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Assessment of functional capacity of the elderly

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Abstract

Introduction and Objective. Ageing is a continuous, progressive process of functional reserve loss. Physical fitness and mental state have a significant impact on the functionality level of the elderly population. Assessing the degree elderly people's of independence regarding self-care is an important aspect of the Comprehensive Geriatric Assessment (CGA). The aim of the study was to assess the functional capacity of people over 65 years of age.

Materials and method. The study involved 312 patients in hospital wards across Lower Silesia, south-west Poland. The criteria for participation were as follows: providing informed consent to participate in the study, intellectual capacity to be interviewed, and age over 65. The study applied the diagnostic survey method, together with the use of the VAS, Barthel, IADL and GDS scales.

Results. Among the respondents, 59.94% were in a moderately severe condition according to the Barthel scale, average IADL score – 20.56 points; according to the GDS scale, 58.97% had no symptoms of depression. Respondents suffered from multiple chronic diseases, the most common of which were hypertension (71.47%); they also reported some medical issues, mainly back pain (47.44). Assessment of the correlation of the Barthel and GDS scales, as well as the IADL and GDS, revealed a significant and negative correlation at -0.49 and -0.50. Assessment of the correlation between the number of diseases and the Barthel scale was -0.49, the number of symptoms and the Barthel scale -0.4; pain severity and the Barthel scale -0.41, number of diseases and IADL -0.58, and number of symptoms and IADL -0.52.

Conclusions. The greater the seniors' independence regarding instrumental activities of daily living, the weaker the symptoms of depression. Multimorbidity and experiencing pain impaired independence among the elderly.

Key words

senior, physical, mental and functional fitness

INTRODUCTION

Nowadays, life expectancy has increased due to improved sanitation, medical developments, reduced infant mortality and greater public awareness. With the best interest of senior citizens in mind, activities related to health promotion, education, prevention and the functional capacity of the elderly are carried out on many levels. These measures aim to adapt healthcare to the greatest extent possible, increase quality of life, prevent physical falls and recognise the needs of the elderly. The implementation of functional capacity screening can contribute to the prevention and early detection of dysfunctions in the scope of overall independence and self-care activities. It is also important to provide assistance in the face of the ever-increasing healthrelated needs of the elderly, which is particularly important in view of the growing number of modern-age diseases and chronic diseases with a simultaneous constant, or even a decreasing, medical workforce [1-4].

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Assessment of functional capacity is a part of the Comprehensive Geriatric Assessment (CGA) which provides a series of guidelines on how to perform analyses and which research tools to use for a comprehensive assessment of the health condition of seniors. The advantage of CGA is that it makes it possible to quickly establish a personalised therapeutic process. The use of international scales reduces the risk of error in the screening diagnosis, and also facilitates complete data collection and interpretation. Based on the obtained results, it is possible to devise a therapeutic plan based on the biopsychosocial condition of an older person, where the functional capacity assessment plays an important role. It affects the extent to which the senior citizens can carry out their daily living activities, and therefore their quality of life. Screening for the degree of independence provides an opportunity for the early detection of vital function impairment, and thus of possible future complications and healthcare overload [5].

The CGA assesses the condition of an elderly person in three main areas: physical, mental and functional. The physical condition is often the benchmark for mobility and locomotion. It also has an impact on the mental state as well as the occurrence of depressive episodes. Seniors are

often found to suffer from hypokinesia, which is the result of physiological changes occurring in the body with age, as well as a reduced amount of exercise, which leads to a deterioration in the functioning of the whole body. The primary consequences include a reduction in the overall fitness of the body, as well as a decrease in muscle mass, body fat and bone mass, and limited bowel function. Cardiac, endocrine and water-electrolyte abnormalities also occur [6].

It is estimated that physical fitness helps slow down the ageing process and limit the severity of diseases. A significant part of the elderly population reduces their physical activity, which results in a geriatric cascade that starts with the progression of age, followed by a gradual decrease in physical activity and its subsequent consequences, i.e. an increase in body weight and a progressive decrease in muscle strength. The next stage is a further decrease in physical activity followed by an increase in pain and the progression of health predicaments. The ultimate stage of the cascade is death [7, 8].

