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Letter to the Editor

The Impact of Loneliness in Older Adults Presenting with Memory Impairment: A Single-Center Experience

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Dear Editor,

I am writing regarding the article titled "The Impact of Loneliness in Older Adults Presenting with Memory Impairment: A Single-Center Experience" published in the Sakarya Medical Journal.[1] As a geriatrician, I would like to thank the authors for addressing this topic in a well-structured way.

I would, however, like to highlight a few additional considerations on behalf of this study that could enhance the interpretation of the findings and inform future research.

Forgetfulness is a common symptom observed in older adults, and it is crucial to identify all potential causes to determine treatable factors and implement interventions to reverse it. As the authors have noted in the article, psychological, social, and metabolic conditions can contribute to the development of cognitive impairment through various mechanisms. In this study, while examining the relationship between loneliness and mild cognitive impairment in the elderly, individuals already diagnosed with Alzheimer's disease, those with central vascular diseases, metabolic disorders such as diabetes and thyroid diseases, as well as those with psychiatric and oncological conditions, were excluded from the analysis. However, some other important conditions in older adults that can cause cognitive impairment and potentially affect the results may not have been fully addressed. One of this condition is presence of sleep disturbances or insomnia. Sleep disturbances can reduce the clearance of metabolites such as amyloid-beta, a

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lipoprotein, which may lead to tau aggregation and, over the long term, neurodegeneration.[2] The relationship between sleep disturbances and cognitive impairment has been demonstrated in several studies involving older adults.[3,4] Furthermore, sleep disturbances contribute to systemic inflammation, oxidative stress, and changes in the neurovascular unit, all of which exacerbate cognitive decline over time.

Another issue is that, as readers, we are not provided with information about the medications that participants routinely use. Medications with anticholinergic effects, such as those prescribed for common conditions among older adults—like urinary incontinence, depression, anxiety, or insomnia—are known to have detrimental effects on memory. Although the direct cause-and-effect mechanism is not yet clear, it is well-known that drugs with anticholinergic properties can cause cognitive decline in older adults.[5] This may occur through cholinergic depletion, as acetylcholine plays a crucial role in memory and cognitive function. Its depletion can exacerbate neurodegenerative processes and promote brain atrophy.

Finally, in studies of this nature, considering the high prevalence of comorbidities in older adults—as highlighted in this study, where at least 76.7% of participants had at least one comorbidity—it may be more appropriate to use a parameter that reflects the overall comorbidity burden and its severity, such as the Charlson Comorbidity Index, rather than categorizing participants simply as having or not having chronic diseases. This approach would provide readers with a clearer understanding of participants' overall health status. Moreover, given the varying systemic impact and severity of chronic diseases, evaluating the total disease burden could provide a more meaningful metric in analysis.

Once again, I commend the authors for their valuable contribution to geriatric/neurologic care.

Thank you for the opportunity to provide feedback.

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