



## 269 - ASSOCIATION OF A HEALTHY LIFESTYLE AND SOCIAL FRAILTY PREDICTORS WITH THE RISK OF MULTIMORBIDITY

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### Resumen

**Background/Objectives:** Multimorbidity is defined as the coexistence of multiple chronic conditions, and it is becoming increasingly common among older adults. Identifying possible prevention strategies must be a public health priority. Our objective was to assess the prospective association between lifestyle factors and social determinants and the risk of developing multimorbidity among community-dwelling older adults.

**Methods:** This study included 1288 adults aged  $\geq 65$  y from the Seniors-ENRICA II cohort. Lifestyle characteristics and social determinants were measured at baseline during years 2015-2017 and summarized into the Healthy Lifestyle Index (HLI) and the Social Frailty Index (SFI). Information on medical diagnosis was obtained from electronic health records in Primary Care. These conditions were grouped into a list of 45 categories and within 4 body systems to assess multimorbidity ( $\geq 6$  chronic conditions) and complex multimorbidity ( $\geq 4$  chronic conditions affecting one or more body systems). Cox proportional hazard models adjusted by potential confounders were used.

**Results:** A total of 1,288 participants [mean (SD) age, 70.8 (4.17); 769 (59.7%) men] were followed up for a median of 6.5 years. We identified 611 cases of multimorbidity and 460 cases of complex multimorbidity. Participants in the highest tertile of healthy lifestyle adherence versus the lowest had a decreased risk of developing multimorbidity [fully-adjusted HR (95%CI): 0.79 (0.64-0.98), P-trend: 0.03]. A 2-point HLI score increment was associated with a 7% (95%CI: 2-12%) reduction on the risk of multimorbidity and 12% (95%CI: 7-17%) less risk of complex multimorbidity. No significant associations were found for the SFI and multimorbidity but, among participants with above-average adherence to healthy lifestyles, greater social robustness was associated with a lower risk of complex multimorbidity [HR in comparison with below-average adherence to healthy lifestyles and low social robustness: 0.72 (95%CI: 0.52-0.98) for medium social robustness, 0.67 (95%CI: 0.48-0.92) for high social robustness].

**Conclusions/Recommendations:** Greater adherence to a healthy lifestyle was associated with a reduced risk of developing multimorbidity, while social frailty was relevant on multimorbidity development only for those with above-average adherence to healthy lifestyles.

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