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### **Quality of life in the aging process: comparative analysis**

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**Abstract:** Quality of life in the elderly can be understood as the maintenance of health in all aspects of human life: physical, social, psychic and spiritual. In this sense, aging with quality of life has become a challenge for humanity. **Objective:** To compare the quality of life of Brazilian and Portuguese elderly accompanied by Primary Health Care. **Methodological description:** This is a descriptive, correlational study applied to 235 elderly people accompanied by family health units in the municipalities of Benevides, Pará, Brazil and Coimbra, Portugal. The inclusion criteria for both countries were: to be

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resident and / or cared for in the attached areas of the health units, to be 65 years of age or older. Exclusion criteria were defined as: not residing in the assigned area and / or not being attended by the health units, being less than 65 years old. For data collection, the World Health Organization Quality of Life-bref instrument (WHOQOL-bref), validated in both countries, was used in two moments: in Brazil, from July 2015 to February 2016; and in Portugal from April to May 2017. The sociodemographic variables were treated descriptively and analyzed using the statistical software Statistical Package for the Social Sciences (SPSS) version 20.0. Results: Predominated the female gender, married, incomplete schooling and retirees. The quality of life among the Portuguese elderly is better in the Environment domain than the Brazilian elderly, the best score is the Psychological domain. Conclusion: Knowing the quality of life of elderly people

among different countries allowed the implementation of actions that strengthen public policies aimed at promoting active and healthy aging.

Keywords: Primary health care. Active aging. Quality of life. Health of the Elderly.

## 1. Introduction

The increase in life expectancy around the world has provoked discussions about the quality of life during the aging process, a situation that challenges the scientific community to promote an active and healthy aging. The World Health Organization (WHO) defines quality of life as "the individual's perception of their position in life, in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns" (Who, 2012).

In Portugal, according to National Statistics Institute (INE), the aging index is 131 elderly ( $\geq 65$  years) per group of 100 young people (0-14 years), and the average life expectancy is 79.8 years. This phenomenon is more pronounced in women, evidenced in the group of the many elderly (age  $\geq 85$  years), which represents 12.0% of the general population in developed countries (Ine, 2013).

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In Latin America and the Caribbean, according to the Brazilian Institute of Geography and Statistics (IBGE), the number of older people rose from 6.5% of the general population in 1950 to 11.1% in 2000, with a projection of 18.1% in 2050. In Brazil, the aging rate has similar results. In 2050, children from 0 to 14 years old will represent 13.1%, while the elderly stratum will reach 22.7% of the total population, characterizing the inversion of the population pyramid (Ibge, 2013).

In Brazil, the participation of the population over 60 years of age in the total national population rose from 4% in 1940 to 10.8% in 2010. Over the last 70 years, the absolute number of people over 60 years of age has increased ninefold. In 1940 it was 1,7 million and in 2000, of 14,5 million. A contingent of approximately 30.9 million people who will be over 60 years old is projected for 2020 (Perseguino et al., 2017).

The aim is to provide a better quality of life and, for this, a multiplicity of aspects that influence health should be considered, such as the preservation of functional capacity,

autonomy, social participation of these individuals and their level of personal satisfaction, encouraging not only care, but also prevention and comprehensive health care for the elderly (Ibge, 2013).

The evaluation of the quality of life becomes one of the important parameters to assess the extension of the cultivation of the active aging by the elderly in a subjective way: the state of health and the well-being. Quality of life is considered as "the individual's perception of their position in life, in the context of the culture and value system in which they live and in relation to their goals, expectations, standards and concerns" (Souza et al., 2013 ).

Primary health care is the originator of care networks in developed and developing countries. In this analysis, Brazil, through the Ministry of Health, considers teamwork as a central element in primary care. Portugal, for its part, is one of the countries that most develops evaluation instruments for use in Primary Health Care (CSP) equivalent to primary care in Brazil. Both Brazil and Portugal currently prioritize the use of procedural

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instruments in primary care, for example, "e-health" and "s-clinical" software, respectively. (Souza et al., 2013).

