# 130 - CHARACTERIZATION AND ANALYSIS OF QUALITY OF LIFE OF ELDERLY IN LONG-STAY INSTITUTIONS

VILANI MEDEIROS DE A. NUNES JOÃO CARLOS ALCHIERI REJANE MARIA P. DE MENEZES Federal University of Rio Grande do Norte / Natal-RN - Brazil vilani.medeiros@bol.com.br

#### INTRODUCTION

According to World Health Organization (WHO) estimates for the year 2050, the global over-60 population will consist of around two billion people, and most elderly will be living in developing countries. In Brazil, the estimates point to 34 million elderly people by the year 2025, with the over-80 age group predominating (VERAS, 2003; OMS, 2005).

The elderly growth rate in Brazil presents major challenges for society, accompanied by social, urban, industrial, and family transformations. These transformations bring with them a new type of family with structural changes related to bonds, intergenerational relationships, and other difficulties that compromise the family's abilities to care for, protect, and accept an elderly who is dependent on the family for day-to-day activities (RAMOS et al, 1987).

The more physically or financially dependent the elderly person, the greater the chance that person has of being institutionalized. A nursing home is nothing more than an ancient form of care for people with limitations, homeless people, or people without families, established long ago by Brazilian social security policy, and today called elderly long-stay institutions (LSIs) and defined as "government or non-governmental institutions of a residential character, intended as collective housing for people 60 years of age or older and with or without family support, under conditions of freedom, dignity and rights" (BRASIL, 2005).

Associated with the specific context of elderly people in long-stay institutions is an ongoing and slow onset of weakness syndromes. The main consequences are immobility in bed and the loss of visual, auditory, cognitive, and physical abilities, which often undermine autonomy and independence and raise a real and relevant question about the quality of life of these elderly people. Moreover, these homes also make it difficult for the elderly to build interpersonal relationships in a community context, relationships which are essential to maintaining a high quality of life and developing citizenship.

In this study, the concept of QOL adopted is that which is defined by the WHO as "the individuals' 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" (WHOQOL GROUP, 1995). To study this issue, it is important to understand that QOL has multiple aspects related to the perception of the elderly that are analyzed, including sensory abilities; autonomy; past, present, and future activities; social participation; and death, dying, and questions of intimacy, all of which may impact the QOL of elderly residents in homes. We begin with the premise that elderly individuals residing in a long-stay institution (LSI) are living in a vulnerable condition because they are subject to abandonment, a lack of affection, loneliness, and dependency in their daily activities, all of which can affect quality of life, this study aimed to analyze the quality of life of elderly residents in long-stay institutions in the city of Natal, RN.

#### **MATERIALS AND METHODS:**

A descriptive, exploratory, and quantitative study was conducted in six LSIs distributed in the catchment areas of health districts in the city of Natal, Brazil: North, East, West, and South, which corresponds to 100% of the institutions registered for local health inspection.

The population studied was 266 elderly residents of the six LSIs, an initial simple random sample followed by a convenience sample corresponding to 30% of the elderly in each LSI, for a total of 80 people. The inclusion criteria used were: elderly 60 years of age or older, evaluated by the institution as independent or partially dependent, with favorable motor skills, the ability to answer the questions posed, and who agreed to participate in the study. As to the exclusion criteria, people 60 and older with a mental disorder or another illness that prevented them from answering questions did not participate, in addition to those who had speaking and hearing difficulties or those who were not willing to participate.

After applying the exclusion criteria described, 37 elderly people (46.2%) were excluded from the sample due to previously diagnosed cognitive disorders and hearing and speaking difficulties, as well as those taking antidepressant medication, which reduced the sample to 43 elderly people (53.7%). Thus, the final sample consisted of 43 elderly people, accounting for 16% of elderly residents in the selected institutions.

To collect the data, two surveys were used: the first containing questions related to sociodemographic and the second, prepared by the WHOQOL, evaluating on quality of life, especially for identification of the possible consequences of policy on the quality of life of older adults and a clearer understanding of areas for investment, to obtain the best gains in quality of life, known as the WHOQOL-OLD module.

