

Trends in healthy life expectancy among elderly in a city of Southeastern Brazil

Ana Paula Belon, Margareth G. Lima, Marilisa B.A. Barros
(State University of Campinas, UNICAMP, SP, Brazil)



UNICAMP

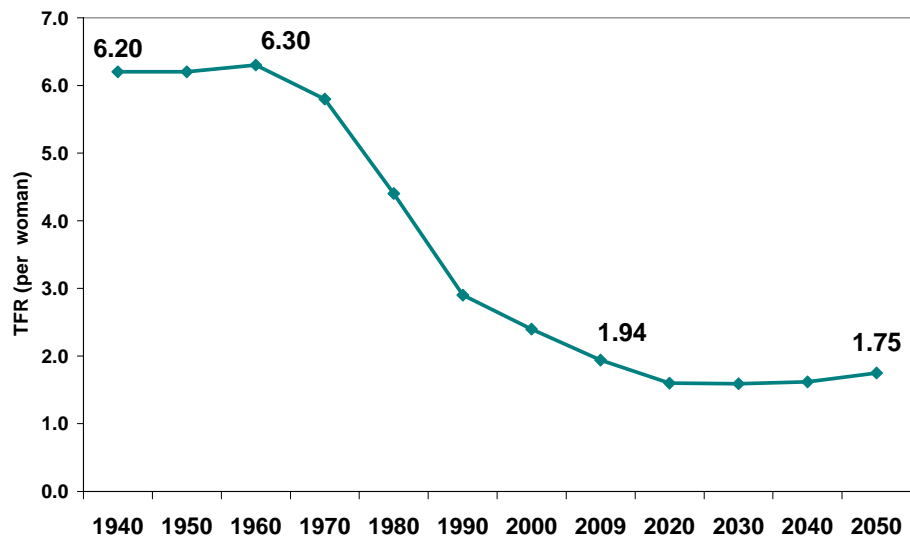


Topics

- Introduction
 - The aging process in Brazil
- Methods
 - The measurements used to calculate healthy life expectancy
- Results
- Conclusions

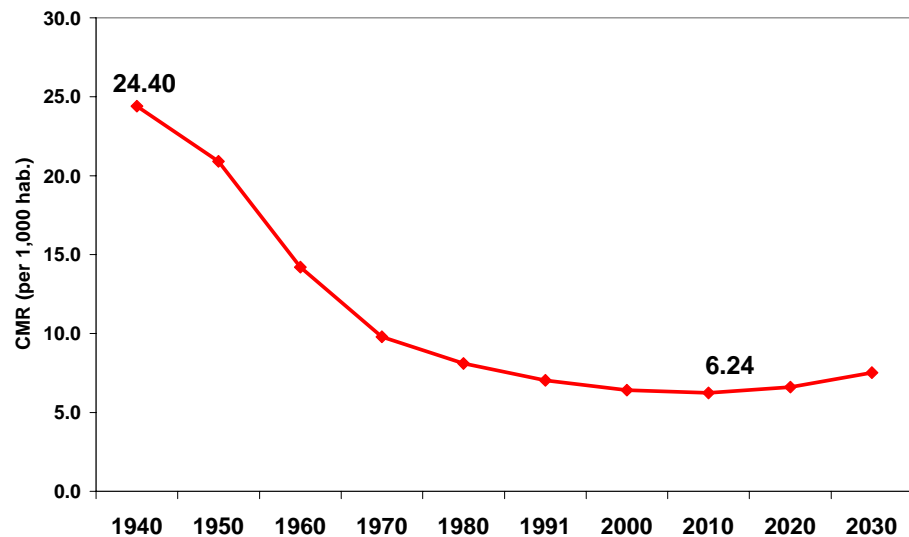
Introduction

Total Fertility Rates. Brazil, 1940-2050



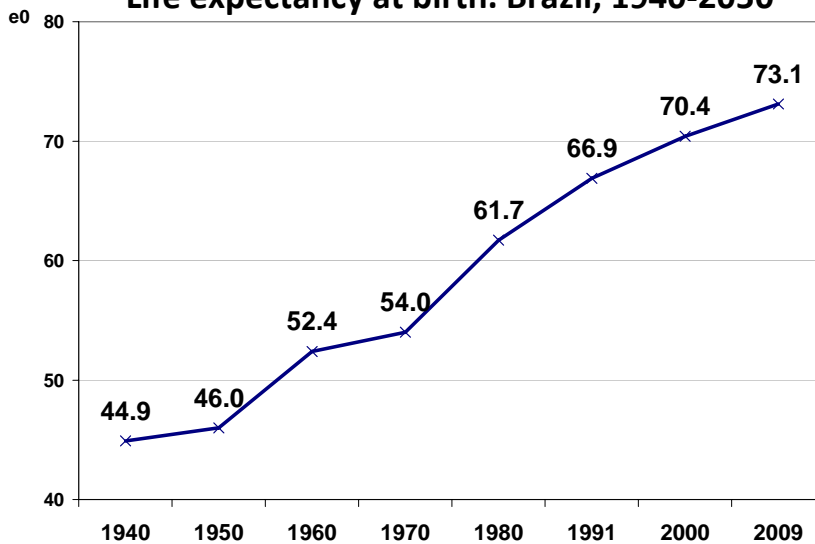
Source: IBGE, 2009; World Population Prospects: The 2008 Revision.

Crude Mortality Rates. Brazil, 1940-2050



Source: IBGE, 2006.

