DIFFERENTIAL OF HEALTHY LIFE EXPECTANCY IN HAVANA CITY, CUBA. SOCIOECONOMIC FACTORS ASSOCIATED WITH DISABILITIES AND DISEASES IN OLDER ADULTS.
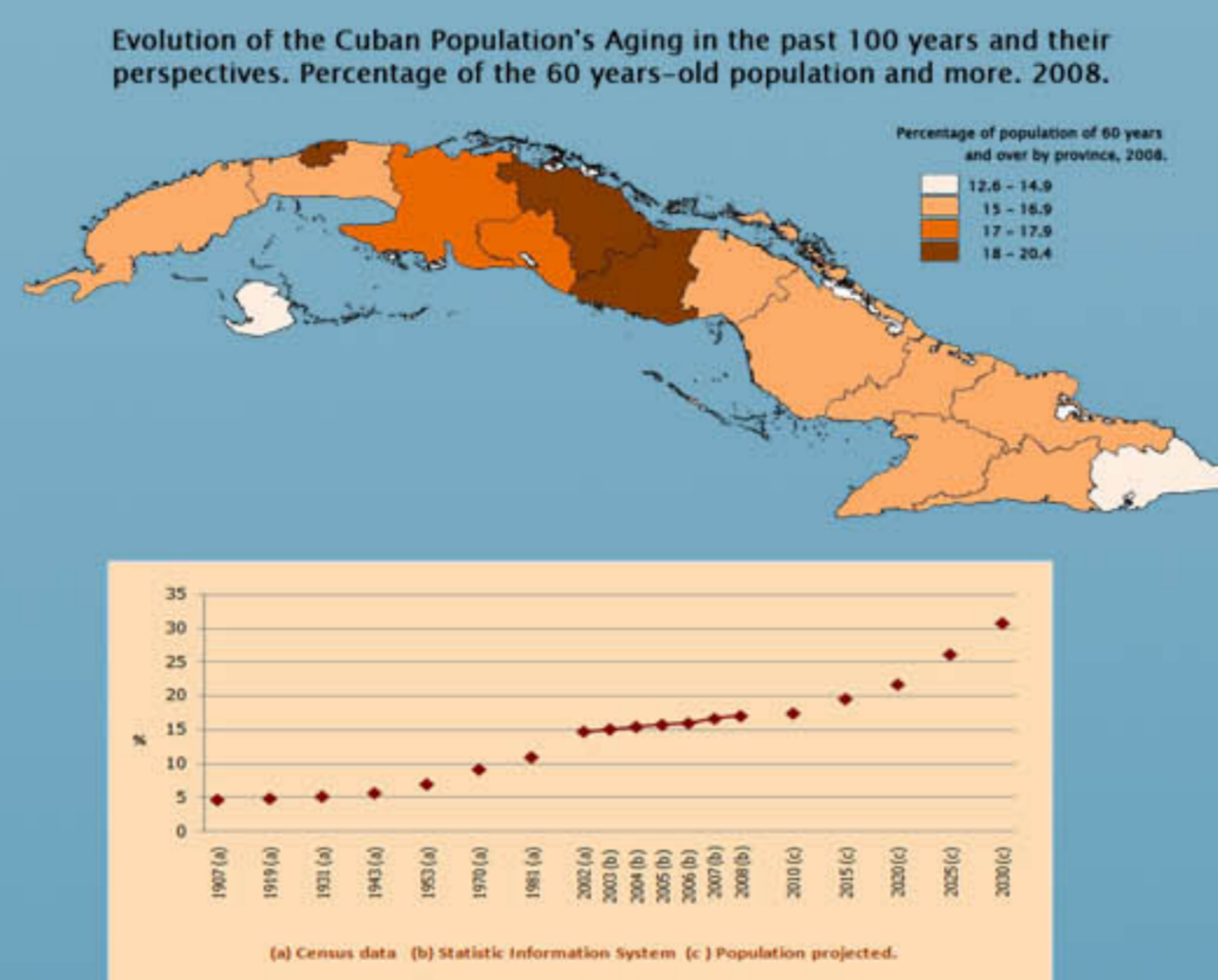
Esther María León Díaz
Centre of Population and Development Studies (CEPDE),
National Statistics Office (ONE), Cuba. (techy@one.cu)

