Why COVID-19 Is Especially Difficult for Those With Schizophrenia:
Reasons and Solutions

Sanjana P. Padala[a,*]; Richard A. Dennis, PhD[b]; and Ricardo Caceda, MD, PhD[c]

The coronavirus disease 2019 (COVID-19) pandemic has uprooted the lives of many individuals in its wake. Major consequences of the COVID-19 pandemic include increased global morbidity and mortality rates, social isolation, reduced availability of resources essential for daily needs, and a severe decline in health care options. Individuals who suffer from mental health issues are especially vulnerable, not only to COVID-19 infection, but also to the pandemic's effect on mental health. For instance, Brooks and colleagues[1] reviewed the psychological effect of quarantine and described increased anxiety, depression, confusion, anger, and posttraumatic stress symptoms. It is essential to characterize the impact of the COVID-19 pandemic on individuals with severe mental illness to generate prompt and efficient solutions to the problems that affect their daily lives. Patients with schizophrenia, approximately 3.5 million Americans, represent a particularly vulnerable population with regard to COVID-19.[2] We address the impact of COVID-19 on patients with schizophrenia based on the *DSM-5* multiaxial diagnostic system and comment on use of technology, telehealth, and other available strategies to mitigate the effects.

Axis I

The effects of the COVID-19 pandemic are likely influenced by the presence of either positive (delusions and hallucinations) or negative (reduced motivation, defects in speech, and social withdrawal) symptoms. The fear of becoming infected might worsen paranoia and other established delusional systems. Social distancing, which is a measure to help contain the COVID-19 pandemic, takes an additional toll on these patients. Closure of many mental health clinics due to COVID-19 limits access to resources, providers, medications, and case management, and many community outreach programs that serve the most impaired patients have been suspended as well. Use of telehealth has become widespread seemingly overnight. Delusions and hallucinations may interfere with care if telehealth is the only available outpatient modality. Fortunately, telehealth seems to be well accepted by patients with schizophrenia spectrum disorders.[3] Nonetheless, many psychotropics, such as long-acting antipsychotics and clozapine, require face-to-face contact for injections or periodic blood draws to monitor neutrophil counts or blood levels (mood stabilizers). In this context, the US Food and Drug Administration (FDA)[4] has already relaxed its blood draw monitoring guidelines for patients on clozapine and encouraged clinicians to use their best judgement while deciding to continue clozapine without regular monitoring. Furthermore, the FDA stated that no enforcement action will be taken with regard to the reduced risk evaluation and mitigation strategy–required testing at least through the duration of the pandemic. Siskind et al[5] recommend that the frequency of absolute neutrophil count testing may be reduced to every 3 months, with a dispensation of up to a 90-day supply of clozapine in select patients that have been on the medicine for at least a year and have no history of neutropenia.

Thought process abnormalities and cognitive dysfunction, common symptoms particularly in older patients with schizophrenia, may lead to poor encoding, including maintenance and retrieval of information, which in turn results in an increased difficulty in understanding, poor concentration and memory, and difficulty expressing and integrating thoughts, feelings, and behavior.[6] Thus, patients with schizophrenia would have difficulty following the evolving COVID-19–related guidelines and adapting to the abrupt changes in health care systems. These individuals may have a difficult time following pandemic-related precautions such as washing hands more often, following social distancing protocols and self-isolating, and monitoring symptoms of COVID-19, making them more vulnerable. It is important to monitor such patients carefully while working with their families.

Axis II

Although schizoid traits are fairly common in patients with schizophrenia, they may have a minor impact during the COVID-19 pandemic. On the other hand, schizotypal, neurotic, and anxious traits may worsen these patients'

[a]Vanderbilt University, Nashville, Tennessee
[b]Central Arkansas Veterans Healthcare System, Little Rock, Arkansas
[c]Department of Psychiatry and Behavioral Sciences, Stony Brook University Medical Center, Stony Brook, New York
*Corresponding author: Sanjana P. Padala, Vanderbilt University, 2301 Vanderbilt Pl, Nashville, TN 37235 (Sanjana.p.padala@vanderbilt.edu).

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outlook in terms of uncertainty, fears, and reduced traditional social support.[7] Inability to make or sustain relationships places patients with schizophrenia at high risk of social isolation. Proactively reaching out to patients at high risk of isolation via phone calls or video chats and connecting them with peer support specialists are some approaches to reduce isolation. Existing programs to identify high-risk patients for preemptive care, such as the VA REACH VET Initiative,[8] could be adapted to identify schizophrenia patients at high risk of social isolation.

Axis III

Medical comorbidity is the rule rather than the exception in schizophrenia. Patients with schizophrenia have higher rates of obesity, diabetes, smoking, cardiovascular conditions, and immunodeficiency syndromes. Many of these comorbidities increase the risk of COVID-19 infection and are associated with poorer outcomes when diagnosed with the virus. Thus, patients with schizophrenia have a multilayered increased vulnerability to the physical deleterious effects of COVID-19, and the essential management of these chronic illnesses may be disrupted by the pandemic.

