Addressing equity gaps in fall-related injuries

See **Articles** page e539

Falls cause a major burden of death and disability globally, but the burden is not equitably distributed: while the age-standardised incidence of injuries from falls declined from 1990 to 2017 in high Socio-demographic Index quintiles, incidence increased in the low-income and middle-income quintiles.[1]

This pattern, however, is not surprising, given that falls—like many other injuries—are partly driven by social determinants of health, leading to gross inequities. Poor-quality housing, inadequate workplace safety, systemic and institutional racism, and the absence of standards for consumer product safety are all factors that contribute to the incidence of falls in resource-constrained settings worldwide. Recognising this substantial and inequitable burden, in 2021, WHO's *Step Safely* technical package was published to provide global guidance on fall prevention strategies.[2]

Internationally, there is a large body of research focused on building knowledge on the burden of and risk factors for falls in older people, but much less research exists on this burden across the lifecourse. In *The Lancet Public Health*, the GBD US Health Disparities Collaborators[3] provide unique detail on fall mortality in US populations by race and ethnicity. With a focus on examining disparities, the research provides a county-level, time-series analysis of fall-related mortality stratified by race and ethnicity.

Unsurprisingly, the results reveal that older people had the highest rates of mortality due to falls and the largest increases in fall-related mortality over time.[3] Falls in older people are major drivers of morbidity and mortality globally and, with rapidly ageing populations worldwide, implementing appropriate prevention measures is essential to curtailing burgeoning injuries and health-care costs.

High mortality due to falls was evident in older White people, particularly in certain counties (eg, in Florida and Kansas).[3] The authors postulated that this finding might be attributable to various factors, including low bone mineral density or greater social isolation in White populations. It could also be due to insufficient physical activity, as exercise has been shown to reduce falls in older people living in the community.[4] Given that sedentary behaviour in people aged 65 years and older in the USA is high and increased between 2001 and 2016,[5] there is an important need to create opportunities for people to exercise across the lifecourse to prevent falls in older age, in addition to the myriad of other health benefits of exercise.

As the collaborators note,[3] there is a dearth of evidence on the burden of falls in younger populations, or on effective prevention programmes. Notably, they reported on high rates of fatal falls for younger adults in American Indian or Alaska Native (AIAN) populations across most settings, and for Black and Latino adults across the Midwest and Mountain West of the USA. Historical and ongoing injustices—including colonisation, slavery, and marginalisation of minority populations—creates ongoing intergenerational trauma and impacts the social determinants of health, all of which are likely to influence these high injury rates. These results are also indicative of an urgent need for further disaggregated analyses of injury data, by industry and mechanism, and for development of co-designed prevention programmes and policy change for minority population groups.

Among adults aged 20–64 years, fall-related mortality was also revealed to be much higher for men than for women.[3] This finding highlights probable causes of falls for working-age men, particularly occupational injury. Rising temperatures due to climate change are predicted to affect occupational deaths through heat syncope and heat stroke, especially in older workers, and will require further attention in future to better address occupational risk.[6] Furthermore, although the research was unable to explore contributing risk factors, alcohol is a known risk factor for falls at home among working-age adults,[7] and our recent work on opioids and falls showed the first 28 days following opioid initiation was a time of increased risk of serious fall injuries,[8] highlighting these areas as important priorities for future research.

Finally, as non-Indigenous and Indigenous academics, despite published principles on the use of Indigenous data,[9] we note the absence of governance mechanisms around reporting on, stewardship of, or ownership of data on minority populations. In Australia, principles of Indigenous data governance for Indigenous data sovereignty are becoming better articulated and applied, especially for data of this nature.[10] We recommend that

reporting of AIAN data only be done where appropriate governance structures are established that provide guidance on analyses, reporting, and interpretation. For global collaborations, such as the Global Burden of Diseases, Injuries, and Risk Factors Study, this means that data and processes involving these data are overseen by data governance committees led by people of the population of interest, who provide stewardship over use of and interpretation of data, and are included as authors on outputs as appropriate. We repeat our previous call for researchers to recognise the social, commercial, cultural, and political determinants of health in their work, and, through enactment of principles of Indigenous data sovereignty, give voice and power to the people whose data it is.[11]

We declare no competing interests.

Rebecca Ivers, Courtney Ryder, Brett Shannon
rebecca.ivers@unsw.edu.au

School of Population Health, University of New South Wales, Sydney, NSW 2052, Australia (RI, CR, BS); The George Institute for Global Health, University of New South Wales, Sydney, NSW, Australia (RI, CR); College of Medicine and Public Health (RI, CR) and Flinders Health and Medical Research Institute (CR), Flinders University, Adelaide, SA, Australia; Division of Environmental and Occupational Health Sciences, School of Public Health, University of Illinois, Chicago, IL, USA (BS); Phoenix Occupational Medicine, Brisbane, QLD, Australia (BS)

1 James SL, Lucchesi LR, Bisignano C, et al. The global burden of falls: global, regional and national estimates of morbidity and mortality from the Global Burden of Disease Study 2017. *Inj Prev* 2020; **26** (suppl 1)**:** i3–11.
2 Meddings D, Ivers R, Andersen M. Step safely: strategies for preventing and managing falls across the life-course. Geneva: World Health Organization, 2021. https://www.who.int/teams/social-determinants-of-health/safety-and-mobility/step-safely (accessed July 13, 2024).
3 GBD US Health Disparities Collaborators. Mortality due to falls by county, age group, race, and ethnicity in the USA, 2000–19: a systematic analysis of health disparities. *Lancet Public Health* 2024; **9:** e539–50.
4 Sherrington C, Fairhall N, Wallbank G, et al. Exercise for preventing falls in older people living in the community: an abridged Cochrane systematic review. *Br J Sports Med* 2020; **54:** 885–91.
5 Yang L, Cao C, Kantor ED, et al. Trends in sedentary behavior among the US population, 2001–2016. *JAMA* 2019; **321:** 1587–97.
6 International Labour Organization. Ensuring safety and health at work in a changing climate. Geneva: International Labour Office, 2024. https://www.ilo.org/publications/ensuring-safety-and-health-work-changing-climate (accessed June 22, 2024).
7 Kool B, Ameratunga S, Robinson E, Crengle S, Jackson R. The contribution of alcohol to falls at home among working-aged adults. *Alcohol* 2008; **42:** 383–88.
8 Hopkins RE, Bharat C, Buizen L, et al. Age-related risk of serious fall events and opioid analgesic use. *JAMA Intern Med* 2024; **184:** 394–401.
9 Carroll SR, Garba I, Figueroa-Rodríguez JH, et al. The CARE Principles for Indigenous data governance. *Data Sci J* 2020; **19:** 43.
10 Ryder C, Wilson R, D'Angelo S, et al. Indigenous data sovereignty and governance: the Australian Traumatic Brain Injury National Data project. *Nat Med* 2022; **28:** 888–89.
11 Bhaumik S, Ryder C, Ivers RQ. Strengthening diversity, inclusiveness and justice in the injury community. *Inj Prev* 2024; **30:** 3–4.