Madelín Gómez León
Centre d'Estudis Demogràfics, Universitat Autònoma de Barcelona.
Spain. (madeling@gmail.com)

1. Introduction

We investigate the effect of disabilities in Activities of Daily Living (ADL), Instrumental Activities of Daily Living (IADL) and diseases over the life expectancy of ageing people in Havana City for 2000. It is also examined the relation of sociodemographic variables with disabilities, diseases and percei-ved health. These analyses offer some elements to trace population's strate-gies in Cuba, specially for those who arrive to the third age, and that will considerably increase their percentage for the next decades.

Evolution of the Cuban Population's Aging in the past 100 years and their perspectives. Percentage of the 60 years–old population and more. 2008.

(a) Census data (b) Statistic Information System (c) Population projected.
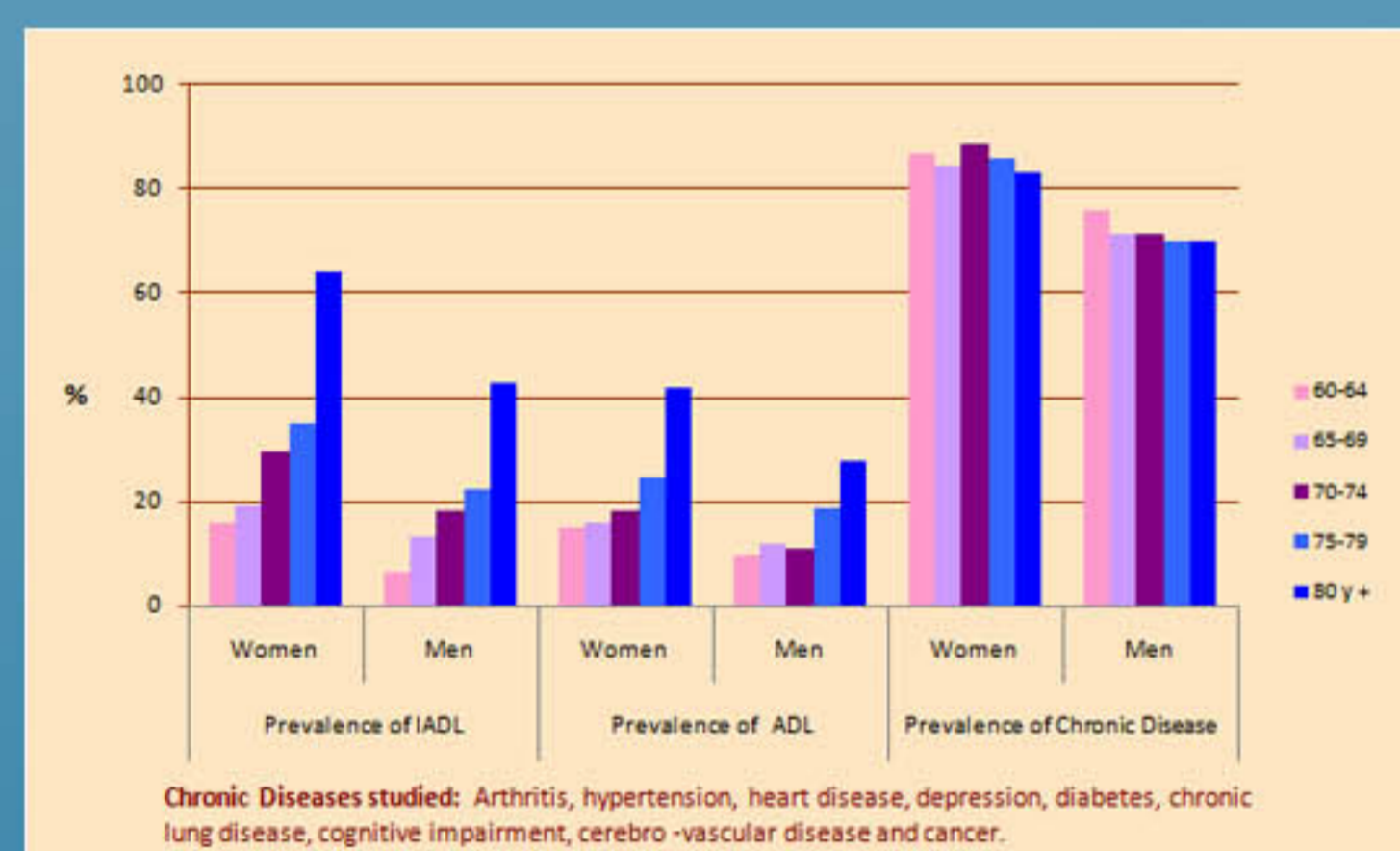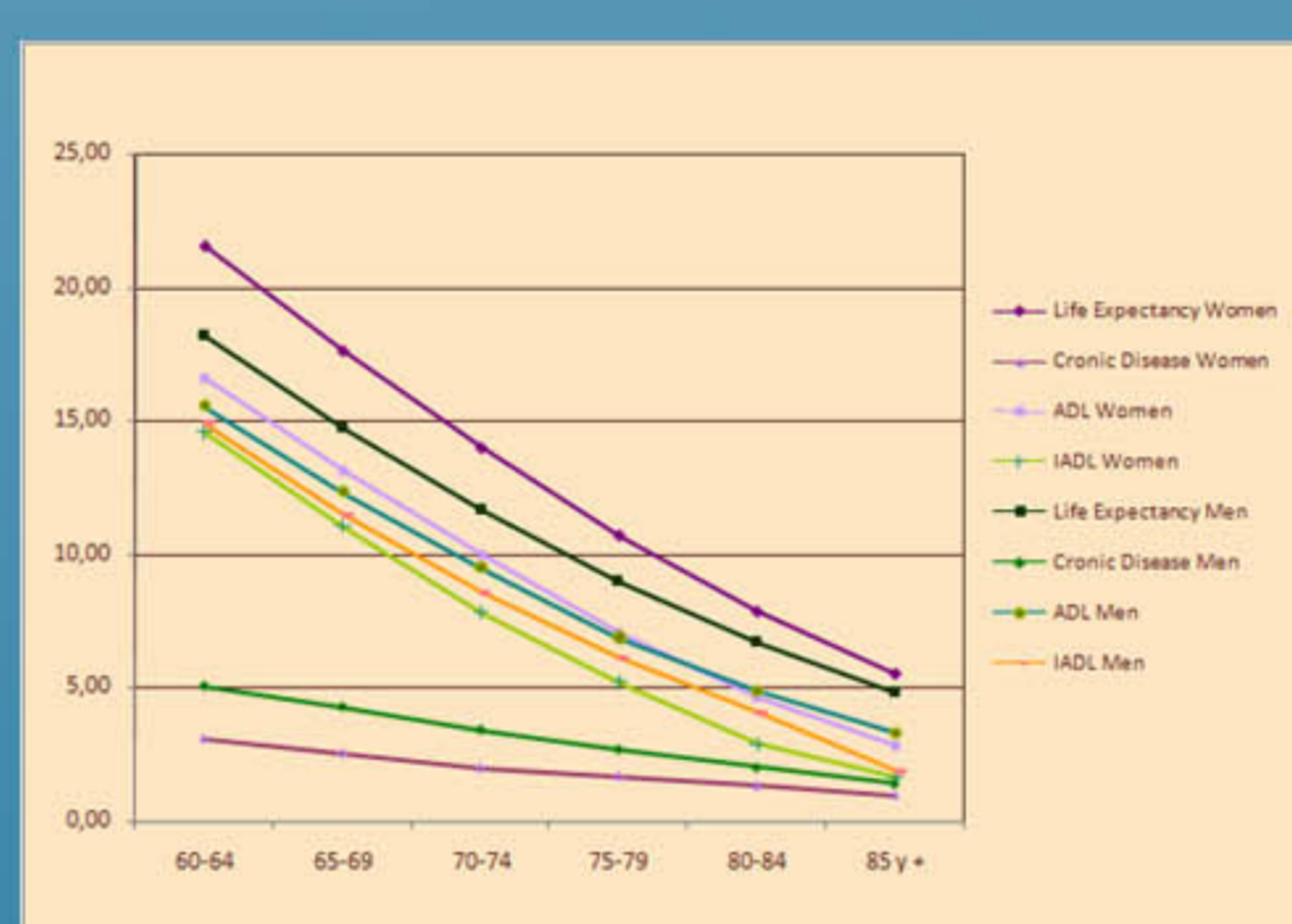
2. Data and Methods

