# Healthy Life Years in the EU

### **Results from SHARE 2004**

## Carol Jagger EHEMU team



## **Healthy Life Years – what are they?**

- HLY is a DFLE based on a global activity limitation question:
  - For the past six months at least, to what extent have you been limited because of a health problem in activities people usually do? Yes severely limited/limited but not severely/no



## **Previous cross-European comparisons**

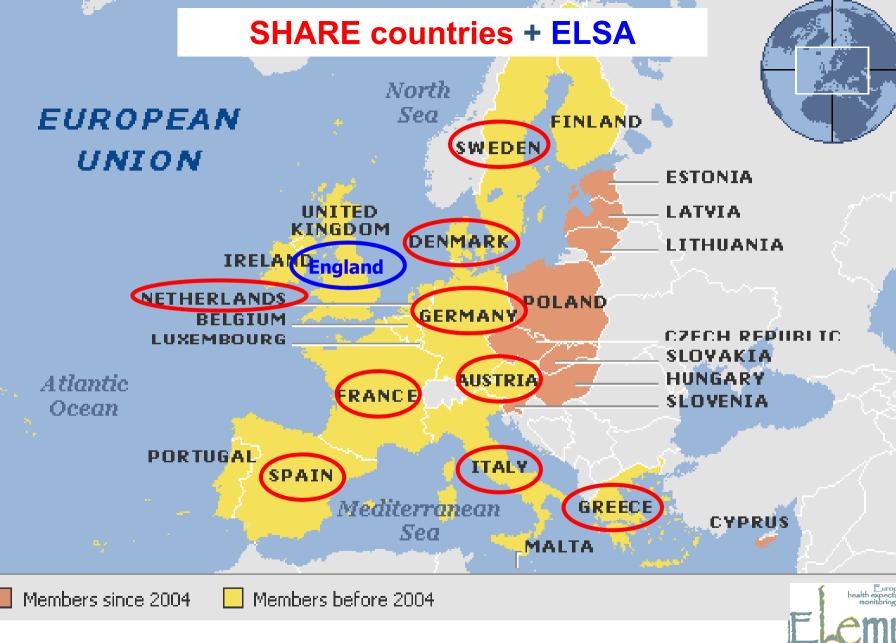
- Have been few and have relied on post rather than pre collection harmonisation
- The Longitudinal European Study on Aging (CLESA) Project\* is the first attempt to make a cross-national comparison of disability free life expectancy (DFLE)
  - five countries (Finland, Italy, The Netherlands, Spain and Sweden) and Israel
- Though longitudinal, the ADL indicators were collected in different periods from 1987 to 1993 (baseline) and from 1990 to 2000 with different categories and data were harmonised post-collection

\*Minicuci N, Noale M, Pluijm SMF, Zunzunegui MV, Blumstein T, Deeg DJH, Bardage C, Jylha M. Disability-free life expectancy: a cross-national comparison of six longitudinal studies on aging. The CLESA project. Eur J Ageing 2004;1:37-44.

## Data

- Survey of Health and retirement in Europe (SHARE) 2004
  - 11 countries (Austria, Belgium, Denmark, France, Germany, Greece, Italy, Netherlands, Spain, Sweden and Switzerland) ≈ 23 000 participants
- English Longitudinal Study of Ageing (ELSA)
  - Built on Health Survey for England
  - Second wave (2004-5) included 8688 aged 50+
- SHARE and ELSA
  - represent the non-institutionalized population aged 50 and older
  - based on US AHEAD study





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## **Methods**

### SHARE

 Country-specific health and life expectancies at age 65 from EHEMU information system (EHEMU IS)

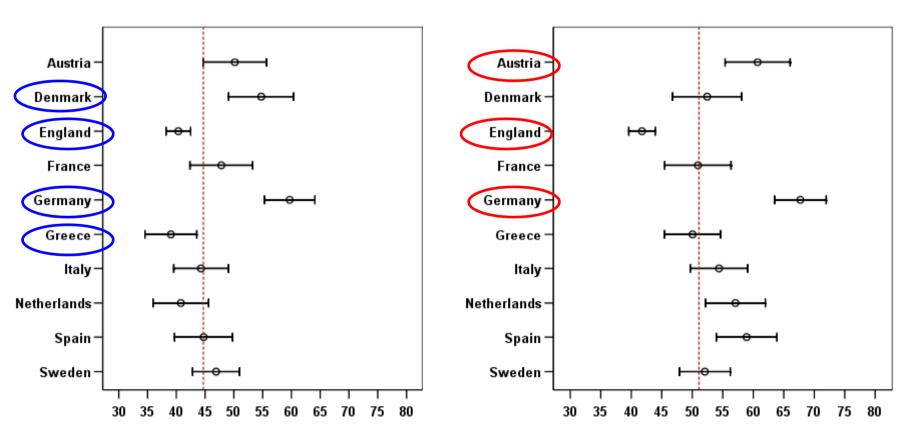
- ELSA
  - Life tables for 2004-5 from EHEMU IS
  - Health expectancies at age 65 calculated using EHEMU IS methods and spreadsheet



