

Disability and cognitive impairment free life expectancies: results from epidemiological surveys in Bulgaria, Canada, Italy and Latin America

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Bulgaria: study description

National Health Interview Survey (NHIS)

Supported by the National Statistics Institute

Longitudinal study: baseline in 1996, follow-up in 2001

Cohort of 17,523 subjects, all ages

Evaluates health conditions, physical activity, disability, handicap and self-perceived health

Canada: study description

National Population Health Survey (NPHS)

Supported by the national statistics institute

Longitudinal study: baseline in 1994, follow-ups in 1996-1998-2000

Cohort of 17,276 subjects, all ages

Evaluates socio-economic-demographic characteristics, health status, risk factors, functional ability and health services use

Latin America: study description

“Salud Bienestar y Envejecimiento en América Latina y el Caribe” (SABE)

Supported by Pan American Health Organization and National Institutions in each country.

Cross-sectional study: baseline in 1999-2000

Cohort of 10,891 subjects, aged 60+ living in Argentina, Barbados, Brasil, Chile, Cuba, Mexico, Uruguay.

Evaluates socio-demographic characteristics, cognitive functioning, health status, functional status, use and accessibility of health services.

Italy: study description

Italian Longitudinal Study on Aging (ILSA)

Supported by the National Council Research

Longitudinal study: baseline in 1992, follow-ups in 1996-2000

Cohort of 5628 subjects, aged 65-84 years

Evaluates socio-economic-demographic characteristics, health status, risk factors, functional ability.

Technical notes

General characteristics refer to 65-84 age group

Data are weighted according to the sampling technique

Institutionalized subjects are excluded from analysis

DFLE and CogImpFLE (Sullivan) refer to 65-69 age group.

Main characteristics (%) (65-84 years)

	Bul	Can	Arg	Bar	Bra	Chi	Cub	Mex	Uru	Ita
Sample size	1468	1918	747	1311	1494	904	1215	794	1057	5632
Males	45	41	39	41	41	40	41	42	38	41
Married	59	50	54	45	54	55	35	51	47	59
Widow/divor	39	34	41	37	41	38	62	46	49	33
Single	2	6	5	17	5	7	3	3	4	7
Living alone	-	45	21	23	15	10	11	11	20	18
With spouse only	-	44	32	23	23	15	10	15	27	37
< elementary	8	1	36	48	80	44	31	58	48	36

Main characteristics (%) (65-84 years)

	Bul	Can	Arg	Bar	Bra	Chi	Cub	Mex	Uru	Ita
Smoking	12	15	12	6	15	13	29	16	14	14
Alcohol cons.	7	36	23	6	6	9	4	3	17	79
Physical act.	70	34	13	43	27	21	22	30	14	-
Self-rated health*	32	23	4	6	8	20	13	21	7	-
Heart disease§	6	17	20	12	22	34	24	11	26	15
Hypertension	51	34	50	50	57	52	43	44	46	43
Diabetes	10	10	13	22	19	13	16	22	15	17
Stroke	9	4	5	6	8	7	10	6	4	8
Cancer	3	5	5	4	4	4	3	2	6	6

*Self-rated health: near/bad/very bad; §Bulgaria: only MI

Physical functioning instruments

Bulgaria: International Classification of Impairment, Disability and Handicaps, (WHO)

