

Cohort study

Frailty as part of the disablement process: calling for health economic interventions

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Implications for practice and research

- ▶ Providing evidence that frailty precedes the disablement process could lead to the recognition of insurance benefits.
- ▶ Preventive interventions can be explored in future research to mitigate the disability effects on older person's lives.

Context

The disablement process is viewed as a continuum with four distinct stages: robustness, mild, moderate and severe. Contemporary evidence has shown the distinction between frailty and disability. These two concepts are often viewed independently,¹ resulting in different outcomes.² This created a gap in the conceptual and practical interdependence of frailty and disability in the disablement process that needs further exploration.

Methods

The purpose of this study³ was to explore the hierarchical relationship between frailty and disability. The study involved 943 participants aged 75 years and above from three cities in France. In the study, Zamudio-Rodríguez and colleagues correlated the Fried frailty phenotype, Instrumental Activities of Daily Living (IADL), and basic Activities of Daily Living (ADL) tools sociodemographic and medical variables. Also, they explored 4-year mortality risk associated with the four groups, namely (1) robust, (2) no disability, (3) frailty with IADL only, and (4) frailty with IADL and ADL disabilities, and multiple statistical treatments were employed to test their hypothesis.

Findings

61.3% of the sample were robust, meaning no frailty and no disability, 5.4% have no disability, 10.5% characterised as frail and IADL disabled, and 4.8% as IADL and ADL disabled. The downward progression with a slight uptick on the moderate or frailty with IADL disability shows mutual dependency. Significant statistical relationship ($p < 0.001$) has been found on the four groupings and the following variables: age, institution, lower income, number of drugs, heart failure, Mini-Mental Status Examination (MMSE) and Center for Epidemiologic Studies- Depression Scale (CES-D) scores, vision and hearing impairments, and perceived state of health. These factors among older persons imply higher risks to move to

the severe stage of the disablement process, which is frailty with IADL and ADL disability.

Commentary

The study provides preliminary findings proving that frailty and disability could be part of the hierarchical progression in disability. This is an important topic, especially to health workers lobbying to include frailty for health insurance benefits. Expansion of the disability definition with frailty could save insurance companies unnecessary costs, halted once frailty is established. Not only that, delaying or decreasing frailty was proven to reduce out-of-pocket payments.⁴ With only 10% of individuals on long-term care insurance, the early mitigation of frailty has substantive economic implications, as shown in the USA⁵ and China.⁶

Scholarship on the conceptual differences between frailty and disability is rendered more exciting by this study. The study provides an evidence-based framework on the need to declare frailty as a precursor to disability. This would imply that preventive interventions can be instituted to defer the progression to disability. The insertion of frailty also served as a jumpstart on relevant and more inclusive supportive interventions that older populations deserved. I am mainly sparked by how the authors framed the study based on the timeless adage that 'an ounce of prevention is worth a pound of cure'.

Competing interests None declared.

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References

- Hirani V, Naganathan V, Blyth F, *et al.* Longitudinal associations between body composition, sarcopenic obesity and outcomes of frailty, disability, institutionalisation and mortality in community-dwelling older men: the Concord health and ageing in men project. *Age Ageing* 2017;46:413–20.
- Brummel NE, Bell SP, Girard TD, *et al.* Frailty and subsequent disability and mortality among patients with critical illness. *Am J Respir Crit Care Med* 2017;196:64–72.
- Zamudio-Rodríguez A, Letenneur L, Féart C, *et al.* The disability process: is there a place for frailty? *Age Ageing* 2020;49:764–70.
- Hajek A, Bock J-O, Saum K-U, *et al.* Frailty and healthcare costs—longitudinal results of a prospective cohort study. *Age Ageing* 2018;47:233–41.
- Braun RA, Kopecky KA, Koreshkova T. Old, frail, and uninsured: accounting for features of the U.S. Long-Term care insurance market. *Econometrica* 2019;87:981–1019.
- Jin H-Y, Liu X, Xue Q-L, *et al.* The association between frailty and healthcare expenditure among Chinese older adults. *J Am Med Dir Assoc* 2020;21:780–5.