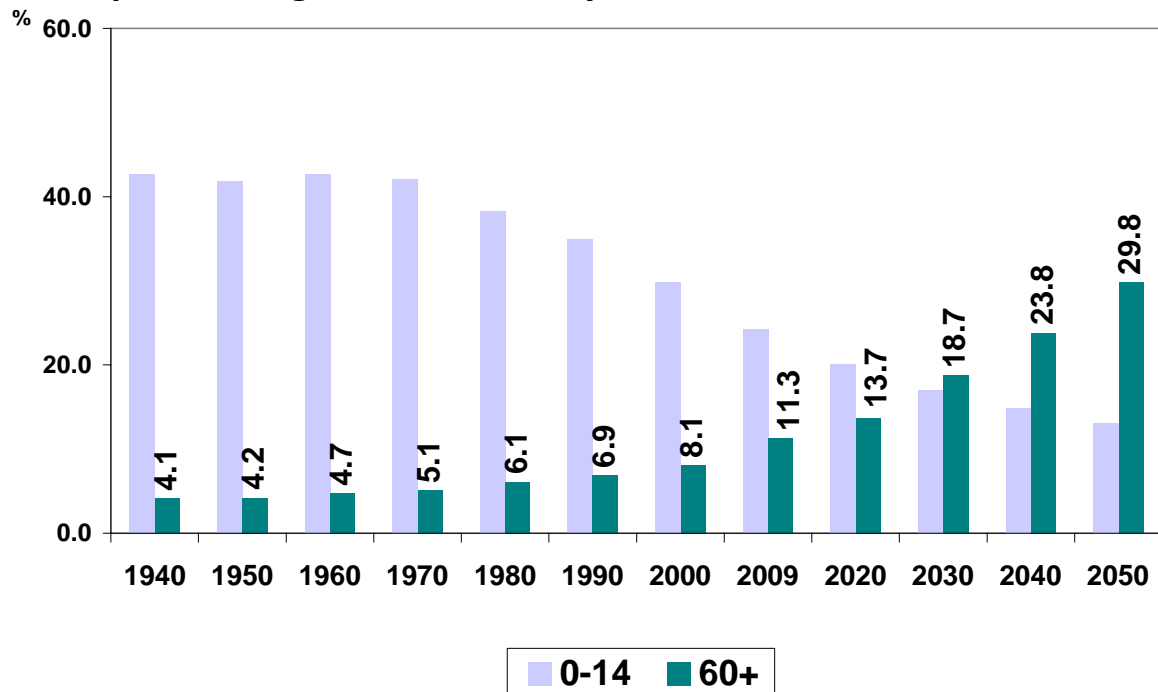
Life expectancy at birth. Brazil, 1940-2050



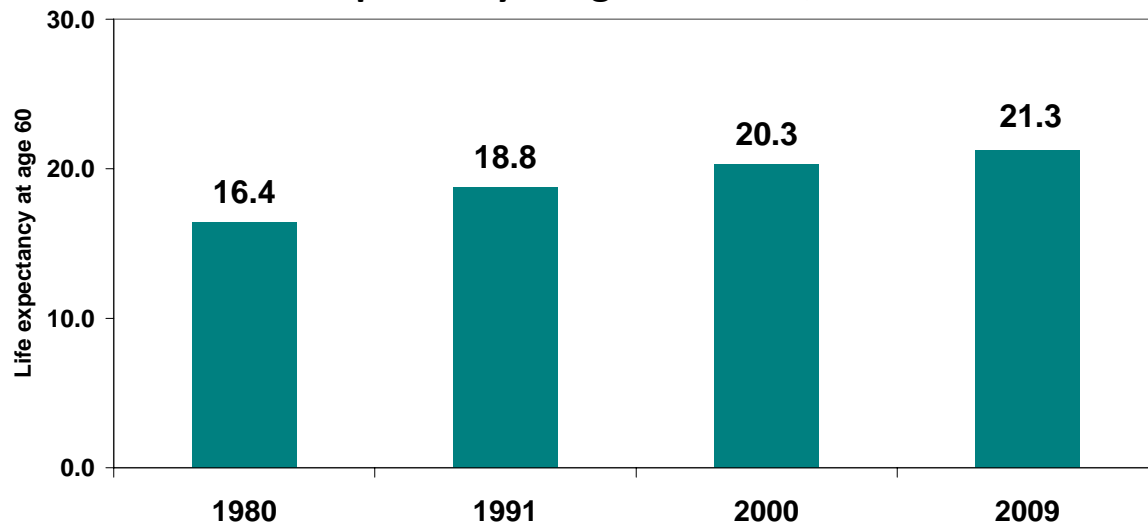
Source: IBGE, 2006 e 2010; IDB/MS, 2009

In a span of 70 years:
28.2 years in e_0

Population aged 0-14 and 60 years and older. Brazil, 1940-2009



Life expectancy at age 60. Brazil, 1980-2009



Objective

Objective

The aim of this study is to estimate the trend of healthy life expectancy for people aged 60 or more between 2001 and 2008. For this, we use two measurements of state of health, obtained from two health surveys carried out in Campinas, a city in Southeastern Brazil.

Methods





An economically important city in the state of Sao Paulo (5th city in terms of contribution to the GNP of this state)

An estimated population of 1,080,113 inhabitants in 2010.



Project of mortality monitoring

- Since 1989
- Partnership between the Municipal Health Department of Campinas and the State University of Campinas
- Publication: periodic bulletins about several aspects of mortality
- Improvement of data quality



Surveys on health conditions

- The surveys were a cross-sectional, population-based study which covered only the non-institutionalized individuals.