The second important element of the CGA is assessing the mental state of the elderly. Even though the definitions of concepts are already in place, due to cultural diversity, individual feelings and the uncharted areas of the human mind, it is difficult to unequivocally define the boundary between well-being and mental abnormality, which is particularly relevant in case of the elderly, whose mental state has a significant impact on their quality of life [9, 10]. The ageing process is characterised by a continuous progression of body function loss, which is reflected in the mood of the elderly. This relates to a broad loss of fitness and biological functions. In addition, changes also affect the social sphere, including changes in the roles that the given individual has performed so far. A fully independent person gradually starts needing a certain amount of support. This can lead to a deterioration of mental functioning, which also depends on factors such as the senior's health condition, age, perception of their own body, work activity, productivity level or sexual functioning. Failing to define alternatives for lost or altered social functions, leisure activities, and the sense of having an important role to play, as well as not being able to overcome loneliness, can all contribute to the emergence of mental disorders.

Functional capacity consists of two main components: physical and mental fitness. It is responsible for daily life functioning and includes activities related to self-service and self-care, hence it is so important to assess the needs of seniors in terms of their functional capacity. The extent of self-reliance as far as basic and complex activities of daily living are concerned, significantly affects the quality of life of the elderly [2, 6, 11, 12].

Given the inseparable nature of physical and mental deterioration, and the fact that societies around the world are ageing, the need for specialised geriatric care is increasing. Mental health screening can contribute to the development of healthcare adapted to the needs of the elderly. The dissemination of preventive mental healthcare can have a positive impact on the quality of life of seniors [13, 14].

OBJECTIVE

The aim of the study was to assess the functional capacity of the elderly, with the goal of adapting healthcare to the needs of the elderly, improving their quality of life, preventing physical falls, establishing an individualised therapeutic process, contributing to the prevention and early recognition of dysfunctions in self-care and self-care activities.

MATERIALS AND METHOD

The study finally involved 312 people over 65 years of age in hospital wards across Lower Silesia, south-western Poland. The participation prerequisites for the study were being over 65 years of age, providing voluntary consent to participate in the survey, and possessing the intellectual capacity to participate in the interview, lack of diagnosed mental disorder or mental incapacity.

The anonymous surveys were conducted between February 2022 – May 2022 and were approved by the Bioethics Committee of the Wrocław Medical University (Approval No. 547/2021).

The survey included standardised scales: VAS, Barthel, Brody Instrumental Activities of Daily Living Scale (Lawton's Scale), Yesavage Geriatric Depression Scale (GDS – 15-point version, and a questionnaire compiled by the author, containing 14 questions on health condition, use of additional equipment, occurrence of skin lesions (bedsores, ulcers), physical falls, comorbidities, physical activity, regularly administered medications, and any additional health issues.

Statistical analysis. Quantitative variables were analysed by calculating the mean, standard deviation, median, quartiles, minimum and maximum, and in regards to qualitative variables – by calculating the number and the percentage of occurrences of each value. Comparison of the values of quantitative variables in two separate groups was carried out using the Mann–Whitney U test.

Comparisons of quantitative variables in three or more groups were carried out using the Kruskal–Wallis test. When statistically significant differences were recorded, a *post hoc* analysis was performed using Dunn's test to identify the groups exhibiting statistically significant differences. Correlations between qualitative variables were analysed using Spearman's correlation coefficient. A significance level of p=0.05 was assumed for the purpose of the analysis. The analysis was conducted using the R software, version 3.6.03.

RESULTS

A total of 312 people were included in the analysis – mean age: 66.7 years. The characteristics of the studied group are presented in Table 1.

The average score based on the IADL scale was 20.56 points, which was 2.56 points per question (SD=4.95, Min=8, Max=24); therefore, the vast majority of respondents were completely self-reliant in complex activities of daily living.

