

REVES 24

中山醫學大學老年醫學暨老年學教育研究中心
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SOCIO-ECONOMIC STATUS, AGING AND
HEALTH IN A MIDDLE-INCOME COUNTRY

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2012 Tai Chung

Inequalities in health by socio-economic status: Is it a universal fact?

2011 Paris

Are sex differences in health expectancies a social issue?

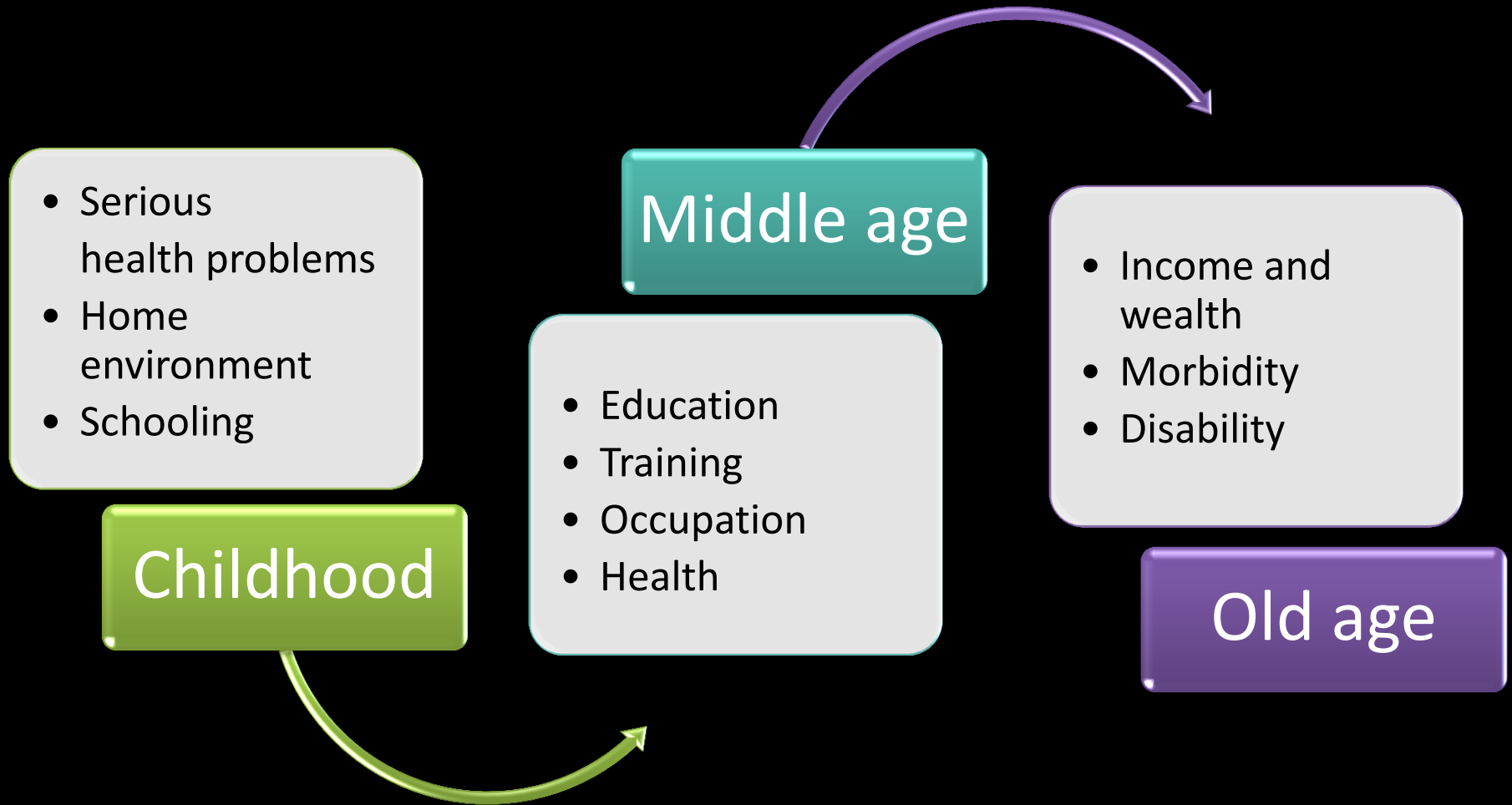
2003 Guadalajara

Socio-economic determinants in life and health expectancies

2008 Manila

Assessing the past, looking for the future

Life-course SES and its impact on old age health



SES and aging in developing societies: what we know

- Women outnumber men
- Low educational level, improving for less older generations
- Deprived SES, forcing informal employment and meager income
- Lack of social security

