PERSONAL INVESTMENT AND FUNCTIONAL INDEPENDENCE IN ELDERLY

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Resumo

Enquadramento –O investimento na vida pessoal realizado pelos idosos de forma a obter a melhor qualidade de vida bem como a manutenção da sua independência funcional são indicadores para um envelhecimento bem-sucedido.

Objetivos - Identificar a perceção dos idosos sobre o seu investimento na vida pessoal, avaliar níveis de independência funcional e analisar associações entre varáveis sociodemográficas clínicas e psicossociais e o investimento pessoal e a independência funcional.

Material e Métodos - Estudo do tipo transversal, analítico-correlacional de natureza quantitativa e de cariz descritivo, com uma amostra não probabilística constituída por 103 idosos. Para a mensuração das variáveis aplicou-se um questionário que integra uma secção de caraterização socio demográfica e clínica, a Escala de Apgar Familiar, o índice de Barthel e a Escala de Investimento Pessoal**.**

Resultados - Demonstram que a nossa amostra apresenta níveis elevados de independência funcional (40,8%) e de investimento na vida pessoal (89,3%). As variáveis que se associam de forma significativa com a independência funcional foram o género, local de institucionalização e o exercício físico. Já as que se associaram ao investimento pessoal foram o estado civil, local de residência, a prática de exercício físico e a funcionalidade familiar.

Conclusão - Apesar da elevada média de idades dos nossos idosos estes apresentam bastante funcionalidade e moderado investimento na vida pessoal, contudo as variáveis associadas de forma significativa a estes constructos são: ser do género masculino, ser casado ou viver em união de facto, o residir no próprio domicílio, praticar regularmente exercício físico e percecionar famílias funcionais.

Palavras-chave:. Investimento na vida pessoal, Independência funcional, envelhecimento ativo, idosos.

Abstract

Background: - The investment in personal life made by elders to get the best quality of life as well as to keep their functional autonomy is a very important factor that contributes to a successful ageing process.

Objective – To identify the perception of the elders about their investment in personal life, to assess the level of functional autonomy. To analyze associations between social/demographic psychosocial and clinical variables, and the personal investment and functional autonomy.

Material and Method - A transversal, analytical and correlational study of quantitative nature and descriptive profile has been done, with a non-probabilistic sample, constituted by 103 elders. To measure the variables a questionnaire has been applied including a clinical, social and demographic characterization, the Familiar Apgar Scale, the Barthel Index and the Personal Investment Scale.

Results - Our sample presents high levels of functional autonomy (40,8%) and investment in personal life (89,3%). The variables that are associated with functional autonomy in a significant way are gender, the place of institutionalization and physical exercise. The ones that are associated with personal investment are the marital status, the home place, the physical activity and the familiar functionality.

Conclusion - In spite of the high average age of our elders, they show much functionality and moderate investment in personal life, however the variables significantly associated to these constructs are: being male gender, being married or living in union of fact, reside in the home itself, practice of regular physical exercise and perceive functional families.

Keywords: functional independence, active aging, elderly.

Introduction

Currently the countries of the European Union (EU), including Portugal, face one of the most important economic, financial and above all social challenges: an aged population. The increase in average life expectancy coupled with the sharp decline in the fertility rates have led to a considerable increase in the proportion of older people in the general population.[1]

Some authors[2] report that increased longevity is a new challenge for societies, health managers, researchers and the entire aging population in the world.

An aging population is a triumph but at the same time a problem for most officials, politicians, and even people in general. This increased longevity, due to the increase in life expectancy, is not being equitably accompanied with the quality of life envisioned.[3]

In this sense, the process of institutionalisation, symbolized by the elderly having to leave their homes carries with it a set of stages, such as the decision to institutionalise, the choice of institution and adaptation/integration into that institution, which may be a long or short process.[4]

In light of the above and the current situation, the overall aim of the study is to identify the perception of the elderly about their investment in their personal lives and to assess their functional independence levels. We also want to examine associations between sociodemographic and clinical variables, personal investment and functional independence.

