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LIFE QUALITY AND ASSOCIATED FACTORS IN ACTIVE ELDERLY

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ABSTRACT

Objectives: Assessing life quality and the associated factors in elderly people in the city of Vitória da Conquista/BA.

Methods: This is an exploratory, descriptive and analytical research with cross-sectional design and quantitative approach, sub-project of the project: Interdisciplinary Program of Studies and Research on Human Aging: Actions of care and attention to the elderly. The data collection instruments used were: a social-demographic questionnaire, Barthel's Index, Lawton and Brody's Scale and Whoqol-bref.

Results: one evidenced higher prevalence of literate females (83.1%), (57.6%) without a partner and (45.8%) with an income of up to three minimum wages. Most elderly (98.3%) presented some health problem, regardless of the BADL (71.1%) and dependent for IADL (64.4%). In relation to the areas, the psychological one showed the lowest rate (13.77%). By applying Spearman's correlation coefficient between the study variables and the life quality areas, one verified that there was only significant statistical difference between the psychological realm and dependent for the Instrumental Activities of Daily Life ($p=0000$).

Conclusion: One evidenced in this study that the dependence in the Instrumental Activities of Daily Life interferes with the psychological realm; this is related with the age advance and the increase of chronic conditions and functional changes that result in physical impairment, as emotional and psychological ones.

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INTRODUCTION

Nowadays, population aging is a challenge for the public health, mainly in developing countries in which population aging has occurred in a more accelerate way (Silva, 2001).

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According to the Brazilian census in 2010, the elderly population in Brazil has increased every year in a accentuated way, surpassing about 20 million people (http://www.ibge.gov.br/home/estatistica/populacao/censo2010/default_sinopse.shtm). According to the projections made by The Brazilian Institute of Geography and Statistics – IBGE, one estimates that the total number of the elderly in Brazil will reach 29.6% in 2050 (<http://www.ibge.gov.br/home/estatistica/populacao/>

projecao_da_populacao/2008/projecao.pdf). In a way in front of demographic changes, started in the last few decades, and the technological and scientific processes, one notices that the Brazilian population is increasingly more aged. Thus, it is increasingly more important to guarantee the elderly with not only longevity, but also good life quality – LF (Reis, 2013). Therefore, life quality among the elderly is a factor that demands discussion, because the aging process reduces the capacity of the individuals' adaptation, thus increasing the levels of dependence in the environment where they live (Araújo, 2014). The LQ definition is too complex and varies from author to author. To Madke (Madke, 2012), life quality is completely linked to self-esteem, to physical, mental, emotional, cognitive, affective welfare, to the good physical function to perform and develop chores as well as the physical, social-economic and spiritual environment. Still according to Madke (Silva, 2012), life quality is what every individual must seek; it's living well, it's loving, it's about having professional satisfaction, home, security, food, living together, time, comfort, financial satisfaction, education, culture; it's about seeking what one considers important for their life. Thus, assessing LQ in the elderly suggests the adoption of several criteria of biologic, psychological, sociocultural and spiritual natures.

From this perspective, Silva (Santos, 2014) states that the existence of several threats to life quality of the elderly such as falling down risks, familiar abandon, low purchasing power, co-morbidities, brings important implications for the family, community, the health system and for the very elderly life. Thus, by considering the several effects caused by the aging process and that affects the elderly LQ somehow it is necessary to discuss the factors associated to LQ and the prevention so that the elderly may age with a better LQ. Thus, this article aims to assess life quality and the associated factors among the elderly in the city of Vitória da Conquista/BA.

