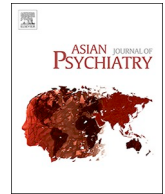




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## Letter to the Editor

## New information technology (IT)-related approaches could facilitate psychiatric treatments in general hospital psychiatry during the COVID-19 pandemic



Dear Editor

There have been two fatal cases owing to psychiatric conditions that were closely related to the COVID-19 pandemic among outpatients and inpatients in our psychiatric department in Ashikaga Red Cross Hospital during the first 2-month period (March 10 to May 9, 2020) after the Japanese government categorized the COVID-19 pandemic in Japan as an emergency situation. More specifically, the causes of death were a suicide for one patient and extreme malnutrition for the other, both of which were associated with the delusional belief of being infected with COVID-19. In contrast, in the same department, there were no fatal cases due to psychiatric conditions after the Great East Japan Earthquake and its related nuclear accident during the 2-month period after the earthquake, although mental conditions of some psychiatric outpatients deteriorated, especially those with affective disorders (Funayama and Mizushima, 2013).

Over this same 2-month period, we note that the number of new outpatients had significantly decreased from 65 patients during the preceding 2-month period (Jan 10 to March 9, 2020) to 36 patients (55.4 %), even though psychiatric patients are experiencing more psychiatric symptoms during the COVID-19 pandemic and lockdown than healthy control subjects (Hao et al., 2020). Similar circumstances were also seen in Italy, where a marked reduction in psychiatric admission rates was recorded. This was explained by a fear of hospitals, which were seen as possible sites of contagion, as well as a change in thresholds of behavioral problems acting as a trigger for admission requests from family relatives or referrals from treating clinicians (Clerici et al., 2020).

What can general hospital psychiatry offer for the psychiatric conditions associated with the COVID-19 pandemic? In our opinion, one way of overcoming these difficulties might be the introduction of new information technology (IT)-related tools into clinical settings (Matsumoto et al., 2018; Yoshida et al., 2019). Most of the hospitals across Japan have implemented strict visiting restrictions for family members or friends of inpatients to prevent outbreak of nosocomial infection. This “no visiting rule” often disrupts family support during psychiatric hospitalization, which might deteriorate psychiatric conditions of some inpatients. To alleviate this potential detrimental factor, our psychiatric unit, which has a long history to allow inpatients to use cell phones and text messages in this isolated unit, has introduced “tablet visit” for inpatients since April of 2020, in which an inpatient and his/her family members can see each other online although they are unable to meet in person. This virtual visiting system is especially popular among elderly patients who are not familiar with IT and, in fact, some patients with long-term hospitalization were extremely happy with using this tablet visiting.

Some outpatients have been fearful about being infected in our hospital-associated clinic and have thus canceled their appointments.

For these patients, we have used a telemedicine system, in which patients can visit our clinic online. In contrast to communication by telephone, an online screen can project the real-time expressions and behaviors of patients, which allows the psychiatrists to easily judge their mental conditions and also can give patients relief and facilitate consultation. In one instance, a patient with a slight fever was unable to enter our hospital because of the risk of having COVID-19. He used this online visit system instead, which allowed him to receive the treatment he needed and minimized our anxiety about being infected. We publicized this online visiting system via our hospital homepage and also via the local public health center.

As patients with COVID-19 frequently have symptoms of mental illness (Marazziti and Stahl, 2020) and the effects of society’s response (e.g., quarantine, lock-down, etc.) are considered to be substantial (Tandon, 2020), it is likely that our psychiatric unit will be required to admit a psychiatric patient with COVID-19 infection in the near future. In this case, an online medical interview might decrease the amount of time during which health care providers interact with this patient in person, if this system functions easily enough for the patient to manipulate independently. Thus, an online examination system, together with training on standard precautions with personal protective equipment and use of a negative pressure room, might be the key for preventing our psychiatrists and medical staff from being infected in our psychiatric unit.

In addition to the effects of quarantine or lock-down, the upcoming economic recession could have a profound effect on people’s mental health (Tandon, 2020). As the impact of the COVID-19 pandemic and its related social change on psychiatric conditions has been increasing across the world, initiatives to protect undesirable consequences in psychiatric conditions have attracted great attention. The introduction of additional IT tools into psychiatric practices might provide a solution to these issues.

### Ethics

The authors assert that all procedures contributing to this work comply with the ethical standards of the relevant national and institutional committees on human experimentation and with the Helsinki Declaration of 1975, as revised in 2008.

### Data availability statement

The datasets generated and/or analyzed during the current study are available from the corresponding author (MF) upon request.

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### Declaration of Competing Interest

All the authors declare that they have no competing interests.

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Michitaka Funayama\*, Shin Kurose, Shun Kudo, Yusuke Shimizu,  
Taketo Takata

Department of Neuropsychiatry, Ashikaga Red Cross Hospital, 284-1, Yobe,  
Ashikaga-City, 3260843, Japan

E-mail address: [mctkfnym@gmail.com](mailto:mctkfnym@gmail.com) (M. Funayama).

\* Corresponding author at: Department of Neuropsychiatry, Ashikaga Red Cross Hospital, Tochigi, 3260843, Japan.