

# Critical issues in treating COVID-19-positive psychiatric patients in low- and middle-income countries

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**This paper considers certain specific issues that will be faced by low- and middle-income countries when treating psychiatric patients who test positive for COVID-19. The need for both medical and psychiatric units to do the same and challenges in the treatment and management of positive-testing patients are discussed.**

A multitude of specific mental health issues have arisen from the COVID-19 pandemic. Current literature has shown that patients with pre-existing psychiatric illness may be reluctant to follow the precautions laid down, owing to their lack of insight and understanding. They may not seek help when they have medical problems or fever and thus may not be tested for COVID-19 as they do not approach authorities.<sup>1</sup>

Low- and middle-income countries (LMICs) face particular problems when a patient with an existing psychiatric illness tests positive for COVID and may need medical and psychiatric intervention at the same time.

## COVID-19-positive medical/psychiatric units

A patient who tests positive for COVID-19 and has an acute psychiatric illness or is suffering from acute substance withdrawal is a unique challenge in all settings. It may be an onerous task, especially in low-resource countries, to manage such patients in a medical intensive care unit. The staff are ill-equipped to handle psychiatric emergencies, and there may be a risk of violence on the part of the patient. Team management by a combination of both medical and psychiatric units is required in such cases. The patient would need admission in a restrictive environment such as an in-patient psychiatric unit and at the same time would need intensive care back-up if available.<sup>2</sup> COVID-19-positive psychiatric patients would ideally need input from psychiatrists and internal medicine experts working in the same unit. At any point in time either the psychiatric disorder or the medical disorder could take priority and there may be instances where both conditions should be treated simultaneously. Some patients need isolation and primary medical treatment, whereas others need medical monitoring while the primary management is delivered by psychiatrists. Many patients will need individual psychotherapy, occupational therapy and help

from a psychiatric social worker, so all these professions should ideally contribute to the staffing of such units.<sup>3</sup>

## PPE and nursing staff training

A problem faced by many LMICs is the shortage of personal protective equipment (PPE) needed to protect staff who are monitoring patients held in isolation during the acute phase of the COVID-19 infection. If there is joint care from physicians and psychiatrists, the entire psychiatric unit will need to be trained in its effective use. That would include not only wearing and removal but also the disposal of PPE, as well as basic training in infection control and sanitisation procedures.<sup>4</sup>

The nursing staff of a joint medical/psychiatric unit would need to be trained from a medical and psychiatric point of view. Nurse:patient ratios will have to be monitored (as in a psychiatric unit) and a combination of medical and psychiatric nurses would be in joint overall charge. The nursing staff would need both to monitor patients for their mental state and to undertake medical observations, if they are managing high-risk patients who are COVID-19 positive. This will be demanding, so it is important to allow for relief and breaks from wearing PPE. They should have access to rest periods between duties.<sup>5</sup>

## Restraint and discharge guidelines

The 'COVID-19-positive medical/psychiatric unit' will require guidelines to be put in place on the restraint of violent patients. There will be a need for staff to wear PPE when they perform such interventions. Additional guidelines should indicate when a patient who is COVID-19 negative and medically fit may be discharged. They might be transferred to a non-COVID-19 psychiatric unit in the same centre or to a long-term rehabilitation unit so that psychiatric care can be continued. Keeping all this in mind, it would be prudent for the general hospital psychiatric units that form the backbone of psychiatric care in LMICs to take up the challenge of establishing COVID-19-positive medical/psychiatric units in the same hospital to facilitate better care for these subsets of patients.<sup>6</sup>

## Patient-specific considerations

While running a COVID-19-positive medical/psychiatric unit there is also a need for all the staff involved to be trained in ethical considerations.

It would be important to ensure that at all times there is no ethical violation or human rights violation from the patient's perspective. Many psychiatric patients may not be capable of giving consent to treatment, so an evaluation of their insight into the procedures will need to be carried out. A legal representative may have to be consulted in such cases.<sup>7</sup>

Many psychiatric patients (unlike other patients with COVID-19 infections) will need help from a psychosocial point of view to combat the dual stigma they may face (COVID-related plus mental illness-related). They may need assistance to find employment post-discharge, supervised medication, decent housing and sound social support.<sup>8</sup>

Two other important points also need consideration. There could be interactions between the drugs used in the management of COVID-19 and psychotropic medication. Vigilance will be required to watch for psychiatric side-effects caused by drugs used in the management of COVID-19.<sup>9</sup> It is also vital to bear in mind the possibility that emergent psychiatric symptoms could be of neuropsychiatric origin due to the COVID-19 infection, resulting from the massive release of cytokines that sometimes occurs in that condition. A cytokine storm can have psychiatric manifestations.<sup>10</sup>

### Service implications

Where possible, we recommend the establishment of COVID-19-positive joint medical/psychiatric units in LMICs, although there are various challenges in achieving this and in providing psychiatric care in such settings. Many LMICs simply lack sufficient psychiatric establishments and staff to provide such joint care. In such countries it is imperative to put in place structures by which medical staff who are caring for COVID-19-positive patients with mental health problems can obtain (online) support from experts who understand the issues involved.

### Author contributions

All the authors have made substantial contributions to the conception or design of the work; or the acquisition, analysis, or

interpretation of data for the work; drafting the work or revising it critically for important intellectual content; and final approval of the version to be published, and agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

### Declaration of interest

None.

ICMJE forms are in the supplementary material, available online at <https://doi.org/10.1192/bji.2020.40>.

### References

- 1 Duan L, Zhu G. Psychological interventions for people affected by the COVID-19 epidemic. *Lancet Psychiatry* 2020; 7: 300–2.
- 2 Fagiolini A, Cuomo A, Frank E. COVID-19 diary from a psychiatry department in Italy. *J Clin Psychiatry* 2020; 81: 20com13357.
- 3 Bojdani E, Rajagopalan A, Chen A, Gearin P, Olcott W, Shankar V, et al COVID-19 pandemic: impact on psychiatric care in the United States, a review. *Psychiatr Res* 2020; 289: 113069.
- 4 Tomas ME, Kundrapu S, Thota P, Sunkesula VC, Cadnum JL, Mana TS, et al Contamination of health care personnel during removal of personal protective equipment. *JAMA Intern Med* 2015; 175: 1904–10.
- 5 Shao Y, Shao Y, Fei JM. Psychiatry hospital management facing COVID-19: from medical staff to patients. *Brain Behav Immun* [Epub ahead of print] 10 Apr 2020. Available from: <https://doi.org/10.1016/j.bbi.2020.04.018>.
- 6 Xiang YT, Zhao YJ, Liu ZH, Li XH, Zhao N, Cheung T, et al The COVID-19 outbreak and psychiatric hospitals in China: managing challenges through mental health service reform. *Int J Biol Sci* 2020; 16: 1741.
- 7 De Sousa A, Mohandas E, Javed A. Psychological interventions during COVID-19: challenges for low and middle income countries. *Asian J Psychiatry* 2020; 51: 102128.
- 8 Mukhtar MS. Mental health and psychosocial aspects of coronavirus outbreak in Pakistan: psychological intervention for public mental health crisis. *Asian J Psychiatry* 2020; 51: 102069.
- 9 Zhang K, Zhou X, Liu H, Hashimoto K. Treatment concerns for psychiatric symptoms in patients with COVID-19 with or without psychiatric disorders. *Br J Psychiatry* 2020; 217: 351.
- 10 Mehta P, McAuley DF, Brown M, Sanchez E, Tattersall RS, Manson JJ. COVID-19: consider cytokine storm syndromes and immunosuppression. *Lancet* 2020; 395: 1033–4.