METHODOLOGY

This is an exploratory, descriptive and analytical research, with transversal design and quantitative approach; sub-project of the project: Interdisciplinary Program of Studies and Research on Human Aging: Care actions and attention to the elderly. The research project was conducted in the city of Vitória da Conquista in the Interdisciplinary Area of Studies and Research on Human Aging (NIEPEH). The sample was constituted by all the elderly who had mental conditions in order to answer the research instrument, the mental state being assessed by the Mini-Mental State Examination (MMSE). The sample was non-probabilistic and constituted of more than 80 individuals who were selected by means of inclusion and exclusion criteria: Exclusion criteria: the individuals who were handicap or bearers of visual and/or hearing disorders. Amounting to a sample of 59 elderly. The research instrument was constituted by social-demographic data such as the date of the questionnaire application, gender (male or female), education (literate or illiterate), marital status (with or without a partner), family income (a minimum wage, from 1-3 minimum wages, from 3-5 minimum wages, from 7-10 minimum wage). The characterization of the health conditions was assessed by means of questioning the elderly whether they presented any health problem, if they were on treatment; the assessment of the incapacities for the basic and instrumental activities of daily life was conducted by means of Barthel's Index and Lawton's and Brody's Scale respectively.

Barthel's Index assesses the individual's independence level for the performance of ten basic activities of daily life (BADL). It aims to assess if the individual is able to perform activities independently such as nutrition, bath, routine activities, dressing up, intestine, urinary system, toilet use, transfer from the bed to the chair and vice versa, mobility and stairs. Their score goes from 0 to 100, the lower the score the higher will be the dependence degree. In the study one adopted the classification dependent (score <100 points) and independent (score = 100 points). The scale for assessing the incapacities for the IADL, developed by Lawton and Brody, assesses the individual's independence level as far as the performance of the instrumental activities of daily life (IADL) is concerned, composed of nine tasks that provide the person with the adaptation to the environment and the maintenance of independence in the community such as phone use, transports, going shopping, preparing food, household chores, performing manual work, washing and ironing their own clothes, the correct use of medicine and money administration. Each question has three options, the first one indicates independence, the second one partial independence and the third one total dependence. In order to calculate the score, one attributed 3, 2 and 1 points respectively with a score of 9 to 27 points. The higher the score, the higher the independence degree [12]. In the study one adopted the dependent classification (score <27 points) and independent (score = 27 points).

In order to assess the life quality one used the Whoqol-bref, created by "World Health Organization Quality of Life" and validated by researchers of the Federal University of Rio Grande do Sul. It is recommended by the World Health Organization for assessing life quality. The instrument is composed of 26 questions, the two first ones refer to the individual perception of LQ and the perception of health and the 24 following questions are subdivided in four areas: physical, psychological, social relations and the environment. Each area may reach scores of 4 to 20, and the closer to 20 the better the life quality in assessed area. By summing up the scores of the four areas and of the two questions related to the individual's perception, one may come to minimum scores of 20 and maximum of 100. Higher scores indicate a better life quality. At first, one arranged an initial contact with the responsible by the development of the activities of the group living together, where one explained the objectives of the research, requesting authorization for data collection. After consent for taking part in the research one has given the The Written Informed Consent Form (WICF), being respected the ethical principals that are in the resolution 466/12 of the National Health Council. Only after signing the term, one started the research with the elderly registered in the Project Active Life of UESB and in the basic units of family health in the city of Vitória da conquista-BA.

The invitation to take part in the research occurred in a random way with the individuals who were present at the moment of the visits. From this approach, one explained the objectives, risks and benefits of the research and confirmed if the participant fits the criteria of the research selection. The collected data were organized in an Excel® 2015 spreadsheet and then transported and analysed in the program Statistical Pack age for the Social Science SPSS® version 20.0. The correlation between Motor Performance and Life Quality was carried out through the coefficient of Spearman's correlation.

The participants were informed about the research objectives, being free to take part in the research or not. Upon accepting, they signed the Written Informed Consent Form (WICF), respecting the ethical principals established by Resolution 466/12 of the National Health Council so that the data may be used and the results divulged.

RESULTS

One evidenced in this study that there was a higher distribution of female elderly (83.1%), literate (83.1%), without a partner (57.6%) and with family income from 1 to 3 minimum wages (45.8%), according to Table 1.

Table 1. Socio-demographic characterization of active elderly. Vitória da Conquista / BA, 2017

	N	%
Gender		
Female	49	83.1
Male	10	16.9
Education		
Literate	49	83.1
Illiterate	10	16.9
Marital status		
With a partner	25	42.4
Without a partner	34	57.6
Family income		
1to 3 minimum wages	27	45.8
1minimum wage	24	40.7
3to 5 minimum wages	4	6.8
7to 10 minimum wages	4	6.8
Total	59	100.0

Source: Research Data.

