

Functional capacity and its measurement in the elderly: an integrative review

Capacidade funcional e sua mensuração em idosos: uma revisão integrativa

Capacidad funcional y su medición en el anciano: una revisión integradora

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The aim of this study was to seek scientific evidence that address the functional capacity in the elderly as well as instruments used to measure it. It is an integrative review of the literature, which included articles indexed in the LILACS and SCIELO databases, published in Portuguese in Brazil from 2008 to 2012. The year of publication of the studies ranged between 2010 and 2012, with predominance of the cross-sectional study. The nurses were primarily responsible for publications. Questionnaires and scales were used to assess the functional capacity of the elderly, with predominance of Katz Index. Most of the articles are from research groups of public universities. Publications have demonstrated that through the use of scales and questionnaires, it is possible to identify the factors that limit the functional capacity of the elderly.

Descriptors: Nursing; Elderly; Public health.

O objetivo deste estudo foi buscar evidências científicas que abordem a capacidade funcional em idosos, bem como instrumentos utilizados para mensurá-la. Trata-se de uma revisão integrativa da literatura, na qual se incluíram artigos indexados nas bases de dados LILACS e SCIELO publicados em língua portuguesa no Brasil de 2008 a 2012. O ano de publicação dos artigos variou entre 2010 e 2012, havendo predominância do estudo do tipo transversal. Os profissionais enfermeiros foram os principais responsáveis pelas publicações. Questionários e escalas foram utilizados para avaliar a capacidade funcional dos idosos, com predominância do Índice de Katz, sendo a grande maioria dos artigos provenientes de grupos de pesquisa de universidades públicas. As publicações demonstraram que, por meio da utilização de escalas e questionários, é possível identificar os fatores que limitam a capacidade funcional dos idosos.

Descritores: Enfermagem; Idoso; Saúde coletiva.

El objetivo de este estudio fue buscar evidencia científica acerca de la capacidad funcional de ancianos, así como los instrumentos utilizados para medirla. Se trata de una revisión integradora de la literatura, que incluyeron artículos indizados en las bases de datos LILACS y SCIELO publicado en portugués en Brasil de 2008 a 2012. El año de la publicación de los estudios varió entre 2010 y 2012 con predominio de estudios transversales. Las enfermeras eran las principales responsables de las publicaciones. Cuestionarios y escalas se utilizaron para evaluar la capacidad funcional de los ancianos, sobre todo Katz Index. La mayor parte de los artículos son de grupos de investigación de universidades públicas. Las publicaciones demostraron que a través de la utilización de escalas y cuestionarios, es posible identificar los factores que limitan la capacidad funcional de los ancianos.

Descriptorios: Enfermería; Anciano; Salud colectiva.

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INTRODUCTION

The world population is aging. Studies show that the number of older people grows faster than the people born, resulting in a number of situations that modify the structure of expenditures of countries in different areas. In Brazil, the rate of growth of the elderly population has been systematic and consistent. In the period 1999-2009, the relative weight of the elderly (60 years or older) in the population arose from 9.1% to 11.3%. Combined with other factors, such as advances in technology, especially in the area of health, the elderly group currently occupies a significant space in Brazilian society¹.

In this sense, the Brazilian Institute of Geography and Statistics (IBGE) have been warning, through social and demographic indicators published annually, that the age structure of the country is changing and that the elderly group is today, a significant population group in absolute terms and presents increasing relative importance in Brazilian society as a whole. This brings on many new requirements and demands in terms of public health policies and active inclusion of elderly in social life as well as the evaluation of their functional capacity¹.

As a greater number of people reaches older ages, there is a tendency of changing in the pattern of morbidity and causes of death of the population. So, instead of infectious diseases, chronic degenerative diseases and their complications have become prevalent. The current trend is to have a growing number of elderly individuals who, although live longer, experience greater number of chronic conditions².

The increase in the number of chronic diseases leads to a higher prevalence of disability, both in short and long term. Moreover, with the physiological process of aging, the functional capacity of each system of the human body decreases. It is a slow process and imperceptible, but inexorable and universal².

