Comment on: COVID-19 Deaths in Long-Term Care Facilities: A Critical Piece of the Pandemic Puzzle

Tak-kwan Kong, MBBS(HK) [1]

[1]Prince of Wales Hospital, The Chinese University of Hong Kong, Hong Kong SAR, China

Corresponding Author:
Tak-kwan KONG,
Address: Division of Geriatrics, Department of Medicine & Therapeutics,
Prince of Wales Hospital, The Chinese University of Hong Kong,
9/F Lui Che Woo Clinical Sciences Building,
30-32 Ngan Shing Street,
Shatin, Hong Kong SAR, China.
Email: tkkong@hku.hk
ORCID Tak-kwan KONG https://orcid.org/0000-0003-4340-7479
Twitter: https//twitter.com/DrTKKong
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To the Editor: I read with interest the editorial by Lau-Ng et al[1] who reviewed COVID-19 deaths in long-term care facilities (LTCFs) in the USA. They commented that Hong Kong has been an exception to the general pattern of LTCFs frequently being sites for COVID-19 outbreaks and deaths.

There are currently about 74500 older people living in 953 LTCFs in Hong Kong and no COVID-19 outbreaks occurred in those facilities until July 7, 2020 when the first outbreak in a LTCF was reported. As of July 27, 2020, 9 staff and 34 of its 37 residents were infected, 4 of whom died. The improvements in and implementations of infection control measures in LTCFs in Hong Kong were built on lessons learnt from SARS epidemics in 2003, which affected 6.72% (51/759) of the LTCFs and 0.13% (72/54754) of the LTCF residents, with a mortality rate of 78.1%.[2-4] Collaboration among medical, social welfare, and private sectors is the key to the early detection of cases and the prevention of spread during infectious outbreaks in LTCFs. Effective measures include training on proper infection control practices, the correct use of personal protective equipment, cohort formation and surveillance of LTCF residents recently discharged from hospitals during the epidemics, and hospital-based community geriatric teams led by

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geriatric specialist to render support to LTCFs. The last is particularly important to reduce avoidable hospitalization by attending to the medical needs of frail older people.[4] The outreach role of geriatricians was found to be especially important during the 2003 SARS epidemic when scrutiny of cases among LTCF residents revealed that 81% had been hospital acquired and only 14% were acquired in LTCFs.[4]

Among the reasons why LTCFs are so vulnerable to COVID-19, Lau-Ng et al listed asymptomatic transmission as the "Achilles Heel." [1] To this, I would add the longer incubation period of COVD-19 in older adults[5] which predisposes to presymptomatic transmission. Transmission towards the end of the incubation period and before the onset of symptoms is more likely to occur during a long incubation period.[6] Arons et al[7] reported presymptomatic SARS-CoV-2 infections in half (24/48) of the residents tested positive for COVID-19 during a LTCF outbreak. Symptoms developed subsequently within a median of 4 days, and viable virus isolated up to 6 days before symptom onset.[7] A longer incubation period in older adults was suspected clinically during the 2003 SARS epidemic[2-4] and has been documented recently for SARS-CoV-2 during COVID-19 pandemic.[5] Knowledge of a longer COVID-19 incubation period (median 11.2 days, 90th percentile 17 days) in older adults[2] supports extending the duration of transmission-based precautions, isolation and observation strategies for LTCF residents to minimize spread. Extending the quarantine period from the current adopted duration of 14 days to 17 days for older adults would increase the coverage from 72% to 90%.[5] A precautionary approach of quarantining new or returning residents for a longer duration has also been advocated in the UK.[8]

I agree with Lau-Ng et al on the need to address the psychosocial toll and to preserve the quality of life of LTCF residents. The price to pay for isolation can be an epidemic of loneliness[9]. Physical distancing needs to be differentiated from social distancing. Maintaining social connections with LTCF residents is vital to reduce the complications of loneliness. To balance the risks and benefits of appropriate human contacts for frail residents during this COVID-19 epidemic, some LTCFs in Hong Kong

have adopted a low visiting instead of a no visiting policy with due application of infection control practices. Other local LTCFs have employed technological innovations such as robotic health care assistant equipped with high resolution cameras and autofocus to enable families to make virtual visits to their older relatives in LTCFs through videoconferencing.[9]

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