Original papers

Published online: 25 Apr 2019 DOI: 10.5604/01.3001.0013.0312

POPULATION AGING IS ONE OF THE MOST IMPORTANT CHALLENGES FACING SOCIAL POLICY AND PUBLIC HEALTH

Andrei Shpakou^{1,3 A-C,E,F}

• ORCID: 0000-0003-4340-5211

Aliaksandr Shpakau^{1,3 A,D,E,F}

• ORCID: 0000-0001-5260-6547

ALEH KUZNIATSOU^{2,3 D-F}

• ORCID: 0000-0002-1348-8688

- Department of Sport Medicine and Rehabilitation Yanka Kupala State University of Grodno, Grodno, Belarus
- ² Department of Clinical Laboratory Diagnostics and Immunology, Grodno State Medical University, Belarus
- $^{\scriptscriptstyle 3}$ University of Medical Science in Bialystok, Poland

A-study design, B-data collection, C-statistical analysis, D-interpretation of data, E-manuscript preparation, F-literature review, G-sourcing of funding

ABSTRACT

Background: Population aging is one of the most important social policy and public health challenges for the state. Increased proportions of older people is accompanied with increased negative attitudes manifested toward them, as represented by ageism, the discrimination against the elderly, contributing to their exclusion from public life.

Aim of the study: To study the prevalence and characteristics of ageism manifestations in healthcare institutions in the city of Grodno (Belarus) and to consider measures to minimize it.

Material and methods: 250 random urban respondents from Grodno age 60 or more not undergoing treated in healthcare institutions were anonymously questioned. Data analysis was performed using different statistical methods.

Results: The majority of respondents rated geriatric, social and medical care in the country as functioning at a high level. The share of elderly people who felt age discrimination was 70 (28.0%) and was independent from the gender and age of the respondents. Clinical departments were mentioned by 24 (34.3%) of respondents as places where manifestations of ageism were seen, particularly in emergency rooms – 14 (20.0%) and family doctor offices – 17 (24.3%). In 35 (50%) of cases, the family doctor explained the symptoms of the disease by the onset of old age, which can be regarded as a manifestation of ageism.

Conclusions: Training in the field of geriatrics is very important for medical professionals. Failure to take measures to ensure a holistic (integrated) approach in the treatment and care of elderly must be considered discriminatory. Particular measures should be taken to develop all types of care for the elderly, increasing the level of patient satisfaction with medical services and reducing the frequency of gerontological ageism manifestations.

KEYWORDS: healthcare sector, discrimination, ageism

BACKGROUND

The aging of the population is one of the most important problems for social and public policies of the state [1,2]. Some of the key problems older people encounter globally include discrimination, low living standards compared to populations, and chronic diseases. On the basis of the principles of the United Nations (UN, General Assembly resolution 46/91, December 16, 1991), all governments are recommended to "make the life of the elderly full-fledged". In this regard, it is necessary to take measures in the field of social support for the elderly, ensure independence, participation in society,

provision of care and protection by family and society, and promote the realization of their internal potential. Furthermore, a national policy on the elderly is recommended to strengthen communication between generations, protect the elderly from economic shocks, ensure the quality of life in institutions for the elderly, and provide the elderly with social services regardless of their place of residence [3].

The size of the world's elderly population is steadily growing, including in Belarus [4–7]. The population of Belarus, like most countries of the world, continues to age. Over the past 10 years, life expectancy at birth



has increased among Belarusian citizens and amounted to 74.4 years in 2017 (women – 79.2 years, men – 69.3 years) [8]. Older people accounted for 1.9 million (1.2 million of whom are women) of the total population (9.5 million) at the beginning of 2019. Every fifth resident has reached retirement age. The ratio between women and men is 1.8:1 [9]. The share of people aged 60 and over in the country is expected to surpass 25% by 2035.

Positive trends in the elderly include the following: every year among older people in Belarus, the number of people engaged in physical culture and recreational motor activity increases (15.3% at the beginning of 2010, 21.2% in 2017), the age of 60+ is not a hindrance for family creation [10]. In 2018, 1002 women and 1546 men have married at this age category (in 774 cases, both married over 60). The number of users of Internet services among elderly residents is 23.7% (2016). 27.7% of urban and 13.8% of rural residents are currently able to use the Internet. Every day, 41.9% of elderly users use the Internet: (urban residents – 42.5%, rural residents – 39.2%).

