




Self-perception and health conditions of a population assisted in an elderly caregiver program in the city of São Paulo

Autopercepção e condições de saúde de uma população assistida em um programa acompanhante de idoso do município de São Paulo

Autopercepción y condiciones de salud de una población asistida en un programa acompañante de ancianos de la municipalidad de São Paulo

Camila Chagas de Lima* 
Débora Manzano Nogueira** 
Ana Claudia Fiorini* 

Abstract

Objective: Evaluate self-perception and health conditions in elderly population assisted in an Elderly Companion Program (PAI, according to its acronym in Portuguese) in the city of São Paulo. **Method:** Observational study of quantitative approach with the use of secondary data. The sample of 41 elderly people came from the PAI database of a Primary Care Unit, in São Paulo, through the application of the Multidimensional Assessment of the Elderly Person in Primary Care (AMPI / AB, according to its acronym in Portuguese). The information corresponds to the following health parameters of the elderly: age, health self-perception, family arrangement, chronic health conditions, medications,

* Pontifícia Universidade Católica de São Paulo (PUC-SP), São Paulo, SP, Brazil.

** Prefeitura Municipal de São Paulo, São Paulo, SP, Brazil.

Authors' contributions:

CCL: Study conception, methodology, data collection and analysis, and general and final writing of the study.

DMN: Data analysis, and general and final writing of the study.

ACF: Study conception, methodology, general and final writing of the study and guidance.

Correspondence email address: Camila Chagas de Lima - camilachagas47@hotmail.com

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hospitalizations, falls, vision, hearing, physical limitation, cognition, mood, basic activities of daily living, instrumental activities of daily living, incontinence, unintended weight loss and oral conditions. **Results:** Predominance of females, white race, and average age of 81.53 years. Most of the subjects referred to regular, poor or very poor self-perception, living accompanied, having three or more chronic health conditions, using five or more medications per day, absence of hospitalization or falls in the last twelve months, visual and hearing difficulties, absence of physical limitations, worsening of memory in the last year, independence on basic activities of daily living and dependence on instrumental activities of daily living and, still, absence of incontinence, unintended weight loss and oral alterations. As for AMPI / AB classifications, most of the elderly were in the “Pre-fragile” group (51.3%), followed by “Fragile” (39%) and “Healthy” (9.7%). Associations of the “Fragile” group were observed with hearing problems and episodes of forgetfulness. There was a correlation between age increasing and worsening in the result of AMPI/AB. **Conclusion:** Predominance of negative self-perception of health, high occurrence of chronic diseases - especially hypertension - and dependence on subjects to perform instrumental activities of daily living. Fragile elderly people reported more hearing difficulties and forgetfulness episodes. There’s a trend of greater health impairment as the age increases.

Keywords: Health Services for the Aged; Health Profile; Aged; Unified Health System; Health Surveys.

Resumo

Objetivo: Avaliar a autopercepção e as condições de saúde em idosos assistidos em um Programa Acompanhante do Idoso (PAI) do Município de São Paulo. **Método:** Estudo observacional de abordagem quantitativa, com uso de dados secundários. Foram sujeitos desta pesquisa 41 idosos cujos dados da Avaliação Multidimensional da Pessoa Idosa na Atenção Básica (AMPI/AB) constavam em banco de dados do referido PAI. As informações correspondem aos seguintes parâmetros de saúde da pessoa idosa: idade, autopercepção de saúde, arranjo familiar, condições crônicas de saúde, medicamentos, internações, quedas, visão, audição, limitação física, cognição, humor, atividades básicas de vida diária, atividades instrumentais de vida diária, incontinência, perda de peso não intencional e condições bucais. **Resultados:** Predominância do sexo feminino, raça branca e média de idade de 81,53 anos. A maioria dos sujeitos referiu autopercepção regular, ruim ou muito ruim de saúde; morar acompanhados; possuir três ou mais condições crônicas de saúde, utilizar cinco ou mais fármacos ao dia, ausência de internação ou quedas nos últimos doze meses, possuir dificuldades visuais e auditivas, não possuir limitações físicas, piora na memória no último ano, alterações de humor, independência nas atividades básicas de vida diária e dependência nas atividades instrumentais de vida diária e, ainda, ausência de incontinência, de perda de peso não intencional e de alterações bucais. Quanto às classificações da AMPI/AB, a maioria dos idosos ficou na categoria “Pré-frágil” (51,3%), seguida de “Frágil” (39%) e “Saudável” (9,7%). Foram observadas associações da categoria “Frágil” com problemas auditivos e episódios de esquecimentos. Houve correlação entre aumento de idade e piora no resultado da AMPI/AB. **Conclusão:** Predomínio de autopercepção negativa da saúde, alta ocorrência de doenças crônicas - principalmente a hipertensão - e dependência dos sujeitos para realizar atividades instrumentais de vida diária. Idosos frágeis relataram mais dificuldades auditivas e episódios de esquecimentos. Há uma tendência de maiores acometimentos na saúde conforme o aumento da idade.

