

Functional Independence of Adults and the Elderly Attended by a Family Health Strategy in Teixeira de Freitas-BA

Independência Funcional de Adultos e Idosos Atendidos por uma Estratégia de Saúde da Família em Teixeira de Freitas-BA

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Abstract

Aging is related to several morphological and functional changes in the individuals' body that directly reflects on their functional independence. This affects both maintaining the ability to perform Basic Activities of Daily Living and the Instrumental Activities of Daily Living. The present study aimed to verify the level of functional independence in adults and the elderly attended by a Family Health Strategy in Teixeira de Freitas-BA. It is an observational study of transverse and descriptive design composed of 30 participants who answered a semi-structured questionnaire and socioeconomic Functional Independence Measure instrument (MIF). Spearman's correlation coefficient was used to analyze the correlation among the variables. Through MIF it was possible to identify a total of 123.1 ± 4.47 points for the participants, which indicates complete independence in performing routine tasks. The memory factor was the component that scored lower, followed by problem resolution. A strong correlation ($r = 0.71$) was found between the total MIF score and the social cognition factor. Therefore, one notices the need for investments in appropriate professionals as well as improvement in public health policies in order to active and healthy aging.

Keywords: Health Care (Public Health). Aged. Activities of Daily Living.

Resumo

O envelhecimento está relacionado à diversas alterações morfológicas e funcionais no organismo dos indivíduos que reflete diretamente na independência funcional destes. Isso afeta tanto na manutenção da habilidade de realizar Atividades Básicas da Vida Diária quanto nas Atividades Instrumentais da Vida Diária. O presente estudo teve por objetivo verificar o nível de independência funcional em adultos e idosos atendidos por uma Estratégia Saúde da Família em Teixeira de Freitas-BA. É um estudo observacional de delineamento transversal e descritivo, foi composto por 30 participantes que responderam a um questionário socioeconômico semiestruturado e o instrumento de Medida de Independência Funcional (MIF). Para as análises foi utilizado o coeficiente de correlação de Spearman para avaliar a correlação existente entre as variáveis. Por meio da MIF foi possível identificar um total de $123,1 \pm 4,47$ pontos para os participantes, o que indica a independência completa na realização de tarefas de rotina. O fator memória foi o componente que obteve menor pontuação, seguido de resolução de problemas. Constatou-se nesse estudo uma correlação forte ($r=0,71$) entre a pontuação total da MIF e o fator cognição social. Assim, percebe-se a necessidade de investimentos em profissionais adequados bem como melhoria nas políticas públicas de saúde a fim de promover um envelhecimento ativo e saudável.

Palavras-chave: Atenção à Saúde. Idoso. Atividades Cotidianas.

1 Introduction

The Pan-American Health Organization - PAHO, together with the World Health Organization (WHO)¹ pointed out in 2016, the number of persons aged greater than or equal to 60 years will more than double, from 900 million to around 2 billion worldwide in 2050. This rapid population aging may increase the occurrence of non-transmissible chronic diseases that are directly related to an increased risk of disability and mortality, in addition to the impairment of quality of life^{2,3}.

The functional disability is understood as a multidimensional condition, a result of the relationship between the individual and his or her physical/social environment. The inability or difficulty performing activities range from basic activities to the most complex, directed to

their everyday life^{2,4}.

The National Health Policy of the Elderly in Brazil brings a model for promoting and maintaining the autonomy and independence of the elderly, with emphasis on functional capacity⁵. This policy aims to prioritize the preservation, improvement and rehabilitation of the functional capacity of the elderly, to ensure their participation in society, exercising their daily activities independently⁶.

Therefore, it is important to highlight the maintenance of the ability to perform basic Activities of Daily Living (ABVD) and instrumental activities of daily living (AIVD), as essential and acceptable for an independent and autonomous life. The achievement of the ABVD and the AIVD for the elderly, is something present and necessary for their survival, keeping the participatory approach in managing and caring for their

own health and the development of domestic tasks^{7,8}.

The search for an active aging, with quality of life is being objective of social programs and health care, directed toward the preservation of independence and autonomy. This investment has not been fundamental goal only from the government, but of all sectors of society. Thus, as an important strategy for achieving this challenge, the program Family Health Strategy stands out, developed in Family Health Units, being registered as competent to achieve specific measures of health prevention and promotion, especially taking care with the elderly living in the community^{6,7}.

The elderly who maintains their independence and the ability to exercise their autonomy, must be considered healthy even if the same is diagnosed with one or more chronic diseases⁹. From a public health point of view, the functional capacity shows itself as an integral part of the concept of health conducive to implement and operate a policy of attention to the health of the elderly¹⁰.