According to Fleck et al (2003), the WHOQOL-OLD is for 24 items of Likert scale assigned to six facets: "Operation of sensorimotor (SM)," Autonomy "(AUT)," Past Activities, Gifts and Future "(PTT)," Social Participation "(PSO)," Death and Dying "(MEM) and" Intimacy "(INT). Each of these facets has 4 items, and the score values of these facets can vary from 4 to 20, provided that all items of a facet have been completed (Table 1) and also producing a combined overall score ("Global") to the quality of life in older adults, denoted as the "overall score" module.

Data collection took place in July and August 2007 in the elderly homes with the dates scheduled and agreed upon with the interviewee. All ethical and legal aspects of resolution 196/96 of the Ministry of Health (1996) were followed, from the authorization letter from the institutions, approval by the Ethics and Research Committee of the Universidad Federal do Rio Grande do Norte (CEP-UFRN), to the Informed and Free Consent Form, in accordance with the project approved by CEP-UFRN under protocol 108/2007.

The results followed the statistical model adopted by the WHOQOL-OLD, the Statistical Package for Social Sciences-SPSS (13.0), through calculations of the Gross Facet Score, Standardized Mean Facet Score, with values between 1 and 5, and the Transformed Facet Score ranging from 0 to 100, in accordance with the WHOQOL-OLD manual (FLECK et al, 2003).

Table 1 – Facet distribution according to the items and response ranges, in accordance with the method and results of WHOQOL-OLD focus

FACET	ACRONYM	ITEMS	FACET ITEMS		Sensory functions, impact of sensory skill loss on the quality of life			
Sensory abilities		4	1+2+10+20	16 (4, 20)				
Autonomy	AUT	4	3+4+5+11	16 (4, 20)	Independence in old age, ability or freedom to live independently and make decisions			
Past, present, and future activities	PPF	4	12+13+15+19	16 (4, 20)	Satisfaction with achievements in life and things desired			
Social participation	PSO	4	14+16+17+18	16 (4, 20)	Participation in daily activities, especially in the community			
Death and dying	MEM	4	6+7+8+9	16 (4, 20)	Concerns, anxieties, and fears about death and dying			
Intimacy	INT	4	21+22+23+24	16 (4, 20)	Ability to have personal and intimate relationships			

Source: WHOQOL manual (FLECK et al, 2003).

The average score of the elderly participants in each of the six facets indicates their perception of their satisfaction with each of these aspects in their life, linking them to their quality of life. According to the 0-100 scale used, the closer the average score of the elderly to 100, the more satisfied or positive the perception of that facet is, in accordance with the respective items. The conversion of a raw score to a transformed scale score between 0 and 100 allows for the expression of the scale score as a percentage between the lowest possible value (0) and the highest possible value (100) of QOL classification, according to the following facet categorization scale (Table 2):

Table 2 - Relationship of the 0 - 100 scale to QOL classification according to the items and response ranges, following the method and results of WHOQOL-OLD focus groups in Brazil in 2003

0 – 20	21 - 40	41 - 60	61 - 80	81 - 100		
Nothing	Very little	So So	Quite	Extremely		
Nothing	Very little	Average	Very	Completely		
Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied		

Source: WHO QOL-OLD manual (F LECK et al, 2003; 2006).

#### **RESULTS AND DISCUSSION**

The institutions surveyed are categorized as philanthropic, nonprofit, and connected to religious entities, receiving funds from state and city health departments, in addition to the retirement benefits of elderly residents. Participants in this study included 43 elderly residents of six philanthropic long-stay institutions supported by funds donated by the state and city Secretariats of Health and Welfare, in addition to funds established by the elderly residents' retirement, in accordance with Chapter VIII of Social Welfare, Art. 35, § 1.° and § 2.° of the Statute of the Elderly (BRASIL, 2003).

The sociodemographic and institutional characterization showed that 65.1% of the elderly respondents were female and 34.9% male, whose marital status was predominantly single or widower/widow at 44.2% and 41.8%, respectively. This confirmed a number of studies Corttelleti et al (2003) on institutionalized elderly in Caxias do Sul - RS, where investigators found significant levels of single subjects (38.3%), which, added to the percentage of widowers/widows (42.9%), demonstrated that the absence of a partner can be a determining factor in admission to a home.