Health systems in both countries have common ties, since both have the strategy of strengthening primary care. Studies show that Brazil and Portugal discuss practices that facilitate the performance of health professionals in order to better coordinate health services (Costa & Silva, 2014), which is why it is important to know the quality of life of the elderly in these countries in order to provide the elderly with a strategy to live active and healthy aging, contributing to the development and implementation of programs and actions that benefit this population.

Thus, this study is an integral part of the doctoral thesis entitled: Health promotion of the elderly users of the Family Health Program, which seeks to support the strengthening of PHC actions - in the ABS and PSF units - with a view to achieving the promotion of active and healthy aging.

In this sense, this study aims to compare the quality of life of the Brazilian and Portuguese elderly attended by primary health care / primary health care.

## 2. Methodological Description

Descriptive and correlational study, developed among elderly people attending the primary health care units of the two countries: the first in the family health unit in the municipality of Benevides, Pará, Brazil, and the other in the family health unit of the Municipality of Coimbra, Portugal.

The total sample of the study was started with 306 elderly people (176 Portuguese elderly and 130 Brazilian elderly), according to the age equivalence of the elderly person in Brazil aged 65 years, as it is considered in Portugal. Thus, the final sample of the study consisted of 235 elderly people of both sexes, whose size was calculated using the stratified random sampling technique (Bolfarine & Sandoval, 2011) by sex and by the elderly population enrolled in each health unit (Benevides with 4856 lbge, 2010) and Coimbra, with 6,825 (SNE, 2015), resulting in 81 Brazilian elderly attended by the Family Health Program of the municipality of Benevides - Pará, and 154 Portuguese elderly

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attended by the Family Health Unit of the Norton Health Center of Matos, in the Municipality of Coimbra.

The inclusion criterion for both countries was: to be resident and / or cared for in the area attached to health units selected for the study; and be 65 years of age or older. As exclusion criteria: do not reside in the assigned area and be less than 65 years old.

The data were collected in two moments: in Brazil, from July 2015 to February 2016; and in Portugal, from April to May 2017, applying the WHOQOL-bref (World Health Organization Quality of Life Questionnaire) in its abbreviated version, validated for the Portuguese language. The psychometric characteristics of this instrument meet the criteria of discriminant validity, concurrent validity, content validity and reliability by internal consistency (Fleck et al., 2000; Serra et al., 2006)

The WHOQOL-bref is an instrument composed of 26 questions: two general about perception of quality of life and state of health; and 24 questions distributed in four domains: physical, psychological, social relations and environment, as described below.

a) Physical mastery, 07 issues - assessment and discomfort, energy and fatigue, sleep and rest, mobility, daily life activities, dependence on medications or treatments and work capacity. b) Psychological mastery, 06 questions - focuses on positive and negative feelings, such as: thinking, learning, memory and concentration, self-esteem, body image and appearance; spirituality, religion, and personal beliefs. c) Domain social relations, 03 issues - addresses personal relationships, social support (support), sexual activity. d) Environmental domain, 08 issues - includes issues of physical security and protection, home environment, financial resources; health and social care: availability and quality, opportunity to acquire new information and skills, participation in recreation / leisure opportunities; physical environment: pollution, noise, traffic, climate and transport. In this instrument, the quality of life is assessed using the Likert scale, whose answers to the questions in scores range from 1 to 5, indicating for worst

conditions the score 1, and for the best the score 5. The result of an evaluation by this instrument is converted to a centesimal scale of 0 to 100.

Data were analyzed using Statistical Package for Social Sciences (SPSS) software version 20.0. Sociodemographic variables were treated descriptively, including absolute frequency (n), percentage (%). For the comparative analysis of the WHOQOL-bref domains the Student's T-Test (T = 1.732, p value = 0.085) was used.

The study was submitted to the Research Ethics Committee of the Federal University of São Paulo, in accordance with Resolution 466/12 of the National Council of the Ministry of Health of Brazil, receiving approval opinion n. 990,544, and also to the Ethics Committee in Health of the Regional Health Agency of the Center (ARSC) of Portugal, receiving approval opinion n ° 34/2017. Participants were guaranteed the ethical principles of respect for autonomy, beneficence, non-maleficence and confidentiality. The participants signed the Informed Consent Term.

