

**16 - ELDERLY: PROFILE AND EVALUATION OF FUNCTIONALITY IN A LONG-TERM INSTITUTION**

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**INTRODUCTION**

People go through several stages in life, named childhood, adolescence, maturity or adulthood, and old age. Therefore, old age is emphasized as one of the stages in life that must be understood in multiple dimensions, since it is a moment of the biological process, but it is still a sociocultural factor. It is a phase during life, in which bio-psychosocial modifications occur that affect the relationships of the individual with his or her social context. In this way, old age is a complex process of changes in daily life (FREITAS; QUEIROZ; SOUSA, 2010).

The Brazilian population is aging in an accelerated way, in consequence of the increase of diseases and noncommunicable chronic diseases (NCDs), which tend to manifest (BRASIL, 2007; KÜCHEMANN, 2012). They can generate a disabling process, affecting the functionality of the elderly, that is, hindering or obstructing the performance of daily living activities independently. Although they are not fatal, these conditions generally tend to significantly compromise the quality of life of the elderly (BRASIL, 2007).

Anjos; Boery; Pereira (2014) report that fragility, generated by dependency, is a state in which several people are found, which is related to the lack or loss of physical and/or psychic autonomy, requiring assistance and/or help from another person to perform their Activities of Daily Living (ADLs) and/or Instrumental Activities of Daily Living (IADLs), due to this fragility, generating problems that have several psychosocial, economic, political and financial implications.

The functional evaluation seeks to verify at what level the diseases or injuries prevent the elderly from performing daily activities in an autonomous and independent way. It is highlighted that for health professionals, autonomy and dependency are aspects that define the need for adaptations or help of other people, allowing the elaboration of a more adequate care plan, verifying if this need for assistance is partial or total (DUARTE; ANDRADE; LEBRÃO, 2007).

Therefore, the loss of functional ability of the elderly due to physical or mental illness may result in the need for intervention and adaptations to maintain routine activities and lifestyle, which require constant inference from both care network professionals and family members.

It is known that relatives do not always have the availability and technical knowledge to care for this elderly person, so the alternatives are to hire someone of trust or to stay in a long-term institution for the elderly (LTI), also called nursing home, what may be a difficult step to the elderly and his or her family. This fact causes difficulties for both, to accept the separation and the conviviality of this elderly to come across a different environment and different people, being the adaptation of the same often difficult, generating sadness and feeling of abandonment by the family.

Considering the facts, the aim of this study was to evaluate the functional independence of elderly people living in the São Vicente de Paulo nursing home, in the city of Campina da Lagoa/PR, and to identify the predominant levels of dependence or independence among the elderly, as well as characterize their profile.

**MATERIALS AND METHODS**

The research was carried out in a long-term philanthropic institution defined as Home for the Elderly, which has been present for more than 26 years in the city of Campina da Lagoa in the state of Paraná, and which is home to 28 elderlies. Its aim is to protect the elderly, and the health care is provided by the Family Health Strategy, which is from coverage area and physiotherapy services.

The sample consisted of 27 elderly people who live in this institution and an instrument with 21 questions, being 19 closed and 2 open questions, was used for data collection. The procedure was composed by two moments: the first with the description of personal data, being carried out through an interview and; the second with application of two scales: Katz scale and Lawton scale respectively. Katz scale was used to evaluate the functional independence in the performance of the ADLs in six functions with 6 closed questions, and Lawton scale to assess the degree of independence for the realization of IADLs, with nine closed questions that were applied to the elderly residents of the institution.

Data was collected from the first half of August 2016, through pre-scheduled visits with the head of the institution.

Freitas; Miranda (2006) mention that the Katz scale has three possible scores for each of the items according to the level of dependence of the patient: independent, needs assistance, and dependent.

Six functions were evaluated: bathing, dressing, going to the bathroom, transference, continence, and feeding. The score used varies from zero to six points, in which a point is assigned to each answer 'yes' and zero to each answer 'no', and the individual is classified as: with 6 points, independent in all functions; 4 points, moderate dependency; and 2 points or less, very dependent.