Only with the real knowledge of these data, can we establish programmes to promote active and healthy aging of our elderly in the future.

Material and Method

This is a quantitative, non-experimental, cross-sectional, descriptive and correlational study. A non-probabilistic, convenience sample was used consisting of institutionalised elderly people in day care or home care, attending an institution until 30 April 2015. Exclusion criteria were defined as clients aged under 65, as they are not considered elderly, and clients with psychological and intellectual or physiological limitations which could impair their ability to answer questions. The sample consists of 103 individuals, 56 females and 47 males. Most respondents are widowed 53.4%, 34% are married, 11% single and the remainder are divorced or separated.

The specific aims are to characterise the individuals in sociodemographic terms; to identify the sociodemographic variables; clinical variables, levels of personal investment and functional independence; to verify and compare the association between sociodemographic, clinical and Apgar Family variables with the level of personal investment; to verify and compare the association between sociodemographic, clinical and Apgar Family variables with the level of functional independence.

The instruments were constructed and adapted to the stated problem and aims. They are organized into five sections: the first and second section served to characterise the sample (sociodemographically, institutionalisation, clinical and physical exercise variables); the third section is devoted to assessing family functionality by applying the Apgar scale; the fourth section is intended to measure the functional independence of the elderly by applying the Barthel scale; the fifth and final section measures personal investment by the elderly by the Personal Investment Scale.

Results

The respondents' age varies between 65 and 100 years, with an average age of 83.17 years and a standard deviation 6.70 years. As for residence, the majority of respondents are found to be institutionalised (68%), 29.1% live at home with home care and the rest are in day centres. With regard to the institutionalised, 41.4% are in a nursing home, 30% are in a residential structure, 14.3% in a continuing care unit (CCU) and 14.3% in another home belonging to the same institution.

With regard to the length of institutionalisation, it ranged between 1 month and 30 years, with a mean of 43.94 months (3.7 years) and a standard deviation of 63.89 months (5.3 years). As for the clinical characterization, the vast majority of respondents has an illness (85.4%), and only 14.6% said they did not suffer any illness. The prevalent conditions are diseases of the musculoskeletal, cardiovascular and neurological systems. In what concerns regular physical activity for the elderly, approximately 61% of respondents mention they prefer walking. Only one respondent refers to fitness exercises as an option. The remaining 38.8% do not do any physical activity.

Regarding functional independence, most respondents are independent in all ADLs (Activities of Daily Life) with the exception of personal hygiene, where only 44.7% and 34% are in this category, respectively in both assessments. The most independent

daily activity is eating, which was registered in equal proportion of independent respondents in both moments of assessment (80.6%), followed by defecation and urination with a percentage of 78.6% and 77.7% at time of admission and 77.7% and 75.7% at the current time, respectively.

With respect to family functioning, 48.5% perceive their families to be highly functional; 38.8% believe there is a slight dysfunction, and the remaining 12.6% say they have severely dysfunctional families.

In personal Investment most of the respondents' answered they were positively invested in their personal lives. The only exception was sexuality, as the majority of respondents (56.3%) considered they invested very little, and there are also 26.2% who invested little. It is also worth noting that none of the respondents stated they invested greatly in sexuality. This contrasts with investments in family well-being, independence, life as a whole and death and dying for which over 50% of responses were, a good deal, or a great deal of investment. Thus, the sample only has 10.7% of respondents with low personal investment, 75.7% with moderate investment and the remaining 13.6% have a high investment in personal life.

Regarding the hypotheses, we found statistically significant values for the association between gender and the functional independence of elderly people. Men were found to be more independent than women, as the number of observed independent men is clearly higher than expected with the opposite trend being registered for women. There is an association between marital status and personal investment, highlighting that the number of elderly people who are married or living in civil unions with a high investment in personal life is higher than expected; and there is an opposite trend for widowers. We found that there is an association between residence and the elderly's personal investment. We found that seniors living in their homes with support or day care centres have clearly superior results to those who are institutionalised. There is an association between where they are institutionalised and the functional independence of the elderly. There are fewer than expected in nursing homes with moderate to severe dependence. In residential structure the number of independent elderly is higher than expected. In the continuing care unit and other home, the number of elderly with moderate and total dependence is clearly higher than expected.

