

The role of psychoeducation and yoga in reducing the burden of family caregivers of people with Alzheimer's disease

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Abstract

The continuous increase in the elderly population and chronic health conditions present significant challenges to healthcare systems, particularly in developing countries. Among these conditions, dementia, particularly Alzheimer's disease (AD), is one of the most concerning, causing cognitive decline, behavioral changes, and progressive dependence on family caregivers. The physical, emotional, and financial burden on caregivers can deteriorate their quality of life. Psychoeducation has shown efficacy in reducing stress and improving caregiving skills. Yoga-based approaches have also demonstrated significant benefits in reducing symptoms of anxiety and depression. This commentary aims to describe the effect of psychoeducation and yoga in reducing the burden on family caregivers of people with AD, primarily exploring the findings of the study by Araujo *et al.* (2023). In this study, psychoeducation was effective in reducing caregivers' burden, while the integration of yoga improved only certain aspects of quality of life. The research indicates that distance learning methodology is feasible, cost-effective, and can assist caregivers. However, the short duration and frequency of the yoga sessions may have limited their effects.

Keywords: Alzheimer's disease, Burden, Family caregivers, Psychoeducation, Yoga

Introduction

The continuous growth of the elderly population and the increase in chronic health conditions present a significant challenge to health systems worldwide. In developing countries, this situation is even more concerning due to limited financial resources and inadequate healthcare infrastructure. Among these conditions, dementias are particularly relevant. Dementia is a clinical syndrome characterized by cognitive decline, behavioral changes, and impairment of daily living activities [1,2]. Alzheimer's disease (AD) is the leading cause of dementia worldwide, accounting for up to 75% of cases, followed by vascular dementia [2]. As dementia progresses, patients become increasingly dependent on their family members for daily activities, initially involving more complex tasks and, in more advanced stages, basic activities such as personal hygiene and feeding. Additionally, the progression of the disease is often accompanied by the emergence of neuropsychiatric and behavioral symptoms, including anxiety, depression, delusions, hallucinations, apathy, agitation, insomnia, and aggression, which pose significant challenges for caregivers [3-5]. This situation can impose a substantial physical, emotional, and financial burden on family caregivers, resulting in a deterioration of their quality of life [6]. Current literature indicates that psychoeducation can play a crucial role in reducing stress, improving caregiving skills, and coping with these challenges. Additionally, yoga-based approaches have shown significant benefits in reducing symptoms of anxiety and depression and improving sleep quality in those who practice this intervention. The aim of this commentary is to briefly describe the effect of psychoeducation and yoga in reducing the burden on family caregivers of people with AD, and primarily to explore the findings of the study by Araujo *et al.* (2023), which

investigated the potential benefits of these interventions in the context of supporting family caregivers of people with AD [7].

Psychoeducation

Psychoeducation is based on pedagogical and psychological techniques, aiming to instruct patients and caregivers about a specific disease, its symptoms, prognosis, progression, and therapeutic options [8]. This approach promotes greater awareness of the condition and strategies to face associated daily challenges.

This approach has been widely used to support patients and caregivers of individuals with mental disorders. Psychoeducation programs aimed at improving the understanding of the disease, its management, and how to deal with the burden can enhance their skills and abilities to face the situation more effectively. Additionally, psychoeducation can offer tools that help in understanding one's own feelings regarding the care provided and personal needs [9-11]. Alves *et al.* conducted a systematic review of psychoeducational interventions for managing neuropsychiatric symptoms in people with AD during the COVID-19 pandemic. The results indicated that most studies reported an improvement in patients' neuropsychiatric symptoms (NSD), as well as in caregivers' anxiety and mood, resulting in improved quality of life for both patients and caregivers [12]. In a Brazilian pilot study, where caregivers participated in virtual psychoeducation sessions, high satisfaction with the program was demonstrated. Additionally, it was evidenced that distance education is feasible, cost-effective, and can assist caregivers in managing dementia [13].

Yoga

Yoga is conceptualized as a mental, meditative, or awareness state in which the individual identifies with their true essence. As an integration process, yoga seeks to develop methods and strategies to combat influences that cause any type of disintegration. Initially, it focuses on cultivating appropriate psychological attitudes, promoting a conscious effort to avoid adverse emotional situations that can be controlled [14]. In a study investigating the impact of unconventional interventions such as physical exercise, yoga, meditation, and tai chi on depression and anxiety, Saeed *et al.* concluded that yoga can be an effective complementary strategy in the treatment of these conditions [15]. These findings are supported by the randomized controlled clinical trial conducted by Manincor *et al.*, which compared conventional treatment alone with conventional treatment combined with a yoga intervention in individuals with symptoms of depression and anxiety. The group that participated in yoga sessions showed more significant reductions in depression scores, leading the authors to suggest that this practice can bring benefits to the mental health of the general population [16]. In Brazil, Danucalov *et al.* conducted a randomized clinical trial to examine the effects of yoga practice combined with compassion meditation on the quality of life, attention, vitality, and self-compassion of family caregivers of patients with AD. The results of this study indicated that yoga and meditation practice can improve the quality of life, attention, vitality, and self-compassion of caregivers [17]. Studies investigating the efficacy of psychoeducation and yoga practice in caregivers of dependent individuals are still scarce. In this context, the clinical trial "Psychoeducation versus Psychoeducation integrated with yoga for family caregivers of people with Alzheimer's disease: a randomized clinical trial" stood out as pioneering and innovative, by offering online classes of psychoeducation and yoga. Moreover, the integration