2001: ISA-SP (426 elderly)

2008: ISACAMP (1519 elderly)

Surveys on health conditions

Two indicators of state of health were studied:

- self-rated health and
- self-reported physical functioning

Self-rated health

In general, would you say your health is:

1. excellent 2. very good 3. good 4. fair 5. poor

These answers were divided into:

good (excellent, very good and good)

poor (fair and poor)

Physical functioning

- SF-36 scale score
- 10 questions regarding the presence and extension of limitations of physical functioning.
- The total score of physical functioning scale ranged from 0 to 100, with higher scores meaning better health.
- With the mean score for the elderly population:
 - Good physical functioning (equal to or above the mean score)
 - Poor physical functioning (below the mean score for the elderly)

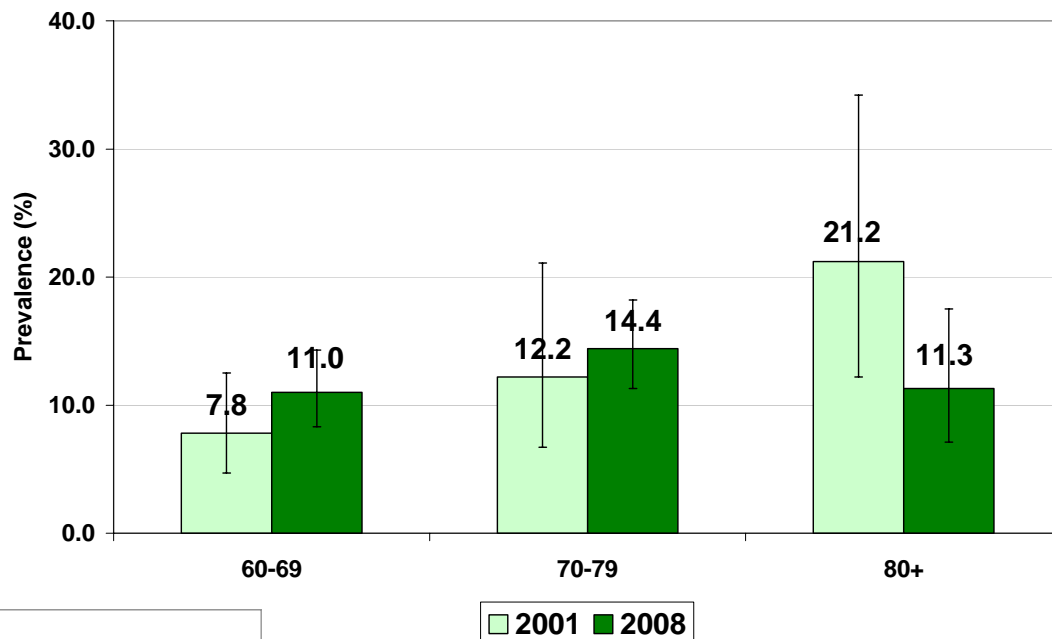
Healthy life expectancy

- Abridged life tables
(60-69, 70-79, and 80+)
- Sullivan method

Jagger C, Hauet E, Brouard N. Health expectancy calculation by the Sullivan method: a practical guide. European concerted action on the harmonization of health expectancy calculations in Europe. Leicester, Paris: EURO-REVES, 2001. REVES Paper no. 408.

Results

Poor self-rated health



Poor physical functioning

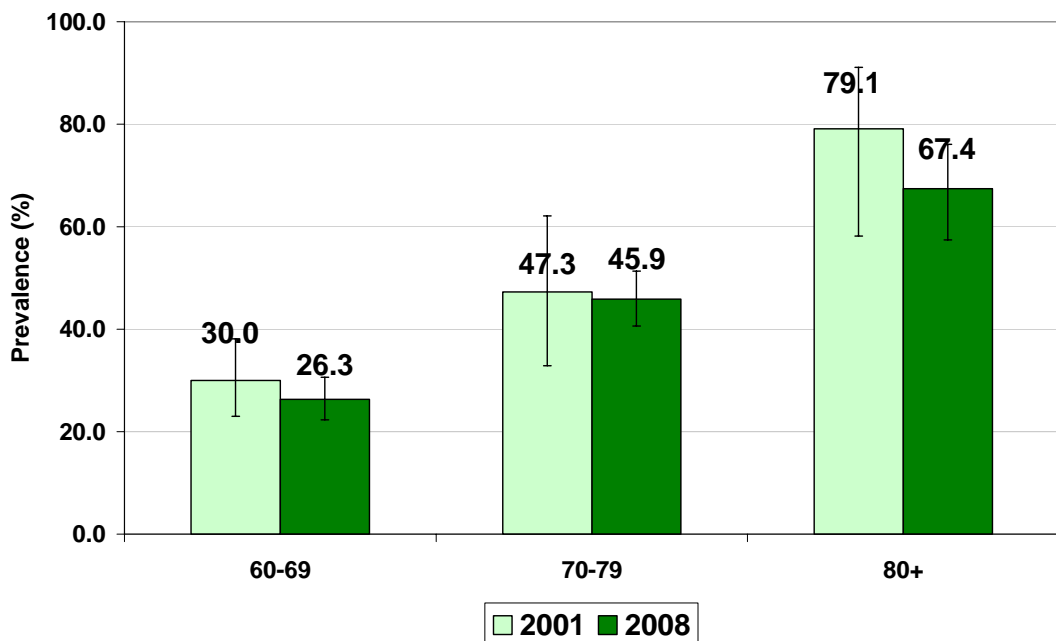


Fig. Prevalence of poor self-rated health and poor physical functioning, by age group. Campinas, 2001 and 2008.