As for exercise, there is an association between physical exercise and personal investment, elderly people who take physical exercise have a greater investment. The

association is significant between the practice of physical exercise and the functional independence of the elderly.

Discussion

Regarding the sociodemographic variables, the data are in line with the results of studies conducted,[5,6] where the most common marital status was widowed (52.5%), and female.

In what concerns residence, there is a trend towards institutionalising our elderly, since 68% of our sample is institutionalised against 29.1 % of older people in their own homes and 2.9% who are in a day care regime. Thus, the results obtained are in line with other studies[7] in which most of the elderly were living in nursing homes; approximately 51,017 elderly people, mostly women (69%) and 85% of the residents are aged over 75 years. With regard to length of institutionalisation, a range between 1 month and 30 years was obtained with a mean of 3.7 years. These data are similar to another study,[8] where most of the elderly had been institutionalised for more than 4 years (50%).

Reflecting on health, the vast majority of the elderly report they suffer from some pathology (85.4%) against 14.6%, who say they do not suffer from any disease. These data are consistent with a study[9] in which 93.0% of the elderly reported suffering from some pathology compared to only 7.0% who said they were not ill. In what regards the type of disease they sufferer from, we can see that diseases of the musculoskeletal (25.0%), cardiovascular (23.9%) and neurological (21.6%) systems predominate. Other studies consulted confirm the data obtained[10].

Contrary to what would have been expected due to the high mean age, our sample has a high level of physical activity since the majority answered that they performed physical activities, with walking being the main form. Only 38.8% of respondents reported that they did not perform any physical activity. Walking also appears as the activity of choice by the sample in another study[11], with a percentage of 83.34%.

As for promoting physical activity by institutions, all of them provide at least one type of physical activity such as the continuing care unit (CCU) which provides physiotherapy, where 11.4% of its patients participate. The remaining units also offer physical exercise, besides physiotherapy, and the residence structures enable older people to perform water aerobics, and 20.0% of its residents participate in the various activities promoted. This concern on the part of the home to provide a variety of possible activities is in line with what has been argued in some studies conducted in geriatric institutions. In these

studies it was shown that maintaining or restoring autonomy is an essential element to contribute to greater life satisfaction and consequently an increase in social participation by the elderly.[12]

When we look at the results taking ADLs into consideration, we find that it is hygiene where the highest frequencies for category of dependent are seen, both at the time of admission (55.3%) and currently (66.0%). It is the ADL of eating that our sample is shown to be most independent in both moments, 80.6%, which was unaltered. There are also no oscillations in percentages for independence for the ADLs, bed/chair transfer and walking. These results are consistent with those obtained by other researchers,[13] where the individuals of the sample are better able to execute the ADLs of eating (86.4%) and transfers (67.2%). In contrast for the ADL, hygiene, as in our study, older adults demonstrated lower performance capacity (68.8%).

In general, our study found a decrease in the percentage of independence from the first to the second ADL assessment. The largest decrease (10.0%) was recorded in hygiene.

With regard to family functioning, 48.5% are in a highly functional family and only 12.6% reported being in a dysfunctional family. In another study[2] 62.4% of the sample say they are in a highly functional family. According to the MSST study, “Social Charter”, the vast majority of people living a situation of dependency in homes (72.0%) has a regular relationship with their families.

With regard to personal investment we found that most seniors (75.7%) think have made a moderate investment, 13.6%, a high investment and 10.7%, a low investment. In contrast, in the category sexuality, our elderly people reveal they invest little (56.3%). To sum up, we may infer that the elderly people under study invest in their personal lives with a view to active aging and a better quality of life, which is in line with a study[2] in which 92.2% of the sample was classified as having a good quality of life.

Also regarding personal investment, the influence of gender was not shown. However, it was found that gender influences functional independence, contrary to the results of other studies.[9] Nevertheless, our results are corroborated by some authors[14] who conclude that gender is strongly linked to dependence, being twice as high for women as for men.

