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FUNCTIONAL CAPACITY AND RESILIENCE IN HOSPITALIZED OLDER ADULTS

CAPACIDADE FUNCIONAL E RESILIÊNCIA EM IDOSOS HOSPITALIZADOS

CAPACIDAD FUNCIONAL Y RESILIENCIA EN PERSONAS MAYORES HOSPITALIZADAS

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ABSTRACT

Objective: to determine functional capacity and resilience in hospitalized older adults. **Method:** quantitative, cross-sectional and descriptive study conducted with 59 older adults admitted to a university hospital. We used instruments to assess functional capacity, resilience, and sociodemographic data. **Results:** low resilience (28%), medium resilience (32%), and high resilience (39%) were found in the older adults. Among the most independent older adults, the highest frequency score for resilience was high, whereas the scores of the most dependent older adults ranged from medium to low. **Conclusion:** it is important to assess resilience and functional capacity to screen older adults, given that low resilience and functional capacity in the initial evaluation can allow the identification of older adults with less rehabilitation potential and, thus, favoring better planning of discharge by health professionals and early hospital discharge. **Descriptors:** Older Adult; Psychological Resilience; Health Evaluation; Healthcare in Older Adults; Health of Older Adults; Daily Life Activities.

RESUMO

Objetivo: identificar a capacidade funcional e a resiliência em idosos hospitalizados. **Método:** estudo quantitativo, transversal e descritivo realizado com 59 idosos internados em um hospital universitário. Aplicaram-se instrumentos de avaliação da capacidade funcional, resiliência e dados sociodemográficos. **Resultados:** constatou-se uma baixa resiliência em 28% dos idosos, média resiliência em 32% e alta resiliência em 39%. Entre os idosos mais independentes, o escore de maior frequência para a resiliência foi alto, enquanto os mais dependentes obtiveram escores de média a baixa resiliência. **Conclusão:** destaca-se a importância da realização da avaliação de resiliência e capacidade funcional como avaliação de rastreio em idosos, pois as baixas resiliência e capacidade funcional na avaliação inicial podem permitir a identificação de idosos com menor potencial de reabilitação e, assim, favorecer um melhor planejamento da alta pelos profissionais de saúde e uma alta hospitalar precoce. **Descritores:** Idoso; Resiliência Psicológica; Avaliação em Saúde; Assistência a Idosos; Saúde do Idoso; Atividades Cotidianas.

RESUMEN

Objetivo: identificar la capacidad funcional y la resiliencia en personas mayores hospitalizadas. **Método:** estudio cuantitativo, transversal y descriptivo realizado con 59 personas mayores internadas en un hospital universitario. Se utilizaron instrumentos de evaluación de la capacidad funcional, resiliencia y datos sociodemográficos. **Resultados:** se constató una baja resiliencia en el 28% de las personas mayores, media resiliencia en el 32% y alta resiliencia en el 39%. Entre las personas mayores más independientes, el score de mayor frecuencia para la resiliencia fue alto, mientras que las más dependientes obtuvieron escores de media a baja resiliencia. **Conclusión:** se destaca la importancia de realizar la evaluación de resiliencia y capacidad funcional para evaluar personas mayores, pues las bajas resiliencia y capacidad funcional en la evaluación inicial pueden permitir la identificación de personas mayores con menor potencial de rehabilitación y así favorecer una mejor planificación del alta por los profesionales de salud y alta hospitalaria precoz. **Descriptores:** Persona Mayor; Resiliencia Psicológica; Evaluación en Salud; Asistencia en Personas Mayores; Salud de la Persona Mayor; Actividades Cotidianas.

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INTRODUCTION

Aging is a constant and uninterrupted process. It is complex in its many variables and increasingly present in the Brazilian society. It is estimated that, by 2050, the Brazilian population will rise to 253 million individuals and will be the fifth largest population on the planet, only behind countries like India, China, the United States, and Indonesia. Currently, older adults represent 11% of the Brazilian population. It is believed that, by 2020, Brazil will be the sixth oldest country in the world, with more than 32 million individuals aged over 60 years, thus surpassing the number of older adults in European countries.¹⁻²

Old age is associated with a time of changes, characterized by a decrease in physical vigor and cardiovascular endurance, children leaving home, retirement, loss of reproductive function, changes in the position of older adults within the family (from family leader to family member with more peripheral roles), and death of friends and family members, among others.³

It is known that functional capacity is conditioned to the interference of socioeconomic, demographic, cultural, and psychosocial factors. It may be related to lifestyle and social and supportive relationships.⁴ Deficits in physical functioning of older adults may interfere with the performance of daily activities and the individuals' subjective assessment of life. In many situations, these deficits can be experienced as stressors, and they can also affect older adults emotionally as well as their quality of life.⁵

The term "resilience" is used in various contexts, such as the academy, the development paradigm throughout the life course, theories, and stages of human development, with special emphasis in aging.⁶ The concept of resilience is related to the ability of individuals or families to face adversities, being transformed by them, and overcoming them. Therefore, resilience is understood as the set of social and intrapsychic processes that promote healthy development of the individuals, even if they experience unfavorable experiences.¹

Some authors consider the inability to acquire resilient features during life. However, other studies consider the opposite, stating that it is possible for the individuals to acquire tools for constructing a positive problem-solving perspective, thus leading to resilience, not as a linear and constant process, but as a complex, systemic, and

individual phenomenon in the life trajectory of each person, which can contribute to positive aging.^{1,7}

Resilience is directly associated with individuals' quality of life and potential for overcoming adversities, including physical comorbidities and functional capacity.⁷ Therefore, it is possible to notice the importance of studying the concept of resilience as a health promoter.⁶

OBJECTIVE

- To determine functional capacity and resilience in hospitalized older adults.

