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QUALIDADE DE VIDA EM IDOSOS INSTITUCIONALIZADOS SUBMETIDOS A UM PROGRAMA DE ENVELHECIMENTO ATIVO

QUALITY OF LIFE IN INSTITUTIONALIZED ELDERLY UNDERGOING AN ACTIVE AGING PROGRAM

CALIDAD DE VIDA EN ANCIANOS INSTITUCIONALIZADOS SOMETIDOS A UN PROGRAMA DEL ENVEJECIMIENTO ACTIVO

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RESUMO

Introdução: Viver com qualidade é uma preocupação crescente no âmbito da população idosa. Assistimos a uma crescente institucionalização dos idosos e é neste contexto que os programas de envelhecimento ativo assumem relevância, possibilitando o contacto com experiências que lhes permitem envelhecer com qualidade de vida, mantendo a sua autonomia e fomentando o seu bem estar físico, psíquico e emocional.

Objetivo: Avaliar a qualidade de vida (QdV) dos idosos institucionalizados submetidos a um programa de envelhecimento ativo.

Métodos: Desenvolvemos um estudo do tipo quantitativo, quase-experimental, utilizando-se os seguintes instrumentos para a avaliação da QdV: EUROHIS-QOL-8 e WHOQOL-OLD, aos quais foram associadas questões sociodemográficas e clínicas. Foram efetuadas avaliações em dois momentos, pré e pós intervenção, numa amostra de 37 idosos institucionalizados.

Resultados: Relativamente à avaliação da QdV relacionada com a saúde (EUROHIS-QOL-8) encontramos pontuações superiores no segundo momento de avaliação com diferenças significativas ($p=0.004$). No que respeita à QdV relacionada com o idoso (WHOQOL-OLD) também se verificaram melhores pontuações no segundo momento de avaliação, com significância ($p=0.001$).

Conclusões: Os resultados evidenciam uma melhoria da percepção da QdV nos idosos submetidos a um programa de envelhecimento ativo, relevando a importância deste.

Palavras-chave: Qualidade de Vida; Envelhecimento; Institucionalização;

ABSTRACT

Introduction: Living with quality is a growing concern of the old population. There is an increasing institutionalization of the elderly, and it is in this context that active aging programs assume relevance, allowing the elderly the contact with experiences that allow them to age with quality of life, by maintaining their autonomy and promoting their physical, mental and emotional well-being.

Objective: To evaluate the quality of life (QOL) of institutionalized elderly undergoing to an active aging program.

Methods: We have developed a quantitative type study, semi-experimental, in which the following instruments were used to measure the quality of life: EUROHIS-QOL-8 and WHOQOL-OLD, to which sociodemographic and clinical questions were added. Assessments were made in two different moments, before and after the intervention program, in a sample of 37 institutionalized elderly.

Results: Concerning the assessment of quality of life related to health (EUROHIS-QOL-8), significant higher scores were obtained in the second moment ($p=0.004$). Regarding the quality of life (WHOQOL-OLD) related to the elderly significant better scores were also obtained in the second assessment ($p=0.001$).

Conclusions: The results show an improvement in the perception of quality of life in elderly patients undergoing to an active aging program, emphasizing the importance of it.

Keywords: Quality of life; Aging; Institutionalization;

RESUMEN

Introducción: Vivir con calidad es una preocupación creciente en la población anciana. Estamos asistiendo a una creciente institucionalización de los ancianos y es en este contexto que los programas de envejecimiento activo se volvieron más importantes, lo que permite el contacto con experiencias que les permitan envejecer con calidad de vida, manteniendo su autonomía y la promoción de su bienestar físico, mental y emocional.

Objetivo: Evaluar la calidad de vida de los pacientes ancianos institucionalizados sometidos a un programa de envejecimiento activo.

Métodos: Hemos desarrollado un estudio cuasi-experimental, utilizando las metodologías cuantitativas, utilizando los siguientes instrumentos para la evaluación de la calidad de vida: EUROHIS-QOL-8 y WHOQOL-OLD, que se asocia cuestiones sociodemográficas y clínicas. Las evaluaciones se realizaron en dos etapas, antes y después de la intervención en una muestra de 37 ancianos institucionalizados.