Functional capacity evaluation is essential to establish a diagnosis, a prognosis and an appropriate clinical judgment as a basis for decisions on the necessary care to the elderly. It is a parameter, associated with other health indicators, that can be used to determine the effectiveness and efficiency of the proposed interventions. Functional assessment seeks to verify, in a systematic way, at what level the diseases or injuries hinder autonomous and independent performance in daily activities of elderly, allowing the development of a more appropriate care planning^{2,3}.

Many functional assessment models were developed and applied in the last decades in various population categories. Models are created and selected for categories that present the same specificity: more or less dependent individuals, institutionalized, hospitalized or community individuals, carriers of specific diseases (such as arthritis, osteoarthritis, Parkinson's disease, stroke and other). Most of these tests is little sensitive to small functional losses and is not designed for healthy elderly individuals who have small deficits of physiological decline^{3,4}.

This article aims to seek scientific evidence that address the functional capacity in the elderly, as well as instruments used to measure it through scientific articles.

METHOD

This is an integrative review, which includes analysis of relevant research that provides support for decision making, allowing the incorporation of these findings into clinical practice. This type of study is a strategy for the identification and analysis of existing evidence of health practices, when the production of scientific knowledge is not sufficiently substantiated. For the development of an integrative review, it is necessary to adopt stages presenting a methodological rigor for evidence on a particular issue. In order to implement this integrative review, the following methodological steps were used: defining the criteria for inclusion and exclusion;

defining the information to be extracted from selected studies; categorization of studies; analysis and interpretation of data; evaluation of results included in the integrative review and presentation of the review/synthesis of knowledge⁵.

The literature search was conducted in the databases of Latin American and Caribbean Literature on Health Sciences (LILACS) and Scientific Electronic Library Online (SciELO). Descriptors in Health Sciences (DeCS) were used: "functional capacity", "elderly", "functionality". Articles were selected according to the following inclusion criteria: presence of descriptors chosen in the work title or inserted in the abstract, full-text articles, productions in Portuguese language, originating in Brazil and published between January 2008 and December 2012. The search was conducted in the month of January 2013. 225 indexed articles were found in LILACS database and 373 articles on the basis of SCIELO. Only 20 of these articles met the inclusion criteria to answer the purpose of this study.

Articles in the form of handouts, letters and editorials were excluded from the research, because they did not include the necessary criteria for a scientific research since the focus of this study was to seek scientific evidence on the subject.

An instrument for data collection was developed to catalog the items and perform further evaluation. The instrument consisted of: journal name, publication year, area of knowledge, institutional affiliation of the author, origin of the article, article title, objectives, type of study, characteristics of the elderly, instruments and variables.

Analyses were performed by means of reading and grouping of articles⁵ and grounded in the instrument developed and in the selection using the criteria of inclusion and exclusion. The results were presented in form of tables and descriptive language. For best viewing, it was decided to separate two areas of discussion, outlined below:

functional capacity and aging and instruments used to measure functional capacity in the elderly.

RESULTS

Of the 20 articles published on the subject in question, it was realized in this integrative review that they were published in the following journals: three (15%) in the Acta Paulista Nursing Journal; two (10%) in Latin American Journal of Nursing; two (10%) in the Brazilian Journal of Health Sciences; two (10%) in the Science and Public Health Journal; two (10%) in Bahia Journal of Public Health; one (5%) in the Journal Cogitare Nursing; one (5%) in the Brazilian Journal of Nursing; one (5%) in Gaucha Journal of Nursing; one (5%) in the Journal of Nursing Network of the Northeast; and one (5%) in the Text and Context Nursing Journal; one (5%) in the Book of Public Health; one (5%) in the Book of Occupational Therapy; one (5%) in the Brazilian Journal of Physiotherapy; one (5%) in the Journal of Public Health; presented in Table 1.

For the year of publication of the articles, it was found that seven (35%) were published in the year 2010; five (25%) in the year 2011; four (20%) 2012; two (10%) in the year 2009 and two (10%) in 2008.