Canada: mobility trouble scale

Italy: ADL and IADL

Latin America: ADL and IADL

Harmonized ADL disability item

Bulgaria-Italy-Latin America

washing, dressing, going to the toilette, transferring, eating

Each item dichotomized in 0=No difficulties

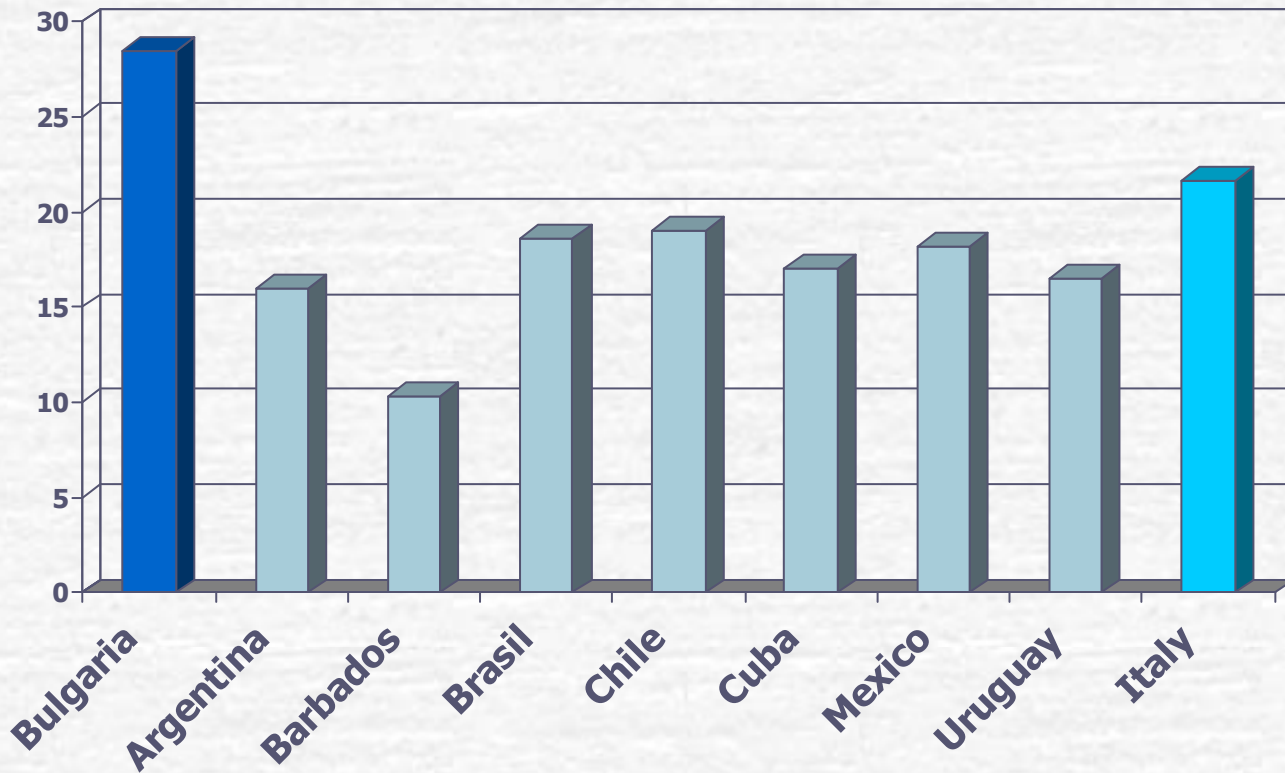
1=With difficulties

5-item ADL disability

0=No item with difficulties

1=At least one item with difficulty

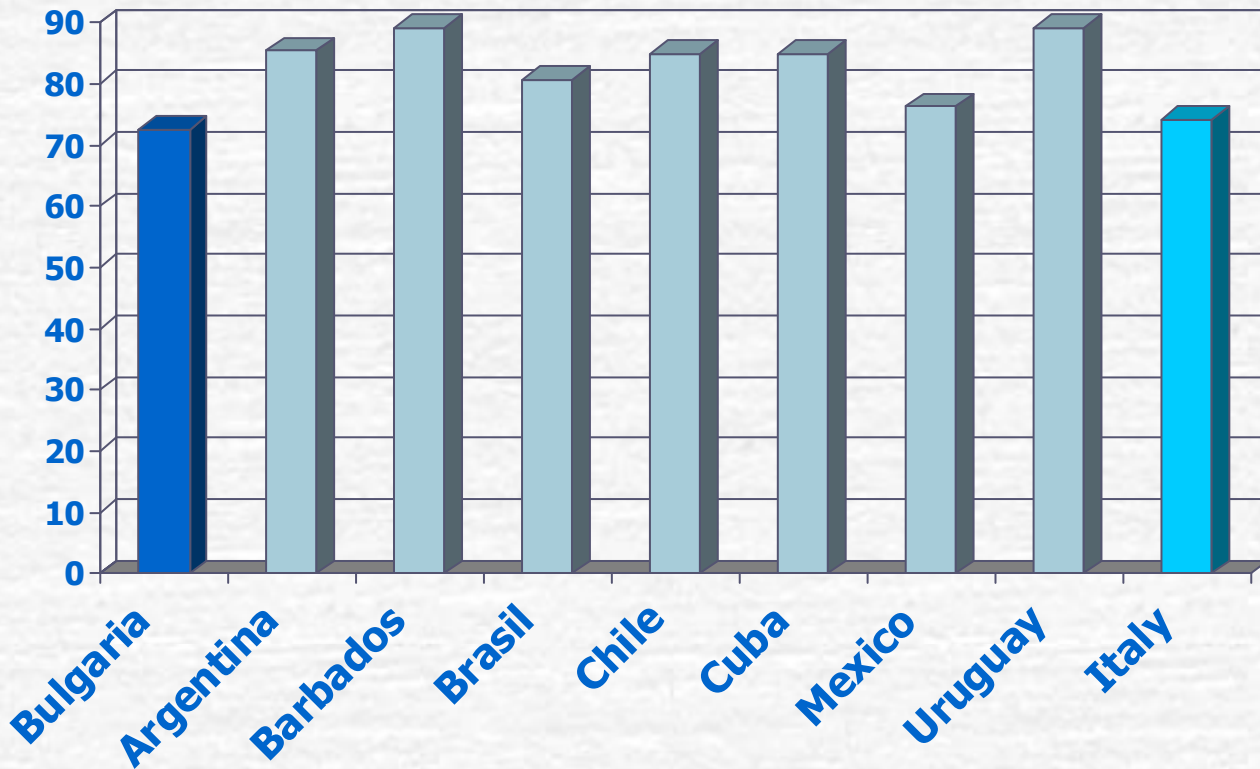
ADL Disability Prevalence (65-84 years)