The Lawton scale contains nine questions; each of them has three response options: "unassisted", "partially aided", and "cannot". For the calculation of the score, it is assigned 3, 2, and 1 point respectively, reaching the highest score of 27 points (FREITAS; MIRANDA, 2006). The higher the score, the higher the independence. So, the two scales are complementary.

An authorization was officially requested to carry out the research and follow up the elderly of the Home for the Elderly in Campina da Lagoa.

The Term of Free and Informed Consent for the elderly was elaborated in two ways, one being retained by the research subject or by his/her legal representative, and one filed by the researcher.

According to Resolution 466; 2012 of CONEP/MS, the research project was submitted to the Research Ethics Committee of the University of Paraná (UNIPAR) and approved by the proposal number 1.652.271 of 2016.

The analysis was done with a quantitative approach, which for Severino (2007), consists essentially of finding relationships between variables and making descriptions using statistical treatment through data collection. The structural data of the research will be distributed in graphs and simple percentages.

**RESULTS AND DISCUSSION**

The present study allowed us to verify the current situation of the elderly, in which participated 5 women (18.52%) and 22 men (81.48%), aged between 60 and 94 years old, with an average age of 75 years for both genders, with a predominance of males. This is outside the patterns generally described in literature, since in most of the studies reviewed, the percentage of the female population in Long Term Institutions (LTIs) is much higher than the number of males.

Concerning marital status, the prevalence of unmarried elderly is 16 (59.25%), followed by widows with 10 (37.05%) and 1 (3.70%) separated.

The prevalence of unmarried and widowed elderly justifies the need for LTIs, for those who, due to the impossibility of self-support and lack of family, need institutional care. It is important to highlight that the percentage of unmarried couples added to the percentage of widows totaled 26 (96.3%), and the absence of a companion was the contributing factor for the demand of the LTI.

The time of institutionalization of the elderly varied from 4 months to 26 years, with an average of 5 years.

In relation to income, 24 elderly (88.89%) are retired with a monthly income of up to one minimum wage, and 3 (11.11%) were not retired until the present moment. The predominant source of income is retirement by age, illness or length of service, followed by pensions. The low per capita income of these elders is combined with the deprivation of adequate health care, purchase of medicines, impossibility of acquiring a health plan, as well as essential items for health maintenance and recovery.

It was also demonstrated the low schooling among them, being 17 (62.96%) illiterate elderly, that is, they cannot read and write. Another 10 (37.4%) have ≤ 4 years of study. This low schooling level may be explained by the low value that educational training had when these elders were still children.

In the evaluation of the performance of basic daily living activities by the Katz Scale, it was verified that the data is homogeneous for bathing activities, dressing up, personal hygiene, transfer and continence. The ability to feed alone was the one with highest percentage of independence, 24 (88.89%) and the lowest percentage of independence was in personal hygiene and dressing activities, where none of the interviewees reported complete dependence (Chart 1).

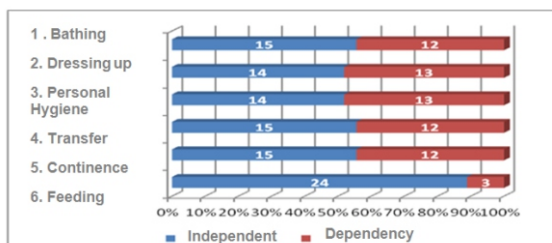


Chart 1. Elderly distribution, according to the performance of Daily Living Activities by Katz Scale, Campina da Lagoa 2016.

Therefore, from the total amount of elderly researched by Katz scale, it was found that 10 (37.04%) elderly are considered as highly dependent, 5 (18.51%) are moderately dependent, and 12 (44.45%) are independent. The Katz scale can be considered a predictive tool for using in planning the need for elderly care.

It is up to caregivers of the long-term institution to stimulate the capacities of the elderly to develop the basic and instrumental activities of daily life. Stimulating autonomy and independence of the elderly makes physical and behavioral independence remain. Caregivers encourage the elderly in the institutional environment to stimulate their potential for self-care, in order to remain independent as long as possible.

