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## Ageism in clinical practice and improving educational programmes based on anti-ageism principles

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### ABSTRACT

The purpose of the article is to study the manifestations of ageism in clinical practice, the relationship of ageism with the presence of senile asthenia and comorbidity in the picture of the disease, substantiation of the improvement of educational programs based on anti-age approaches. **Methodology.** To assess the subjective perception of discrimination, patients of mature, elderly and senile age were examined; "Questionnaire for Citizens aged 75 and Over", "Ageism Questionnaire" by E. Palmare was used; the Charlson polymorbidity index was calculated; to improve the training programs for medical specialists, their awareness of the main problems of aging was studied. **Results.** Ageism manifestations were correlated with the development of senile asthenia and comorbidity in the clinical picture of the disease. It has been shown that the psychological discomfort of elderly and senile patients associated with ageism increases with age, which may exceed in importance the immediate health problems in the overall picture of the disease. The most important manifestation of the subjective perception of bias is the justification by the attending physician of the disease mainly by the age of the patients, which indirectly implies ignoring other causes of pathology and reduces the activity of carrying out therapeutic and diagnostic measures. As a result of the study, the need to improve educational programs for the training of medical specialists was substantiated, taking into account the gerontological and anti-aging approach.

KEY WORDS: ageism; gerontology; geriatrics; senile asthenia; elderly; aging.

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## El ageísmo en la práctica clínica y mejora de los programas educativos basados en principios anti-ageísmo

### RESUMEN

El propósito del artículo es estudiar las manifestaciones de la discriminación por edad en la práctica clínica, la relación de la discriminación por edad con la presencia de astenia senil y la comorbilidad en el cuadro de la enfermedad, fundamentación de la mejora de los programas educativos basados en enfoques anti-edad. Metodología. Para evaluar la percepción subjetiva de discriminación, se examinaron pacientes en edad madura, anciana y senil; Se utilizó el “Cuestionario para ciudadanos de 75 y más años”, el “Cuestionario de discriminación por edad” de E. Palmare; se calculó el índice de polimorbilidad de Charlson; Para mejorar los programas de formación de médicos especialistas, se estudió su conocimiento de los principales problemas del envejecimiento. Resultados. Las manifestaciones por edad se correlacionaron con el desarrollo de astenia senil y comorbilidad en el cuadro clínico de la enfermedad. Se ha demostrado que el malestar psicológico de los pacientes ancianos y seniles asociado a la discriminación por edad aumenta con la edad, lo que puede superar en importancia a los problemas de salud inmediatos en el cuadro general de la enfermedad. La manifestación más importante de la percepción subjetiva de sesgo es la justificación por parte del médico tratante de la enfermedad principalmente por la edad de los pacientes, lo que indirectamente implica ignorar otras causas de patología y reduce la actividad de realizar medidas terapéuticas y diagnósticas. Como resultado del estudio, se fundamentó la necesidad de mejorar los programas educativos para la formación de médicos especialistas, teniendo en cuenta el enfoque gerontológico y anti-envejecimiento.

**PALABRAS CLAVE:** Ageísmo; gerontología; geriatría; astenia senil; anciano; envejecimiento.

### Introduction

The aging of the population is a worldwide tendency of increasing life expectancy in developed countries, including Russia. According to the UN, the share of elderly and older people in these countries will increase from 20% of the population in 2015 to 25% in 2025 and to 30% in 2050.

The problem of geriatric care is multidisciplinary and requires improving the provision of medical, social, psychological and other types of care (Ilnitskiy and Proshchaev, 2013; Kolpina, 2017; Miklyaeva, 2009a; Tkacheva et al., 2017).

