



ORIGINAL ARTICLE

What influences pensioners to use social protection services?

Igor Lekić^{®1}, **™**Željka Stamenković^{®2}, Bojana Matejić^{®2}, Nataša Maksimović^{®3}

- ¹ Florida State University College of Medicine, Internal Medicine residency program at Lee Health, Tallahassee, FL 32306, USA
- ² University of Belgrade, Faculty of Medicine, Institute of Social Medicine, Belgrade, Serbia
- ³ University of Belgrade, Faculty of Medicine, Institute of Epidemiology, Belgrade, Serbia

Recived: 25 October 2023 **Revised:** 23 February 2024

Accepted: 23 February 2024



updates

Funding information:

The study was funded by the Ministry of Education, Science and Technological Development of the Republic of Serbia (project No. 200110).

Copyright: © 2024 Medicinska istraživanja

Licence:

This is an open access article distributed under the terms of the Creative Commons Attribution License (https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Competing interests:

The authors have declared that no competing interests exist

Correspondence to:

Željka Stamenković Institute of Social Medicine Faculty of Medicine University of Belgrade 8, Dr Subotića Street, 11000 Belgrade, Serbia Email: zeljka.stamenkovic@med.bg.ac.rs

Summary

Introduction/Aim. Ageing is a natural phase in the life of every individual, and it is correlated to life changes like retirement when the active working life of a person is ending and is compensated for with sources of income that do not have to be earned by working, which is called pension. The aim of this study was to analyze the use of social services among the retired population and examine the factors associated with the use of social care.

Material and Methods. This cross-sectional study is a secondary analysis of the data collected in a study conducted by the Union of pension holders of Serbia which was done on a convenient sample of retirees. An anonymous written questionnaire was designed for this specific research. Univariate and multivariate statistic regression were used to analyze the factors associated with the use of social services.

Results. Only 6.5% of retirees use some social protection services. Older age, living alone, lower level of education, and not having a mobile phone or computer significantly decrease the probability of using social protection services. Besides, spending time with friends and family significantly decreases the likelihood of using some social protection services.

Conclusion. Work in the field of health education is of utmost importance, especially spreading the knowledge about health-related, psychological, and social aspects of ageing in order to overcome stereotypes, prejudices and misunderstandings of this stage of life.

Keywords: older population, pensioners, social services

Cite this article as: Lekić I, Stamenković Ž, Matejić B, Maksimović N. What influences pensioners to use social protection services? Medicinska istaživanja 2024; 57(2):23-32 DOI: 10.5937/medi57-47332



INTRODUCTION

Ageing is a biological process that has its dynamics and is a natural phase in the life of every individual; it manifests itself in a broad spectrum of changes that over a period of time lead to gradual physical and cognitive decline, higher risk of disease and eventually death. The United Nations and the World Health Organization state that older people are defined as individuals who are 65 years old or older (1, 2). The share of the older population in the world is constantly getting higher due to different factors like declining birth rates, an increase in life expectancy and intense migrations. In addition to biological changes, ageing is also associated with other life changes such as retirement, relocation, or the partner's death. Retirement represents the age when a person ceases to be active, and at the same time has a certain income or pension.

In the Republic of Serbia, the number of pensioners has been progressively increasing since the beginning of the last decade of the 20th century, which is partly a consequence of demographic changes, and largely a consequence of liberal conditions for acquiring pension insurance rights (3, 4). The pension system on the territory of the Republic of Serbia, as well as in many other countries, is based on the principle of intergenerational solidarity. It is a pay-as-you-go model of the pension system within which the funds for the payment of current pensions are provided by the income generated from current payments of contributions for pension and disability insurance. It is a system of financing that is sustainable if there are conditions of favorable demographic parameters that provide a satisfactory proportion between the insured and those who exercise their rights related to social insurance (5). Based on the data of the Republic Pension and Disability Insurance Fund of the Republic of Serbia, as of June 2023, the total number of pension beneficiaries was 1.646.171, 1.082.185 of which were old-age pension beneficiaries (65.7%), 235.770 were disability pension beneficiaries (14.4%) and 328.216 were beneficiaries of survivors' pensions (19.9%). During the last decade, there was an increase in the number of old-age pension beneficiaries, while the number of beneficiaries of survivors' pensions did not change significantly (3).

The population of societies around the world, including Serbia, is ageing and the need for social and health services is increasing. Older people are the majority among beneficiaries of the social and healthcare systems, and this is a great challenge in planning services for older people (6). Traditionally, health and social service sectors operate separately. A growing demand for integrated services and rising costs lead to more intensive cooperation between healthcare institutions and social service providers (7, 8). Social protection services include activities that provide support and assistance to individuals and families in order to improve or preserve their quality of life, eliminate or mitigate the risk of adverse life circumstances, as well as

create opportunities to live independently in society. The Law on Social Protection of the Republic of Serbia clearly defines a set of social protection services related to older people. Social protection services are divided into the following groups: assessment and planning services, daily services in the community, support services for independent living, counselling-therapeutic and social-educational services, and accommodation services (9).

The use of social protection services is related to individual characteristics such as age, gender, and level of education, but also to characteristics at the environmental level such as place of residence (10-12). On the other hand, the use of social protection services has proved to be one of the factors influencing better self-assessment of health status in the way that users of these services assessed their health status better than older people who were not users of social services (13, 14).

The social support provided to the older population is extremely important because it acts as a protective factor against problems such as loneliness, stress, and depression (15). A study conducted in Poland showed that the health condition of the older population was different in relation to where the care was provided, whether it was an institutionalized environment or home environment. The authors pointed out that older people living in their homes indicated significant limitations in performing basic daily activities and instrumental daily activities, a higher prevalence of depression and cognitive impairment, and consequently a greater need for social protection services (16).

