Gerontology & Geriatric Medicine
Volume 10: 1–4

DOI: 10.1177/23337214241277052
journals.sagepub.com/home/ggm
Sage

Understanding Pandemic Increases in Long-Stay Psychotropic Prescribing for Dementia Symptoms: A Survey of Nursing Home Clinicians

John William Kerns, MD[1,2], Jonathan D. Winter, MD[1,2], Katherine M. Winter, CFNP[3], Rebecca Etz, PhD[2,4], Sarah Reves, FNP-C[2,4], and C. J. Christian Bergman, MD, CMD[2]

Abstract

Objective: To explore the perceptions of nursing home (NH) clinicians regarding factors underpinning known increases in psychotropic prescribing over the COVID-19 pandemic. **Methods**: Three iterative online surveys were fielded to Virginia NH prescribing clinicians (11/2021–6/2022) to assess their perspectives regarding factors driving pandemic increases in NH psychotropic use. Existing literature and emerging survey data informed survey content. Sampling was for convenience and achieved through crowdsourcing, leveraging collaborations with Virginia NH clinician professional organizations. **Results:** A total of 89 surveys were collected. Clinicians noted simultaneous surging of dementia symptoms with decreased availability of non-pharmacologic measures to remedy them, leading to increased prescribing of all psychotropics. Staff shortages and turnover, isolation from family and community, and personal protective equipment protocols were identified as key pandemic factors contributing to this mismatch. **Conclusions:** Virginia NH clinicians explicitly linked increased NH psychotropic prescribing to known pandemic phenomena, associations previously hypothesized, but not, to our knowledge, directly confirmed.

Keywords

COVID-19, pandemic, psychotropic, survey, nursing home, dementia, BPSD

Manuscript received: May 24, 2024; **final revision received:** July 16, 2024; **accepted:** August 6, 2024.

Introduction

The COVID-19 pandemic created enormous challenges to providing dementia care in nursing homes (NHs), the full implications of which have yet to be determined. National data suggest that a deterioration of resident mood and dementia symptoms coincided with a rapid acceleration in the use of all classes of psychotropic medications, reversing a decade-long downward prescribing trend (McDermid et al., 2023; White et al., 2021; Winter et al., 2023). While multiple causes have been postulated, an unequivocal link between escalating psychotropic use and specific pandemic phenomena is lacking (Chen et al., 2023; Hoben et al., 2023; White et al., 2021). To address this knowledge gap, we surveyed Virginia NH clinicians to directly explore their perspectives regarding the impact of pandemic-related factors on NH prescribing for dementia symptoms.

Methods

To better understand how and why psychotropic prescribing for the behavioral and psychological symptoms of dementia (BPSD) changed over the COVID-19 pandemic, we surveyed Virginia NH clinicians regarding their perspectives on the impact of pandemic factors on BPSD management. For the purposes of this survey, NH clinicians were defined as any clinician (whether physician or advanced practice provider) who prescribed medications for dementia symptoms in NHs.

[1]VCU-Shenandoah Family Practice Residency, Front Royal, VA, USA
[2]Virginia Commonwealth University, Richmond, USA
[3]Shenandoah University, Winchester, VA, USA
[4]Larry A. Green Center, Richmond, VA, USA

Corresponding Author:
John William Kerns, VCU-Shenandoah Family Practice Residency, 351 Valley Health Way, Suite 300, Front Royal, VA 22630, USA.
Email: bkerns@valleyhealthlink.com

The intended results were to begin explaining previous quantitative outcomes, not to test hypotheses, thus a representative sample would be excessive to accomplish this aim. To that end, we employed a crowdsourcing approach to recruit survey participation. First, we reached out to the contact lists of partner Virginia professional and academic organizations whose membership are known to prescribe psychoactive medications in nursing homes as well as personal contacts of nursing home clinicians. Second, survey invitations included the ability to share the survey link with other nursing home clinicians, in a "snow ball" approach.

Survey construction followed an adaptive sequential exploratory design process, and was fielded in three cycles over an eight-month period to increase participation and allow flexibility to explore relevant themes and issues arising de novo from survey results. Initial survey content was grounded in existing literature, our previous research regarding BPSD management approaches in Virginia NHs, and research team consensus (Kerns, Winter, Winter, Boyd, et al., 2018; Kerns, Winter, Winter, Kerns, et al., 2018; Winter et al., 2023). Questions were then honed by piloting and cognitive interviews (Crabtree & Miller, 2022). Each survey consisted of four parts: core questions, emergent questions, demographic questions, and open-ended comments. Core questions assessed issues surrounding the decision to prescribe or not prescribe psychoactive drugs for dementia symptoms at the time of each survey. Emergent questions were added and/or deleted during the survey process, which allowed the research team to be adaptive and iterative through the survey process, to delve deeper into the findings, and evaluate ongoing change (e.g., we added questions related to clinician stressors, Supplemental Tables 1 and 2, but deleted further questions about BPSD symptom increases). Thus, the second and third survey cycle incorporated the results of previous surveys. Open-ended comments allowed participants several opportunities to clarify and expand on answers, and informed survey modifications.