The growing elderly population is increasingly perceived as a problem phenomenon. This manifests itself as a negative attitude towards older people, provoking a fear of aging. The cult of young age contributes to the elimination of older people from social life and other manifestations of gerontological ageism – discrimination of someone by age, neglect or degrading practices based on negative age stereotyping [11]. This phenomenon is just as prevalent as racial and gender discrimination, revealing itself primarily in the areas of health and social services [12–14]. Among older people subjected to discrimination or witnesses of discrimination, social tension increases, further exacerbating the problem [15,16].

AIM OF THE STUDY

To study the prevalence and characteristics of ageism in healthcare institutions in the city of Grodno (Belarus) and consider measures for its minimization.

MATERIAL AND METHODS

250 random urban respondents from Grodno aged at least 60 not currently being treated at healthcare institutions were anonymously questioned.

The study was performed in 2017–2018. The Dpeciak questionnaire were used to study the phenomenon of age-based age discrimination [17]. The questionnaire was translated into Russian and adapted to this study and the contingent. The main questions of this questionnaire on which the study was based concerned cases and features of a dismissive or degrading attitude towards the respondent and peers in society, and in particular, at healthcare institutions.

Statistical data processing was performed using Statistica software package. The description of qualitative

features was carried out by calculating the absolute values and relative (%) frequencies with 95% confidence intervals (95% CI). The $\chi 2$ test was used to compare the relative frequencies of qualitative traits in the different age groups. Differences were statistically significant if p<0.05.

RESULTS

The socio-demographic characteristics of the surveyed respondents (gender, age, marital status, family structure, place of residence, living conditions, financial component, education) are presented in Table 1.

Table 1. Socio-demographic characteristics of the respondents (n=250) $\,$

К	Respondents, absolute amount (%)			
Sex	male	82 (32,8)		
Sex	female	168 (67,2)		
Age, years	60–70	102 (40,8)		
	71–80	111 (44,4)		
	older 80	37 (14,8)		
Family status	married	79 (31,6)		
	widower/widow	115 (46,0)		
	single, not married	23 (9,2)		
	divorced, live separately	33 (13.2)		
Location	big city (more than 200 thousand inhabitants)	170 (68.0)		
	middle size city (50–200 thousand inhabitants)	25 (10.0)		
	small size city (up to 50 thousand inhabitants)	15 (6.0)		
	village	40 (16.0)		
	very good	5 (2.0)		
	good	54(21.6)		
Financial status	middle	152 (60.8)		
	bad	31(12.4)		
	very bad	8 (3.2)		
	higher education	63 (25.2)		
Education	secondary education	50 (20.0)		
	specialized secondary	97 (38.8)		
	incomplete secondary	40 (16.0)		
_	one generation	135 (54.0)		
Family structure	two generations	64 (25.6)		
	three generations and more	51 (20.4)		

The level of geriatric care organization in the country by respondents' answers is presented in Figure 1. Most respondents rated the country's level of geriatric care organization as good.

Differences in evaluation between respondents by age are statistically significant. For example, the group of respondents aged 60-70 assessed the system of rendering geriatric care as insufficient.

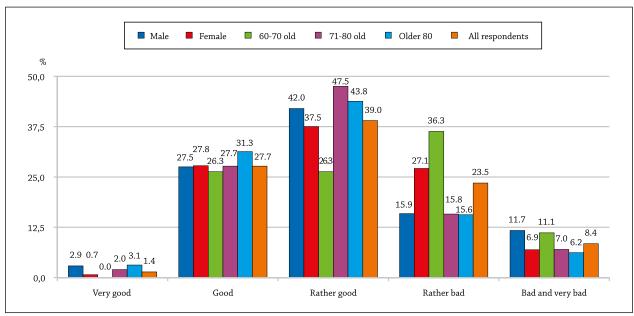


Figure 1. Evaluation of the system of geriatric care, depending on gender and age (subjective).