When it comes to social support, a study conducted in Spain showed that 40% of older respondents had three to five close people at their disposal in case of a serious problem, while only 7% used social protection services (17). A study conducted in Estonia analyzed two groups of women who used social services – an elderly person who lived in an old people's home in Tallinn and an elderly person who received home care. The results showed that 65% of users of old people's homes were satisfied with the treatment and life in old age, while 40% of home care users were satisfied, which indicates the importance and positive impact of living in old people's homes in relation to living at home (18).

Unfavorable social and economic situation increases the risk of deteriorating health outcomes (19, 20). In this regard, it is important to have information about the type of care that an elderly person needs and the reasons why they need it, all in order to establish their independence and maximize their quality of life (21, 22). Although there are no official data in the Republic of Serbia regarding the number of informal caregivers, the assumption is that the number of people in need of someone else's care and assistance is far higher than the number receiving this material compensation and that it is around 200,000 inhabitants. i.e., 195,000 individuals, which makes up approximately 2.6% of the population in the country (23).

According to the 2011 Census, 93,000 older people (65+) needed support in performing basic daily activities, noting that due to the negative natural increase and ageing of the population in future, this percentage can be expected to be significantly higher (11).

Although there are numerous studies on the use of social services in the world, a study of this type has not been conducted in Serbia among the population of pensioners so far, so this study aims to examine the frequency of using these services in the population of pensioners, as well as to investigate the factors related to the use of social protection services.

METHOD

Data source and the type of study. A cross-sectional study was conducted as a secondary analysis of data obtained from the study of the Association of Pensioners' Unions of Serbia (APUS) conducted on a sample of pensioners in the period from April to June 2019.

Sample. During the research, individuals who received a pension (pensioners) were interviewed, and those who were available to the interviewers - family members, neighbors, friends and members of various organizations or associations. In June 2019, there were 1,707,592 pensioners in Serbia, of which 368,884 lived in Belgrade, according to the data from the Statistical Bulletin of the Republic Fund for Pension and Disability Insurance. A total of 625 retirees were surveyed, i.e., 0.17% of the retired population of Belgrade, which makes this sample suitable.

In preparation for the interviews, a short training of APUS activists was conducted, and they had face-to-face interviews in their communities, mainly in central and suburban municipalities of Belgrade, but also in some areas of Serbia.

Research instrument. An anonymous questionnaire in paper form was used as a research instrument, constructed for the needs of this research, the previous research in this field (14, 24, 25), expert opinions, and the consent of the USPS presidency. The questionnaire had a total of 37 questions.

The variables used in research analysis were selected based on evidence from the literature, as well as on the opinions of researchers on their significance. The variables used in the research were related to (1) socio-demographic characteristics of the respondents, (2) income and quality of life, (3) use of health care services, and (4) social inclusion/support.

Statistical methods of data processing. The obtained data were analyzed using methods of descriptive and inferential statistics. Comparisons were made about the use of social protection services. Using univariate and multivariate logistic regression, the connection of predictive-independent variables for dependent, i.e., variables of

interest, were analyzed. The variable of interest was the use of social protection services.

All independent variables, whose p-value in univariate logistic regression was less than 0.05 were included in multivariate logistic regression models. Results (odds ratio with 95% confidence interval) in univariate as well as in multivariate logistic regression were considered significant if the p-value was less than 0.05 in the final model. All statistical analyzes are based on the probability of a null hypothesis of 0.05. The IBM SPSS Statistics for Windows software package, version 26 (IBM Corp., Armonk, N.Y., USA) was used for database preparation as well as for statistical processing.

RESULTS

A small number of surveyed pensioners use social protection services, only 39 (6.5%). When asked which services they used, the most common were geronto-housewife services, then material assistance, and only in one case meals in the soup kitchen and staying at a nursing home (data not shown in the table).

Demographic, socio-economic characteristics and the use of social protection services

Demographic and socio-economic characteristics of respondents in relation to the use of social protection services are shown in **Table 1**. The average age of respondents who use social protection services is 75 years. Males are more likely to use social protection services compared to females (61.5% vs. 38.5%). Social protection services are mostly used by people living with a partner (42.1%), followed by people living alone (36.8%), people living only with children (18.4%) and people living with their spouses and children (2.6%). When it comes to the jobs the users did before retirement, the largest percentage of the users of social protection services is among those who were engaged in creative occupations before retirement (41.7%), while the least percentage is among housewives (8.3%).

Univariate logistic regression showed a connection between the use of social protection services and the following independent variables: age, who the person lives with, level of education, and possession of a mobile phone and computer. After inserting all the socio-economic characteristics that proved significant in the univariate model into the multivariate model of logistic regression, the same pattern of connectivity was confirmed. Age is significantly associated with the use of social protection services (OR 1.06, CI95% 1.0-1.11). Also, people living with a partner and children are less likely to use some of the social protection services than those living alone (OR 0.08, CI95% 0.01-0.6). With a higher level of education, the chance that a person will use one of the social protection services decreases (OR 0.8, CI95% 0.6-1.1). Having

Table 1. Demographic, socio-economic characteristics of respondents and the use of social protection services

