

152 - COMPARISON OF THE LEVEL OF INDEPENDENCE IN ADLS IN ELDERLY INSTITUTIONALIZED AND NON-INSTITUTIONALIZED

CAMILA LIBÓRIO RODRIGUES
 LUIZ ORESTES BOZZA
 Faculdade Assis Gurgacz (FAG) – Cascavel – Paraná – Brasil
camila.liborio@hotmail.com

INTRODUCTION

The twentieth century was marked definitively the importance of studying aging, first because never in human history, the population had such high life expectancy of life, resulting from the implementation of medicines, health planning and sanitary control, giving trend growth of interest in researching and studying the aging process at the same time that this increase in the number of elderly people worldwide, a passive pressure exerted on the development of research in this field. (NETTO E CUNHA, 2002).

Data from Brazilian Institute of Geography and Statistics - IBGE (2000) show that Brazil had 14.875.000 seniors, representing approximately 5% of the total population in 2000. However, the Brazil of today, the beginning of third millennium presents a demographic profile different from that featured a young country, where projections show that the elderly population is growing every year, estimating that in 2050 the elderly represent 18% of the population.

Aging is described by several authors with different terminology, but all with similar meanings. Maciel (2005) and Mota (2004) agree when they say the aging process is inevitable and a reality around the world, where with advancing age, there are disorders or diseases that affect the smooth operation and changed the body of the elderly.

However, Maciel said that the diseases affect primarily the disturbance of posture and equilibrium, supported by Simoceli (2003), which also characterizes clinical disorders such as dizziness, vertigo and imbalance. But Mota and Junior (2002) disagree, pointing out the major diseases as disorders that affect the cardiac, neurological and musculoskeletal systems, saying that these will lead to more serious consequences. In addition to the descriptions in accordance with the conditions and changes in the human body, there are descriptions according to age.

The World Health Organization (WHO), quoted in Barros (2000), classifies people according to age and independent of gender, being:

Media age: 45 to 64 years old.
 Elderly: 65 to 79 years old.
 Old age: 80 to 90 years old.
 Great old age: above 90 years old.

It is known that when the human aging, many tasks of daily life, mundane, and therefore easy, go slowly and often imperceptibly, making it increasingly difficult to be performed until the individual perceives that it is already dependent on another person to take a bath, for example. (ARAUJO e CEOLIM, 2007). Paschoal (1999) agrees and adding that all efforts should be maximized in order to prevent physical dependence, so that the elderly can live longer in their home environment.

Although policies in Brazil to prioritize the family as responsible for the care of the elderly, the trend of increasing demand for long-stay institutions becomes increasingly a fact imminent. (CREUTZBERG et. al., 2007).

According to the World Health Organization (1981), a good justification for the possible admission of elderly in nursing homes is a disability because of a disability, which are usually necessary for independent living of the human community.

Paúl (1997) quoted in Araújo et. al. (2007), held a study showing that loss of functional capacity was found in the primary reason for institutionalization of the elderly. Moreover, Chaimowicz; Greco, (1999); Herédia et. al. (2004) add, lack of financial resources, precarious family education about caring for a person with so many quirks and unavailability of caregivers in the family as reasons for institutionalization.

The institutionalizations is much more than a change of physical environment for the elderly is presented as a need to adjust itself and the new environment, and triggers a sense of abandonment, anxiety and fear, the possibility of spending the last days of his life in a strange place, next to strangers (HERÉDIA et. al. 2004). More than this, the loss of autonomy of the elderly and physical inactivity as a result of inadequate technical management affect the elderly. Not to mention the damage as depression, confusion, loss of contact with reality and depersonalization (ARAUJO E CEOLIM, 2007). It is also common in long-stay institutions, the physical dependence, stimulated by the employees, since they prefer to help the elderly in their basic activities, especially when they present inability to perform simple tasks, although they are not able to do them, having conditions to conduct them in a slower rate, is what it says Pavarine (1996). But this does not necessarily mean that the institutionalized elderly have greater functional disability and disease, the non-institutionalized elderly.

The research aims to compare the level of independence to perform of activities of daily living (ADL's) in elderly residents of those institutions and those who live at home, through the Barthel index questionnaire, with modified scale, where gradually the level of independence, through the level of personal autonomy and mobility.