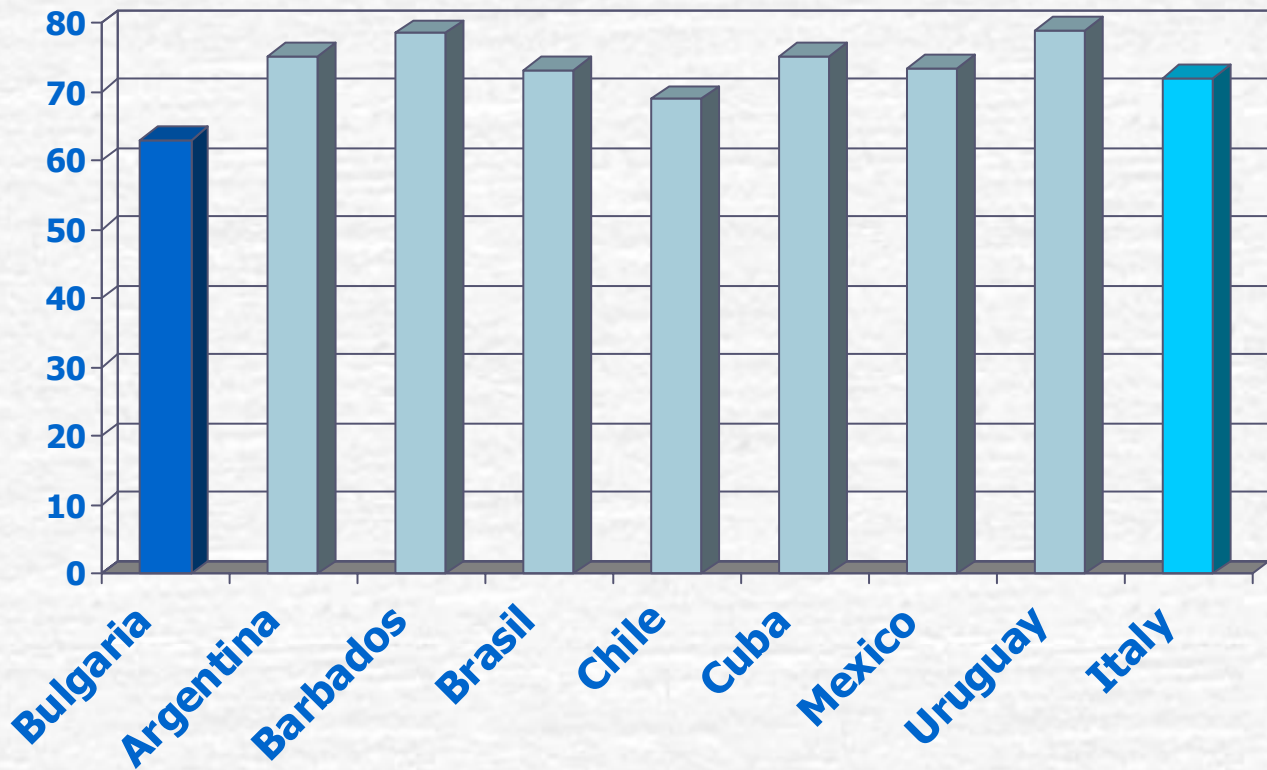
Life expectancy

	Bul	Arg	Bar	Bra	Chi	Cub	Mex	Uru	Ita
Men									
65-69	13.0	13.9	13.9	13.1	16.1	16.1	16.9	14.2	16.2
70-74	10.2	11.0	11.0	10.6	12.7	13.2	13.8	11.5	12.7
75-79	7.8	8.4	8.4	8.5	9.9	10.9	11.0	9.0	9.7
Women									
65-69	15.7	18.3	19.7	18.4	19.8	19.9	18.4	18.9	20.2
70-74	12.1	14.6	16.0	15.0	16.0	16.4	14.9	15.2	16.1
75-79	8.9	11.3	12.6	11.9	12.6	13.6	11.8	11.8	12.3

DFLE/LE (%) (Men-65-69 years)



DFLE/LE (%) (Women-65-69 years)



DFLE-Main points

Women carry a greater number of years lived with disability at every age and in each country.

For both men and women (65-69, 70-74, 75-79 years)

Bulgaria: the lowest time spent without disability

Barbados-Uruguay: the highest time spent without disability

Harmonized physical disability item

Latin America-Italy

Telephone, shopping, meals, housework, medicine

Each item dichotomized in 0=No difficulties

1=With difficulties

Physical disability

Independent (ADL and IADL)