It should be highlighted that dependency to perform ADLs before the age of 70 is suggestive of unsuccessful aging, possible because of social and economic conditions, which negatively interfere with the health of the elderly (COSTA; NAKATANI; BACHION, 2006).

The results of the application of the Lawton Scale revealed that the group was generally evaluated as “cannot” perform their IADLs, presenting a total dependency to prepare their own meals, to take their medicines at correct doses and times, and to take care of finances (Chart 2).

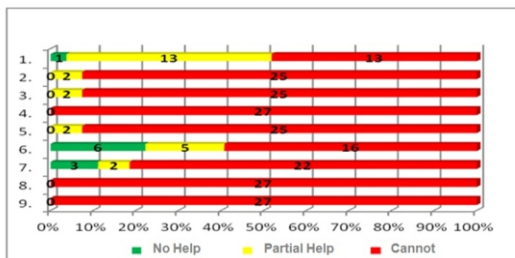


Chart 2. Distribution of the elderly according to the performance of Instrumental Activities of Daily Living by Lawton Scale. Campina da Lagoa 2016.

It is noted that the elderly who receive some kind of help were identified with autonomy to use the phone, to go to distant places, using some transportation, shopping, doing some manual work and doing the laundry or ironing.

Some disabilities in the dependencies of instrumental daily activities may be associated to the level of schooling of the elderly, pointing out that 17 (62.96%) of these are illiterate, limiting, in a way, handling with money, taking medication, using the telephone, shopping, and using means of transportation; so, the necessity of other's assistance. Therefore, such incapacities compromise the social life of these elderly, also decreasing autonomy and quality of life.

According to Chart 3, it is evident the activities in which the elderly has more autonomy to perform, among them, there is the ability to use the telephone and do manual labor. In the age group between 70 and 79 years old, it is observed that a high rate of the elderly, in some way, is able to perform manual housework, which is confirmed by the findings in the Lawton Scale

because it presents greater independence in the instrumental daily activities.

Regarding the activity of telephone use, with a predominant index in the age range of 90-99 years old, it should be considered that in this age group only one 94-year-old person is included, being visible the only activity developed by him.

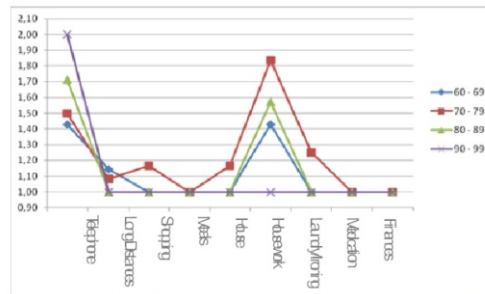


Chart 3. Distribution of the elderly according to age and performance of Instrumental Activities of Daily Living, by Lawton Scale, Campina da Lagoa 2016.

As stated by Costa; Nakatani; Bachion (2006), the functional capacity of the human being declines with age, so, there is the necessity to plan strategies that improve the lifestyle of the elderly, making it possible to minimize dependence on the basic and instrumental activities of daily living, as well as aiming for an aging with autonomy and greater independence.

According to the results found for DLA by Katz scale and for IDLA by Lawton scale, there is a similarity on them, that is, the elderly who present greater dependency for basic activities of daily living, are the ones who show a greater dependency on instrumental activities of daily living, what shows the importance of using both instruments to complement the evaluation of the level of dependency of the elderly.

As the human being gets older, the activities of everyday life, considered mundane, become increasingly difficult to perform. For Del Duca; Silva; Hallal (2009) the functional ability of the elderly is the indicator of independence, which requires preventive measures or even therapeutic interventions that decrease the mechanisms that affect the decline in the ability of the individual to perform various physical and mental functions daily and increase the life expectancy of these individuals.

As said by Costa; Nakatani; Bachion (2006), through the socioeconomic-demographic profile and the functional capacity of the population, the family health team can plan and organize actions for health promotion, prevention and treatment of diseases and rehabilitation.

Families often search for an environment in which they can provide the necessary care for their elderly, although long-term institutions should not only be places where elderly people abandoned by their families live, but must be understood as a choice of each life story (SILVA; COMIN; SANTOS, 2013).