MATERIALS AND METHODS

The epidemiological study is the type of cross-sectional comparative data with a probability sample.

The research was performed in a long stay institution, St Vicent de Paul nursing home, located at Jaime Duarte Leal Avenue, 110, in Maria Luiza in the city of Cascavel- PR; and in the center of the living of Assis Gurgacz College (FAG), where happens the action and citizenship project, with the target the elderly people and as objective to provide physical conditioning, manual and psychological for these, located at Torres Avenue, 500 in FAG subdivision in the city of Cascavel-PR.

The sample consisted of 30 elderly, between 70 and 80 years, who were available and within the inclusion criteria: residents enrolled in the nursing home, regular participants in the action and citizenship project, age between 70 and 80 years and who agreed and sign the commitment agreement free and clear, and were excluded from the study elderly who were not stipulated in the age group, who refused to sign the commitment agreement and those with any pathology that could influence the level of independence, totaling 30 individuals, 16 were institutionalized and 14 non-institutionalized.

Data collection was conducted in March and April 2010, where it was explained to the participant about the research

and delivered a statement of commitment free and clear, in which the participant claimed to have been duly informed about the research objectives, agreeing to participate voluntarily in the same, after the Barthel index questionnaire was applied by an appraiser trained beforehand, to assess the level of independence in activities of daily living (ADLs), containing nine questions where it is assessed the level of personal autonomy (with maximum score 53) and six questions to analyze the level of mobility (maximum score 47), totaling a maximum score of 100, where 0 is totally dependent and 100 totally independent.

Data were tabulated using Microsoft Excel 2007 program (Windows 7 operating system, Microsoft Corporation, Inc.) and analyzed using test t of student, using significance level of 5%, and simple percentages, for some data.

The project of the research was approved by the Ethics Committee on Human Research of the Assis Gurgacz College (FAG) (CEP Opinion 356/2009, 011/09 in December 16, 2009).

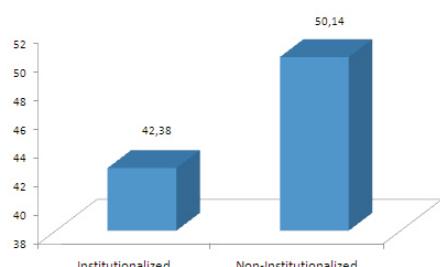
RESULTS

We analyzed 30 questionnaire, being 16 answered by the elderly that live in St. Vicent de Paul nursing home and 14 answered by participants of action and citizenship project of Assis Gurgacz College - FAG.

The sample had an average age of 64.62 years, ranging between 70 to 79 years. Since that 53.33% were male and 46.66% were female in a random choice. Although it was observed that the score was the biggest difference in the level of mobility, different than the total score, which will be discussed in the graphs below.

According to the division of the Barthel scale, primarily analyzing the level of personal autonomy, we found the total of 42.38 points for the institutionalized elderly, while the non-institutionalized had 50.14 points, showing no great difference in independence relation to personal, can prove, seeing that 6 of the institutionalized elderly had the maximum score in this category (53 points), nearly equaling the non-institutionalized elderly which were 7 with the maximum score.

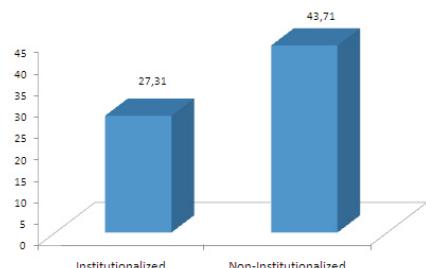
GRAPH1: Personal Autonomy



Source: Atuthor, 2010.

In the second part of the questionnaire, where the focus was on the level of mobility, we noticed a big difference, showing that the non-institutionalized elderly have a score almost double those institutionalized. However, during the applications of questionnaire, the elderly participants of action and citizenship project, reported having more pain than elderly of nursing home, mainly in the spine and lower limbs. Thus concluding that in spite of their greater mobility, have pain, may lead to a reduction of mobility in the future.