We used the mortality life table of the City of Havana for 1998-2000, and the prevalence of disability in ADL, IADL , chronic diseases and perceived health from the SABE Survey (www.one.cu) of Havana organized by Pan-American Health Organization (PAHO) and Centre of Population and Development Studies (CEPDE) using Sullivan's method. Socio-economic and gender factors differences related with the perceived health was examined using logistic and probit regression models.
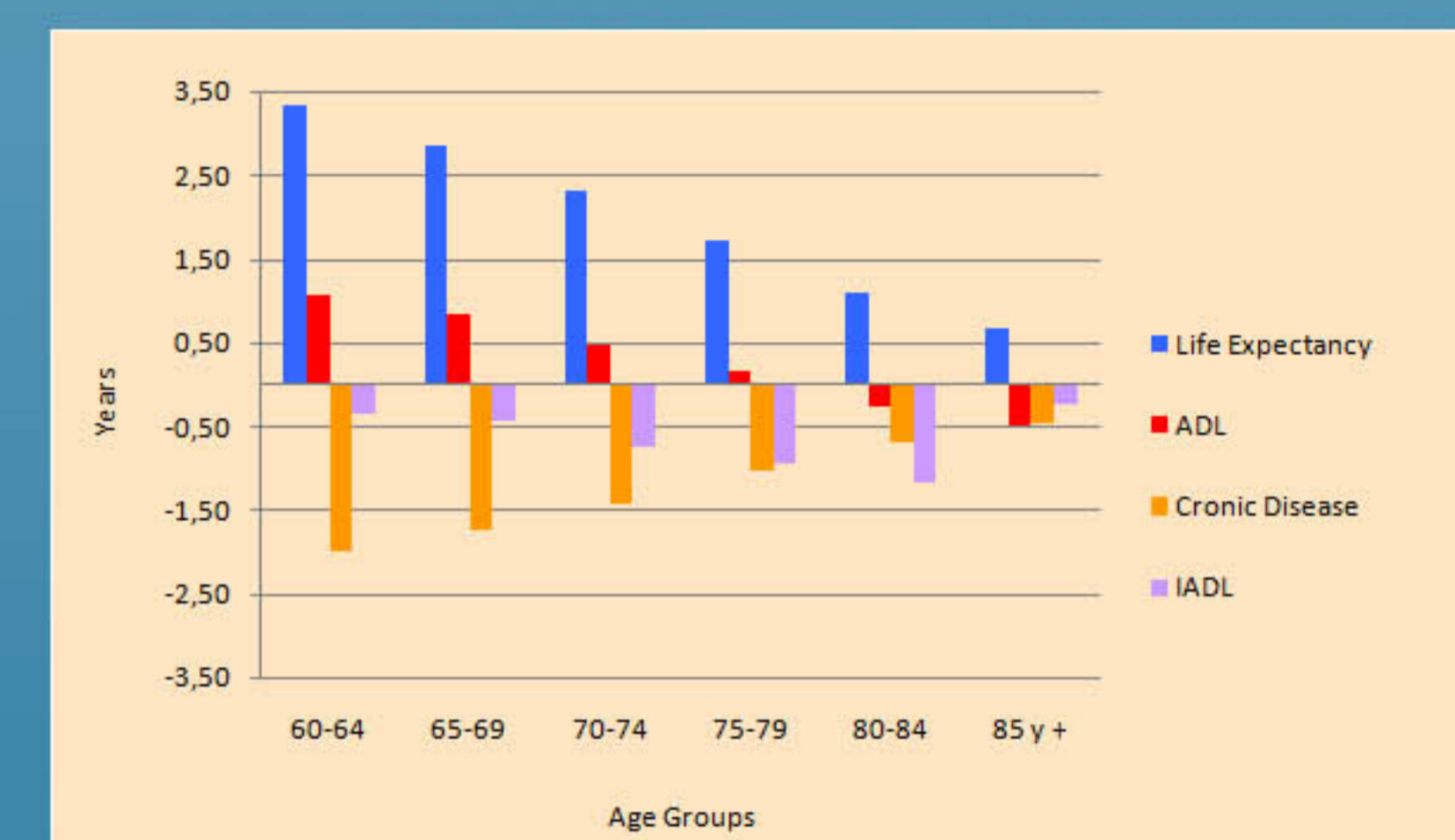
3. Results

