# An International Study of Self-Rated Health among Older Adults

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## Background

- Self-rated health is an important indicator of health among older adults, and a good predictor of mortality and decline in functional ability.
- Few studies have examined cross-cultural differences in the prevalence of self-rated health, and the social determinants that can account for these differences.
- Research objective: to examine factors associated with good self-rated health related to socioeconomic status, social support, depression and disability among populations of older adults from five different international sites.

## Methods

- Study population
  - Database from the International Mobility in Aging Study (IMIAS)
  - 1995 older adults in Canada (Saint-Hyacinthe, Quebec & Kingston, Ontario), in Latin America (Natal, Brazil & Manizales Colombia), and in Southeastern Europe (Tirana, Albania)
- Measurement instruments
  - Self-rated health: dichotomous item from a 5-point Likert scale (very good / good health, fair / poor / very poor health)
  - Income, income sufficiency, education
  - Social support from friends, extended family, children, and partner, and work status
  - Depression (CESD scale, score above 16)
  - Disability (dichotomous ADL disability)
- Methods of data analysis: Poisson multiple regression with robust covariance

## Descriptive Statistics



Figure 1: Gender Differences in Self-Rated Health
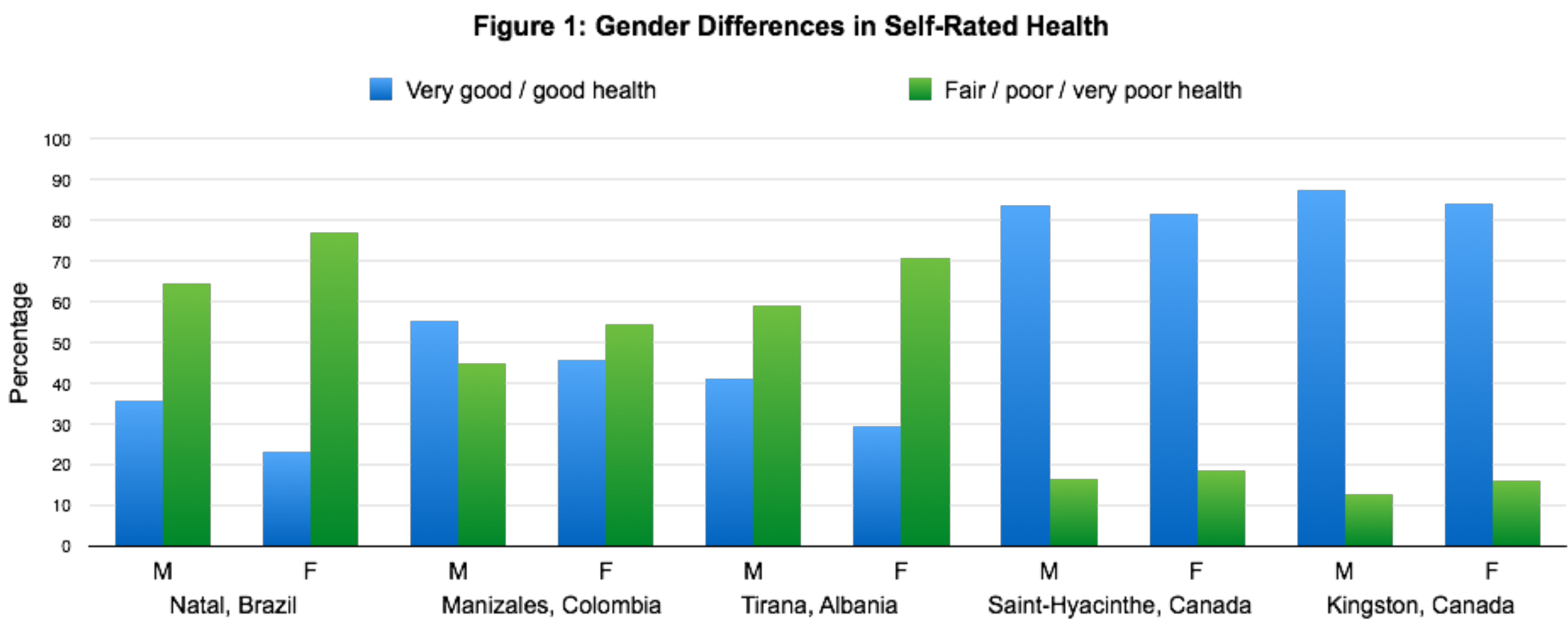
## Results

### Canada

- Gender is not a significant predictor, but good health is more prevalent among participants with higher income and education level.
- Friends' support is independently associated with good health in Canada.
- Good health is more prevalent among respondents who work.
- The prevalence of good health remains higher in high income groups even after controlling for depression and disability.

