The Relationship Between Self-perceived and Measured Frailty

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Background

Qualitative studies suggest discordance between older adults' self-perceived and measured frailty (1-5).

Aim

To quantify the relationship between self-perceived and measured frailty in community dwelling older adults.

Methods

375 older adults responded to postal survey rating their own frailty (self-perceived frailty [SPF] rated on binary and ordinal scales, PRISMA-7 (6), Self-Rated Health [SRH]).

1. Agreement between self-perceived frailty and Electronic Frailty Index (eFI) (7) category calculated with Weighed Kappa and Gwets AC2

2. Discrimination of self-report measures for eFI defined frailty (threshold ≥0.12) and area under the curve (AUC) plotted by ROC to determine optimum eFI cut point for self-perceived frailty.

3. Logistic regressions considered predictors of self-perceived frailty.

References SCAN ME

Conclusions

- There was a mismatch between older adults self-perceived frailty and their eFI score (especially for those measured as severely frail).
- Older adults were more optimistic about their frailty than the eFI.
- Age and depression predicted self-perceived frailty.
- This has implications for the public acceptability of frailty screening and engagement with frailty interventions.

Results

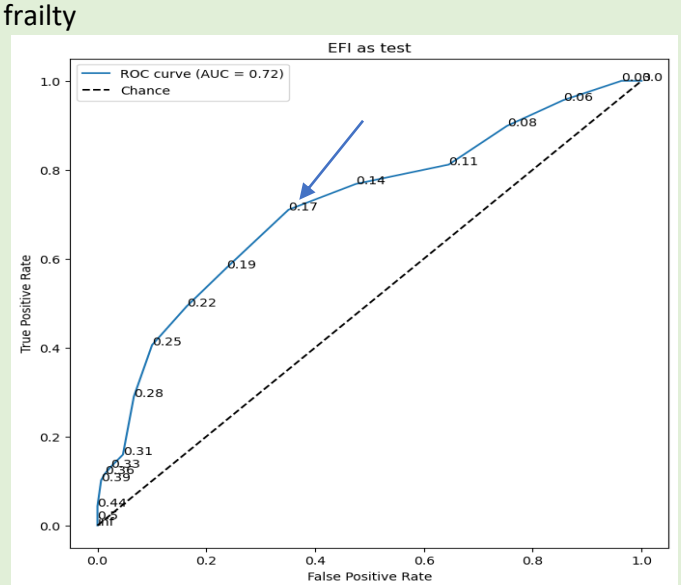
Table 1. Agreement between self-perceived and eFI rated frailty

Kappa (linear)	Kappa (quad)	AC2 (linear)	AC2 (quad)
0.25 (0.17-0.32) p<0.001	0.37 (0.28-0.46) p<0.001	0.65 (0.60-0.69) p<0.001	0.81 (0.78-0.85) p<0.001

Table 2. Discrimination for eFI frailty

Index Test	Cut-point	Sensitivity	Specificity
SPF on binary scale	Binary	0.27 (0.23-0.32)	0.91 (0.88-0.94)
SPF ordinal to binary	Mild/ Mod/ Severe	0.49 (0.44-0.54)	0.77 (0.73-0.82)
PRISMA-7	≥3	0.49 (0.44-0.55)	0.86 (0.82-0.89)
SRH	≤6	0.23 (0.19-0.27)	0.96 (0.94-0.98)

Figure 1. Optimal eFI cut point for self-perceived frailty



Regression results: Increasing age (OR 1.10 per year, 95%CI 1.02-1.18) and depression were associated with self-perceived frailty.

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