1. Percentage of people with limitation in ADL and IADL, and at least one chronic disease, by sex and age.

Chronic Diseases studied: Arthritis, hypertension, heart disease, depression, diabetes, chronic lung disease, cognitive impairment, cerebro -vascular disease and cancer.

2. Life Expectancy and Life expectancy free of diseases. Havana City. 2000.

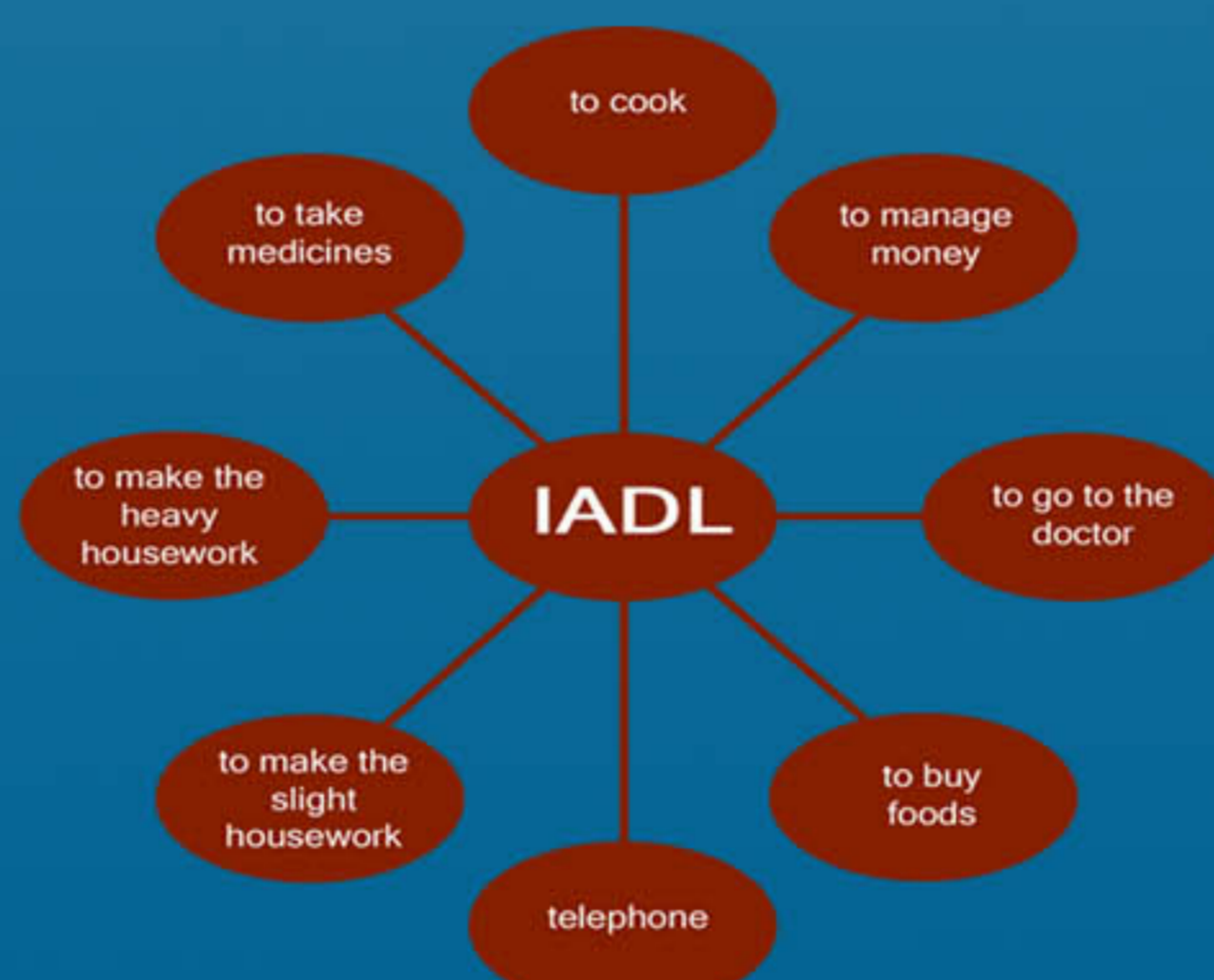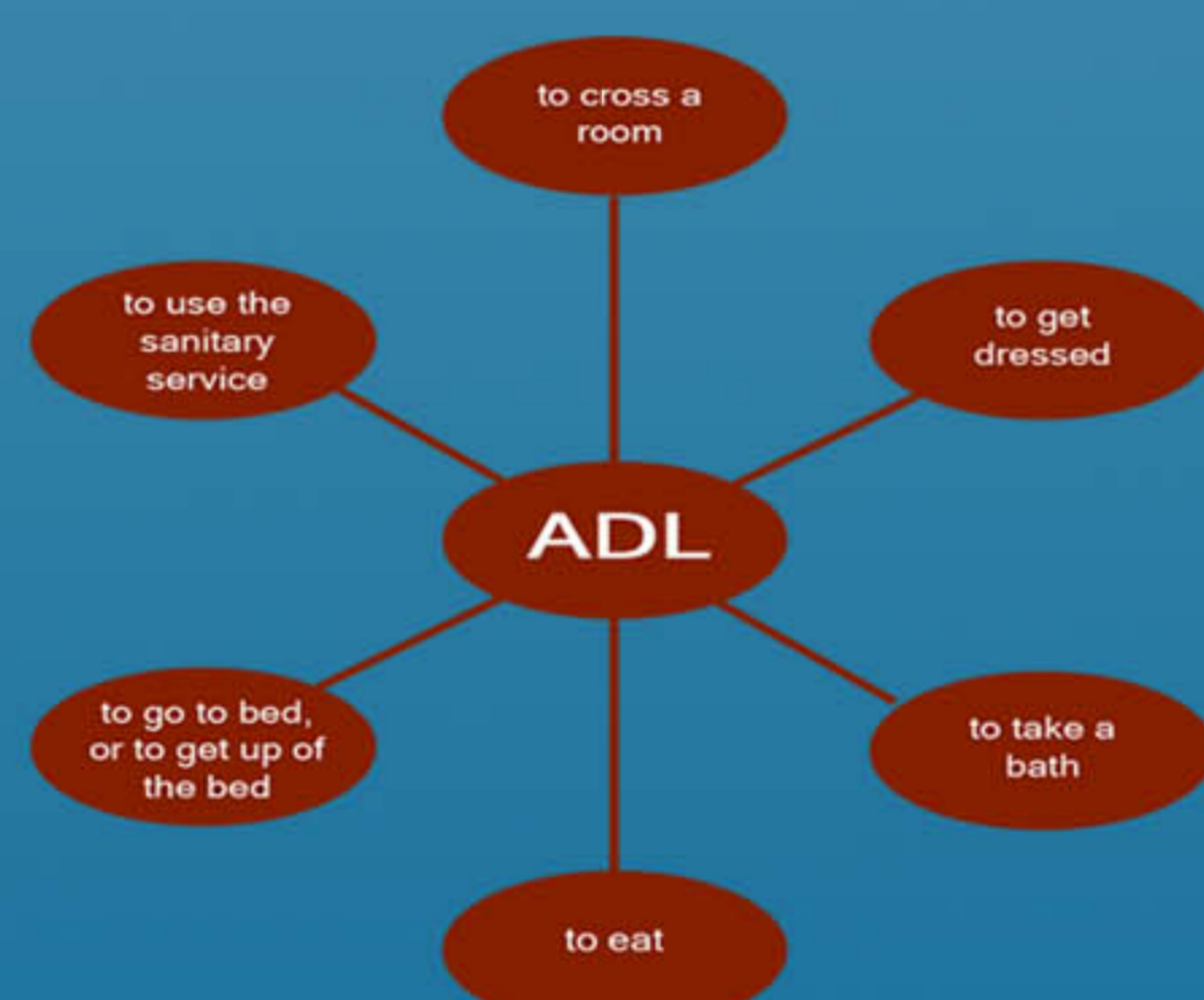3. Years of difference in Healthy Life Expectancy: women compared with men. Cuba.