The features in the evaluation of medical care and nursing care for the elderly were established: among the respondents' answers about the level of medical care and the organization of nurs-

ing care were dominated by the answers "good" and "rather good". Based on the analysis of respondents' answers, the Quality of Health Care Index is high (Table 2).

Table 2. Evaluation of the organization and implementation of medical care (1) and nursing care (2) for the elderly, separated by gender and age (%). Frequency with 95% confidence intervals (95% CI).

Mark	Sex			Age								
	Male (n=82)		Female (n=168)		60-70 years old (n=102)		71-80 years old (n=111)		over 80 years old (n=37)		Total	
	1	2	1	2	1	2	1	2	1	2	1	2
Very good	1 (1.2%) (1.16–3.6)	1 (1.2%) (1.16–3.6)	1 (0.6%) (0.7-1.8)	1 (0.6%) (0.7–1.8)	0	0	1 (0.9%) (-0.9–2.7)	1 (0.9%) (-0.9–2.7)	1 (2.7%) (-2.5–7.9)	1 (2.7%) (-2.5–7.9)	2 (0.8%) (-0.3–1.9)	2 (0.8%) (-0.3–1.9)
Good	18 (22.0%) (13.0-30.9)	18 (22.0%) (13.0-30.9)	46 (27.4%) (20.6-34.1)	56 (33.3%) (26.2-40.5)	22 (21.6%) (13.6-30.0)	18 (17.7%) (10.3–25.1)	27 (24.3%) (16.3–32.3)	40 (36.0%) (27.1-45.0)	15 (40.5%) (24.7–56.4)	16 (43.2%) (27.3–59.2)	64 (25.6%) (20.2–31.0)	74 (29.6%) (23.9–35.3)
Rather good	34 (41.5%) (30.8–52.1)	32 (39.0%) (28.5–50.0)	59 (35.1%) (27.9–42.3)	57 (33.9%) (26.8–41.1)	24 (23.5%) (15.3–31.8)	31 (30.4%) (21.5-39.3)	55 (49.6%) (40.3–58.9)	46 (41.4%) (32.3–50.6)	14 (37.9%) (22.2–53.5)	12 (32.5%) (17.4–47.5)	93 (37.2%) (31.2–43.2)	89 (35.6%) (29.7–41.5)
Rather bad	15 (18.3%) (9.9–26.7)	16 (19.5%) 10.9–28.1)	35 (20.8%) (14.7–27.0)	28 (16.7%) (11.0-22.3)	31 (30.4%) (21.5–39.3)	26 (25.5%) (17.0-34.0)	15 (13.5%) (7.2–19.9)	14 (12.6%) (6.4–18.8)	4 (10.8%) (0.8–20.8)	4 (10.8%) (0.8–20.8)	50 (20.0%) (15.0-25.0)	44 (17.6%) (12.9–22.3)
Bad and very bad	4 (4.9%) (0.2–9.54)	4 (4.9%) (0.2–9.54)	9 (5.4%) (1.9–8.8)	8 (4.8%) (1.5–8.0)	4 (3.9%) (0.2-7.7)	6 (5.9%) (1.3–10.5)	7 (6.3%) (1.8–10.8)	4 (3.6%) (0.1–7.1)	2 (5.4%) (-1.9–12.7)	2 (5.4%) (-1.9–12.7)	13 (5.2%) (2.5–8.0)	12 (4.8%) (2.2-7.5)
No answer	10 (12.1%) (5.12–16.3)	11 (13.4%) (6.0–20.8)	18 (10.7%) (6.0–15.4)	18 (10.7%) (6.0–15.4)	21 (20.5%) (12.7–28.4)	21 (20.5%) (12.7–28.4)	6 (5.5%) (1.2–9.6)	6 (5.5%) (1.2–9.6)	1 (2.7%) (-2.5–7.9)	2 (5.4%) (-1.9–12.7)	28 (11.2%) (7.3–15.1)	29 (11.6%) (7.6–15.6)
Quality index ¹	47.2	43.7	40.7	52.7	13.6	21.0	58.1	65.7	66.7	65.7	41.4	49.3
Total answers	82		168		102		111		37		250	

 $^{^1}$ The quality of care index = ("very good" + "good" + "rather good") - ("very bad" and "bad" + "rather bad") * 100 / sum of answers.