Sociodemographic characteristics of the respondents	Total	They use social protection services n (%)	They do not use social protection services n (%)	Univariant logistic regression OR (CI 95%)	Multivariant logistic regression OR (CI 95%)
Age (as±sd)	71,3±6,5	75,2±8,6	71,0±6,2	1,09 (1,04-1,14)	1,06 (1,0-1,11)
Gender					
Male	290 (48,0%)	24 (61,5%)	266 (47,1%)		
Female	314 (52,0%)	15 (38,5%)	299 (52,9%)	0,6 (0,3-1,1)	
Who they live with					
Alone	138 (23,1%)	14 (36,8%)	124 (22,1%)	Referency category	Referency category
With spouse	258 (43,1%)	16 (42,1%)	242 (43,2%)	0,6 (0,3-1,2)	0,7 (0,3-1,5)
With spouse and children	114 (19,1%)	1 (2,6%)	113 (20,2%)	0,1 (0,01-0,6)	0,08 (0,01-0,6)
Only with children	68 (11,4%)	7 (18,4%)	61 (10,9%)	1,0 (0,4-2,7)	0,8 (0,3-2,2)
With somebody else	20 (3,3%)	0 (0,0%)	20 (3,6%)	-	-
Accommodation					
Own apartment	434 (72,8%)	26 (66,7%)	408 (73,2%)	Reference category	
House	138 (23,2%)	11 (28,2%)	127 (22,8%)	1,4 (0,7-2,8)	
Tenant	12 (2,0%)	1 (2,6%)	11 (2,0%)	1,4 (0,2-11,5)	
Other	12 (2,0%)	1 (2,6%)	11 (2,0%)	1,4 (0,2-11,5)	
Level of education					
Primary school	29 (4,8%)	7 (17,9%)	22 (3,9%)		0,8 (0,5-1,1)
Three-year school/ Occupation	55 (9,2%)	5 (12,8%)	50 (8,9%)		
High school	177 (29,5%)	10 (25,6%)	167 (29,8%)	0,7 (0,5-0,9)	
College	122 (20,3%)	6 (15,4%)	116 (20,7%)		
Faculty	217 (36,2%)	11 (28,2%)	206 (36,7%)		
Occupation before retirement					
Housewife	18 (3,1%)	3 (8,3%)	15 (2,8%)	3,6 (0,9-13,9)	
Worker	112 (19,3%)	12 (33,3%)	100 (18,3%)	2,2 (0,9-4,9)	
Officer	164 (28,2%)	6 (16,7%)	158 (29,0%)	0,7 (0,3-1,8)	
Creative occupations	287 (49,4%)	15 (41,7%)	272 (49,9%)	Reference category	
Do you own a mobile phone?					
Yes	558 (95,1%)	32 (82,1%)	526 (96,0%)	0,2 (0,1-0,5)	0,5 (0,2-1,4)
No	29 (4,9%)	7 (17,9%)	22 (4,0%)		
Do you own a computer?					
Yes	357 (61,3%)	12 (31,6%)	345 (63,4%)	0,3 (0,1-0,6)	0,6 (0,2-1,3)
No		26 (68,4%)			

a mobile phone and a computer reduces the likelihood that a person will use social protection services (mobile phone: OR 0.5, CI95% 0.1-1.4; computer: OR 0.5, CI95% 0.2-1.01).

Revenues and the use of social protection services

Table 2 refers to income and the use of social protection services in the population of surveyed pensioners. The majority of the users of social protection services are beneficiaries of old-age pensions (60.5%), and the smallest number of these individuals use retirement pensions (5.3%). In both categories of respondents, there is the highest percentage of those who support their children from using their owns pensions, while the lowest percentage is of those who use their pensions to support their spouses (6.3%). When it comes to additional sources of income, there is a significantly lower percentage of individuals without additional income among the users

of social protection services compared to those who are not (2.6% vs. 18.2%).

The analysis of univariate logistic regression showed that the type of pension and the existence of an additional source of income are significantly related to the use of social protection services. After including the variables that proved significant in the univariate model in the multivariate logistic regression model, the correlation remained unchanged. Beneficiaries of survivors' and disability pensions are multiple times more likely to use some of the social protection services compared to beneficiaries of old-age pension (beneficiaries of survivors' pensions: OR 3.8, CI 95% 1.4-10.2; beneficiaries of disability pensions: OR 2, 3, CI95% 0.9-5.7), while the existence of an additional source of income significantly reduces the chance of using social protection services (OR 0.1, CI95% 0.02-1.01).