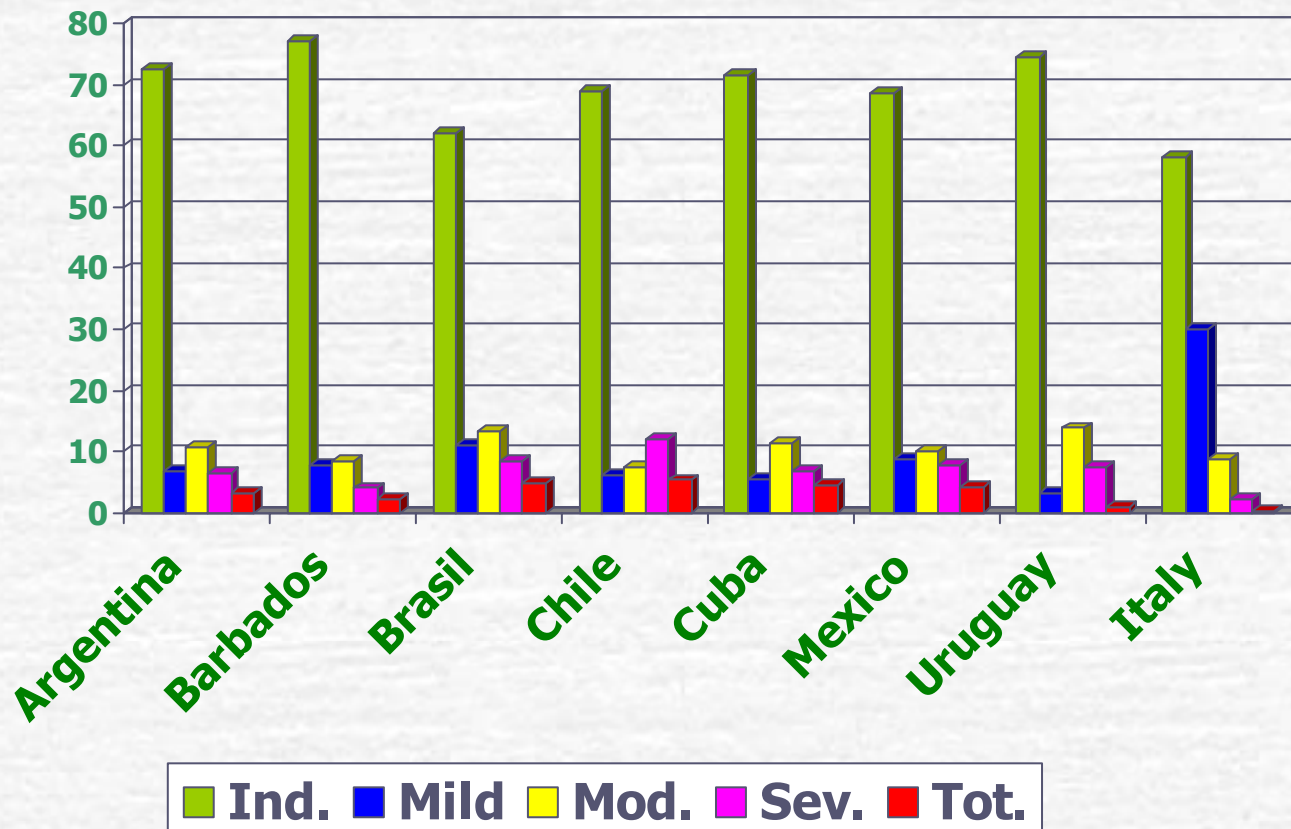
Mild=difficulty in IADL but no in ADL

Moderate=difficulty in IADL and in 1 ADL

Severe= difficulty in IADL and in 2 or 3 ADL

Total = difficulty in IADL and in 4 or 5 ADL

Physical Disability Prevalence (65-84 years)



Cognitive functioning instruments

Bulgaria: -none

Canada: general questions on memory and problem solving

Italy: MMSE (Folstein)

Latin America: Short validated version of MMSE / Pfeffer to a proxy.

