Prepare the psychiatric inpatient unit for COVID-19 pandemic

Mao-Hsuan Huang[a,b,c], Chih-Yuan Hung[a], Tung-Ping Su[b,c,d,*]

[a]Department of Psychiatry, Taipei Veterans General Hospital, Yuanshan and Suao branches, Ilan, Taiwan, ROC; [b]Division of Psychiatry, Faculty of Medicine, National Yang Ming Chiao Tung University, Taipei, Taiwan, ROC; [c]Institute of Brain Science, National Yang Ming Chiao Tung University, Taipei, Taiwan, ROC; [d]Department of Psychiatry, General Cheng Hsin Hospital, Taipei, Taiwan, ROC

Taiwan, which has been mostly free of coronavirus disease 2019 (COVID-19), is now facing the worst outbreak since the beginning of the pandemic. To preserve healthcare capacity, Taiwan's Central Epidemic Command Center (CECC) have tightened hospital/quarantine ward admission guidelines for COVID-19 patients in the following groups: people having moderate or severe COVID-19, aged 80 or above, 36 weeks pregnant or over, infants under 3 months old with a fever, and infants 3–12 months old with a fever of over 39 degrees Celsius.[1] Patients with psychiatric disorders have been reported to be vulnerable to being infected with COVID-19 and to experience adverse outcomes[2]; clinical recommendations and practical suggestions have been proposed in response to the evolving needs of psychiatric acute inpatients.[3–5] However, patients with COVID-19 who have severe mental illnesses with potential dangerousness to self or others do not meet the current CECC criteria for hospital/quarantine ward admission. Here, we share our experience in managing a cluster infection in a psychiatric inpatient unit (Yuanshan and Suao branches of Taipei Veterans General Hospital) and actions we took to care for COVID-19 patients requiring intensive psychiatric care and treatment.

A standard operation procedure (SOP) has been developed in our department before the COVID-19 outbreak to outline the process to be followed by all mental health professionals while caring for psychiatric inpatients with COVID-19. The SOP was frequently updated to meet the CECC regulations and included the following: criteria for intensive care unit (ICU)/quarantine ward transfer, criteria of COVID-19 testing for patients and medical staff, use of personal protective equipment (PPE), disinfection guidelines, and admission and discharge protocol. The chief of the psychiatry department has built a multidisciplinary team, consisting of psychiatry, psychology, nursing, and social worker staff, to implement the administrative and clinical aspects of the SOP. Soon after this outbreak, a cluster of infections involving more than 20 inpatients was identified in our acute and chronic inpatient units. The first index case developed fever and sore throat, and COVID-19 infection was detected. Immediately after identifying the index case in the unit, leaders of the department collaborated with infectious disease experts at our hospital and implemented several steps to prevent further spread of COVID-19:

1. Explain all changes and procedures that were necessary to take clearly and transparently to our patients. Educational sessions on COVID-19 transmission were provided to patients before this outbreak. All patients must wear a surgical face mask in the unit.
2. Provide polymerase chain reaction (PCR) test for all inpatients and healthcare providers in the same unit. Inpatients or healthcare providers who tested negative but had cold-like symptoms (ie, sore throat, hoarse voice, muscle pain, chills) in the following days would receive additional testing.
3. Because these patients were not eligible for quarantine ward transfer and the quarantine ward bed capacity is limited, they received COVID-19 and psychiatric treatment in our inpatient unit. Isolation rooms for positive and potentially positive patients were therefore created, with a maximum of five patients in one room. The ventilation system and the bathroom were separated from other rooms in the unit. Patients in units with cluster infection had to dine in their own room; all group sessions, including occupational therapy and group psychotherapy, were temporarily suspended. Rehabilitation program continued in units without cluster infections.
4. Antiviral medication (Nirmatrelvir) was prescribed to COVID-19 infected patients, and drug-drug interactions were considered.
5. Patients were transferred to quarantine ward or ICU once they developed moderate or severe COVID-19.
6. According to the CECC guidance, patients in isolation with confirmed COVID-19 were allowed out of isolation 7 days after the positive PCR test.
7. All staff in contact with COVID-19 infected patients as part of their duties need to use a full set PPE (ie, N95 respirator, goggles, scrubs, gloves, boots). Surgical face masks were worn by staff in nonclinical areas and when it was possible to maintain safe distancing (>1.5 meters). Hand hygiene using alcohol-based sanitizers were made available. Staff changing area, clean area, and dirty area were clearly identifies to prevent cross-infection. Workstations were separated to keep social distancing.

*Address correspondence. Dr. Tung-Ping Su, Department of Psychiatry, General Cheng Hsin Hospital, 45, Cheng Hsin Street, Taipei 112, Taiwan, ROC. E-mail address: tomsu0402@gmail.com (T.-P. Su).

Conflicts of interest: Dr. Tung-Ping Su, an editorial board member at Journal of the Chinese Medical Association, had no role in the peer review process of or decision to publish this article. The other authors declare that they have no conflicts of interest related to the subject matter or materials discussed in this article.

Journal of Chinese Medical Association. (2022) 85: 739-740.