Palavras-chave: Serviços de Saúde Para Idosos; Perfil de Saúde; Idosos; Sistema Único de Saúde; Inquéritos Epidemiológicos.

Resumen

Objetivo: Valorar la autopercepción y las condiciones de salud de ancianos asistidos en un Programa Acompañante de Ancianos (PAI, por sus siglas en portugués) de la municipalidad de São Paulo. **Método:** Estudio observacional de abordaje cuantitativo, utilizando datos secundarios. Fueron sujetos de esta investigación 41 ancianos cuyos datos de la Evaluación Multidimensional de la Persona Anciana en la Atención Básica (AMPI/AB, por sus siglas en portugués) constaban

en el banco de datos del PAI mencionado. Las informaciones corresponden a los siguientes parámetros de salud de la persona anciana: edad, autopercepción de salud, circunstancias familiares, condiciones crónicas de salud, medicamentos, internaciones, caídas, visión, audición, limitaciones físicas, cognición, humor, actividades básicas de la vida cotidiana, actividades instrumentales de la vida cotidiana, incontinencia, pérdida de peso no intencional y condiciones bucales. **Resultados:** Predominancia del sexo femenino, raza blanca y promedio de edad de 81,53 años. La mayoría de los sujetos relató autopercepción regular, mala o muy mala de salud; vivir acompañados; poseer tres o más condiciones crónicas de salud; utilizar cinco o más fármacos por día; ausencia de internación o caídas en los últimos doce meses; poseer dificultades visuales y auditivas; no poseer limitaciones físicas; empeoramiento de la memoria en el último año; alteraciones de humor; independencia en las actividades básicas de vida cotidiana y dependencia en las actividades instrumentales de vida cotidiana; y, además, ausencia de incontinencia, de pérdida de peso no intencional y de alteraciones bucales. En relación con las clasificaciones de la AMPI/AB, la mayoría de los ancianos se encuadra en la categoría “Pre frágil” (51,3%), luego de “Frágil” (39%) y “Saludable” (9,7%). Se observaron asociaciones de la categoría “Frágil” con problemas auditivos y episodios de olvidos. Hubo correlación entre el aumento de edad y empeoramiento del resultado de la AMPI/AB. **Conclusión:** Predominio de autopercepción negativa de la salud, alto registro de enfermedades crónicas - principalmente la hipertensión - y dependencia de los sujetos para realizar actividades instrumentales de vida cotidiana. Ancianos frágiles relataron más dificultades auditivas y episodios de olvidos. Existe una tendencia de mayores problemas de salud de acuerdo con el aumento de la edad.

Palabras clave: Servicios de Salud para Ancianos; Perfil de Salud; Anciano; Sistema Único de Salud; Encuestas Epidemiológicas.

Introduction

There has been a significant increase in life expectancy in Brazil in recent times so that, according to data from the Brazilian Institute of Geography and Statistics (IBGE), a quarter of the Brazilian population is expected to be over 60 in 2046¹. According to official data, around 1.7 million individuals aged 60 years or more lived in the city of São Paulo in 2019, that is, 15% of the city's population².

