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EDITORIAL

Evaluation of the mental health of COVID-19 patients discharged from the intensive care unit

Elif Sarac

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Abstract

In this editorial, I address the mental health status of patients who have been discharged from intensive care units (ICUs) after battling coronavirus disease 2019 (COVID-19). An ICU admission is generally a stressful experience, and for severe COVID-19 survivors prolonged treatment in the ICU can lead to significant psychological consequences. These individuals may experience psychiatric distress, including symptoms such as insomnia, anxiety, depression, and even post-traumatic psychological issues. Research indicates that during the first 6 months to 1 year following an ICU stay, nearly one-third of survivors exhibit symptoms similar to those of depression and post-traumatic stress disorder. Several factors may have contributed to the development of depressive and anxious symptoms during the COVID-19 pandemic, particularly for those who underwent an ICU stay. The ICU environment itself is inherently stressful, filled with the constant noise of various medical devices. Studies have provided strong evidence that the prolonged need for ventilation support and the loss of freedom of movement are key factors in the development of psychological problems among COVID-19 patients who had been treated in the ICU.

Key Words: COVID-19; Patient; Post-intensive care unit; Discharge; Mental health

Core Tip: A prolonged stay in the intensive care unit (ICU) for coronavirus disease 2019 can be psychologically traumatic to survivors. In addition to pandemic-related risk factors such as widespread contagion and lockdowns, it is crucial to emphasize the importance of monitoring the psychological health of individuals who have spent an extended period in the ICU.

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INTRODUCTION

The coronavirus disease 2019 (COVID-19) outbreak was declared a global public health emergency[1]. Despite ongoing efforts to combat the virus, it continues to spread in various forms. The clinical manifestations of COVID-19 vary widely, ranging from asymptomatic cases to severe physical and psychological issues, including multi-organ dysfunction[2-4]. Preventive measures such as social isolation, prolonged mask-wearing, and strict working conditions have had a significant impact on daily life. The disease poses a threat not only to physical health but also to mental well-being. Individuals in critical condition who were admitted to intensive care units (ICUs) face the highest risk of developing psychological distress later in life. Research supports the link between extended ICU stays, post-intensive care syndrome (PICS), and the onset of psychiatric disorders[5-8]. PICS can also lead to cognitive, physical, and mental health impairments.

In 5%-11% of cases, COVID-19 infection leads to medical complications that require a prolonged stay in an ICU with mechanical ventilation[5,9,10]. ICU hospitalization during COVID-19 treatment can be a traumatic experience. In addition to the many stressors associated with the pandemic, such as fear of the disease, social isolation, and uncertainty about the future, an extended ICU stay can further exacerbate a patient's psychological condition. Increasing evidence suggests that the virus has a significant emotional impact[2,11]. In particular, experiencing severe symptoms and requiring ICU admission may result in heightened anxiety, depression, and post-traumatic stress disorder (PTSD)[12,13].

Assessing the psychological health of COVID-19 survivors after ICU discharge is crucial for determining whether individuals receive appropriate mental health care during or after their ICU stay. Public health professionals have made significant efforts to prevent the spread of the disease and to minimize the comorbidities associated with COVID-19 treatments, including the psychological impact on survivors.

PICS

Critical illnesses are commonly associated with PICS, which affects many patients after ICU discharge. PICS is linked to high rates of psychological symptoms, including distress, anxiety, insomnia, and PTSD[14]. Preventative measures to reduce the incidence and severity of PICS are being implemented, such as orientation and communication strategies, early mobilization, and rehabilitation programs[15,16].

IMPORTANCE OF ASSESSING MENTAL HEALTH AMONG COVID-19 PATIENTS AFTER ICU DISCHARGE

To date, many studies exploring the impacts of the COVID-19 pandemic have focused primarily on physical or psychosocial outcomes. However, the literature is limited on the mental health of individuals who experienced severe symptoms and required ICU hospitalization. Previous research suggests that the long-term consequences of the virus include chronic fatigue and organ damage[17,18]. In addition to severe symptoms or physical disabilities, the pandemic has been associated with increased levels of anxiety, worry, and social avoidance behavior in the general population[19]. However, there is limited data on whether patients receive mental health care during or after their ICU admission[14,20]. It is well known that ICU admission can lead to various psychological disorders or negative emotions, including fear, nervousness, sadness, guilt, confusion, anger, numbness, and anxiety-induced insomnia[21-23]. Investigating the responses of COVID-19 survivors to their ICU hospitalization experience is crucial for providing better care and developing effective coping strategies.

There is strong evidence that preventive measures implemented during the pandemic, such as quarantine, isolation, and social distancing, may also contribute to the worsening of mental health in individuals and their family members[24,25].

Alhammad *et al*[26] published a significant study titled "Mental Health Status Among COVID-19 Patients Survivors of Critical Illness in Saudi Arabia: A 6-Month Follow-Up Questionnaire Study". This study focused on evaluating anxiety and depression in patients who had severe COVID-19. The research involved screening all patients with laboratory or radiological confirmation of COVID-19 who were either admitted to the ICU or under ICU observation for more than 24 h between April 2020 and November 2020. Data were collected using the Arabic version of the Hospital Anxiety and Depression Scale[27]. A total of 48 valid responses were received. The study concluded that individuals who were critically ill with the virus experienced anxiety or depression up to 6 months post-ICU discharge. These findings align with existing literature and confirm that the long-term impact of the disease persists even after discharge[28,29]. Piras *et al*[28] reported that patients commonly experienced negative feelings, anxiety, loneliness, and fear of dying. Another study

found that disabilities in daily activities and anxiety persisted up to 12 months after ICU discharge[30]. This evidence underscores the long-term mental health issues associated with extended ICU stays. The similarity in findings may be attributed to factors such as prolonged bed rest, the uncertainties associated with the virus, and the use of pharmacological sedation, which could lead to motor level impairments and nervous system deficits. Additionally, a study by Sun *et al*[31] found suggestive evidence of fear and stigma among individuals who experienced ICU admission. They also highlighted that the most challenging aspect was the feeling of complete isolation.

The results from studies indicate that the majority of individuals who experienced a prolonged ICU stay primarily faced mild to moderate levels of anxiety and depression related to their hospitalization. Given that long-term ICU stays can significantly impact patients' quality of life, it is crucial to identify those at risk to ensure effective management upon discharge and to provide continuity of care.

CLINICAL IMPLICATIONS

Since the onset of the COVID-19 pandemic, scientific research on psychological consequences has predominantly focused on objectively measurable aspects, such as panic disorder, insomnia, depression, and PTSD. However, there has been a neglect of the subjective experiences and emotions that may impact the mental health and quality of life of individuals who faced severe complications in the ICU.

CONCLUSION

The findings represent strong evidence that the prevalence of persistent psychological symptoms is higher among COVID-19 survivors following ICU hospitalization. Further research is suggested to identify individuals at risk for long-term effects of COVID-19 and to implement holistic care that begins before discharge and continues within the community after leaving the hospital or ICU.

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FOOTNOTES

Author contributions: Sarac E performed the design and conceptualization of the study, investigation, obtainment of the resources, supervision, visualization of the data, and writing, review and editing of the manuscript.

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