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Title: Self-Reported Health among Old-Age Populations: a cross-national comparison across Latin America.
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Short Abstract

This paper examines covariates of self-reported health among individuals aged 60 or older in three parts. <u>First</u>, we examine the association of self-reported health with various measures of well being (functionality, self-report of chronic conditions, satisfaction with memory, satisfaction with financial conditions, satisfaction with life) in an attempt to understand the meaning of the components of the overall self-reported health. <u>Second</u>, we examine the socioeconomic covariates of self-reported health, such as age, sex, education, income, availability of health insurance, to understand the social context in which health differences occur. And <u>third,</u> we make comparisons across seven countries in Latin America and the Caribbean region, to conclude about how generalized findings are. We use data from the SABE study, completed in seven cities of the region around the year 2000.

Long Abstract

Introduction

According to the literature, either from life-course perspective among sociologists or health stock models from economists, health in old age is a result of life-long investments and can be associated with current individual conditions as well as those in the past. Health disparities in old age can be attributed to factors such as access to health services, to the impact that medical expenditures could have on savings capacity, to genetic or biological factors as well as those of human behavior that affect the productivity in the labor market, to the preferences for health care, and the exposure to health risks. In different contexts, the level of inequality in access to resources among the population will impact on the nature of the disparities found among the population. For example, the mechanism could be the health care system, whereas inequality in access to health care services determine to a large extent if it is necessary to have more economic resources to afford good health. The role of the institutional setting could be large and unobserved, however, and cross-national comparisons could provide insights on the mechanisms involved. In addition to the role of institutions, the cultural norms about family care *versus* institutional care in old age may be an important determinant of elderly health, in particular self-reported health.

The global self-reported health is used in the literature on health of older adults for three main reasons: 1) in the aggregate, it has been found to be strongly associated with

mortality and physical health of populations; 2) at the individual level it often predicts mortality, and 3) it is relatively easy to measure in household surveys (Power and Matthews 1997, Power et al. 1999). Self-reported health is generally measured through the response to a question such as the following: "nowadays, do you consider your health to be excellent, very good, good, fair, or poor?"

This paper examines covariates of self-reported health among individuals aged 60 or older in three parts. First, we examine the association of self-reported health with various measures of well being (functionality, self-report of chronic conditions, satisfaction with memory, satisfaction with financial conditions, satisfaction with life) in an attempt to understand the meaning of the components of the overall self-reported health. Second, we examine the socioeconomic covariates of self-reported health, such as age, sex, education, income, availability of health insurance, and living arrangements, to understand the social context in which health differences occur. And third, we make comparisons across seven countries in Latin America and the Caribbean region, to conclude about how generalized findings are. We pay particular attention to the role of institutions and the family as care providers of the elderly across the seven societies.

The degree to which cross-country analyses can help us estimate the nature of effects of individual characteristics depends on intercountry heterogeneity regarding key institutional characteristics. The countries in our sample display large economic and social differences. There are also vast differences in the way they buffer individuals and households from the economic consequences of negative health outcomes in terms of catastrophic health expenses, increased need for health care, and loss of income. First, the seven countries exhibit large contrasts in social and economic terms. These economic differences are reflected also in national health expenditures per capita in PPP US$[1]. Argentina, Barbados and Uruguay spend about US$ 1,000, while Brazil, Chile and Mexico spend about half this value. Cuba due to its peculiar socio-political system spends about PPP US$ 200. Public expenditure as a part of the GDP reveals, however, that Cuba investments in health are relatively high. With the exception of Uruguay, none of these countries devote more than 10% of the GDP to health care services, as it is the case for developed countries. Second, demographic indicators also show important differences in age structure of the populations and adult mortality. For example, among those who are aged 60 or older, the fraction aged 70 or more ranges from 45 percent in Mexico City to 62% in Sao Paulo. Third, there is large variation in the structure and achievement of the health care systems across the countries, and the role played by the public health sector. Several countries of LAC have health care systems with fragmented coverage, combining social security, social assistance and universal coverage, and others offered by the health ministries. The contrasts in overall health coverage are wide, ranging from virtually universal in Cuba, to 4% lacking access to care in Chile, 13% in Uruguay, and 40% in Mexico (CISS 2003). In summary, the observed heterogeneity across the countries shall provide a solid base for comparative analyses of health and its determinants.

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[1] PPP (purchasing power parity).