As to the age of the elderly subjects, the 71-80 bracket had a higher frequency: 18 (41.8%), followed by the 81-90 and 61-70 brackets, which had frequencies of 15 (34.9%) and 10 (23.4%), respectively. It can be inferred that the average age of the elderly is 76.6 years (standard deviation = 7.25).

Of the participating elderly, 81.4% referred to themselves as Catholic, followed by 16.3% evangelical, although 99% of the sample (42) showed an affinity with some religious practice. Some studies show that religious belief is associated with feelings of greater overall satisfaction, well-being, and stability (NAJMAN and LEVINE, 1981).

With respect to place of origin, 67.4% of the elderly respondents were from rural areas, while 32.6% came from urban areas. According to studies by Berquo (1999), one possible explanation for this is that the migration process from rural to urban areas creates distinct family and domestic arrangements which, over time, acquire specific features that may place the elderly, in emotional and material terms, in insecure or vulnerable situations, and therefore at risk of psychological affections that are reflected in their quality of life.

As to the education of participants, 30.2% did not complete primary school, followed by a percentage of 25.6% literate individuals. Of the elderly surveyed, only one (2.3%) had a university degree, in social work. However, 41.9% of the elderly residents were illiterate. These data are consistent with the Brazilian Institute of Geography and Statistics and its claim that Brazilian education levels are still far from desired, especially in the Northeast, where the majority of the population is classified as "illiterate" (BRASIL, 2003).

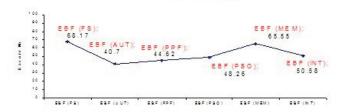
Before entering the long-stay institutions 37.2% of the elderly lived with their children, followed by 27.9% who lived with relatives. Another 16.3% lived alone and only 9.3% of respondents lived with their spouse, which does not seem to have given these elderly the opportunities for the emotional support necessary to quality of life at this stage of their existence. Regarding the number of children the elderly had born, 32.6% were childless, while 67.4% of the respondents have or had born

children, with a higher frequency of elderly with one or two children (27.2 %), followed by elderly with three or four children (16.3%) and five or six children (11.63%). These results, however, reveal that more than half the elderly in this study (65.1%) had lived with family, either children or relatives, before they opted for housing in LSIs.

Analysis of QOL according to the six facets: sensory skills; autonomy; past, present, and future activities; social participation; death and dying; and intimacy.

The responses of the elderly were grouped into the WHOQOL-OLD questions, corresponding to the aspects of quality of life that the module attempted to evaluate: sensory skills (FS), autonomy (AUT), past, present, and future activities (APPF), social participation (OS), death and dying (MEM), and intimacy (INT).

Figure 1 - Demonstration of the average facet scores according to the perception of elderly in long-stay institutions in the city of Natal, Brazil, 2007.



It is observed that the highest mean score (68.1) occurred under the sensory functioning facet, while the lowest mean score (40.7) was observed under the autonomy facet. The total mean facet score was 52.9, corresponding to a QOL assessment that was neither satisfactory nor unsatisfactory. The results of the mean facet scores (ETF) show how the elderly in this study perceived their QOL. The sensory facet had a mean score of 68.1 (SD = 20, 0), interpreted as an indication that the elderly in this study, in general, are satisfied with their sensory skills that are needed to participate in daily activities and interaction with other people living in the homes (Table 1).

Table 1 - Distribution of scores for the WHOQOL-OLD facets, as perceived by elderly in long-stay in stitutions in the city of Natal, Brazil, 2007.

Facet Scale 9	FS		AUT		PPF		PSO		MEM		INT		77
	M *	SD**	M *	SD**	M *	SD*	M *	SD**	M *	SD*	M*	SD*	TO TAL
Mean EBF (4- 20)	14.9	3.2	10.5	2.1	11.1	2.7	11.7	2.5	14.4	3.4	12.0	3.0	74.8
Mean EPF (1 - 5)	3.7	0.8	2.6	0.5	2.7	0.6	2.9	0.6	3.6	0.8	3.0	0.7	3.1
ET F (0-100)	68.1	20.0	40.7	13.0	44.6	16.9	48.2	15.8	65.5	21.7	50.6	18.8	52.9

M\* = mean; SD\*\* = standard deviation.