### 3. Results

Of the elderly studied in the region of Coimbra genre female (53.4%), mean age of 76.8 years, predominating the age group over 80 years; most of them married (57.4%), followed by widowers (36.9%), retired (65.9%) and incomplete schooling aged 1 to 4

years (64.2%). The results of Benevides also show a predominance of female elderly (60.0%), with a mean age of 73.2 years, predominantly between 70 and 79 years of age, widows (41%) followed by married couples (31%), retired (81%) with incomplete schooling 1 to 4 years (53%) (Table 1).

Table 1- Sociodemographic profile of the elderly according to sex, age, marital status, schooling and occupation. Coimbra, Portugal, and Benevides, Brazil, 2016-2017

Variables	Coimbra (Portugal)		Benevides (Brazil)	
	n (154)	%	n (81)	%
Genre				



Male	82	46.6	32	40.0
Female	94	53.4	49	60.0
<b>Age Group</b>				
65 – 69 years	57	32.4	23	28.0
70 – 79 years	38	21.6	37	46,0
≥ 80 years	81	46.1	21	26.0
Mean ± Standard deviation	76,8 ± 9,5 years		73,2 ± 8,3 years	
<b>Marital status</b>				
Married	101	57.4	25	31.0
Widowed	65	36.9	33	41.0
Divorced/Separated	0	0	10	12.0
Single	10	5.7	13	16.0
<b>Education</b>				
None	07	3.9	23	28.0
Incomplet primary (1 a 4 years)	113	64.2	43	53.0
Complete primary (5 a 6 years)	05	2.8	09	11.0
Full gym (7 a 9 years)	10	5.7	01	2.0
Secondary education (10 a 12 years)	20	11.4	03	4.0
Higher education	17	9.7	03	4.0
Postgraduate studies	04	2.3	0	0
<b>Occupation</b>				
Retired	116	65.9	66	81.0

Pensioner	15	11.5	11	14.0
Homemaker / Domestic	34	19.3	01	1.0
Service Worker / Public Administration	12	6.8	02	2.0
Self Employed	04	3.2	01	1.0
Top Level Worker	13	7.4	0	0
Rural worker	02	1.5	0	0
Unemployed	01	0.6	0	0
Full	154	100	81	100

Table 2 presents the comparison by domains of the quality of life assessment of the elderly of both Health Units, whose data show a statistically significant relationship between the Whoqol-bref domains. Coimbra presented the best score in the environment domain: 64.4 ( $p = 0.000$ ), while Benevides had the best scores in the domains: psychological and social relations: 71.2 and 70.6 respectively ( $p = 0.000$ ).

Table 2 - Quality of life of the elderly according to the WHOQOL-bref domains. Coimbra, Portugal and Benevides, Brazil, 2016 – 2017

County/ Municipality	Domains	n	Mean	value t	p value*
Coimbra	Physical	154	59.8	-0.472	0.637
Benevides	Physical	81	61.1	-0.472	0.637
Coimbra	Psychological	154	60.9	-0.498	0.000
Benevides	Psychological	81	71.2	-0.498	0.000
Coimbra	Social relations	154	61.6	-3.768	0.000
Benevides	Social relations	81	70.6	-3.768	0.000

Coimbra	Environmental	154	64.4	5.480	0.000
Benevides	Environmental	81	53.7	5.480	0.000

\*T-student

#### 4. Discussion

Quality of life is one of the factors directly related to the process of aging of the population, and must be understood to implant comprehensive care for the elderly (Bombardeli et al., 2017).

Among the elderly women who participated in the study, women predominated in both countries, corroborating data from the world literature revealing the feminization of old age, with women having greater survival and health care (Pereira et al., 2017; Rodrigues et al., 2016). It is possible that the greater longevity of women is due, in addition to biological factors, to the health programs directed to a greater extent to this segment, giving them easier access to health services.