Data

We use data from the Health and Wellbeing of the Elderly Survey (SABE). This is a data collection project anchored in seven major cities (six of them capital cities) of the region: Buenos Aires (Argentina), Bridgetown (Barbados), San Paulo (Brazil), Santiago (Chile), Havana (Cuba), Mexico City (Mexico) and Montevideo (Uruguay). All seven surveys were administered to representative samples of populations aged 60 and above in each city and were strictly comparable though translated to three different languages (Spanish, Portuguese and English). In some cases, interviewers selected a target older person and his/her surviving spouse. All sample frames were drawn either from recent population censuses or from nationally representative surveys carried out periodically in the capital cities of the region[2]. The fieldwork took place between June 1999 and June 2000, and a preliminary final report was completed in December of 2002. An important feature of the survey is that, with one exception (Buenos Aires), the rates of response were significantly better than those in similar surveys in other countries. Data were collected on multiple domains of health (global self-report, chronic conditions and treatments, cognition, depression, anthropometric measures and performance); use of health care services and health expenditures; demographic traits, including residential arrangements and attributes of household members; family and social networks and transfers exchanged; work; income and pensions; and aspects of the dwelling and consumer durables. The total completed interviews by city were as follows: Barbados (1812), Buenos Aires (1039), Habana (1905), Mexico City (1247), Montevideo (1444), Santiago (1301), Sao Paulo (2143).

Preliminary Results

We have completed preliminary analysis of the second part of the paper, the socioeconomic covariates of self-reported health. There is wide variation in the distribution of health, and this can be due largely to the age structure differences across the seven samples. We estimate a regression model using self-reported good or better health as the dependent variable, and using age, sex, marital status, education, socioeconomic status, and living arrangements as the main socioeconomic factors. We first examine the regression results to compare the association with health of these covariates across the seven SABE cities. We then use the estimated regression model to calculate the probability of reporting good or better health for a prototypical person in the seven cities.

As the dependent variable, we use a dummy variable of self-reported good health, classifying as good health as those who report good, very good, or excellent health. We include dummy variables that define categories of age, sex-marital status, education, socioeconomic status, and living arrangements. For age, we contruct three categories: 60-64, 65-74, and 75 or more. We define dummy variables that include the combination of sex and marital status: married men, single men, widowed men, married women, single women, and widowed women. In the categories of married, we include married and in-

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[2] For more information on the nature of the samples see Palloni and Pelaez 2002.

consensual union; and in the single category we include never-married, separated and divorced women. For education, we form three groups: 0-2 years, 3-6 years, and 7 or more years of formal education. For the socioeconomic status, we construct three groups (low medium and high), according to a simple index based on consumer durables in the household. For living arrangements, we construct three categories: living alone, living in a nuclear family (with spouse, children, or spouse and children only), and living in an extended family.

The findings show that the association of the main covariates with health varies across the countries in SABE. Controlling for age, sex, marital status, education, and residential arrangements, the association of socioeconomic level (SES) with self-reported health is positive in all cities, but this is true only for those in the highest SES category. Compared to those with *low SES*, the increase in the probability of reporting good health associated with *high SES* ranges from 0.09 for Havana, around 0.12 for Buenos Aires and Mexico City, 0.17 for Bridgetown, Montevideo and Santiago, and 0.21 for Sao Paulo.

Holding the other factors constant, the association between age and health is limited, significant only for two of the cities (Bridgetown and Sao Paulo). For Bridgetown, being 65-74 is associated with a *lower* probability of good health by 0.09, compared to those of age 60-64. On the other hand, being 75 years old or older is associated with a *lower* probability of good health by 0.20. Controlling for the other factors in the model, the gender gap in health is found in five of the seven cities (the exceptions are Montevideo and Sao Paulo). Within these five cities, compared to married men, widowed women have a lower probability of reporting good health by around 0.10 in four of the cities, whereas single women have a lower propensity to report good health by around 0.12 in three of these cities. Widowed men report better health than married men only in Montevideo and Sao Paulo.

In order to facilitate comparisons across countries, the probability of reporting good or better health by the same prototypical person is estimated for the seven cities. For the purposes of illustration, we define the *prototypical person* as a woman, age 65-74, with low-education, low socioeconomic status, and residing in an extended household. The estimated probability of reporting good health by this prototypical person ranges from 0.20 for Mexico City to 0.48 for Montevideo. The paper describes and discusses these results in more detail, incorporating the differences in the social and institutional context represented by the countries. In addition, we estimate a regression model that controls for unobserved heterogeneity across the countries, by pooling the seven samples and adding country-specific terms and interactions in the model.

The full paper is organized as follows: we first present a summary of the literature on self-reported health and health covariates across developed and developing countries. Next, we presents results of the association of self-reported health with an array of health dimensions (chronic conditions, functionality, and others mentioned above), and the multivariate analyses of self-reported health with socioeconomic covariates. We draw conclusions based on the cross-national comparisons as well as from the country-specific results.