

COMMENTARY

Ethnic disparities and dementia

Commentary on “Ethnic disparities in the uptake of anti-dementia medication in young and late-onset dementia” by Giebel *et al.*

Ana Luisa Sosa^{1,2}  and Isaac Acosta^{1,2} 

¹Laboratory of dementias, Instituto Nacional de Neurología y Neurocirugía, CDMX, 14269, Mexico

²Universidad Nacional Autónoma de México, Mexico City, Mexico

E-mail: drasosa@hotmail.com

In this issue of *International Psychogeriatrics*, Giebel *et al.* (2020) reported according to foregoing publications (Mehta *et al.*, 2005; Poon *et al.*, 2009; Zuckerman *et al.*, 2008) and with later reports (Lin *et al.*, 2021; Olchanski *et al.*, 2022; Zhu *et al.*, 2022) that antedementia medication usage in the USA was highest in persons with dementia from a white ethnic background than from minority ethnic groups (MEG). Giebel *et al.*'s report highlights the impact of social factors on current usage of antidementia medication and analyzes for the first time the difference between young onset dementia (YOD) and late onset dementia (LOD), finding that more people with YOD used more memantine than those with LOD, while fewer used cholinesterase inhibitors.

This article presents us a situation in which several factors interact in a complex way. In the framework of these findings, there are several points related to the ethnic inequity in health and in the disparity in the distribution of dementia treatment. Inequity is generated throughout the life course, having repercussions at all levels in the care chain, from the generation of risk and protective factors along life to final stages of dementia care.

Faison *et al.* (2007), after consulting several sources, defined ethnicity as a term that refers to sharing a common culture, origin, psychological characteristics, attitudes, language, religion, and cultural traditions. And they mentioned that this term is frequently associated to immigrant status. The population size of elderly from ethnic minority groups is exponentially growing in several low- and middle-income countries (Shah *et al.*, 2008). Then dementia, depression, and other mental health problems will increase too (Bhattacharyya and Benbow, 2013). Now, the non-Hispanic whites represent in US three-quarters of older adults. It is estimated that MEG population will increase from 25% to

approximately 45% of older adults in the USA by 2040 (ACL, 2021). Alzheimer's dementia and related disorders (ADRD) prevalence were higher for women than men. Latinos are expected to have the largest increase in dementia cases in the coming years (Aranda *et al.*, 2021). Alzheimer's Association's 2021 report (2021) summarized the evidence from almost 10 publications about the fact that minorities such as Hispanics and African Americans have more risk for developing dementia compared to non-Hispanic whites. And mentioned that health, socioeconomic disparities, and systemic racism contribute to increased Alzheimer's and dementia risk in MEG.

Giebel *et al.* (2020) revised national data from a wide period (September 2005 to March 2019) and included three diagnoses: Alzheimer's disease dementia, Lewy body dementia, and Parkinson's disease dementia; from the USA, National Alzheimer's Coordinating Center (Beekly *et al.*, 2007; Morris *et al.*, 2006), from 34 Alzheimer's Disease Centers (ADC). This study, even based on a national registry, remarks the underrepresentation of MEG. Most of the population studied (82.4%) were non-Hispanic whites, and the rest (17.6%) were people from MEG.

People from low and middle-income countries migrate to more developed countries, looking for better opportunities. Although they may have more income, most of them and their descendants will continue living in inequity status in the high-income countries where they are immigrants. If they or their relatives present dementia, they must afford several disadvantageous situations simultaneously:

1. Be part of a minority group because racial, ethnic, and immigrant conditions.
2. Belonging to the aged population group.
3. Suffer dementia, condition linked to stigma.
4. All this situation is even worse for women.

It has been documented that MEG families look for help years after the deterioration started, until the family or the career are collapsed. They believe that families should take care of their elders. This could be associated to health and dementia illiteracy, and their sense of familial responsibility (Mukadam *et al.*, 2011). People living with dementia experiences it differently depending on several conditions such as life and social circumstances, environment, preferences, and economical and social resources (Aranda *et al.*, 2021). There is a lack not only in opportunities for treatment but also an accurate and timely diagnosis. Several reports document that people from MEG have difficulties in receiving a diagnosis and accessing to care services (Giebel *et al.*, 2019; Mayeda *et al.*, 2016; Nielsen *et al.*, 2020).

Giebel *et al.* (2020) reported that, in some ethnic groups, the possibility of a “changing” diagnosis is more likely than in others. This is perhaps favored for difficulties in accurate communication, which is very necessary for knowing the symptoms and course of the disease. It is important to consider that the cultural component play an important role in the understanding and behaviors related to dementia and it could be very heterogeneous.