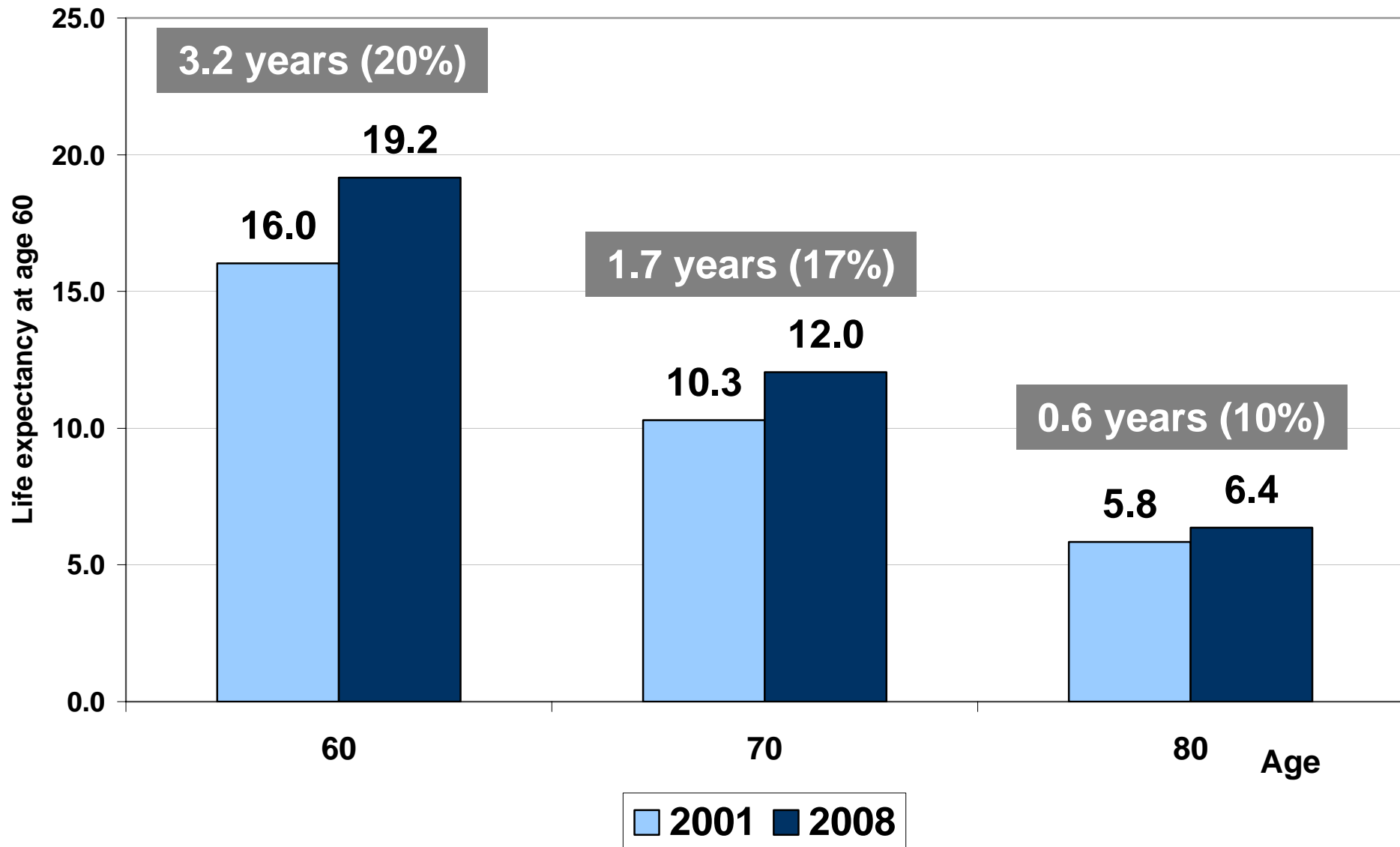


Fig. Life expectancy at age 60, 70 and 80. Campinas, 2001 and 2008.