## CONCLUSION

The living conditions of these elderly people living in the LTI vary from independence, partial dependence, and dependence to the accomplishment of daily living activities. The research points out that some of the elderly present some degree of dependency, which suggests the need of a caregiver, with the assistance of a multiprofessional team. It is emphasized that rehabilitation for the elderly people to regain their ability to perform daily living activities is essential for developing the capacity to do the activities by themselves.

The search for longevity with greater independence, autonomy and quality of life for the elderly reinforces the need for prevention, early diagnosis, and treatment of chronic degenerative diseases, as well as associated disabilities in the elderly, both by Primary Care professionals and the long-term institutional care.

The carried-out study does not cover all relevant aspects and it is not finished at this time. A possible limitation of this research would be related to the fact of the loss of autonomy, due to functional or cognitive decline or even coming from some pathology, such as: stroke or dementia. So, it is suggested that in order to obtain a better discussion, the condition of the elderly should be analyzed, that is, if there is any pathology leading to loss of functional capacity.

However, despite the limitations, the present research shows the necessity for greater attention to the institutionalized elderly, by the three spheres of the government, to better maintain the elderly's functional capacity.

It should be emphasized the importance of the participation of Primary Care professionals, being them from the Family Health Team or the traditional teams along with the Long-term Institutional care, to plan actions for health promotion, prevention, and treatment of diseases and rehabilitation.

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#### ELDERLY: PROFILE AND EVALUATION OF FUNCTIONALITY IN A LONG-TERM INSTITUTION

**ABSTRACT:** The aim of the present study was to evaluate the functional independence of the elderly living at São Vicente de Paulo Nursing Home, in the city of Campina da Lagoa – PR, as well as to identify the predominant levels of dependency and independency among the elderly, and to categorize their profile. This is a descriptive and exploratory research. The sample consisted of 27 elderlies from both genders, with an average age of 75 years old. The majority was male 81.48%, single 59.25%, illiterate 62.96% and retired 88.89%, with a monthly income of up to a minimum wage. The time of institutionalization of the elderly ranged from 4 months to 26 years, with an average of 5 years. In the application of the Katz scale, it was found that 37.04% of the elderly are considered as highly dependent; 18.51% with moderate dependence, and 44.45% independent. The Lawton scale showed that most of the elderlies “cannot” perform the instrumental activities of daily life, presenting in unanimous total dependence to prepare their own meals, take their medicines at correct doses and take care of finances. In addition, there were elderly identified with autonomy to use the telephone, perform manual work, as well as ironing and doing the laundry. It is concluded that there is a necessity of a greater attention to the institutionalized elderly, on the part of the three spheres of the government, so that the elderly can better maintain their functional capacity.

**KEYWORDS:** Functional evaluation, Elderly, Long-term institution.

#### PERSONNES ÂGÉES: PROFIL ET ÉVALUATION DE LA FONCTIONNALITÉ DANS UN ÉTABLISSEMENT DE LONGUE DURÉE

**RÉSUMÉ:** Le but de cette étude est d'évaluer l'indépendance fonctionnelle des personnes âgées vivant dans l'Institution São Vicente de Paulo à la ville de Campina da Lagoa / PR, ainsi que d'identifier les niveaux de dépendance ou d'indépendance prévalant entre les personnes âgées et de caractériser leur profil. Il s'agit d'une recherche de terrain descriptive et exploratoire. L'échantillon comprend 27 personnes âgées, avec un âge moyen de 75 ans entre les deux sexes. La majorité étaient des hommes (81,48%), célibataires (59,25%), analphabètes (62,96%) et retraités (88,89%), avec un revenu mensuel allant jusqu'à un salaire minimum. Le temps d'institutionnalisation (permanence à l'institution) des personnes âgées allait de 4 mois à 26 ans, avec une moyenne de 5 ans. Dans l'application de l'échelle de Katz, on a constaté que 37,04% des personnes âgées sont considérées comme très dépendantes, 18,51% avec une dépendance modérée et 44,45% d'indépendantes. Sur l'échelle de Lawton, on a constaté que la majorité des personnes âgées «ne peuvent pas» effectuer les activités instrumentales de la vie quotidienne, se présentant dans une dépendance totale unanime pour préparer leurs propres repas, prendre leurs médicaments aux bonnes doses et aux bonnes heures et prendre soin des finances. En outre, On a identifié des personnes âgées avec autonomie pour utiliser le téléphone, effectuer un travail manuel, ainsi que le lavage et le repassage. On conclut qu'il est nécessaire que les personnes âgées institutionnalisées reçoivent plus d'attention des trois sphères du gouvernement afin qu'ils puissent mieux maintenir leur capacité fonctionnelle.

