Gender-specific differences in physical and mental health across European countries: variation in levels and explanatory factors at older age

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Gender differences in health have been well-established. Studies attempting to find factors explaining these differences have been only partly successful. So far, such studies have not done justice to the different importance such factors may have for men and women across cultures and nations. This study aims to quantify gender gaps in health across five European countries and Israel, and to study gender-specific explanatory factors for observed inter-country differences.

Methods
We used data that were harmonised in the framework of the Comparison of Longitudinal European Studies on Aging (CLESA) study, an EU-project funded in the context of the Fifth Framework Programme (Minicuci et al 2003). Population-based studies from Finland, Sweden, the Netherlands, Spain, Italy and Israel were included. The common age group of 75-84 years was studied. Indicators of health were disability, depressed mood, and self-rated health. Potential explanatory factors were selected according to the literature and the availability of information in the CLESA database, and included socio-demographic characteristics, diseases, life style factors, and social engagement. Differences between countries in levels of each health indicator were determined using logistic regression with country as a set of dummy variables, with the Netherlands (being geographically in the middle) as the reference country. Explanatory factors for gender-specific inter-country differences in health were determined using hierarchical logistic regression analyses for each health indicator as the dependent variable.

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Results

The findings show inter-country differences for both men and women in all three health indicators (table 1). These differences persisted, even though accounting for explanatory factors somewhat reduced these differences for some indicators. The indicator least affected by cultural factors was disability. Here, a North-South gradient was apparent, in that both men and women in Northern countries showed lower disability than those in Southern countries. Depressed mood showed similar country differences as disability, although the prevalence in Finland was closer to that in Southern countries for both men and women, and lower in Spanish men as compared to men in other Southern countries. The summary measure self-rated health showed corresponding differences: poorer levels of health in Southern countries than in the Netherlands, with levels in Finland in-between.

Among the explanatory factors, chronic morbidity showed the most consistent association. The role of life style and socio-structural factors varied across countries and genders. Life style, especially exercise and walking, was most often associated with health indicators in men, but in women, life style factors tended to play a weaker role, and social factors were more prominent. Among the social factors, active involvement in religion appeared to have a favourable role, whereas the role of living arrangements differed across physical and mental health indicators, especially for women.

Discussion

From this study it can be concluded that gender differences in the explanatory value of some factors suggest that a gender-specific approach to the prevention of poor health may be most adequate. Moreover, cross-national differences suggest both cultural differences and country differences in the facilitation of healthy lifestyles. In particular, as lack of exercise was not associated with poor health in all countries, organised exercise programmes, adapted for older people with disability, might be helpful in ameliorating poor health.

This study, although comprehensive, did not fully succeed in explaining country differences from the explanatory factors included. As the factors included mainly described individual characteristics, rather than characteristics of the country, future research should aim at explanation of inter-country differences in health from characteristics at the national level, such as the type of health and social care system and the extent to which the environment is gendered.

Reference

Minicuci N, Noale M, Bardage C, Blumstein T, Deeg DJH, Gindin J, Jylhä M, Nikula S, Otero A, Pedersen NL, Pluijm SMF, Zunzunegui MV, Maggi S, for the CLESA Working Group. Cross-national

determinants of quality of life from six longitudinal studies on aging: The CLESA project. Aging Clinical and Experimental Research15; 2003: 187-202.

Table 1. Distribution of poor health across six countries and gender, ages 75-84 years

	Men (%)	Men (OR)[1]	Women (%)	Women (OR)[1]
Disability				
Finland	10.5	2.65	14.7	2.11*
Israel	19.1	5.00**	24.0	3.83**
Italy	35.8	12.23**	36.1	6.59**
Netherlands	4.5	1.00[2]	8.3	1.00[2]
Spain	28.7	8.57**	40.2	8.21**
Sweden	8.6	1.92	22.7	3.35**
Depressed mood				
Finland	21.8	4.12**	29.0	4.00**
Israel	19.0	3.50**	34.2	5.14**
Italy	33.1	7.34**	52.3	10.62**
Netherlands	6.3	1.00[2]	9.4	1.00[2]
Spain	8.0	1.34	21.9	2.72**
Sweden	20.7	3.89**	27.9	3.76**
Less-than-good self-rated health[3]				
Finland	70.9	4.20**	70.7	2.54**
Israel	70.2	4.01**	86.4	6.63**
Netherlands	36.9	1.00[2]	48.7	1.00[2]
Spain	63.2	2.92**	79.0	3.96**
Sweden	50.5	1.74*	56.8	1.38

[1] Gender-specific test of inter-country differences, controlling for age

[2] Reference country

[3] Not available for Italy

* significant at $p < 0.05$; ** significant at $p < 0.001$