Self-rated health

Good self-rated health

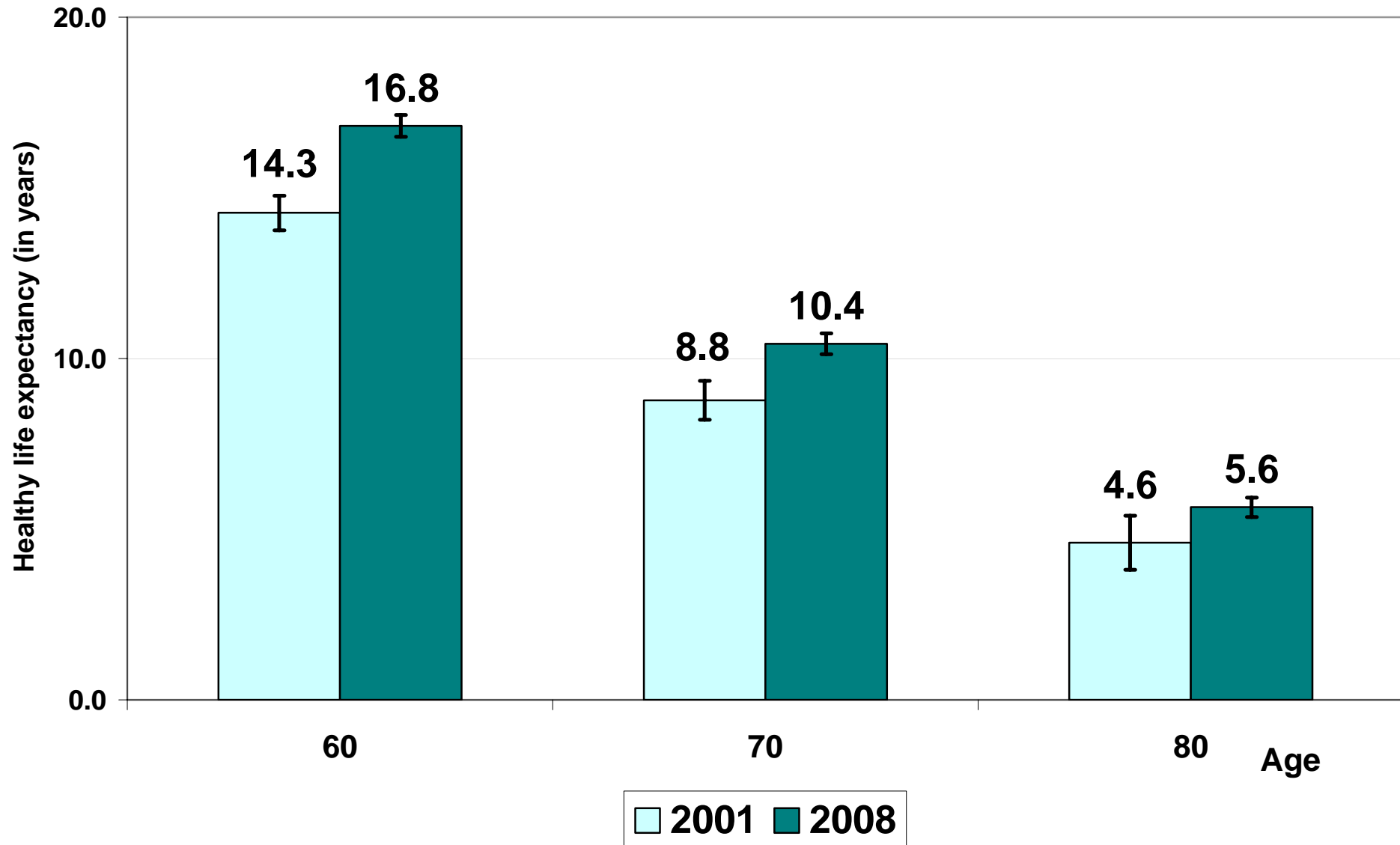


Fig. Healthy life expectancy at age 60, 70 and 80. Campinas, 2001 and 2008.

Good self-rated health

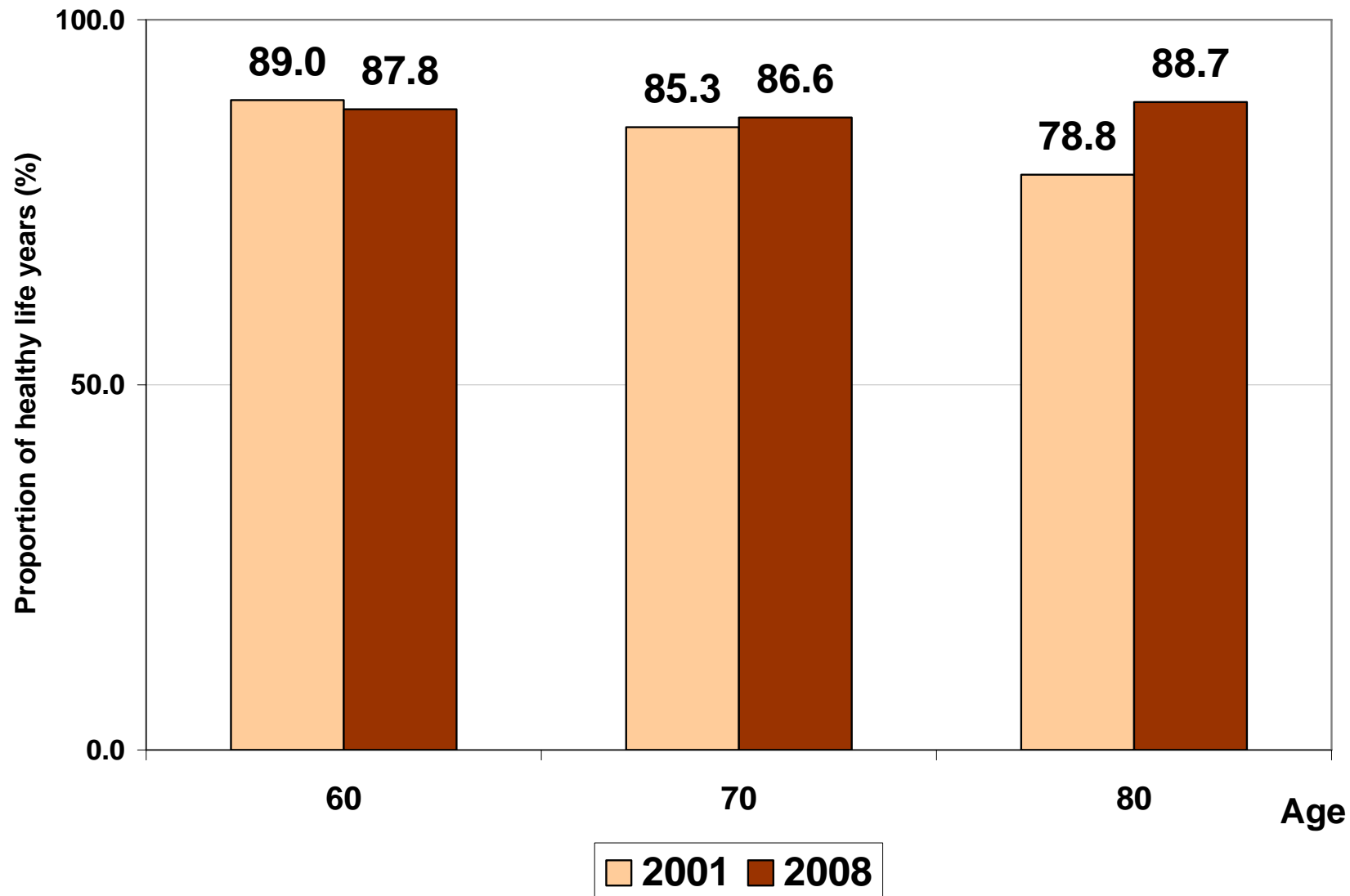
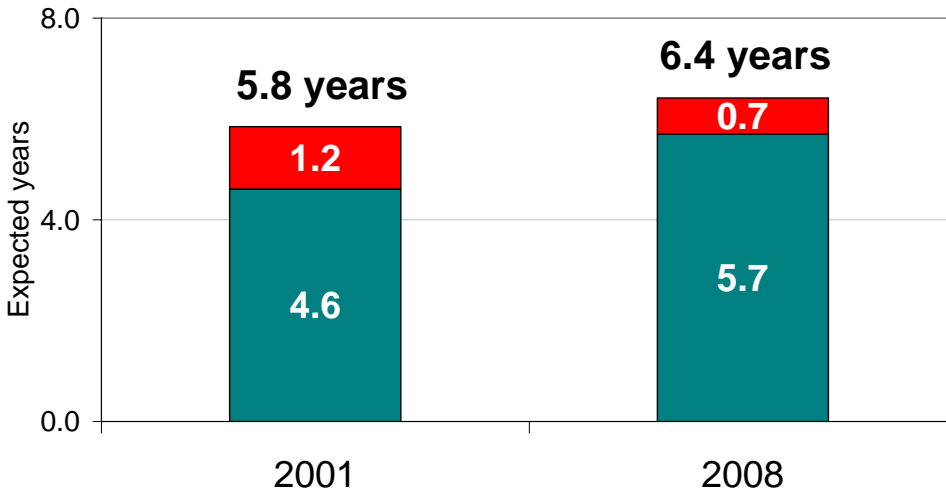