Cooper *et al.* (2010) found that MEG attends to medical services later, in advanced stages of the illness, and when they got a diagnosis, they had less options to have access to antidementia medication. The gaps for receiving pharmacological and non-pharmacological treatments are manifestations of health and healthcare inequities. Rates of pharmaceutical antidementia treatment are low and disparate in the Medicare population diagnosed with ADRD. The timing for therapy initiation varies widely across race/ethnicity, suggesting inequities in diagnostic and treatment (Aranda *et al.*, 2021). Evidence shows that postdiagnosis, black and Latino patients are not only less likely to be prescribed medications but are also advised to discontinue antidementia drugs. Even more, there is evidence of an increase in antipsychotic consumption in the Latinos (Aranda *et al.*, 2021). Giebel *et al.* (2020) point out that health literacy is an other topic linked to inequity that it may be associated with access to care and use of medications, and it may or may not be independent of socioeconomic status.

Recently, more authors have been studying the mental health neglect among minorities of older adults, a topic that has been documented in specialized journals, such as IPG, for several years (Graham *et al.*, 1998; Shah *et al.*, 2008). Evidence added to that recently published regarding the inequity of care for serious mental illness at the end of life (Shalev and Fields, 2021).

We know that so far there is no available pharmacologic treatment for avoiding the damage and death of neurons that cause Alzheimer’s disease. Pharmaceutical treatment with the antidementia treatments available (donepezil, galantamine, rivastigmine, and memantine) has modest effectiveness, but may delay the cognitive and functional decline of ADRD. Even when the delays to deterioration could be modest, it is valuable for the affected person and his/her family (Barthold *et al.*, 2020). Nevertheless, we are being witnesses of impressive advances in the understanding and early diagnoses of neurodegenerative disorders, and particularly of Alzheimers disease (AD). In this new era, with the biomarkers and new clinical trials emerging, looking for AD-modifying therapies, these options should be equitably available.

With the numbers of people with ADRD rising rapidly across the world, the scientific community can no longer neglect the need for research focusing on ADRD among underrepresented ethno-racial diverse groups (Babulal *et al.*, 2019). It is imperative that clinical trials for AD include grater minority participants for generating information on possible differences in metabolism, treatment response, adverse events to therapeutic agents, and favors the investigation of genetic variability among ethnic groups. Strategies are urgently needed to accessing of dementia medication and to provide access to social services for people who are facing inequities in dementia care. There are several groups, programs, and proposals oriented to combat inequity, but the results so far are not notorious (Faison *et al.*, 2007).

As example, there are some initiatives to provide alternative mental health care for ethnic minorities, these are not sufficiently widespread even in developed countries (Bhattacharyya and Benbow, 2013). The crude scenario faces a complex situation of elderly minorities in low- and middle-income countries. Where the family assumes totally, the responsibility of caring is “before them rather than the services or the government” (Mukadam *et al.*, 2011).

To advance the understanding of ethno-racial factors in ADRD, the field not only needs to directly test the importance of ethno-racial factors but also test these constructs within the context of the “big picture” including, but not limited to, the traditional factors (Stevnsborg *et al.*, 2016). Kenning *et al.* (2017) suggests that barriers should be addressed on two levels, service-level interventions and personal- or community-level interventions, in conjunction to try and maximize their effectiveness. Further research in terms of the implementation of dual intervention strategies is needed.

The NIA Health Disparities Research Framework recommends responses at multilevel with an approach of life course. Actions and solutions are needed to ensure that the already devastating burden of Alzheimer's disease and other dementias on disproportionately affected racial and ethnic groups is not made worse by discrimination and health inequities in the current system (AA, 2021). The mentioned organization provides a landscape for stimulating multidisciplinary approaches, evaluating research productivity, and identifying opportunities for health disparities research related to aging that may ultimately achieve health equity (AA, 2022).

Conflict of interest

None.

Description of authors' roles

Both authors contributed to conceptualization and writing of this paper.

