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CHARACTERISTICS OF THE POPULATION OF AN EXCELLENCE CENTER IN HEALTHCARE FOR THE ELDERLY

CARACTERÍSTICAS DA POPULAÇÃO USUÁRIA DO CENTRO DE REFERÊNCIA EM ATENDIMENTO À SAÚDE DA PESSOA IDOSA

POBLACIÓN DE UN CENTRO DE EXCELENCIA EN LA ATENCIÓN SANITARIA PARA LAS PERSONAS MAYORES

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ABSTRACT

Objective: describing the sociodemographic characteristics, functional capacity and cognitive profile of the elderly who are users of a clinic of an excellence center for healthcare of the elderly (CRASPI). **Method:** cross-sectional study by means of documental analysis of 110 elderly who receive care from CRASPI, in Recife/PE/Brazil. These users' medical files were surveyed to obtain sociodemographic variables and scores for daily life activities of (DLAs) and the Mini-Mental State Examination (MMSE). Was used descriptive statistics (mean, median, standard deviation and frequency distribution). The research project was approved by the Research Ethics Committee of the Oswaldo Cruz University Hospital/Emergency Hospital of Pernambuco, CAEE 0100.0.106.000-11. **Results:** most of these elderly individuals were females (72.73%), aged 70 to 79 years (47.62%) and widowed (41.35%), and had completed their elementary education (47.71%). **Conclusion:** these results provide knowledge about the population that is cared at CRASPI, thus contributing towards planning actions for disease prevention and health promotion among the elderly people. **Descriptors:** Aged; Health Profile; Demographic Aging; Health of the Elderly; Health Services for the Aged.

RESUMO

Objetivo: descrever as características sociodemográficas, a capacidade funcional e o perfil cognitivo dos idosos usuários do ambulatório de um Centro de Referência em Atendimento à Saúde da Pessoa Idosa (Craspi). **Método:** estudo descritivo de corte transversal, com análise documental nos prontuários de 110 idosos usuários de um Craspi, no Recife/PE/Brazil. Foi empregada a estatística descritiva (média, mediana, desvio-padrão e distribuição de frequências). O projeto de pesquisa foi aprovado pelo Comitê de Ética em Pesquisa do Hospital Universitário Oswaldo Cruz/Pronto Socorro Cardiológico de Pernambuco, CAEE 0100.0.106.000-11. **Resultados:** a maior parte dos idosos é do sexo feminino (72,73%), na faixa etária dos 70 a 79 anos (47,62%), viúvos (41,35%) e tinham o primeiro grau (47,71%). **Conclusão:** esses resultados propiciam um conhecimento sobre a população que é atendida no Craspi, contribuindo com o planejamento das ações de prevenção de morbidades e na promoção de saúde dos idosos. **Descritores:** Idoso; Perfil Epidemiológico; Envelhecimento da População; Saúde do Idoso; Serviços de Saúde para Idosos.

RESUMEN

Objetivo: describir las características sociodemográficas, la capacidad funcional y el perfil cognitivo de los ancianos usuarios del ambulatorio de un Centro de Referencia en Atención Sanitaria del Anciano (CRASPI). **Método:** se trata de un estudio de corte transversal realizada a través del análisis documental de los prontuarios de 110 ancianos do CRASPI, situado en Recife/PE/Brazil. Se utilizó estadística descriptiva (media, mediana, desviación estándar y distribución de frecuencia). El proyecto de investigación fue aprobado por el Comité Ético de Investigación del Hospital Universitario Oswaldo Cruz/Emergency Hospital de Pernambuco (CAEE 0100.0.106.000-11). **Resultado:** la mayor parte de los ancianos es del sexo femenino (72,73%), con edades entre los 70 y los 79 años (47,62%), viudos (41,35%) y tenían enseñanza primaria (47,71%). **Conclusión:** estos resultados propician un conocimiento sobre la población que atiende el CRASPI, contribuyendo con la planificación de las acciones de prevención de morbilidad y en el fomento de la salud de los ancianos. **Descriptores:** Anciano; Perfil de Salud; Envejecimiento de Lapoblación; Salud del Anciano; Servicios de Salud para Ancianos.