Fig. Proportion of healthy life years at age 60, 70 and 80. Campinas, 2001 and 2008.

At age 80

Years



Increase in life expectancy at age 80 was concentrated in healthy years.

Proportion

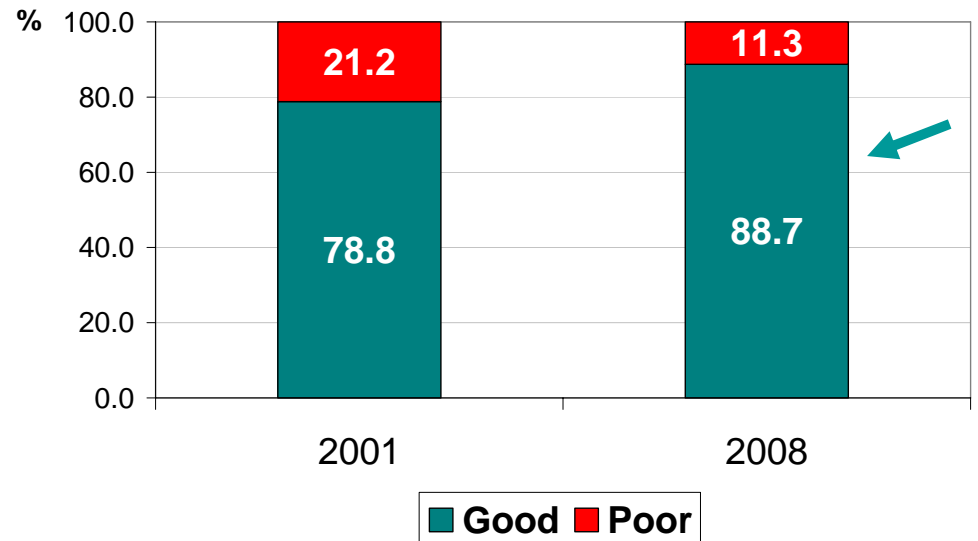


Fig. Life expectancy and expected years in good and poor perceived health at age 80.

