



After COVID-19: The Impact of Sociodemographic Variables, Physical Health, and Functionality on Mental Health Symptoms and Quality of Life

Dikshita Yadav

Department of Sports, Amity University Gurugram, Gurugram, India

*Corresponding Author: Dikshita Yadav, Department of Sports, Amity University Gurugram, Gurugram, India

E-mail: dyadav90@gmail.com

Received: 06-Aug-2024, Manuscript no.: EJSES-24-144634; Editor assigned: 08-Aug-2024, Pre QC no: EJSES-24-144634(PQ); Reviewed: 12-Aug-2024, QC no.: EJSES-24-144634(Q); Revised: 15-Aug-2024, Manuscript no.: EJSES-24-144634(R); Published: 20-Aug-2024

ABSTRACT

With over 145 million affected individuals exhibiting multisystem symptoms, long COVID-19 syndrome continues to be a global public health concern. It is critical to attend to the needs of those affected by a syndrome that has a complex and diverse clinical presentation. To improve independence and quality of life, treatment solutions must take into account the elements that can have an impact and comprehend how they progress. Thus, the purpose of this research was to examine the impact of clinical and sociodemographic factors on existence and how they relate to symptoms of anxiety, depression, and asthenia. A cross-sectional descriptive study with observational data supplemented with an analytical investigation. The Activities of Daily Living Questionnaire (ADQL; $p=0.002$), age ($p=0.042$), and sex ($p=0.034$) all had significant univariate impacts on asthenia according to logistic regression. [overall health ($p=0.014$) and physical functioning ($p<0.001$)] and multivariate [physical functioning ($p=0.04$), adult age ($p=0.01$), and sex ($p=0.019$)] reduced mood [evolutionary time ($p=0.028$) and multivariate [time course ($p=0.007$), ADLQ ($p=0.011$), physical role ($p=0.013$), and overall health ($p=0.001$)] and anxiety [multivariate [physical functioning ($p=0.034$), age ($p=0.011$), time of evolution ($p=0.001$), and ADQL ($p=0.011$)] and physical functioning ($p=0.046$).

Keywords: Public health, COVID-19

INTRODUCTION

A typical clinical picture of symptoms including fever, malaise, headache, and exhaustion is brought on by an acute COVID-19 infection and may in some circumstances develop chronic. By means of an international Delphi agreement, the World Health Organization (WHO) has defined a clinical definition for chronic COVID-19. "Post-COVID-19 is a disorder that affects people who have had a history of probable or confirmed SARS-CoV-2 infection. Symptoms typically appear three months after the infection, remain for at least two months and cannot be explained by another diagnosis. Typical symptoms affect day-to-day functioning and include but are not limited to fatigue, dyspnea, and cognitive impairment. After first recovering from an acute bout of COVID-19, symptoms may appear again or continue from the original disease. Over time, symptoms could also change or recur. According to recent research, the condition is affecting about 145 million people globally. Long-term effects may impact 11% to 24% of COVID-19 affected individuals. These signs and symptoms have been discovered regardless of COVID-19's acute severity. Actually, eighty percent of cases are moderate. Even though the percentage is significant, it is important to remember that those who were not hospitalized during the acute phase of COVID-19 had less access to healthcare than those who were ill with other diseases because of limitations and isolation protocols. Social limitations persisted in Spain for two years after the pandemic began, particularly with the most susceptible people. In terms of the characteristics of individuals who have recovered from COVID-19, research indicates that most of them are female, average age 43, and have not had any significant health issues in the past. They also typically do not have a history of physical difficulties or mental illness diagnoses prior to COVID-19. Since the majority of individuals experienced a minor acute phase of COVID-19 without hospitalization, their acute phase was followed up on an outpatient basis. Persistent COVID-19 is thought to have an aetiopathogenesis in which the virus's processes cause long-term tissue damage, neuroinflammation, and changes to the immune system. This could help to explain why individuals with post-COVID-19 conditions frequently exhibit these enduring

symptoms, which change over time and are typically not associated with a pronounced recovery from the acute COVID-19 episode. Neurological and psychological symptoms, such as sadness, anxiety, cognitive impairment, asthenia, apathy, and sleep disturbances, are among the most common symptomatology that develops or continues over time. These factors have a substantial impact on everyday functioning and quality of life, making them important markers of poor mental health that are frequently employed in clinical evaluations. It is also noteworthy that this demographic has a substantial prevalence of chronic persistent asthenia, which is characterized by both physical and mental exhaustion that interferes with day-to-day functioning. Furthermore, these individuals frequently have Post-Exertional Malaise (PEM), a marked deterioration that occurs after physical activity. The information that is now available, however, still shows confusion because it is unclear if these mental health symptoms are caused by the disease's neurobiological effects or whether they evolve over time as a result of the influence of other factors that require further research. Numerous studies have mostly concentrated on analyzing how physical symptoms affect functioning and performance in day-to-day activities. Beyond simple symptoms, physical functioning and self-perception of one's physical health and performing physical roles relate to a person's ability and perception to engage in everyday physical activities in comparison to their pre-disease state. These factors may exacerbate emotional well-being. According to recent systematic evaluations, people with post-COVID-19 condition saw a decline in their ability to do Activities of Daily Living (ADL) as compared to their pre-diagnosis. Almost one-third of those afflicted have this neuropsychological illness right after the COVID-19 acute phase, and over time, its prevalence gradually raises. As a result, there are significant consequences and effects on mental health; in fact, some writers contend that COVID-19 is to blame for the current psychiatric crisis. As a result, this illness is still a serious worldwide public health issue that has long-term effects on both individuals and society. To execute appropriate treatments and promote the improvement and well-being of individuals affected, it is required to establish evidence and analyze the impact.