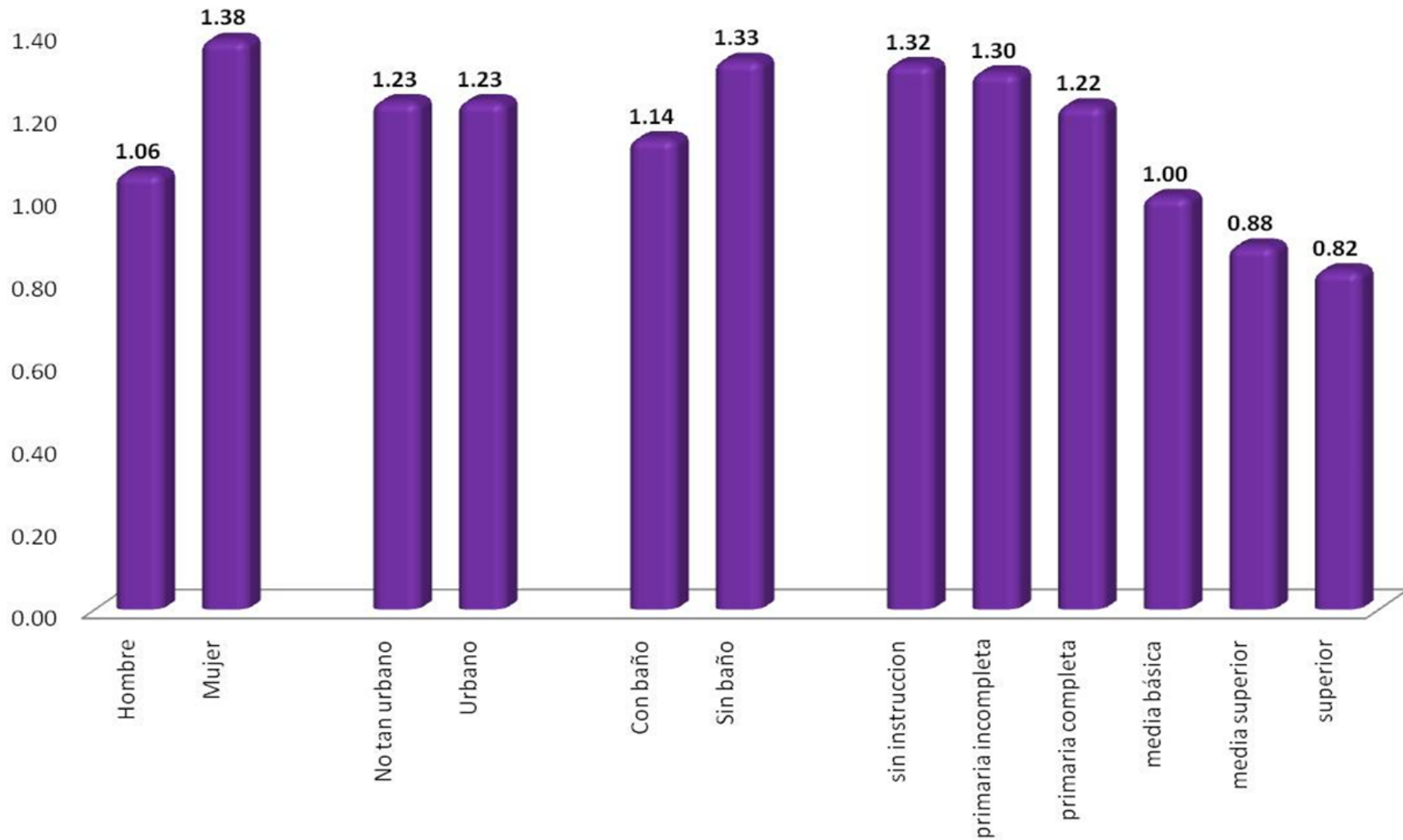
	Age groups				
	50 - 59	60 - 69	70 - 79	80+	
Men	(44.2)	(31.0)	(17.6)	(7.2)	100.0
More urban (100,000+)	47.96	40.15	41.08	26.84	42.81
Average years of schooling	5.48	4.00	3.13	1.92	4.35
With chronic disease (%)	36.83	52.04	59.66	58.48	47.13
With ADL difficulty (%)	4.01	6.8	15.16	34.45	9.02
Childhood without toilet (%)	67.63	73.98	77.41	87.72	72.77
Serious health problem (%)	9.82	8.75	8.32	10.73	9.29
Income < 1 MW	53.73	50.37	44.56	22.05	48.8
Women	(46.6)	(30.1)	(15.0)	(8.3)	100.0
More urban (100,000+)	49.69	46.34	47.34	35.97	47.19
Average years of schooling	4.18	3.39	2.47	2.67	3.56
With chronic disease (%)	58.59	69.59	67.77	71.27	64.31
With ADL difficulty (%)	7.22	10.59	16.17	38.96	12.21
Childhood without toilet (%)	67.53	71.85	74.01	78.65	70.55
Serious health problem (%)	10.72	10.85	10.6	8.66	10.6
Income < 1 MW	45.42	38.07	31.17	37.72	40.43