### **Prevalence\* of AL at age 65 by country**

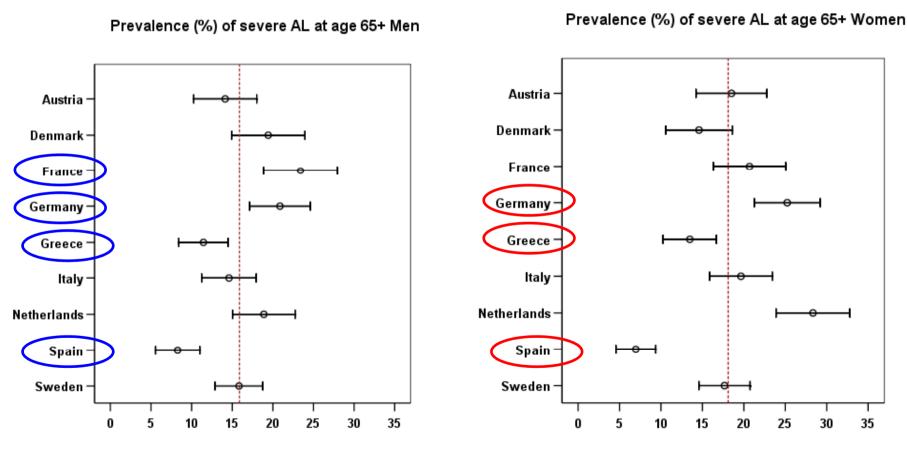
Prevalence (%) of AL at age 65+ Men

Prevalence(%) of AL at age 65+ Women



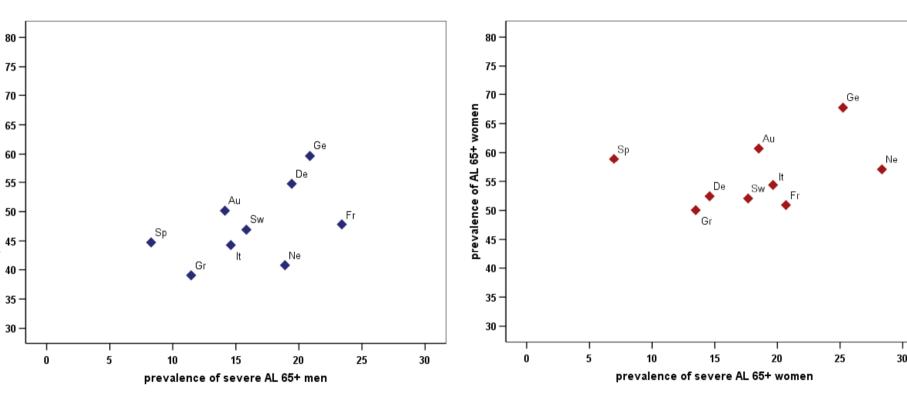
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### **Prevalence\* of severe AL at age 65 by country**



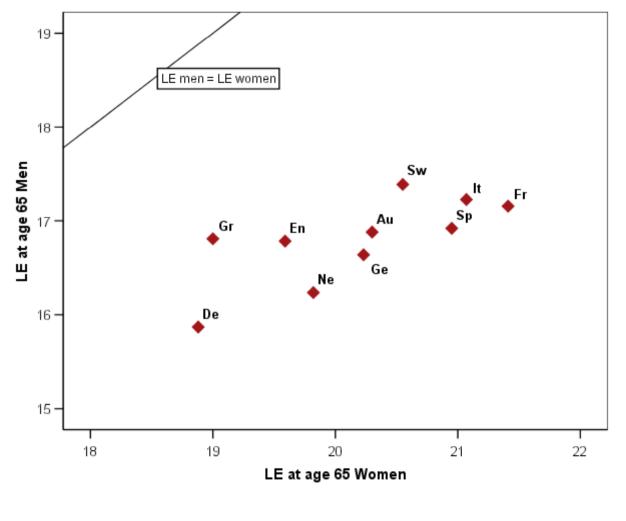
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#### AL v severe AL at age 65 by country