of yoga with psychoeducation for family caregivers of people with AD was an unprecedented approach in the scientific literature. The study's results showed that the distance learning methodology can be feasible, facilitate access to educational programs, and enable a larger number of participants to complete the expected program. In this study, there were eight weekly sessions, lasting 30 minutes for psychoeducation and 30 minutes for yoga practice. As in the study by Ferreti *et al.*, high participant satisfaction with the programs and a low dropout rate were observed [13]. These results suggest that the online methodology is an effective strategy and should be encouraged to reach as many caregivers as possible. Regarding the sociodemographic and clinical-epidemiological characteristics of the participants in this research, there were no significant differences between the groups, indicating no selection bias. Most participants were female, daughters, primary indicating no selection bias. Most participants were female, daughters, primary caregivers, with an average age of 53.54 (\pm 8.48) years in the psychoeducation group and 54.96 (\pm 9.36) years in the psychoeducation integrated with yoga group. These results are consistent with the current literature [18-20].

The psychoeducational program was developed to cover topics ranging from the definition of dementia and AD, progression and prognosis, neuropsychiatric symptoms (NSD), non-pharmacological strategies for dealing with NSD, to identifying signs of caregiver burden and tools for improving caregivers' quality of life. The yoga program was structured in three stages, with exercises chosen from the Hatha Yoga system, particularly the Asanas. The results also reinforced existing literature, demonstrating that family caregivers of individuals with AD are exposed to a high burden and are more susceptible to symptoms of stress, anxiety, and depression. Additionally, they are more prone to poorer quality of life indicators. Psychoeducation proved effective in reducing the burden, but the integration of yoga did not enhance this improvement. One explanation for this result could be the short duration (30 minutes) and frequency (once a week) of the yoga sessions. The few studies in this area offered longer sessions and more frequent classes. Furthermore, it was not possible to ensure that participants practiced the proposed exercises outside of the class during the week. On the other hand, yoga improved some domains of family caregivers' quality of life, such as physical health, memory, and finances. Thus, it is assumed that participants were able to gain physical benefits from the exercises and more emotional balance from the meditation and valuing their essence over external factors. When evaluating all studied outcomes, it is observed that the effectiveness of yoga was modest when compared to the few studies found in the literature. Most of these studies demonstrated that the practice of yoga has a positive impact on mental health and reduces caregiver stress [21-23]. Some limitations of the study prevent the generalization of the results, one of which is the uncertainty regarding the possibility of replication in different cultural contexts. However, when evaluating the methodology used and the results achieved, it is possible to estimate that the cost-effectiveness of psychoeducation and yoga programs for family caregivers of people with AD is favorable. Therefore, approaches using online psychoeducation and yoga programs should be encouraged and guide future studies.

Conclusion

The study in question demonstrated that psychoeducation effectively reduced the burden on family caregivers of individuals

with Alzheimer's disease. Additionally, it showed that the integration of yoga improved only certain aspects of their quality of life. Given the high relevance of this topic in the context of public health, the existing research gap regarding the potential of yoga as a support strategy for caregivers should be addressed by future studies employing more frequent and extended yoga programs.