Regarding the hypothesis that marital status influences personal investment, this was validated, and the association between these variables is statistically significant. This is especially the case for married elderly people or those in a civil union who have a higher perception of investing in personal life, therefore have a better quality of life. This trend

is the opposite for widowers. In contrast, we found that divorced and married seniors enjoyed a better quality of life than the widowed and single.[6]

In analysing the relationship between place of residence and the personal investment of the elderly, we confirmed that they are associated with statistical significance. The elderly living at home with support or in the day care system have a greater personal investment than institutionalised seniors. Another study found that, generally speaking, the majority of the elderly had a good quality of life; however, this is higher in the elderly who reside in the community.[15]

In relation to an association between location of institutionalisation and functional dependence, the value obtained is lower than 5%; thus, the variables are associated with statistical significance. Our data are in line with those presented in the "Social Charter" (2007) study, in which a higher percentage of dependents (about 50%) are in a nursing home, followed by the home care service, elderly residences, and finally in day care centres.

Between the physical exercise practice and personal investment and functional independence both hypotheses were validated. With regard to personal investment, limiting physical activity was found[16] to contribute to greater harm to quality of life. In a last point of discussion we intended to see if family functioning influenced personal investment and functional independence. In the case of personal investment, the results validated our hypothesis, in line with several studies.[2,17]

Conclusion

Healthy aging, autonomy and independence are, today, a challenge with individual and collective responsibility. It is certainly important to understand our elderly population. We concluded that with regard to demographic aspects most are female, with a mean age of 83.17 years. Regarding marital status most of our sample are widowed. Regarding our respondents' residential situation most are institutionalised, the remaining are in the day care system or have home care. Regarding the institutionalised subjects, their length of residence is 3.7 years on average.

With regard to clinical characterisation, it was found that the elderly suffer from some pathology; only a minority said they did not suffer from any disease. The most common pathologies are those of the musculoskeletal system followed by the cardiovascular and neurological systems.

As for performing physical exercise the vast majority claimed to be physically active, walking being their main activity. With respect to physical activities promoted by the various institutions, the CCU only promotes physical therapy with a share of few patients.

With respect to characterising levels of functional independence, most appear to be independent in all ADLs. Analysis of the ten categories of the scale shows that it is in hygiene that the elderly reveal a higher level of dependence. The ADL with the highest level of independence is eating.

In relation to family functioning most of the sample perceive that they belong to functional families, and there are few who rate their family as dysfunctional.

Considering the existing perceptions about the levels of personal investment, we found that most seniors think they have made a moderate investment. The category of sexuality was shown to receive lower investment.

Regarding the hypotheses studied, gender is significantly associated with functional independence in the elderly with men being more independent than women. Marital status is significantly associated with personal investment, and elderly people who are married or living in civil unions have a high investment in their personal lives unlike the widowed. The place of residence is also significantly associated with personal investment, with the elderly living at home having a greater investment in their personal lives compared to those who are institutionalised. The place of institutionalisation is significantly associated with the elderly's functional independence; elderly residents in a residential structure are more independent.

Physical exercise was significantly associated with personal investment in the elderly. Those who perform physical exercise have a greater personal investment. Physical exercise is also significantly associated with the functional independence of older people, and those who exercise have greater functional independence.

Family functionality is associated significantly with personal investment, and the elderly with highly functional families have greater personal investment relatively to older people with dysfunctional families. From the hypotheses accepted, we may conclude that the sociodemographic variables are associated with personal investment and functional independence when tested dimension by dimension, namely the male gender, being married or living in a civil union, residing at home, as well as other variables such as regular physical exercise and belonging to a functional family.

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What we know about the theme:

The investment in personal life made by elders to get the best quality of life as well as to keep their functional autonomy is a very important factor that contributes to a successful ageing process.

What we get out the study:

In spite of the high age average of our elders, they show much functionality and moderate investment in personal life, however the variables significantly associated to these constructs are: being male gender, being married or living in union of fact, reside in the home itself, practice regular physical exercise and perceive functional families.

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