

Frailty: time for a new approach to health care?



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In *The Lancet Healthy Longevity*, Joanna Blodgett and colleagues¹ provide important evidence that frailty can be observed and measured in younger age groups (ie, in individuals aged ≥ 20 years), and is perhaps more relevant for predicting health outcomes than age. Except for women aged younger than 35 years, the results show an overall increase in mean frailty levels in all age groups for both men and women, accompanied by stable frailty lethality, from 1999 to 2018 in the USA. This increase poses some serious challenges for population health management. If people are not only failing to delay the onset of frailty in later years, but are also experiencing frailty earlier in life, this trend will result in a big challenge for health systems.

There have been substantial efforts over the past 40 years to try to compress morbidity (ie, delay the amount of time spent in ill health or dependence),² so that the impact of diseases is delayed until the final 1 or 2 years of life and most of the increasing lifespan is spent in relatively good health, with good levels of function that enable meaningful participation in society. Yet, assessments of the compression of morbidity hypothesis have repeatedly yielded rather disappointing results, with extra life years coming at the cost of most of these years being spent in a state of frailty.³ In the UK, nearly £6 billion per annum is spent on managing frailty-related crises in people aged 65 years and older.⁴ If the impact of frailty in younger age groups on health systems is similar to that of age-related frailty, then a radical approach that reconsiders our notions of a healthy lifestyle are required.

Why have we failed thus far to engage populations in adopting a healthy lifestyle? The core elements for successful healthy ageing are well known; doing exercise, avoiding smoking and excessive alcohol consumption, following a good diet, reducing stress, being employed, and avoiding pollution.⁵ Yet, the data presented by Blodgett and colleagues¹ suggest that these elements are either increasingly poorly adhered to, or are insufficient to attenuate the accumulation of deficits over the lifecourse. Data from the Organisation for Economic Cooperation and Development from the past decade point to the former, showing that, although the proportion of people who smoke has decreased, alcohol consumption, drug use, and obesity have increased, despite policy interventions.⁶

Hoping that these findings of poor lifestyle are unique to the US population studied is an optimistic interpretation of the study findings.¹ All societies would be well advised to consider the effect of increasing levels of frailty over the lifecourse, as these will not only manifest in terms of their effect on health and social care systems, but also workplace productivity.

The study¹ challenges us to reconsider our current approach to addressing lifestyle. Often, we focus on single (and measurable) issues, such as medical conditions, exercise, and nutrition; however, engagement in all aspects of healthy living is important for successful ageing. Frailty is a complex, multisystem issue;⁷ as such, single interventions will rarely be sufficient to engender any meaningful effect, and multifaceted interventions are therefore required.

Delivering and monitoring multifaceted interventions consistently over the lifecourse will require motivation, cooperation, integration, and attention to all aspects of healthy living across all populations. The targeting of such interventions in a way that they are acceptable to the individuals they are intended to benefit—whether from a cultural, racial, or any other perspective—is an area that is much neglected. We also need to better understand the role of deficit accumulation and the manifestation of frailty in younger age groups. The frailty construct relates to the accumulation of deficits over a lifetime and is associated with ageing. Frailty in people aged younger than 65 years could well be a different syndrome than age-related frailty, in which the number of dysfunctional systems affected is more predictive of adverse outcomes than issues with any single system.⁸ For this younger age group, a frailty index might need to consider lifecourse factors (eg, perinatal health) and lifestyle components (eg, smoking, alcohol use, exercise, and diet).

Aside from understanding frailty in younger age groups, and although it is now possible to capture frailty risk at a system-level (eg, the electronic Frailty Index in primary care⁹ and the Hospital Frailty Risk Score¹⁰ in secondary care), to our knowledge, no health system has yet progressed to creating frailty registries that can identify increasing frailty risk and initiate reviews and interventions that are holistic in nature. We will need to alter our approach to create holistic interventions

that address not only the risk of specific diseases (eg, cardiovascular risk), but also wider aspects that can improve health. More importantly, these interventions should address both patient-reported and disease-specific outcome measures, as patient-reported outcomes could further refine our approach in ensuring interventions are meaningful and acceptable to those they are intended to benefit.

Even though such ideas might evoke notions of a so-called Big Brother, the alternative, which is to continue as usual despite increasing evidence that our systems will soon be overwhelmed, seems somewhat misguided. Perhaps lessons from the COVID-19 pandemic, during which aspects of individual freedoms were compromised for the greater good, might begin to influence future public health strategies, and allow health and social care systems to adapt, so that they can address the current and ever growing frailty pandemic.

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- 1 Blodgett JM, Rockwood K, Theou O. Changes in the severity and lethality of age-related health deficit accumulation in the USA between 1999 and 2018: a population-based cohort study. *Lancet Healthy Longev* 2021; **2**: e96–104.
- 2 Fries JF. Aging, natural death, and the compression of morbidity. *N Engl J Med* 1980; **303**: 130–35.
- 3 Kingston A, Comas-Herrera A, Jagger C. Forecasting the care needs of the older population in England over the next 20 years: estimates from the Population Ageing and Care Simulation (PACSim) modelling study. *Lancet Public Health* 2018; **3**: e447–55.
- 4 Han L, Clegg A, Doran T, et al. The impact of frailty on healthcare resource use: a longitudinal analysis using the Clinical Practice Research Datalink in England. *Age and Ageing* 2019; **48**: 665–71.
- 5 Shin J, Han SH, Choi J. Exposure to ambient air pollution and cognitive impairment in community-dwelling older adults: the Korean frailty and aging cohort study. *Int J Environ Res Public Health* 2019; **16**: 3767.
- 6 OECD. Health at a glance 2019: OECD indicators. Paris: OECD Publishing, 2019.
- 7 Clegg A, Young J, Iliffe S, et al. Frailty in elderly people. *Lancet* 2013; **381**: 752–62.
- 8 Fried LP, Xue Q-L, Cappola AR, et al. Nonlinear multisystem physiological dysregulation associated with frailty in older women: implications for etiology and treatment. *J Gerontol A Biol Sci Med Sci* 2009; **64**: 1049–57.
- 9 Clegg A, Bates C, Young J, et al. Development and validation of an electronic frailty index using routine primary care electronic health record data. *Age Ageing* 2016; **45**: 353–60.
- 10 Gilbert T, Neuburger J, Kraindler J, et al. Development and validation of a Hospital Frailty Risk Score focusing on older people in acute care settings using electronic hospital records: an observational study. *Lancet* 2018; **391**: 1775–82.