Multimorbidity patterns and quality of life across European populations: Results from SHARE database

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An increasing number of people living with multimorbidity may receive suboptimal care since health systems are not well prepared to respond to their complex needs. Identifying which conditions most commonly group together could support better care for patients with multiple diseases. This is particularly critical for conditions that have the most deteriorating effect on quality of life (QoL). The aim of the study was to: 1) identify multimorbidity patterns in Europe and 2) assess their impact on QoL. This was a cross-sectional analysis performed on the Survey of Health, Ageing and Retirement in Europe (SHARE) among adults aged 50+, in eighteen countries (n = 67,179). The Control, Autonomy, Self-Realization and Pleasure (CASP-12v1) scale assessed QoL. Exploratory factor analysis (using 17 conditions) based on tetra-choric correlations, was applied to identify multimorbidity patterns. Associations between patterns and QoL were estimated with multilevel mixed-effects linear regression. The analyses were adjusted for socio-economic, clinical and psycho-social factors, and stratified by sex. Three multimorbidity patterns were found: 1) cardio-metabolic [frequency in men (27.7%); women (25.9%)], 2) psycho-geriatric [1.4%; 0.3%] and 3) mixed [11.7%; 17.4%]. Sample adequacy was confirmed by the Kaiser-Meyer-Olkin test [0.81; 0.84, for men and women, respectively]. The patterns showed slight sex differences. The frequency of all patterns increased with age, while patterns overlapped significantly in the population. The psycho-geriatric pattern had the most deteriorating effect on QoL [-4.5(95%CI:-6.2;-2.8) for men; -5.0(95%CI: -9.5; -0.5) for women]. Recognizing the most common disease patterns may allow more targeted planning and provision of care, including development of clinical guidelines, enhancing collaboration between health professionals, and creation of prevention plans to reduce complications and preserve the best QoL for patients with multimorbidity.

Key messages:

- First large population-based study on multimorbidity patterns and their impact on QoL across Europe, using SHARE database.
- The findings can serve to support better care for multimorbid patients.