The respondents were diagnosed with multiple chronic diseases (Tab. 2) and suffered from various health issues (Tab. 3).

Nearly half of the seniors participating in the survey (46.87%) declared taking more than three different types of pharmaceutic drugs per day, 15.20% were taking four different types of pharmaceutic drugs, 12.29% were taking more than four, 12.02% were taking one type and 11.71% – two types, whereas 1.91% were not taking any drugs.

Table 1. Characteristics of the studied g	roup

Gender	n	%
Female	171	54.81
Male	141	45.19
Age		
60–69 years	149	47.76
70–75 years	70	22.45
76–80 years	31	9.93
81–85 years	31	9.93
86–90 years	31	9.93
Education		
University	33	10.57
High	102	32.69
Vocational	102	32.69
Elementary	75	24.10
Residence		
Country	147	47.11
City	165	52.89
Marital status		
Single	17	5.50
Married	207	66.33
Divorcedy	2	0.61
Widowed	78	25.10
Free	8	2.71
Livelihood		
Health pension	53	16.99
Retirement Pension	211	67.63
Allowance	6	1.92
Employment	42	13.46
Professionl work		
Physical	165	52.88
Mental	81	25.96
Physial-mental	66	21.16

Table 2. Most commonly diagnose	d diseases in respondents
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Diagnosed diseases	n	%*
Hypertension	223	71.47
Rheumatoid arthritis	114	36.54
Atherosclerosis	87	27.88
Diabetes	84	26.92
Eye diseases (cataract, glaucoma, macular disease)	81	25.96
Coronary artery disease	81	25.96
Peptic ulcer of stomach/duodenum	78	25.00
Hearing impairment	62	19.87
Osteoporosis	61	19.55
Neurological diseases (stroke, Alzheimer's disease, Parkinson's disease)	58	18.59
Urinary tract infection/urinary incontinence	45	14.42
Hyperthyroidism, hypothyroidism	42	13.46
Respiratory diseases (COPD, asthma)	31	9.94
Mental disorders	21	6.73

*Percentages do not add up to 100% because this was a multiple choice question

Gender	n	%
Assessment of the material situation		
Very good	22	7.05
Good	97	31.09
Average	175	56.09
Bad	18	5.77
Housing assessment		
Very good	42	13.46
Good	176	56.41
Average	89	28.53
Bad	5	1.6
Use of orthopaedic equipment		
Yes	100	32.05
No	212	67.95
Mobility equipment		
Crutches	14	14.00
Cane	62	62.00
Balcony	6	6.00
Weelchair	18	18.00
Skin lesions in the form of sores or ulcers		
Yes	35	11.22
No	277	88.78
How many times have you fallen?		
0	87	27.88
1	201	64.42
2	17	5.45
3	3	0.96
4	2	0.64
>4	2	0.64
Physical activity minimal 3 times a week for 30 minutes		
yes	158	50.64
no	154	49.36

The majority of seniors participating in the survey (64.92%) claimed they receive support from their loved ones.

The severity of pain was at an average of 4.05 points out of 10 (SD=2.45) and scores ranged from 0-9 points. According to the Barthel scale, the majority of the participants were in a moderately severe condition. Furthermore, on the GDS scale, the majority of seniors did not have symptoms of depression, and respondents mostly rated their health condition as good (65.87%) (Tab. 4).

The study analysed whether the fitness levels of the respondents affected their mental state. The relationship proved to be statistically significant (p < 0.05) and negative, i.e. the less serious the seniors' condition, the weaker their depressive symptoms (Spearman's correlation coefficient=-0.492) (Fig. 1). The correlation between the results obtained based on IADL and GDS scales also turned out to be statistically significant (p < 0.001) and negative; therefore, the more self-reliant the respondents were in complex activities of daily living, the less severe were the symptoms of depression they exhibited (Spearman's correlation coefficient=-0.502) (Fig. 2).

