Variation in falling and fall risk among community-dwelling older citizens in 12 European countries

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CONFLICT OF INTEREST DISCLOSURE

I have no potential conflict of interest to report
Falls: an introduction

Burden health

• 30% community-dwelling elderly >65y fall yearly
• 90% hip fractures attributed to falls

Burden resources

• In 2000, direct costs hip fractures Europe over €24 billion
• In 2050, costs expected to double
Falls: an introduction

• No studies on international variation in falling and fall risk
  – Important to inform policy
  – Prioritize right fall prevention programmes

• Composition of fall-risk factors in populations could explain variation
  – Socio-demographic
  – Intrinsic
  – Extrinsic
Research questions

1. Are there between-country differences in fall rate?

2. Are there between-country differences in prevalence of socio-demographic and intrinsic fall risk characteristics?

3. Do these differences account for possible differences in fall rate?
Methods

• Data: Survey of Health, Ageing and Retirement in Europe (SHARE), wave 4&5 (2010-2013)

• Population: 18,596 community-dwelling men and women aged ≥ 65 years from 12 European countries
Measurements

• At baseline: Fall risk factors
  – Socio-demographics (age, sex, education, living alone)
  – Mobility limitations, ADL, dizziness, depression, self-perceived health, vision, cognitive function

• At 2-year follow-up: Falling
  – Question: “For the past six months at least, have you been bothered by any of the health conditions on this card?”
Results 1: Are there between-country differences in fall rate?

Falling by country
Results 2: Are there between-country differences in terms of intrinsic fall characteristics?

**Intrinsic fall risk factors by country**

- Low health
- Mobility limitation(s)
- ADL limitation(s)
- Dizziness
- Impaired vision
- Depression
- Impaired cognition

Countries: Switzerland, Austria, Sweden, Denmark, Italy, Germany, Netherlands, Belgium, Estonia, France, Spain, Czech...
Results 3: Do these differences account for possible differences in falls?

Falls by country, adjusted for intrinsic fall risk factors (aOR)
Discussion/Conclusion

• Fall incidence varies between European countries
  – Higher in Belgium, France, Spain, Estonia, Czech Republic

• Explained by:
  – Differences main intrinsic fall risk factors
  – Not by socio-demographic composition

• Other explanations: home hazards, risk behaviour
Discussion/Conclusion

• Limitations
  – self-reported data
  – 25% persons lost to follow-up between baseline & follow-up

• Strengths
  – first cross-national comparative study falling
  – Nationally representative samples
  – Able to capture many intrinsic risk factors
Thank you!

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• SHARE research team and participants
Do you have any questions?

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