Addressing Vulnerability and Dementia in the Era of COVID-19

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The medical community was quick to recognize that dementia and other comorbidities of older age left older individuals prone to severe illness and death from COVID-19.1,2 Yet the impact of the COVID-19 pandemic has had far broader consequences to population health than can be attributed to the virus itself. The indirect effects of COVID-19, including increased adoption of telehealth, decreased access to community resources, and social isolation, carry their own health burden and disproportionately affect older adults with dementia who have consolidated social networks and increased functional dependence on communities and health systems. However, the actual impact of these changes on mortality has thus far been inadequately understood and recognized.

In this issue of JAMA Neurology, Gilstrap et al3 take an important step in quantifying the change in all-cause mortality among older adults with dementia in the US during the COVID-19 pandemic. The authors used a 100% sample of more than 53.6 million Medicare fee-for-service beneficiaries to examine the differences in mortality associated with the emergence of COVID-19. As expected, mortality increased for all individuals in 2020 compared with 2019; however, excess mortality was 2-fold higher among older adults with dementia, whose mortality increased 25.7% (95% CI, 25.3%-26.2%) in 2020, compared with 12.4% (95% CI, 12.1%-12.6%) among their peers without cognitive impairment. For nursing home residents with dementia, excess mortality was even higher, increasing 33.4% (95% CI, 32.8%-34.0%) in 2020. Although there has been widespread acceptance that dementia and nursing home care amplify the negative consequences of the COVID-19 pandemic, tying this observation to population-based estimates of excess mortality is crucial for establishing the importance of dementia as an independent risk factor for disparate health outcomes, including death.

Could this finding merely represent the destructive force of COVID-19 infection among individuals with dementia? Although cause of death was not available in the cohort and the authors could not exclude a direct effect of COVID-19 on mortality, dementia was associated with excess mortality in 2020 irrespective of COVID-19 exposure. Specifically, regions with the lowest rates of COVID-19 infection experienced a decrease in mortality during 2020 among individuals without dementia yet still experienced increased mortality among individuals with dementia, strongly suggesting that downstream effects of COVID-19, rather than the virus itself, may have played a major role in driving mortality in this vulnerable population.

These results represent the best available evidence that failing to mitigate the negative effects of COVID-19 on daily life and the health system is associated with preventable death among older adults with dementia. This finding may come as no surprise. Health outcomes among individuals with dementia are closely tied to their base of support because they rely so heavily on social services and informal caregiving to meet their daily needs.4,5 In response to the heightened risk of COVID-19 in older adults, policy makers have emphasized the need for infection prevention and have encouraged decreased social contact among older individuals living in either the community or a facility. This policy has been coupled with extensive changes to the health system and local community. The study by Gilstrap et al3 shows that these disruptions may be associated not only with increased risk of death among older adults with dementia diagnosed as having COVID-19 but with increased risk of death unrelated to COVID-19.

The findings are consistent with the fact that the structure of our health system affects population health and that changes in response to the COVID-19 pandemic are associated with inequities in health outcomes. This study focused on older individuals with dementia and in nursing homes, but the authors also report excess mortality among older persons with or without dementia who identified as non-White (Asian, Black, and Hispanic), highlighting the observation that there are many vulnerable populations who bear a disproportionate burden of illness associated with COVID-19. Indeed, the detrimental impact of these indirect effects is equally concerning at the other end of the life span, in which worsening child and adolescent mental health has become a proportionate burden of illness associated with COVID-19.6

Worsening child and adolescent mental health has become equally concerning at the other end of the life span, in which worsening child and adolescent mental health has become a proportionate burden of illness associated with COVID-19.6 As public health champions, we must be more intentional in building social services. The extraordinary high rates of mortality among nursing home residents with dementia found in this study, and corroborated by others, shows the devastating synergy of medical frailty and cognitive impairment.3,7 The long-standing challenges to facility-based care and reduced availability of nursing home beds during the COVID-19 pandemic have left millions of individuals with dementia exposed to inadequate support. Informal caregivers have become even more indispensable as the linchpins of dementia care. Bolstering their efforts...
should not be seen as supplementary; it is essential. Centering clinical care around the patient-caregiver dyad rather than the patient alone is necessary for maintaining the health of individuals with dementia as well as of the caregivers themselves.4,5

As clinicians, we must be more scientifically rigorous in designing clinical platforms. A cohort study of 11 million US veterans showed that excess mortality was lower in that patient population than in the general population despite greater social vulnerability and burden of medical comorbidities among US veterans.8 These finding were partially attributed to the broad telehealth reach of the Veterans Health Administration. Although age and cognitive impairment are barriers to telehealth adoption, thoughtful implementation of telehealth may allow for successful integration of this new technology into routine dementia care.4,9,10

The effects of COVID-19 on our social network and health system are unambiguous.11 This study by Gilstrap et al12 serves as a sobering lesson about how these changes may compromise the health of older adults with dementia and other vulnerable populations, urging us to consider a more holistic approach to reducing morbidity and mortality. Policies that fail to repair the anemic social networks and patchy medical care resulting from COVID-19 are undeniably incomplete. As COVID-19 turns from pandemic to endemic, it is time to consider how we might apply a more nuanced approach to evaluating risks and benefits of our health policy measures to combat this pandemic and others to come.

REFERENCES