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INTRODUCTION

Nowadays, the aging population represents one of the most important challenges for the public health. It consists of a sociodemographic event that has political, economic and social repercussions for both the developed country and the developing ones.¹ According to World Health Organization (WHO) the individuals classified as elderly are the ones that are over 60 years old or more for the developing countries.²

It is known that the proportion of elderly has been growing in the world faster than it is observed in other group ages. For the period between 1970 and 2025, an increase of 223% in this population is expected, that is, it is estimated a total of 1.2 billion of elderly people. Until 2050 the expectation will be of two billion elderly, from which 80% will be in developing countries.²

In Brazil the process of the aging population occurs in a fast way.³ According to the demographic census of 2010 the number of elderly in the country was of 20,590,599.⁴ Projections for 2025 indicate that the elderly population will be superior to 30 million, with this, the country will be the sixth in the world in number of elderly.²

This aging causes important modifications in the profile of morbimortality of the population, resulting from chronic diseases and its consequences with the loss of autonomy and independency that imply in high expenses for any health system.^{3,5} The elderly used more the health services, their taxes of hospitalization and average time of permanence are more elevated than the other group ages.⁶ Although, the infrastructure of the health services is still precarious to take care of a specific demand of this population.⁷

Considering the necessities of the elderly health, the State Networks of Assistance to the Elderly Health were created, which are integrated by general hospitals and centers of excellence. The center of excellence must be part of the Health System (SUS) and provides specialized clinic care, hospital-day and home assistance. The clinic specialized in elderly health must provides individual care and in group to elders by a multiprofessional and interdisciplinary team.⁸

The Center of Excellence in Healthcare for the Elderly (Craspi), of the Hospital Universitário Oswaldo Cruz (HUOC) of the Universidade de Pernambuco has the objectives of providing geriatric and gerontological assistance, besides promoting

the research about the health of the elderly population in Pernambuco.

OBJECTIVE

- To describe the sociodemographic characteristics, the functional capacity and the cognitive profile of the elderly of a clinic in a Center of Excellence in Healthcare for the Elderly (Craspi).

METHOD

Transversal cohort study carried out in a clinic of geriatrics of a Center of Excellence in Healthcare for the Elderly (Craspi) of the HUOC of the Universidade de Pernambuco, located in the city of Recife (PE), the only one of the public state health system to have specific beds and is specialized in geriatrics that has more than 3.5 thousand elderly enrolled.

The studied population was composed of people with age equal or superior to 60 years old cared in the Craspi, in the period of January until December, 2010. The collection of the data was carried out from the general list of the elderly enrolled in the ambulatory during this year, and then, it was done the search in the records of these elders in the Department of Medical File of the HUOC. From the 194 elderly enrolled were excluded: four of them, because they were not present in the appointment at the geriatric ambulatory, three of them because the form was left blank, eighteen records were not found in the file and fifty-nine incomplete records with the information related to the daily life activities (DLA), constituting a sample of 110 elderly.

The search in the records occurred during the months of October and November, 2011. Sociodemographic variables were researched (sex, age, city of residence, marital status and education), self-referred morbidity, medication use, activities of daily life (ADL) and the evaluation of the Mini Mental State Examination (MMSE).

For the evaluation of the DLA the scale of Katz was used, which is composed of six items: taking shower, going to the toilet, transference, continence and feeding and aims to evaluate the degree of assistance require in these activities.⁹ For each positive response, that is, when the activity is done it is attributed one point. Thus, the maximum values reach six points. From six to five points means independence, from four to three means moderate dependence and two or less represents an important dependence.¹⁰

The Mini Mental State Examination (MMSE) translated and validated in Brazil was used for the evaluation of the cognitive capacity of the elderly.¹¹ It is related to a brief cognitive study composed of items related to the dimensions of concentration, language, time spatial orientation, memory and attention, having as a maximum score 30 points. Considering that the level of education has an influence in the performance of the test, it is necessary to establish cutoff points that respect education.¹² The following cutoff points were considered: 13 or less for illiterate elderly; 18 for elementary education (one to four years of incomplete study) and average education (four to eight years of incomplete study) and 26 for high education (more than eight years of study).¹¹ A higher score obtained in the test represents a preserved cognitive function.

All the information was registered in a form elaborated for the study, which was filled in from the records. The information obtained was encoded and typed with double data entry for validation (VALIDATE), automated checking and analysis of inconsistency, aiming to reduce possible mistakes, using the program EpiInfo version 6.04d (Centers for Disease Control and Prevention, Atlanta, United States). With the data base structured, analyses were carried out in the version 7 of this program. The descriptive statistics was applied (mean, median, standard deviation and distribution of frequencies).