In relation to the health conditions, one noticed a wider distribution of the elderly with health problems (98.3%), classified as independent for the Basic Activities of Daily Life/BADL (71.1%) and dependent (64.4%) for the Instrumental Activities of Daily Life/IADL, according to data of Table 2.

Table 2. Characterization of the health conditions of the active elderly. Vitória da Conquista/BA, 2017.

	N	%
Presence of Health Problem		
Yes	58	98.3
No	1	1.7
BADL*		
Independent	42	71.1
Dependent	17	28.9
IADL**		
Dependent	38	64.4
Independent	21	35.6
Total	59	100.0

Source: Research Data.

*Basic Activities of Daily Life. ** Instrumental Activities of Daily Life

According to Table 3, one noticed that LQ is more impaired in the physical realm (14.16% points), psychological one (13.77%points) and environment (14.37% points).

Table 3. Distribution of Whoqol-bref domains. Vitória da Conquista / BA, 2017

Domains	N	Average	Pattern Deviation	CI
Physical Domain	59	14.16	1.50	6.88
Psychological Domain	59	13.77	2.20	10.64
Social Relation Domain	59	16.00	2.99	10.68
Environment Domain	59	14.37	2.52	11.48

Source: Research Data.

With the application of the coefficient of Spearman's correlation between the study variables and the life quality domains, one evidenced that there was only significant statistical difference between the psychological domain and dependence for the IADL ($p=0.000$).

DISCUSSION

Upon analysing the obtained results in this study, one could notice the higher participation of women, which evidences a higher tendency by women in order to achieve longevity. Similar data found in the literature point out that this vantage in relation to the female gender is due to many factors, including the tendency women have in taking care more than men do and looking for health care and/or social support (Santos, 2014). According to the obtained data, there was a higher distribution of literate elderly. Therefore, one notices that these elderly present an improvement in the education aspect, thus increasing the proportion of literate elderly (Andrade, 2014). Thus, this is a data of important investigation for future works, since education is a reason of concern for the health professionals, mainly in the North-Eastern region, which continues to present the highest rate of illiteracy in Brazil (http://www.ibge.gov.br/home/estatistica/populacao/censo2010/default_sinopse.shtm). According to Andrade et al. (2014), the education level has strong impacts on the elderly life, since a low education level represents low perception of health self-care, it compromises the access to the education in health and also compromises the segment to health treatment. A study conducted by Dawalibi, Goulart and Prearo¹² with 182 elderly in the cities of São Paulo, São Caetano do Sul and Mogi das Cruzes, has evidenced that the high level of education of the elderly was the variable that influenced most positively the life quality of the elderly taking part in the study.

In relation to marital status the data show that the number of the elderly in marital condition "without a partner" represents their highest distribution (Lino et al., 2016). It also indicates data similar to those found in our study; pointing out that 90.5% of the elderly live without any partners. This data is interesting probably do to the women's higher longevity, and the fact that women tend to live widowhood more frequently than men, and getting married again be more common among men (Marinho, 2016; Lopes, 2015). According to Pegorari and Tavares (Pegorari, 2014), elderly women without a partner present a higher mortality rate; in this sense, they consider that the marital status constitutes a strong component of social support for the elderly and presupposes that the interaction of clinic and social factors may be affected. The family income presented in the study evidences a higher percentage of elderly with up to three minimum wages. According to Silva et al. (Silva, 2016), 50% of the elderly receive up to two minimum wages and 33.3%, up to three, a value considered low in relation to the expenses that they have. The family income affects directly the elderly life quality, because they have a lot of expenses with medicine of continuous use, food, bills, among others. And they are dependent on the Unified Health System (SUS), because what they receive is not sufficient to pay all the expenses (Silva et al., 2016). One evidenced a higher frequency of elderly affected by some kind of health problem. The study conducted by Marchini¹⁶ pointed out a prevalence of at least one chronic disease, which reaches numbers near 70 among the elderly population, a result near the 80.2% found by Dawalibi, Goulart e Prearo (Dawalibi,

