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Original article

Sociodemographic profile and health condition of elderly patients attended at a community primary health center

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ABSTRACT

Background/Purpose: The world has gradually been turning eyes to the elderly population due to the increased life expectancy. This study aimed to trace the sociodemographic profile and to analyze health conditions among elderly individuals.
Methods: A transversal retrospective study was performed. Data were obtained using an administered questionnaire on sociodemographic and clinical features, diseases reported by the studied population, daily activities, and laboratory test results gathered from patients' medical records.
Results: In this study, 66.2% of the total patients were female; 74% had 4 years of primary education with a family income of up to three Brazilian minimum wages; 64.6% were retired; 27.8% had one or more morbidities. As much as 33.4% of the patients showed no difficulty in performing daily activities.
Conclusion: Understanding the profile of the senior population is of utmost importance so that public health programs may be carried out to meet the needs of these individuals.

1. Introduction

The World Health Organization classifies the age of the elderly population according to the country's socioeconomic level. In developing countries, people are considered elderly from the age of 60 years, whereas in developed countries, it is from the age of 65 years.[1] In 2012, the world's senior population represented 810 million people, accounting for 11.5% of the global population, and this number is expected to exceed 2 billion by 2050.[2,3]

In Brazil, the drop in mortality rates in the beginning of the 40s, along with the reduction of fertility rates by the end of the 60s, triggered the process of age-structure transition, resulting in an increase of the elderly population from 3.1% in 1970 to 5.5% in 2000. By contrast, the rate of children younger than 5 years was reduced from 15% to 11% over the same period.[4] In 2011, the elderly population totaled 23.5 million in Brazil, and the number of children up to 4 years of age dropped to 13.3 million.[2]

This change in age structure has made the existing scenario rather more complex. In addition to the general lack of resources, there are two age groups, namely, young and old, that demand specific programs and public fund support as well as ability, management, creativity, and innovation capacity to administer scarcity from the part of managers.[2]

Population aging can be translated as a higher burden of diseases, a higher number of incapacities, and an increased use of health services. Hospitalizations are more frequent and bed occupancy rate is higher than in other age groups.[5]

The implicit risk of hospitalizations can be irreparable. A major incidence of depression, malnutrition, reduction in cognitive and functional ability, along with the development of other comorbidities, can be observed in this population group.[6]

However, chronic diseases and their impairments are not inevitable consequences of aging. Effective prevention can take place no matter at what stage of life an individual is in.[5] Brazilian senior citizens fear violence and lack of medical assistance and hospitals, and they have to live on low pensions with few leisure options.[7]

During the aging process, several anatomic and functional alterations occur. Many of these changes are gradual, and reductions

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in the functional ability, from the sensitivity to primary tastes to metabolic processes in the body, can be observed. Such alterations have an impact on the health condition and nutritional status of the elderly population, making them prone to malnutrition or nutritional deficiencies.[7]

Another aspect to be considered is that aging may bring about alterations and issues that progressively interfere with the functional condition, which varies from one individual to another.[8] As a result, not only are changes noted in elderly patients anatomical and functional alterations, but also in their functional ability in their daily activities.[9,10]

Functional ability can be defined as the potential that individuals have to decide and act independently in their day-by-day activities. By contrast, *functional disability* is generally measured by reports on the need for help or difficulties in performing daily activities no matter how simple or complex they might be.[9]

Functional ability tests provide information that outlines the profile of elderly individuals, allowing health professionals to establish health-promoting strategies among this population so that their disabilities can be prevented or delayed, and their lives can be extended with quality and dignity.[8]

Functional ability has been introduced as a new concept to instrumentalize and operationalize health care to the elderly population.[10] Therefore, preventive, assisting, and rehabilitating actions must be taken to improve, or at least keep the integrity of functional ability, so that senior individuals may qualitatively live their lives.