METHOD

This is a quantitative, cross-sectional and descriptive study conducted in a university hospital in Brasília, Federal District, Brazil. The study population was composed of older adults hospitalized during the period of data collection. The data were collected between May 2015 and May 2016. The inclusion criteria were: older adults aged 60 years or older; and not being diagnosed with dementia.

For data collection, we used instruments to assess basic activities of daily living (BADL), and instrumental activities of daily living (IADL), i.e., Katz and Lawton scales, respectively.⁸⁻¹⁰ To obtain the sociodemographic data, we prepared a questionnaire composed of questions about sex, age, income, schooling, and the individuals with whom they lived.

To assess resilience, we used the Resilience Scale (RS) proposed by Wagnild and Young, which has 25 statements with Likert-type answers ranging from 1 (totally disagree) to 7 (strongly agree).¹¹ RS scores vary between 25 and 175, meaning a greater or lesser degree of resilience if the individuals obtain higher or lower scores. Scores up to 125 points represent low resilience, between 125 and 145 average resilience, and above 145 high resilience.¹²

The data were entered into a Microsoft Excel spreadsheet (Microsoft Office suite). We performed a detailed descriptive analysis of the data that comprised the absolute and relative frequencies, in addition to the associations between the dependent variables of the study.

The research project was approved by the Research Ethics Committee of the School of Health Sciences of the University of Brasília (UnB), under the number of the Certificate of Presentation for Ethical Evaluation (CAAE) 41550415.6.0000.0030.

RESULTS

The final sample consisted of 59 older adults. As for the sociodemographic profile, there was a predominance of male patients (56%), aged between 60 and 69 years (58%), literate, who had attended until the second grade of primary education (32%), and with incomes up to a minimum wage (61%) (Table 1).

As for the BADL, evaluated through the Katz Scale, 76% of the older adults were independent to perform these activities. Therefore, they were able to take showers, dress themselves, use the bathroom, move around. They had no fecal and urinary incontinence, and could feed themselves autonomously. Regarding IADL, it was observed that 37% of the older adults were partially or lightly dependent, followed by independent older adults (30%) (Table 2).

With respect to the scores obtained through the RS, the average score in the twenty-five questions was 135.8 points. The minimum scores obtained among the older adults ranged from 89 to 171. High resilience

was observed in 39.0% of the older adults (Table 3).

Regarding the basic self-care activities, evaluated through the Katz Scale, the largest number of older adults concentrated on the responses that revealed high resilience and independence for these activities (87.0%). Among the most dependent older adults, the highest frequency was exhibited by the older adults with low resilience (23.5%) (Table 3).

With respect to the Lawton Scale, which assesses complex activities, such as using the telephone, shopping, preparing food, doing housework, washing clothes, moving away from home, taking responsibility for medication, and handling money, 47.0% of the most dependent older adults exhibited low resilience. Among those with high resilience, 78.2% exhibited less dependence (Table 3).

Table 1. Distribution of the older adults according to the sociodemographic data. Brasília (DF), 2017 (n=59).

Variables	n	%
Sex		
Male	33	56.0
Female	26	44.0
Age group		
60 to 69 years	34	58.0
70 to 79 years	17	29.0
80 to 89 years	8	13.0
Lives with		
Others	16	27.0
Only with children	13	22.0
Only with a partner	11	18.7
Alone	10	17.0
Partner and children	9	15.3
Schooling		
Literate (up to 2ª grade of primary education)	19	32.2
Complete secondary education	11	18.7
Illiterate	9	15.3
Incomplete primary education	8	13.5
Complete primary education	6	10.1
Complete higher education	4	6.8
Incomplete secondary education	1	1.7
Incomplete higher education	1	1.7
Income		
Up to a minimum wage	36	61.0
No income	8	13.5
From 1 to 2 minimum wages	7	11.9
From 3 to 5 minimum wages	5	8.5
From 5 to 10 minimum wages	3	5.1
Total	59	100

Table 2. Distribution of the older adults according to the assessment of functional capacity, Brasília (DF), 2017 (n=59).

Variables	n	%
Basic activities of daily living		
Independent	45	76.3
Partially dependent	8	13.5
Dependent	6	10.2
Instrumental activities of daily living		
Light dependence	22	37.3
Independent	18	30.5
Moderate dependence	8	13.5
Serious dependence	7	11.9
Total dependence	4	6.8
Total	59	100

Table 3. Comparison between the scores of the Resilience Scale and the assessment of functional capacity, Brasília (DF), 2017 (n=59).