Survey invitations were emailed in November 2021, March 2022, and June 2022. Surveys were posted on SurveyMonkey, and the data downloaded in a de-identified manner. Quantitative data was analyzed in a descriptive fashion. Open ended comments were analyzed by research team immersion and crystallization iteratively during both the gathering and interpretive processes and differences were resolved by team consensus (Crabtree & Miller, 2022).

Results

Three iterations of the survey were fielded between November 2021 and June 2022 resulting in 23, 38, and 28 clinician responses respectively. More physicians than nurse practitioners responded; otherwise, participant demographics varied but compared favorably with what is known about the population of clinicians who can prescribe psychotropics in nursing homes (Goodwin et al., 2021; Harris-Kojetin et al., 2016). Respondents noted significant increases in all BPSD over the pandemic (Supplemental Table 3). Causal factors cited by clinicians for these amplified symptoms were loneliness and isolation as residents were quarantined from the community, activities, families, and each other, along with new and unfamiliar staff, and the use of disorienting personal protective equipment (PPE). As observed BPSD surged, clinicians described an increased need for non-pharmacological BPSD management but a decreased capacity to deliver such services. Clinicians identified several factors contributing to this mismatch, including: (1) a loss of well-trained, experienced staff; (2) an influx of new, often temporary personnel both unfamiliar with residents and their families and lacking in NH BPSD management skills; (3) visitation restrictions resulting in the loss of both family help as well as volunteer and community assistance in routine dementia care; and (4) the prioritization of the time and effort necessitated by quarantine measures and PPE protocols over routine dementia care (Supplemental Tables 1 and 2).

Respondents recounted increasing their use of all psychotropic medications during the pandemic to treat worsening BPSD as alternatives evaporated. Fifty-two percent reported using more antidepressants, while 24% specified increasing antipsychotic use. Significant increases in mood-stabilizer (13%) and anxiolytic (10%) prescribing for BPSD were also reported. Interestingly, significant majorities of clinicians reported using every queried class of psychotropic medication for dementia symptoms during the COVID-19 pandemic (Supplemental Table 4).

Virtually all clinicians (96%) reported that NHs expected them to provide the same level of care regardless of staffing adequacy; fifty percent reported the same expectation despite burdensome PPE and other pandemic requirements.

Please see Supplemental Tables for additional result granularity.

Discussion

These survey results, while limited in scope, corroborate and begin to explain early findings highlighting the negative impact of the COVID-19 pandemic on dementia care and outcomes. Clinicians observed escalating dementia symptoms, a consequent increased demand for non-pharmacologic interventions to manage them, and a simultaneous decrease in the capacity of facilities to provide this prescribed care. These factors resulted in a greater reliance on risky pharmacologic approaches. NH clinicians affirmed previous assumptions that staffing shortages and turnover, isolation from family and community supports, and PPE were key factors contributing to this incongruity.

Conversely, these findings support the intuitive argument that adequate and experienced staffing, the availability of non-pharmacological interventions for BPSD,

along with strong family and community support are crucial to minimizing the use of psychotropic medications in NHs. Clinicians' widespread application of all psychotropics, with a preponderance reporting use of every psychotropic class to manage BPSD, is significantly different from previous research in Virginia, and corroborates national reports of a changing approach to managing dementia symptoms during the COVID-19 pandemic (Kerns, Winter, Winter, Boyd, et al., 2018; Kerns, Winter, Winter, Kerns, et al., 2018; Winter et al., 2022, 2023).

This was a limited and regional pilot with a small number of respondents. Clinician participation in online surveys decreased over the pandemic, and it is impossible to know exactly how many clinicians were exposed to online recruitment efforts. When using crowdsourcing methods for sampling, validity and generalizability are best approximated by comparing the characteristics of the sample with those of the national population. External validity has been achieved using these methods in similar national online clinician surveys with comparable objectives and sampling goals, and the characteristics of our sample compare well with what is known about clinicians who prescribe psychotropics in NHs (Goodwin et al., 2021; Harris-Kojetin et al., 2016). Further, a strength of this survey approach is the direct input from NH clinicians, including both physicians and nurse practitioners, who were on the pandemic's frontlines. Further, since this exploratory study was not designed to test hypotheses, but rather to begin to explain known outcomes, a representative sampling was not necessary to accomplish our aim.

Conclusions

These results help to make direct connections between pandemic changes in staffing, isolation, and PPE and known increases in psychotropic use, associations that have been hypothesized but, to our knowledge, never confirmed.