Resultados: Para la evaluación de la calidad de vida relacionada con la salud (EUROHIS-QOL-8) encontraron una puntuación más alta en la segunda evaluación con diferencias significativas ($p = 0.004$). En cuanto a la calidad de vida relacionada con la edad

avanzada (WHOQOL-OLD) también encontró altas puntuaciones en la segunda evaluación, con significación estadística ($p = 0.001$).

Conclusión: Los resultados muestran una mejora en la percepción de la calidad de vida en pacientes ancianos sometidos a programa de envejecimiento activo, haciendo hincapié en la importancia de esto.

Palabras clave: Calidad de Vida; Envejecimiento; Institucionalización;

INTRODUCTION

In Portugal, demographic ageing is a reality confirmed by the changes in the shape of population pyramids, with a narrowing of the pyramid's base (corresponding to the decrease in the number of younger people) and a widening of its top (corresponding to the increase in the number of older people). Between 2001 and 2011, the ageing index increased from 103 to 128 elders per 100 young people (Statistics Portugal (INE), 2013). According to INE (2015), the ageing index of the European Union (28 countries), in 2013, was of 119 elders per 100 youngsters, Germany presenting the highest rate (159) and Portugal coming in fifth place, with an index of 136. In 2014, Portugal's ageing index increased to 141 (INE, 2015).

Advancing age fosters the development of new pathologies and the decrease of physical, psychological and social capabilities, thus affecting QOL.

The concept of active ageing (AA) emerged in the late '90s, replacing the term healthy ageing. The World Health Organization - WHO (WHO, 2005, p.13) defines AA as "the process of optimizing opportunities for health, participation and security in order to enhance quality of life as people age." This concept applies to both individuals and population groups, allowing them not only to perceive their potential for physical, social and mental well-being throughout life, but also to engage actively in various affairs (Jacob, 2007). The nursing homes should provide activities of this nature, fostering social participation and promoting the self-esteem and well-being of its residents.

The main purpose of this study is to evaluate the QOL of institutionalised elders undergoing an active ageing programme at Santa Casa da Misericórdia, in Bragança.

1. THEORETICAL FRAMEWORK

WHO defines quality of life as the "individuals' 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, 1997, p. 1). According to Paschoal (2006), the concept of quality of life is subjective, wide, complex and ambiguous, bearing various meanings which differ from person to person and depend on time and place. Similarly, Fernández-Ballesteros, Kruse, Zamarrón, and Caprara (2009) talk about the multidimensionality of the concept, one of its most relevant aspects given its comprehension of various subjective conditions, behavioural and health aspects, as well as external and environmental circumstances.

Lawton (1983, *cited by* Paschoal, 2006) established a model of quality of life in old age divided into four interrelated sectors. The first sector refers to the environment. It should provide the appropriate conditions for human life, given that adaptive skills (such as emotions, cognition and behaviour) are influenced by physical and ecological contexts. The second sector is in reference to the behavioural competence, i.e., the individual's performance throughout life. This depends on each person's potential, on their life experiences, their values and their personal development, all this under the influence of the historical and cultural background. The third sector has to do with the perceived quality of life. The fourth sector, related to psychological well-being, indicates the satisfaction with one's own life, in an overall assessment or referring only to certain criteria.

Whoqol assessment instruments (WHOQOL-100 and WHOQOL-BREF) were created in the '90s by a group of international experts from 15 WHO research centres. Before these, there was no specific instrument with a conceptual base to assess QOL cross-cultural. Thus, a revision of the procedures was necessary to conclusively clarify the concept of quality of life, to which the notions of subjectivity and multidimensionality are related (Canavarro et al., 2010). Later on, shorter adaptations based on

WHOQOL-100 and WHOQOL-BREF were made to facilitate the participation and the filling of the questionnaires by the respondents. An example is EUROHIS-QOL-8.

Following the creation of WHOQOL-100 and WHOQOL-BREF as generic QOL measuring instruments created by the Whoqol Group, another project was developed: WHOQOL-OLD. Starting in 1999, the objective was to complement and specify the generic measuring instruments by adapting them for older adults (Vilar et al., 2010). The final version of WHOQOL-OLD comprises 24 items divided into six facets (sensory abilities; autonomy; past, present and future activities; social participation; death and dying; and intimacy). A new facet was added in the adaptation and validation of WHOQOL-OLD for the Portuguese population. Titled Family/Family Life, this new phase assessed the satisfaction with support from the families, the family relationship and the concern with the health and well-being of the family members (Vilar et al., 2013). Of the 8 initial items introduced in this facet, only four were considered, which resulted in a total of 28 items in the Portuguese version.