Table 2. Revenues and the use of social protection services

Sociodemographic characteristics of the	Total	They use social protection	They don't use social protection	Univariant logistic regression	Multivariant logistic regression	
respondents	n (%)	services n (%)	services n(%)	OR (CI 95%)	OR (CI 95%)	
Type of pension						
Old age	460 (77,8%)	23 (60,5%)	437 (79,0%)	Reference category	Reference category	
Early	36 (6,1%)	2 (5,3%)	34 (6,1%)	1,1 (0,3-10,4)	1,0 (0,2-4,6)	
Survivors'	35 (5,9%)	6 (15,8%)	29 (5,2%)	3,9 (1,5-10,4)	3,8 (1,4-10,2)	
Disability	60 (10,2%)	7 (18,4%)	53 (9,6%)	2,5 (1,0-6,1)	2,3 (0,9-5,7)	
Supporting someone else using	g their pension					
Yes	221 (37,3%)	19 (50,0%)	202 (36,5%)	1,7 (0,9-3,4)		
No	371 (62,7%)	19 (50,0%)	352 (63,5%)			
Who else the respondent supports using their pension *						
Spouse	24 (12,3%)	1 (6,3%)	23 (12,8%)	0,5 (0,1-3,6)		
Children	152 (77,9%)	12 (75,0%)	140 (78,2%)	0,8 (0,3-2,7)		
Grandchildren	23 (11,8%)	2 (12,5%)	21 (11,7%)	1,0 (0,2-5,1)		
Someone else	6 (3,5%)	1 (7,1%)	5 (3,2%)	2,4 (0,3-21,7)		
Do they have an additional source of income in addition to their pension?						
Yes	102 (17,2%)	1 (2,6%)	101 (18,2%)	0,1 (0,02-0,9)	0,1 (0,02-1,01)	
No	492 (82,8%)	37 (97,4%)	455 (81,8%)			
Were you among those whose	pensions were reduc	ced?				
Yes	472 (80,8%)	31 (83,8%)	441 (80,6%)	1,3 (0,5-3,1)		
No	112 (19,2%)	6 (16,2%)	106 (19,4%)			
What was affected by the reduction of pensions **						
Food quality	101 (29,7%)	6 (28,6%)	95 (29,8%)	0,9 (0,4-2,5)		
Purchase of medicines, aid	146 (42,9%)	10 (47,6%)	136 (42,6%)	1,2 (0,5-3,0)		
Going to spa, trips, excursions	189 (55,6%)	6 (28,6%)	183 (57,4%)	0,3 (0,1-0,8)		
Cultural activities	133 (39,1%)	3 (14,3%)	130 (40,8%)	0,3 (0,1-0,8)		
Socializing, relatives, friends	73 (21,5%)	3 (14,3%)	70 (21,9%)	0,6 (0,2-2,1)		
Something else	77 (22,6%)	12 (57,1%)	65 (20,4%)	5,2 (2,1-12,9)		
Do you live better today than a few years ago?						
Yes	24 (4,3%)	0 (0%)	24 (4,5%)			
Nothing significant has changed	184 (32,7%)	10 (33,3%)	174 (32,6%)	1,3 (0,9-2,0)		
Lives a little worse	195 (34,6%)	8 (26,7%)	187 (35,1%)			
Lives a lot worse	160 (28,4%)	12 (40%)	148 (27,8%)			

^{*} Applies only to respondents who answered that they are supporting someone else from their pension

Health care, satisfaction with health care services and the use of social protection services

Table 3 refers to health care, satisfaction with health care services and the use of social protection services. When it comes to the users of social protection services, the largest percentage were those who were dissatisfied with health care services (33.3%), while none of the respondents stated that they were very satisfied. More than half of the users of social protection services used the services of both a private doctor (57.9%) and a private dentist (52.6%) in the past year. Slightly more than two-thirds of the users of

social protection services (68.8%) have a chronic illness, while almost all of them (97.4%) have to buy medication to treat their illness. When it comes to self-assessment of their health status, among the users of social protection services, there is the highest percentage of those who assess their condition as neither good nor bad (37.8%), and the lowest percentage of those who depend on someone else's care and assistance (13.5%).

In the examined population of pensioners, there is a significant correlation between the self-assessment of health status and the use of social protection services in the following way: the worse the self-assessment of the

^{**} Applied only to respondents whose pension has been reduced

Table 3. Health care, satisfaction with health care services and the use of social protection services

	Total	They use social protection services n (%)	They don't use social protection services n (%)	Univariant logistic regression OR (CI 95%)			
Satisfaction with health care							
Very satisfied	13 (2,2%)	0 (0,0%)	13 (2,4%)				
Satisfied	183 (31,0%)	10 (25,6%)	173 (31,4%)				
Neither satisfied nor dissatisfied	187 (31,7%)	11 (28,2%)	176 (31,9%)	1,3 (0,9-1,8)			
Dissatisfied	159 (26,9%)	13 (33,3%)	146 (26,5%)				
Very dissatisfied	48 (8,1%)	5 (12,8%)	43 (7,8%)				
Have you used the services of a private doctor in the past year?							
Yes	341 (57,8%)	22 (57,9%)	319 (57,8%)	1,0 (0,5-2,0)			
No	249 (42,2%)	16 (42,1%)	233 (42,2%)				
Have you used the services of a private dentist in the	Have you used the services of a private dentist in the past year?						
Yes	315 (53,6%)	20 (52,6%)	295 (53,6%)	1,0 (0,5-1,9)			
No	273 (46,4%)	18 (47,4%)	255 (46,4%)				
Do you have a chronic illness?	Do you have a chronic illness?						
Yes	390 (68,4%)	22 (68,8%)	368 (68,4%)	1,0 (0,5-2,2)			
No	180 (31,6%)	10 (31,3%)	170 (31,6%)				
Do you have to buy medicines to treat your illness?	483 (84,9%)	36 (94,7%)	447 (84,2%)	3,4 (0,8-14,3)			
Self-assessment of health status							
Good	228 (39,2%)	8 (21,6%)	220 (40,4%)				
Neither good nor bad	221 (38,0%)	14 (37,8%)	207 (38,0%)	2,0 (1,4-3,1)			
Bad but takes care of himself	122 (21,0%)	10 (27,0%)	112 (20,6%)	2,0 (1,4-3,1)			
Depends on someone else's care and help	11 (1,9%)	5 (13,5%)	6 (1,1%)				

health condition, the higher the probability that the person will use one of the social protection services (OR 2.0, CI95% 1.4-3.1).

Social inclusion and the use of social protection services

Table 4 shows data related to social inclusion and the use of social protection services. Among the users of social protection services, 85.7% hang out and see their family, relatives and friends, while 13.9% are socially engaged. While slightly more than a third of social protection service users read the daily press (38.5%), two-thirds watch TV (66.7%).

Combining variables into a multivariate logistic regression model confirmed that socializing with family and friends significantly reduced the likelihood of using one of the social protection services (OR 0.1, CI95% 0.04-0.4). Also, respondents who knew how to use a computer were less likely to be users of these services (OR 0.3, 95% 0.2-0.8).

DISCUSSION

A cross-sectional study conducted on a sample of pensioners provided an answer to the question concerning the perception of the position of pensioners in the Republic of Serbia, primarily in the field of using social services and the factors related to them.