References

1. Nitrini R, Caramelli P, Bottino CM, Damasceno BP, Brucki SM, Anghinah R, et al. Recomendações do Departamento Científico de Neurologia Cognitiva e do Envelhecimento da Academia Brasileira de Neurologia [Diagnosis of Alzheimer's disease in Brazil: diagnostic criteria and auxiliary tests. Recommendations of the Scientific Department of Cognitive Neurology and Aging of the Brazilian Academy of Neurology]. *Arq Neuropsiquiatr.* 2005 Sep;63(3A):713-9.
2. Ayodele T, Rogaeva E, Kurup JT, Beecham G, Reitz C. Early-Onset Alzheimer's Disease: What Is Missing in Research? *Curr Neurol Neurosci Rep.* 2021 Jan 19;21(2):4.
3. Chiu M, Wesson V, Sadavoy J. Improving caregiving competence, stress coping, and mental well-being in informal dementia carers. *World J Psychiatry.* 2013 Sep 22;3(3):65-73.
4. Tawfik NM, Sabry NA, Darwish H, Mowafy M, Soliman SSA. Psychoeducational Program for the Family Member Caregivers of People with Dementia to Reduce Perceived Burden and Increase Patient's Quality of Life: A Randomized Controlled Trial. *J Prim Care Community Health.* 2021 Jan-Dec; 12:21501327211014088.
5. Riffin C, Van Ness PH, Wolff JL, Fried T. Multifactorial Examination of Caregiver Burden in a National Sample of Family and Unpaid Caregivers. *J Am Geriatr Soc.* 2019 Feb;67(2):277-83.
6. de Araujo EL, Lacerda SS. Psychosocial factors affected by burden in family caregivers of people with Alzheimer's disease. *Dement Neuropsychol.* 2024 Jun 24; 18: e20230115.
7. de Araujo EL, Rodrigues MR, Kozasa EH, Lacerda SS. Psychoeducation versus psychoeducation integrated with yoga for family caregivers of people with Alzheimer's disease: a randomized clinical trial. *Eur J Ageing.* 2023 Nov 25;20(1):46.
8. Lemes CB, Neto JO. Aplicações da psicoeducação no contexto da saúde. *Temas em psicologia.* 2017;25(1):17-28.
9. Rocha Júnior PR, Corrente JE, Hattor CH, Oliveira IM, Zancheta D, Gallo CG, et al. Efeito da capacitação dos cuidadores informais sobre a qualidade de vida de idosos com déficit de autocuidado [The results of training of informal caregivers on the quality of life of the elderly with a deficit in self-care]. *Cien Saude Colet.* 2011 Jul;16(7):3131-7.
10. Inouye SK, Studenski S, Tinetti ME, Kuchel GA. Geriatric syndromes: clinical, research, and policy implications of a core geriatric concept. *J Am Geriatr Soc.* 2007 May;55(5):780-91.
11. Soong A, Au ST, Kyaw BM, Theng YL, Tudor Car L. Information needs and information seeking behaviour of people with dementia and their non-professional caregivers: a scoping review. *BMC Geriatr.* 2020 Feb 14;20(1):61.
12. Alves GS, Casali ME, Veras AB, Carrilho CG, Bruno Costa E, Rodrigues VM, et al. A Systematic Review of Home-Setting Psychoeducation Interventions for Behavioral Changes in Dementia: Some Lessons for the COVID-19 Pandemic and Post-Pandemic Assistance. *Front Psychiatry.* 2020 Sep 29; 11:577871.
13. Ferretti C, Nitrini R, Brucki SMD. Virtual Support in Dementia: A Possible Viable Strategy for Caregivers. *Front Neurol.* 2021 Aug 13; 12:662253.
14. Gharote ML. *Yoga Aplicada - da teoria à prática.* 2a ed. São Paulo: FMU; 1996.
15. Saeed SA, Cunningham K, Bloch RM. Depression and Anxiety Disorders: Benefits of Exercise, Yoga, and Meditation. *Am Fam Physician.* 2019;99(10):620-7.
16. de Manincor M, Bensoussan A, Smith CA, Barr K, Schweickle M, Donoghoe LL, et al. Individualized yoga for reducing depression and anxiety, and improving well-being: a randomized controlled trial. *Depress Anxiety.* 2016;33(9):816-28.
17. Danucalov MA, Kozasa EH, Afonso RF, Galduroz JC, Leite JR. Yoga and compassion meditation program improve quality of life and self-compassion in family caregivers of Alzheimer's disease patients: A randomized controlled trial. *Geriatr Gerontol Int.* 2017;17(1):85-91.
18. Alzheimer's Association. Alzheimer's disease facts and figures. *Alzheimer's Dement.* 2022;18(4):700-89.
19. Kim B, Noh GO, Kim K. Behavioural and psychological symptoms of dementia in patients with Alzheimer's disease and family caregiver burden: a path analysis. *BMC Geriatr.* 2021 Mar 5;21(1):160.
20. Ohno S, Chen Y, Sakamaki H, Matsumaru N, Yoshino M, Tsukamoto K. Burden of caring for Alzheimer's disease or dementia patients in Japan, the US, and EU: results from the National Health and Wellness Survey: a cross-sectional survey. *J Med Econ.* 2021 Jan-Dec;24(1):266-78.
21. Martis CS, Chandrababu R, Ravishankar N, Bhandary RP, Mohammed CA, Tolson D, et al. The effectiveness of yoga therapy on caregivers of people living with dementia: A systematic review and meta-analysis of randomized controlled trials. *Clinical Epidemiology and Global Health.* 2023 Jan 1;19:101192.
22. Park J, Howard H, Tolea MI, Galvin JE. Perceived Benefits of Using Nonpharmacological Interventions in Older Adults With Alzheimer's Disease or Dementia With Lewy Bodies. *J Gerontol Nurs.* 2020 Jan 1;46(1):37-46.
23. Santonja-Ayuso L, Corchón-Arreche S, Portillo MC. Interventions to Foster Resilience in Family Caregivers of People with Alzheimer's Disease: A Scoping Review. *Int J Environ Res Public Health.* 2024 Apr 16;21(4):485.