The research project was approved by the Committee of Ethics in Research of the Hospital Universitário Oswaldo Cruz/Pronto Socorro Cardiológico de Pernambuco (CAEE 0100.0.106.000-11).

RESULTS

The main sociodemographic characteristics of the elderly are presented in Table 1. There was the predominance of females (72.73%). The preponderant group age was 70-79 years old (n=50; 47.62%). The population researched varied from 60 to 92 years old, with an average of 72.06 years (dp=17.51) and mean of 75 years old. For females the average age was 73.83 years old (dp=14.13) and median of 75.50 years old. Males had an average age of 67.33 years old (dp=24.00) and median of 74.00 years old. About the marital status 41.35% of the elderly were widowed. In relation to education 47.71% completed elementary school and the illiterate were 24.77% of the cases. Most (96.33%) elderly resided in cities located in the Metropolitan Region of Recife (RMR), highlighting the cities of Recife (50.91%) and Olinda (24.55%).

From all the records researched (n=110) in 91 of them (82.73%) there were the elderly that were referred to other health services for the Craspi, seven (6.36%) were there for spontaneous demand and in 12 (10.91%) records this information was not filled in. Regarding the use of medication 91 (82.73%) elderly reported using one or more.

Table 1. Sociodemographic characteristics of the elderly cared in the ambulatory of geriatrics of the Craspi, Recife (PE), 2010

Variables	n	%
Sex [n=110]		
Male	30	27,27
Female	80	72,73
Group age [n=105 (a)] (years)		
60 - 69	24	22,86
70 - 79	50	47,62
≥ 80	31	29,52
Marital status [n=104 (b)]		
Single	18	17,31
Married	39	37,50
Divorced	4	3,85
Widowed	43	41,35
Education [n=109 (c)]		
Illiterate	27	24,77
Literate	16	14,68
Elementary school	52	47,71
High school	8	7,34
College	6	5,50
City of residence [n=109 (d)]		
Metropolitan Region of Recife	105	96,33
Other cities	4	3,67

Number/percentage of ignored: ^(a)5/4.55%; ^(b)6/5.45%; ^(c)1/0.91%; ^(d)1/0.91%

The group of diseases of the circulatory system responded as the main cause the morbidity reported by the elderly (n=81; 38.76%), highlighting the systemic

hypertension (n=74; 91.35%). The second group of problems most frequently seen were the diseases of the musculoskeletal system (n=37; 17.70%), in special the osteoarthritis

(n=22; 59.46%) and osteoporosis (n=12; 32.43%). Then it is the group composed of the metabolic diseases (n= 24; 11.48%), in which

the diabetes mellitus represents the main disease (n=20; 83.33%) as it was described in table 2.

Table 2. Morbidities reported by the elderly assisted in the ambulatory of geriatrics of Craspi, Recife (PE), 2010

Morbidity reported	n*	%
Circulatory system disease	81	38,76
Digestive system disease	4	1,91
Respiratory system disease	2	0,96
Nervous system disease	20	9,57
Musculoskeletal system disease	37	17,70
Ear disease	6	2,87
Disease of eyes and annexes	5	2,39
Endocrinal, nutritional and metabolic diseases	24	11,48
Neoplasia	3	1,44
Mental and behavior disorders	14	6,70
Others	2	0,96
Ignored	11	5,26
Total	209	100,00

*From the elderly researched many of them reported more than one morbidity.

According to the records analyzed, most of the elderly (69.09%) did not need assistance to perform the DLA. Approximately 95% (n=104) reported they fed themselves by their own, 78.18% (n=86) took shower without assistance, 85.45% (n=94) did not need assistance to lie down or stand up from the bed and go to the toilet and 87.27% (n=96) reported to have self-control of the bladder

and intestine. Dressing was the activity in which the elderly reported to have more the need of assistance (24.54%; n=27). The comparison of the DLA performance in relation to the genders did not reveal significant statistical difference. There was just one significant difference (p=0.05) on the item of lying down and standing up without assistance (Table 3).

