

M.J. FORJAZ, I.G.M. WIJERS, C. RODRIGUEZ-BLAZQUEZ, V. RODRIGUEZ-RODRIGUEZ, A. RODRIGUEZ-LASO, F. ROJO-PEREZ, M.E. PRIETO FLORES, G. FERNANDEZ-MAYORALAS. **Rasch analysis of the disease burden morbidity assessment in older adults: Getting closer to computerized test assessment.** *Gerontechnology* 2016;15(suppl):150s; doi:10.4017/gt.2016.15.s.990.00

**Purpose** As life expectancy increases, a progressively higher number of older adults have to cope with multiple chronic diseases, which cause functional deterioration and impaired quality of life and may impede ageing at home with autonomy and independence. Therefore, it is important to have a reliable, valid and easy-to-apply measure of disease burden morbidity, centered in the person. This study (funded by ENVACES (MINECO/FEDER/EU, Ref CSO2015-16115-R); ENCAGE-CM (ref: S2015/HUM-3367); ELES-PS (ref: CSO2011-30210-C02-01); CHRODIS-Joint Action) describes the metric properties of the disease burden morbidity assessment (DBMA)<sup>1,2</sup> using Rasch analysis<sup>3</sup>, which allows developing linear measures that may be applied using computerized test assessment. **Method** Participants were 1400 adults aged 50 years and over from the Longitudinal Study Aging in Spain Pilot Survey (ELES-PS)<sup>4</sup>. The DBMA asked about the impact of several chronic health problems on activities of daily living, with a 5-point response scale. Rasch analysis was applied. **Results & Discussion** The participants' mean age was 65.5±10.40 years, 55.4% were women, and reported a mean number of chronic conditions of 2.5±2.25. After adjusting the response scale, a good fit to the Rasch model was achieved, with items local independence and unidimensionality, no differential item functioning, though with low reliability. The linear measure showed moderate correlations with physical function and self-rated health. In conclusion, after adjustment the DBMA offers results in a linear measure, with an adequate internal and construct validity. This measure allows assessing the impact of illness according to the patient's perspective and supports its application through computerized test assessment.

### References

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