Variables	Resilience (Scores)		
	Low n (%)	Medium n (%)	High n (%)
Katz Scale			
Independent	10 (58.9)	15 (79.0)	20 (87.0)
Partially Dependent	3 (17.6)	3 (15.8)	2 (8.7)
Dependent	4 (23.5)	1 (5.2)	1 (4.3)
Lawton Scale			
Low Dependence (Light to independent)	9 (53.0)	13 (68.4)	18 (78.2)
High Dependence (Moderate to total)	8 (47.0)	6 (31.6)	5 (21.8)
Total	17(28.8)	19(32.2)	23(39.0)

DISCUSSION

Comparing the sociodemographic data of the present study with those obtained in other studies, we found divergence regarding sex, with the majority of the participants being male. This difference can be explained by the increase in the campaigns of health incentive and promotion for men, which have been occurring in the last programs. This demystification has been taking place ever since, and it is believed that men tend to care more about their own health.^{1,5,13-14}

The predominant age group found in the sample was in line with that found in similar studies, as well as the variables "lives with" and "schooling".^{1,3,13,15-16} However, in previous studies conducted with older adults in the Federal District, their incomes were higher than a minimum wage, i.e., above the national average.¹⁵

It was observed that, even among patients admitted to hospital institutions, the older adults of the studied sample were mostly independent to perform BADL, and exhibited low dependence or independence to perform IADL.^{1,2,13} It is worth mentioning that functional capacity is an important factor of good health, social participation and, therefore, quality of life in the older adult

population.¹⁻² High functional capacity is also a protection factor for quality of life and successful aging, such as corroborated by the testimonies of the several interviewees, and already mentioned in other studies.^{1-2,16}

Regarding resilience, it can be observed that the sample exhibited high values. The average found was 136.53, i.e., above the average of older adults from localities in southern Brazil, and similar to the scores of older adults from municipalities in northeastern Brazil.^{1,13} Factors such as income do not usually influence resilience. It has been observed the existence of proportionally similar resilience values in older adults with high and low incomes.¹

It is known that, among the various protection factors for resilience, social interaction and sense of belonging, i.e., considering oneself as an integral member of the family social group, are considered of high importance.^{1,13} Individual characteristics, such as psychological and material resources, contribute to resilience. Community level, family, social support, participation, social and welfare services, finances, religion, and social policy are important factors that can promote resilience.^{13,17} Older adults with chronic diseases attending outpatient services, and even with partial degree of

functional disability, developed resilient behaviors, which favored coping with the process of treating the disease.¹⁸

This way, resilience can be considered a protective factor that can increase the ability to overcome crises and negative life events, and the willingness of individuals to seek healthcare. It is then observed that being resilient increases the likelihood of talking to health professionals about depressive symptoms and seeking healthcare to alleviate these symptoms, in addition to affecting health and well-being, which are other important aspects of physical and psychological adjustment and adaptation of older adults during the aging process.¹⁹

The experience of aging is heterogeneous and can occur in different ways due to its own insertion in the different historical and social contexts. During the development of a disease, which is usually chronic at this stage, intellectual factors and the personality of the individuals will influence the perception and determine how each one "faces" this stage of life, favoring a resilient behavior or not.²⁰

It is worth noting that for fragile older adult, especially in the hospital setting, assessments and interventions that consider resilience, such as for example in the clinical condition of hip fracture, may be crucial in the final result of the therapy, as observed in another study. This way, identifying low resilience and fragility in the initial evaluation of older adults with lower recovery potential is of paramount importance, since it provides early insertion of these individuals into rehabilitation programs.²¹

The inclusion of older adult assessment models that are not exclusively based on the organic complications of the diseases, but which also consider personal, environmental, social, and economic factors, can favor the elaboration of individual rehabilitation plans and, thus, increase the performance of the individuals in the activities of daily life and the level of participation in their recovery.²⁰⁻²¹

After recovery and rehabilitation processes, or even after hospital discharge, older adults should be encouraged to participate in social activities, such as performing physical and sports activities. Physical activity, coupled with social, family, and interaction relationships that these environments provide, may allow a sense of overcoming social alienation and increase emotional stability leading to successful aging.²²⁻³

CONCLUSION

In the present study, we found that more independent older adults—both in basic or instrumental activities of daily living—were those that obtained high resilience scores, whereas those more dependent when performing these same activities obtained medium and low resilience scores.

It is also worth mentioning the importance of performing the assessment of resilience as a screening test in older adults. Detecting low resilience associated with low functional capacity in the initial evaluation makes it possible to identify older adults with less potential for rehabilitation and/or recovery.

This way, the present study has demonstrated practical implications, giving that measuring resilience along with functional capacity can be an important indicator to be considered by the health teams that provide healthcare to hospitalized older adults. This measurement may favor better recovery, more efficient discharge planning, and early hospital discharge.

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