**Table 1: Poisson Regression of Self-Rated Health among Older Adults in Canada (n= 796)**

| | Prevalence Ratio | | |
|---|---|---|---|
| 65-69 years old | .99 | .98 | .98 |
| Male | .99 | 1.01 | 1.00 |
| Kingston | .97 | .96 | .96 |
| Middle income | 1.16** | 1.16** | 1.13** |
| High income | 1.13* | 1.12* | 1.09* |
| Income sufficient | 1.15 | 1.13* | 1.07 |
| Income very sufficient | 1.26* | 1.22* | 1.12 |
| Secondary education | 1.30 | 1.33* | 1.26 |
| Post-secondary education | 1.37* | 1.41* | 1.33* |
| Low support friends | | 1.21 | 1.17 |
| Mid support friends | | 1.32* | 1.29* |
| High support friends | | 1.38* | 1.31* |
| Work | | 1.13*** | 1.11*** |
| Depression | | | .85*** |
| ADL disability | | | .70*** |

*p<0.05, **p<0.01 , ***p<0.001

### Latin America

- Respondents in Manizales, Colombia report better health than in Brazil.
- Children are the main source of social support affecting health at the Latin American sites.
- Men have better health than women in Latin America, after controlling for socioeconomic status, but not after adjusting for social support.
- Income remains a significant predictor of good health even after controlling for depression and disability.

**Table 2: Poisson Regression of Self-Rated Health among Older Adults in Latin America (n= 801)**

| | Prevalence Ratio | | |
|---|---|---|---|
| 65-69 years old | 1.11 | 1.11 | 1.08 |
| Male | 1.24* | 1.18 | 1.02 |
| Manizales | 2.06*** | 2.01*** | 1.92*** |
| Middle income | 1.53*** | 1.47** | 1.34** |
| High income | 1.64** | 1.56** | 1.39** |
| Income sufficient | 1.30** | 1.30** | 1.15 |
| Income very sufficient | 1.07 | 1.09 | 1.05 |
| Secondary education | 1.16 | | |
| Post-secondary education | 1.05 | | |
| Low support child | | 1.03 | 1.04 |
| Middle support child | | 1.58* | 1.28 |
| High support child | | 1.43* | 1.19 |
| Work | | 1.30** | 1.20 |
| Depression | | | .28*** |
| ADL disability | | | .55*** |

*p<0.05, **p<0.01 , ***p<0.001

### Southeastern Europe

- Self-reported income sufficiency is the only socioeconomic predictor of good health, but the association disappears after adjusting for depression and disability.
- Men have a higher prevalence of good health in Tirana, even when controlling for income sufficiency.
- Social support is not associated with health.

**Table 3: Poisson Regression of Self-Rated Health among Older Adults in Tirana (n= 394)**

| | Prevalence Ratio | | |
|---|---|---|---|
| 65-69 years old | 1.45* | 1.32* | 1.30* |
| Male | 1.35* | 1.26 | 1.11 |
| Middle income | .97 | | |
| High income | .78 | | |
| Income sufficient | 1.61* | 1.39 | 1.25 |
| Income very sufficient | 2.26** | 1.85* | 1.48 |
| Secondary education | .90 | | |
| Post-secondary education | 1.08 | | |
| Low support friends | | 1.37 | |
| Mid support friends | | 1.60 | |
| High support friends | | 1.79 | |
| Work | | 1.24 | |
| Depression | | | .44*** |
| ADL disability | | | .44*** |

*p<0.05, **p<0.01 , ***p<0.001

- Being younger is independently associated with good health in Tirana.
- Once we control for depression and disability, neither gender nor economic variables significantly impact the prevalence of good health.

## Conclusions

- The effect of socioeconomic status and social support on the prevalence of self-rated health among older adults differs across international sites.
- Important gender differences remain in Latin American and Southeastern European sites, despite controlling for socioeconomic variables.
- The nature of social support that is relevant for self-rated health also differs cross-culturally.
- Depression and disability are important predictors of self-rated health, but many social variables remain significant after controlling for these important aspects of health.

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