Axes IV and V

Social isolation has had a deleterious effect on mental health during the pandemic. Most low-functioning patients with schizophrenia live alone in community housing or are homeless. Being unable to physically meet with loved ones may cause an increase in stress, uncertainty, and mood and anxiety symptoms due to a lack of social contact. Many hospitals have also restricted visitations to stem the spread of COVID-19, which forces patients to be socially isolated. Although telecommunication tools exist, distrust or unfamiliarity with technology may be an added barrier for older adult schizophrenia patients using such tools. Patients with schizophrenia have a harder time maintaining a regular income, which limits their access to food, permanent housing, and medication.[9] The COVID-19 pandemic has caused a considerable increase in unemployment rates, restricting individuals from having a steady income to provide for themselves or their families. Shortages of resources that patients rely on, such as transportation, groceries, and services from public buildings, further disrupt daily life. Limited hospital resources, including beds, staff, and equipment, reduced transportation for patients, and knowledge, skills, and access barriers to use of telehealth are also major problems that have emerged during the COVID-19 pandemic. Patients with schizophrenia must seek alternative strategies to obtain health care but may lack the know-how or external support to face these challenges.

Potential Solutions

Telecommunication and telehealth along with enhanced case management and a multidisciplinary approach can solve some of the problems reported here. Telehealth can meet several health care needs and relieve the burden on patients, health care systems, and society in general, while helping to reduce the COVID-19 infection rate. Telecommunication such as FaceTime is a good way for individuals to connect with loved ones during social isolation.[10] Relaxation of telehealth regulations at the federal and state levels has successfully allowed for the ability to increase outpatient coverage in many fields, thereby improving the management of chronic illnesses. Use of text messages to improve clinical engagement and smartphone apps has been studied in schizophrenia, and efforts should be made to facilitate their use in addition to telehealth visits.[11,12] However, other essential services such as medication delivery, patient transportation, and food provision may still need thoughtful in-person contacts.

***Enhanced case management*:** In-person contacts in the community are key components in the success of evidence-based models of care for schizophrenia including assertive community treatment and intensive case management.[13] These case management strategies might need to be enhanced and adapted to reduce the spread of the virus. The Department of Veterans Affairs, for instance, has used several innovative changes to their Mental Health Intensive Case Management program such as changing long-acting injectables (LAIs) to 3-month formulations if clinically justified, going to patients' homes to deliver the LAI, administering the LAI on porches or in driveways while both patients and staff are wearing masks, and using vans instead of sedans for patient transportation to provide ample room for social distancing.

Multidisciplinary approaches: Involvement of pharmacists is critical to ensure that patients have sufficient refills of medications for management of both schizophrenia and medical comorbidities, to identify those whose refills have lapsed or who did not order medications in time, to provide longer duration of prescriptions, and to suggest LAIs instead of oral medications. Nurses may work with family members of schizophrenia patients to ensure that medication refills are ordered in a timely fashion, ideally for a mail-out option, while also educating them on picking the medication up safely using any screening protocols in place. Social workers play an important role in ensuring that delivery of essential services continue with limited contact by reaching out to homeless shelters, food pantries, and homeless kitchens. Many food pantries are prepackaging items for pick up. Education for patients and their caregivers on handwashing, masking, and maintaining safe physical distance during the pandemic may yield considerable rewards for patients with severe mental illness and society in general.

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REFERENCES

1. Brooks SK, Webster RK, Smith LE, et al. The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *Lancet*. 2020;395(10227):912–920.
2. Kessler RC, Birnbaum H, Demler O, et al. The prevalence and correlates of nonaffective psychosis in the National Comorbidity Survey Replication (NCS-R). *Biol Psychiatry*. 2005;58(8):668–676.
3. Santesteban-Echarri O, Piskulic D, Nyman RK, et al. Telehealth interventions for schizophrenia-spectrum disorders and clinical high-risk for psychosis individuals: a scoping review. *J Telemed Telecare*. 2020;26(1–2):14–20.
4. US Food and Drug Administration. Coronavirus (COVID-19) Update: FDA provides update on patient access to certain REMS drugs during COVID-19 public health emergency. https://www.fda.gov/news-events/press-announcements/coronavirus-covid-19-update-fda-provides-update-patient-access-certain-rems-drugs-during-covid-19. Accessed August 12, 2020.
5. Siskind D, Honer WG, Clark S, et al. Consensus statement on the use of clozapine during the COVID-19 pandemic. *J Psychiatry Neurosci*. 2020;45(3):222–223.
6. Barch DM, Ceaser A. Cognition in schizophrenia: core psychological and neural mechanisms. *Trends Cogn Sci*. 2012;16(1):27–34.
7. Gurrera RJ, Nestor PG, O'Donnell BF. Personality traits in schizophrenia: comparison with a community sample. *J Nerv Ment Dis*. 2000;188(1):31–35.
8. McCarthy JF, Bossarte RM, Katz IR, et al. Predictive modeling and concentration of the risk of suicide: implications for preventive interventions in the US Department of Veterans Affairs. *Am J Public Health*. 2015;105(9):1935–1942.
9. Suijkerbuijk YB, Schaafsma FG, van Mechelen JC, et al. Interventions for obtaining and maintaining employment in adults with severe mental illness, a network meta-analysis. *Cochrane Database Syst Rev*. 2017;9(9):CD011867.
10. Padala SP, Jendro AM, Orr LC. Facetime to reduce behavioral problems in a nursing home resident with Alzheimer's dementia during COVID-19. *Psychiatry Res*. 2020;288:113028.
11. D'Arcey J, Collaton J, Kozloff N, et al. The use of text messaging to improve clinical engagement for individuals with psychosis: systematic review. *JMIR Ment Health*. 2020;7(4):e16993.
12. Firth J, Torous J. Smartphone apps for Schizophrenia: a systematic review. *JMIR Mhealth Uhealth*. 2015;3(4):e102.
13. Mueser KT, Bond GR, Drake RE, et al. Models of community care for severe mental illness: a review of research on case management. *Schizophr Bull*. 1998;24(1):37–74.