Ageism is one of the social problems in geriatrics. Ageism is discrimination of a person on the basis of age based on stereotypes or prejudice towards him (Puchkov and Afanasyeva, 2011; Startseva and Ilnitskiy, 2018; Butler, 1999; Meisner, 2012; Sargent-Cox, 2017; Wyman et al., 2018). Ageism can manifest itself in the dislike of older people by young people in the form of indifference, disrespect, ridicule, unwillingness to cooperate and listen, as well as disgust, cruelty and even violence against the elderly. At the same time, the objects of ageism can be distinguished, for example, patients of healthcare institutions, its subjects, in particular, medical personnel (Kolpina, 2015; Kolpina et al., 2015; Eymard and Douglas, 2012; Liu et al., 2012; Granadillo et al, 2015).

The subjective perception of ageism in elderly and senile patients has a negative effect on both their psychological state and somatic status, in particular on the neuroendocrine system. Ageism contributes to the development of depression, dementia and cardiovascular pathology in elderly and senile people (Gaynor et al., 2014; Makris et al., 2015; Theofanidis, 2015; Thiem et al., 2011). Aggravates the course of gerontological syndromes, in particular senile asthenia. Senile asthenia is a geriatric syndrome characterized by an age-associated decrease in the physiological reserve and functions of many body systems, leading to increased vulnerability of the elderly person's body to the effects of endo- and exogenous factors (Ilnitskiy and Proshchaev, 2013; Tkacheva, 2018; Tkacheva et al., 2017; Kotter-Gruhn, 2015). The syndrome of senile asthenia is closely associated with other geriatric syndromes, as well as with the presence of comorbidity (multiple pathology in one patient) (Lazebnik et al., 2015; Charlson et al., 1987; Thiem et al., 2011).

Traditionally, the issues of ageism have been considered in the most detail by specialist psychologists and sociologists (Miklyayeva, 2009b; Kotter-Gruhn, 2015; Palmore, 2001; Voss et al., 2018). However, the inclusion of these issues in educational programs for the training of medical specialists of clinical direction is relevant for creating a "safe environment" for elderly and senile people, as well as increasing the degree of empathy of all health workers towards elderly and senile people.

The significance and dynamics of the subjective perception of ageism in therapeutic patients in different age groups are investigated in order to achieve the goal. Manifestations of ageism were correlated with the development of senile asthenia and comorbidity in the

clinical picture of the disease. We examined gerontological knowledge and ageism in undergraduate clinical students before and after educational programmes based on geriatric and anti-ageism approaches.

## 1. Materials and methods

90 patients (54 women and 36 men) of mature, elderly and senile age (50 ... 90 years), hospitalized in the city clinical hospital No. 2 of the city of Belgorod, were examined to assess the subjective perception of discrimination. Patients with leading therapeutic, cardiological and neurological pathology were included. The exclusion criterion was a general severe somatic condition. The likelihood of senile asthenia was investigated using the "Questionnaire for citizens aged 75 and over" (Tkacheva, 2018; Tkacheva et al., 2017), polymorbidity was assessed using the Charlson index (Charlson et al., 1987). The subjective level of ageism was studied using the "Ageism Questionnaire" by E. Palmore (Palmore, 2001), which allows to measure the subjective perception of a person's discrimination.

The awareness of senior students of the medical institute of the National Research University "BelSU" about the main problems of aging was studied to improve the training programs for medical specialists in the field of gerontology and geriatrics. A survey was conducted of 220 people of both sexes (118 women and 102 men) at the age of 21 - 25 years. We used the original questionnaire "Assessment of the level of ageism in the system of cross-cutting gerontological education", which included 25 questions about old age and age: definition of old age; how long does the period of youth last; at what age old age begins; at what age does old age begin; at what age should men retire; at what age women should retire; should there be differences between men and women at retirement age; five benefits of old age; five negative aspects associated with old age; can a person in old age get a new profession; can an elderly person drive a car; five leading problems (diseases, disorders) in the health of older people; are there people in your environment (family, friends, neighbors, etc.) with urinary incontinence; Whether urinary incontinence is an integral part of the aging process by what signs, as early as possible, to identify urinary incontinence; is it possible to effectively treat urinary incontinence in old age; what forms of living for older people do you consider acceptable; if you come to a polyclinic and you have the opportunity to choose a doctor between 30, 50 and 70 years old, which doctor will you choose; if you