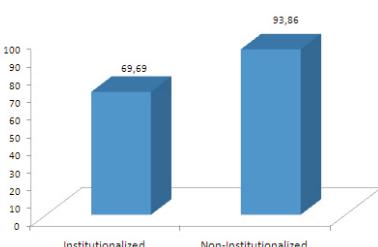
GRAPH 2: Mobility Level



Source: Atuthor, 2010.

Thus, analyzing the questionnaire with a total score, it was noticed that the elderly residents a long-stay institution have a higher dependence to perform activities of daily living, the elderly with their own home.

GRAPH 3: Total Barthel



Source: Atuthor, 2010.

DISCUSSION

The functional capacity, especially in activities of daily living, is a major component of the health of the elderly, due to factors that influence and help to impede such capabilities. For this have been widely used questionnaires that assess the independence of the elderly; in this study, the Barthel index questionnaire is the method that was used.

Thus, with this study, it is found that the 30 subjects interviewed, 22 had a score greater than 75, where 8 were institutionalized and the remaining non-institutionalized, being considered independent, since the maximum score is 100 to independence. In contrast, only 4 of the interviewees had score less than 50, considering so dependent for most ADLs, noting that the four are residents of the nursing home. And the other four are with the score on semidependence, being too institutionalized. Thus concluding that the institutionalized elderly are more dependent and the non-institutionalized semidependent, data that doesn't coincide with the study of Diaz (2005), which showed that only 47% of institutionalized elderly were independent and the other 53% semidependent or dependents.

Given this, the differences between groups may be related to internal and external constraints that interfere in autonomous actions. Agreeing with Almeida and Dernt (1996), quoted in Greve (2007), in their study found evidence to suggest that the confinement in institutions contributes to accentuate the problems of personal isolation and loss of personal autonomy.

Although the level of mobility is bad in the institutionalized elderly, the level of personal autonomy has a low average score (score 27.31) compared to the comparative group (score 43.71), this, not necessarily because the elderly are unable to perform the tasks and can often run them, but with more time, but probably because the caregivers had not qualified to instruct them and the patience to wait for the same conduct. Is the same as said Nascimento et al. (1998), explaining that the inactivity of the elderly, is often forced by the caregivers, even when performing all functions for the elderly. However, we found a high of independence for the institutionalized elderly, it is important that, they are stimulated all the time, that doesn't develop a dependency forced to because of poor care, as already mentioned. This also, to exclude the statement about the association of institutionalizations with physical and cognitive dependence of older people (DIOGO, 2003).

Still, similar to the present study, regarding the lack of trained caregivers, Pilot et al (1998) analyzed nursing home and reported that the main problems of care were the lack of human resources for promotion, lack of skilled labor care of inmates and inactivity towards the elderly. Being an important point to new studies and training with this population and can thus reduce the levels of dependency in the nursing home elderly, among other problems with the senility that affects public health.

CONCLUSION

Thus concluding that there are differences in the independence of elderly non-institutionalized and institutionalized, with an average score of heterogeneous and highly significant, in which the second part of the questionnaire, which includes the level of mobility, the differences are larger than those found in the item autonomy staff. However as the two are directly linked and dependent, the mean total score was quite different, thus indicating that the institutionalized elderly are more dependent than non-institutionalized.