Physical functioning

Good physical functioning

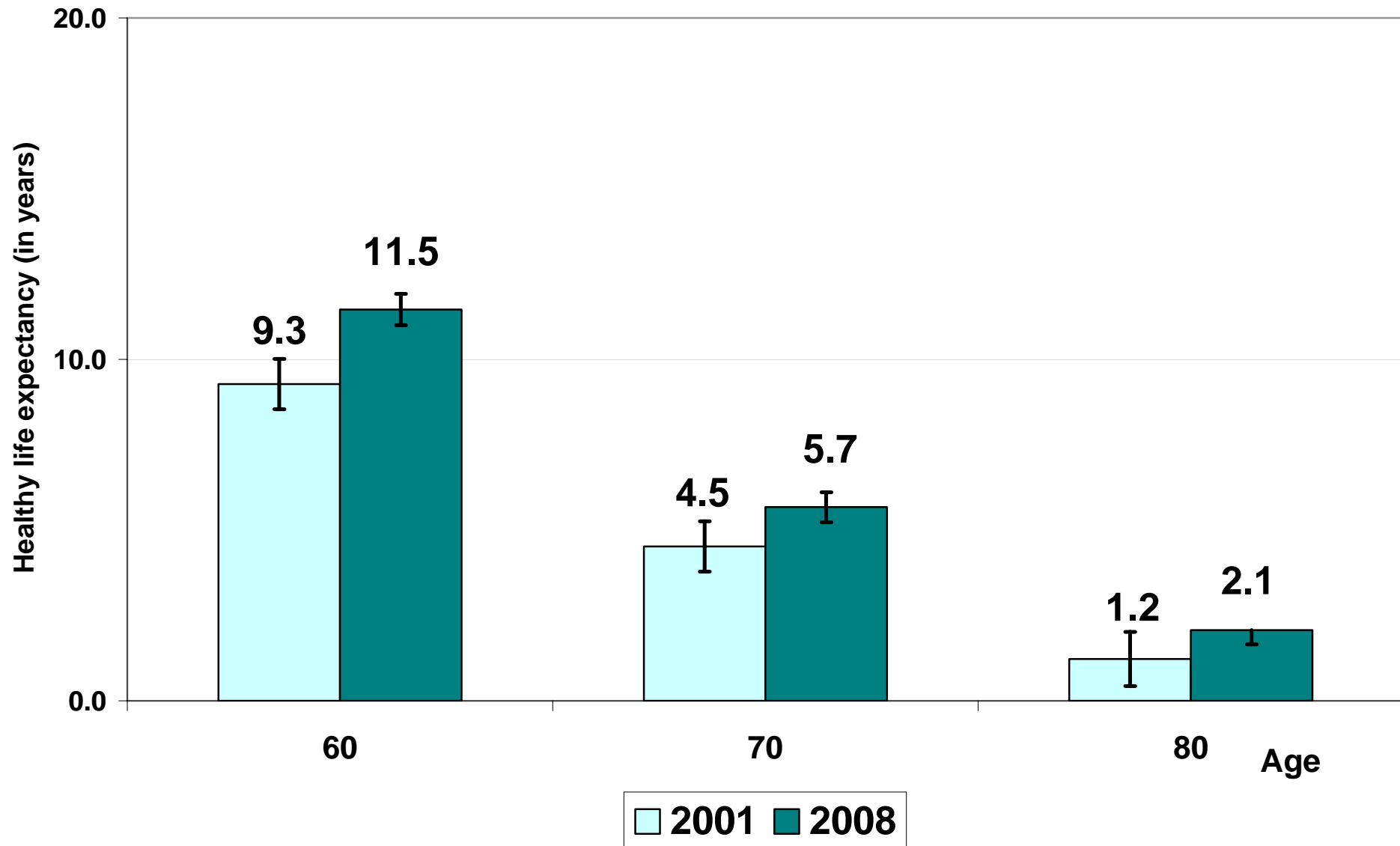


Fig. Healthy life expectancy at age 60, 70 and 80. Campinas, 2001 and 2008.