Aging and the life-cycle :

what we know that have to be evaluated

- Aging conditions are the result of past experiences
- Those experiences have to be examined by birth cohort in correlation with SES and historical events
- Which are the links between long-life socio-economic determinants and health expectancies

Average number of chronic diseases, population 50 years and older, by socioeconomic characteristics, Mexico 2001



Logistic regression models

Dependent variable:

1 = At least one chronic disease

0 = No chronic diseases

1 = Difficulty with at least one ADL

0 = No difficulties in performing ADLs

Control variables:

- Health and socioeconomic conditions before age 10
- Educational attainment
- Sex
- Age
- Degree of urbanization

Logistic regression models: Descriptive Statistics

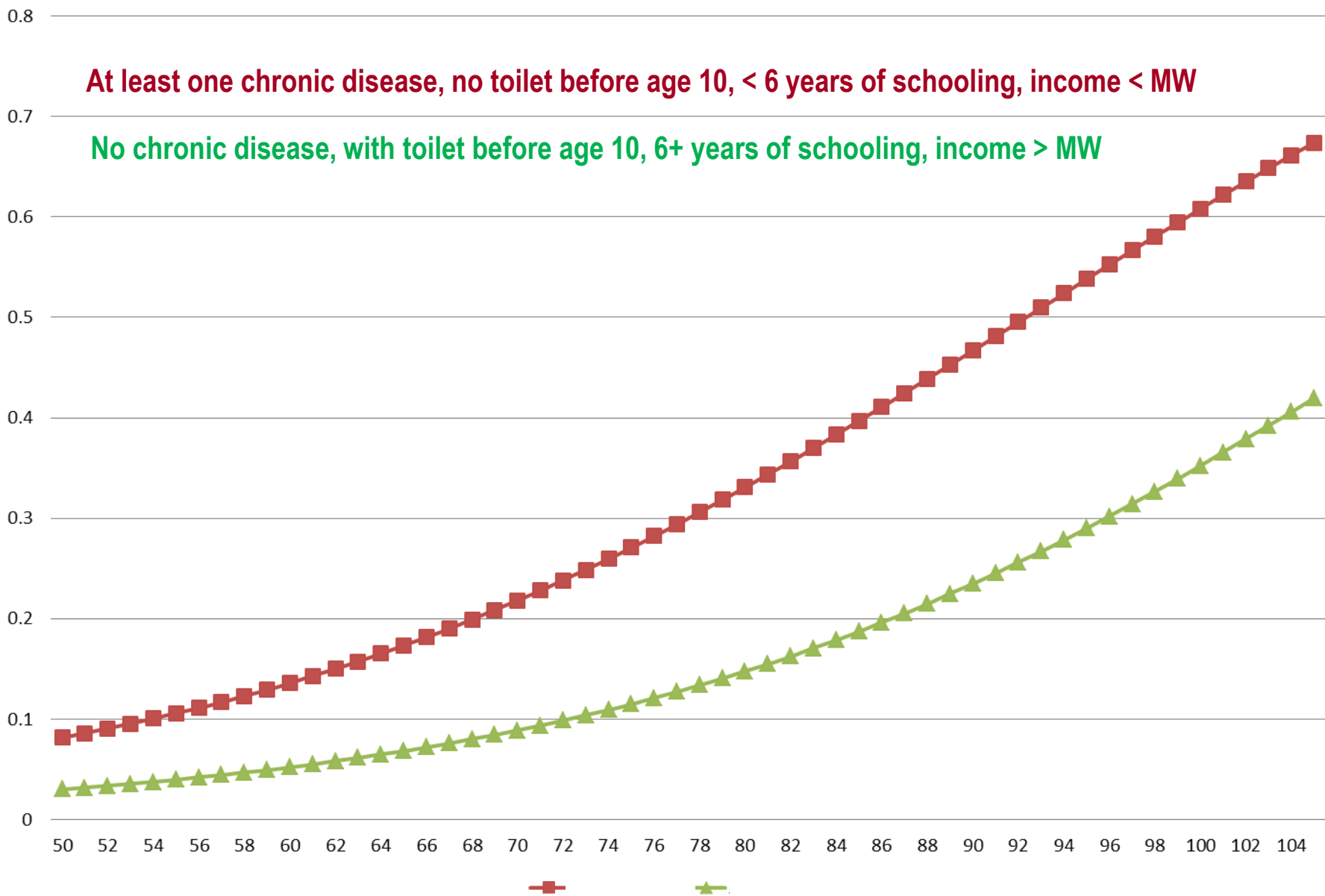
CHRONIC DISEASES	Odds Ratio	Std. Err.	z	P> z	[95% Conf. Interval]	
toilet_2001	1.082553	.0496921	1.73	0.084	.9894109	1.184463
serious_health_2001	1.444513	.0953935	5.57	0.000	1.269139	1.64412
dolor_cabeza_2001	1.249683	.1319212	2.11	0.035	1.016118	1.536937
escola2_2	1.145677	.0596104	2.61	0.009	1.034603	1.268677
escola2_3	.9431583	.0536919	-1.03	0.304	.8435826	1.054488
edad	1.02609	.0022649	11.67	0.000	1.021661	1.030539
hombres	.4867937	.019023	-18.42	0.000	.4509014	.525543
murb	1.185951	.052047	3.89	0.000	1.088205	1.292477
salmin c	1.019277	.0408791	0.48	0.634	.942224	1.102632
_cons	.3084679	.048356	-7.50	0.000	.2268684	.419417

