PSYCHIATRIC MORBIDITIES AMONG COVID-19 PATIENTS A CLINICO-EPIDEMIOLOGICAL STUDY

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Abstract

Background

The coronavirus strain SARS-COV2, also known as COVID-19, is responsible for the recent coronavirus sickness. With the physiological condition, mental morbidities are more prevalent in pandemic stages than they are in everyday life. **Aims and Objectives**: To assess the psychiatric morbidities among covid-19 patients. **Methods and Material:** A clinico-epidemiological study related to the study of psychiatric morbidities among covid-19 patients. In this study, a total of 100 patients who have suffered with COVID-19 diseases have been evaluated. **Results**: From the results, it is clear that the stress have the higher percentage among all mental disorders and that is 55 percent. most of people were considered that highest impact on education, 80 percent and the second highest favored to employment. The results also show that lower mental wellbeing was significantly associated with male gender, private job, and older age group that is older than 45 years. **Recommendations**: The study findings on psychiatric morbidities among COVID-19 patients exhibit the need for several recommendations. Firstly, healthcare providers should prioritize mental health screenings and interventions for individuals interpreted as patients with COVID-19.

Keywords - Psychiatric morbidities, SARS-COV2, clinical-epidemiological, post-traumatic stress disorder, central nervous system, pandemic, personal protective equipment.

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Introduction:

The coronavirus strain SARS-COV2, also known as COVID-19, is responsible for the recent coronavirus sickness. With the physiological condition, mental morbidities are more prevalent in pandemic stages than they are in everyday life. The COVID-19 pandemic is responsible for the current situation, which has raised stress, anxiety, and dread across different population groups

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globally. Because most people don't know enough about the issue, stigma, uncertainty, misinterpretations, and rumors are common, which has led to public anxiety. In addition to the illness, the individual countries' efforts to stop the pandemic also had an effect on how well individuals were able to live their lives, which may have directly or indirectly contributed to a rise in psychological morbidities. Frontline healthcare workers, infection patients, and those who are away from their families may experience problems as a result of the increased workload, hard hours, and increased chance of exposure to positive cases. In this particular study, the psychiatric morbidities and different mental instability and illness among covid-19 patients will be discussed.

According to Wang *et al.* 2021, as the 2019 novel coronavirus disease (COVID-19) pandemic progresses, there is growing awareness of its impact on mental health. Hospitalization for COVID-19 is a particularly distressing, worrying, and isolating event, but post hospital mental illness is largely unreported in the literature. It's thought that the illness, when exacerbated by mandatory quarantine and statewide lockdowns, can cause post-traumatic stress disorder (PTSD), compulsive behaviors, anxiety, despair and acute panic attacks. Due to all of these problems, people are now more afraid of social rejection, loneliness, disease and death, the desire to escape family, worry, melancholy, stress, insomnia, sleep problems, and psychological suffering. It is essential to address the needs and gaps in the mental and psychological facets of health in all societal segments, including the general public, medical professionals, and COVID-19 patients.
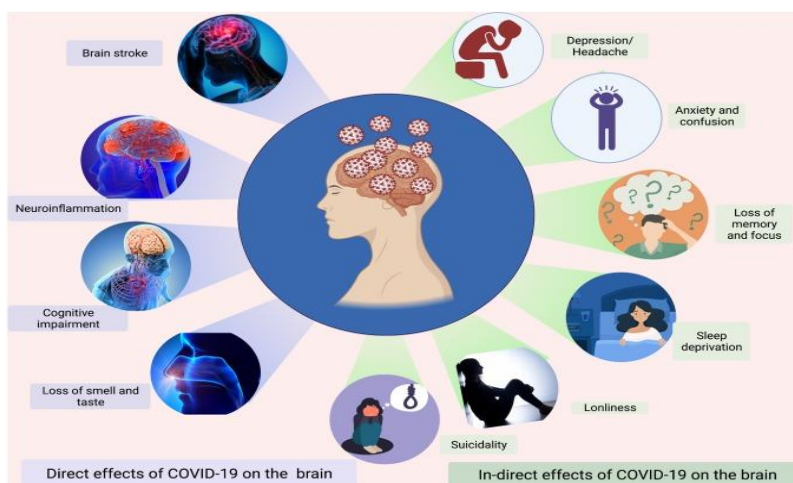