The quality of care index did not show differences between genders. Older respondents rated the level of medical care and organization of nursing care better than those under the age of 70 years. Respondents rated the organization of nursing care higher than the organization of medical care (women).

70 (28.0%) of the respondents faced age discrimination, but it did not depend on the gender and age of

the respondent. About 30% (75 respondents) indicated that they had witnessed ageism.

Respondents specified manifestations of ageism, and described people and places where it was manifested.

Older persons were more critical of the system's provision of geriatric, nursing and social care, as well as the system of medical care for the elderly in general (Figure 2).

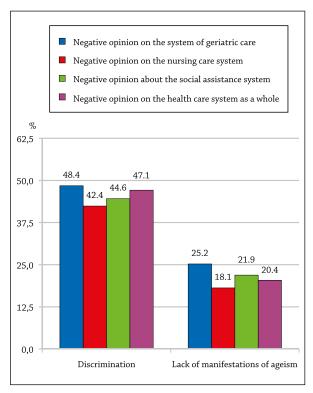


Figure 2. Views on providing assistance to older people and manifestations of ageism among the respondents interviewed

The genders and ages of the respondents did not significantly affect the answers regarding health workers expressing elements of age discrimination: in 19 (27.1%) of cases, such as manifestations associated with the activities of a doctor. Women more often noted improper treatment by the doctor. Nurses and registry staff showed elements of ageism to the patient less often than doctors (20; 28.6%). Men were unsatisfied by the work of registry staff more often. About 20% noted manifestations of age discrimination by younger patients. 24 (34.3%) of respondents indicated clinical departments as a place where elements of ageism were more expressed. 14 (20.0%) mentioned that the medical staff in the emergency room of the clinic and 17 (24.3%) stated that the local doctor's office demonstrated ageism. 35 (50%) stated that the family doctor discussed disease as a symptom of old age, which the majority of respondents considered as a manifestation of a discriminatory attitude towards elderly patients.

Analyzing the underlying causes of ageism in healthcare institutions, it was found that 24 (34.3%) respondents pointed to the scornful attitudes of medical workers. 16 (22.9%) indicated the reluctance of a nurse or doctor to provide objective information about their disease.

Among the surveyed respondents, 144 (57.6%) believed that the phenomenon of discrimination against older people in the healthcare sector is a social problem. 165 (66.0% of respondents) noted incorrect attitudes towards them due to their age. 89 (35.6%) said lack of healthcare funding was the biggest threat to geriatric care: the prerequisites for discriminatory practices in health care are the low social status of professions

focused on providing health care and services to older people, not always the high quality of their training and a lack of staff.

74 (29.6%) respondents pointed to the low interest of physicians (doctor, nurse) in specializing in geriatrics, and, as a result, 65 (26.0%) stated that there was a lack of specialists in specialized departments of clinics, and 96 (38.4%) stated that widespread prerequisites of gerontological ageism and threats to the functioning of the geriatric care system were present. Every tenth respondent pointed to the stigmatization of geriatrics by specialists from other medical specialties.

Discussion

In the modern literature, the number of publications on the status and evaluation of geriatric care for elderly patients is increasing, indicating the relevance of research in this area [18–19].

Explanation by medical workers of disease symptoms as caused by aging is often the result of insufficient coverage of geriatric problems during medical specialist training. Our study showed that in half of cases the doctor explained the presence of specific symptoms of the disease by the patient's advanced age. In a study by Jędrzejkiewicz et al [20] reported a similar result. Other results were obtained by S. Kropinska [17], according to whom, 22% of elderly people indicated that the doctor explained the presence of symptoms of the disease as caused by old age. McGuire et al [21] presented results when 40.0% of the elderly claimed that the medical staff attributed the onset of symptoms to the attainment of old age.

Our data confirm that in more than 30% of cases, medical personnel do not wish to explain mechanisms of disease development, and expectations for obtaining qualified information remain unfulfilled. T. Saleem *et al* [22] found in a group of 380 patients aged 65+ that the most common frustration of older people was precisely the reluctance of the medical staff to provide detailed information on the mechanisms of disease development in a form accessible to the patient (60.0%).