ADL	Odds Ratio	Std. Err.	z	P> z	[95% Conf. Interval]	
toilet_2001	1.246661	.095039	2.89	0.004	1.073637	1.44757
serious health_2001	1.302786	.1193041	2.89	0.004	1.088738	1.558917
dolor_cabeza_2001	1.711627	.2297294	4.00	0.000	1.31572	2.226665
escola2_2	.9999351	.0721369	-0.00	0.999	.86809	1.151805
escola2_3	.675265	.0599849	-4.42	0.000	.5673625	.8036886
edad	1.058902	.0032006	18.94	0.000	1.052648	1.065194
hombres	.712263	.0441745	-5.47	0.000	.6307379	.8043255
murb	1.238494	.0829956	3.19	0.001	1.086055	1.412328
salmin c	.8420684	.0537896	-2.69	0.007	.7429752	.9543779
_cons	.0030418	.0007035	-25.06	0.000	.0019333	.0047861

Pathway of ADL disability under health and SES indicators, 60+

At least one chronic disease, no toilet before age 10, < 6 years of schooling, income < MW

No chronic disease, with toilet before age 10, 6+ years of schooling, income > MW



SES and aging :

how to deal with prospectives of changing SES

- Higher levels of education for future generations
- Changes in family composition and living arrangements towards two main patterns: a) oldest-old living in a multi-generation household (55% of 80+); b) oldest-old living alone (13% of 80+)
- Changes in epidemiological profiles: differences by SES reflecting differential access to health and social services

Conclusions:

- Health inequalities are always evident in any survey
- The magnitude of inequalities depends on the SES indicator used and the associated health outcome
- Inequalities in health are more evident if functional ability is used vs. number of chronic diseases
- Since aging implies lossing health resilience, SES losses relevance for the oldest-old
- Further analyses could explore differences by different chronic diseases: diabetes, hypertension, CVD...
- The need for prospectives, projections and scenarios to design health and public policies

謝謝