Apart from life expectancy, the number of older people who need health and social services is on the increase as well. Although informal support systems for the older population have been present for much longer than the formal ones, especially those provided by close relatives such as spouses, children and siblings, formalization of care through the social protection system plays a significant role in providing care and support to pensioners. The results of the conducted research show that even among older people, with the increase in the number of years, the use of social protection services is increasing as well. This is in line with the results of other studies that have also shown that ageing enhances the need to use social protection services, which is expected since ageing reduces functional capacity and increases the risk of developing chronic diseases (11, 12, 19, 26-30). Given that older individuals have greater needs of social services and are more often represented among service users, the importance of age as a determinant of social service use was not unexpected (31).

The study conducted on the territory of the Republic of Serbia has shown that social protection institutions have an insufficient role in the network of support and assistance to poor older people. Those who need help to function daily rely minimally on all institutions that can potentially support them, such as healthcare institutions and centers for social work (32).

Pensioners living in a household with a partner and children use social protection services significantly less than pensioners living alone or with a partner only. These results are not surprising given that direct assistance from

Table 4. Social support and use of social protection services

Total	They use social protection services n (%)	They don't use social protection services n (%)	Univariant logistic regression OR (CI 95%)	Multivariant logistic regression OR (CI 95%)		
Do you socialize and see family, friends, and relatives?						
557 (97,5%)	30 (85,7%)	527 (98,3%)	0,1 (0,03-0,3)	0,1 (0,04-0,4)		
14 (2,5%)	5 (14,3%)	9 (1,7%)				
106 (19,3%)	5 (13,9%)	101 (19,7%)	0,7 (0,3-1,7)			
443 (80,7%)	31 (86,1%)	412 (80,3%)				
276 (47,3%)	15 (38,5%)	261 (48,0%)	0,7 (0,3-1,3)			
307 (52,7%)	24 (61,5%)	283 (52,0%)				
392 (64,6%)	26 (66,7%)	366 (64,4%)	1,1 (0,6-2,2)			
215 (35,4)	13 (33,3%)	202 (35,6%)				
357 (61,3%)	12 (31,6%)	345 (63,4%)	0,3 (0,1-0,5)	0,3 (0,2-0,8)		
225 (38,7%)	26 (68,4%)	199 (36,6%)				
	nds, and relatives: 557 (97,5%) 14 (2,5%) 106 (19,3%) 443 (80,7%) 276 (47,3%) 307 (52,7%) 392 (64,6%) 215 (35,4) 357 (61,3%)	protection services n (%) ands, and relatives? 557 (97,5%) 30 (85,7%) 14 (2,5%) 5 (14,3%) 106 (19,3%) 5 (13,9%) 443 (80,7%) 31 (86,1%) 276 (47,3%) 15 (38,5%) 307 (52,7%) 24 (61,5%) 392 (64,6%) 26 (66,7%) 215 (35,4) 13 (33,3%) 357 (61,3%) 12 (31,6%)	protection services n (%) nds, and relatives? 557 (97,5%) 30 (85,7%) 527 (98,3%) 14 (2,5%) 5 (14,3%) 9 (1,7%) 106 (19,3%) 5 (13,9%) 101 (19,7%) 443 (80,7%) 31 (86,1%) 412 (80,3%) 276 (47,3%) 15 (38,5%) 261 (48,0%) 307 (52,7%) 24 (61,5%) 283 (52,0%) 392 (64,6%) 26 (66,7%) 366 (64,4%) 215 (35,4) 13 (33,3%) 202 (35,6%) 357 (61,3%) 12 (31,6%) 345 (63,4%)	protection services n (%) social protection regression OR (CI 95%) n (%) nds, and relatives? 557 (97,5%) 30 (85,7%) 527 (98,3%) 0,1 (0,03-0,3) 14 (2,5%) 5 (14,3%) 9 (1,7%) 106 (19,3%) 5 (13,9%) 101 (19,7%) 0,7 (0,3-1,7) 443 (80,7%) 31 (86,1%) 412 (80,3%) 276 (47,3%) 15 (38,5%) 261 (48,0%) 0,7 (0,3-1,3) 307 (52,7%) 24 (61,5%) 283 (52,0%) 392 (64,6%) 26 (66,7%) 366 (64,4%) 1,1 (0,6-2,2) 215 (35,4) 13 (33,3%) 202 (35,6%) 357 (61,3%) 12 (31,6%) 345 (63,4%) 0,3 (0,1-0,5)		

family members is available in a multi-member household. This is in line with the results of another study highlighting that the increased tangible support was associated with greater satisfaction with family relationships and a greater total number of close friends and family (31). These results indicate good targeting of users in terms of family status. In their research, Matković and Stanić also stated that the largest percentage of social protection beneficiaries lived alone and did not have direct support of their closest ones, which indicated a fair distribution of social services in the older population (11).

The probability that retirees will be beneficiaries of social protection services decreases significantly with the increase in the level of education. These results are significant among pensioners. The analysis of service users in Belgrade confirms the findings of some previous studies that services are more directed towards more educated and wealthier sections of the population (27), but in terms of education, the higher one's education, the lower the chance that a person will use one of the social protection services. It is assumed that a higher level of education significantly contributes to easier access to information on social services and thus to the use of these services. However, access to information alone does not guarantee their use, as shown by the analysis. The analysis of service users in a previous period in Serbia confirmed the findings of some earlier studies that services were more directed towards more educated and well-off people (27).

The results of the conducted research show that having a mobile phone and a computer significantly reduces the probability that a person will use social protection services. It is explained by the fact that in that way, older people can connect and communicate with family and friends, who they can turn to in need. These results are in line with the results of a study conducted in America on the use of computers, the Internet and email among the older population, which states that the benefits of using a

computer are a sense of connectedness, satisfaction, usefulness, and positive learning experiences (33, 34).