The functional independence has been used in different scenarios of attention to elderly health both in Brazil and in other countries. An instrument to assess the individuals' cognitive and motor ability is the Measure of Functional Independence-MIF file that has had good acceptance in the scientific community, because in addition to allowing the measurement of the degree of the elderly dependence, can also quantify the demand for care that they may present¹¹.

Cognitive deficits, for example, have been associated with functional loss¹² and furthermore, changes in memory, executive function and attention are related to low gait and may predict loss of mobility, falls and progression of cognitive decline¹³. On the other hand, elderly practitioners of regular physical activity may present better results or maintain the cognitive status, functional capacity and ability to perform activities of daily living, compared to the non-active elderly¹⁴.

In this perspective, the objective of this study is to verify the level of functional independence, compare by gender and age the level of functional independence and identify which areas and factors of the measure of functional independence would be more compromised in the elderly cared for by a Family Health Strategy (FHS) in Teixeira de Freitas-Bahia. Considering the above, the results can contribute to the survey of the elderly population needs in relation to their inability and also provide data on the functional disability.

2 Material and Methods

It is a sectional observational and descriptive study. The study sample consisted of 30 participants of both sexes, assisted by a FHS, located in the municipality of Teixeira de Freitas/Bahia. After being informed about the benefits and risks of the research, they agreed to sign the Informed Consent Form(TCLE) (CEP of UEFS, CAAE: 58368216.1.0000.0053) participating in the study voluntarily.

The participants answered a structured questionnaire

containing 30 sociodemographic questions, about health and the instrument Measure of Functional Independence - MIF. The instrument has the function to assess quantitatively the load of cares needed for a person to perform motor and routine cognitive activities. On a scale of 7 points 18 items are evaluated that include the individual's personal care, control of sphincters, motility, locomotion, communication and social cognition¹⁵.

The total score of MIF is obtained by summing the score of each dimension, having as a minimum 18 and maximum 126 points. A result of 18 points, it is considered that there is dependence, complete with need of total assistance to perform daily tasks; 19 to 60 points, modified dependence, with the assistance of up to 50% on the job; from 61 to 103 points, modified dependence, with the need for assistance of up to 25% on the task and 104 to 126 points, equivalent to complete independence/modified¹⁶.

This tool was chosen for being a measure which meets the criteria of reliability, validity, accuracy, convenience and ease. In addition, it is part of a uniform system for Medical Rehabilitation, being widely used and accepted as a measure of functional evaluation internationally. It also has as a goal to determine what the necessary cares to be offered so that the patient performs the ABVD and AIVD. Afterwards, the collected data were tabulated and archived in the electronic database available in spreadsheets.

To evaluate the correlation between two variables Spearman's correlation coefficient was used. The degree of linear relationship between two quantitative variables varies between -1 and 1. About the result of the correlation, the value 0 (zero) means that there is no linear relationship, the value 1 indicates a perfect linear relationship, and the value -1 also indicates a perfect linear relationship, but in reverse. The qualitative assessment of the degree of correlation between two variables can also be called as null, if a correlation coefficient (r)=0 is obtained. If it is obtained a $r > 0$ and < 0.3 it would be weak, for $r \geq 0.3$ and < 0.6 it is known as regular correlation, the correlation can still be called strong, very strong and full, if the r obtained is respectively between: ≥ 0.6 and < 0.9 , ≥ 0.9 and < 1 and $= 1$ ¹⁷. For the Spearman correlation, performed in the study variables, it was used the program SAS 9.0.

A comparison analysis was also made taking into consideration the age to identify the involvement in motor and cognitive domains. For this reason, the WHO criterion was used, which classifies older adults aged over 60 years. Thus, the studied group was divided in < 60 years and > 60 years.

3 Results and Discussion

The studied sample consisted of 30 participants. The mean age of the group was 63.2 \pm 8 years, with a predominance of females (67%), being of the male gender a total of 33%. The largest participation of female population in this study could be related to the valorization of autonomy that women tend to

maintain during the aging process, preserving daily activities and care with themselves¹⁸. In addition, women have more positive attitudes in relation to health, with lower exposure to risk factors compared to men^{19,20}.