Table 3. Most frequently reported health issues among the respondents

Type of the medical condition	n	%*
Back pain	148	47.44
Impaired vision	145	46.47
Headaches	134	42.95
Joint pains	134	42.95
Decreased lower-limb muscle strength	92	29.49
Dizziness	86	27.56
Heart palpitations	75	24.04
Sensation of heavy legs	72	23.08
Tinnitus	70	22.44
Impaired hearing	70	22.44
Decreased upper-limb muscle strength	64	20.51
Chest tightness	61	19.55
Cough	61	19.55
Limited joint mobility	53	16.99
Dyspnoea	53	16.99
Swelling	50	16.03
Decreased appetite	42	13.46
Reduced thirst	31	9.94

* Percentages do not add up to 100% because this was a multiple choice question

Socio-demographic factors were investigated in terms of having an impact on the seniors' ability to perform activities of daily living. It turned out this relationship is statistically non-significant in the case of the gender and place of residence of the respondents (p < 0.05). At the same time, self-

Table 4. Respondents' health assessment and according to the Barthel, VAS and GDS scales

Barthel scale – points/status	n	%
0–20 – very severe	14	4.48
21–85 – moderate	187	59.94
86–100 – good	111	35.58
Health self-assesment		
Very good	12	3.84
Good	205	65.71
Bad	81	25.96
Very bad	14	4.49
Severity of pain		
0	28	8.97
1	30	9.62
2	33	10.58
3	33	10.58
4	48	15.38
5	87	27.88
6	20	6.41
7	16	5.13
8	14	4.49
9	3	0.96
10	0	0.00
GDS – points/interpretation		
0–5 – no depression	66	58,93
6-10 - mild depression	37	33,04
7–11 – severe depression	9	8,04



Figure 1. Correlation of respondents' Barthel scale and GDS scores



Figure 2. Correlation of respondents' IADL and GDS scores

reliance in complex activities of daily living was significantly better in the 65–69 age group than in those aged 70–75 and over. Moreover, the education, marital status and form of livelihood of the respondents appeared to have an impact on their self-reliance in complex activities of daily living (p > 0.05) – respondents with higher or secondary education had higher scores than those with primary or vocational education. IADL was also significantly better among those who were married, those who had gainful employment and those who defined their financial and living situation as very good or good, compared to those who defined them as poor. IADL was significantly worse among physical workers compared to other groups (p < 0.05) (Tab. 5.)

Aanalysis of the relationship between the number of diseases diagnosed in the respondents, as well as their

Table 5. Relationship between socio-demographic data and the IADL scores

			Age				
IADL [points] —	65–69 (n=149)	70–75 (n=70)	76–80 (n=31)	81-85 (n=31)	86-90 (n=31)	— р	
mean±SD	23±2.06	22.37±2.37	20.66±4.36	16.4±5.3	11.45±4.73		
median	24	24	22	17	10	p<0.001	
quartiles	23–24	21–24	21-23.24	12.76–21	8–12		
IADL [points]			Educatio	n			
	higher (N=25)	secondary	(N=102)	vocational (N=102)	primary (N=83)	— р	
mean±SD	22.57±3.37	22.88±	-2.38	20.43±4.56	16.79±6.21		
median	24	24	ŀ	22.4	18	p<0.001	
quartiles	24–24	22.26	-24	18.24–23.76	12–22.4	_	
IADL [points]			Marital stat	us		— р	
	unmarried, sing	gle (N=25)	married (N=2	207)	divorced, widowed (N=80)		
mean±SD	17.57±7	.03	21.88±3.5	4	18.3±5.98		
median	21		24		21	p<0.001	
quartiles	9–23		22–24		12–23	_	
IADL [points]			Forms of liveli	hood		— р	
	disability pensi	on (N=45)	retirement pension	n (N=211)	gainful employment (N=56)		
mean±SD	20.57±4	.83	19.89±5.2	5	23.25±2.07		
median	22.4		22		24		
quartiles	20–24	20–24 18–24			23.40-24	_	
IADL [points]			Professional ac	tivity		_	
	manual (N	=165)	intellectual (N	=81) mix	ed (physical and intellectual) (N=66)	— р	
mean±SD	19.21±5	.52	22.68±2.34		21.17±4.85	_	
median	22		24		24	p=0.003	
quartiles	16–24	1	23–24		21–24		
IADL [points]			Financial situation a	ssessment			
	very good (N=40)	good (N=9	7)	poor(N=175)	— р	
mean±SD	23.39±1	.06	21.55±4.13		19.71±5.37		
median	24	23 22		22	p=0.036		
quartiles	23–24 21–24		16–24	_			
IADL [points]			Living situation as	sessment			
	very good (N=95)	good (N=17	76)	poor (N=41)	— р	
mean±SD	21.08±5.12 22.2±3.2 17.46±6.18			17.46±6.18			
median	24		23 20.5		20.5	p=0.001	
quartiles	20.04-2	24	22–24		10.4–23	-	