It is understood that this feeling may be related to the main health complaints that elderly patients have, namely, loss of hearing and sight abilities, a natural process in this phase of life for most elderly people and which, if not treated, can cause cataracts and glaucoma. The problems associated with visual impairment may prevent or impede the independence of the elderly in their daily lives. The loss of vision that cataracts cause may impede day-to-day activities, thus influencing the quality of life of the affected individuals (FERRAZ et al, 2002).

For the autonomy facet, a mean score of 40.7 (SD = 13.0) was found, which was a lower than that found with the other facets. These results are not very surprising, since the elderly living in LSIs are usually passive people without jobs, making the residents people without their own initiatives with which to fill their time.

We understand this result to be an indication that the elderly in this study are dissatisfied with their autonomy in the homes in which they live, a fact that could be due to the reduced freedom allowed them or the little respect given by institution officials to the freedom the elderly do have. Elderly people often realize that the people working for the institution in which they reside do not respect their freedom, not allowing them to make decisions about what they would like to do with their lives or even plan their futures. This means that elderly residents in long-stay institutions are not assured their autonomy, nor do they have the freedom to make decisions when necessary or control over their future, and in some cases the freedom to stay at home, engaging in activities that make them happy. Thus, the institutions do not seem to act as directed by the Statute of the Elderly in Chapter II, Art. 10, § 1° and 2° (BRASIL, 2003).

Results obtained for the "Death and Dying" facet had a mean score of 65.5 (SD = 21.7), indicating that the elderly in this study are satisfied as to their feelings about concerns and fears of death and dying, which may be related to the fact that, because they feel they are nearing the end of life, death is something to expect.

Relationships among the institutionalized elderly and the affection and respect they build with one another oftentimes lead them to consider some fellow elderly residents as loved ones, sometimes even more so than their own families (ROSS, 2002).

### CONCLUSION

This study provided an evaluation of the quality of life (QOL) of elderly residents in long-stay institutions (LSIs), with a view to their perception and based on identification of the sociodemographic aspects which concern them, from activities related to health and institutionalization to the QOL aspects considered relevant to the elderly and as measured by the WHOQOL-OLD. Connected to a new structure, current old age exhibits some changes present in our society and identified in this study.

Because this work specifically dealt with the elderly, we chose to use the abbreviated version of the WHOQOL-OLD directed toward the elderly, as it is a useful alternative for the specificities of human aging and because of its ease of use. The module was administered by the researcher in the institutions where the elderly live, during times when they approved it, which was usually in the morning, and respecting their need for comfort and well being.

With respect to aspects of quality of life of institutionalized elderly in the city of Natal, Brazil, analysis of the results highlights a tendency toward neutrality, with a total mean score of 52.9%, even though that quality of life depends on subjective evaluations that people make and may be biased both by the poverty that creates low expectations and by resignation in the face of the consequences of the institutional process.

Based on this information, the elderly in this study assessed their QOL as neither satisfactory nor unsatisfactory, a result which may be related to indifference or resignation to fate, characterized by the finite nature of life, considered a common feeling among the elderly or even as an accommodation, and often accompanied by a discouragement present in many elderly. It was found that, among the facets, FS obtained the highest mean score (68.1%) for the elderly in this study.

The autonomy facet represented the lowest score (40.7%), referring to independence and the ability to make decisions, as it was perceived by the elderly respondents to be dissatisfactory. These results are not very surprising, since the elderly living in LSIs are usually passive people without jobs, which turns the residents into people without their own initiatives with which to fill their time.

While institutionalization constitutes a strategy for elderly who are abandoned, who have no home care or other caregivers, it is necessary to expand programs that promote health in the six facets of quality of life studied, especially for the autonomy facet, where the results suggest dissatisfaction. As a result, elderly living in long-stay institutions would have better quality of life and therefore better health and welfare, fostering basic health care and enhancing quality of life from a physical, mental, and social point of view.