References

- AA. (2022). 2022 Alzheimer's disease facts and figures: more than normal aging: understanding mild cognitive impairment. *Alzheimer's and Dementia*, 18, 700–789. <https://doi.org/10.1002/alz.12638>
- ACL. (2021). *2020 Profile of Older Americans*. Washington, DC: ACL. Available at: https://acl.gov/sites/default/files/Aging%20and%20Disability%20in%20America/2020ProfileOlderAmericans.Final_.pdf
- AA. (2021). 2021 Alzheimer's disease facts and figures: race, ethnicity and Alzheimer's in America. *Alzheimer's and Dementia*, 13, 327–406.
- Aranda, M. P. *et al.* (2021). Impact of dementia: health disparities, population trends, care interventions, and economic costs. *Journal of the American Geriatrics Society*, 69, 1774–1783.
- Babulal, G. M. *et al.* (2019). Perspectives on ethnic and racial disparities in Alzheimer's disease and related dementias: update and areas of immediate need. *Alzheimer's and Dementia*, 15, 292–312. <https://doi.org/10.1016/j.jalz.2018.09.009>
- Barthold, D. *et al.* (2020). Pharmaceutical treatment for Alzheimer's disease and related dementias: utilization and disparities. *Journal of Alzheimer's Disease*, 76, 579–589.
- Beekly, D. L. *et al.* (2007). The National Alzheimer's Coordinating Center (NACC) database: the Uniform Data Set. *Alzheimer Disease and Associated Disorders*, 21, 249–258.
- Bhattacharyya, S. and Benbow, S. M. (2013). Mental health services for black and minority ethnic elders in the United Kingdom: a systematic review of innovative practice with service provision and policy implications. *International Psychogeriatrics*, 25, 359–373. <https://doi.org/10.1017/S1041610212001858>
- Cooper, C., Tandy, A. R., Balamurali, T. B. S. and Livingston, G. (2010). A systematic review and meta-analysis of ethnic differences in use of dementia treatment, care, and research. *The American Journal of Geriatric Psychiatry: Official Journal of the American Association for Geriatric Psychiatry*, 18, 193–203.
- Faison, W. E. *et al.* (2007). Potential ethnic modifiers in the assessment and treatment of Alzheimer's disease: challenges for the future. *International Psychogeriatrics*, 19, 539–558.
- Giebel, C., Cations, M., Draper, B. and Komuravelli, A. (2020). Ethnic disparities in the uptake of anti-dementia medication in young and late-onset dementia. *International Psychogeriatrics*, 35, 381–390. <https://doi.org/10.1017/S1041610220000794>
- Giebel, C. M. *et al.* (2019). Age, memory loss and perceptions of dementia in South Asian ethnic minorities. *Aging and Mental Health*, 23, 173–182. <https://doi.org/10.1080/13607863.2017.1408772>
- Graham, C., Howard, R. and Ha, Y. (1998). Dementia and ethnicity. *International Psychogeriatrics*, 10, 183–191.
- Kenning, C., Daker-White, G., Blakemore, A., Panagioti, M. and Waheed, W. (2017). Barriers and facilitators in accessing dementia care by ethnic minority groups: a meta-synthesis of qualitative studies. *BMC Psychiatry*, 17, 316.
- Lin, P. *et al.* (2021). Alzheimer's disease medication utilization patterns: disparities in treatment initiation, non-adherence, and discontinuation. *Alzheimer's & Dementia*, 17, e054849.
- Mayeda, E. R., Glymour, M. M., Quesenberry, C. P. and Whitmer, R. A. (2016). Inequalities in dementia incidence between six racial and ethnic groups over 14 years. *Alzheimer's and Dementia*, 12, 216–224. <https://doi.org/10.1016/j.jalz.2015.12.007>
- Mehta, K. M., Yin, M., Resendez, C. and Yaffe, K. (2005). Ethnic differences in acetylcholinesterase inhibitor use for Alzheimer disease. *Neurology*, 65, 159–162.
- Morris, J. C. *et al.* (2006). The Uniform Data Set (UDS): clinical and cognitive variables and descriptive data from Alzheimer Disease Centers. *Alzheimer Disease and Associated Disorders*, 20, 210–216.
- Mukadam, N., Cooper, C., Basit, B. and Livingston, G. (2011). Why do ethnic elders present later to UK dementia services? A qualitative study. *International Psychogeriatrics*, 23, 1070–1077. <https://doi.org/10.1017/S1041610211000214>
- Nielsen, T. R., Nielsen, D. S. and Waldemar, G. (2020). Barriers to post-diagnostic care and support in minority ethnic communities: a survey of Danish primary care dementia coordinators. *Dementia*, 19, 2702–2713. <https://doi.org/10.1177/1471301219853945>
- Olchanski, N. *et al.* (2022). Alzheimer's disease medication use and adherence patterns by race and ethnicity. *Alzheimer's & Dementia: The Journal of the Alzheimer's Association*, 24, S93. <https://doi.org/10.1002/alz.12753>
- Poon, I., Lal, L. S., Ford, M. E. and Braun, U. K. (2009). Racial/ethnic disparities in medication use among

veterans with hypertension and dementia: a national cohort study. *The Annals of Pharmacotherapy*, 43, 185–193.

Shah, A., Doe, P. and Deverill, K. (2008). Ethnic minority elders: are they neglected in published geriatric psychiatry literature? *International Psychogeriatrics*, 20, 3. <https://doi.org/10.1017/S1041610208006959>

Shalev, D. and Fields, L. (2021). Redressing disparities in end-of-life care and serious mental illness through models of care and workforce development. *International Psychogeriatrics*, 33, 109–112. <https://doi.org/10.1017/S1041610220001519>

Stevnsborg, L., Jensen-Dahm, C., Nielsen, T. R., Gasse, C. and Waldemar, G. (2016). Inequalities in access to treatment

and care for patients with dementia and immigrant background: a Danish nationwide study. *Journal of Alzheimer's Disease*, 54, 505–514. <https://doi.org/10.3233/JAD-160124>

Zhu, C. W., Neugroschl, J., Barnes, L. L. and Sano, M. (2022). Racial/ethnic disparities in initiation and persistent use of anti-dementia medications. *Alzheimer's & Dementia: The Journal of the Alzheimer's Association*, 35, 64. <https://doi.org/10.1002/alz.12623>

Zuckerman, I. H. et al. (2008). Racial and ethnic disparities in the treatment of dementia among Medicare beneficiaries. *The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences*, 63, S328–33.