A study conducted by Grzanka-Tykwińska *et al* [23] showed that 16% of respondents aged 60+ reported they were victims of other forms of discrimination because of their age. In our study, the percentage of elderly people who regard the actions of medical personnel as discriminatory amounted to almost one third of all respondents.

The majority of respondents indicate that discriminatory attitudes towards the elderly are characteristic of the doctor (75.0%) [17], with the behavior of the nurse (more than 23.0%) in second place by a large margin. Respondents usually name the hospital department (44.2%) as a place of discrimination. Study of the answers of respondents in our study showed that the most frequent "discriminators" were also a doctor and less often a nurse (doctor – 20 – 28.6%, nurse – 18 – 25.5%).

In one study [24], almost 20.0% of elderly respondents noted that they had repeatedly witnessed discrimination due to age against their peers in healthcare institutions. Our study confirmed this trend. About 30% of respondents noted that they had witnessed ageism in the behavior of health workers in relation to other elderly people. The frequency of manifestations of discrimination against other older people is almost identical to the frequency of occurrence of elements of discrimination against themselves, which may indicate a willingness to publicly acknowledge the existence of a discriminatory attitude, and thus exacerbate this problem in society.

These results are new, because in earlier studies, the elderly only reluctantly admitted that they were discriminated against and only 13% of respondents reported manifestations of ageism, with many preferring to hide it [25].

A small number of scientific studies on the evaluation of geriatric care has led to a lack of proposals and solutions aimed at addressing these issues in countries with relatively low rates of care for the elderly.

Our study showed that low levels of geriatric funding, a lack of geriatric specialists (doctors, nurses)

REFERENCES

- **1.** Berlinger N, Solomon MZ. Becoming good citizens of aging societies. Hastings Cent Rep 2018 Sep; 48 Suppl 3: 2–9.
- Eurostat. Population Structure and Ageing [online] 2016 [cit. 31.01.2019]. Available from URL: http://ec.europa.eu/eurostat/statistics-explained/index.php/Population_structure_and_ageing.
- 3. European Commission. Active ageing and solidarity between generations – a statistical portrait of the European Union 2012. Luxembourg: Publications Office of the European Union; 2011.
- **4.** Ageing and life-course. Geneva: World Health Organization [online] 2018 [cit. 1.02.2019]. Available from URL: http://www.who.int/ageing/ageism/en/.
- **5.** Ayalon L. Perceived age, gender, and racial/ethnic discrimination in Europe: results from the European social survey. Educ Gerontol 2014; 40(7): 499–517.
- **6.** Frederick P, Morgeson Æ, Matthew H, Reider Æ, Michael A, Campion Æ, et al. Review of research on age discrimination in the employment interview. Bull J Bus Psychol 2008; 22: 223–232.
- Harris K, Krygsman S, Waschenko J, Rudman DL. Ageism and the older worker: a scoping review. The Gerontologist 2018; 58(2): 1–14.
- 8. Statistical review of Belarus January September 2018. Minsk: National Statistical Committee of the Republic of Belarus; 2018.
- **9.** Belarus on the way to achieving sustainable development goals. Minsk: National Statistical Committee of the Republic of Belarus; 2019.
- 10. Leavy JE, Bull FC, Rosenberg M, Bauman A. Physical activity mass media campaigns and their evaluation: a systematic review of the literature 2003–2010. Health Educ Res 2011 Dec; 26(6): 1060–1085.
- 11. São José JM, Amado CA. On studying ageism in long-term care: a systematic review of the literature. Int Psychogeriatr 2017 Mar; 29(3): 373–387.

and an insufficient number of specialized departments to assist the elderly are central to the existence and development of the geriatric care system in the country.

CONCLUSIONS

Failure to take measures to ensure a holistic (integrated) approach in the treatment and care of older people must be considered a manifestation of discrimination and is more common than cases of ageism.

The phenomenon of discrimination on the basis of age in the health system is a problem for geriatrics and gerontology, therefore, when training future doctors and nurses, it is imperative to instill in staff the desire for advanced training in this area, development of empathy and the desire to understand the patient, the ability to communicate information about health and disease mechanisms.

It is necessary to envisage measures to develop the system of medical care for the elderly, increase the level of patient satisfaction with medical services and reduce the frequency of manifestations of gerontological ageism.