The data related to the type of pension speak in favor of the fact that the largest number of users of social services are users of old-age pensions, as expected. However, it is important to emphasize that family pension beneficiaries were 3.8 times more likely to use one of the social protection services than old-age pension beneficiaries. As the conditions for acquiring the right to an old-age and survivor's pension differ, it is clear that in addition to age, the amount of income can significantly affect the use of these services. Baronijan points out that the differences in the poverty of pensioners in the Republic of Serbia according to age can be mostly attributed to the type of pension that pensioners receive. Namely, pensioners over the age of 75 mostly belong to agricultural and family pensioners and have the highest poverty index (35). Regarding the amount of pension, Stanić points out that over half of pensioners receive pensions that are below average, emphasizing that the situation with agricultural pensioners and beneficiaries of disability pensions is somewhat specific, given that the average pension of these two groups of pensioners is lower than the minimum pension, so that a small number of pensioners receive a pension below the average pension, but almost all - over 90% of pensioners receive a pension up to the minimum and the minimum amount (36).

Thus, the results of the research show that beneficiaries of survivors' and disability pensions are many times more likely to use one of the social protection services than beneficiaries of old-age pensions, which is in line with the fact that beneficiaries of these two pension groups receive low pension amounts resulting in the need to use social protection services. This is supported by the fact that the existence of an additional source of income reduces the chance of using social protection services by 10 times. The findings obtained by this research corre-

spond to the results of previous studies which showed that people with lower incomes, i.e., with lower socio-economic status, used social protection services to a greater extent, in relation to persons with higher incomes, i.e., better socioeconomic status (12, 27-30, 32, 37-39).

Spending time with family and friends reduces the probability that a person will use one of the social protection services by ten times. In their research on the position of older people in the Republic of Serbia, Matković and Stanić also state that those older individuals who hang out with family and friends feel less lonely and rely on them for help (informal care), which reduces their chances of using some social protection services. (11). Retirees who know how to use a computer and use it properly are less likely to be users of social security services, which corresponds to the results of research on computer use among the older population in America, which shows that computer and Internet use is extremely important in the lives of these older people considering that older people remain connected to family and friends through the use of computers (34).

Advantages and limitations of the study. As with all research, this study has some limitations to consider when looking into its findings. The cross-sectional study design prevents the drawing of causal conclusions from the relationships indicated between independent variables (predictors) and the outcome (the use of social protection services and purchase of medicines). Furthermore, the research was conducted pro bono, which had an impact on the sample of pensioners included in the research. Also, the questionnaire as a research instrument has not been officially validated.

However, an important advantage of this study is that, to date, the first study of this type examines the factors associated with the use of social and healthcare services in the retiree population. Also, the study covered four groups of indicators, so we were able to check which of the given categories most influenced the outcome variables. Precisely owing to this, the results can be used in the development of future programs and interventions aimed at improving the health of retirees.

CONCLUSION

In this research, only 6,5% of retirees use some of the social protection services. Older age, living alone, lower level of education, and not having a mobile phone or a computer significantly decrease the probability of using social protection services. On the other hand, spending time with friends and family significantly decreases the probability that a person will use some social protection services.

Based on the results of this research, it is indicated that activities in the field of population education are of great importance and the focus is mainly on spreading knowledge about health, psychological and social aspects of ageing and old age in order to change stereotypes, prejudices and misunderstandings of this age, support for intergenerational and intragenerational solidarity and the development of personal responsibility for life in old age. In this process, which should be long-lasting and systematic, it is necessary to include all known formal and informal channels. The promotion of a healthy lifestyle and individual behavior, including old age, should be one of the regular activities, not only of the Ministry of Health and health institutions but also of the education system, social protection institutions, local governments, civil society organizations and the media. As we are facing the decade of healthy ageing 2020 - 2030 (Decade of Healthy Aging), it is important to monitor and get involved in global initiatives in the field of active ageing because only in this way the socio-economic position of older people and their quality of life can be improved.

Acknowledgement

The authors would like to thank the Association of Pensioners' Unions of Serbia for the support and access to the participants of the study.

Financial Disclosure

The funders had no role in study design, data collection and analysis, the decision to publish, or the preparation of the manuscript.

REFERENCES

- UN. (2019). World Population Ageing 2019. New York: United Nations Publications.
- 2. WHO. (2015). World report on ageing and health. Geneva: WHO.
- 3. Republic Pension and Disability Insurance Fund. (2023). Mesecni bilten. http://www.pio.rs/sr/mesechni-bilten
- Sekulić, Lj. i Kovačević, M. (2013). Projections of the number of employees and pensioners and the impact on the sustainability of the pension system [Projekcije broja zaposlenih i penzionera i uticaj na održivost penzionog sistema]. Makroekonomske analize i trendovi, July/August, 15-21.
- Stanojević, D., Pavlović Babić, D., Matković, G., Petrović, J., Arandarenko, M., Gailey, N., Nikitović, V., Lutz W., Stamenković Ž. (2022). National Human Development Report – Serbia 2022. Human Devel-

- opment in Response to Demographic Change. UNDP Srbija. https://hdr.undp.org/system/files/documents/national-report-document/national-human-development-report-serbia-2022pdf.pdf
- WHO. (2018). Ageing and health. https://www.who.int/news-room/ fact-sheets/detail/ageing-and-health
- Abdi, S., Spann, A., Borilovic, J., de Witte, L., & Hawley, M. (2019). Understanding the care and support needs of older people: a scoping review and categorisation using the WHO international classification of functioning, disability and health framework (ICF). BMC geriatrics, 19(1), 195. https://doi.org/10.1186/s12877-019-1189-9
- Weil A. R. (2020). Integrating Social Services And Health. Health affairs (Project Hope), 39(4), 551. https://doi.org/10.1377/ hlthaff.2020.00180