p – Kruska-Wallis test + post hoc analysis (Dunn's test).

reported symptoms and their Barthel and IADL scale scores, proved statistically significant (p < 0.05) and negative, i.e. the more diseases and symptoms the elderly persons had, the worse their condition and the lower their self-reliance in complex activities of daily living. The situation was similar for the relationship between pain intensity reported by the

Table 6. Relationship between number of diseases, symptoms and pain, and Barthel and IADL scores

Analysed features	Spearman's correlation coefficient	р
No. of diseases and Barthel scale	-0.495	p<0.001
No. of symptoms and Barthel scale	-0.4	p<0.001
No. of diseases and IADL	-0.582	p<0.001
No. of symptoms and IADL	-0.522	p<0.001
Pain intensity and Barthel scale	-0.414	p<0.001

seniors and the Barthel scale score, i.e. the more severe the pain, the worse the patients' conditions (Tab. 6).

DISCUSSION

Physical and mental fitness assessment of the elderly is an important component of the CGA as it comprehensively addresses their health condition by examining the biopsychosocial spheres, covering all stages of illness and symptoms that the elderly report. The multitude of scales available allows the research method to be adapted individually for each elderly person [14, 15].

The physical fitness level among the elderly can affect the extent of their self-reliance. The Barthel scale is used to assess this type of fitness and the results obtained in this study indicate that more than half of the respondents were in a good

overall condition. Starczewska, who analysed a group of 274 persons over 65, as well as Bogusz who analysed a group of persons over 70, both obtained similar results. The findings of both authors confirmed relatively high self-reliance in activities of daily living among seniors [16, 17].

When applying the Barthel scale, it is important to bear in mind that when interpreting the results, the condition of people who obtained a score between 21-85 is described as 'moderately severe'. In actuality, this particular group comprises people with significantly varying degrees of selfreliance. For this reason, the Barthel scores should only be used as a reference point for further analysis, and the extent of assistance should be adapted individually to the actual condition and capacity of the relevant patient. The subjective assessment of the senior's health condition, which was also carried out in the current study research, can prove quite useful here. The majority of project participants defined their condition as good. Another aspect confirming the Barthel scale results is the fact that the participants in the study declared that they engage in regular physical activity, do not have any skin lesions (bedsores, ulcers), and although they do use orthopaedic equipment, they primarily use a cane, which confirms their overall fitness [18].

Given that mental well-being has a direct impact on the functional performance of the elderly, the occurrence of depressed mood symptoms was another aspect analysed for the purpose of this study. Today, depression affects an increasing proportion of the population at all ages, and is a particularly common illness affecting the daily functioning among the elderly, due to the complex process of ageing, the pains and limitations associated with it, as well as the changes in social roles and significant losses in terms of health and the quality of life.