BIBLIOGRAPHIES

1. ARAUJO, F.; RIBEIRO, J. L. P.; OLIVEIRA, A., PINTO, C. Validação do índice de Barthel numa amostra de idosos institucionalizados. *Revista portuguesa de saúde pública*. V.25, n.2, p. 59 – 66. Jul./dez. 2007.
2. ARAUJO, M. O. P. H. D.; CEOLIM, M. F. Avaliação do grau de independência de idosos residentes em instituições de longa permanência. *Revista Escola de Enfermagem da USP*. V. 41, n.3. São Paulo: set. 2007.
3. BARROS, D. D. R. A gerontomotricidade e as condutas psicomotoras. In: FERREIRA, C. A. D. M. (Org.). *Psicomotricidade: da educação infantil à gerontologia*. São Paulo: Lovise, 2000, cap. 16, pag. 153 – 160.
4. CHAIMOWICZ, F.; GRECO, D. B. Dinâmica da institucionalização de idosos em Belo Horizonte. *Rev. Saúde Pública*, v.33, n.5, p. 454 – 460, out – 1999.
5. CREUTZBERG, M.; GOLÇALVES, L. H. T.; SOBOTTKA, E. A. et. al. La institución de larga permanencia para ancianos y el sistema de salud. *Revista latino americana de enfermagem*. V. 15, n.6. Nov./dez.; 2007.
6. CUNHA, G. L. D.; JECKEL – NETO, E. A. Teorias biológicas do envelhecimento. In: FREITAS, E. V. D.; PY, L.; NERI, A. L.; CANÇADO, F. A. X.; GORZONI, M. L.; ROCHA, S. M. D. (Org.). *Tratado de geriatria e Gerontologia*. Rio de Janeiro: Guanabara Koogan, 2002, cap. 2, pag. 13 – 19.
7. GREVE, P.; GUERRA, A. G.; PORTELA, M. A.; PORTES, M. S.; REBELATTO, J. R. Correlação entre mobilidade e independência funcional em idosos institucionalizados e não institucionalizados. *Rev. Fisioterapia em movimento*. V. 20, n.4. p. 117 – 124. Curitiba: out./Nov. 2007.
8. HERÉDIA, V. B. M. et. al. Institucionalização do idoso: identidade e realidade. In: CORTELLETTI, I. A.; CASARA, M. B.; HERÉDIA, V. B. M. *Idoso isolado, um estudo gerontológico*. Caxias do Sul: Educs/Edipucrs, 2004, cap. 13, pag. 60.
9. INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA: *Síntese de indicadores sociais 2000*. Rio de Janeiro 2000. Disponível em <http://www.ibge.com.br> Acesso em 15/05/2010 às 15:30.
10. JUNIOR, C. M. P.; HECKMANN, M. Distúrbios da postura, marcha e quedas. In: FREITAS, E. V. D. (Org.). *Tratado de geriatria e gerontologia*. Rio de Janeiro: Guanabara Koogan, 2002. cap. 74, pag. 624-634.
11. MACIEL, A. C. C.; GUERRA, R. O. Prevalência e fatores associados ao déficit de equilíbrio em idosos. *Revista brasileira de ciência e movimento*. 2005; 13(1): 37-44.
12. MOTA, M. P.; FIGUEIREDO, P. A.; DUARTE, J. A. Teorias biológicas do envelhecimento. *Revista portuguesa de ciências do desporto*. v. 4, n.1, 81-110, 2004.
13. NASCIMENTO, E. B.; PEREIRA, N. G.; GARCIA, Y. R. A Instituição e o idoso: um estudo das características da instituição e do perfil de seus moradores. *Gerontologia*. V.6, n.4. p. 167 – 176, 1998.
14. NETTO, M. P.; O estudo da velhice no século XX: histórico, definição do campo e termos básicos. In: FREITAS, E. V. D.; PY, L.; NERI, A. L.; CANÇADO, F. A. X.; GORZONI, M. L.; ROCHA, S. M. D. (Org.). *Tratado de geriatria e Gerontologia*. Rio de Janeiro: Guanabara Koogan, 2002, cap. 1, pag. 2 – 12.
15. PASCHOAL, S. M. P. Autonomia e independência. In: PAPALÉO, N. M. (Org.). *Gerontologia*. São Paulo: Atheneu, 1999, pag. 313 – 326.
16. PAVARINI, S. C. I. *Dependência comportamental na velhice: uma análise do cuidado prestado ao idoso institucionalizado*. [Dissertação de doutorado]. Campinas: Universidade Estadual de Campinas, 1996.
17. SIMOCELI, L.; BITTAR, R. M. S.; BOTTINO, M. A.; BENTO, R. F. Perfil diagnóstico do idoso portador de desequilíbrio corporal: resultados preliminares. *Revista brasileira de otorrinolaringologia*. v.69, n.6, 772-777, Nov./dez., 2003.
18. WORLD HEALTH ORGANIZATION. *Disability prevention and rehabilitation*. Geneva, p.40, 1981.