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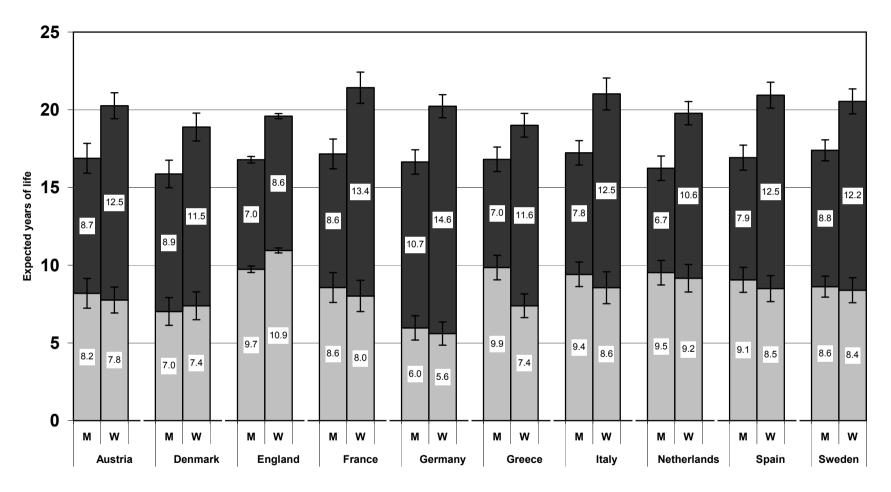
### LE at age 65 by country



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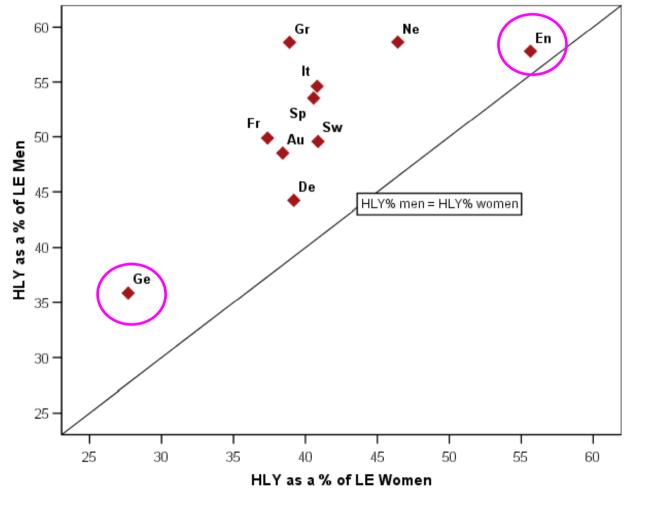
## Healthy Life Years at age 65



Without activity limitation

With activity limitaton

### HLY as a % of LE at age 65 by country

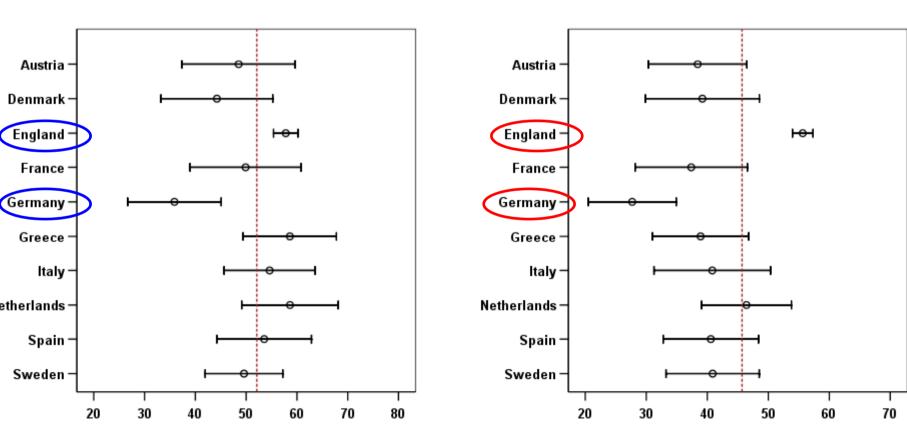


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## HLY as a % of LE at age 65 by country