2. METHODS

This is a study that fits in quantitative methodologies of semi-experimental nature.

2.1 Sample

Our population consisted of the 182 elders institutionalised in the Santa Casa da Misericórdia de Bragança (SCMB). In 2014, a sample of 39 elders was drawn out of those using the method of convenience sampling. The following inclusion criteria were taken into account in the selection of the sample: being 65 years old or older; independent or slightly dependent; with no cognitive deficit; accepting to participate in the study. In the course of the study, two individuals were excluded, one for withdrawing, the other for having suffered an injury, thus resulting in a final sample of 37.

The sample is mostly comprised of females (73%). The age of the sampled individuals varies between 71 and 100 years old, with an average age of 85.41 years and a standard deviation of 6.53 years. Regarding the marital status, 2 individuals are single, 4 are married, and the remaining 31 are widowed. In terms of age groups, three individuals are aged between 65 and 74, sixteen are aged between 75 and 84, and the remaining nineteen are aged 85 or more. Concerning the education level of the respondents, 40.5% can't either read or write, 16.2% can read and write but didn't finish the 1st cycle of basic education, and the remaining finished the 1st or 2nd cycle of basic education. These results are shown in Table 1.

Table 1 - Sample distribution according to gender, marital status, age group and education level

		n	%
Gender	Male	10	27.0
	Female	27	73.0
Marital Status	Single	2	5.4
	Married	4	10.8
	Widowed	31	83.8
Age	65-74	2	5.4
	75-84	16	43.2
	85 or older	19	51.4
	Average	Standard deviation	
	85.41	6.53	
Education Level	Can't read/write	15	40.5
	Can read and write	6	16.2
	1st or 2nd cycle of basic education	16	43.2

Based on the clinical characterisation, the entire sample reported to suffer from, at least, one pathology. About 78.4% reported to suffer from three or more pathologies. The vast majority reported the consumption of more than 5 drugs a day. The consumption average was of 5.11 drugs, with a standard deviation of 1.95.

2.2 Instruments for data collection

To accomplish the proposed objective, we used the EUROHIS-QOL-8 index (Pereira et al., 2011) and WHOQOL-OLD as data collecting instruments. The first assesses QOL, health and other areas of the life of the individuals; the second instrument, which

assesses QOL for older adults, is an experimental version, adapted and validated for Portugal by Vilar. A cooperation agreement with the team from the University of Coimbra was signed in order to use WHOQOL-OLD. This instrument also contained a questionnaire to assess personal and medical/clinical information. Folstein's Mini Mental State Examination (MMSE) scale was used to evaluate cognitive functioning and to ensure compliance with the inclusion criteria. To measure the dependency level in activities of daily living we resorted to the Barthel Index. EUROHIS-QOL-8 includes 8 questions with an answering format that varies between 1 and 5 points. The result is a global index that ranges from 8 to 40 points, the highest value corresponding to a better perception of QOL (Pereira et al., 2011). The WHOQOL-OLD scale validated for the Portuguese population includes 28 items, grouped in seven facets which concern Sensory Abilities (SA); Autonomy (A); Past, Present and Future Activities (PPFA); Social Participation (SP); Death and Dying (DD); Intimacy (I); and lastly, Family/Family Life (F). These items are organised in Likert-type answer scales. This instrument allows the results to be organised by facet or globally. The total sum of the facets varies between the minimum of 28 and the maximum of 140 points. Higher values correspond to a higher perception of QOL.

2.3 Procedures

After SCMB authorised the use of the instrument, an Informed Consent was drafted as well as a declaration of acceptance for the elders to join the study on QOL, freely and knowing all its procedures and purposes.

This study is characterised by two assessment moments (pre and post-intervention). The first data collection (pre-intervention) was in March, in a sample of 37 individuals divided into three groups. The first group was comprised of 20 individuals that, for more than a year, had already undergone active ageing activities offered by the institution. The remaining 17 individuals who weren't engaged in any type of active ageing activity were divided into two groups. The first (with nine elements) was subjected to an active ageing programme developed and carried out by us for 2 months. The second group (with 8 elements) was considered the control group (didn't engage in any active ageing programme). The activities developed in the programme cover issues such as: creativity; auditory, visual and olfactory short and long-term memory training; attention, concentration and observation; sensory stimulation; spatial perception; mental and perceptive agility; fine motor skills; group participation. The second moment of the assessment (post-intervention) was in June and in the beginning of July, in a sample of 37 individuals. The data collection instruments were the same used in the first assessment. The time spent with each elder was of about 45/60 minutes.