Rua das Hortências nº 185 – Bairro: Tropical
 Cascavel – Paraná – Brasil
 camila.liborio@hotmail.com

COMPARISON OF THE LEVEL OF INDEPENDENCE IN ADLS IN ELDERLY INSTITUTIONALIZED AND NON-INSTITUTIONALIZED.

ABSTRACT

Introduction: It is known that aging is a natural process of life that brings a series of morphological, functional, biochemical and psychological changes. Although senility isn't synonymous of disease, many elderly have functional disabilities may lead to total dependence. **Objective:** The research aims to compare the level of independence to perform of activities of daily living (ADL's) in elderly residents of those institutions and non-institutionalized. **Methodology:** The epidemiological study is the type of cross-sectional comparative data with a probability sample. The sample consisted of 30 elderly, between 70 and 80 years living in nursing home and participants of action and citizenship project of Assis Gurgacz College. Being applied the Barthel index questionnaire, with modified scale, with 15 closed questions that punctuated the level of independence of the elderly. The data were tabulated and analyzed by Microsoft Excel 2007 program. **Results:** In the analysis of the total score was found a considerable difference between the two groups, and the institutionalized elderly had a lower score than the non-institutionalized. However the level of personal autonomy, even showing differences, these were minimal, since in both groups an average of six people who have achieved the maximum score. We found the disparity in the level of mobility where the elderly resident in nursing home had about half the score when compared to another group. **Conclusion:** We conclude that there is considerable difference of independence between groups. Since the institutionalized did not physical exercise which lead to a greater deficit in the mobility level, while non-institutionalized have better mobility.

KEYWORDS: Elderly. Level of independence. Activities of daily living.

COMPARAISON DU NIVEAU D'INDÉPENDANCE DANS AVD'S DES PERSONNES AGÉES INSTITUTIONNALISÉES ET NON INSTITUTIONNALISÉES.

RÉSUMÉ

Introduction : Il est connu que le vieillissement est un processus naturel de la vie qu'apporte avec elle une série de modifications morphologiques, fonctionnelles, biochimiques et psychologiques. Bien que la sénilité ce n'est pas synonyme de maladies, beaucoup de personnes âgées présentent des incapacités fonctionnelles, en pouvant prendre la dépendance totale. **Objectif :** La recherche a comme objectif comparer le niveau d'indépendance pour la réalisation des activités de la vie quotidienne (AVD'S) des résidents âgés des institutions et des ceux non institutionnalisés. **Méthodologie :** L'étude c'est du type épidémiologique, de caractère comparatif de coupe transversale avec un échantillon probabiliste. L'échantillon s'est composé de 30 personnes âgées, entre 70 et 80 ans, résidents dans une maison de repos et les participants au projet d'action et de la citoyenneté de la Faculté Assis Gurgacz. En étant appliquée le questionnaire d'indice de Barthel, avec échelle modifiée, avec 15 questions fermées qui ont ponctué le niveau d'indépendance des personnes âgées. Les données se

sont mis sous forme tableau et analysés par le programme Microsoft Excel 2007. **Résultats :** Dans l'analyse du score total se sont trouvées une différence considérable entre les deux groupes, en étant que les personnes âgées institutionnalisées ont présenté une ponction plus basse que non institutionnalisées. Néanmoins dans le niveau d'autonomie personnelle, malgré présenter des différences, ceux-là étaient minimales, vu que les deux groupes une moyenne de 6 personnes ont atteint le score la ponction maxime. On trouve la disproportion à le niveau de mobilité où les personnes âgées résidents de l'abri ils ont présenté approximativement la moitié de la ponction quand comparé à l'autre groupe. **Conclusion :** On conclut qu'il y a différence remarquable d'indépendance entre les groupes. En étant que les institutionnalisées n'ont pas réalisé d'activités physiques en prenant à l'un plus grand déficit à le niveau de mobilité, tant que les non institutionnalisées ne présentent pas mieux mobilité.

MOTS-CLÉS : Personnes âgées. Niveau d'indépendance. Activités de la Vie Quotidienne.

COMPARACIÓN DEL NIVEL DE INDEPENDENCIA EN LAS AVD'S EN ANCIANOS INSTITUCIONALIZADOS Y NO INSTITUCIONALIZADOS.

