



Editorial

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

Hailey V. Cray, M.P.H., Ipsit V. Vahia, M.D.

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As COVID-19 hits the 2-year mark, it's devastating impact on mental health has become apparent.^{1–4} 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.^{5,6} 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 groups⁷ 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,⁸ long COVID,⁹ the impact of physical and social distancing¹⁰ and the disproportionate impact on the health of people with dementia and especially their caregivers.^{11–13}

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 colleagues¹⁴ 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

From the McLean Hospital (HV Cray, IV Vahia), Belmont, MA; and the Harvard Medical School (IV Vahia), Boston, MA. Send correspondence and reprint requests to Ipsit V. Vahia, M.D., McLean Hospital, 115 Mill Street, Mail stop 234, Belmont, MA 02478 e-mails: ivahia@partners.org, ivahia@mclean.harvard.edu

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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-19.⁸ 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.⁸

Overall, population-wide surveys of mental health echo these studies, showing that it has worsened over time.⁴ However, at the 2-year point, the protective effect of age appears to be intact.^{2,15,16} 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.¹ This again appears to reflect greater resilience^{7,15} 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 Aging³ show that older adults had twice the odds of depressive symptoms during the pandemic when compared with the pre-pandemic period.^{4,17}

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.⁹ 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.⁹ Other studies appear to echo these findings, and suggest that PACS may be particularly problematic in persons who developed delirium.¹¹ However, a separate study of 254 individuals hospitalized in Italy¹⁸ 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.¹¹

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.¹¹ 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.¹⁹ 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.¹¹

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.²⁰ This burden may be particularly severe for subgroups such as informal caregivers.¹³ 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.¹²

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.²¹ Finally, there has been substantial evidence⁶ 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.¹⁹

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.

AUTHOR CONTRIBUTIONS

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

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.

References

1. Czeisler MÉ, Howard ME, Rajaratnam SMW: Mental health during the COVID-19 pandemic: challenges, populations at risk, implications, and opportunities. *Am J Health Promot* 2021; 35:301-311;doi:10.1177/0890117120983982b
2. Kobayashi LC, O'Shea BQ, Kler JS, et al: Cohort profile: the COVID-19 coping study, a longitudinal mixed-methods study of middle-aged and older adults' mental health and well-being during the COVID-19 pandemic in the USA. *BMJ Open* 2021; 11:e044965;doi:10.1136/bmjopen-2020-044965
3. Raina P, Wolfson C, Griffith L, et al: A longitudinal analysis of the impact of the COVID-19 pandemic on the mental health of middle-aged and older adults from the Canadian longitudinal study on aging. *Nat Aging* 2021; 1:1137-1147;doi:10.1038/s43587-021-00128-1
4. Ramiz L, Contrand B, Rojas Castro MY, et al: A longitudinal study of mental health before and during COVID-19 lockdown in the French population. *Global Health* 2021; 17:29;doi:10.1186/s12992-021-00682-8
5. Brown EE, Kumar S, Rajji TK, et al: Anticipating and mitigating the impact of the COVID-19 pandemic on Alzheimer's disease and related dementias. *Am J Geriatr Psychiatry* 2020; 28:712-721;doi:10.1016/j.jagp.2020.04.010
6. Vahia IV, Blazer DG, Smith GS, et al: COVID-19, mental health and aging: a need for new knowledge to bridge science and service. *Am J Geriatr Psychiatry* 2020; 28:695-697;doi:10.1016/j.jagp.2020.03.007
7. Vahia IV, Jeste DV, Reynolds CF: Older adults and the mental health effects of COVID-19. *JAMA* 2020; 324:2253-2254; doi:10.1001/jama.2020.21753
8. Mazza MG, Palladini M, De Lorenzo R, et al: One-year mental health outcomes in a cohort of COVID-19 survivors. *J Psychiatr Res* 2021; 145:118-124;doi:10.1016/j.jpsychires.2021.11.031
9. Méndez R, Balanzá-Martínez V, Luperdi SC, et al: Long-term neuropsychiatric outcomes in COVID-19 survivors: a 1-year longitudinal study. *J Intern Med* 2022; 291:247-251;doi:10.1111/joim.13389
10. Bailey L, Ward M, DiCosimo A, et al: Physical and mental health of older people while cocooning during the COVID-19 pandemic. *QJM* 2021; 114:648-653;doi:10.1093/qjmed/hcab015
11. Manca R, De Marco M, Venneri A: The impact of COVID-19 infection and enforced prolonged social isolation on neuropsychiatric symptoms in older adults with and without dementia: a review. *Front Psychiatry* 2020; 11:585540;doi:10.3389/fpsy.2020.585540
12. Czeisler MÉ, Rohan EA, Melillo S, et al: Mental health among parents of children aged <18 years and unpaid caregivers of adults during the COVID-19 pandemic - United States, December 2020 and February-March 2021. *MMWR Morb Mortal Wkly Rep* 2021; 70:879-887;doi:10.15585/mmwr.mm7024a3