Figure 1: Mental conditions due to the effect of COVID-19

(Source: https://ars.els-cdn.com/content/image/1-s2.0-S0361923021002604-gr1.jpg)

Understanding the prevalence of post-hospital psychiatric illness is essential for appropriate long-term psychiatric management of hospitalized COVID-19 patients [1]. The primary objective of the researcher was the cross-sectional study to determine the prevalence of post-discharge mental illness in hospitalized COVID-19 patients and their secondary aim was to

determine whether a history of psychiatric illness increases the likelihood of positive screening for psychiatric illness. The patients must receive special mental illness monitoring and crisis psychological interventions after discharge from hospitals.

According to Doppalapudi and Lippmann, 2020, The 2019 coronavirus disease (COVID-19) took the world by surprise. It is caused by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), which belongs to the coronavirus family. Mental health staff are focused on mitigating mental illness caused by the stress of this pandemic. There are psychiatric problems caused by viruses, host immune responses and some treatments. After previous coronavirus outbreaks, episodes of postviral anxiety, psychosis, and various mood disorders have been identified. SARS-CoV-2 invades the central nervous system (CNS). As a neurotropic virus. via the olfactory nerve pathway.

Prevalence of psychiatric morbidity in COVID-19 inpatients with and without prior psychiatric history.

	All patients N (%)	No prior psychiatric history N (%)	Prior psychiatric history N (%)	Odds Ratio (95% CI)
PTSD-5 positive[a, b]	72 (34.1%)	28 (23.0%)	44 (49.4%)	3.3 (1.8, 5.9)
GAD-7 positive[b]	52 (24.2%)	14 (11.2%)	38 (42.2%)	5.8 (2.9, 11.6)
CES-D 10 positive[a, b]	87 (41.8%)	45 (37.2%)	66 (75.9%)	5.3 (2.9, 9.8)
Any positive screen[b]	122 (56.7%)	52 (41.6%)	70 (77.8%)	4.9 (2.7, 9.1)

Table 1: Prevalence of psychiatric morbidity in COVID-19 in patients with or without prior psychiatric history
(Source: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7834109/)

The above table represents the history of psychiatric morbidity in COVID-19 in patients where all the history has the higher percentage and signifies the psychiatric morbidity among the patients. The virus is found in the CNS and replicates in neurons in vitro. Neuropsychiatric symptoms have been reported in post-COVID-19 patients. These are mental disorders that occur as a result of disease or injury to the central nervous system. These may be the direct result of a viral attack on the brain or a host immune response. Coronavirus infection causes bipolar disorder and other mood disorders and psychoses. An increased prevalence of antibodies to coronaviruses has been documented in psychiatric patients. Treatments such as corticosteroids and antiviral drugs prescribed to people with COVID-19 can cause psychosis. 3,10 Hydroxychloroquine can cause anxiety, mood disorders, insomnia, and/or psychosis.

According to Pfefferbaum and North, 2020, Public health emergencies have the potential to have an impact on the happiness, health, and safety of both individuals & communities due to financial loss, closure of businesses and educational facilities, a lack of resources for medical aid, and insufficient delivery of basic necessities. Among these effects are anxiety, confusion,

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sentimental exclusion, and stigma [2]. In both those who acquire the disease and the normal population, these impacts may manifest as a variety of emotional responses, such as distress or mental illnesses, unhealthy behaviors, like excessive drug use, and failure to adhere to public health recommendations, like immunization and home confinement.