RESUMEN

Introducción: Se sabe que el envejecimiento es un proceso natural de la vida que trae una serie de modificaciones morfológicas, funcionales, bioquímicas y psicológicas. Aunque la senilidad no sea sinónimo de enfermedad, muchas personas mayores presentan discapacidades funcionales, puede llevar a la dependencia total. **Objetivo:** El estudio pretende comparar el nivel de independencia para llevar a cabo las actividades de la vida diaria (AVD'S) en los ancianos residentes de las instituciones y no institucionalizados. **Metodología:** El estudio es de tipo epidemiológico, de carácter comparativo de corte transversal con una muestra de probabilidad. La muestra consistió de 30 ancianos, de edad entre 70 y 80 años que viven en una institución para personas mayores y los participantes del proyecto Ação e Cidadania da Faculdade Assis Gurgacz. Se aplica el cuestionario de Índice de Barthel, con la escala modificada, con 15 preguntas cerradas que marcaron el nivel de independencia de los ancianos. Los datos fueron tabulados y analizados por Microsoft Excel 2007. **Resultados:** El análisis de la puntuación total se encontró una diferencia considerable entre los dos grupos, siendo que los ancianos institucionalizados tuvieron una puntuación más baja que los no institucionalizados. Sin embargo, el nivel de autonomía personal, aunque con diferencias, estas fueron mínimas, ya que en ambos grupos de un promedio de seis personas que han alcanzado la puntuación máxima. Hemos encontrado la disparidad en el nivel de movilidad, donde los ancianos residentes de una institución presentaron alrededor de la mitad de la puntuación en comparación con otro grupo. **Conclusión:** Se concluye que hay una diferencia considerable de independencia entre los grupos. Dado que los institucionalizados no realizan ejercicios físicos que conducen a un mayor déficit en el nivel de movilidad, mientras que los no institucionalizados tienen una mejor movilidad.

PALABRAS CLAVE: Ancianos. Nivel de independencia. Actividades de la Vida Diaria.

COMPARAÇÃO DO NÍVEL DE INDEPENDÊNCIA NAS AVD'S EM IDOSOS INSTITUCIONALIZADOS E NÃO INSTITUCIONALIZADOS

RESUMO

Introdução: Sabe-se que o envelhecimento é um processo natural da vida que traz consigo uma série de modificações morfológicas, funcionais, bioquímicas e psicológicas. Embora a senilidade não seja sinônimo de doenças, muitos idosos apresentam incapacidades funcionais, podendo levar a dependência total. **Objetivo:** A pesquisa tem como objetivo comparar o nível de independência para a realização das atividades da vida diária (AVD'S) em idosos moradores de instituições e aqueles

não institucionalizados. Metodologia: O estudo é do tipo epidemiológico, de caráter comparativo de corte transversal com uma amostra probabilística. A amostra foi composta por 30 idosos, entre 70 e 80 anos, residentes em uma instituição asilar e participantes do projeto Ação e Cidadania da Faculdade Assis Gurgacz. Sendo aplicado o questionário de Índice de Barthel, com escala modificada, com 15 perguntas fechadas que pontuava o nível de independência dos idosos. Os dados foram tabulados e analisados pelo programa Microsoft Excel 2007. Resultados: Na análise do score total encontrou-se uma diferença considerável entre os dois grupos, sendo que os idosos institucionalizados apresentaram uma pontuação mais baixa que os não institucionalizados. No entanto no nível de autonomia pessoal, apesar de apresentarem diferenças, essas foram mínimas, uma vez que em ambos os grupo uma média de 6 pessoas atingiram a pontuação máxima. Encontramos a desproporção no nível de mobilidade onde os idosos moradores do abrigo apresentaram aproximadamente metade da pontuação quando comparado ao outro grupo. Conclusão: Concluimos que há diferença relevante de independência entre os grupos. Sendo que os institucionalizados não realizam atividades físicas levando à um maior déficit no nível de mobilidade, enquanto os não institucionalizados apresentam melhor mobilidade.

PALAVRAS-CHAVE: Idosos. Nível de independência. Atividades da vida diária.