2014). The elderly health problems are multiple and complex and tend to manifest themselves in an expressive way in an older age and they are often associated with other comorbidities. They may trigger an incapacitating process, affecting the elderly functionality, making it difficult and impeaching the performance of their daily activities in an independent way, thus affecting the elderly life quality in a significant way (Marin, 2014; Santos, 2015). In relation to the functionality assessment, one observes that most elderly were classified as independent for the BADL. These results show themselves similar to those found by Bortoluzzi (Bortoluzzi, 2014), since 74% were independent for the basic activities, as well as 84.4% mentioned by Novais et al. (2016). This higher independence for the basic activities occurs because such activities are related to personal care and are less complex than the instrumental activities (Novais et al., 2016). Upon assessing the IADL, one evidenced that a small number of the elderly were classified as independent. In a study carried out by Lopes and Santos (Lopes, 2015) in Ananindeua, in the state of Pará, where researchers also used Lawton's Index, they observed a functional impairment more evident for the performance of the IADL, a result very close to the one found in this study. These results are in consonance with other studies, since the instrumental activities are considered more complex tasks than the basic ones, and they require the aid to perform them, as, for instance, moving to a distant place by using transportation (Lopes, 2015; Santos, 2015; Pegorari, 2014; Novais, 2016). It was noticed that the assessed elderly demonstrate a better average of life quality in the domains *social relations*, followed by *environment domain*. Similar results were found in another study, which also used the WHOQOL-bref in the assessment of life quality among the elderly, and the best scores of the domains, in a decreasing way, were: *social*, *environmental*, *physical* and *psychological* (Vitorino et al., 2015). The domain *social relations* is related to the elderly satisfaction with their social relations (friends and relatives), with the support received and their sexual activity (Vitorino et al., 2015). Other studies also evidenced a better LQ in this domain (Vitorino et al., 2015; Stival, 2014; Tavares, 2016). Another dimension to be considered should be the environment in which the elderly is in, since the domain *environmental* was the one that presented the second highest frequency in the life quality of the researched elderly.

On the other hand, the elderly presented the worst LQ in the domains *physical* and *psychological*, being classified as a life quality that needs improvement. According to Estival et al. (2014), the elderly without any disease present better LQ in the *physical* domain; thus, the worst scores in the physical domain may be explained by the impact that a disease causes in the elderly life, influencing negatively their daily activities. In relation to the psychological domain, other studies have also found a less significant contribution in the LQ of the studied elderly (Vitorino et al., 2015; Stival et al., 2014). This less score in the psychological domain may be related to the age advance and the increase of chronic diseases and functional changes that result in physical impairment, as well as emotional and psychological (Vagetti et al., 2013). One evidenced in this study that the dependence for the IADL influences in the psychological domain of life quality. Such evidence is compatible with the one found in a research carried out by Tavares and Dias (Tavares, 2012), in which they observed that the decline in the functional capacity of the elderly affects directly life quality, especially in the

psychological domain, due to the emergence of negative feelings related to the physical state.

Conclusion

This study enabled the assessment of life quality and the associated factors among elderly in the city of Vitória da Conquista/BA, with predominance for the female gender, thus evidencing a higher tendency of women in trying to reach longevity. In relation to education, most of them were illiterate, and in the marital status of singles (without a partner), with income lower than three minimum wages. Most elderly (98.3%) presented some kind of disease, independent for the Basic Activities of Daily Life and dependent for the Instrumental Activities of Daily Life. As far as the domains are concerned, the psychological one presented the lowest index. The study evidenced that the physical, environmental, social relations domains reflect directly in the LQ of the elderly; therefore, reinforcing the social links, practising group activities, improving the environment in which the elderly is, increases the satisfaction of the psychological domain and improves the elderly life quality. One concludes that the dependence for the Instrumental Activities of Daily Life interferes with the psychological domain of life quality. That is related with aging and the increase of chronic conditions and functional conditions that result in physical impairment as well as emotional one and psychological one.

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