As a progressive event in human development, aging causes a reduction in the rapid response to stimuli, resulting in the vulnerability of the elderly population.³ Awareness of this issue is essential for the development of actions to promote and protect health, mainly with the objective of preventing diseases and/or avoiding worsening. In addition to increasing autonomy and independence in the aging process, such actions result in positive impacts on the health and well-being of the elderly person's daily life⁴.

However, it should be noted that the gradual increase in the elderly population increases the demand for the application of public policies aimed at this population. Demographic and epidemiological changes in the population, such as the increase

in morbidity and mortality profiles, according to the reported growth in the occurrence of chronic degenerative diseases, have a great impact on public health⁵.

The guidelines of public policies for the elderly population have strategies that aim to ensure conditions of autonomy, integration and effective participation in society, reaffirming the right of this population to life, health and dignity⁶. Since 2008, there is the Technical Health Area for the Elderly of the Municipal Health Department of São Paulo, which aims to promote, protect, recover and rehabilitate the health of the elderly based on the services of the municipal health network, integrated into the Health Care Network for the Elderly (RASPI). Services performed in specialized equipment for this population include the Elderly Companion Program (PAI, which in Portuguese also makes an association with the word “pai”, which means “father”).⁷

The Health Care Network for the Elderly (RASPI) aims to ensure the promotion and complete health care of the elderly in Primary Care, establishing an integrated system between the Primary Health Units (UBS), the Reference Centers for Elderly Health (URSI) and other services provided in the network.

In turn, the Elderly Companion Program promotes home and psychosocial care for the elderly who are dependent, socially vulnerable and/or have some difficulty in accessing the health system. The elderly are monitored by a team that includes the coordinator, physician, nurse, nursing assistants/technicians, administrative assistants and caregivers for the elderly. All these professionals are involved in order to support the Activities of Daily Living and meet the pathophysiological and social needs of the elderly⁷.

The Primary Health Units are responsible for evaluating the functional behavior of the elderly through the Multidimensional Assessment of the Elderly in Primary Care (AMPI/AB), which is a questionnaire with 17 parameters in which the elderly report their self-perception of health⁸. The result obtained in this assessment (AMPI/AB) is a mandatory criterion for the referral of the elderly to the PAI, which is a program aimed at people over 60 in a situation of clinical frailty, social vulnerability, isolation or social exclusion due to insufficient family or social support. Despite being a service that normally does not have vacancies in a particular Primary Health Unit, the PAI is a reference for any elderly registered in a UBS in the territory covered delimited by the Health Coordination.

The use of self-perception health instruments aims to identify the individual's actual health status at the time of its application. The information can be understood as a representation of objective health assessments, mainly due to their relationship with functional decline^{4,9}. In general, people with a worse self-perceived health status are at greater risk for adverse events, such as illnesses and even death, when compared to those who report very good or excellent health status⁹.

The progress of public policies for the elderly stands out for proposing guidelines that meet the needs of this population and the regulation process of such policies must adequately meet the demands, following the pace of population aging. In this sense, although the Brazilian legislation regarding the care of the elderly population is quite developed and its forms of protection are changing, the practice is still understood as unsatisfactory, and requires more articulated and comprehensive actions¹⁰.

In this scenario, it is increasingly relevant to carry out studies aimed at the Brazilian elderly population, in order to know the health conditions

and seek necessary and appropriate action strategies for this population. Raising awareness about the elderly population's self-perception of health is essential for planning the journey in the Health Care Network (RAS) and preparing a Singular Therapeutic Project (PTS) that really meets the needs of each individual. Thus, these scientific investigations allow discussing, deepening and disseminating actions and interventions in collective health and public policies.

Therefore, this study aimed to assess self-perception and health conditions in elderly people assisted in an Elderly Companion Program in the city of São Paulo.

Method

This is an observational study with a quantitative approach, including the use of secondary data. The data included in this study refer to elderly people who participated in the Elderly Companion Program (PAI), in an Integrated AMA-UBS at Ipiranga, Southeast Health Coordination of São Paulo, in 2018 and 2019. This study was approved by the Municipal Health School – Southeast Region of the Municipal Health Department of São Paulo and was approved by the Research Ethics Committee (Plataforma Brasil) of the Universidade Federal de São Paulo, under No. 0879/2019.