had the opportunity to choose teachers (for you or your children) between 30, 50 and 70, what age teacher would you choose; you give way to older people on public transport; how do you feel about marriages between people with a 20-year age difference; can a nurse call an elderly patient a grandmother; how many years ahead do you plan your life; do you think about your old age; are you afraid of your old age? Different points were assigned to the answer options. Next, the ageism index was calculated. The level of ageism was regarded as low at an index value of 0-24, as an average level at 25-74, as a high level at 75-100.

## 2. Results and discussion

A study of the subjective perception of discrimination in patients undergoing treatment in a hospital setting showed that 39% of them (35 people) note the presence of a certain level of ageism in relation to them. Analysis of the structure of specific manifestations of discrimination according to the "Ageism Questionnaire" by E. Palmare showed that the overwhelming majority of respondents noted the fact that the doctor justified the disease in the patient mainly by their age. This indirectly implies ignoring other reasons and reduces the activity of carrying out medical and diagnostic measures. A noticeably smaller part of the manifestation of ageism is associated with the bias of medical personnel in interpersonal contacts with patients. Not a single patient noted gross violations of medical ethics (Fig. 1).

Figure 2 shows a diagram of the distribution of points of subjective perception of ageism in the study group of patients according to the E. Palmare questionnaire. It shows a clear increase in subjective perceptions of discrimination with age.

The study of the age-related dynamics of the subjective perception of ageism, as well as the dynamics of such gerontological problems as comorbidity of pathology and the development of senile asthenia (frailty) are presented in Table 1.

Analysis of the table shows that with age there is a progressive increase in the incidence of all studied gerontological problems. Moreover, comparing them with the initial level in adulthood, taken as a unit, shows an outrunning increase in the psychological discomfort of patients associated with ageism (Fig. 3). That is, the problem of social relations may exceed in importance the immediate health problems in the picture of the disease among elderly and senile patients.