Concerning the affiliation of the responsible author, all of them belong to public educational institutions, nine (45%) of the Southeast Region; five (25%) of the Southern Region; five (25%) of the Northeast (5%) and one of the Midwest Region. 15 (83%) of the articles found are from research groups and five (17%) were produced based on Master's thesis. All studies were quantitative researches with varied approaches, such as: 15 (75%) cross-sectional; two (10%) of sectional type; one (5%) of prospective type; one (5%) of multicentre type; and one (5%) of explanatory type, and the nurses were responsible for 70% of the publications of the topic in question.

Table 1 – Articles according to journal, publication year, area of knowledge, institutional affiliation and origin of the article. São Paulo, SP, 2013.

Name of Journal	Year	Area of knowledge	Institutional Affiliation	Origin of the article
Ciência e Saúde Coletiva	2008	Nursing	Federal University of Goiás	Research Group
Acta Paulista de Enfermagem	2008	Nursing	University of São Paulo	Research Group
Ciência e Saúde Coletiva	2009	Physiotherapy	Federal University of Triângulo Mineiro	Research Group
Rev. Bras Fisioter.	2009	Physiotherapy	Federal University of Viçosa-MG	Research Group
Rev. Gaúcha de Enferm.	2010	Nursing	Federal University of Rio Grande do Sul	Term Paper
Rev. Latino-Am. de Enfermagem	2010	Nursing	Federal University of Rio Grande do Sul	Research Group
Cogitare Enfermagem	2010	Nursing	University of São Paulo	Research Group
Revista Baiana de Saúde Pública	2010	Nursing	Universidade de São Paulo	Research Group
Acta Paulista de Enfermagem	2010	Nursing	University of São Paulo	Research Group
Ciência e Saúde Coletiva	2010	Nursing	State University of Santa Catarina	Research Group
Revista Baiana de Saúde Pública	2010	Physiotherapy	State University of Southwest of Bahia	Research Group
Acta Paulista de Enfermagem	2011	Nursing	Federal University of São Carlos	Master's Thesis
Rev. Rene	2011	Nursing	State University of Londrina	Institutional Program for Scientific Initiation
Rev. Brasileira de Ciências da Saúde	2011	Nursing	Federal University of Paraíba	Research Group
Rev. Brasileira de Ciências da Saúde	2011	Physiotherapy	Federal University of Paraíba	Research Group
Revista de Saúde Pública	2011	Physical Education	Federal University of Santa Catarina	Research Group
Rev. Bras. de Enferm.	2012	Nursing	Federal University of Minas Gerais	Research Group
Rev. Latino-Am. de Enfermagem	2012	Nursing	Federal University of São Carlos	Master's Thesis
Texto Contexto Enfermagem	2012	Nursing	Federal University of Paraíba	Master's Thesis
Cad. Ter. Ocup. UFSCar	2012	Physiotherapy	Federal University of Sciences of Alagoas	Research Group

About the elderly in the articles sample, 18 articles (90%) are in the urban population and two (10%) among the rural population. As for the scenario chosen by the researchers, 11 (55%) opted for the Family Health Strategy; four (20%) by School Hospital; three (15%) for long-stay institutions and two (10%) for the elderly at home.

The objectives found in the researches revealed the intention of the researchers to

know the elderly in its entirety and relate how socioeconomic and demographic characteristics influence functional capacity and health conditions of the elderly. As for the instruments used for data collection, the questionnaire was the most used for data on socioeconomic and demographic characteristics.

Regarding the tools used to measure functional capacity, 10 (50%) used the Katz Index; four (20%) the Barthel Index; three

(15%) the Older Americans Resources and Services (OARS) instrument; two (10%) the Functional Independence Measure (FIM);

and one (5%) the Lawton Scale, as shown in Table 2.

Table 02 - Articles according to title, type of study, objective and instrument used to measure functional capacity. São Paulo, SP, 2013.

