

P137: Cost Considerations of Untreated Agitation: Direct, Indirect, and Intangible

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OBJECTIVE: In the past decade, researchers and advocates have taken important steps toward understanding the full costs of Alzheimer's disease and related dementias. However, our current approach to framing these costs does not fully consider the behavioral symptoms of dementia, notably agitation. Agitation in Alzheimer's disease contributes to negative social and financial outcomes for people with the condition, their care partners, and health systems. When left untreated, the negative impact of these outcomes is exacerbated, yet the full scale of this impact is unknown. "Cost Considerations of Untreated Agitation" seeks to propose a framework to help in evaluating the variables that impact these costs.

METHODS: We created a model that investigates each stage of Alzheimer's disease with agitation. This model assesses direct, indirect, and intangible costs of the disease. Direct costs include professional caregiving, non-pharmacological intervention, nursing home costs, healthcare professional consultations, and hospitalizations. Indirect costs included loss of income and value of unpaid caregiving. Intangible costs include the mental health impact of agitation on individuals living with Alzheimer's and their care partners. Additionally, we used quality-adjusted life years to measure disease burden and health outcomes. Finally, we leveraged qualitative research to overlay the experience of care partners and individuals with lived experience to bring their voice to this work.

RESULTS: Results are a tentative framework and describe what additional research and input is necessary in order to create a version with which one can assess the comprehensive costs of untreated agitation in Alzheimer's. This framework will include perspectives and feedback from individuals with lived experience, care partners, and key opinion leaders in Alzheimer's research from across the world.

CONCLUSION: Agitation has severe consequences on individuals, families, and health systems. Oftentimes one of the first symptoms of Alzheimer's or dementia, agitation can increase the caregiving responsibilities, trigger placement into nursing homes, and cause severe emotional and physical toll on care partners. We cannot understand the full costs of dementia or AD until we account for untreated agitation vis-à-vis a multi-symptom assessment, therefore an accepted framework is necessary in order to fully consider the costs of untreated agitation.

P138: Articulating Agitation: Towards Culturally Competent Care

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Objective: In 2014, IPA advanced the field of Alzheimer's care by offering a definition of *agitation*. Yet, as the definition rightly notes, agitation "can bear very different meanings to different people." This becomes more complex as we consider how different cultural and socioeconomic communities talk about agitation – both within their communities and outside them.

"Articulating Agitation: Towards Culturally Competent Care" seeks to better understand how people living with dementia (PLWD) and care partners talk about agitation from a multi-cultural perspective. This project focuses on discussions of agitation within Black, LGBTQ+, and white American populations.

Methods: This project prioritizes the first-hand testimony of people with lived experience, both PLWD and care partners. We conducted a series of interviews with members from Black, LGBTQ+, and white communities in 2021 and 2022 to gain authentic testimony. Interviews were led by members of the respective communities, with our research team on "listen only" mode.

Results: There are notable differences in how each community talks about agitation – including identifying early symptoms; conversations with families, communities, and HCPs; and determining pathways for care and treatment. From our conversations with members of the Black community we heard statements like, “what goes on in the house stays in the house, we don’t discuss [dementia] with other people” and “our people don’t trust a lot of stuff being put out there by doctors and scientists”. From the LGBTQ+ community we heard statements like “I definitely felt that we weren’t taken as seriously or heard because we were two women”. All underscore the sweeping implications of history, stigma, bias, and culture on how diverse communities experience and respond to agitation and care.

Conclusion: Culturally competent care for agitation among PLWD and care partners requires HCPs and other supporters to balance two things at once: the standard diagnostic definition of agitation, but also the cultural humility and openness to listen and seek to understand how PLWD and care partners express their experiences and observations with agitation.

P140: Midlife diet and risk of dementia/mild cognitive impairment

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The Japan Public Health Center-based prospective (JPHC) Study is a large population-based cohort. Midlife dietary intake was assessed on two occasions: in the years 1995 and 2000 (aged 45-64 in 1995). In 2014-2015, approximately 1300 participants from Saku district in Nagano prefecture completed a mental health screening including later life depression and cognitive decline (i.e., mild cognitive impairment (MCI) and dementia). We used logistic regression analyses to calculate odds ratios (ORs) for MCI and dementia. Based on this survey, we found the following characteristics of midlife diet, which may be useful information to prevent cognitive decline/dementia.

1. High-density lipoprotein cholesterol (HDL-C) and later cognitive decline (Svensson et al. *Transl Psychiatry*, 2019): Midlife high-density lipoprotein cholesterol (HDL-C) is a measure which could help identify individuals at reduced risk of developing age-related cognitive decline. Compared to the lowest HDL-C quartile, the highest HDL-C quartile was significantly inversely associated with MCI. High HDL-C (quartiles 2-4) was inversely associated with dementia compared to low HDL-C (quartile 1).
2. Dietary fish and n-3 polyunsaturated fatty acid (PUFA) and later cognitive decline (Nozaki et al. *J Alzheimers Dis*, 2021): Higher intake of fish, eicosapentaenoic acid (EPA), docosahexaenoic acid (DHA) and docosapentaenoic acid (DPA) in midlife significantly reduced risks of dementia.
3. Intake of soy and the isoflavone and later cognitive decline (Svensson et al. *J Alzheimers Dis*, 2021): Compared to the lowest dietary quartile of energy-adjusted isoflavone genistein intake, the highest quartile was significantly associated with late-life cognitive impairment.
4. Cancer/diabetes and later cognitive decline (Sadahiro et al. *Psychiatry Clin Neurosci*, 2019): Comorbid cancer and diabetes from midlife may increase the risk of MCI or dementia in later life. In addition to the increased dementia risk associated with diabetes on the basis of insulin resistance, cancer and cancer therapies may also interfere with cognitive function via insulin resistance.

P149: Chronic fatigue syndrome and its response to the use of a multimodal antidepressant

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