Harmonized cognitive functioning

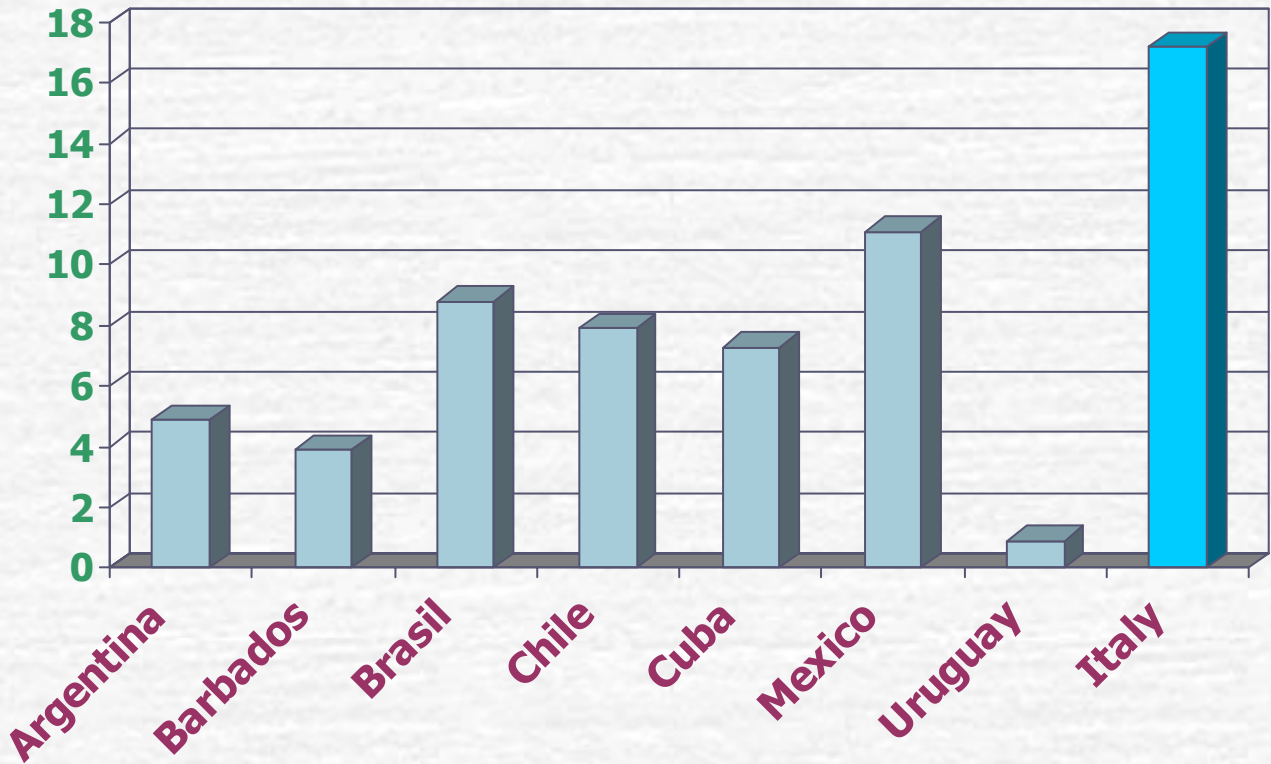
Latin America-Italy

Classification of cognitive impairment

Latin America: If short MMSE ≤ 12 and Pfeffer ≥ 6

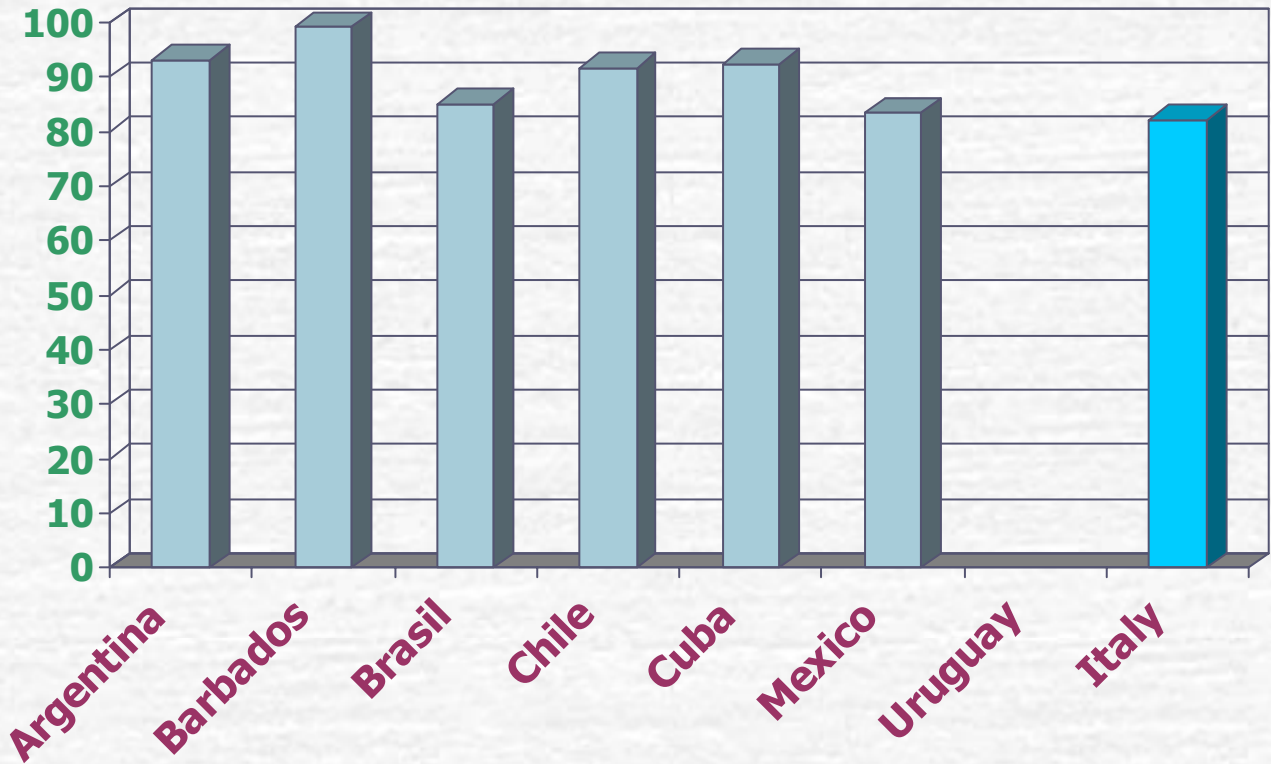
Italy: MMSE less than 24

Cognitive Impairment Prevalence (65-84 years)