The results of the presented study are optimistic as the majority of its participants did not show symptoms of depression. Babiarczyk and Fidecki came to similar conclusions in their study, where it was also found that their largest participating group were seniors who, according to the GDS scale, showed no symptoms of depression [19, 20]. In contrast, different results were obtained in a study by Kowalska, who analysed a group of seniors over the age of 60 [21]. The difference between the data obtained may arise due to the nature of the analysed groups, as Kowalska analysed the health condition of residents of Care and Treatment Institutions, where seniors usually stay for extended periods, whereas the research by Babiarczyk and Fidecki and the present study focused on people in hospital wards, where one typically only stays for a few days. The study confirms that the length of stay in an inpatient unit has a significant impact on the well-being of the elderly: the longer it is, the greater the risk of depression. However, the GDS results cannot be used as a basis for diagnosis. They are merely a reference point for further action. People who scored between 6-11 points should be referred to a psychiatrist for a specialist examination. As for the seniors who scored between 0-5 points, they should be under continuous observation with the use of standardised screening tests [22].

Additional evidence of the actual well-being of the respondents is their declarations regarding the intensity of pain they experience, which was rated as average by the respondents, as well as their perceived level of support from their relatives.

The extent of daily living activities that seniors can perform on their own may affect their mental well-being [23]. The results obtained from the correlation of the Barthel and GDS scales and the IADL and GDS show that the less severe the senior's condition and the greater the extent of his or her self-reliance in activities of daily living, the lower the severity of depressive symptoms. Knyszyńska obtained similar results in her study and found a trend indicating a greater degree of self-reliance among nursing home residents declaring a lower depressive symptoms severity index [24]. Evidence shows that the level of physical fitness has an impact on the mental state of the elderly, as well as their independence, especially when it comes to locomotor skills [25, 26].

Socio-demographic variables can also have an impact on the level of performance of complex activities of daily living. The results of the current study indicate a significant relationship between age, education, marital status, work activity, good living and financial situation, and the selfreliance of the respondents. Rybka and Fidecki obtained similar results, although, in the case of their respective studies, the self-reliance among the seniors was also influenced by their gender, which was not confirmed in the present study [27, 28]. The reason behind the differences in results may be the diversity of the analysed groups, as well as the location of the study.

The number of people aged 65 or older is about to grow in 2050 to nearly 1.5 billion. The progressing ageing process depletes the bodily reserves and hinders the ability to compensate for the pathological changes that occur. Taking into account the diseases that the elderly suffer from, as well as the related symptoms they present, is a vital aspect of geriatric care. The present study indicates that there is a statistical correlation between the number of diseases and adverse symptoms, as well as a reduction in the level of selfreliance [29, 30]. The Barthel scale and IADL scores were analysed, factoring in the number of diseases and age-specific symptoms in the respondents. Hypertension was the most frequently indicated medical condition, followed by joint disease, diabetes and coronary artery disease. The cause of functional disability progressing with age is primarily chronic diseases, among which there are about 200 disease entities. Among the most burdensome, which was also confirmed by the studies conducted, are chronic non-traumatic diseases of the musculoskeletal system (osteoarthritis, rheumatoid arthritis, osteoporosis, ankylosing spondylitis), which affect the quality of life of the elderly [29, 31].

The possibility of lower self-reliance tends to increase together with the number of medical conditions [32]. The results of analyses among the elderly indicate that being diagnosed with one chronic disease predisposes the elderly patient to functional deterioration [33]. The elderly struggling with comorbidities of modern-age diseases, which include hypertension and diabetes, are a particularly noteworthy group. These conditions, as well as the way they progress and their complications, bring a significant risk of functional deterioration [34]. The data in the literature and the results of the present study support the hypothesis that an increased number of diseases and adverse symptoms reduce functional capacity in people over 65. The results obtained in the correlation between the number of symptoms declared by the respondents and their extent of self-reliance, also serve to confirm this thesis.