- Social Protection Law [Zakon o socijalnoj zaštiti]. Official Gazette RS, 24/2011. https://www.paragraf.rs/propisi/zakon_o_socijalnoj_ zastiti.html
- Gonyea, J. G., Curley, A., Melekis, K., Levine, N., & Lee, Y. (2018).
 Loneliness and Depression Among Older Adults in Urban Subsidized Housing. Journal of aging and health, 30(3), 458–474. https://doi.org/10.1177/0898264316682908
- 11. Matković, G. i Stanić, K. (2014). Social protection in old age. Long-term care and social pensions [Socijalna zaštita u starosti. Dugotrajna nega i socijalne penzije]. Belgrade: Faculty of Economics, Finance and Administration, Center for Social Policy and Team for Inclusion and Poverty Reduction, Government of the Republic of Serbia.
- Skarupski, K. A., McCann, J. J., Bienias, J. L., Wolinsky, F. D., Aggarwal, N. T., & Evans, D. A. (2008). Use of home-based formal services by adult day care clients with Alzheimer's disease. Home health care services quarterly, 27(3), 217–239. https://doi. org/10.1080/01621420802320009
- Araujo de Carvalho, I., Epping-Jordan, J., Pot, A. M., Kelley, E., Toro, N., Thiyagarajan, J. A., & Beard, J. R. (2017). Organizing integrated health-care services to meet older people's needs. Bulletin of the World Health Organization, 95(11), 756–763. https://doi. org/10.2471/BLT.16.187617
- Kehusmaa, S., Autti-Rämö, I., Helenius, H., Hinkka, K., Valaste, M., & Rissanen, P. (2012). Factors associated with the utilization and costs of health and social services in frail elderly patients. BMC health services research, 12, 204. https://doi.org/10.1186/1472-6963-12-204
- Giebel, C., Hassan, S., Harvey, G., Devitt, C., Harper, L., & Simmill-Binning, C. (2022). Enabling middle-aged and older adults accessing community services to reduce social isolation: Community Connectors. Health & social care in the community, 30(2), e461–e468. https://doi.org/10.1111/hsc.13228
- Dobrzyn-Matusiak, D., Marcisz, C., Bąk, E., Kulik, H., & Marcisz, E. (2014). Physical and mental health aspects of elderly in social care in Poland. Clinical interventions in aging, 9, 1793–1802. https://doi.org/10.2147/CIA.S69741
- López-Cerdá, E., Carmona-Torres, J. M., & Rodríguez-Borrego, M. A. (2019). Social support for elderly people over 65 years in Spain. International nursing review, 66(1), 104–111. https://doi.org/10.1111/ inr.12468
- Kasepalu, U., Laidmäe, V. I., & Tulva, T. (2014). The important things in the life of older people: elderly women in social houses and home care. Journal of women & aging, 26(2), 182–202. https://doi.org/10.1 080/08952841.2014.883261
- Kreuter, M. W., Thompson, T., McQueen, A., & Garg, R. (2021).
 Addressing Social Needs in Health Care Settings: Evidence,
 Challenges, and Opportunities for Public Health. Annual review of public health, 42, 329–344. https://doi.org/10.1146/annurev-publhealth-090419-102204
- Wallman, T., Burel, G., Kullman, S., & Svärdsudd, K. (2004). Health care utilisation before and after retirement due to illness. A 13-year population-based follow-up study of prematurely retired men and referents from the general population. Scandinavian journal of primary health care, 22(2), 95–100. https://doi.org/10.1080/02813430410005126
- Zhang, W., Rand, S., Milne, A., Collins, G., & Silarova, B. (2022).
 The quality of life of older carers and the people they support: An international scoping review. Health & social care in the community, 30(6), e3342–e3353. https://doi.org/10.1111/hsc.13916
- 22. Hellström, Y., & Hallberg, I. R. (2001). Perspectives of elderly people receiving home help on health, care and quality of life. Health & social care in the community, 9(2), 61–71. https://doi.org/10.1046/j.1365-2524.2001.00282.x
- 23. Matejić, B. & Đikanović, B. (2019). Improving the position of informal caregivers in the Republic of Serbia comprehensive needs research in order to create recommendations for public policies [Unapređenje položaja neformalnih negovatelja u Republici Srbiji istraživanje sveobuhvatnih potreba u cilju kreiranja preporuka za javne politike]. Belgrade: Center for Support and Inclusion HELPNET.

