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Letter to the Editor

## Coronavirus Disease 19 (COVID-19) Restrictions and Loneliness Among Residents in Long-Term Care Communities: Data From the National Health and Aging Trends Study



Loneliness is associated with increased morbidity and mortality among older adults.<sup>1</sup> Residents in long-term care (LTC) communities have higher rates of loneliness than community-dwelling individuals.<sup>2</sup> Coronavirus disease 19 (COVID-19) has disproportionately contributed to deaths in LTC communities, leading to measures to prevent the virus's spread such as prohibiting visitors.<sup>3</sup> Although potentially life-saving, these actions may have negative implications given that social isolation increases risk for loneliness.<sup>4</sup> Anecdotal reports suggest that COVID-19 restrictions contribute to residents who have stopped eating and “given up.”<sup>5</sup> However, to our knowledge, the relationship between COVID-19 restrictions and increased loneliness among residents in LTC communities has yet to be explored using nationally representative data. This report examines whether restrictive measures are associated with increased loneliness among older adults in LTC communities during the COVID-19 pandemic.

### Methods

We used data from the 2020 National Health and Aging Trends Study (NHATS) COVID-19 supplement, a nationally representative mail survey regarding older (age  $\geq 65$  years) Medicare beneficiaries' experiences during the pandemic (supplement response rate = 83.5%). A total of 234 participants resided in a LTC community, which included any community (ie, nursing homes, assisted living, independent living) where assistance with daily activities was provided. We excluded surveys completed by proxies of respondents because loneliness measures were not available ( $n = 100$ ) and surveys with missing loneliness measures ( $n = 11$ ).

Participants were asked how often they felt lonely during the COVID-19 pandemic; they were then asked, “Is this more often, less often or about the same as a typical week before the COVID-19

outbreak started?” Responses included more often, less often, or about the same. We created an indicator that represented that a participant felt lonely more often than before the COVID-19 outbreak started.

Residents in LTC communities were asked whether the community in which they lived implemented measures to prevent the spread COVID-19. A  $\chi^2$  statistic was used to compare differences in loneliness between individuals who resided in communities with restrictive policies to individuals in communities without restrictive policies. To account for the complex sample design, we used stratification, cluster, and weight variables. The weights adjusted for nonresponse. Stata 16.0 (StataCorp LLC, College Station, TX) was used for analysis.

### Results

**Table 1** outlines the weighted percentage of respondents who felt lonelier during the pandemic than in the weeks prior to the pandemic. Results are also stratified by whether the participants lived in communities that introduced policies to restrict COVID-19 spread. Approximately 28.7% [95% confidence interval (CI) 19.2, 40.5] of participants residing in LTC communities reported feeling lonelier during the pandemic than in a typical week prior to the pandemic. Approximately 45.2% (95% CI 31.8, 59.3) of individuals lived in communities that prohibited residents from leaving their rooms. Residents who could not leave their rooms felt lonelier during the pandemic than residents who could leave their rooms; 40.7% (95% CI 24.2, 59.7) of residents who were not allowed to leave their rooms felt lonelier during the pandemic compared to 18.7% (95% CI 11.3, 29.4) of residents who were allowed to leave their rooms ( $P = .016$ ). Other differences were not statistically significant but still notable owing to the small sample size. For example, 64.9% (95% CI 47.6, 79.0) of individuals lived in a community that stopped providing group activities in the common area. Approximately 36.2% (95% CI 23.5, 51.2) of residents who lived in communities that stopped group activities felt lonelier during the pandemic compared with 14.7% (95% CI 6.0, 31.8) of residents who lived in communities that did not stop group activities ( $P = .06$ ).

### Discussion

Approximately 28.7% of residents in LTC communities were lonelier during the pandemic than in the weeks before the pandemic. Residents who could not leave their rooms appeared to be particularly vulnerable to increased loneliness. Other differences were not statistically significant; however, our analysis was limited by a small sample size. The study was also descriptive; multivariable analysis is needed to examine the influence of chronic conditions and type of LTC community on the relationship between COVID-19 restrictions and loneliness. We did not include

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**Table 1**  
Percentage of Residents in Long-Term Care Communities Who Felt Lonelier During COVID-19 than before the Pandemic (Sample n = 123; Weighted n = 745,126)

COVID-19 Preventative Measure	Individuals in LTC Communities that Put Measure in Place (%; 95% CI)	Felt Lonelier during COVID-19		
		Individuals in LTC Communities that Put Measure in Place (%; 95% CI)	Individuals in LTC Communities that Did Not Put Measure in Place (%; 95% CI)	P Value*
Stopped or limited outside visitors	71.4 (58.1, 81.8)	32.9 (20.2, 48.7)	18.0 (7.5, 37.3)	.21
Required all residents to stay in their units or rooms	45.2 (31.8, 59.3)	40.7 (24.2, 59.7)	18.7 (11.3, 29.4)	.016
For residents returning from outside, required them to stay in their units or rooms for a specific period of time (“quarantine” or “isolation”)	48.4 (35.9, 61.2)	34.3 (17.4, 56.5)	23.3 (12.8, 38.8)	.40
Stopped providing group meals in a common area	60.7 (42.9, 76.1)	36.4 (23.2, 52.1)	16.8 (6.9, 39.1)	.14
Stopped group activities in a common area	64.9 (47.6, 79.0)	36.2 (23.5, 51.2)	14.7 (6.0, 31.8)	.06
Stopped facility-provided transportation for nonessential trips	60.4 (46.6, 72.7)	37.3 (23.5, 53.5)	15.4 (5.3, 37.2)	.11
Implemented all restrictive policies	31.2 (20.5, 44.4)	38.6 (20.3, 60.7)	24.2 (14.9, 36.6)	.19

Data come from the 2020 National Health and Aging Trends Study (NHATS) COVID-19 supplement. Results are weighted to account for the complex survey design. The sample included individuals in a long-term care community who were able to respond without a proxy and who had complete data on loneliness measures.

\*A  $\chi^2$  statistic is used. Compares responses by whether or not a resident was in a long-term care community that implemented a restrictive policy.

individuals who had a proxy complete the survey for them, which may have excluded individuals with worse health.<sup>6</sup>

Recommendations to reduce loneliness during COVID-19 and future pandemics in LTC communities have been published.<sup>3,7–10</sup>

Many suggestions have focused on ways to increase external communication between residents and family members. Our study found that residents isolated in their rooms and without group activities appear to be the most vulnerable to loneliness. Interventions delivered to increase well-being within the community such as Wii gaming and robotic pets warrant additional attention.<sup>3,10</sup>

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