Why do older adults fall on stairs at home? Insights from a nationwide survey of 194 older adults

R Foster; A Akpan; M Hodges; L Corner; M Hollands; M Scott; L Alcock

1. INTRODUCTION

Stair falls cause major morbidity and mortality in older adults. Despite this, stair-focused recommendations are lacking from the 2022 World Falls Guidelines. We aimed to characterise environmental risk factors and consequences of home stair falls and near-falls, and demographics of older adults reporting them.

2. METHOD

- Co-designed online survey of adults aged 60+ years in England (N = 194).
- Respondents provided demographics, indices of multiple deprivation (IMD), concern about falling, and injury outcomes for home falls and near-falls over the previous 2 years.
- This analysis focused on the stair/step incident subset.
- Respondents selected causes of stair falls and near-falls from a predefined list.

STUDY AT A GLANCE

Survey sample: ***N* = 194**

Stair falls: ***n* = 33**

Stair near-falls: ***n* = 20**

3. RESULTS: PARTICIPANT CHARACTERISTICS

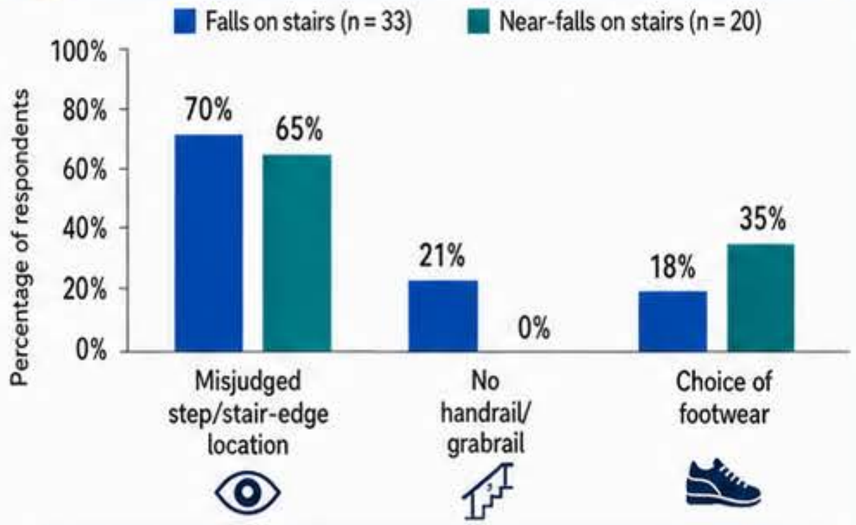
A. Falls on stairs (n = 33)

- Mean age: 70 years
- 76% female
- 69% from lower-deprivation areas (IMD quartile 4/5)
- 91% had low/moderate concern about falling (Short FES-I)

B. Near-falls on stairs (n = 20)

- Mean age: 68 years
- 55% female
- 70% from lower-deprivation areas (IMD quartile 4/5)
- 95% had low/moderate concern about falling (Short FES-I)

4. MAIN REPORTED CAUSES

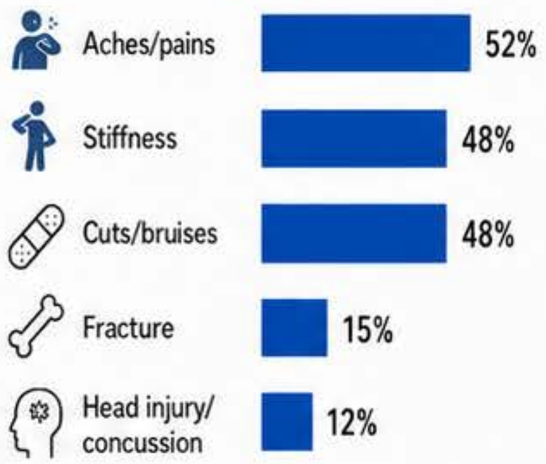


MAIN FINDING

Misjudged step or stair-edge location was the most commonly reported cause of both stair falls (70%) and stair near-falls (65%).

5. CONSEQUENCES OF STAIR INCIDENTS

Falls on stairs (n = 33)



Near-falls on stairs (n = 20)

Falls had more severe consequences, but near-falls also had physical consequences.

6. CONCLUSIONS

Similarity between stair falls and near-falls indicates shared risks, justifying early, feature-specific home modifications triggered by near-falls. Older adults reported modifiable, stair-specific factors including step-edge misjudgement, missing handrails, and footwear as salient contributors to home stair incidents.

7. IMPLICATIONS FOR PRACTICE

- Support feature-specific home assessments
- Consider low-cost stair adaptations such as high-contrast step-edge markers and continuous handrails
- Previous work shows step-edge highlighters can improve foot clearance
- Implementation barriers remain: aesthetics, acceptability, and installation

Stair safety should be addressed explicitly in falls-prevention practice and guidance.