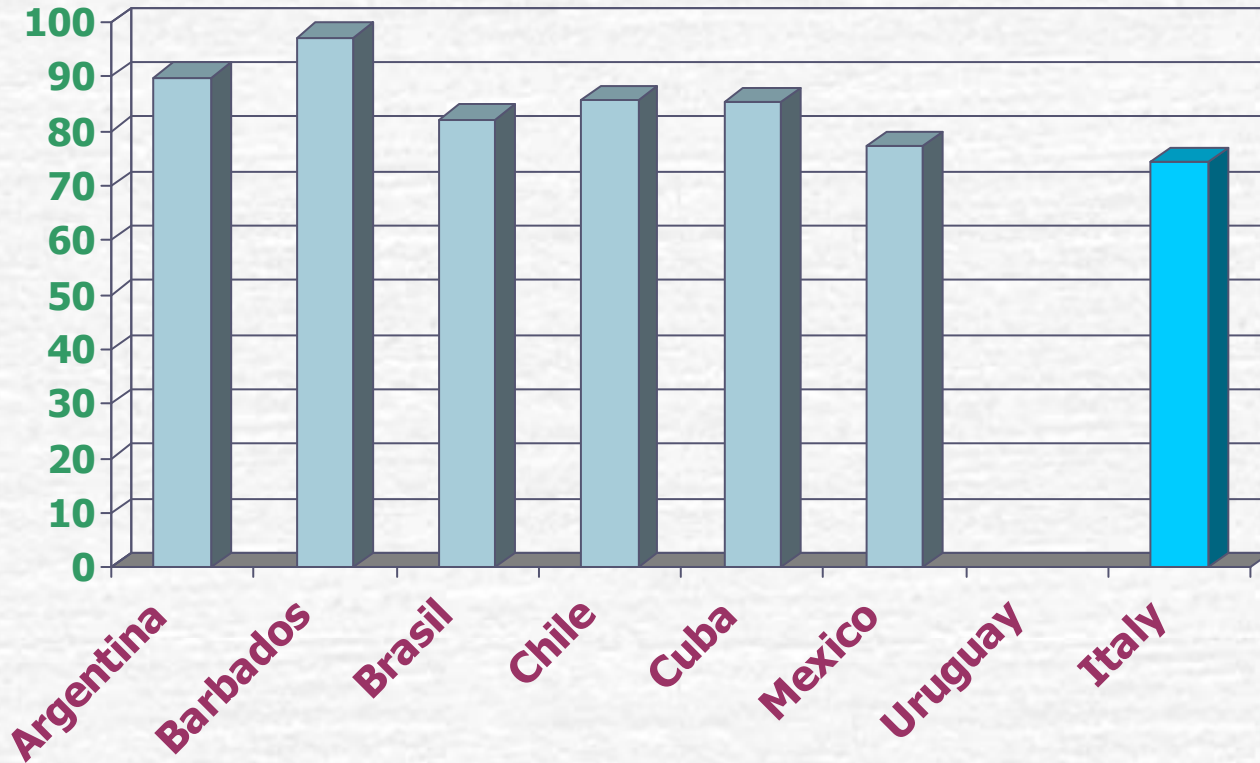


Uruguay was excluded from analyses (9 women and 1 men with Cog. Imp. over 1057)

CognImpFLE/LE (%) (Men-65-69 years)



CognImpFLE/LE (%) (Women-65-69 years)



CogImpFLE-Main points

Women perform worse than men at every age and in each country

For both men and women (65-69, 70-74, 75-79 years)

Italy: the lowest time spent without cognitive impairment

Barbados: the highest time spent without cognitive impairment

Conclusions

1. In all countries women are at higher risk of ADL disability and cognitive impairment
2. Bulgaria: the lowest time spent without ADL disability
Italy: the lowest time spent without cognitive impairment
3. Barbados-Uruguay: the highest time spent without ADL disability
Barbados: the highest time spent without cognitive impairment;
4. Institutionalized subjects may be a bias (Argentina, Barbados, Uruguay)

Problems

1. Surveys used different questions
2. The instrument, when standardized, may have response scales different (self-rated health)
3. Measures are self-reported
4. Unmeasured differences