- 24. Lopez Hartmann, M., De Almeida Mello, J., Anthierens, S., Declercq, A., Van Durme, T., Cès, S., Verhoeven, V., Wens, J., Macq, J., & Remmen, R. (2019). Caring for a frail older person: the association between informal caregiver burden and being unsatisfied with support from family and friends. Age and ageing, 48(5), 658–664. https://doi.org/10.1093/ageing/afz054
- Leichsenring K. (2004). Developing integrated health and social care services for older persons in Europe. International journal of integrated care, 4, e10. https://doi.org/10.5334/ijic.107
- Dambha-Miller, H., Simpson, G., Hobson, L., Roderick, P., Little, P., Everitt, H., & Santer, M. (2021). Integrated primary care and social services for older adults with multimorbidity in England: a scoping review. BMC geriatrics, 21(1), 674. https://doi.org/10.1186/s12877-021-02618-8
- 27. Satarić, N. & Rašević, M. (2007). Non-institutional protection of elderly people in Serbia - gap between needs and possibilities [Vaninstitucinalna zaštita starijih ljudi u Srbiji - jaz između potreba i mogućnosti]. Belgrade: Association of Citizens - Strength of Friendship - Amity.
- Saarela, T. M., Finne-Soveri, H., Liedenpohja, A. M., & Noro, A. (2008). Comparing psychogeriatric units to ordinary long-term care units are there differences in case-mix or clinical symptoms?. Nordic journal of psychiatry, 62(1), 32–38. https://doi.org/10.1080/08039480801960172
- Sandberg, M., Kristensson, J., Midlöv, P., Fagerström, C., & Jakobsson, U. (2012). Prevalence and predictors of healthcare utilization among older people (60+): focusing on ADL dependency and risk of depression. Archives of gerontology and geriatrics, 54(3), e349–e363. https://doi.org/10.1016/j.archger.2012.02.006
- Palosuo, H. (2009). Health inequalities in Finland: Trends in socioeconomic health differences 1980–2005. Helsinki: Ministry of Social Affairs and Health.
- Goldman, A. S., Abbott, K. M., Huang, L., Naylor, M. D., & Hirschman, K. B. (2023). Changes in Tangible Social Support Over Time Among Older Adults Receiving Long-Term Services and Supports. Journal of applied gerontology: the official journal of the Southern Gerontological Society, 42(5), 981–991. https://doi. org/10.1177/07334648221150966
- 32. Satarić, N., Rašević, M., & Miloradović, S. (2009). They can't wait a study on poor elderly people in Serbia [Oni ne mogu da čekaju studija o siromašnim starijim licima u Srbiji]. Belgrade: Association of Citizens Strength of Friendship Amity.
- Choi, M., Kong, S., & Jung, D. (2012). Computer and internet interventions for loneliness and depression in older adults: a meta-analysis. Healthcare informatics research, 18(3), 191–198. https://doi.org/10.4258/hir.2012.18.3.191
- Gatto, S. L. & Tak, S. H. (2008) Computer, Internet, and E-mail Use Among Older Adults: Benefits and Barriers. Educational Gerontology, 34:9, 800-811, DOI: 10.1080/03601270802243697
- 35. Baronijan, H.D. (2008). Poverty among pensioners and the elderly aged 65 and over analysis of the characteristics of poverty in Serbia [Siromaštvo među penzionerima i starim licima sa 65 i više godina analiza karakteristika siromaštva u Srbiji]. Belgrade.
- Stanić, K. (2010). The pension system in Serbia design, characteristics and recommendations [Penzijski sistem u Srbiji dizajn, karakteristike i preporuke]. Belgrade: USAID SEGA project.
- Kunst, A. E., Bos, V., Lahelma, E., Bartley, M., Lissau, I., Regidor, E., Mielck, A., Cardano, M., Dalstra, J. A., Geurts, J. J., Helmert, U., Lennartsson, C., Ramm, J., Spadea, T., Stronegger, W. J., & Mackenbach, J. P. (2005). Trends in socioeconomic inequalities in self-assessed health in 10 European countries. International journal of epidemiology, 34(2), 295–305. https://doi.org/10.1093/ije/dyh342
- Laine, J., Linna, M., Noro, A., & Häkkinen, U. (2005). The cost efficiency and clinical quality of institutional long-term care for the elderly. Health care management science, 8(2), 149–156. https://doi.org/10.1007/s10729-005-0397-3
- Wolinsky, F. D., & Johnson, R. J. (1991). The use of health services by older adults. Journal of gerontology, 46(6), S345–S357. https://doi. org/10.1093/geronj/46.6.s345

ŠTA UTIČE NA PENZIONERE DA KORISTE USLUGE SOCIJALNE ZAŠTITE?

Igor Lekić¹, Željka Stamenković², Bojana Matejić², Nataša Maksimović³

Sažetak

Uvod/Cilj. Starenje, kao prirodna faza u životu svakog pojedinca, je u korelaciji sa životnim promenama poput odlaska u penziju kada se završava aktivni radni vek čoveka, a nadoknađuje se izvorima prihoda koji ne moraju da se ostvaruju radom i koji se nazivaju penzija. Cilj ove studije bio je da se analizira korišćenje usluga socijalne zaštite u penzionerskoj populaciji i da se ispitaju faktori u vezi sa korišćenjem usluga socijalne zaštite.

Materijal i metode. Istraživanje predstavlja sekundarnu analizu podataka prikupljenih istraživanjem Unije penzija Srbije, koje je urađeno na prigodnom uzorku penzionera. Kao instrument istraživanja korišćen je upitnik osmišljen za potrebe istraživanja. Univarijantna i multivarijantna regresiona analiza je korišćena za identifikaciju faktora povezanih sa korišćenjem usluga socijalne zaštite.

Rezultati. Svega 6,5% penzionera koristi neke od usluga socijalne zaštite. Starija životna dob, osoba koja živi sama, niži stepen obrazovanja i neposedovanje mobilnog telefona ili računara značajno smanjuju verovatnoću korišćenja usluga socijalne zaštite. Osim toga, druženje sa prijateljima i porodicom značajno smanjuje verovatnoću da će osoba koristiti neke od usluga socijalne zaštite.

Zaključak. Rad u domenu zdravstvenog vaspitanja je od ključnog značaja, sa akcentom na znanju o zdravstvenim, psihološkim i socijalnim aspektima procesa starenja u cilju prevazilaženja stereotipa, predrasuda i nerazumevanja ove faze života.

Ključne reči: populacija starih, penzioneri, usluge socijalne zaštite

Primljen: 25.10.2023. | Revizija: 23.02.2024. | Prihvaćen: 23.02.2024.

Medicinska istaživanja 2024; 57(2):23-32