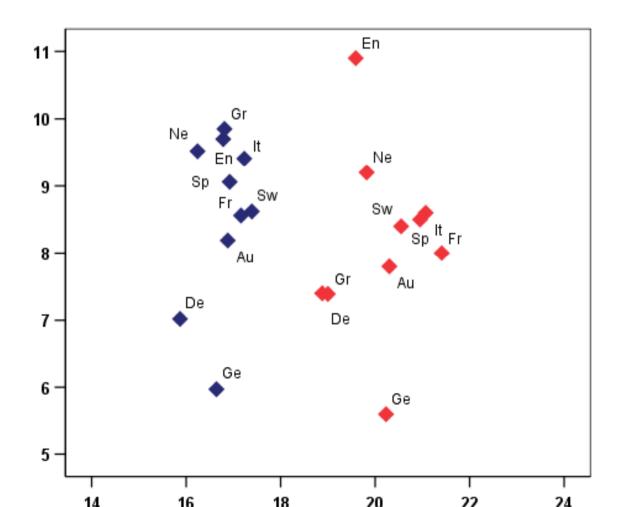
HLY as a % of LE at age 65 Men

HLY as a % of LE at age 65 Women



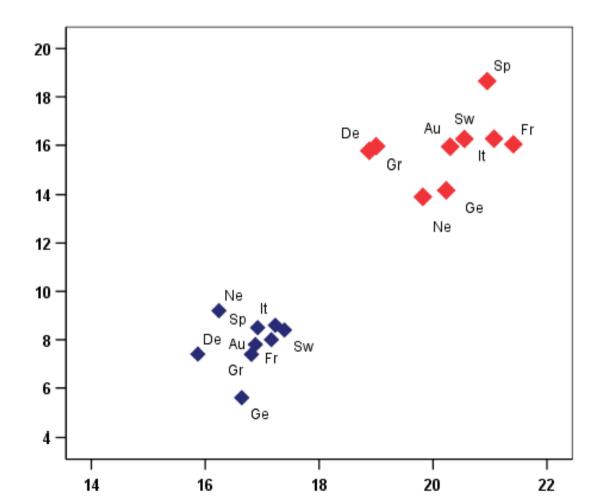
### Is longer life associated with more HLY?

HLY and LE at age 65



### Is longer life associated with more HLY?

LE and LE free of severe AL



## Conclusions

 Differences in the prevalence of all and severe activity limitation at 65+ were considerable

- ✓ 39% to 59% in men and 42% to 68% in women for AL
- ✓ 9% to 23% in men and 7% to 28% in women for severe AL
- Differences in LE at age 65 were 1.5 years for men and 2 years for women
- Germany had significantly lower HLY as a % of LE and England had significantly higher HLY%



## Conclusions

 Longer LE did not appear to be strongly associated with more HLY

however

 Longer LE did appear to be associated with longer LE free of severe AL



# Healthy Life Years in the EU

### **Results from SHARE 2004**

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#### SHARE sample

Total number of participants and response rates for the SHARE survey, per country, sex and age group, 2004

Country	Total	Male	Female	Under	50 to	65 to	75+	Household	Individual
				50	64	74		response	response
								rate *	rate
Austria	1,986	820	1,166	48	1,004	571	363	58.1	87.4 %
Denmark	1,732	785	947	95	929	374	334	63.2	93.0 %
France	1,842	794	1,048	93	928	454	366	73.6	91.7%
Germany	3,020	1,385	1,635	67	1,573	888	485	63.4	86.5 %
Greece	2,142	901	1,241	159	1,035	554	391	61.4	91.8 %
Netherlands	3,000	1,337	1,623	102	1,705	713	460	55.1	87.9 %
Italy	2,559	1,132	1,427	53	1,339	785	382	61.3	79.7 %
Spain	2,419	1,004	1,415	44	1,092	702	579	53.3	73.8 %
Sweden	3,067	1,424	1,643	57	1,595	821	594	50.2	83.8 %
Switzerland	1,010	468	542	41	508	245	203	37.6	86.9 %
All countries	22,777	10,088	12,685	759	11,708	6,107	4,157	61.8	86.0%

\* Weighted average (see Börsch-Supan & Jürges, 2005, for details).

#### SHARE sample used

#### Number of participants aged 50 and above used in the SHARE survey for calculation of health expectancies per country and sex, 2004

Country	Total	Men	Women
Austria	1938	814	1124
Denmark	1637	770	867
France	1748	785	963
Germany	2946	1372	1574
Greece	1980	899	1081
Italy	2506	1126	1380
Netherlands	2373	<b>998</b>	1375
Spain	3010	1417	1593
Sweden	2878	1355	1523
All countries	21016	9536	11480



Life expectancy with and without activity limitation

For the past six months at least, to what extent have you been limited because of a health problem in activities people usually do?

Severely limited
Limited, but not severely
Not limited

=>This health expectancy corresponds to the EU Structural Indicator Healthy Life Year (HLY)

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#### **Data and Methods**

# Problems in both mortality and the panel data

#### 1) Data base

- Probable data errors
- Replacement with other sources
- Missing

#### 2) Interruption of data collection

• No data for 2002 and 2003

#### Solutions

#### 1) Data base

- Linear imputation of age pecific probabilities (death and disability)
- Shift of the prevalence trend to the ECHP level
- Imputation of data according to observed trends

#### 2) Interruption of data collection

• Linear extrapolation of the disability prevalence