Received May 17, 2022; accepted May 21, 2022.

doi: 10.1097/JCMA.0000000000000753.

Copyright © 2022, the Chinese Medical Association. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/)

CA9_V85N7_Text.indb 739 24-Jun-22 20:16:46

8. All family and nonteam member visits were stopped to reduce nonessential contacts.
9. As decrease in the psychiatric inpatient services has been suggested to lead to long-term consequences,[6] our acute inpatient units without cluster infections were still open for patients with psychiatric emergency. Prior to their arrival at our facility, all patients need to do a PCR test and stay in isolation rooms until the test result was negative. The patient stayed in the isolation room if the test was positive; we informed their family and discussed with them whether they need self-isolation at home or to do a rapid test.
10. For COVID-19 patients whom compulsory admission was advised, they stayed in isolation rooms in which an intercom was equipped so that coercive measures could take place even when patients were in quarantine.

While the daily COVID-19 new cases are still increasing, the need for psychiatric services will increase nationwide in the coming months. Over the last few weeks, we have had admissions of patients whom have been impacted by the pandemic, with worsening of psychiatric symptoms such as psychosis, depression, and anxiety. The urgent and involuntary psychiatric inpatient admissions may increase during the pandemic,[7] resulting from the tightened admission criteria for less urgent admissions from restrictions imposed by the hospitals. We suggest that mental health professionals should proactively plan strategies in managing COVID-19 inpatients with psychiatric disorders in various settings: outpatient, emergency department, inpatient units, consultation-liaison psychiatry, and the community. It should be noted that not all psychiatric inpatient units are suitable for caring COVID-19 patients. Implementing prevention measures in units with shared bathrooms, limited bed capacity and limited space for social distancing can be a challenge and may put staff at risk of contagion. Priority should be given to staff stability and safety in order to build teams with a sense of togetherness.

The lesson we learned from this recent event is the need for frequent and open communication within group leaders and between leaders and staff. Medical staff have carried a heavy burden during the COVID-19 crisis not only in terms of the workload from stressful and risky working environments but also in the mental health aspect.[8] Transparency and sharing knowledge about risks, and making preparations for possible scenarios were vital elements that facilitated staff despite the unfavorable circumstances. Technical support as use of communication software to establish prompt links is critical and needs to be part of a preparedness plan. At the same time, the rights of COVID-19 inpatients with psychiatric disorders deserve extra protection. They belong to a group of particularly vulnerable patients, with limited mobility in the isolation rooms, restricted access to the optimal therapeutic program, and no visitors.

The COVID-19 pandemic is not likely to end in the near future, and it is reshaping our clinical practice. Providing psychiatric treatment to patients while coping with pandemic at the same time has given rise to opportunities for innovation and will become part of our new routine. Our experience underscores the complexity of COVID-19 patients with psychiatric disorders and the multifaceted approaches that should be considered.

ACKNOWLEDGMENTS

We appreciate the support from Dr. Pan-Ming Chen, Dr. Li-Kai Tseng, and all medical staff from the Yuanshan and Suao branches of Taipei Veterans General Hospital.

REFERENCES

1. Taiwan Centers for Disease Control. Principles for admission and treatment of mild and severe Covid-19 cases adjusted effectively from today. 2022. Available at https://www.cdc.gov.tw/En/Bulletin/Detail/0bypzhk24jp7-_hNkNTZsw?typeid=158. Accessed May 16, 2022.
2. Yao H, Chen JH, Xu YF. Patients with mental health disorders in the COVID-19 epidemic. *Lancet Psychiatry* 2020;**7**:e21.
3. Mahgoub N, Agarkar S, Radosta M, Fakih F, Calleran B, Clark R, et al. Inpatient psychiatry unit devoted to COVID-19 patients. *Compr Psychiatry* 2021;**107**:152237.
4. Anmella G, Arbelo N, Fico G, Murru A, Llach CD, Madero S, et al. COVID-19 inpatients with psychiatric disorders: real-world clinical recommendations from an expert team in consultation-liaison psychiatry. *J Affect Disord* 2020;**274**:1062–7.
5. Vigo D, Patten S, Pajer K, Krausz M, Taylor S, Rush B, et al. Mental health of communities during the COVID-19 pandemic. *Can J Psychiatry* 2020;**65**:681–7.
6. Pfefferbaum B, North CS. Mental health and the Covid-19 pandemic. *N Engl J Med* 2020;**383**:510–2.
7. Fasshauer JM, Bollmann A, Hohenstein S, Mouratis K, Hindricks G, Meier-Hellmann A, et al. Impact of COVID-19 pandemic on involuntary and urgent inpatient admissions for psychiatric disorders in a German-wide hospital network. *J Psychiatr Res* 2021;**142**:140–3.
8. Lai J, Ma S, Wang Y, Cai Z, Hu J, Wei N, et al. Factors associated with mental health outcomes among health care workers exposed to coronavirus disease 2019. *JAMA Netw Open* 2020;**3**:e203976.

CA9_V85N7_Text.indb 740 24-Jun-22 20:16:46