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## Editorial

# Two Years of COVID-19: Understanding Impact and Implications for the Mental Health of Older Adults

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As COVID-19 hits the 2-year mark, it's devastating impact on mental health has become apparent.<sup>1–4</sup> There are already well over 15,000 publications on this topic. However, this is a body of literature that is actively evolving. The earliest publications were broad and speculative in nature.<sup>5,6</sup> A second wave of publications based on cross-sectional data or short-term longitudinal studies from the early phase of the pandemic began to identify differences in mental health outcomes among different age groups<sup>7</sup> but also among specific subgroups. Multiple studies from around the world made it apparent that as a whole, older adults may have withstood the stress of the pandemic better than younger age groups, at least in its initial stages. However, as more longitudinal studies emerge, it is clear that mental health impact may vary and evolve among older adults depending on their individual circumstances. Longitudinal data are sharpening our understanding

of the long-term effects of COVID among recoverees,<sup>8</sup> long COVID,<sup>9</sup> the impact of physical and social distancing<sup>10</sup> and the disproportionate impact on the health of people with dementia and especially their caregivers.<sup>11–13</sup>

## UNDERSTANDING TRENDS AND FACTORS IMPACTING MENTAL HEALTH IMPACT IN OLDER ADULTS

The current issue of the *American Journal of Geriatric Psychiatry* features a noteworthy study by Cortes-Zamora and colleagues<sup>14</sup> who present longitudinal data on 215 cognitively intact long-term care facility residents in Spain. Analyzing data collected between March and September 2020, they compared outcomes among those who contacted COVID-19 versus those who did not. In their sample, residents who had

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contacted COVID-19 had worse functionality and were frailer than their uninfected counterparts. At follow-up however, regardless of the residents' COVID-19 infection status, 57.7% reported symptoms of depression, and 93% reported sleep disturbances, while anxiety and post-traumatic stress disorder were more prevalent among those who had been ill. Overall, 47% of all residents experienced a decline in their basic activities of daily living. However, COVID-19 infection status alone could not explain the losses in function or ambulatory ability, suggesting that social isolation may have played a role in their decline.

A similar decline has been reported in other longitudinal studies. A study of 192 community-dwelling older adults found a decline in self-reported mental health among survivors of COVID-19.<sup>8</sup> In addition to higher rates of persistent depression, anxiety, insomnia, and PTSD, this study found that in the year following infection, 28% of COVID-19 survivors received psychotropic medications, and 14% required psychological interventions. However, this study found no relationship between COVID-19 severity and psychiatric outcomes. The authors suggest that psychiatric consequences may be less an outcome of COVID-19 infection, and more a result of social isolation and its associated sequelae.<sup>8</sup>

Overall, population-wide surveys of mental health echo these studies, showing that it has worsened over time.<sup>4</sup> However, at the 2-year point, the protective effect of age appears to be intact.<sup>2,15,16</sup> Consistently lower rates of adverse mental health symptoms in older adults stand in stark contrast to their high rates of COVID-19-related hospitalization and mortality.<sup>1</sup> This again appears to reflect greater resilience<sup>7,15</sup> among older adults, though it does not imply that they have not been impacted by the pandemic. For example, data from the Canadian Longitudinal Study on Aging<sup>3</sup> show that older adults had twice the odds of depressive symptoms during the pandemic when compared with the pre-pandemic period.<sup>4,17</sup>

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### AGING AND THE POST-ACUTE SEQUELAE OF COVID-19 (PASC)

While our understanding of PASC (also referred to as 'long COVID') is evolving, early studies indicate that its impact may be particularly significant among older adults. An example is a longitudinal study from

Spain of 171 adults aged 18–85 with no history of cognitive impairment or a major psychiatric disorder, who tested positive between March and April 2020, underwent hospitalization and were followed for a year after discharge.<sup>9</sup> A year after discharge, nearly 74% reported at least one persisting symptom of COVID-19, with 48.5% reporting fatigue. Overall, 45% reported neurocognitive dysfunction and psychiatric comorbidity, with 24% reporting impaired cognition. Of the overall sample, 12.3% of the reported moderate or severe cognitive impairment.<sup>9</sup> Other studies appear to echo these findings, and suggest that PACS may be particularly problematic in persons who developed delirium.<sup>11</sup> However, a separate study of 254 individuals hospitalized in Italy<sup>18</sup> noted that while older age was associated with persistent psychiatric and somatic symptoms, these symptoms seemed to increase in severity up until 6 months post-infection, then began to decrease. As such, it may be too early to determine the underlying mechanisms behind PACS and neuropsychiatric symptoms, although SARS Cov-2-induced alterations in circuitry and neural architecture have been implicated.<sup>11</sup>

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### OUTCOMES IN PERSONS WITH DEMENTIA AND THEIR CAREGIVERS

While older adults as a whole appear to demonstrate resilience, those with dementia appear to be at higher risk of worsening cognitive and mental health during the pandemic, in part due to social isolation.<sup>11</sup> Multiple studies show that behavioral and psychological symptoms worsened over time in persons with dementia (PwDs), particularly during times when COVID-related restrictions resulted in isolation.<sup>19</sup> A host of symptoms including agitation, apathy, depression, and irritability have been reported in PwD who remained free of COVID and their severity was correlated with the length of social isolation and caregiver distress.<sup>11</sup>

Caregivers of older adults, especially of PwD, faced a profound loss of resources and services and increased care responsibilities. They reported increased burden, often needing to set aside their own health needs in the face of increased caregiving demands.<sup>20</sup> This burden may be particularly severe for subgroups such as informal caregivers.<sup>13</sup> A report from the Centers for Disease Control indicates that as

many as 70% of caregivers may have experienced adverse mental health conditions over the first year of the pandemic.<sup>12</sup>

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## IMPLICATIONS FOR CLINICAL PRACTICE

There is now a corpus of longitudinal data that paints a complex picture of the pandemic's impact. While older adults as a whole may have withstood the stresses better than other groups, care at the individual level requires nuance. For clinicians, this will mean an additional layer of clinical assessment. Determining whether a given individual was infected, and that extent and nature of their initial COVID-19 symptoms (including neuropsychiatric symptoms) is critical. Equally important is establishing whether any symptoms persist and whether their cognitive status may have changed since recovery. The literature also highlights the importance of assessing what caregiving responsibilities a person may have, what their support system is, and quantifying the extent of loneliness.<sup>21</sup> Finally, there has been substantial evidence<sup>6</sup> that the ability to leverage technology in order to maintain connectedness may be protective. With much care delivery being done remotely, an understand of proficiency in technology

may open possibilities for incorporating digital tools into care.<sup>19</sup>

It is also critical to acknowledge that the story of COVID-19 and its impact on geriatric mental health is still being written. The existing literature at the time of writing does not capture the impact of the Delta and Omicron variant-induced spikes and their accompanying restrictions. As with any chronic stressor, it may be years before the true scope of mental health fallout may be evident. In the here-and-now however, clinicians must assume the onus of adapting their approach to older adults to maximize their resilience and anticipate and mitigate COVID-induced challenges.

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## AUTHOR CONTRIBUTIONS

All authors contributed equally to the conceptualization and writing of this manuscript.

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## DISCLOSURES

*The authors have conflicts of interest related to the content of this article. IV receives an honorarium for serving as social media editor for the American Journal of Geriatric Psychiatry.*

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