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Preparing for COVID-19: The experiences of a long-term care facility in Taiwan

Keywords: COVID-19, healthcare professional, long-term care facility, nursing care, prevention.

Dear Editor,

As of 16 April 2020, there have been >1 991 562 confirmed cases of coronavirus disease 2019 (COVID-19) worldwide and 130 885 deaths.¹ One previous study showed that COVID-19 is more likely to affect older men with comorbidities;² the highest mortality rate was observed among persons aged ≥85, ranging 10–27%, followed by 3–11% among those aged 65–84 years.³ Long-term care facilities (LTCF) are high-risk settings for severe outcomes of the COVID-19 outbreak, owing to both the advanced age and frequent chronic underlying health conditions of the residents.⁴ To prevent large-scale community transmission of COVID-19, Taiwan has taken advanced steps in terms of medical care planning (e.g. border control, identifying cases, quarantining suspicious cases, proactively searching for cases, allocating resources etc.).⁵ Thus far, just 395 COVID-19 patients have been confirmed, six of whom have died. Only one nursing home has been in lockdown, because one of its nursing staff became infected. In this article, we share our experiences regarding how we have responded to COVID-19 in our LTFC based on the management of visitors, residents and healthcare professionals (HCP), as well as government support and policies.

The first policy we made was to limit the number of visitors when we learned that some infected individuals have no fever or respiratory symptoms. All visitors are required to: wear a mask; have their body temperature checked; voluntarily declare their history of travel, occupation, contacts and cluster; and register before entering the building. Visiting hours and the number of persons accompanying patients are gradually being reduced as the number of confirmed cases rises in Taiwan. Using big data technology, the government later makes the immigration data accessible on health insurance cards. All the visitors are required to present their health insurance card to make known if they have recently visited high-risk countries.

Regarding management of HCP, we hold regular educational and training seminars to deal with COVID-19. We actively screen HCP for fever and respiratory symptoms at the beginning of their shifts, and implement sick leave policies that

allow ill HCP to stay home. Traveling abroad is prohibited, and all employees must report their weekend and vacation activities every week. We now restrict all volunteers and non-essential HCP from entering the building. Later on, we decided to cancel all group activities, avoid communal dinners with colleagues, and to re-organize the groupings and schedules of nursing staff and attendants. One member of each group is confined to the same working place and accommodation area. To lower any risk of delayed diagnosis or misdiagnosis, if residents or HCPs have a fever or respiratory symptoms, they take a COVID-19 test.

In terms of considerations for residents, they are not allowed to leave the facility. To avoid extra contact in the hospital, our staff regularly prescribe medication for them if they are in a stable condition. In addition, we increased the number of rehabilitation clinics in the facility for residents who require rehabilitation at the hospital. To decrease the burden and risks for HCPs, our facility has become temporarily unavailable to new residents. To prepare for surge capacity in staffing, equipment and supplies, we asked the residents and their families whether they would like to return home or stay in the facility while there is an outbreak occurring within it.


International organizations have recognized the Taiwanese government for waging a successful battle against COVID-19. Just like its aggressive efforts toward border control, containment and proactive testing, the attempts to care for patients who require long-term care are not inferior to other aspects of Taiwan's overall endeavor. Initially, the government coordinated with manufacturers to help our LTFC purchase supplies, such as thermometers and ethyl alcohol. Later on – even though there has been no far-reaching community transmission – the government gave the order to keep all visitors from entering nursing homes or LTFC.

To plan ahead of time and to mitigate supply shortages if outbreaks in the community were to occur, the government checks the vacancy of LTFC beds, coordinates with neighboring hospitals to satisfy the medical needs of LTFC and has requested a prepared plan from each facility. Although we are unable to predict whether there will be extensive community transmission of COVID-18 in Taiwan, most LTFC readily cooperate with the government's policies, try to plan ahead and minimize risks as best as they are able.

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Disclosure statement

No conflict of interest.

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Geriatric practice during and after the COVID-19 pandemic

Keywords: COVID-19, diabetes mellitus, elderly, frailty, geriatrics.

Dear Editor,

Two aspects warrant consideration regarding the ongoing COVID-19 pandemic: prevention of COVID-19 infection and protection from the related changes among the elderly. For prevention, the Tokyo metropolitan government has announced a stay at home campaign that requests residents to stay at home. For the latter, the Japan Geriatrics Society (JGS) established the “COVID-19, Practice Caution for Older People” in March 2020 to raise awareness on “prevention of frailty” (Fig. 1).

To achieve both goals, we need to avoid close contact and lead a routine, healthy life. COVID-19 influence can trigger age-related diseases other than frailty; therefore, it is necessary to identify the impact of this pandemic on the geriatric population. Here, we present two aspects of COVID-19, i.e., (i) physical effects, including frailty and aggravation of age-related comorbidities, and (ii) psychosocial effects of COVID-19-induced changes.

COVID-19 is known to have poor prognosis in the elderly because it tends to be more severe in that population.¹ There might be an association between angiotensin-converting enzyme (ACE) 2 levels and COVID-19 infection,² and obese and diabetic patients may have increased ACE2 levels.^{3,4} Therefore, patients with these diseases should be cautious of susceptibility and aggravation of COVID-19 infection. Although the long-term effects of COVID-19 infection on humans are unclear, the potential effects of excessive cytokines have been reported; inflammatory cytokines can cause frailty,⁵ cognitive deterioration⁶ and cardiovascular disease.⁷ Thus, further research is needed to investigate the effects of COVID-19 on various age-related diseases in addition to frailty.

COVID-19 infections have a tremendous effect on the affected individual and the population due to the need for self-restraint and social distancing. Japan has experienced the 2011 Great East Japan Earthquake and the 2016 Kumamoto

Earthquake, and has developed medical care for disasters. During this pandemic, several situations similar to those observed during natural disasters have emerged for the elderly. Decreased physical activity can cause hyperglycemia, increased susceptibility to infection, increased cardiovascular diseases, worsened psychological state, worsened cognitive function and more bone joint diseases. Social interaction is particularly important for the elderly. The battle with the COVID-19 pandemic is expected to last a long time, and this situation affects not only our daily life, but also our mental health. Mental health issues, including depression, discontent, hopelessness, hostility, anger and life events can cause incidents of stroke or cardiovascular disease and increase mortality.⁸ Behavioral and psychological symptoms of dementia may worsen. In contrast, protective psychological factors against stressors that include optimism, positive coping style, positive attitude toward aging and sense of coherence are related to a reduced incidence of stroke.⁸ Psychosocial interventions are crucial for the elderly people during and after the COVID-19 pandemic to prevent stroke and cardiovascular disease.

To maintain the physical functions and daily routine of the elderly, the JGS recommends eight points related to the following three aspects: (i) exercise and nutrition, (ii) oral function, and (iii) social support (Fig. 1). It has been challenging to achieve these proposed practices and encourage people. Moreover, there are several unresolved issues: How do we restore our daily life? Is there any other communication option aside from calling our families? Is it not important to have an outpatient visit along with telephone consultation? To resolve these points, we need to develop a new medical care system for the elderly in consultation with clinicians, healthcare workers and researchers across the globe. Encouraging and educating the elderly in the use of personal computers could enable online group exercise therapy sessions, nutrition guidance and social networking. Information technology, including robots, would