Mental morbidities	Odds ratio	95% confidence interval	P value
General mental health problems			
High perceived stigmatization	3.29	1.18–9.17	0.02
High perceived social support	0.78	0.62–0.98	0.04
PTSD symptoms			
High negative coping inclination	1.58	1.04–2.38	0.03
SAS and/or SDS symptoms			
High perceived social support	0.79	0.64–0.97	0.02

Table 2: Logistic regression with variables predicting main outcomes of mental morbidities
(Source: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7273270/)

The above table represents the logistic regression of variable prediction about the main outcomes of mental morbidities where the p-values of all the variables are less tan 0.05 which is statistically significant. The majority of people are strong and rarely develop psychopathology after calamities. In actuality, some individuals actually develop new talents. Nevertheless, post-traumatic stress disorder (PTSD) brought on by trauma exposure is a major worry in conventional natural disasters, technology mishaps, and deliberate acts of mass destruction. Natural illnesses, such as severe viral infections, do not match the current trauma requirements required for PTSD classification, although they might result in other mental disorders like anxiety or sadness. It's likely that some groups are more susceptible than others to the psychological consequences of pandemics.

Materials and Methodology:

This study is related to assessment of psychiatric morbidities among covid-19 patients. In this, a total of 100 patients who have already suffered from, COVID-19 diseases have been assessed. Here, different groups of mentally disordered, COVID-19 Infected people have asked different questions, and are allowed to do different activities such that the answers or the activity-related outcomes can prove their mental state. In this study, the groups are divided into two main

broader senses such that they are divided by their mental illness and state of social position [3]. This study has proceeded in mainly two ways, firstly people with different mental states have been allowed to do different activities and the outcomes from the activities help to determine their mental state. In the second part of the study, people from different occupations are asked different questions and from there the percentage of their mental state has been determined.

Results and Observations:

The result section is divided into main two parts. Here, in the first part, people with different types of mental disorders are asked for different activities they do and the observations are recorded. From the findings of observations different mental illnesses were assessed.
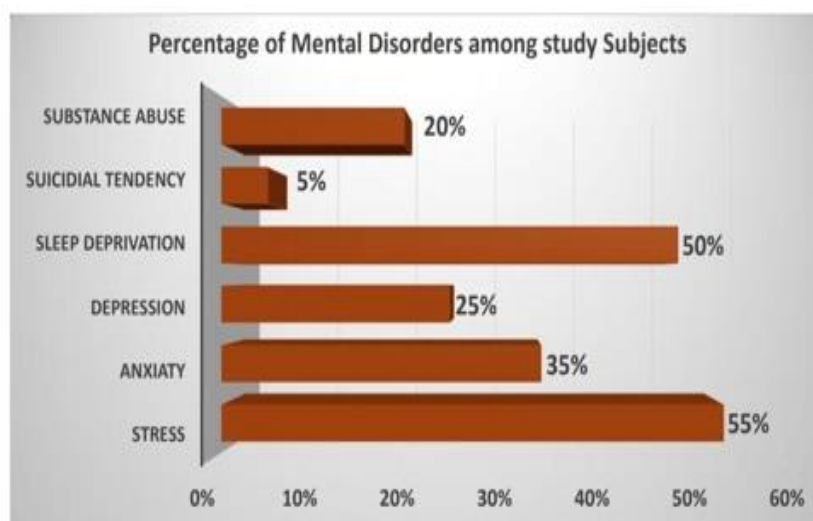

Figure 2: Distribution of Mental illness among study subjects

The above graph represents the percentage of mental illness among COVID-19-infected patients such as substance abuse, suicidal tendency, sleep deprivation, depression, anxiety, and the most common one is stress. All patients were asked to do different activities where the any abnormalities in their activity have been observed. And from the results, it is clear that the stress have the higher percentage of mental disorders among all and that is 55 per cent [4]. The second highest belongs to sleep deprivation which is 50 percent. And patients who have the suicidal tendency have the lowest percentage of mental disorders.