All elderly people registered in the database were invited to participate in the study, but, after clarifying the use only of the information already collected, only those who agreed and signed the Informed Consent Form (ICF) were enrolled in the study. Although there were 120 elderly people registered in the database between 2018 and 2019, there were limitations in obtaining signatures to the ICF, as many elderly people had difficulty reading and writing and also had doubts on the objectives and methods of the study. Thus, the sample of this research consisted of 41 elderly people (34.2% of the total) who agreed to make the data available and signed the ICF.

The Integrated AMA-UBS selected to be the study center is one of the internship fields in the university's health courses. Since 2016, this institution has developed activities aimed at promoting and protecting the health of the elderly, in line with the guiding documents of national and municipal public policies. This study used self-perceived health data obtained through the application of the

AMPI/AB⁸, which is a multidimensional functional tracking instrument recommended in the protocol suggested by the National Policy for the Elderly, proposed in Booklet 19 of Primary Care: Aging and Health of the Elderly¹¹.

This instrument is organized into 17 parameters, namely: age, self-perception of health, family arrangement, chronic conditions, medications, hospitalizations, falls, vision, hearing, physical limitation, cognition, mood, basic Activities of Daily Living (BADL), Instrumental Activities of Daily Living (IADL), incontinence, unintentional weight loss and oral conditions⁸. The answers to the questions in each of the parameters can have a score of “0” (when the answer is negative for the presence of health problems), “1” (positive answers) and “2” (in the presence of more than one health problem)^{8,11}. Thus, the result of this assessment is based on the sum of the scores for each of the parameters to generate a final score with the following classification: healthy elderly (0-5 points), pre-frail (6-10 points) or frail (>11 points). In this context, the higher the score, the greater the need for attention and care. The results obtained in AMPI/AB are essential to refer the elderly to specialized services, if necessary¹¹. According to the guiding document of the municipal government, only elderly people classified as “healthy” or “pre-frail” can apply for the PAI. However, it should be noted that the AMPI/AB must be applied annually and therefore the score may change from year to year. Thus, the systematic analysis of these results can provide important data for case discussions and decision-making.

All data collected for the study were entered into an Excel spreadsheet to later generate a database for analysis and, after checking the consistency of the data, the database was transferred to the Statistical Package for Social Sciences (SPSS) v.20. At first, the results were analyzed according to the simple frequency distribution for all instrument variables.

In turn, the Chi-Squared test for homogeneity was applied for the association analyses, using the AMPI/AB classification as the main outcome into two groups, namely: (a) Healthy + Pre-frail; and (b) Frail. The researchers decided to use the categories “Healthy + Pre-frail”, as only the elderly with this classification should be referred to the PAI. However, as the classification may undergo changes over time, the technical team must evaluate the

changes to decide on the patient’s continuity in the Program, or the need for other referrals in the health network. Thus, a continued analysis is essential both for the service and to ensure comprehensive care for the elderly. Then, variables were selected for associations with the main outcome, namely: age, gender, self-perception of health, presence of diseases, vision and hearing impairments, report of forgetfulness episodes, need for help in activities of daily living and episodes of falls.

Furthermore, as the variables did not have a normal distribution, Spearman’s rank correlation coefficient was used for the correlation analysis, which measures the degree of association of the variables. Thus, correlations that had $p \leq 0.05$ and a moderate or strong degree of correlation were considered statistically significant correlations. The study adopted a significance level of 5% for each test.

Results

The sample consisted of 41 elderly people aged 62 to 95 years (mean age of 81.53 and standard deviation of 8.39 years), with a predominance of females (n=29; 70.7%) and self-reported white (n=18; 43.9%) race, followed by mixed (n=12; 29.3%). Regarding the territory of residence of the elderly, 51.2% (n=21) individuals were referred by the UBS and 48.8% (n=20) from other Primary Health Units in the territory. When asked about the family arrangement variable, the vast majority of the elderly reported living with others (n=32; 78%).

