The Journal of Infectious Diseases

EDITORIAL COMMENTARY

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Commentary: Race, COVID-19 and Nursing Homes

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In this issue of *The Journal of Infectious Diseases*, Lu et al [1] report on the risk of mortality from coronavirus disease 2019 (COVID-19) in elderly nursing home residents. They observed that mortality increased with age and that 46.9% of deaths occurred without the patient being hospitalized. Two additional observations are particularly worthy of comment . First, there was a significantly increased mortality rate in for-profit nursing homes and in those with a low inspection scores (ie, objectively observed quality rating). Second, the authors concluded that "Racial/ethnic minorities generally shared a similarly high risk of [nursing home] COVID-19 deaths" compared with white nursing home residents.

Nursing homes are increasingly being used for supported care in elderly individuals who cannot care for themselves owing to either physical disability or dementia, with an increasing proportion of the latter over time [2]. As of 2016, the Centers for Disease Control and Prevention estimated that there were >1.7 million licensed nursing home beds in the United States with 69.3% being in for-profit centers [3]. With the onset of the severe acute respiratory syndrome (SARS-CoV-2) pandemic, it was immediately clear that patients in such centers were at increased risk of both infection and subsequent death [4]. Thus, whether there are racial and ethnic disparities in care and whether outcomes are worse in certain care settings are questions with significant clinical impact that can be addressed with better understanding of the underlying causation.

The suggestion by Lu et al [1] that there was little or no racial or ethnic disparity in hospitalization or mortality rates deserves a bit more discussion. It is possible, as the authors point out, that being in a nursing home provides all patients with equal access to care, since the decision as to whether to seek care is less influenced by the patient's wishes than by practices of the care facility itself. Support for this "access" hypothesis is provided by a similar phenomenon observed in cancer clinical trials where access to care is equal and where black and white patients have been observed to have equivalent outcomes, although the 95% confidence interval around this risk ratio was wide (.58–1.40), making this conclusion open to refutation [5].

In contrast to the absence of disparity suggested by these recent oncologic outcomes, previous studies suggested that black race is associated with a 2-fold increase in COVID-19 mortality rate, compared with white race [6]. The report by Lu et al is not necessarily in conflict these earlier reports. A close look at their unadjusted hospitalization and mortality rates [[1], table 2] reveals that while blacks made up only 12.1% of the cohorts studied, their hospitalization and death rates from COVID-19 were 20.9% and 14.8% respectively, representing increases of 73% and 17% compared with the expected rates. Furthermore, there a similar excess in the relative risks of hospitalization and death among Latinos and Asians. It is important, however, to recognize that the results reported by Lu et al [[1], table 2] are unadjusted for the presence of comorbid conditions, such as diabetes, hypertension, and renal disease, all of which could affect the risks of hospitalization and death.

What does this difference in the adjusted and unadjusted risks tell us? Clearly, blacks and other minorities have an increased risk of hospitalization and death due to COVID-19. This difference in risk is likely to be due (at least in part) to the increased rate of comorbid conditions. However, it is not obvious from the data provided whether the differences in hospitalizations and death *are* in fact due to the increased comorbid conditions, which may in turn be due to lack of access to care and appropriate screening for chronic disease before nursing home entry. So while the results reported by Lu et al show no obvious evidence of racism in nursing home care [1], they do leave open the possible contribution of structural racism to the increased chronic disease burden among minorities. A better understanding of the factors contributing to such a difference is certainly worthy of more study.

The observation that both for-profit nursing homes and those with lower health ratings had worse patient outcomes should prompt action. Although the finding that nursing homes with poor quality ratings have worse outcomes seems self-evident, the findings of the

Received 30 September 2021; editorial decision 30 September 2021; accepted 1 October 2021; published online 7 October 2021.

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The Journal of Infectious Diseases® 2021;XX:1–2

https://doi.org/10.1093/infdis/jiab516

current study care [1] support the need for prompt government action to require improvement by those centers. Similarly, the increased risk of death in for-profit centers is worrisome, especially because 69.3% of all centers in the United States are for profit. The possibility that overly zealous cost cutting may be responsible for this situation is supported by a study showing that unionized nursing homes have better care [7]. Unionized nursing homes pay higher wages and are likely to be able to recruit more highly trained personnel.

Lu et al focused on the epidemiology of SARS-CoV-2 infection in nursing homes, and their findings highlight the importance of rigorously enforced regulations for the care provided in nursing homes with low quality ratings [1]. Equitable outcomes across racial/ethnic subpopulations continue to be a goal that may not yet be achieved, and it appears that more work is needed to ensure that the source of residual excess hospitalization and mortality rates can be identified and addressed. An important first step may be for us to identify all the factors contributing to barriers to accessing high-quality healthcare among minority populations.

Note

Potential conflicts of interest. All authors have submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest. Conflicts that the editors consider relevant to the content of the manuscript have been disclosed.

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