

Aging in Mexico: *Frailty*

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What is frailty?

A condition associated with adverse outcomes such as dependency or mortality when exposed to daily life stressors. It is commonly measured using a variety of recognized tools such as the frailty phenotype and the frailty index^{1,2}.

AROUND THE WORLD



Frailty prevalence varies widely, with an overall estimate of 11% in community-dwelling older adults aged 65 and older³.



Prevalence in Latin America varies from 21% to 48% among individuals 60 years and older, one of the highest in the world⁴.



Frailty increases with age, from 4% (age 65-69) to 26% (age >85); it is more prevalent in women⁵.



Frailty has a clear relationship with low socioeconomic status⁶, and having 2 or more chronic diseases⁷.



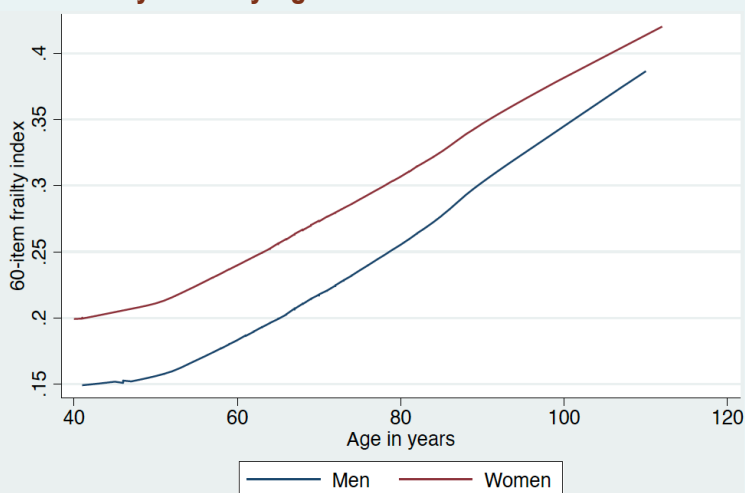
Frailty has a complex interplay with other common conditions of older adults such as cognitive decline, falls, depression, sarcopenia, and malnutrition⁵.

FRAILITY IN MEXICO: MHAS FINDINGS

The prevalence is around 25% among individuals ages 60 and older, it increases with age, is more prevalent in women than men⁹, and is associated with higher risk of mortality^{8,10}. Frail subjects aged 60 and older have about a 37% higher risk of falls¹⁰. The risk of frailty in Mexican older adults more than doubles for those with diabetes¹¹. In the last year of life, frailty is associated with more than 50% higher use of health care services, including more visits to a physician and more hospitalized days, compared to non-frail individuals¹³. Abnormal values in biomarkers such as hemoglobin, glycated hemoglobin and vitamin D are associated with higher odds of frailty¹². Healthy lifestyle behaviors such as regular exercise, not smoking, and moderate alcohol drinking are associated with lower incidence of frailty¹⁴. For instance, regular physical activity is associated with an approximately 20% reduction in the risk of frailty in the Mexican older adult¹⁴.

Frailty is more common with older age and among women

Frailty Index by Age and Sex



Source: Own calculations using MHAS 2012 data.

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RECOMMENDATIONS

1. Frailty status should be assessed in older adults, to help health professionals develop appropriate interventions.
2. Increasing physical activity is an intervention with large positive impact on frailty. An incremental program of physical activity should be mandatory for older adults to prevent, delay or diminish frailty. Physical activity programs should be tailored to the specific needs and social, biological and psychological characteristics of the frail individual.
3. Control of conditions such as diabetes mellitus and hypertension should be a priority to lower the risk of frailty and its consequences such as falls.
4. Frailty should be assessed among high-risk groups: cancer survivors, those with food insecurity, with vitamin D deficiency, or with a high number of abnormal laboratory tests, with strategies put in place to lower the impact on the older adult.
5. Avoiding stressors is another intervention to decrease the burden of frailty. A simple example is vaccination, which helps avoid the risk of the full development of diseases in frail older adults.





The Mexican Health and Aging Study (MHAS) is a national study of adults 50 years and older (n=15,000) in Mexico¹⁴ designed to evaluate the impact of disease on health, function, and mortality. It is the first longitudinal study of older Mexicans with a broad socioeconomic perspective and has produced over 280 publications. Five waves of data have been collected since the baseline in 2001 through 2018. One more wave is planned for 2021. **The MHAS is supported by the National Institutes of Health/National Institute on Aging (R01AG018016) and the Instituto Nacional de Estadística y Geografía (INEGI) in Mexico.**

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WEBSITES

-  www.MHASweb.org (English)
-  www.ENASEM.org (Spanish)



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