Regarding self-rated health, the instrument includes the following question: “In general, compared to other people of your age, would you say that your health is...”, with the following answer alternatives: “very good/good” (no score in the final score) and “fair/poor/very poor” (one point in the final score). In total, 19 elderly people (46.3%) selected the category “very good/good”, while 22 (53.7%) answered that their health was in the category “fair/poor/very poor”.

As for chronic health conditions, 25 elderly (61%) reported three or more chronic diseases, with hypertension as the most frequent (n=38; 92.7%), followed by chronic pain (n=13; 31.7%), diabetes (n=11; 26.8%) and vascular diseases (n=9; 22%). Although 65.8% of respondents (n=27) reported using five or more drugs daily in the medication parameter, most participants had not been hospital-

ized in the last twelve months (n=33; 80.5%). Data referring to the number of falls in the last 12 months found that 28 elderly (68.3%) had no episode, while seven (17%) had only one episode and six (14.7%) had two or more episodes of falls.

Of the total, 58.5% (n=24) of the subjects reported vision problems and 51.2% (n=21) reported hearing difficulties. As for the parameter related to physical limitations, the questions are related to motor coordination and mobility of the lower and upper limbs (touching the back of the head with both hands, picking up and returning an object to the table, walking 400 meters and sitting down and standing up). Most answers to questions related to upper limb functions denied the presence of difficulties (more than 85% of the total). However, there was a greater report of difficulty in sitting and standing (n=25; 36.5%), as well as in walking (n=26; 39%).

Regarding cognition, 21 (51.2%) elderly people reported that relatives and friends complained of forgetfulness episodes, with nine (21.9%) individuals believing that their condition was worsening and seven (17.1%) felt limited by this issue. In the mood parameter, 61% (n=25) of the elderly reported discouragement, sadness or hopelessness in the last month.

Overall, the 41 elderly participants reported independence in the Basic Activities of Daily Liv-

ing parameter, especially in actions such as getting out of bed and eating. Only six (14.6%) participants reported some difficulties in taking a shower and five (12.2%) in getting dressed. However, for Instrumental Activities of Daily Living (IADL), 29 (70.7%) individuals required some help to carry out activities outside the home and 24 (58.5%) reported that they needed help to deal with money when paying accounts, checking change and going to the bank, among others.

In the parameter presence of urinary incontinence, there was an occurrence report of 31.7% (n=13), while unintentional weight loss was reported by 11 elderly people (26.8%). Regarding the oral conditions of these elderly people, the results showed the following distribution: 16 (39%) reported using poorly fitted dentures, 12 (29.3%) had chewing problems, eight (19.5%) had difficulties in swallowing and 13 (31.7%) reported having stopped eating some food due to these issues.

Table 1 shows the distribution of the final AMPI classification, obtained from the sum of all parameters. Thus, it is possible to notice that most participants were classified as “Pre-frail” elderly with scores from six to ten points (n=21; 51.3%). The result with the lowest occurrence was the classification as “Healthy” (n=4; 9.7%).

Table 1. Distribution of classifications and variables in relation to the total AMPI score

AMPI Total	n	%
Healthy Elderly 0 – 5 points	4	9.7
Pre-frail Elderly 6 – 10 points	21	51.3
Frail Elderly ≥ 11 points	16	39

According to the established statistical analysis plan, the main outcome used was the AMPI/AB classification into two groups: “Healthy + Pre-frail” and “Frail”. The Chi-Squared test for homogeneity was used to verify the associations of the outcome with each of the AMPI/AB parameters, as qualitative variables. Table 2 shows the main results, in

addition to the association of the main outcome with the presence of hearing problems (p=0.015) and forgetfulness episodes (p=0.002). Thus, both the proportion of elderly people with hearing problems and reports of forgetfulness episodes were higher in the “Frail” category.

Table 2. Variable frequency distribution in relation to AMPI classification.