**MOT CLÉS:** Évaluation fonctionnelle, établissement de long séjour, personnes âgées.

#### ANCIANOS: PERFIL Y EVALUACIÓN DE LA FUNCIONALIDAD EN INSTITUCIÓN DE LARGA PERMANENCIA

**RESUMEN:** La presente investigación objetivó evaluar la independencia funcional de las personas mayores residentes en el hogar São Vicente de Paulo en la ciudad de Campina da Lagoa / PR, así como identificar los niveles de dependencia o independencia predominante entre los ancianos y caracterizar el perfil de los mismos. Se trata de una investigación descriptiva, exploratoria de campo. La muestra totalizó 27 ancianos, con media de 75 años entre ambos sexos. La mayoría era del sexo masculino 81,48%, solteros 59,25%, analfabetos 62,96% y jubilados 88,89%, con rendimiento mensual de hasta un salario mínimo. El tiempo de institucionalización de los ancianos varía de 4 meses a 26 años, con una media de 5 años. En la aplicación de la escala de Katz se constató que 37,04% ancianos son considerados como muy dependientes, 18,51% con dependencia moderada y 44,45% independientes. La escala de Lawton apuntó que la mayoría de los ancianos "no logra" desempeñar las actividades instrumentales de la vida diaria, presentando de forma unánime dependencia total para preparar sus propias comidas, tomar sus remedios en las dosis y horarios correctos y cuidar de las finanzas. También se identificaron ancianos con autonomía para utilizar el teléfono, realizar trabajos manuales domésticos, así como lavar y planchar ropa. Se concluye que hay necesidad de mayor atención a los ancianos institucionalizados, por parte de las tres esferas de gobierno, a fin de que los ancianos tengan mejor mantenimiento de su capacidad funcional.

**PALABRAS CLAVE:** Evaluación Funcional, Ancianos, Institución de Larga Permanencia.

#### IDOSO: PERFIL E AVALIAÇÃO DA FUNCIONALIDADE EM INSTITUIÇÃO DE LONGA PERMANÊNCIA

**RESUMO:** A presente pesquisa objetivou avaliar a independência funcional das pessoas idosas residentes no lar São Vicente de Paulo na cidade de Campina da Lagoa/PR, bem como identificar os níveis de dependência ou independência predominante entre os idosos e caracterizar o perfil dos mesmos. Trata-se de uma pesquisa descritiva, exploratória de campo. A amostra totalizou 27 idosos, com média de 75 anos entre ambos os sexos. A maioria era do sexo masculino 81,48%, solteiros 59,25%, analfabetos 62,96% e aposentados 88,89%, com rendimento mensal de até um salário mínimo. O tempo de institucionalização dos idosos variou de 4 meses a 26 anos, com média de 5 anos. Na aplicação da escala de Katz constatou-se que 37,04% idosos são considerados como muito dependentes, 18,51% com dependência moderada e 44,45% independentes. Já para na escala de Lawton apontou que a maioria dos idosos “não consegue” desempenhar as atividades instrumentais da vida diária, apresentando de forma unânime dependência total para preparar suas próprias refeições, tomar seus remédios nas doses e horários corretos e cuidar das finanças. Ainda, foram identificados idosos com autonomia para utilizar o telefone, realizar trabalhos manuais domésticos, bem como lavar e passar roupas. Conclui-se que há necessidade de maior atenção aos idosos institucionalizados, por parte das três esferas de governo, a fim de que os idosos tenham melhor manutenção de sua capacidade funcional.

**PALAVRAS CHAVE:** Avaliação Funcional, Idoso, Instituição de Longa Permanência.