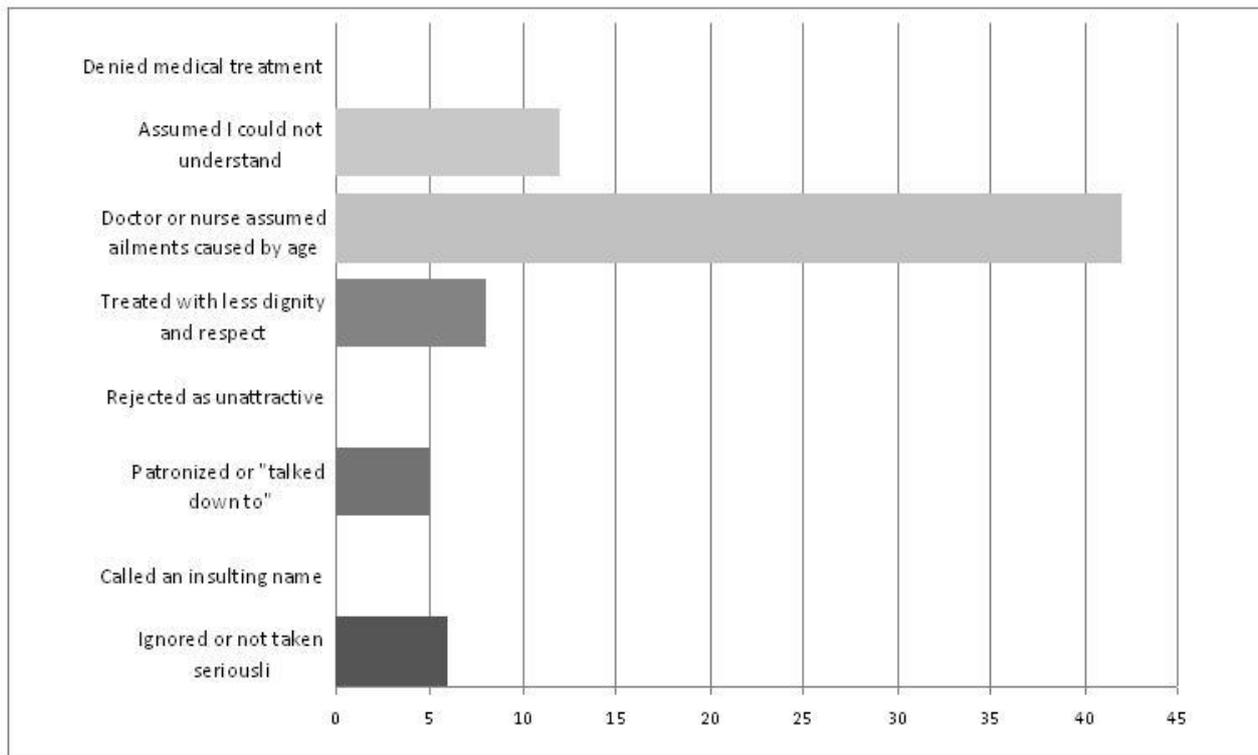


Figure 1. Structural diagram of the manifestations of subjective perception of ageism in patients according to the E. Palmare questionnaire

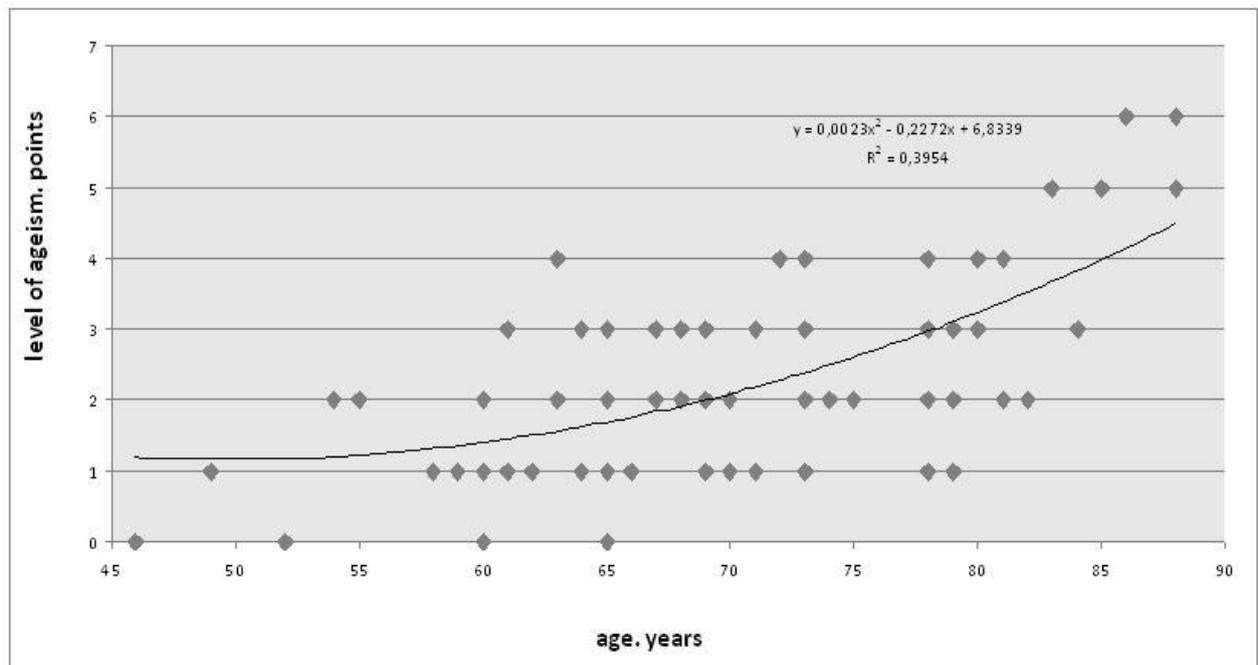


Figure 2. Diagram of the subjective perception of ageism in points according to the E. Palmare questionnaire