One of the possible ways to ensure this quality of life is to focus on the health conditions of the elderly populations to provide them with the means to keep their autonomy as long as possible.[9]

Based on what was identified so far, the aim of this study is to characterize the profile of elderly patients attended at a Community Primary Health Center in Santo André, São Paulo, Brazil, by tracing their sociodemographic profile, classifying their daily activity schedule, and analyzing laboratory test results and the incidence of pathologies.

2. Methods

This is a transversal retrospective study carried out with an elderly population attending a Community Primary Health Center in the municipality of Santo André, São Paulo, Brazil.

The studied population included 795 elderly patients of both sexes aged 60 years or older. Data were collected from January 2014 to December 2014 for a period of 12 months. The study inclusion criteria were as follows: patients of both sexes from Santo André Health Center aged 60 years or older, with or without pathologies, and voluntarily willing to participate. We excluded those who did not fit in the inclusion criteria, improperly filled out the form used for data collection, or left it incomplete.

The trial was approved by the Research Ethics Committee of the Faculdade de Medicina do ABC (ABC Medical School, São Paulo, Brazil) under the number 214/2010. All the information to be used in the study was obtained from medical records according to the form that senior patients had to fill out during their first medical visit. The forms aimed to characterize the study population, and they were provided by the nursing staff from the Primary Health Center.

Data such as age, highest level of education attained, occupation, coresidents (if any), household income on minimum wages basis, and financial self-sufficiency were collected to evaluate the sociodemographic profile. Other data such as pathologies reported by the studied population, results of laboratory tests carried out during the first visit (hemogram, glucose, B_{12} vitamin level, uric acid, T_3, T_4, thyroid-stimulating hormone, total cholesterol, and fractions), and functional ability evaluation were used to analyze health conditions.

To evaluate functional ability, the Katz's questionnaire was used.[10] It was an adapted version related to the daily activities performed by the patients. Questions included the levels of difficulty patients found in performing the following daily tasks: lying down or getting up from bed, eating, brushing their hair, walking on flat surfaces, taking a shower, getting dressed, going to the bathroom on time, going up stairs, taking medication on time, taking walks near home, shopping, preparing meals, trimming their toenails, using public means of transportation, and performing household chores.

The reference values shown in Table 1 were used for the evaluation of laboratory test results. All the data were tabulated and analyzed using Epi Info 6.0.

Association tests with quantitative and qualitative variables were performed using the mean difference test and the Chi-square test (parametric), respectively. Only results with statistical significance were demonstrated. The outcome variable was defined as the presence or absence of pathologies.

Table 1
Reference values of laboratory tests.

Laboratory test	Reference values	
	Males	Females
Hemoglobin (g/dL)	>13	>12
Platelets (mm^3)	150–400	150–400
Glucose (g/dL)	70–99	70–99
Total cholesterol (g/dL)	120–200	120–200
Low-density lipoprotein (g/dL)	<150	<150
High-density lipoprotein (g/dL)	>35	>35
Triglycerides (g/dL)	50–150	50–150

3. Results and discussion

A total of 765 elderly patients were attending the Community Primary Health Center. Data on sex distribution and socioeconomic situation of the study population are presented in Table 2.

Table 2
Distribution of sex and socioeconomic conditions of elderly individuals attended at the ABC Community Primary Health Center in Santo André, São Paulo, Brazil, 2009.

Variable	N[a]	%
Sex		
Male	285	37.3
Female	476	66.2
Educational level		
Up to 4 y	566	74
≥5 y	181	23.6
Family income (minimum wage)		
>10	19	2.5
4–10	110	14.4
1–3	538	70.3
<1	25	9.5
Retired		
Yes	494	64.6
No	240	31.4
Health issues		
No	545	71.2
Yes	213	27.8
Financial self-support		
Yes	393	51.4
No	295	38.6
Income earner		
Yes	456	59.6
No	263	34.4
Total	765	100

[a] Ignored data were excluded.