#### **REFERENCES**

Berquó E. Considerações sobre o envelhecimento da população no Brasil. In: Neri AL, Debert GG. **Velhice e Sociedade**. São Paulo: Papirus Editora; 1999: 11-40.

Brasil. Lei nº 10.741, de 1º de outubro de 2003. **Dispõe sobre o Estatuto do Idoso e dá outras providências.** Brasília; 2003.

Brasil. Agência Nacional de Vigilância Sanitária - ANVISA. Resolução RDC nº. 283, de 26 de setembro de 2005. Regulamento Técnico que define as normas de funcionamento para as Instituições de Longa Permanência para Idosos. **Diário Oficial da União**, Brasília; 2005.

Ferraz EVAP et al. Adaptação de questionário de avaliação da qualidade de vida para aplicação em portadores de catarata. **Arquivos Brasileiros de Oftalmologia.** 2002; 65(3).

Fleck MPA, Chachamomovich E, Trentini C. Projeto WHOQOL-OLD: método e resultados de grupos focais no Brasil. **Revista de Saúde Pública**. 2003; 37(6): 793-9.

Fleck MPA, Chachamomovich E, Trentini C. Desenvolvimento e validação da versão em Português do módulo WHOQOL-OLD. **Revista de Saúde Pública**. 2006; 40(5).

Najman JM, Levine S. Evaluating the impact of medical care and technologies on the quality of life: a review and critique. **Social & Science Medicine.** 1981; 15: 107-15.

ORGANIZAÇÃO MUNDIAL DA SAÚDE – OMS – **Envelhecimento ativo: uma política de saúde. Brasília**: Organização Pan-Americana de Saúde, 2005.

Ramos LR, Veras RP, Kalache A. Envelhecimento populacional: uma realidade brasileira. **Revista Saúde Pública**. 1987; 21(3): 211-24.

Ross EK. Sobre a morte e o morrer: o que os doentes terminais têm para ensinar a médicos, enfermeiras, religiosos e aos seus próprios parentes. 8. ed. São Paulo (SP): Martins Fontes, 2002.

VERAS, Renato Peixoto. Em busca de uma assistência adequada à saúde do idoso: revisão da literatura e aplicação de um instrumento de detecção precoce e de previsibilidade de agravos. **Cadernos Saúde Pública**, mai./jun. 2003, vol. 19, no.3, p. 705-715.

Whoqol Group. The world health organization quality of life assessment: position paper from the world health organization. **Social & Science Medicine**. 1995; 41: 1403-9.

Vilani Medeiros de Araújo Nunes:

Email: vilani.medeiros@bol.com.br

Address:Rua Padre Fernandes, 08; Portal do Jiqui; Nova Parnamirim; Parnamirim / RN.

CEP: 59150140; Brasil.

João Carlos Alchieri: jcalchieri@gmail.com

Rejane Maria Paiva de Menezes: rejemene@terra.com.br

#### CHARACTERIZATION AND ANALYSIS OF QUALITY OF LIFE OF ELDERLY IN LONG-STAY INSTITUTIONS

The aging of the Brazilian population has been accompanied by changes in family structure, increasing demand for long-stay institutions as an alternative to social support for the elderly. This is a descriptive and exploratory study that aims to analyze the quality of life (QOL) of institutionalized elderly in Natal, Brazil. For data collection, interviews with 43 elderly people were conducted using the WHOQOL-OLD module, specifically to evaluate QOL in the elderly. The results showed an overall mean score of 52.9%. The sensory facet obtained the highest mean scores (68.1%), showing satisfaction of the elderly with their situation. However, the autonomy facet presented the lowest mean (40.7%), demonstrating dissatisfaction with the ability to make decisions. It was concluded that the elderly rated their QOL as neither unsatisfactory nor satisfactory. It is necessary to implement public policies aimed at promoting attention to the institutionalized elderly in anticipation of a better quality of life for these people.

KEY WORDS: Quality of Life. Elderly. Long-Stay Institutions for the Elderly.