13. Hughes MC, Liu Y, Baumbach A: Impact of COVID-19 on the health and well-being of informal caregivers of people with dementia: a rapid systematic review. *Gerontol Geriatr Med* 2021; 7;doi:[10.1177/23337214211020164](https://doi.org/10.1177/23337214211020164), 23337214211020164
14. Cortés Zamora EB, Mas Romero M, Tabernero Sahuquillo MT, et al: Psychological and functional impact of COVID-19 in long-term care facilities: the COVID—a study. *Am J Geriatr Psychiatry* 2022; 30:431–443;doi:[10.1016/j.jagp.2022.01.007](https://doi.org/10.1016/j.jagp.2022.01.007)
15. Losada-Baltar A, Martínez-Huertas JÁ, Jiménez-Gonzalo L, et al: Longitudinal correlates of loneliness and psychological distress during the lockdown situation due to COVID-19. Effects of age and self-perceptions of aging. *J Gerontol B Psychol Sci Soc Sci* 2021;doi:[10.1093/geronb/gbab012](https://doi.org/10.1093/geronb/gbab012), gbab012
16. Hampshire A, Hellyer PJ, Soreq E, et al: Associations between dimensions of behavior, personality traits, and mental-health during the COVID-19 pandemic in the United Kingdom. *Nat Commun* 2021; 12:4111;doi:[10.1038/s41467-021-24365-5](https://doi.org/10.1038/s41467-021-24365-5)
17. Hansen T, Sevenius Nilsen T, Knapstad M, et al: Covid-fatigued? A longitudinal study of Norwegian older adults' psychosocial well-being before and during early and later stages of the COVID-19 pandemic. *Eur J Ageing* 2021; 1–11;doi:[10.1007/s10433-021-00648-0](https://doi.org/10.1007/s10433-021-00648-0)
18. Fumagalli C, Zocchi C, Tasseti L, et al: Factors associated with persistence of symptoms 1 year after COVID-19: a longitudinal, prospective phone-based interview follow-up cohort study. *Eur J Intern Med* 2021;doi:[10.1016/j.ejim.2021.11.018](https://doi.org/10.1016/j.ejim.2021.11.018), S0953-6205 (21)00405-2
19. Gedde MH, Husebo BS, Erdal A, et al: Access to and interest in assistive technology for home-dwelling people with dementia during the COVID-19 pandemic (PAN.DEM). *Int Rev Psychiatry* 2021; 33:404–411;doi:[10.1080/09540261.2020.1845620](https://doi.org/10.1080/09540261.2020.1845620)
20. Rising KL, Salcedo VJ, Amadio G, et al: Living through the pandemic: the voices of persons with dementia and their caregivers. *J Appl Gerontol* 2022; 41:30–35;doi:[10.1177/07334648211036399](https://doi.org/10.1177/07334648211036399)
21. Van Orden KA: Considering the impact of research assessments: a commentary on “COVID-19 related loneliness and psychiatric symptoms among older adults: the buffering role of subjective age. *Am J Geriatr Psychiatry* 2020; 28:1205–1207;doi:[10.1016/j.jagp.2020.08.003](https://doi.org/10.1016/j.jagp.2020.08.003)