poor mental health and 6.7% of respondents didn't sure about their mental health condition after post covid-19 pandemic.

## Discussion

People of all ages have experienced severe adverse impacts on their mental health as a result of the COVID-19 outbreak. But middle-aged people and teenagers may be particularly vulnerable to the pandemic's effects on mental health because of the unique challenges they face. The pandemic has caused disruptions in adolescents' social and academic lives as well as heightened worry and anxiety. Teenagers' rates of melancholy and anxiety have increased throughout the epidemic, according to research, and they may also be at risk for post-traumatic stress disorder (PTSD) as a result of the stressors associated with the pandemic. Middle Adults have also been disproportionately affected by the epidemic in terms of employment loss, financial instability, and increased caring duties. Increased rates of anxiety, sadness, and other mental health problems can be brought on by these stressors. PTSD, despair, and anxiety are just a few of the chronic mental health conditions that adults with COVID-19 may experience. Maintaining one's mental and physical health is a vital topic that worries people all around the world during the Covid-19 pandemic. The COVID-19 pandemic and associated restrictions (such as rigorous quarantine and social activity limits) are more likely to cause adverse psychological effects. Signs of extreme anxiety, despair, stress, and loneliness are just a few of them. Previous studies have shown that the COVID-19 pandemic has a deleterious impact on adolescent mental health. The COVID-19 pandemics' immediate and long-term consequences on middle-aged and adolescent health behaviours are still unknown. Therefore, this paper purpose to assessment of change in mental health status among adolescents and middle adulthood groups and after this survey, the result was found that the covid-19 pandemic affected the mental health status and lifestyle behaviours of individuals during post covid-19 pandemic. Less than 15% of participants experienced mental health problems such as Anxiety, Stress, lowliness, insomnia (difficulty in sleeping), PTSD (post-traumatic stress disorders) and reduce their happiness level. Most of the participants reported that they have experienced some times or little mental health problems and rest of the subjects reported that they didn't experienced any type of mental health issues after covid-19 pandemic. This survey result found that 31.7% of subjects reported that have sedentary lifestyle, 65% of subjects have moderate lifestyle and only 3.3% of subjects have heavy lifestyle. Above the following data the result of the survey showed that 13% of subjects reported they have experienced low mood and

depressive mood frequently. 26.7% of subjects reported experienced low mood and depressive mood sometimes, 36.7% of subjects felt little and 23.3% of subjects didn't experience low mood and depressive mood during post Covid-19 pandemic. Only 8.3% of participants experienced irritation, very nervous and stress frequently. 38.3% of participants experienced sometimes 15% of subjects have normal mental health and life style. According to survey, Subjects have experienced anxiety (panic attack, difficulty to control and trouble concentrating fear). And 60% of participants reported that they have experienced little or sometimes. 8.3% of participants experienced with insomnia and 52% of participants experienced difficulties in sleeping in night. Due to Covid-19 pandemic there are different issues occurs such as loss of loved once, financial issues and social problems that caused PTSD (post-traumatic stress disorder) during post Covid-19 pandemic. The survey found that only 2% of participants experienced PTSD (post-traumatic stress disorder) symptoms such as terrifying events, flashback nightmares, sever anxiety, lowliness etc. and 50% of participants reported that they have experienced sometimes or little and rest of participants didn't experienced any such type of issues after Covid-19 pandemic. Post Covid-19 pandemic also affected the work performance of individuals. Due to Covid-19, subjects felt physical tiredness and less energy during all the times. 53% of participants reported that they have reduced the ability to get work done. 4% of participants experienced always tired during all the times during post Covid-19 pandemic. 20% of participants reported most of the time, 23.3% of participants were often of the time, 29% of participants were once in a while, 3% of participants sometimes and 21.7% of participants didn't any changes occurs after covid-19 pandemic. Above the following data, 42% of subjects reported that their mental status were good after covid-19. 32% of subjects got average, 11.7% of subjects were excellent mental health status and 8.3% were poor mental health and 7% of subjects didn't any idea about their mental health status.

#### **4. Conclusion**

It's critical to remember that not everyone who is affected by the epidemic will have mental health issues, and those who do may do so to varied degrees of severity. But it's crucial that people are aware of their mental health status and get assistance if they show signs of depression, anxiety, PTSD, or other mental health issues. In order to flourish and perform at one's best on a psychological, physical, and interpersonal level, one must achieve subjective wellbeing, which is a major life objective. However, because of their lifestyle decisions and negative experiences, this study focused on the mental health of teenagers and middle-aged adults. Evidence from this study indicated that less than 15% of participants change in their mental health status disease such as insomnia, stress, anxiety, PTSD (post traumatic disorder) and reduce happiness level. And rest of subjects didn't experienced any kind of changes and some subjects reported that they experienced such type of changes less likely during post Covid-19 pandemic.

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#### **6. Conflict of Interest**

There is no conflict of interest among authors regarding the publishing of this paper.

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