When analysing the health issues the elderly most frequently suffer from, one must first consider pain, which can be either acute or chronic. The possibility of experiencing pain associated with activities of daily living increases among the elderly due to multimorbidity, as demonstrated by the conducted analyses. It turned out that the worse the pain severity, the worse the overall condition of the patients. This has been confirmed in studies by numerous authors. Not only have these authors demonstrated that chronic pain affects the majority of the elderly, but also that most of them suffer from sleep disorders, have been diagnosed with depression, and face limitations in their daily activities as a result. The relationship between pain intensity and the physical condition of geriatric patients, as evidenced by the study, is further backed by the statement made by the participants regarding a reduction in their daily functioning due to pain, which may indicate a lack of sufficient pain prevention [35].

Physical falls can be yet another factor determining the capacity and quality of functional capacity, since they contribute to injuries which, in turn, are conducive to the phenomenon known as the geriatric cascade. This begins with a physical fall and persists through the injury, immobilisation, the emergence of fear of another fall, further immobilisation and its complications, up until the person's demise due to the consequences of the fall [36]. More than half of the respondents indicated experiencing a physical fall and fear of falling, which showcases the frequency of this phenomenon. Because of its complications, medical staff should pay particular attention to the possibility of elderly people underestimating a physical fall when conducting an interview.

Meanwhile, research shows that physical falls and their complications may be lethal for the elderly [37]. One of the factors that may have an impact on elderly people falling is the phenomenon of polypharmacy, which means taking multiple medications at the same time, with at least one of them being administered without any real justification. If a senior is using multiple drugs all at once without the proper knowledge and awareness, it can put his or her health and even life at risk. Incompetent use of pharmacotherapy can lead to symptoms affecting postural stability of the body, locomotor skills and thinking ability. These can include dizziness, tinnitus, nocturia, cardiac arrhythmia and impaired concentration [38]. Based on the analysis of the current study, more than one-third of the respondents were taking more than four types of medicines per day (not including non-prescription drugs or dietary supplements). Unfortunately, the phenomenon of polypharmacy is common among geriatric patients and can significantly reduce the quality of life in seniors. Hence, any medicines and supplements taken by elderly patients should be thoroughly reviewed and the use of any unnecessary ones should be discontinued. Doing so will not only reduce the risk of physical falls but also minimise the potential for drug interactions and the complications that this could bring, which should improve the daily functioning of the elderly [39-41].

The current study is not without errors and needs to be continued on a larger study group. Analysis of the functional capacity of the elderly can contribute to modifying health and social policies and adapting them to an ageing population which, given the prevailing demographic trends, is becoming a necessity that requires firm and urgent steps. Elderly patients require holistic treatment, nursing and longterm care. The current strategy of treating older people in a fragmented manner, by different specialists, in different departments and shifting the responsibility for their care onto their families, is not working. There are too few geriatric wards to satisfy the needs of the elderly and there is a lack of specialist medical staff dedicated to caring for the oldest members of society. Although health policy recognises the need for the development of elderly medicine, apart from the statement of the problem, fundamental organisational changes improving health services for the elderly have not been implemented. It seems that one of the key actions should be to diagnose the problem itself, to make an actual assessment of the functional capacity of the elderly, for which targeted research is necessary. The analyses and reports that are being prepared will make it possible to assess the actual condition of senior citizens, and to set directions for future planned measures that meet the needs of not only patients, but also of their families and society as a whole.

Public interest in the elderly has been high in recent years. However, we should move beyond the primary investigative stage by conducting research, disseminating information and supporting preventive healthcare for seniors, which should make a visible contribution to improving their quality of life [42, 43].

CONCLUSIONS

- 1) The medical conditions most commonly declared by the elderly participants were: back pain, headaches, joint pain, impaired vision, while the most common diseases included: hypertension, rheumatoid arthritis, arteriosclerosis, and diabetes.
- 2) The participating seniors, despite the moderately severe condition identified on the basis of the Barthel scale results, were self-reliant in carrying out complex activities of daily living. However, higher self-reliance was exhibited by the seniors who at the time of the study: were highly educated, in a relationship, participated in professional activity and declared a high economic status.
- 3) The research showed that the more active seniors are in terms of carrying out complex daily life activities, the lower the risk of them exhibiting depressive symptoms.

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