Table 1. The degree of polymorbidity, the likelihood of senile asthenia and the level of subjective sensation of ageism in patients in different age groups (M±m)

Index	Adult age (n = 27)	Elder age (n = 32)	Senile age (n = 31)
Age	55,2±1,55	67,2±0,61	80,6±0,61
Charlson Index	3,3±0,58	8,4±1,25	9,6±0,55
Application form for citizens aged 75 and over	1,9±0,31	2,6±0,22	4,2±0,35
Ageism level	0,3±0,13	1,05±0,21	1,15±0,31

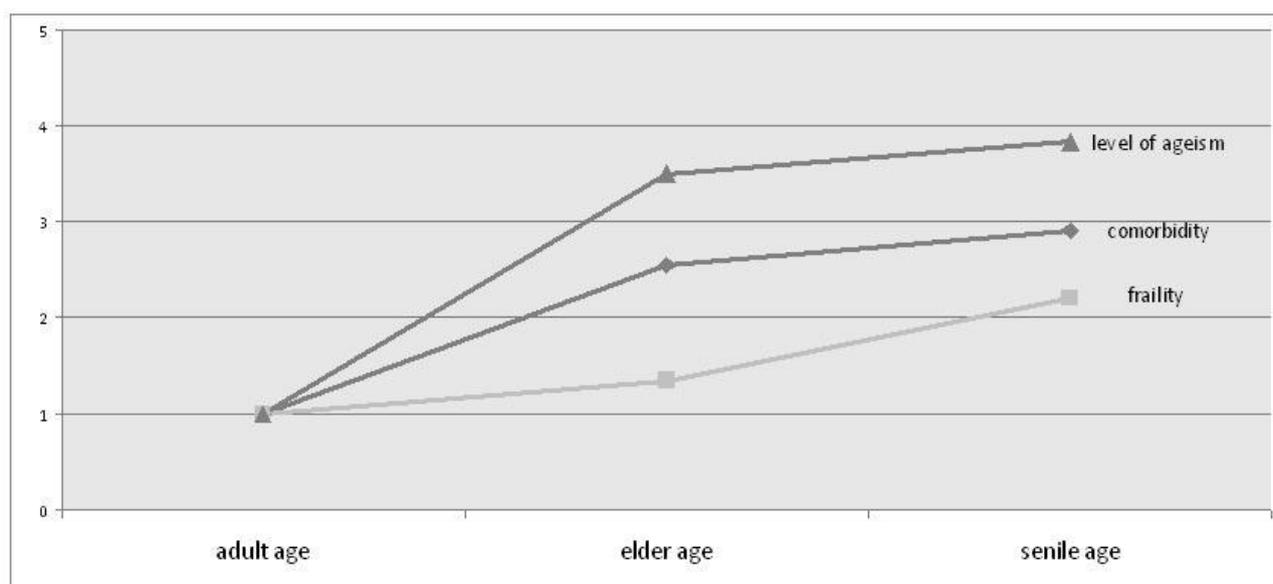


Figure 3. The relative increase in the level of ageism, comorbidity and the presence of senile asthenia in different age groups

The data obtained showed the relevance of improving educational programs based on the gerontological and anti-age approach. In this regard, the level of ageism among senior students of the medical institute was investigated before and after the development of gerontological programs. The programs contained four didactic modules: organizing geriatric care, gerodispensary treatment, emergency geriatrics and orthogeriatrics. At the same time, they used modern educational technologies in the form of e-learning.