Title	Type of study	Objective	Instrument of measurement
Prevalence and associated factors of home health care for elderly people.	Cross-sectional	To estimate the prevalence of home care provided to the elderly and to identify associated factors.	Katz Index
Katz Index applied to institutionalized elderly.	Cross-sectional	Evaluate the profile and the degree of dependence on institutionalized elderly residents in long-stay philanthropic institutions.	Katz Index
Functional capacity of elderly ascribed to the Family Health Strategy in João Pessoa-PB.	Cross-sectional	Draw the functional profile and identify which factors are associated with the ability to perform the ADL of a representative sample of elderly ascribed to "Family Health" Strategy (FHS) of João Pessoa - PB city.	Katz Index
Functional capacity of older subjects: a comparative study in three regions of Rio Grande do Sul.	Cross-sectional	Compare the level of dependence for ADL in the elderly aged 80 or more in three regions of Rio Grande do Sul.	Katz Index
Functional capacity, socioeconomic and health conditions of seniors served by the Family Health teams in Goiânia-GO.	Cross-sectional	Assess functional capacity, identify factors associated with dependence and describe the socioeconomic, demographic and health profile of the elderly.	Katz Index
Functionality of older people with cognitive impairment in different contexts of social vulnerability .	Cross-sectional	Evaluate the functionality of older people with cognitive impairment living in different contexts of social vulnerability.	Katz Index
Relationship between social support and functional capacity of older adults with cognitive impairment.	Cross-sectional	Identify the relationship between social support and functional capacity of elderly with cognitive impairment registered in different units of the Family Health Units.	Katz Index
Epidemiological, clinical and functional independence of an institutionalized elderly population profile.	Cross-sectional / Descriptive	Know the characteristics of institutionalized elderly assessing sociodemographic, clinical, and level of functional dependence variables.	Katz Index
Sociodemographic indicators and functional capacity of elderly diabetics.	Exploratory	Investigate the socio-demographic indicators and measure the functional capacity of elderly diabetics.	Katz Index
Sociodemographic indicators and functional capacity of elderly diabetics.	Exploratory	Investigate the socio-demographic indicators and measure the functional capacity of elderly diabetics.	Katz Index
The institutionalized elderly: assessment of functional capacity and physical ability.	Multicentre	Explore the relationship between physical ability and functional capacity of residents in institutions for poor elderly.	Katz Index
Prevalence of disability and dependence in elderly patients from a Health Center-School of the University of São Paulo.	Cross-sectional	Describe the demographic profile of elderly patients from an outpatient service and estimate the prevalence of disability.	Barthel Index
Relationship between family functioning and functional capacity of elderly dependents in Jequié-BA.	Cross-sectional	Examine the relationship between family functioning to adaptation, to the fellowship, to the development, and to affective and functional capacity of elderly dependents.	Barthel Index
Validation of Barthel Index in elderly patients in outpatient clinics in Brazil.	Cross-sectional	Validate the Barthel Index for elderly patients at an outpatient in Brazil through reliability and validity analysis.	Barthel Index
Assessment of ability to perform activities of daily living in the elderly living at home.	Cross-sectional / Descriptive	Describe the ability to perform daily activities in the elderly living at home.	Barthel Index
Functional capacity of the elderly in a rural community of Rio Grande do Sul.	Sectional	Identify the functional capacity of elderly residents in a community of Rio Grande do Sul.	OARS
Morbidity and its interference in the functional capacity of the	Sectional	Identify the influence of comorbidities on functional capacity of elderly patients at an	OARS

elderly.		outpatient clinic of a tertiary teaching hospital.	
Assessment of functional capacity of elderly enrolled in the Family Health Strategy in the Pontal da Barra, Maceió-AL community.	Prospectivo	Assess the ability of elderly enrolled in the Family Health Strategy in the Pontal da Barra, Maceió-AL community.	OARS
Determinants of functional ability in the oldest old.	Cross-sectional	Determine the factors associated with functional ability in the oldest old.	FIM
Active aging and its relationship to functional independence	Cross-sectional / Descriptive	Assess determinants for a healthier aging and verify the degree of functional independence of elderly enrolled in a Family Health Unit.	FIM
Functional disability in older low-income women.	Cross-sectional	Analyze the relationship of sociodemographic aspects and health conditions related to the condition of dependency in performing instrumental activities of daily living.	Lawton Index

*Continuação Tabela 2.