The long-term consequences of evolving prescribing patterns, clinician burnout, and the exodus of experienced staff on dementia care in NHs is uncertain. Permanent disruption to community resources and deteriorating staffing standards driven by the pandemic have the potential to significantly transform the care and culture of NHs. These findings underscore the critical need for further investigation regarding the enduring consequences of the pandemic on dementia care. In turn, this will allow clinicians and health policy experts to proactively target interventions, advance policies, and shape a more resilient, person-centered approach to dementia care in the post-pandemic era.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This study was supported in part by the Commonwealth of Virginia's Alzheimer's and Related Diseases Research Award Fund [Award 22-6].

ORCID iDs

John William Kerns https://orcid.org/0009-0003-2056-273X
Jonathan D. Winter https://orcid.org/0000-0001-8650-5066
C. J. Christian Bergman https://orcid.org/0000-0003-0367-9031

Supplemental Material

Supplemental material for this article is available online.

References

Chen, M., Goodwin, J. S., Bailey, J. E., Bowblis, J. R., Li, S., & Xu, H. (2023). Longitudinal associations of staff shortages and staff levels with health outcomes in nursing homes. *Journal of the American Medical Directors Association*, *24*(11), 1755–1760.e.7. https://doi.org/10.1016/j.jamda.2023.04.017

Crabtree, B. F., & Miller, W. L. (2022). *Doing qualitative research* (3rd ed.). Sage.

Goodwin, J. S., Agrawal, P., Li, S., Raji, M., & Kuo, Y. F. (2021). Growth of physicians and nurse practitioners practicing full time in nursing homes. *Journal of the American Medical Directors Association*, *22*(12), 2534–2539 e2536. https://doi.org/10.1016/j.jamda.2021.06.019

Harris-Kojetin, L., Sengupta, M., Park-Lee, E., Valverde, R., Caffrey, C., Rome, V., & Lendon, J. (2016). Long-term care providers and services users in the United States: Data from the national study of long-term care providers, 2013-2014. *Vital Health Statistics Series*, *3*(38), x–xii; 1–105.

Hoben, M., Dymchuk, E., Corbett, K., Devkota, R., Shrestha, S., Lam, J., Banerjee, S., Chamberlain, S. A., Cummings, G. G., Doupe, M. B., Duan, Y., Keefe, J., O'Rourke, H. M., Saeidzadeh, S., Song, Y., & Estabrooks, C. A. (2023). Factors associated with the quality of life of nursing home residents during the COVID-19 pandemic: A cross-sectional study. *Journal of the American Medical Directors Association*, *24*(6), 876–884 e875. https://doi.org/10.1016/j.jamda.2023.03.033

Kerns, J. W., Winter, J. D., Winter, K. M., Boyd, T., & Etz, R. S. (2018). Primary care physician perspectives about antipsychotics and other medications for symptoms of dementia. *Journal of the American Board of Family Medicine*, *31*(1), 9–21. https://doi.org/10.3122/jabfm.2018.01.170230

Kerns, J. W., Winter, J. D., Winter, K. M., Kerns, C. C., & Etz, R. S. (2018). Caregiver perspectives about using antipsychotics and other medications for symptoms of dementia. *Gerontologist*, *58*(2), e35–e45. https://doi.org/10.1093/geront/gnx042

McDermid, J., Ballard, C., Khan, Z., Aarsland, D., Fox, C., Fossey, J., Clare, L., Moniz-Cook, E., Soto-Martin, M., Sweetnam, A., Mills, K., Cummings, J., & Corbett, A.

(2023). Impact of the Covid-19 pandemic on neuropsychiatric symptoms and antipsychotic prescribing for people with dementia in nursing home settings. *International Journal of Geriatric Psychiatry*, *38*(1), e5878. https://doi.org/10.1002/gps.5878

White, E. M., Wetle, T. F., Reddy, A., & Baier, R. R. (2021). Front-line nursing home staff experiences during the COVID-19 pandemic. *Journal of the American Medical Directors Association*, *22*(1), 199–203. https://doi.org/10.1016/j.jamda.2020.11.022

Winter, J. D., Kerns, J. W., Winter, K. M., Richards, A., & Sabo, R. T. (2022). Community, social, and facility factors and long-stay antipsychotic use. *Clinical Gerontologist*, *45*(5), 1180–1188. https://doi.org/10.1080/07317115.2022.2063777

Winter, J. D., Kerns, J. W., Winter, K. M., Richards, A., & Sabo, R. T. (2023). Long-stay mood stabilizer use increasing as prescription of antipsychotics decreases. *GeroPsych: The Journal of Gerontopsychology and Geriatric Psychiatry*, *36*(1), 42–47. https://doi.org/10.1024/1662-9647/a000287