

## European Population Conference 2010

Vienna, Austria, 1-4 September 2010

**Title:** Understanding the gap between females and males in life expectancy and healthy life expectancy in Cuba.

### **Madelín Gómez**

mgomez@ced.uab.es

Phd Student in Demography

Centre d'Estudis Demografics, Universitat Autònoma de Barcelona, Espanya.

### **Esther María León**

techy@infomed.sld.cu

Population and Development Studies Centre, National Statistics Office, Cuba.

### **Abstract**

In this paper we will analyze the so called *male-female health-survival paradox*, or in other words, the study of a longer but less healthy survival of women in a particular developing country such as Cuba who has a life expectancy of 79.0 years old in women and 75.1 years old for men in 2007. This country is in an advanced stage of aging (17% of its population was over the age of 60 in 2008 and 31% is expected by 2030) and has a declining population (since 2006 is decreasing at a rate of 0.4 per thousand inhabitants).

Trends in life expectancy and in the specific causes of death and its differentials by sex will be observed in order to shed light on the lower sex gap that Cuba shows compared to other countries with similar levels of life expectancy. Moreover, healthy life expectancy in older people is also treated looking at the morbidity in later life.

Vital statistics data in yearly basis published by National Statistic Office and Public Health Ministry of Cuba will be used. In order to analyze the disability and prevalence

of diseases we have worked with the Health, Wellbeing and Aging Survey (SABE) <sup>1</sup> carried out by the Pan American Health Organization, during 1999–2000. In this survey 1.905 individuals aged 60 and older were interviewed in Ciudad de La Habana, which is the second most aged province in Cuba (19.2% of people older than 60 years old).

### **Extended abstract**

The substantial increase in longevity over the last 20<sup>th</sup> Century led many scholars and society in general to focus their attention on two fields: first, on the study of late-life loss of independence in daily living and increase of prevalence diseases; second, the so called *male-female health-survival paradox*, or in other words, the study of a longer but less healthy survival of women.

In this paper we will briefly examine how sex differences in health and aging could be observed in a particular developing country such as Cuba who has a life expectancy of 79.0 years old in women and 75.1 years old for men in 2007. This country is in an advanced stage of aging (17% of its population was over the age of 60 in 2008 and 31% is expected by 2030) and has a declining population (since 2006 is decreasing at a rate of 0.4 per thousand inhabitants).

Trends in life expectancy and in the specific causes of death and its differentials by sex will be observed in order to shed light on the lower sex gap that Cuba shows compared to other countries with similar levels of life expectancy. Moreover, healthy life expectancy in older people is also treated looking at the morbidity in later life.

Vital statistics data in yearly basis published by National Statistic Office and Public Health Ministry of Cuba will be used. In order to analyze the disability and prevalence of diseases we have worked with the Health, Wellbeing and Aging Survey (SABE) <sup>2</sup>

---

<sup>1</sup> Albala C, Lebrao ML, León Díaz EM, Ham-Chande R, Hennis AJ, Palloni A, et al (2005). Encuesta Salud, Bienestar y Envejecimiento (SABE): Metodología de la encuesta y perfil de la población estudiada. *Rev. Panam. Salud Pública*; 17(5/6): 307-22.

<sup>2</sup> Albala C, Lebrao ML, León Díaz EM, Ham-Chande R, Hennis AJ, Palloni A, et al (2005). Encuesta Salud, Bienestar y Envejecimiento (SABE): Metodología de la encuesta y perfil de la población estudiada. *Rev. Panam. Salud Pública*; 17(5/6): 307-22.

carried out by the Pan American Health Organization, during 1999–2000. In this survey 1.905 individuals aged 60 and older were interviewed in Ciudad de La Habana, which is the second most aged province in Cuba (19.2% of people older than 60 years old).

### *Preliminary findings*

The age schedule of mortality in Cuba has shown a significant evolution in the last 20 years. It presents a marked drop in mortality below age 1. In regard to deaths at younger ages, there is a flat peak around age 25, followed by a decline until 2007. Afterwards, an important increase of death over the time after age 60 stands out with a peak around 81 which is the modal age at death in 2007. Moreover, there is a right shift of the number of deaths towards the oldest ages, supporting the idea that we are extending lifespan by delaying mortality at older ages.

After 1955, life expectancy in Cuba has performed a steady increase, reaching 80 years for women and 76 years for men in 2005-2007. However, there was not any important increase in the sex gap during the period 1955-2007, women live around 3 years more than men, except for 2005-2007 when the gap grew to 4 years.

The increase in life expectancy brought out a higher probability of survival at old ages, carrying also an enlargement of morbidity and disabilities, which is under the expected for an aging population.

Although females have higher life expectancy than men, they have higher disability levels. This health-survival paradox can be confirmed by the evidence provided by our case of study regarding to health at older ages.

If we take into account the percentage of years lived with or without disability (at least one limitation in Activities of Daily Living or Instrumental Activities of Daily Living<sup>3</sup>) for women and men at each age group it was found that in 2000, females in the group 60-

---

<sup>3</sup> Activities of Daily Living (ADL) are those including washing, dressing, toileting, transferring, eating, going to bed and get up of the bed; while Instrumental Activities of Daily Living (IADL) include ability to use telephone, shopping, food preparation, housekeeping, laundry, mode of transportation, responsibility for own medications, and ability to handle finances.

64 years old lived almost 90% of their remaining life with disabilities, and this percentage almost remained constant over the considered ages. Males present a better situation, at 60-64 years old, where less than 80% of their remaining life expectancy might be spent suffering from a disability. In the male case this proportion steadily increased until the oldest age group where they almost reached 90%.

The prevalence of diseases<sup>4</sup> reveals that more than 80% of older people in Ciudad de la Habana have at least one illness. Among the considered diseases arthritis and hypertension were more common.

There was a clear predominance of women for all diseases. Contrary to the general belief, the younger elderly people (60-74 years old) is slightly more vulnerable than people older than 75 years old.

---

<sup>4</sup> Diseases: Hypertension, Arthritis, Heart disease, Depression, Diabetes, Chronic lung diseases, Cognitive impairment, Cerebro-vascular diseases and Cancer.