4.

Logistic Regression Model: Odds of ADL, IADL, Chronic Disease, and Perception of Health.							
	ADL		IADL		Chronic Disease		Perception of Good Health
	OR	Sig.	OR	Sig.	OR	Sig.	OR	Sig.
Sex								
Women	1.32		1.29		2.28	*	0.80	
Age								
75 +	2.29	*	3.09	*	0.81		1.37	*
Chronic illnesses								
It doesn't present							4.61	*
ADL								
It doesn't present							3.40	*
IADL								
It doesn't present							3.68	*
Marital status								
Married	0.93		0.59	*	1.13		0.88	
Education								
Edu >6	0.72	*	0.68	*	1.04		1.45	*
Works								
Yes	0.47	*	0.36	*	0.65	*	1.67	*
Living arrangements								
Alone	0.63	*	0.41	*	1.02		0.79	
Perception good nutrition								
Good nutrition	0.91		0.88		0.81		1.46	*
Perception enough income: daily life								
Yes	0.66	*	0.61	*	0.95		1.09	
Has some income								
Yes	0.93		0.67		1.35		0.82	
Index characteristic of the housing:								
half-high	1.74	*	1.10		0.85		1.48	
Index of equipment of the housing:								
half-high	0.94		1.22		2.14	*	0.75	

