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RT-PCR-confirmed COVID-19 from the *Diamond Princess* cruise ship. Less than two-thirds (61%) of cases had lung opacities on CT; 20% of symptomatic patients had negative CTs.

Although extremely valuable, these results should not be overstated. The CT findings studied (eg, ground-glass opacity, consolidation) are not specific for COVID-19. Similar results would probably be found if CT were used during an influenza epidemic, for example. The positive predictive value of CT will be low unless disease prevalence is high, as we suspect it was in Wuhan. Their cohort includes “patients suspected of [COVID-19],”<sup>2</sup> presumably sick and possibly hospitalised, although details are not provided.

RT-PCR to diagnose COVID-19 has some limitations: the test is not universally available, turnaround times can be lengthy, and reported sensitivities vary. Nevertheless, it is the accepted standard and only positive in patients who are infected with severe acute respiratory syndrome coronavirus 2. CT findings in patients with COVID-19, on the other hand, are seen with numerous pathogens and in many non-infectious aetiologies. We believe CT does not add diagnostic value; positive results can only be believed if the pre-test probability of disease is high. Using CT diagnostically is not known to provide clinical benefit and could lead to false security if results are negative. If COVID-19 is suspected, patients should be isolated pending confirmation with (multiple) RT-PCR tests, or until quarantine has lapsed. The results of a CT scan do not change this.

We feel that framing CT as pivotal for COVID-19 diagnosis is a distraction during a pandemic, and possibly dangerous. Safely using CT to study COVID-19 patients is logistically challenging and can overwhelm available resources. Even with proper cleaning protocols, health-care professionals and CT scanners could become vectors of infection to other vulnerable

patients who require imaging. We urge caution and encourage using published guidelines<sup>3</sup> regarding use of CT imaging.

We declare no competing interests.

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## Dementia care during COVID-19

Older adults are vulnerable at the onset of natural disasters and crisis, and this has been especially true during the coronavirus disease 2019 (COVID-19) pandemic.<sup>1</sup> With the aggressive spread of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the death toll has risen worldwide. According to an interactive online tool that estimates the potential number of deaths from COVID-19 in a population, by age group, in individual countries and regional groupings worldwide under a range of scenarios, most of

those who have died were older adults, most of whom had underlying health problems.<sup>2</sup>

Globally, more than 50 million people have dementia, and one new case occurs every 3 s.<sup>3</sup> Dementia has emerged as a pandemic in an ageing society.<sup>4</sup> The double hit of dementia and COVID-19 pandemics has raised great concerns for people living with dementia.

People living with dementia have limited access to accurate information and facts about the COVID-19 pandemic. They might have difficulties in remembering safeguard procedures, such as wearing masks, or in understanding the public health information issued to them. Ignoring the warnings and lacking sufficient self-quarantine measures could expose them to higher chance of infection.

Older people in many countries, unlike in China, tend to live alone or with their spouse, either at home or in nursing homes. As more and more businesses stop non-essential services or initiate telecommuting work in an attempt to maintain social distancing and limit the further spread of SARS-CoV-2, people living with dementia, who have little knowledge of telecommunication and depend primarily on in-person support might feel lonely and abandoned, and become withdrawn.

To lessen the chance of infection among older people in nursing homes, more local authorities are banning visitors to nursing homes and long-term care facilities.<sup>5</sup> In January, 2020, the Chinese Ministry of Civil Affairs implemented similar social-distancing measures.<sup>6</sup> As a result, older residents lost face-to-face contact with their family members. Group activities in nursing homes were also prohibited. As a consequence, the residents of nursing homes became more socially isolated. We have observed that under the dual stress of fear of infection and worries about the residents' condition, the level of anxiety among staff in nursing homes increased and they developed signs of exhaustion and burnout after a month-long full lockdown of the facilities.

See Online for appendix



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For the online interactive tool see [https://public.tableau.com/views/COVID-19mortalitycalculator/COVID-19mortalitycalc?:display\\_count=y&showVizHome=no](https://public.tableau.com/views/COVID-19mortalitycalculator/COVID-19mortalitycalc?:display_count=y&showVizHome=no)

Some people infected with COVID-19 have had to receive intensive care in hospital. A new environment can lead to increased stress and behavioural problems.<sup>7</sup> Delirium caused by hypoxia, a prominent clinical feature of COVID-19, could complicate the presentation of dementia<sup>8</sup>, increasing the suffering of the people living with dementia, the cost of medical care, and the need for dementia support.

During the COVID-19 outbreak in China, five organisations, including the Chinese Society of Geriatric Psychiatry and Alzheimer's Disease Chinese, promptly released expert recommendations and disseminated key messages on how to provide mental health and psychosocial support.<sup>9</sup> Multidisciplinary teams started counselling services free of charge for people living with dementia and their carers. These approaches minimised the complex impact of both COVID-19 outbreak and dementia.

As recommended by international dementia experts and Alzheimer's Disease International,<sup>10</sup> support for people living with dementia and their carers is needed urgently worldwide. In addition to physical protection from virus infection, mental health and psychosocial support should be delivered. For example, mental health professionals, social workers, nursing home administrators, and volunteers should deliver mental health care for people living with dementia collaboratively. Within such a team, dementia experts could take the lead and support team members from other disciplines. Self-help guidance for reducing stress, such as relaxation or meditation exercise, could be delivered through electronic media. Service teams could support behavioural management through telephone hotlines. Psychological counsellors could provide online consultation for carers at home and in nursing homes.<sup>11</sup> In addition, we encourage people who have a parent with dementia to have more frequent contact or spend more time with their parent, or to take on

some of the caregiving duties so as to give the carer some respite time.

China has contained the epidemic, and business is starting to return to normal. We believe that learning lessons from China would empower the world to tackle the COVID-19 pandemic, with little risk of compromising the quality of life of people living with dementia and their carers.

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## No time for dilemma: mass gatherings must be suspended



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The coronavirus disease 2019 (COVID-19) pandemic places unprecedented pressure on societies and health-care systems around the world. This first pandemic of the 21st century demands internationally unified, cogent, and collective actions by individuals, communities,