Secondly, the study has considered impacts of COVID-19 patients on social well-being. Here a total of 4 types of social grounds have been considered such as impact on social life, employment(occupation/economic conditions), education, and health condition. And the patients are asked different questions and observations were plotted as percentage and has been presented graphically.
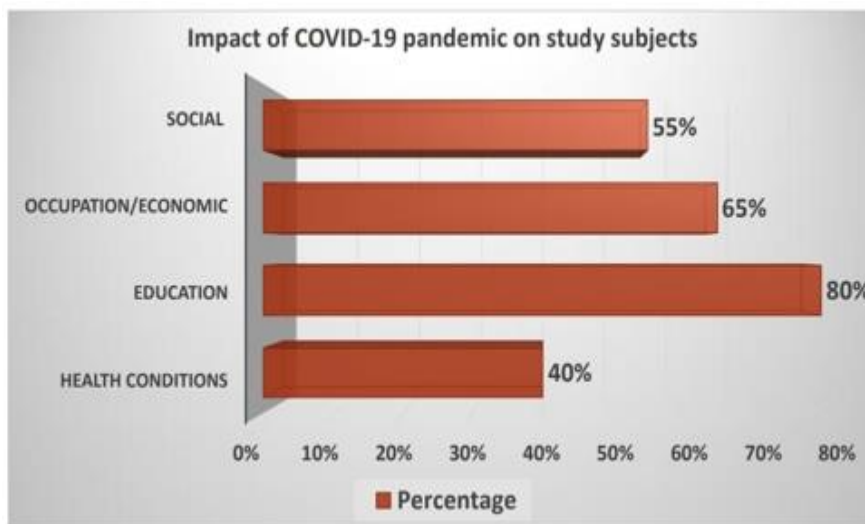
Figure 3: Impact of COVID-19 pandemic among study subjects

The above graph represents the impact of COVID-19 disease on of different people. From the graph, it is clear that the most of people were considered that highest impact on education, 80 percent and the second highest favored to employment. The results also show that lower mental wellbeing was significantly associated with male gender, private job, and older age group that is older than 45 years.

Discussion:

Patients who have the COVID-19 disease are at higher risk for it, like the elder, people with weakened immune systems, and those who already have medical, psychiatric, or addiction issues, negative psychosocial effects are more likely to occur. Medical professionals are particularly vulnerable to mental health problems in the current pandemic due to their risk of contracting the virus, worry about affecting and caring for their loved ones, lack of personal protective equipment (PPE), long hours at work, and involvement in resource allocation decisions that are emotionally and ethically challenging. Initiatives to prevent such consequences, such as mental health problem screening, psychoeducation, and psychosocial support, should concentrate on these and other groups at risk. Medical workers face a number of difficult difficulties, and the present pandemic makes them particularly vulnerable to mental health problems.

From the result section, it can be discussed that the COVID-19 infected patients who have the mental stress show the highest percentage of mental illness among all the participants. Thus, from here, it can be said that mental stress impacts more on a patient's nervous system [5]. On the other hand, the rate of mental illness is seen higher among the male patients who are above the 45 years old and involved with the economic profession.

Conclusions:

Patients with COVID-19 who are affected by the disease epidemic frequently experience psychological morbidities and enduring exhaustion. The two main risk factors are stigmatization and a lack of effective coping mechanisms, whereas generally acknowledged social support from others is the fundamental component in boosting patients' mental health. These results show how healthcare organizations must consider patients' psychological morbidity throughout the COVID-19 pandemic. In conclusion, despite the fact that clear recommendations were crucial during the epidemic, there is a dearth of knowledge on the significance of psychological wellness in relation to professional stress. Therefore, early-focused psychological therapy should be introduced as a regular part of global efforts to address the issue. Additionally, it ought to be established to carry out routine surveillance and monitoring of the psychological impacts connected to the formation of such fatal illnesses.

Future studies should look at the role that comorbidities may have in complicating or mediating the link between severe mental disease and COVID-19-related mortality. By providing this explanation, medical practitioners will find it simpler to provide the best physical and mental health care tailored to the particular requirements of this risk group.

Recommendations:

The study findings on psychiatric morbidities among COVID-19 patients exhibit the need for several recommendations. Firstly, healthcare providers should prioritize mental health screenings and interventions for individuals interpreted as patients with COVID-19. This can help determine and address psychiatric symptoms promptly [6]. Also, healthcare strategies should incorporate mental health services within COVID-19 care skills to ensure complete and holistic patient care. Furthermore, public health campaigns should concentrate on raising understanding about the potential psychiatric effects of COVID-19, reducing stigma, and encouraging access to mental health resources. This can facilitate early detection and intervention, improving patient outcomes. Collaboration between psychiatric and infectious disease specialists is crucial in developing tailored treatment plans that consider both physical and mental well-being.

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