	HEALTHY AND PRE-FRAIL (n=25)	FRAIL (n=16)	P-VALUE (χ^2)
Age, % (n)			
60-69 years	48.00 (12)	37.50 (6)	0.509
80 years or more	52.00 (13)	62.50 (10)	
Gender, % (n)			
Male	40.00 (10)	12.50 (2)	0.059
Female	60.00 (15)	87.50 (14)	
Health, % (n)			
Very good/good	56.00 (14)	31.25 (5)	0.121
Regular/poor/very poor	44.00 (11)	68.75 (11)	
Illnesses, % (n)			
One or two	48.00 (12)	25.00 (4)	0.141
Three or more	52.00 (13)	75.00 (12)	
Visual impairment, % (n)			
No	48.00 (12)	31.25 (5)	0.288
Yes	52.00 (13)	68.75 (11)	
Hearing impairment, % (n)			
No	64.00 (16)	25.00 (4)	0.015*
Yes	36.00 (9)	75.00 (12)	
Report of forgetfulness, % (n)			
No	68.00 (17)	18.75 (3)	0.002*
Yes	32.00 (8)	81.25 (13)	
Need help with tasks, % (n)			
No	48.00 (12)	31.25 (5)	0.288
Yes	52.00 (13)	68.75 (11)	
Falls, % (n)			
No episode	70.00 (19)	56.25 (9)	0.185
One or more episodes	30.00 (6)	43.75 (7)	

*p ≤ 0,05

Finally, as shown in Table 3, Spearman's rank correlation coefficient was used to measure the degree of association of the variable age (in years) and AMPI/AB result as a quantitative variable (score value). This analysis showed a positive correlation

with statistical significance between the variables age and AMPI/AB score (p=0.038), which means that the older the age, the higher (worse) was the AMPI/AB result.

Table 3. Analysis of the correlation between "age" (in years) and "AMPI value" variables.

		Age	AMPI Value
Spearman's rank correlation coefficient	Age	Correlation coefficient	1.000
		Significance Level (Two-Tailed Test)	.
		n	41
	AMPI Value	Correlation coefficient	.326*
		Significance Level (Two-Tailed Test)	.038
		n	41

*. Significance Level at 0.05 (Two-Tailed Test)

Discussion

This study aimed to verify the health conditions of elderly people cared for in a PAI, using an instrument recommended in a national public policy. However, despite one of the objectives of AMPI/AB being the definition of possible referrals in the health care network, it is not common to use these data to monitor the evolution of cases. Throughout life, the elderly person who enters the Program classified as “Healthy” or “Pre-frail” may worsen their health condition and require different types of specialized assistance. Thus, the main focus of this study is to reflect on how health professionals use health assessment instruments and, mainly, how important longitudinal monitoring is to define the real and adequate journey of health care in the network. The variability of results over time should be seen as a warning to assess whether there is a worsening in the case that needs immediate management, or whether the instrument should only be a guide for epidemiological follow-up.

This study had a sample equivalent to 34.2% (n=41) of the 120 elderly people who were being assisted at the PAI. Despite the sample loss due to difficulties in obtaining the ICF for data transfer, the number of elderly people evaluated was sufficient to show the presence of variability in the AMPI/AB results, even in short time intervals. Although all patients enter the Program with results classified as “Healthy” or “Pre-frail”, the score can vary for both the best and the worst classification. Thus, it is essential to have initiatives to investigate which parameters seem to be more sensitive to modifying the results and what would be the best way to use the instrument.

This study found a predominance of women (70.7%) in the sample, which is line with the findings in previous studies carried out in São Paulo¹³ and in the Metropolitan Region of Belo Horizonte¹⁴. Having a majority of women in the elderly population is a relevant fact of the national demographic transition, since the average life expectancy of women is 7.2 years higher than that of men according to the 2015 Demographic Census¹⁵.

As for self-reported race, there was a greater occurrence of white race, followed by mixed race in both genders. Health surveys carried out among elderly citizens in São Paulo¹³ are in line with the results in this study, with a higher prevalence of white race, in both female and male elderly.

Similarly, when asked about the family arrangement, most elderly reported not living alone, which is also in line with previous health surveys. However, there is a trend of change regarding the current reality of this aspect, since IBGE data indicate that, there was an increase in the percentage of people aged 60 years and over who live alone (11.2% to 13.5%) between 1997 and 2007¹⁶. Regarding the elderly who live with others, a survey identified a large occurrence of this situation in certain regions of the country, such as in individuals living in the Southeast (46.72%), Northeast (26.61%) and South (15.38%) regions¹⁷.