DISCUSSION

For best viewing, two areas of discussion were categorized, as described below.

- Functional capacity and aging

Since the last decades of the past century, Brazil has faced with a rapid and sharp decline in fertility, an unprecedented phenomenon, which stands out even compared to other countries, whether in the developed world, or among those in development. As happened in most of these countries, this decline, combined with the decrease in mortality, entailing a process of aging population and increased longevity of the population. Although the aging process is not necessarily related to diseases and disabilities, chronic degenerative diseases are often found in the elderly. Thus, the current tendency is to have a growing number of elderly individuals who, despite living longer, have more chronic conditions. And the increase in chronic diseases is directly related to greater functional disability⁶.

One of the effective measures in this issue was to adopt "functional capacity" as the new paradigm of the National Health of Person Policy by Decree No. 2528 of 19 October 2006. Functional capacity is characterized by the ability of individual conduct, independently, activities of daily living (ADL). Failure to do so without aid constitutes functional dependence⁷.

According to the International Classification of Functioning (ICF), a disease/disorder can produce a deficit in one or more specific systems of the organism which, in turn, can lead to limitations in the performance of certain functions. The

limitations presented by individuals combined with their competence in supply them and contextual continence that surrounds them represent the determinant factors on the level of disability^{7,8}.

When considering the development of a new policy of care for the elderly based on the quality of life, it is assumed the importance of defining the concept of functional capacity, ie, the ability to maintain the physical and mental skills necessary for an independent and autonomous life. Most chronic diseases among elderly people have the major risk factor in age itself. However, longevity does not prevent the elderly from conducting their own lives autonomously and deciding on their interests. The elderly who maintain their independence and self-determination - the ability of individuals to exercise their autonomy - should be considered healthy, even though it presents one or more chronic diseases^{9,10}.

In the late 1990s, the World Health Organization (WHO) began to use the concept of "active aging", trying to include, in addition to health care, other factors that affect aging. This concept can be understood as the process of optimizing opportunities for health, participation and security in order to improve the quality of life as people get older⁹. It involves public policies that promote healthier and safer ways of living in all stages of life, promoting physical activity in daily life and in leisure, the prevention of situations of domestic and urban violence, access to healthy foods and reducing tobacco use, among other measures, that will contribute to the achievement of an aging

with a substantial gaining in quality of life and health¹⁰.

From the standpoint of public health, this concept is the most appropriate for structuring and enabling a policy of health care for the elderly. Therefore, all initiatives of promotion, health care and rehabilitation should aim to improve, maintain or restore functional capacity of the individual as long as possible, enhancing their autonomy and physical and mental independence, exceeding simple diagnosis and treatment of specific diseases. Physical or mental dependence is an important risk factor for mortality, more than the actual diseases that lead to addiction, since not every sick person becomes dependent. Thus, new priorities and actions that will guide contemporary health policies should be established^{9,10}.

It is important to stress that the extremes of functionality, defined as different levels of performance and functional competence, as those present in successful aging and in frailty aging are associated with positive and negative outcomes, respectively. The functionality related to successful aging is associated with higher levels of satisfaction and subjective welfare; greater sense of personal control and self-efficacy; larger network of social relations; better health and physical and mental independence; and a more active engagement with life, despite the presence of chronic diseases. At the other extreme, the functionality related to frailty is associated with higher levels of mortality and comorbidities; poorer health; greater functional dependence; increased risk of institutionalization and higher prevalence of geriatric syndromes such as falls, immobility, cognitive impairment, and urinary incontinence^{10,11}.

