

Schizophrenia During COVID-19: Lessons Learned and Paths Forward

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Abstract

The COVID-19 pandemic has had a profound impact on the mental health sector, exacerbating vulnerabilities among individuals with chronic mental disorders, especially those living with schizophrenia. These individuals have faced increased infection and mortality rates, as well as barriers to healthcare access. Vaccination prioritization has been delayed and restricted in some countries for this population. These circumstances underscore ethical concerns, emphasizing the imperative for future special consideration in mental health intervention planning for individuals with schizophrenia during times of crisis.

Keywords: Mental health • Schizophrenia • COVID-19 • Vaccination

Introduction

The unprecedented global COVID-19 pandemic has exerted significant pressure on healthcare infrastructures, leading to detrimental effects on care delivery, particularly in the field of mental health. Individuals with a history of mental disorders report higher morbidity and mortality rates, along with an increased demand for COVID-19 related care once infected [1].

Schizophrenia, as a complex, debilitating, and severe mental disorder, manifests with profound alterations in perceptions, judgment, and significant loss of autonomy. Those affected by this condition are often vulnerable to various stressors, whether physical, psychological, or psychosocial. Individuals with schizophrenia were exposed to several virus contraction risk factors, such as disorganization symptoms, neurocognitive impairments hindering adherence to preventive measures, barriers to healthcare access, high nicotine consumption, elevated comorbidity with metabolic syndrome, and treatment-related risks like pneumonia associated with clozapine use [1,2].

Description

During the COVID-19 pandemic, individuals with schizophrenia were identified as having an increased risk of contracting severe forms of the virus, placing them among the most vulnerable populations.

Moreover, COVID-19 associated mortality was high in these patients, amplifying their status as a high-risk group within the general population. A notable correlation was found between schizophrenia and an increased mortality rate attributable to SARS-CoV-2 infections in individuals with this condition, with an Odds Ratio (OR) of 2.67 compared to those without mental disorders, after adjusting for variables such as age, sex, race, and other risk factors [2]. Recent research suggested that *Toxoplasma gondii* infections, directly or indirectly, are linked to higher mortality in schizophrenia patients infected with COVID-19 [3].

The incidence of psychotic disorders has been estimated at 1.6% within 6 months following a COVID-19 infection [4]. This recent finding strengthens the connection already explored in scientific literature between viral infections and the onset of psychotic disorders. It supports the pre-existing hypothesis that lifelong exposure to viral illnesses is linked to the development of schizophrenia, emphasizing the importance of understanding the long-term impact of viral infections on mental health [5].

Due to a lack of scientific data, the inclusion of this population as a vaccination priority was delayed compared to that of some chronic illnesses. Many research teams worldwide, along with institutions, advocated for prioritizing vaccination among patients with psychosis in the national vaccination strategy. In Tunisia, our team conducted a study one month after the start of the electronic vaccination campaign

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"Evax.tn" organized by the Tunisian Ministry of Health. The study was carried out even before the inclusion of patients with severe mental disorders, who were added to the prioritized population for vaccination after 5 months from the campaign's inauguration. The results showed low utilization of COVID-19 protection measures, low digital vaccination registration rates, poor vaccination adherence, and a significant association between vaccination refusal and the severity of psychotic symptoms. Thus, our study raised the issue of vaccine hesitancy among individuals with schizophrenia and recommended specific vaccination guidance for this population [6].

In Stéphane Raffard et al., study, negative attitudes towards vaccines were linked to increased levels of negative psychotic symptoms and higher paranoid ideation. Disparities in COVID-19 vaccination rates in individuals with schizophrenia are not related to vaccination hesitancy but rather to structural obstacles such as limited internet access, geographical distance from vaccination sites, and residence in more disadvantaged areas [7]. Individual, environmental (loneliness and isolation), and individual-environment interaction factors predicting motivation to receive COVID-19 vaccination were identified [8].

Today, despite limited hindsight into the pandemic, the long-term impact of COVID-19 on patients with schizophrenia is unknown; some data suggest that these patients with a psychiatric disorder are more susceptible to developing persistent symptoms, known as COVID LONG, compared to those without preexisting mental disorders [9].

Similarly, there is limited data examining the link between COVID-19 vaccination and psychiatric symptoms. The severity of these symptoms is associated with age and perceived stress. Moreover, COVID-19 vaccination might slightly increase psychotic symptoms, as well as anxiety, depression, and perceived stress in individuals with schizophrenia [10].

The COVID-19 pandemic has exposed vulnerabilities in the healthcare systems of several countries, notably highlighting gaps in mental health services, with detrimental effects on vulnerable patients. However, this period has also presented an opportunity to introduce and experiment with telemedicine within this specific population. It has provided a chance to address inherent challenges and explore the potential benefits of this approach in delivering mental health services, marking a positive development in the field of psychiatric care [11,12].

Conclusion

Given the complex challenges faced by patients with schizophrenia in the context of COVID-19, it is imperative to concentrate efforts on a thorough understanding of the long-term effects of COVID-19 on this vulnerable population. This approach should involve a comprehensive analysis of the neurological, psychological, and social implications to guide the development of follow-up protocols and tailored interventions. Ethical principles demand special consideration for the most vulnerable patient groups

such as those with schizophrenia, during pandemic periods. Emergency plans and mental health policies must be developed, taking into account the specific needs of patients with chronic psychotic disorders and integrating this population as a priority in crisis care delivery.

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