Good physical functioning

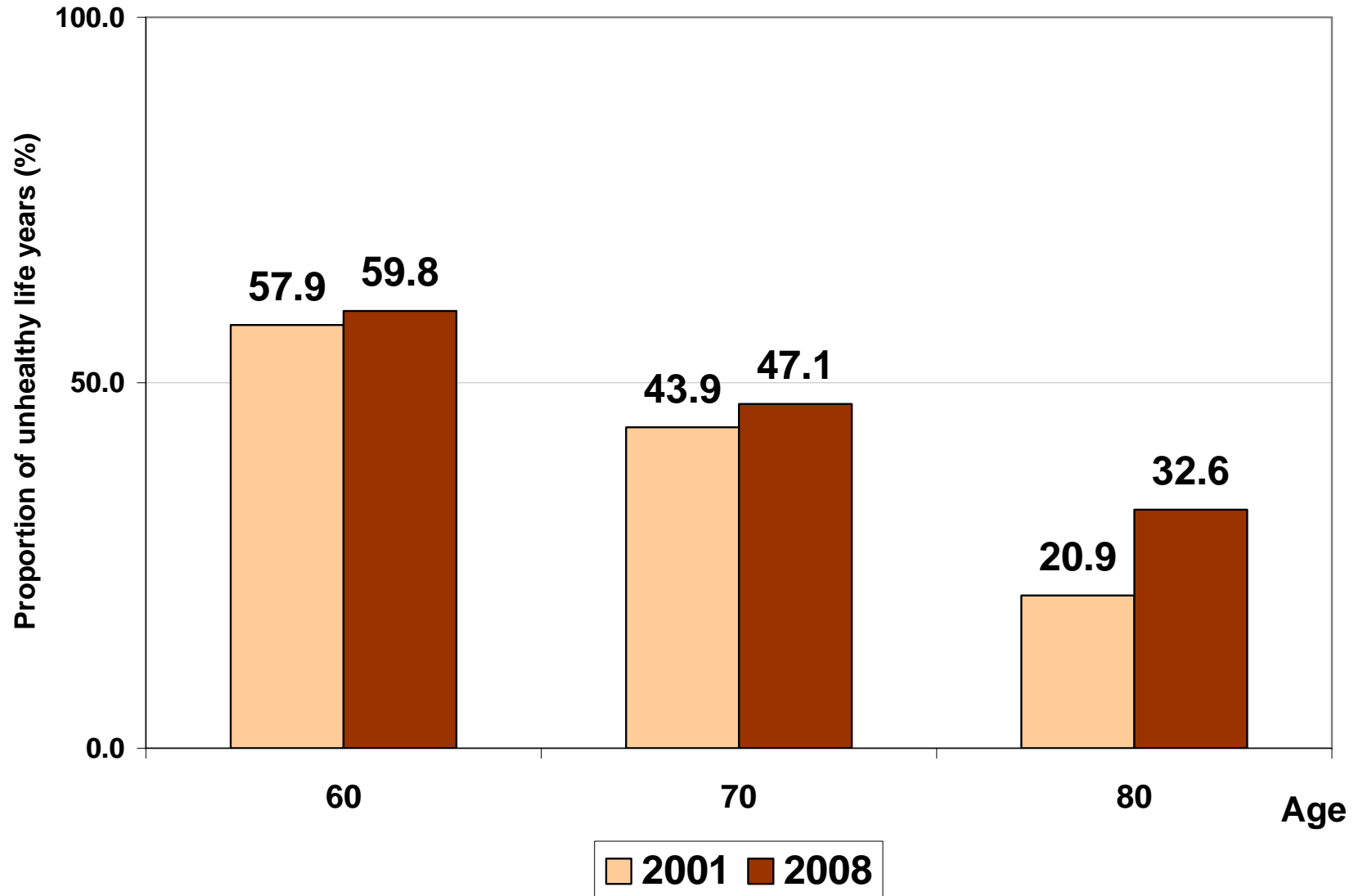
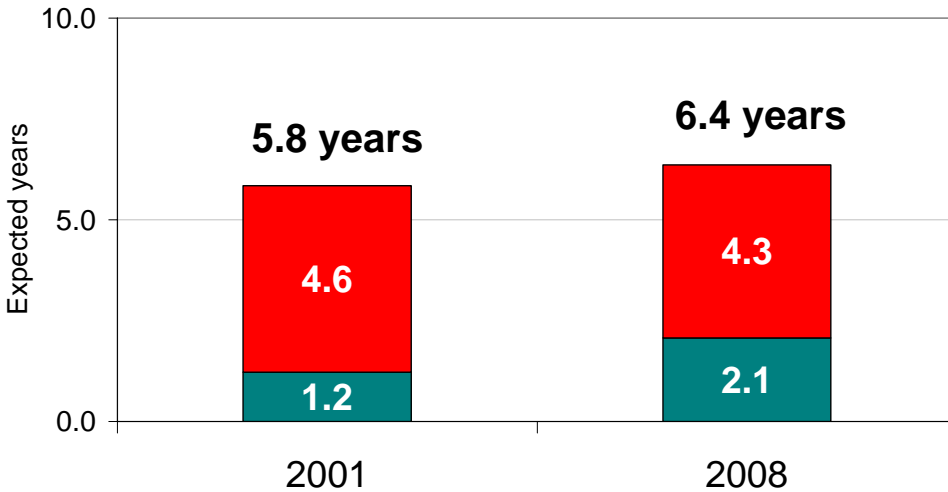


Fig. Proportion of healthy life years at age 60, 70 and 80. Campinas, 2001 and 2008.

At age 80

Years



Increase in life expectancy at age 80 was concentrated in healthy years.

Proportion

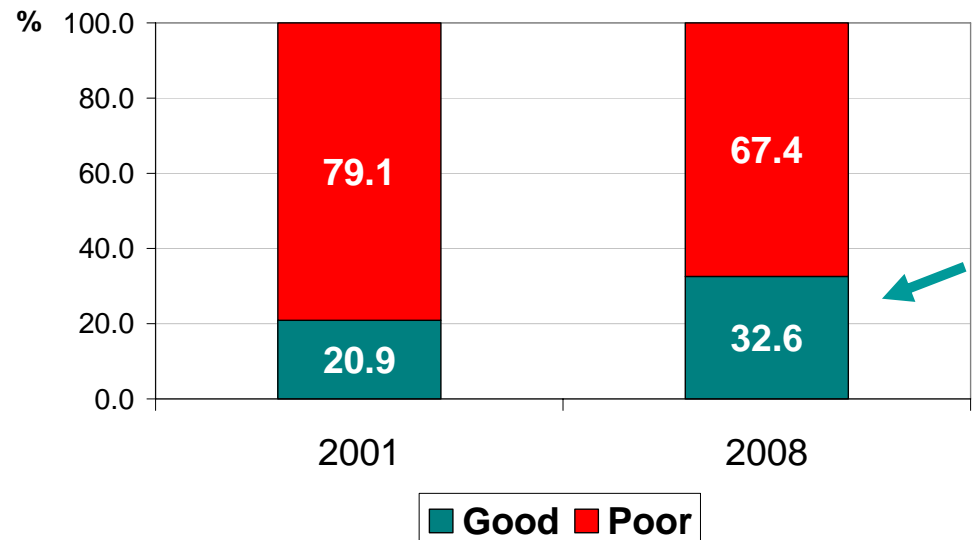


Fig. Life expectancy and expected years in good and poor physical functioning at age 80.

Conclusions

- The increase in life expectancy was accompanied by a statistically significant increase in healthy life expectancy among elderly between 2001 and 2008.
- There were increases in the proportion of the years lived in good self-rated health at age 70 and (mainly) at age 80.
- The proportion of years lived in good physical functioning increased in all ages, mainly at age 80.
- For the oldest old, the increases in the proportion of years lived in good health were higher over time.

These findings contribute to monitoring the trends in healthy life expectancy, taking into account the greatest public policies challenges in promoting aging with autonomy and independence.

E-mail: paulabelon@gmail.com

Website: www.fcm.unicamp.br/centros/ccas