After collecting the information, the database was created in the software Statistical Package for the Social Sciences (SPSS), version 20 for Windows. Statistical measures, such as absolute (n) and relative (%) frequencies, average, and standard deviation, were used in order to do a descriptive analysis of the variables under study. Parametric and nonparametric tests were used for statistical inference. Student's t-test was used in two paired samples in order to establish a comparison between the averages of the two assessment moments. For each moment of assessment, the ANOVA test was used to compare between three independent groups. These tests are based on applicability assumptions such as presenting a normal distribution of the variables, tested with the Shapiro-Wilko test (used in samples of 50 individuals or less). Also, to apply the ANOVA test, the homogeneity of the variances between groups was verified with the Levene test. In the absence of normality, nonparametric tests were used. Thus, once the assumption of normality wasn't met, the Spearman correlation coefficient was used to evaluate the correlation between EUROHIS-QOL-8 and WHOQOL-OLD, based on both the total and the facets, for the two moments of assessment. Cronbach's alfa was used to analyse the internal consistency of EUROHIS-QOL-8 and WHOQOL-OLD and its facets.

3. RESULTS

Cronbach's alfa was used to measure EUROHIS-QOL-8's internal consistency. In the first moment, it presented a value of 0.82 and of 0.80 in the second moment, figures that indicate good consistency. In the first moment, the average was 27.41 and the standard deviation was 4.74. In the second moment, the average was 29.11 and the standard deviation was 4.12. The comparison of the averages was made with the T-Test for paired samples. With an outcome of 0.004, the registered difference is statistically significant (Table 2). The scores of this global index for QOL indicate a significant improvement in the perception of quality of life between the two moments of assessment.

Table 2 - QOL assessment - EUROHIS-QOL-8, in two moments

	Moment 1	Moment 2
Internal Consistency	0.82	0.80
Average	27.41	29.11
Standard Deviation	4.74	4.12
T-Test for paired samples	t = - 3.10 vp = 0.004**	

The results by group gathered from the EUROHIS-QOL-8 index (Pereira et al., 2011) indicated that the group which, for more than a year, had already been engaged in the active ageing programme showed a statistically significant improvement in overall quality of life, from the first to the second moment, with a test value of 0.048 in the T-Test for paired samples.

The analysis of the global sample with WHOQOL-OLD resulted in Cronbach's alphas of 0.83 and 0.77 in the first and second assessments, respectively, which indicates good and reasonable internal consistency. In the first moment, the average was 100.51 and the standard deviation was 13.60. In the second moment, the average was 110.57 and the standard deviation was 11.98. Thus, and since the test value obtained in the T-Test for paired samples was of 0.001 (Table 3), we can state that the elders' perception of quality of life is good and has improved significantly between the two assessments.

Table 3 - QOL assessment - WHOQOL-OLD, in two moments

	Moment 1	Moment 2
Internal Consistency	0.83	0.77
Average	100.51	110.57
Standard Deviation	13.60	11.98
T-Test for paired samples	t = - 5.244 vp = 0.001**	

In relation to the index on quality of life - WHOQOL-OLD by groups, every group revealed an increase from the first to the second moment. While the group that had already been engaged in an active ageing programme for more than a year showed the highest scores, the control group had the lowest. This evolution between the two moments was statistically significant, particularly in the group that had been engaged in active ageing for a longer period of time, which presented a test value of 0.002.

Table 4 concerns the correlation of both instruments (EUROHIS-QOL-8 and WHOQOL-OLD) in the first moment. The table shows that the EUROHIS-QOL-8 index is correlated with the total result of WHOQOL-OLD and some of its facets (Sensory Abilities (weak correlation); Autonomy; Past, Present and Future Activities; and Social Participation) in a positive, moderate and significant way. The positive correlations between the two subindexes show that the elder's perception of quality of life will be higher if the perception of overall quality of life is also high. The same happens with the aforementioned facets. Correlations with significance at 1% are moderate because the coefficient ranges from 0.40 to 0.69. For Sensory Abilities, the correlation is weak (0.20 - 0.39) and presents significance at 5%. In the second moment, overall quality of life perception is positively correlated with the elder's perception of quality of life, with significance, and it is a strong correlation (0.70 - 0.89). Since the coefficients range between 0.40 and 0.69, positive and moderate correlations with significance at 1%, were obtained in the following facets: Autonomy; Past, Present and Future Activities; Social Participation; Intimacy; and Family/Family Life. The correlation between the EUROHIS-QOL-8 index and the facet Death and Dying of WHOQOL-OLD is weak (0.20 - 0.39), with a significance level at 5%. In the second moment, the correlation with Sensory Abilities is not significant.