The self-perception of health in the elderly population is an important tool to analyze the image that individuals have about their own health. In this study, most elderly people (53.7%), regardless of gender, reported their health status as fair, poor or very poor, which is in line with the findings of the study carried out with 535 elderly participants of the PAI in the South Regional Health Coordination of São Paulo¹⁸, in which 67.8% of respondents negatively self-assessed their health. However, the results of this study are worse than the results obtained in a research carried out with 157 elderly people in the State of Minas Gerais, in which 32.5% of the subjects reported negative self-perception of health¹⁹.

The negative self-perception of health of the elderly is associated with a higher risk of mortality, in addition to contributing to the development of a less healthy lifestyle²⁰. In contrast, the positive self-perception of health by the elderly can be understood as a protective factor against the decline in physical functioning in aging²¹.

As for chronic health conditions reported among the elderly in this study, all participants had at least one chronic disease, with the majority reporting the presence of three or more (61%). Likewise, studies carried out in Florianópolis-SC, and in Uberaba and Belo Horizonte, in the State of Minas Gerais, are in line with these findings, in which most of the participants had three or more chronic conditions^{14,22,23}. Thus, the presence of chronic diseases seems to be a common condition among the elderly in Brazil, as few studies report the opposite.

The most frequent morbidities in this study were arterial hypertension, chronic pain and diabetes, but it should be noted that, among chronic diseases, hypertension is the most common morbidity

in the elderly^{14,22-24}. In addition, other studies have also reported the occurrence of back pain, arthritis and joint disease^{14,22-24}. Only one study carried out in the Metropolitan Region of Belo Horizonte found data similar to the findings of this study, in which diabetes was reported as the third most frequent morbidity in the elderly population¹⁵. In addition, another study also carried out in the Metropolitan Region of Belo Horizonte reported arthritis as the third most frequent morbidity²⁵.

As for the amount of medication, most elderly people reported taking five or more medications a day (65.8%). This finding is also in line with another previous study that reported the presence of polypharmacy in the majority (58.1%) of the participants¹⁸. On the other hand, another study found that the elderly took an average of 3.63 medications daily, and females took more medications than males²⁶.

Regarding the variable hospitalizations in the last twelve months, only a minority of the elderly (19.2%) reported having been hospitalized in this period. These data are relatively similar to a study carried out in Minas Gerais¹⁴, in which 8.8% of the studied population reported hospitalization in the last twelve months. However, the findings are contrary to the results of a study carried out among the elderly population of the South Region²³, in which 92.2% of the elderly reported some type of hospitalization in the period.

When asked about episodes of falls in the last twelve months, 68.3% of the elderly reported that there had been no episodes in the period. The data presented in a study carried out in the capital of Santa Catarina are in line with this study, as only 17% reported having at least one episode of fall in the last year²³. Another study also reported the hypothesis of a lower occurrence of falls among the elderly, as 77% of the sample reported having had no episodes²⁴. However, a study carried out by Rosa et al.²⁷, which aimed to determine the sociodemographic and clinical-functional profiles of elderly people in relation to dizziness, reported that 74.5% of the subjects had a history of falls, but without a significant association with dizziness, and that 29.2% of the elderly with dizziness had fractures due to the fall.

Similarly to other studies^{15,21}, 58.5% of the elderly people interviewed in this study reported some visual difficulty. These difficulties may be associated with the aging process, as many studies

associate visual and hearing problems as a result of longevity²⁸.

Furthermore, 51.2% of the subjects reported some hearing difficulty, which is also in line with the findings of Andrade et al.¹⁸, whose study found 41.1% of the elderly people with reports of hearing difficulties. In turn, the study by Rosa et al.²⁷ showed that 36.7% of the subjects reported their own hearing as regular. Evidence shows that advanced age, male gender, difficulty leaving home and performing social activities are risk factors for increased hearing complaints; as well as less education, difficulty in accessing health care and non-participation in family income²⁹. In this study, the elderly classified as “Frail” had a significantly higher occurrence of hearing complaints, which shows the relevance of hearing health actions aimed at the elderly population.