Through the MIF, it was possible to identify that the group had a means of 123.1±4.47 points, which corresponds to values that indicate the complete functional independence in performing routine tasks without the need for assistance from another individual. When the MIF results were verified by gender, the male sex was 124.4±3.47 points and the female 122.45±4.85 points. It is possible to realize that both groups have functional independence, since it presented very close values. The gender variable is associated with the occurrence of dependence²¹. However, in this study, the sample of women was higher than that of men, corroborating other studies, where the aging represents a greater prevalence of elderly women with better results of functional independence^{2,8}.

When correlated genre and total score of MIF it was found that in the male group there is a weak correlation ($r=0.09$). That is, in this group age is not associated with the outcome of MIF. Regarding the female group, it can be seen that there is a strong inverse linear correlation ($r = -0.64$). Therefore, the lower the women's age the greater the functional independence in this study.

Considering the domains evaluated of MIF, it was verified that the group domain motor had an average score of 89.73±13.24 points. Regarding what corresponds to the subdomains this outcome represented: 46% (41.60±1.10 points) of the self-care subdomain, 23% (20.96±0.18 points) mobility, 15% (13.63±1.06 points) sphincters control and 15% (13.53±1.33 points) locomotion. The subdomain mobility was the one that had the highest score in this category.

It is important to have the knowledge of these data, given that aging brings numerous morphological, biochemical, psychological and functional alterations and can cause dependence in activities⁷. An example of this is the inability to control the sphincters. It was pointed out by a study the association of functional disability related to the health self-perception, and one of its intraindividual factors was urinary incontinence¹². This situation can negatively affect the individual's social life, especially the elderly, resulting in diseases such as depression, and generate functional incapacity²². In addition, Ribeiro et al.²³ remind that all elderly, before they reach advanced ages, deserve attention with a view to maintaining the independence, even if they do not present any comorbidity, even those living in community with their families and in stable health conditions.

Whereas in the cognitive domain, the group had an average total of 32.83±3.51 points, which corresponded to the domains assessed: 58% to the subdomain of social cognition that had an average of 18.90±3.30 points and the communication 42%, 13.93±0.36 points. It is perceived in this result a lower score in the category of Social Interaction, Problem Solving and the elderly memory. Lourenço et al.²² obtained similar results,

in which the elderly presented lower score on attitudes to manage their own cash and make purchases.

Upon correlating the MIF factors and verify what the domains evaluated would be requiring greater care, it was noticed that the factor memory (5.96 points) was the most affected, followed by problems solving (6.40 points), both belonging to the cognitive domain. Other factors presented average above 6.50 Points. It is worth mentioning that physical exercise influences on the elderly functional capacity, offering benefits that include nervous system functions, such as the memory, which is directly related to the cognitive functions²⁴.

In addition, it was found that the participants aged less than 60 years have greater independence, with total score higher in MIF of 124.00±2.73 points, being the cognitive domains of 33.77±2.22 points and motor 90.22±1.98 points. On the other hand, the participants over the age of 60 years obtained a total score lower on the MIF of 122.71±5.05 points, with the cognitive domain with a score of 32.42±3.88 points and motor 89.52±2.29 points, characterizing them as the most affected group, of lower score. This result corroborates with Rossato et al.²⁵, who stated that the greater the individual's age, the lesser the performance will be in cognitive activities.

Finally, it was found out a strong correlation ($r = 0.71$) was found between the total MIF score and the social cognition factor. In addition, a regular correlation was obtained between communication and sphincter control ($r = 0.5$) and between the total score of the MIF with sphincter control ($r=0.55$).

When the elderly becomes active, the changes associated with the aging process are reduced, thus ensuring the maintenance and functional capacity and, consequently, better quality of life,^{26, 27 and 28}. This is fundamental to propose strategies that aim to annul and/or control the risk factors to health promotion and recovery of impaired functional capacity, taking into account the demographic, socioeconomic, cultural and psychosocial factors²⁷.

4 Conclusion

The study on the participants' functional independence of the Association of the Elderly, allowed us to observe how is the ability of individuals to perform routine personal activities, their autonomy and difficulties, in addition to checking what aspects need more attention and care.

The assessed group presented complete functional independence in performing routine tasks, without the need for help from other individuals. The research participants aged above 60 years had a lower score in the cognitive and motor domains. A factor to be considered is the development of strategies that work efficiently the elderly's memory and the problems solving, considering that it was the category that showed a lower value in the score of functional independence.

Investments in appropriate professionals as well as the creation of spaces of coexistence should be encouraged to promote strategies and actions aimed at the health promotion and diseases prevention, and the maintenance of

the independence and autonomy of the elderly of paramount importance for the achievement of better results of an active aging, which promotes the quality of life.

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