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Correspondence

How to prevent outbreak of a hospital-affiliated dementia day-care facility in the pandemic COVID-19 infection in Taiwan



KEYWORDS

Dementia day-care facility;
COVID-19;
Taiwan

Dear Editors:

Pandemic 2019 novel coronavirus, SARS-CoV-2 (COVID-19), has become as a critical public health challenge worldwide, and led to forty thousand deaths to date. The risk factors of mortality included old age, co-morbidity, obesity reported.¹ Residents in the long term-care facilities were always old, disabled, poor cognition, with comorbidities.^{1,2} Most of them had chronic medical illness, whose were with high mortality,³ and several outbreaks in long-term care facilities and leading many mortality disasters have been reported. A severe outbreak in many long-term care facilities has been reported in many countries, such as New York.⁴ So, the protection strategies from pandemic COVID-19 for residents living in these facilities are urgent.³

Kaohsiung Municipal Ta-Tung Hospital (KMTTH) is a 428-bed community hospital, and a “dementia day-care facility” located nearby the hospital with 30 elder residents with various degree of dementia was managed by the hospital. It would be real big challenge for dementia day care facilities to prevent any outbreak during this episode of COVID-19 pandemic, especially for dementia population. To date, there is no report on the prevention strategies on “dementia day-care center” worldwide.

Several prevention strategies for COVID-19 transmission were taken in our dementia day-care facility. First, all residents were asked to check health condition by families at home when they went home afternoon every day, including general activity, appetite, body temperature, the related symptoms after our group education for every families. Every morning, they were frequently checked body temperature, respiratory and gastrointestinal symptoms⁴ when they were sent to our facility, before and after entering the facility every morning, they were monitored every 4 h. Secondly, the compliance of hand hygiene and surgical masks wearing were monitored tightly by staffs. The residents would be asked to stay at home if they had fever or any respiratory or gastrointestinal illness. We also stopped all unnecessary visiting. All residents were separated to more than 1 m and less than 10 members stay in a room when eating meal and taking activities in facility.

Strict environmental clearance was also taken twice per day by staff, and regularly monitored by our infection control personnel with adenosine triphosphate (ATP) bioluminescence assay to check the quality and the weak points of clearances to improve it frequently.

Finally, in addition to all families’ TOCC (travel, occupation, contact and cluster) histories self reported daily, big data integration and analysis from government, including Taiwan National Health Insurance (NHI) System, the National Immigration Agency and Center of Diseases Control provided very important information for us to check the travel and contact histories for all families of residents, and all families provided their personal identification numbers to let us check these information daily.⁵ Fortunately, till now, no resident with confirmed COVID-19 infection was found in our dementia day-care facility.

Our prevention strategies for dementia day-care center would be valuable information for further implement to the other similar facilities worldwide.

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Author contributions

Huang HI, initial the study and writing draft the manuscript; Chen TC, data collection and interpretation; Liu TY and CF Chiu CF designed the protective strategies for the day care facility, WC Hsieh handles clinical practices and discussion, Yang CJ designed the study and as a correspondent for the study. Chen YH as a consultant for the study.

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Declaration of Competing Interest

None.

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