LETTER TO THE EDITOR

Pain is underestimated in older adults with risk of falls

Dear Editor.

I have read with great interest the Xiao et al. study examining retrospectively the incidence of falls and related factors in outpatient and inpatient elderly sample (n=451) aged 65 years and above. Key factors considered in the study were pain and other comorbidities, such as frailty and osteoarthritis. Although the findings have great merits and add to the body of literature, there are some limitations that should have been addressed or reported in the study.

Whereas Xiao et al. data indicate that the association between pain and fall is not statistically significant, this finding was not explicitly presented in the article. More importantly, it is astounding that the study found pain had no impact on the incidence of falls, despite the clear link between pain and falls in older adults in the literature. For example, a 2014 systematic review and meta-analysis by Stubbs et al.² found that pain was associated with a higher risk of falls, where half (50.5%) of older adults with pain reported at least one fall over a 12-month period. A more recent systematic review found that multisite pain is associated with an increased risk of future falls risk in community-dwelling older people.³ Further, it is well recognized that chronic pain is highly prevalent and disabling in older adults with and without dementia, but it is often an underestimated clinical problem in this population. 4 Given that the data in the Xiao et al. study did not involve the pathological state of "chronic pain," and the latter differs from the concept of pain within 4 weeks, the authors cannot be assertive in concluding that pain had no impact on the incidence of falls. Clearly, the status, duration, and type of pain (e.g., acute nociceptive pain vs. persistent pain) may have influenced these findings and, therefore, the definition of pain should have been further clarified or operationalized in the Xiao et al. study. Moreover, the limitations of the study should have been mentioned that the findings were only applicable to this operational definition of pain.

The sample in the Xiao et al. study included older adults with mild and moderate dementia, whose pain reporting in some may be unreliable or inadequate. Further, the Mini-Mental State Examination instrument was listed in the methodology, but cognition scores were not reported for the sample. Thus, how did the authors ascertain

intact cognition and communication skills in the sample? That is, how was the self-reporting capacity of the sample confirmed? If not, why was this not reported in the limitations?

Given that no difference in pain was detected between the fall and nonfall groups by the digital pain drawings instrument and this instrument was not validated in people with dementia, these issues raise the question whether the instrument was sensitive enough to detect any differences in pain between the two groups. This finding is also counterintuitive in the presence of significant differences between the groups in relation to the reduced mobility and the ability of performing daily living activities, as both of these are strongly associated with the presence of pain in older adults. Follow-up studies can carry out more in-depth research on the tools and methods of pain assessment and the time window of pain assessment in older adults with risk of falls.

Lastly, recall and documentation biases were not acknowledged in the limitation section of this retrospective study.

AUTHOR CONTRIBUTIONS

Dr Mustafa Atee is the sole author of this publication.

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The author received no funding from an external source in relation to this letter.

CONFLICT OF INTEREST STATEMENT

The author is one of the coinventors of the original PainChek® instrument (branded ePAT at the time), which was acquired and subsequently commercialized by PainChek Ltd. Dr Atee is a shareholder of PainChek Ltd. He previously held the position of a Senior Research Scientist (October 2018–May 2020) at PainChek Ltd, and is currently serving the position of Research and Practice Lead (Team Leader) at The Dementia Centre, HammondCare. Dr Atee coauthored a patent titled "A pain assessment method and system; PCT/ AU2015/000501" which was assigned to PainChek Ltd and who have, to date, received granted patents in China, Japan, and the United States. The PainChek® instrument was not mentioned nor cited in this letter.

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REFERENCES

- Xiao X, Li L, Yang H, et al. Analysis of the incidence of falls and related factors in elderly patients based on comprehensive geriatric assessment. Aging Med. 2023;6:245-253. doi:10.1002/agm2. 12265
- Stubbs B, Binnekade T, Eggermont L, Sepehry AA, Patchay S, Schofield P. Pain and the risk for falls in community-dwelling older adults: systematic review and meta-analysis. Arch Phys Med Rehabil. 2014;95(1):175-187.e9. doi:10.1016/j.apmr.2013.08.241
- Welsh VK, Clarson LE, Mallen CD, McBeth J. Multisite pain and self-reported falls in older people: systematic review and metaanalysis. Arthritis Res Ther. 2019;21:1-8. doi:10.1186/s13075-01 9-1847-5
- 4. Domenichiello AF, Ramsden CE. The silent epidemic of chronic pain in older adults. *Prog Neuropsychopharmacol Biol Psychiatry*. 2019;93:284-290. doi:10.1016/j.pnpbp.2019.04.006
- Muhammad T, Rashid M, Zanwar PP. Examining the association of pain and pain frequency with self-reported difficulty in activities of daily living and instrumental activities of daily living among community-dwelling older adults: findings from the longitudinal aging study in India. J Gerontol B Psychol Sci Soc Sci. 2023;78:1545-1554. doi:10.1093/geronb/gbad085