Between these extreme features, various levels of performance may be present. This complex relationship between the various dimensions of aging makes it sometimes difficult to distinguish pathological processes to those considered "normal" evolution of the aging process. Functionality represents a sequence of functional states with several possible

performance groups, or looking under the negative aspect, various degrees of commitment. To geriatricians and gerontologists, the focus on determining the causes of functional decline and management remains a central issue. There is an important and well-described association between functional decline and the presence of diseases in determining frailty with advancing age¹⁰⁻¹².

The listed studies show that it is important to appreciate the socio-demographic, economic and health characteristics of elderly individuals, given the specificities of this group and considering the variability of health conditions and quality of life in different age groups. They also emphasize the need for services and health professionals to consider the multidimensionality and the peculiarities of the context of life for elderly in order to maintain independence, autonomy, social inclusion and improving quality of life.

The prevalent variables found point to females, aged between 70 and 85 years, represented by women living alone, widows, poor and illiterate. These indicators are seen as relevant to raise the possibility of developing disability.

- Main instruments used for measuring functional capacity in elderly

A functional assessment may consist of multiple items. However, the most mentioned are included issues related to mobility (ambulation at certain distances, changes in the course of walking, getting up from a chair and sit in it, changes in decumbent position and transfer); to the basic activities of daily living (dressing, feeding, bathing, etc.); to the instrumental activities of daily living (using means of transportation, cooking, managing finances, using the telephone, etc.); in addition to some assessments that include the individual's performance at work, in social and leisure environment^{13,14}.

The methods of application of functional assessments include the form of self-report, which measures physical function by issuing an individual's response

to the questions of its operation; it is an easy, fast and inexpensive way to evaluate the patient. However, the individual's perception of their general condition can sometimes influence their responses. Small functional changes can also be unnoticed by the elderly in this type of assessment. Depressed individuals may overestimate their disabilities, and individuals with cognitive impairments, even if moderate, can present a false performance on the tests. As these tests are questionnaires requiring reading items, interference in its results are noted in patients with low educational level, deficiencies in reading and decreased visual acuity¹⁵⁻¹⁷.

Some tools used to evaluate the functional capacity of the elderly are presented below. It is noteworthy that there are many other tests and sets of functional tests. Therefore, we chose to discuss only instruments that were used in the research of selected articles.

Index of Basic Activities of Daily Living of Katz

The Index of Independence in Activities of Daily Living developed by Sidney Katz is still one of the most used tools in national and international gerontological studies, although it was first published in 1963. In the 1950s, it was consensus among researchers that the aging process was related to changes in the course of time that resulted in progressive loss of skills and increasing the rate of death¹⁸.

Based on data analysis, that team developed an instrument that sought to assess the functional independence of patients for bathing, dressing, toileting, transferring from bed to chair and vice versa, being continent and feeding, these activities considered basic and biopsychosocially integrated¹⁹.

For the development of such an instrument all type of care received by the elderly in the performance of such activities was registered. Thus, the functional characterization of the patients was obtained through their functional performance rather than their ability to perform the function, in other words, an old

man who refused to develop any of the mentioned activities was deemed unable to function, even if potentially able to perform it^{19,20}.

The Index of Independence in Activities of Daily Living (ADL) - the ADL Index developed by Sidney Katz is a functional assessment tool widely used in gerontological literature, both nationally and internationally levels. This historical review aimed to show how the instrument was originally conceived, its assumptions and theoretical basis²¹.

Some suggested and/or authorized modifications by the author could also be found, together with the justifications and limitations of their applications, and thus own references that differ from the related to the original instrument. Care must be taken in order to pursue the use of certain instruments in its original version or in case of modifications or adaptations, they must be are warranted. This recommendation is due to the fact that some changes may prevent a comparison between different studies or cause a mistaken analysis of comparative results^{22,23}.

Barthel Index

Developed in 1965 to assess the functional potential and results of rehabilitation treatment of patients who have suffered stroke, this test measures the degree of assistance required in 10 activities (feeding, bathing, personal hygiene, dressing, sphincter control, chair and bed transferring, walking and climbing stairs).