Table 4 - Spearman correlation between EUROHIS-QOL-8 and WHOQOL-OLD and its facets

	WHOQOL-OLD	SA	A	PPFA	SP	DD	I	F
EUROHIS-QOL-8 Moment 1	.61**	.37*	.43**	.65**	.52**	.24	.19	.19
EUROHIS-QOL-8 Moment 2	.71**	.13	.63**	.56**	.44**	.38*	.40*	.45**

* significance at 5%; ** significance at 1%

4. DISCUSSION

The socialdemographic data used in the characterisation of the sample denotes a gender representation imbalance, with a predominance of females. In Portugal, various studies about quality of life involving older people present the same results, such as the one developed by Martins (2012). This issue can be related to the excessive male mortality and to life expectancy, which we know to be higher in females (INE, 2013). As for marital status, most of our sample is comprised of widowed individuals (83.8). Dissolved marriage by death of the spouse affects mostly women due to excessive male mortality, which, in turn, justifies the disparity in crude widowhood rates by gender: 2.7 per one thousand men and 5.8 per one thousand women (INE, 2013).

Aiming the increase of quality of life, a nursing home must contribute to the stimulation of an active aging process, shall promote social integration by providing socio-cultural, leisure-recreational and occupational activities aiming the contribution to a climate of healthy relationship among residents and for the stimulation and maintenance of their physical and mental capacities, as it is recommended by Ordinance no. 67/2012 that defines the conditions of organization, operation and installation to be met by residential structures for elderly (Ordinance no. 67/2012 published on the 21st of March by the Ministry of Solidarity and Social Security, 2012).

In this study, the group that had been engaged in an active ageing programme for a longer period of time presented better scores in the quality of life index. In a study developed by Matimba (2014), that aimed to analyze the effect of a cognitive stimulation program in institutionalized old women, it was found a significant increase in quality of life indexes of the experimental group submitted to a cognitive stimulation program during three months.

In this study the EUROHIS-QOL-8 tool is moderately and significantly correlated with global WHOQOL-OLD. In a study develop by Martins (2012) that aimed to describe old people's quality of life based on EUROHIS-QOL-8 and WHOQOL-OLD, found a relationship between the degree of closeness of relations established by the elderly and the quality of life index. In the study of adaptation, validation and normalization of the WHOQOL-OLD for the Portuguese population, published in 2015 by Vilar, a high and significant correlation between the two tools used in the present study was found (EUROHIS-QOL-8 e WHOQOL-OLD).

CONCLUSIONS

With this study, we intended to know the perception of quality of life in old people Institutionalized in Santa Casa da Misericórdia de Bragança that were included in an active aging program. The sample included a group that had already been part of an active aging program for more than a year (provided by the institution), and another group submitted to an active aging program during two months (promoted by us), remaining a group of eight persons who were not submitted to any active aging program and that functioned as a control group. Results obtained with EUROHIS-QOL-8 and WHOQOL-OLD tools showed that the group that was included in an active aging program for more than a year was the one with better results in QOL index with statistical relevance when compared the first assessment moment (pre-intervention) and the second one (post-intervention), fact that highlights the importance of active aging programs implemented a long time ago. In face of these results, we suggest that nursing homes must bet on old people's integration into active aging programs since their admission, by encouraging group's participation, the physical and mental capacities stimulation that aim the increase of self-esteem and wellbeing, as well as the decrease of the aging process and the reduction / prevention of disabilities.

As limitations of the present study we emphasize the fact that these results cannot be extrapolated, since the studied sample is small in size and refers to a specific spatial, temporal and cultural context. We believe that it would be appropriate to continue this type of study with a larger sample and over a longer period of time, using the same WHOQOL-OLD, as it represents a specific tool of the generic instruments, being a useful alternative in the assessment of the quality of life of the elderly, because it includes fundamental aspects not covered in the original instruments for non-elderly populations.

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