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Improving the ability of psychiatric hospitals to respond to infectious disease outbreaks: lessons learned from the COVID-19 outbreak response in Ibaraki Prefecture, Japan

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Controlling infectious disease outbreaks in psychiatric hospitals is challenging^{1,2} and the impact of a single psychiatric hospital experiencing a COVID-19 outbreak reduces the broader area's mental healthcare capacity due to their limited number. Inpatients interact with one another and with nursing staff, often in more crowded environments than those of general hospitals, placing them at higher risk of exposure if a pathogen is present.^{2–4} Also, psychiatric patients are at a higher risk of severe illness if they contract an infectious disease due to common neurocognitive impairments and comorbidities, including obesity, hypertension, and metabolic syndrome.³ Generally, psychiatric hospitals have a few staff with sufficient knowledge or skill for infection prevention and control (IPC), lack IPC management systems, and/or allocate IPC to a low priority.⁵

For early containment of an outbreak in a psychiatric hospital and thus maintenance of mental healthcare capacity in the area, external support offers a solution. However, during our support of COVID-19 outbreak response efforts, we observed that psychiatric hospitals lacked capability for accepting external support, which obstructed effective response. Here, we articulate three key considerations to develop systems for accepting external support during an outbreak response and day-to-day IPC in psychiatric hospitals.

Establish an organizational management system for infection prevention and control within psychiatric hospitals

Clear decision-making processes for IPC and acceptance of external support benefit from a clearly identified responsible team and command structure.^{2,6} In psychiatric hospitals, the infrastructure for implementing IPC measures was not well established. In the absence of a clear chain of command within the organization, it becomes challenging to manage external support

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and use aid effectively. Response activities become fragmented, leading to confusion when supporting resources are introduced. By having a team responsible for IPC with a clear command structure, IPC capability will be enhanced during an emergency through more rapid and effective implementation of countermeasures. Furthermore, as external support functions alongside the responsible team, the hospital can maintain the essential function of IPC after external support has ended.

Ensure basic knowledge and skills in infection control among staff through day-to-day training with external support

Responding to outbreaks necessitates knowledge and skills for IPC among staff. In psychiatric hospitals, the insufficient focus on IPC translates to insufficient staff knowledge and skills for IPC, which puts these hospitals at risk for increased infections among staff and transmission from staff to patients. Routine IPC training for staff was conducted within the facility; however, necessary practices in outbreak response were not implemented. Even with external support, building knowledge and skills takes time, and delays mean prolonged outbreaks. Staff in psychiatric hospitals must have basic knowledge and skill for IPC. It may be achieved through initiatives aiming to raise the base level for IPC capacity, such as periodic training through external support.

Cultivate a network of potential supporting organizations and other psychiatric hospitals in a jurisdictional boundary

Cultivating a network with potential supporting organizations, such as local governmental agencies and infection control specialists in a jurisdictional boundary prior to an emergency facilitates timely requests for support from appropriate organizations, when one psychiatric hospital is in a COVID-19 outbreak and needing support. Through the networking activities, such as participating in regular infection control training and infection control rounds in psychiatric hospitals, external experts understand specific challenges in outbreak response in psychiatric hospitals, enabling them to provide prompt and suitable support

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during emergencies. Moreover, regular information sharing among psychiatric hospitals regarding daily IPC activities and outbreak response experiences may create a synergistic effect, increasing capacity in infectious disease control.

Although large-scale outbreaks in psychiatric hospitals can significantly impact local mental healthcare systems, these hospitals often lack IPC capacity and systems for receiving external support. We have outlined three considerations to build such systems. Establishing systems to accept external support will facilitate easier access during crises and contribute to fundamental IPC capabilities for routine operations, thus enhancing overall preparedness for emergencies and day-to-day operations. The experience of COVID-19 urges us to implement these systems before the next pandemic.

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