Of the 41 interviewees in this study, 75.6% had some complication related to their physical condition that affected their daily activities, due to pain, muscle weakness and/or limited movement. The data obtained in this study are noteworthy, as chronic pain is the second highest self-reported morbidity by the elderly. A study carried out in 18 Brazilian capitals showed that the higher the age of the individual, the greater the percentage of impairment of physical conditions³⁰.

As for the results regarding the cognition parameter, 48.8% of the sample reported some episode of forgetfulness. This result corroborates the findings of previous studies, which found complaints of cognitive decline in about 45% of elderly subjects^{17,18}. There was a statistically significant association between the complaint of forgetting something and the classification as “frail”, which also highlights the importance of identifying the most frequent changes in the aging process.

This study found a statistically significant correlation between frailty and hearing difficulty, frailty and memory deficit, and frailty and age.

As for the mood parameter, the result of this study showed that 52.5% of the sample had some evidence of depression. However, these data are not in line with the results of the study carried out in Florianópolis, in which a minority claimed to have some evidence of depression¹⁷. This difference between the results may be associated with the way in which the self-assessment question was asked, as the approach method can differentiate the respondent's response.

The Basic Activities of Daily Living (BADL) were considered from four questions that encompass daily activities. The results showed that most subjects do not need help to perform these tasks, which may indicate certain independence for basic activities such as getting out of bed, taking a shower, dressing and eating. However, the results were different in the Instrumental Activities of Daily Living (IADL), as 64.6% of the elderly showed some degree of dependence for activities carried out outside their homes. Studies have reported that most elderly people have mild dependence on IADL, with a prevalence of disability in both sexes from 60 years of age onwards^{23,24}. A previous study showed an important contribution of cardiovascular diseases, such as brain strokes, as a source of disabilities in all domains, especially BADL. In turn, infarction/angina are more frequently related to disability in IADL and mobility, including when associated with diabetes and hypertension²⁵.

There were no results with a high occurrence of urinary and/or fecal incontinence. Similar results were found both in a study conducted in the State of Santa Catarina¹⁷, in which 62.7% of the elderly did not have urinary incontinence; and in a study in São Paulo, in which 58.7% of the participants reported not having this condition¹⁸.

The literature review did not find any self-reported studies regarding issues related to unintentional weight loss in the last year and oral conditions that could affect eating habits in the elderly. In this study, most elderly people did not lose weight, while a minority of participants had some change in their oral conditions.

As for the AMPI/AB classifications, most elderly were included in the “Pre-frail” category (51.3%), followed by “Frail” (39%) and “Healthy” (9.7%). It should be emphasized again that only elderly people with a “Healthy” or “Pre-frail” score can apply to the PAI, which once again shows that there is a tendency for health conditions to deteriorate with advancing age. In this study, the variables presence of hearing problems and episodes of forgetfulness were associated with the “Frail” score, suggesting that these conditions may be the reasons for the worsening of the AMPI/AB result for the elderly in the sample. In addition, there was also a correlation between advancing age and worsening in the AMPI/AB classification, which was expected considering that the mean age of the sample was 81.5 years.

This study allowed us to know the self-reference of the health conditions of the elderly who are cared for by the Elderly Companion Program of a Primary Health Unit in São Paulo. In this context, the relevance of periodically applying AMPI/AB in the elderly population must be understood, with special attention to the worsening of the results to guide the actions of the Elderly Companion Program (PAI).

Conclusion

This study found a predominance of negative self-perception of health, as well as a high occurrence of chronic diseases, especially hypertension, and subjects' dependence to perform instrumental activities of daily living. Frail elderly people reported more hearing difficulties and forgetfulness episodes, which is in line with a trend towards greater health problems with increasing age.

Given that there is a great possibility that the elderly are increasingly dependent on specialized health care, the results highlight the importance of using health surveys to guide the actions necessary to provide comprehensive health care for this population. Therefore, further actions are required for the health system to provide support for this population.

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