- 12. Levy BR, Slade MD, Chang ES, Kannoth S, Wang SY. Ageism amplifies cost and prevalence of health conditions. Gerontologist 2018 Nov 13. doi: 10.1093/geront/gny131. [Epub ahead of print].
- **13.** Kolpina LV. Gerontological ageism in healthcare institutions and social protection and its overcoming directions. Scientific Statements 2015; 10: 144–151.
- 14. Shpakov AI, Klimatskaya LG, Zaitseva OI, Naumov IA, Laskine S. Some aspects of the gerontological ageism in health care. Modern Problems of Science and Education 2017; 5: 1–8.
- **15.** Kagan SH, Melendez-Torres GJ. Ageism in nursing. J NursManag 2015; Jul; 23(5): 644–650.
- 16. Resolution WHA69.3. The global strategy and action plan on ageing and health 2016–2020: towards a world in which everyone can live a long and healthy life. In: Sixty-ninth World Health Assembly, Geneva, 23–28 May 2016. Resolutions and decisions, annexes. Geneva: World Health Organization [online] 2016 [cit. 1.02.2019]. Available from URL: http://apps.who.int/gb/ebwha/pdf_files/WHA69-REC1/A69_2016_REC1-en.pdf#page=27.
- 17. Kropinska S. Age-discrimination of elderly in the Polish health care system [dissertation]. Poznan University of Medical Sciences; 2013.
- 18. Officera A, de la Fuente-Núñeza V. A global campaign to combat ageism. Bull World Health Organ 2018 Apr 1; 96(4): 295–296.
- **19.** Bratt C, Abrams D, Swift HJ, Vauclair CM, Marques S. Perceived age discrimination across age in Europe: from an ageing society to a society for all ages. Dev Psychol 2018 Jan; 54(1): 167–180.
- **20.** Jędrzejkiewicz B, Dobrowolska B, Kaučič B. Selected aspects of geriatric care in the opinion of the elderly and students of medicine and nursing, discussion on ageism in the health care sector. Gerontol Pol 2015; 23(4): 165–171.
- 21. McGuire SL, Klein DA, Chen SL. Ageism revisited: a study

- measuring ageism in East Tennessee, USA. Nurs Health Sci 2008; 10(1): 11–16.
- **22.** Saleem T, Khalid U, Qidwai W. Geriatric patients' expectations of their physicians: findings from a tertiary care hospital in Pakistan. BMC Health Serv Res 2009 Nov 13; 9: 205.
- 23. Grzanka-Tykwińska A, Rzepka A, Chudzińska M, Sygit B, Kusza K, Kędziora-Kornatowska K. Problematyka przemocy wobec osób starszych. Now Lek 2012; 81(1): 44–48. (In Polish).
- **24.** São José JMS, Amado CAF, Ilinca S, Buttigieg SC, Taghizadeh Larsson A. Ageism in health care: a systematic review of operational definitions and inductive conceptualizations. Gerontologist 2019 Mar 14; 59(2): e98–e108.
- **25.** Wróblewska I, Sobik-Niemczynowska B, Błaszczuk J, Chylicka-Jasionowska K, Kurpas D. Opinia pacjentów na temat trudności wieku podeszłego oraz roli opieki pielęgniarskiej w kształtowaniu zachowań proaktywnych u osób w wieku podeszłym. Fam Med Primary Care Rev 2014; 16(4): 356–359. (In Polish).

Received: 23.03.2019

Word count: 2536 • Tables: 2 • Figures: 2 • References: 25

Sources of funding:

The research was funded by the authors.

Conflicts of interests:

The authors report that there were no conflicts of interest.

Cite this article as:

Shpakou A, Shpakau A, Kuzniatsou A. The problem of aging of the population as one of the most important challenges for social policy and public health.

MSP 2019; 13, 1: 8–13.

Correspondence address:

Andrei Shpakou M.D., PhD, Department of Sport Medicine and Rehabilitation Yanka Kupala State University of Grodno Belarus, Grodno, 230023, 22 Ozheshko St. Phone: (+375) 297831034

 Phone: (+375) 297831034
 Reviewed: 3.04.2019

 E-mail: shpakofff@tut.by
 Accepted: 3.04.2019