* Sig ≤ 0.05

Source: Data from Alfonso, J. C; León, Esther Ma.; Menéndez, Jesús; et. al; Centro Iberoamericano de la Tercera Edad, SABE, Proyecto Salud, Bienestar y Envejecimiento de los Adultos Mayores en América Latina y el Caribe. Ciudad de La Habana, Cuba. Año 2000, Centro de Estudios de Población y Desarrollo, Centro Iberoamericano de la Tercera Edad, ISBN: 959-7119-36-6, Ciudad de la Habana, 2005.
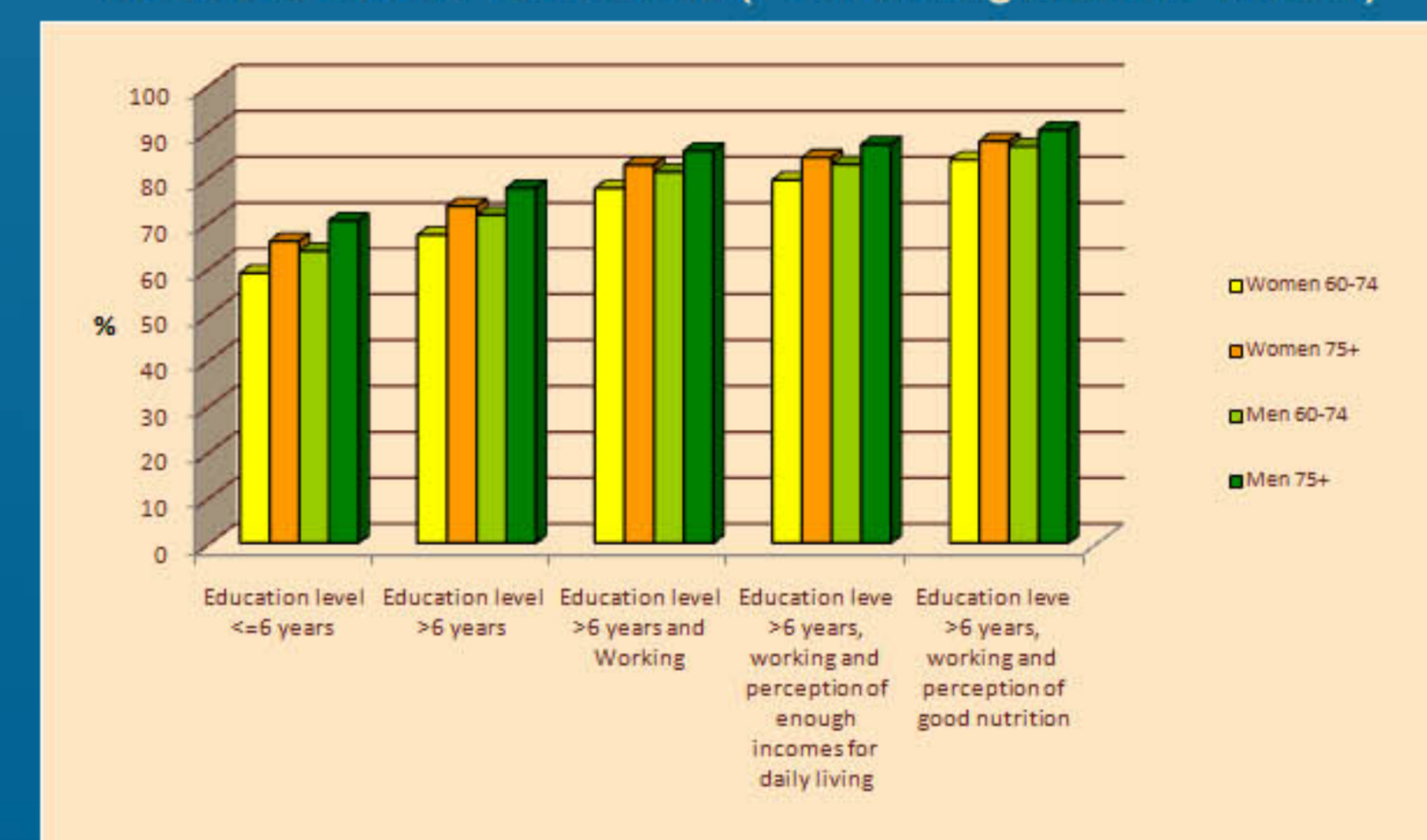

ADL: Basic Activities of Daily Living, Katz and Apkorm, 1976.

IADL: Instrumental Activities of Daily Living, Lawton and Brody, 1969.

5. Multivariate Analysis with Probit Regression Model Covariables that have a significant association with the dependent variable.

Perception of Health (Exc, Very Good, Good)					
Variable	Category	Category of reference	Change		
			Both Sexes	Women	Men
Chronics disease	No Present	(Present)	0.347	0.395	0.308
Limit. AIVD	No Present	(Present)	0.228	0.216	0.234
Limit. AVD	No Present	(Present)	0.202	0.157	0.280
Works	Works	(No works)	0.111	NS	0.177
Educ. Level	Secondary, high school,	(Primary Level)	0.077	0.061	0.096
Perception Nutrition	(Good Nutrition)	(No Good nutrition)	0.076	0.087	NS
Age	75 +	(60-69)	0.065	0.080	NS

6. Probability of being perceived in good health with change in socioeconomic variables. (Probit Regression Model)

Notes: Weighted data. Other variables under control: marital status, living arrange-ments, income, characteristics of household and equipments, ADL and IADL and chronic diseases.

5. Conclusions

Men have an advantage over women in terms of healthy life expectancy, which maybe due to biological and social advantage.

Limitation in ADL and IADL are associated with age, education, living arrangement, perception of enough income for daily life and works.

Chronic Disease are associated with sex, works and Index of the equipment of housing.

Perception of Good Health is associate with age, limitations in ADL, IADL, Chronic disease, and perception of good nutrition.

Results suggest that levels of education is an important variable as an effective way of gaining years of good health in old age.

The probability of perception of good health increases with education, work, perception of enough income for daily life and good nutrition as much for sex as for age.