In Brazil, in relation to age structure, the group of individuals predominates between 65 and 69 years, while Portugal is characterized by greater age balance. These results corroborate data from researches in Brazil related to health care (Nespollo et al., 2017; Leite et al., 2015). Therefore, health professionals should propose actions to care for

and accompany long-term elderly people with their own characteristics in their aging process.

Regarding the marital status, the results of the study show similarities between Brazil and Portugal. In Brazil, the majority of the elderly are widowers followed by married couples, while in Portugal most of the individuals are married, followed by a significant proportion of widowers. Widowhood is important because it deepens the isolation of the elderly, and should be interpreted with care in the domain related to social relations of quality of life. It is believed that the incentive of social relations through links between

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people favors the confrontation of common conflicts, such as self-esteem and self-care (Pereira et al., 2017; Leite et al., 2015).

In the analysis of schooling, it was observed that both the Brazilian elderly and the elderly in Portugal are mostly incomplete (1 to 4 years). It is important to highlight and compare the results in the different research sites: in Brazil, in Benevides, 53.0% of the elderly studied have incomplete schooling. In Portugal, in the region of Coimbra, 64.2% of the elderly studied have incomplete schooling. These results corroborate data from the world literature, showing the low schooling of the elderly population (Leite et al., 2015; Santos et al., 2013). The low level of schooling probably reveals the sociocultural reality of both countries at a time when women were educated to be home while men were responsible for working outside to support the family.

The occupation showed similarity with other results, such as the majority of retired elderly people in both countries, which is similar to data from a study carried out in Portugal, where 68.9% of the elderly live in retirement or in the case of widows (Saints et al., 2013) and those of another study conducted in Brazil, where 88.3% of the elderly interviewed were retired (Leite et al., 2015), while in Mexico 52.6% of the elderly were retired. (Loredo- Figueroa et al., 2016).

Regarding the results on the quality of life of the Portuguese elderly, our work shows that the best score refers to the Environment domain; the investments in the areas of health with quality, transport, leisure and recreation, among others, which are valued and made available to the Portuguese elderly population, while the worst score refers

to the physical domain. This result differs from a similar study carried out in the county of Viana do Castelo, where the best score (64.8) was in the Psychological domain (revealing the importance of social relations and social support) and the worst score was the Environment domain ) with 59.4. However, this same study presented similarities with the results found in Brazil (Castro, 2016).

The Brazilian elderly had better scores in the areas: Psychological and Social Relations, and worse score in the Environment domain. From this result it is inferred that the

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higher values in the areas: Psychological and Social Relationships mean that the socialization of the elderly can contribute to social relations, improving their quality of life. The Environment presented a low value, perhaps related to environmental conditions, including access to health services, since these are still mainly based on the distribution of medicines.

When the domains of the WHOQOL-bref between the two countries were analyzed, the scores in the Physical, Psychological and Social Relations domains are better in Brazil, while in the Environment Portugal domain it has a better score.

In this context, it is important to clarify that in Brazil social support networks exert an influence on the quality of life of the elderly regarding positive or negative feelings (psychological domain), personal relations (social relations domain) and leisure or recreation (environmental domain). Portugal, on the other hand, has a better score in the Environment domain, since primary health care (PHC) in that country undergoes extensive organizational reform, with the family health unit (FHU) as the basis for providing health care with autonomy and functional, networked and close to the citizen, emphasizing teamwork as a central element (Santos et al., 2016).

## 5. Conclusion

The result of the present study showed that the health determinant related to the environmental domain in Brazil still preponderates the fragmented care provided to the elderly person, such as the consultation motivated primarily by the need to receive medication and demand for care in the exacerbation of the disease. It is necessary to

promote integral care for the elderly in order to meet all their needs, giving priority to actions that improve the environment.

In turn, Portugal provides comprehensive care to the elderly with measures that promote follow-up, preventing disease worsening. It should be pointed out that, based on the knowledge of the quality of life of the elderly population, health professionals can develop actions that promote active and healthy aging.

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The aging process begins at birth, involves individual and collective aspects, influencing the health conditions of the elderly. Quality of life needs to be investigated by health professionals, among whom the nurse, because the promotion of quality of life provides greater autonomy to the elderly in their daily lives.

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