Thus, the purpose of this research was to examine the impact of sociodemographic factors, the relationship between physical health and the degree of reliance on clinical variables related to mental health symptoms. According to our initial hypothesis, the prediction of asthenia, anxiety, and low mood in individuals with post-COVID-19 condition may be influenced by variables such as age, gender, and duration of the disease, as well as clinical variables like physical functioning, bodily pain and performance of role physical, general health and dependency status.

DISCUSSION

The current study set out to examine the relationship between the participants' quality of life and clinical and sociodemographic factors, such as physical health and dependency status, as well as any potential effects on the presence or onset of asthenia, anxiety, or depressive symptoms. These findings are consistent with our study's focus on the temporal onset of symptoms rather than their intensity, which suggests that symptoms like anxiety and depression are more likely to develop and become widespread over time. Regarding gender-related findings, our data confirm the current literature and highlight the prevalence and increased significance of persistent COVID-19 in the female population. Previous studies have found sex-based disparities in the COVID-19 pandemic's mental health symptoms. Among a similar vein found that anxiety, depression, physical exhaustion, and sleep difficulties were much more common among women in their descriptive study of post-COVID-19 patients. They did not, however, offer a thorough analysis of symptoms like asthenia from a holistic standpoint. Revealed a strong association between asthenia and apathy and suggested that gender may operate as a risk factor for fatigue. These results are supported by our investigation, which shows that those who were impacted felt both physical and mental exhaustion. However, in contrast to earlier studies, we examined various particular psychiatric symptomatology in greater detail in our study, which expanded the scope and applicability of our findings. Our analysis revealed that age was a significant predictor of the emergence of anxiety, asthenia, and apathy. Our results point to a propensity for these symptoms to become apparent as people get closer to turning 50. The frequency of persistent weariness, both mental and physical, among post-COVID-19 persons has been highlighted by earlier study, especially in middle-aged cohorts. Our research adds to previous findings by emphasizing a heightened vulnerability to feelings of anxiety. Nonetheless, there may be a contradiction in the results of which showed that women under 50 had a higher prevalence of mental disorders.

Regarding the relationship between dependency status and symptoms of low mood and anxiety, our findings indicate that individuals with a higher level of dependency are more likely to experience these symptoms. These findings suggest that individuals affected by post-COVID-19 syndrome continue to face challenges in returning to their pre-illness normal life, impacting their autonomy and independence, thus potentially increasing the likelihood of experiencing symptoms of depression or anxiety. In this context, a systematic review concluded that individuals with persistent COVID-19 exhibited decreased performance in daily activities, leading to a loss of autonomy and independence with a negative impact on self-perceived quality of life. The analyzed trials were limited to acute phase hospitalized patients and did not follow up beyond six months after COVID-19. Our results are consistent with those of other earlier studies, which looked at the long-term restrictions on everyday activities of patients with persistent COVID-19 who were admitted to the hospital during the acute phase. Considering the sizeable proportion of outpatients who are presently afflicted with a post-COVID-19 disease, it becomes especially pertinent to analyze this profile, which is what our research focuses on. The authors have concluded that, in comparison to both their pre-illness state and similar populations, this population continues to exhibit. This suggests that, even though there have been some improvements in long-term daily activities since the COVID-19 diagnosis, the population's perception of their health is still poor, which contributes to a lack of mental well-being. However, as of now, we are unable to locate any research that examined the connection between mental health and restrictions in independence in post-COVID-19 individuals who had not previously been hospitalized. This may be extremely pertinent since, in addition to the effects of the disease's symptoms, independence in day-to-day activities can serve as a protective factor and be a sign of improved mental health. As a result, our data are pertinent to the development of focused intervention programs that prioritize functionality and environmental adaption in order to

enhance patient well-being and minimize negative effects on mental health.

These factors were carefully chosen in order to represent the complex character of poor mental health in our sample. Asthenia is frequently seen during the chronic illness stages, and in long-term COVID-19 patients, there is a strong correlation between physical symptoms and poor mood and anxiety. These results highlight the necessity of treating long-term COVID-19 patients holistically, taking into account both their physical and mental health issues.

CONCLUSIONS

The results of this study indicate that being female and getting close to 50 years old are risk factors for mental health symptoms in those dealing with post-COVID-19 disease. On the other hand, being independent in day-to-day activities and having healthy physical functioning operate as buffers against the emergence of mental health symptoms. Moreover, an extended period following diagnosis seems to intensify the occurrence and presentation of symptoms including exhaustion, depression, and anxiety, hence sustaining a reduced standard of living and weakened mental health in the patients. Although our results are relevant to individuals who recovered from COVID-19, they also fit with more general patterns of poor mental health in the general community.