COVID-19 in Nursing Homes

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One of the tragic legacies of Hurricane Katrina in public consciousness was the disproportionate loss of life among older nursing home residents¹. Given the similar lack of preparation and reserves in the nursing home sector in the course of many other natural disasters, the COVID-19 pandemic poses urgent questions as to whether healthcare systems and professionals have learned from these experiences.

Older age and the presence of comorbidities are associated with increased risk of mortality in the current pandemic. The high prevalence of functional and cognitive impairment and behavioural symptoms add to the risk posed to nursing home residents², as well as environments which present barriers to infection control³. In addition, healthcare professionals globally of all hues have neglected research, recruitment incentivization and quality improvement in nursing home care relative to other areas of clinical practice⁴. This is further reflected by evidence of variable and often inadequate preparation for pandemics in the sector ^{5, 6}, as well as the absence of infection control from descriptions of the competencies of nurses in care homes⁷.

The synergy of these factors is reflected in the first major study of COVID-19 in a nursing home. Nearly two-thirds of residents were infected over a three week period, with a death rate of 33%: fifty staff members and 16 visitors were also infected⁸. In Spain, it has been reported that a significant proportion of COVID-19 associated deaths have been nursing home residents. There is also a concern that many jurisdictions are not including nursing home deaths in the COVID-19 death toll. Whilst general guidelines emphasise the importance of strict infection control protocols, little acknowledgement is given to the unique challenges faced by nursing homes with significant levels of close-contact physical care. Low staff to resident ratios are further impacted by COVID-19 related sick-leave, quarantine and absconding, threatening the provision of basic care to sick isolated residents.

Implementation of isolation procedures and education of residents can be exceptionally complicated for those with significant cognitive impairment and walking with purpose², the person-centred term for wandering.

Parallels may be drawn between challenges faced in nursing homes during the current pandemic and those seen in previous infectious outbreaks and epidemics. Following the Severe Acute Respiratory Syndrome (SARS) epidemic in 2003, a study showed that the majority of residents in a Hong Kong nursing home reported poor knowledge of the condition and staff reported concerns about contracting the condition themselves⁹: the willingness and ability of staff to work, and remain at work, may be impacted upon by a disproportionate level of perceived threat during pandemics and disasters.

Several governmental agencies and professional bodies have drafted guidelines and statements regarding the provision of residential care during the COVID-19 pandemic of varying quality, scope and emphasis. These sources include the World Health Organisation, the Centers for Disease Control, and the British Geriatrics Society): the latter laudably highlights that residents who 'walk with purpose' will require special consideration¹⁰⁻¹². The implementation of these recommendations requires a more clearly developed governance and leadership structure in nursing homes than is often the case currently, such as the medical director role required by law in the USA.

A common strand highlighted is the importance of early, collaborative advanced care planning¹⁰⁻¹². Provision of decision making support and adequately resourcing facilities to provide good palliative care should also be prioritised¹². Preventive measures and practical advice on social distancing within residential care facilities have been recommended¹². The necessity of these measures in order to protect residents, staff members and the public is widely acknowledged. However, in addition

to the challenge of resident understanding and walking with purpose, restriction of visiting and group activities may have a very negative impact on residents' mental and physical wellbeing and needs to be judiciously implemented. The important role of informal support networks and care staff in the provision of practical and emotional support are undermined during these restrictions.

Of considerable importance also is the safeguarding of staff mental and physical wellbeing. On a more fundamental level, education of staff, many of whom will lack dedicated gerontological and healthcare training, is essential in order to dispel myths and impart accurate information concerning the pandemic and optimal support of residents.

Older people resident in nursing homes are demonstrably the group most at risk of adverse outcomes and mortality during the current pandemic. Early, collaborative advanced care planning, more formalized leadership and governance, and provision of education and support for residents and staff is essential. At a more fundamental level, a radical rethink is needed on how to develop and integrate high quality nursing home care into the canon of core healthcare services, with adequate input from a range of gerontological specialties¹³.

References:

- Blanchard G, Dosa D. A comparison of the nursing home evacuation experience between Hurricanes Katrina (2005) and Gustav (2008). *Journal of the American Medical Directors Association* 2009;10(9):639-43.
- Wang H, Li T, Barbarino P, Gauthier S, Brodaty H, Molinuevo JL, et al. Dementia care during COVID-19. Lancet 2020, March 30 (epub ahead of print) DOI:https://doi.org/10.1016/S0140-6736(20)30755-8
- Lansbury LE, Brown CS, Nguyen-Van-Tam JS. Influenza in long-term care facilities. *Influenza Other Respir Viruses* 2017;11(5):356–366. doi:10.1111/irv.12464
- 4. O'Neill D. Reflecting on our perceptions of the worth, status and rewards of working in nursing homes. *Age Ageing* 2018;**47(4)**:502–504. doi:10.1093/ageing/afy065
- Lum HD, Mody L, Levy CR, Ginde AA. Pandemic influenza plans in residential care facilities. *J Am Geriatr Soc.* 2014;62(7):1310–1316. doi:10.1111/jgs.12879
- Huhtinen E, Quinn E, Hess I, Najjar Z, Gupta L. Understanding barriers to effective management of influenza outbreaks by residential aged care facilities. *Australas J Ageing*. 2019;38(1):60–63. doi:10.1111/ajag.12595
- Stanyon MR, Goldberg SE, Astle A, Griffiths A, Gordon AL. The competencies of Registered Nurses working in care homes: a modified Delphi study. *Age Ageing*. 2017;46(4):582–588. doi:10.1093/ageing/afw244
- McMichael TM, Currie DW, Clark S, Pogosjans S, Kay M, Schwartz NG, et al. Epidemiology of Covid-19 in a Long-Term Care Facility in King County, Washington. *N Engl J Med* 2020, Mar 27 2020 [published online ahead of print,]. DOI:10.1056/NEJMoa2005412.
- Tse MM, Pun SP, Benzie IF. Experiencing SARS: perspectives of the elderly residents and health care professionals in a Hong Kong nursing home. *Geriatr Nurs* 2003;24(5):266-9.
- World Health Organisation. Infection Prevention and Control guidance for Long-Term Care Facilities in the context of COVID-19. Geneva, World Health Organisation, 2020. https://apps.who.int/iris/bitstream/handle/10665/331508/WHO-2019-nCoV-IPC_long_term_care-2020.1-eng.pdf (accessed 28 March 2020)

- Centers for Disease Control. Preparing for COVID-19: Long-term Care Facilities, Nursing Homes. Atlanta, Centers for Disease Control, 2020. https://www.cdc.gov/coronavirus/2019-ncov/healthcare-facilities/prevent-spread-inlong-term-care-facilities.html (accessed 28 March 2020)
- British Geriatrics Society. Managing the COVID-19 pandemic in care homes.
 London, British Geriatrics Society, 2020. https://www.bgs.org.uk/resources/covid-19-managing-the-covid-19-pandemic-in-care-homes (accessed 28 March 2020)
- Briggs R, Holmerová I, Martin F, O'Neill D. Towards standards of medical care for physicians in nursing homes. *Eur Geriatr Med* 2015; 6:401–3.