Study²² showed validity and reliability in elderly patients without cognitive impairment and with less than 65 years. Specific weights are assigned to each proposed activity in accordance with clinical observations. In the original version, each item is scored according to the patient's performance in carrying out tasks independently, with some help or dependently. An overall score is formed by assigning points for each category, depending on the time and care required for each patient. The score ranges from 0 to 100 in increments of five points, and higher scores indicate greater independence. Scores

below 50 indicate dependence in daily life activities. The Barthel Index has been applied in patients admitted to rehabilitation units, and in the elderly living in the community, showing good correlation with other functional measures^{24,25}.

Kenny Self-Care Index

It is an instrument consisting of 17 tasks divided into 85 items grouped into six categories: locomotion, transfers, basic activities, clothing, personal hygiene and nutrition. Each item has a corresponding score, so the note is assigned zero (0) for total dependency, one (1) for intensive assistance, two (2) for moderate assistance, three (3) for minimal assistance and four (4) when there is no need for assistance.

The original study of this tool was conducted in 1965 by the Rehabilitation Institute of Kenny team in the United States, and involved the participation of professionals in Occupational Therapy, Physiotherapy and Nursing. The advance of sophistication of Medicine brought the need to better define the functional capacity and to create a logical, orderly and systematic method to assess the degree of extension of the deficiency of capacity. The development of such a method would facilitate the description of the progress and would share the effectiveness of different forms of treatment^{26,27}.

Functional Assessment scale of Lawton and Brody

The Lawton Scale is a tool that analyzes the functional capacity of the elderly, as an indicator of health and welfare, enabling to determine if the individual can live alone. Functional capacity is defined by the presence or absence of difficulties in performing certain actions and activities of daily living, or even the inability to perform them. This scale is dimensioned in terms of the ability and independence to perform certain activities²⁷. It is influenced by demographic, socioeconomic, cultural and psychosocial factors that will characterize the behavior and lifestyle. The IADL scale of Lawton has three types of answers: first means independence, the second ability with help, and the third dependency. The

following activities are evaluated: using telephone, locomotion using means of transportation, shopping, preparing meals, cleaning the house, doing manual work, washing clothes, taking medications in correct doses and schedules, taking care of finances. The total score is 27 points, and the score has meaning only to the elderly individual, serving as a basis for assessing the quality of life²⁷⁻²⁹.

The functional assessment instruments used in Brazil have their origin in other countries, highlighting the lack of national productions. The process of cultural adaptation has provided the use of instruments developed in other languages and adapted to our culture; however, the evaluation of the psychometric properties and the adaptation of minimum scores are very important data, as important as adaptation. The reliability and validity are key attributes for choosing an instrument since they attest the ability of the instrument to measure what it claims and the reliability of the information resulting from this³⁰.

CONCLUSION

Brazilian scientific production related to functional capacity and the instruments used in its measurement in the elderly have been recent focus of multidisciplinary health team and especially the nurses and physiotherapists.

Publications have demonstrated that through the use of scales and questionnaires, it is possible to identify the factors that limit the functional capacity of the elderly. From this perspective, it becomes essential to the nursing and other professionals involved in elderly care in detecting these factors, since they direct the planning of care actions both in prevention and in rehabilitation scopes, meeting the prospects of National Policy for Elderly People, which aims to maintain and promote the autonomy and independence of elderly individuals.

Thus, the data in this study suggest that the issue addressed has a high potential for research to be explored. The assessment of functional capacity of the elderly enables action through health promotion, with

specific actions to help prevent disability. It also allows nurses and other health professionals to draw the plan of specific care to each elderly based on the results of the instruments used to measure the functional capacity.

The diversification of the use of scales for assessing functional capacity of the elderly, when critically crafted, has a positive aspect. The field of knowledge and practice of functional assessment is built cumulatively. Thus, the choice of one or more functional assessment scales should be perceptive, also taking into account the target population to be evaluated.

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CONTRIBUTIONS

Gerson de Souza Santos and Isabel Cristina Kowal Olm Cunha had equal contributions to conception and design of the study, analysis and interpretation of data and writing the manuscript.