Table 3. Elderly cared in the ambulatory of geriatrics of the Craspi according to the daily life activities (AVD), Recife (PE), 2010

Daily life activities	Female				Male				p
	Yes	No	Yes	No	Yes	No	Yes	No	
	n	%	n	%	n	%	n	%	
Shower without assistance	65	81,25	15	18,8	21	70,00	9	30,00	0,31
Feeding themselves without assistance	77	96,25	3	3,75	27	90,00	3	10,00	0,41
Getting dressed without assistance	63	78,75	17	21,3	20	66,67	10	33,33	0,19
Toilet without assistance	71	88,75	9	11,3	23	76,67	7	23,33	0,28
Lying down/standing up from bed without assistance	72	90,00	8	10,00	22	73,33	8	26,67	0,05
Bladder and intestine self-control	72	90,00	8	10,00	24	80,00	6	10,00	0,27

For the performance of all the DLA (Table 4) the average score reached by the elders was 5.3 (dp=1.32), varying from one to six. The 70-79 group age was the highest proportion of independent elders, with moderate and important dependence. In the analysis by sex, it is observed that females presented the greatest percentiles of

independence and moderate dependence (74.42% and 83.33%, respectively). The average female score was 5.41 (dp=1.33). On the other hand, males presented a higher percentile of severe dependence (55.56%; n=5). The average male score in the scale corresponded to 5.0 (dp=1.69).

Table 4. Elderly cared in the ambulatory of geriatrics of the Craspi according to the gender and group age by degree of dependence on the DLA, Recife (PE), 2010

Variables	Independence		Moderate dependence		Very dependent	
	n	%	n	%	n	%
Group age (in years)						
(n=102)						
60-69	21	26,58	2	16,67	1	12,50
70-79	37	46,84	6	50,00	5	62,50
≥ 80	24	30,38	4	33,33	2	25,00
Sex (n=107)						
Male	22	25,58	2	16,67	5	55,56
Female	64	74,42	10	83,33	4	44,44

The score of the MMSE varied from seven to 29 points, with an average of 19.30 points (dp=6.00). Regarding the genders it is observed that males had superior average scores compared to the women's, however

without significant difference. For the illiterates the average was 16.20 points (dp=5.47), for the elementary education was 18.81 (dp=5.79), 22.75 (dp=3.57) for the

secondary education and 25.66 (dp=3.22) for the post-secondary education.

Table 5. Descriptive statistics of the scores of the Mini Mental State Examination (MMES) according to education, gender and group age of the elderly cared in the ambulatory of geriatrics of the Craspi, Recife (PE), 2010.

Variables	n	Mean	Standard deviation	Minimum	Maximum
Education (n=100)					
	25	16,20	5,47	7	26
Illiterates	55	18,81	5,79	7	28
Elementary	8	22,75	3,57	16	28
Secondary	12	25,66	3,22	17	29
Post-secondary					
Sex (n=100)					
	25	20,68	5,69	12	28
Male	75	18,84	6,07	7	29
Female					
Group age (in years) (n=95)					
	22	21,95	4,84	10	28
60-69	46	19,43	5,79	7	29
70-79	27	17,92	5,99	7	28

DISCUSSION

In this study it was observed the higher frequency of females in the elderly population. Researches done in Spain and in Brazil have also identified similar results.¹³⁻¹⁵ Several factors are associated to this predominance of females, such as: differences in the exposure to risks (work, home and traffic accidents), smaller prevalence of smoking and use of alcoholic beverages, greater rates of male mortality and the use of health services are more frequent by women.¹⁶ The progressive increase in the female proportion in the elderly population consists of an important aspect for the planning of the local actions of assistance, for women present more health problems and feel less healthy.¹⁷

The average age of the elderly was 72.06 years old, too close to the life expectancy of Pernambuco (71.3 years old). Age is a factor strongly associated to the loss of functional capacity and the cognitive decrease.^{14,15}

The education level of the population studied was elementary (elementary degree) and almost 25% of the elderly were illiterates. Elementary education is considered a factor that limits the life quality, being a precise indicator of the socioeconomic level of a determined population, relating to the possibilities of access to work and consequently the income and use of the health services.¹⁸

The frequency of medication use was 82.73%. Researches of population base about the use of medication among elderly in the country reveal rates that vary from 72.3% in Carlos Barbosa city (RS) and 80.4% Campinas (SP), pointing out that the medication for the cardiovascular system as the most used.^{19,20}

