



Letter to the Editor

Frailty is associated with multimorbidities due to decreased physical reserve independent of age



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We read the study of Vancampfort et al. entitled “Handgrip strength, chronic physical conditions and physical multimorbidity in middle-aged and older adults in six low- and middle income countries” with great interest [1]. In this paper, community-based data of 34,129 individuals aged ≥ 50 years from the World Health Organization's Study on Global Ageing and Adult Health were analyzed. The authors investigated the associations between handgrip strength, chronic physical conditions, and physical multimorbidity (i.e., ≥ 2 chronic conditions) among community-dwelling middle-aged and older adults using nationally representative data from six in low- and middle-income countries. The authors highlighted that weak handgrip strength correlated with a higher prevalence of physical conditions and multimorbidity. Observed results were similar in middle-aged versus old age people and, in female versus male participants respectively.

We would like to comment on a topic in this article: The authors concluded that “Weaker handgrip strength was associated with a range of chronic physical conditions and multimorbidity.” In the discussion section, it is stated that both frailty and sarcopenia are associated with an adverse inflammatory profile in middle and older age, which may increase risk for a variety of physical diseases. However, hand grip strength and frailty relationship is not addressed in the study [2]. Yet, hand grip strength, indicating muscle strength and sarcopenia, is also a component of frailty [3]. Frailty is characterised by deterioration in multiple body functions and decreased physiological reserve [4]. Frailty is the decline of physiological capability resulting in multimorbidities. The physical phenotype of frailty demonstrates significant overlap with low grip strength [3,5]. The prevalence of frailty increases with age in older adults, but frailty is largely unreported for younger adults [6]. Frailty is the cause of increased morbidity in the presence of chronic diseases (such as renal failure, or cancer) regardless of age. We suggest that weakness of hand grip; evaluation from the perspective of frailty; can strengthen the discussion of this comprehensive population study.

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