### CARACTERISATION ET ANALYSE DE LA QUALITE DE VIE DES PERSONNES AGEES EN LONG SÉJOUR DES INSTITUTIONS

Le vieillissement de la population brésilienne a été accompagnée par des changements dans la structure familiale, l'augmentation de la demande de long séjour des établissements comme un soutien social de substitution aux personnes âgées. Il s'agit d'une étude descriptive, qui analyse la qualité de vie (QV) dans les personnes âgées institutionnalisées dans le Natal, au Brésil. Pour la collecte des données a été réalisé des entrevues avec 43 personnes âgées utilisant l'WHOQOL-old, spécifiquement pour évaluer la qualité de vie chez les personnes âgées. Les résultats ont indiqué un score moyen total de 52,9%. Facet sensorielle obtenu le score moyen le plus élevé (68,1%), révélant la satisfaction dans la situation où elles se trouvent. Toutefois, l'aspect autonomie avait la moyenne la plus basse (40,7%), montrant l'insatisfaction avec la capacité de prendre des

décisions. A conclu que les personnes âgées ont évalué leur qualité de vie tant soit peu satisfaisante ou satisfaisante. Il est nécessaire de mettre en œuvre des politiques publiques pour promouvoir les soins des personnes âgées institutionnalisées, en vue d'améliorer la qualité de vie.

MOTS-CLÉS: Qualité de la Vie; âgées; Établissement pour personnes âgées.

## CARACTERIZACIÓN Y ANÁLISIS DE LA CALIDAD DE VIDA DE LAS PERSONAS MAYORES EN ESTANCIA DE LARGA DURACIÓN DE INSTITUCIONES

El envejecimiento de la población brasileña ha ido acompañado de cambios en la estructura familiar, el aumento de la demanda de estancias de larga duración como las instituciones de apoyo social alternativa a las personas de edad avanzada. Este es un estudio descriptivo, que analiza la calidad de vida (CDV) en los ancianos institucionalizados en Natal, Brasil. Para la recogida de datos se llevó a cabo entrevistas con 43 personas de edad avanzada mediante el WHOQOL-OLD, específicamente para evaluar la calidad de vida en los ancianos. Los resultados indicaron una puntuación media total de 52,9%. La faceta sensorial obtenido la mayor puntuación media (68,1%), revelando la satisfacción en la situación en que se encuentran. Sin embargo, la faceta de la autonomía tenía la media más baja (40,7%), mostrando la insatisfacción con la capacidad de tomar decisiones. La conclusión de que las personas de edad calificaron su calidad de vida como satisfactoria o no satisfactoria. Es necesario implementar políticas públicas para promover el cuidado de los ancianos institucionalizados a fin de mejorar la calidad de vida.

PALABRAS CLAVE: Calidad de vida; Ancianos; Institución para la Tercera Edad.

### CARACTERIZAÇÃO E ANÁLISE DA QUALIDADE DE VIDA DE IDOSOS EM INSTITUIÇÕES DE LONGA PERMANÊNCIA

O envelhecimento populacional brasileiro tem sido acompanhado por transformações na estrutura familiar, aumentando a demanda por instituições de longa permanência como uma alternativa de suporte social à pessoa idosa. Trata-se de estudo descritivo e exploratório, que objetiva analisar a Qualidade de Vida (QV) em idosos institucionalizados em Natal-RN. Para coleta de dados foi realizada entrevista com 43 idosos utilizando-se o WHOQOL-OLD, específico para avaliar a QV em idosos. Os resultados indicaram um escore médio total de 52,9%. A faceta sensorial obteve a maior média dos escores (68,1%), revelando satisfação na situação em que se encontram. Entretanto, a faceta autonomia obteve a menor média (40,7%), demonstrando insatisfação quanto à capacidade de tomar decisões. Conclui-se que os idosos avaliaram sua QV como nem insatisfatória, nem satisfatória. Faz-se necessária a implementação de políticas públicas voltadas para a promoção à atenção ao idoso institucionalizado na perspectiva de uma melhor qualidade de vida.

PALAVRAS-CHAVE: Qualidade de Vida; Idoso; Instituição de Longa Permanência para Idosos

PUBLICAÇÃO NO FIEP BULLETIN ON-LINE: http://www.fiepbulletin.net/80/a1/130