In relation to the morbidity profile it was verified that the diseases of the circulatory system, highlighting the HAS, were the most

reported by the studied population. A systematic revision about the morbidity in elderly pointed out the cardiovascular diseases as the most common.²¹ In Brazil studies of population base also present similar results.^{17,22} The analysis of the hospital morbidity in elderly in the country, through the data of the Sistema de Informações Hospitalares (SIH/MS), revealed the predominance of the circulatory system diseases.²³

On the contrary, the analysis of the mortality tendency among the Brazilian elderly in the 1980-1996 period, indicates that the diseases of the circulatory system are the main cause of mortality; highlighting in this group the cerebrovascular diseases and the ischemic heart diseases. It is noteworthy that the predominance of this group of causes in the elderly mortality is so prominent that probably this one is still the main cause of mortality for a long period of time.²⁴

Several factors contribute to provoke the high indexes of circulatory system diseases, such as: socioeconomic, life style, social environment (including the educational and economic opportunities) and the access to health services. The reduction of morbidity by these diseases is feasible. Thus, the Health Ministry has been developing actions of risk factors monitoring (smoking; physical inactivity; inappropriate feeding; obesity; dyslipidemia; and alcohol use), besides the actions of health promotion.²⁵

The results of this study showed that most of the elderly did not need assistance for the DLA. Males presented a higher proportion of severe dependence in the 70-79 group age. Research carried out with the objective of identifying the profiles of functional capacity and health of the elderly in Brazil showed that they were independent in the DLA and presented a great difficulty in the movements.²⁶ A current revision about the well-succeed aging states that it includes not

only the presence or absence of the disease, but also the aspects of the movements (capacity of walking and performing daily life activities) and the social participation.²⁷

With the fast population aging the functional incapacity became an important indicator of the elderly health in Brazil, for it represents the commitment of the life quality and the increase in the use of the health services, besides being associated to a higher mortality of the elderly.¹⁵ For the elderly health is directly related to independence and the capacity of doing activities, even though these individuals present chronic diseases. If the elderly people continue to have autonomy (with the capacity to choose and decide by their own) and independent (with the capacity to perform activities by their own, without the dependence of the others), the difficulties will be smaller, for themselves, their families and society.²⁸ So, comprehending the degree of dependence of the elderly for the DLA performance enables the programming of interventions of the health professionals and the creation of prevention measures.²⁹

In relation to the results of the MMSE, it was observed that men presented a better performance. In general, the epidemiological studies have been showing divergent results regarding the association of sex with the cognitive deficit, possibly the characteristics of each population may be an influence to this relation.³⁰

In the studied population, it was verified that the elderly with post-secondary study obtained higher scores on the MMSE, whereas the illiterate had the lowest scores. In the literature it is widely recognized that education represents a substantial influence about the cognitive evaluated by the MMSE.³¹ In Germany the longitudinal study about aging, cognition and dementia, has followed during 4.5 years healthy elderly patients cared in the primary attention, identifying that age and education were associated to the performance of MMSE.³² Similar results were also found by researches carried out in Brazil.^{12,14,30}

The cognitive decline conducts to the loss of abilities for the DLA performance, contributing for the dependence of the elderly.²⁸ In this sense, its early diagnosis enables adequate therapeutic interventions. The MMSE is a test for the tracking of the cognitive decline recommended by the Health Ministry due to its efficiency.¹⁴ And its results are important for the planning of preventive actions towards the elderly population.

CONCLUSION

The sociodemographic profile of the elderly population cared in the ambulatory of the Craspi is constituted mostly by females in the 70-79 group age, widowed and with elementary education. The diseases of the circulatory system responded as the main cause of morbidity, highlighting the systemic hypertension. The most part of the elderly did not need assistance to perform the DLA. Older elderly and with elementary education obtained the lowest scores in the MMSE.

These results enabled some knowledge about the population that is cared in the Craspi, contributing with the planning of the prevention actions of morbidities and in the promotion of health of the elderly. Besides, the information about the sociodemographic, epidemiological and clinical variables of the users of the geriatric ambulatory enabled the identification of the factors that favor the occurrence of the diseases. It is highlighted the necessity if the health care in the elderly population that are based in the integrality of the actions, aiming the maintenance of the autonomy and functional capacity.

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