Assessment of the initial level of gerontological knowledge among students showed their insufficient level. Only 44.1% of the respondents could correctly indicate the old age, while 34.1% underestimated this age, and 21.8% overestimated it. Only 22.7% of the respondents could correctly indicate the period of old age, 59.1% of the respondents consider this age to be younger and 18.2% - older. 69.7% of the respondents believe that age matters in the possible choice of a doctor or teacher; this indicates certain manifestations of ageism (age discrimination). 31.4% of the respondents think about the upcoming old age, 49.1% are afraid of it. Among the leading diseases of people of older age groups, 23.8% of respondents named diseases of the cardiovascular system, 15.2% - the musculoskeletal system, 10.4% - visual or hearing impairment, 10.1% - dementia (dementia) and 8, 3% - digestive disorders. The problem of specific geriatric syndromes ("fall", "muscular dystrophy", "asthenia", "loss of energy", etc.) was noted by 4.2% of the respondents, which is only 9th in the priorities.

Average level of ageism: among senior students was  $44.2 \pm 3.5$  points. Assessment of the level of knowledge gained after mastering educational programs in gerontology showed a significant improvement in the results of the exit test compared to the introductory one. A positive moment was a significant decrease in the ageism index. It decreased 2.7 times from  $44.2 \pm 5.8$  points to  $16.2 \pm 3.4$  points ( $p < 0.05$ ) (Fig. 4).

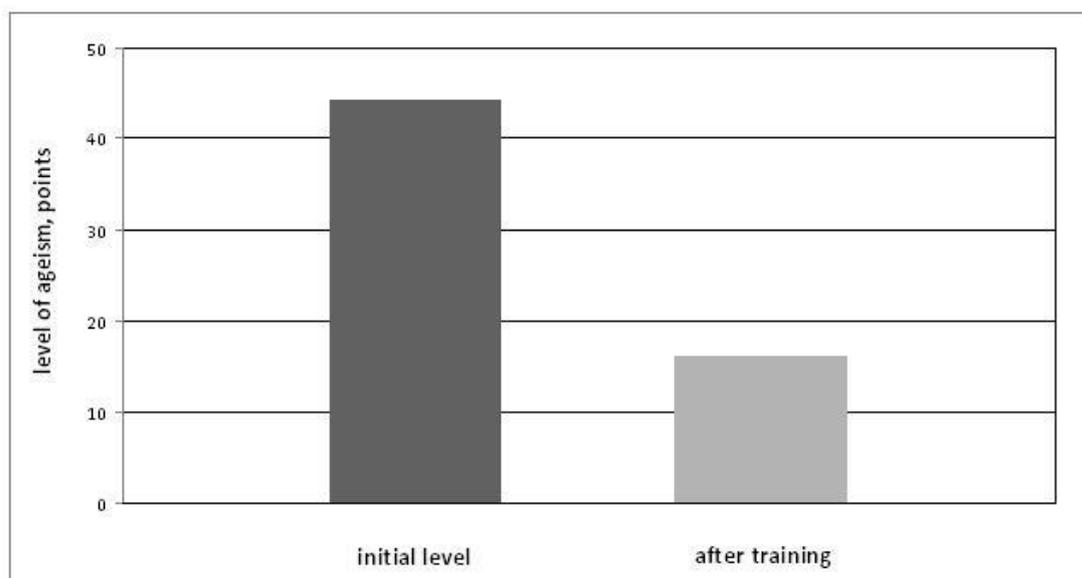


Figure 4. Decrease in the level of ageism among students after mastering educational gerontological programs

## Conclusions

The subjective perception of discrimination is important in the clinical picture of the disease of elderly and senile patients, along with such problems as comorbidity and senile asthenia.

With increasing age of patients, this problem leads to psychological discomfort and an increase in dissatisfaction with medical care. When organizing the treatment and diagnostic process, it is necessary to use a multidisciplinary approach and pay great attention not only to solving clinical problems, but also to improving the psychological state of patients.

Taking into account the relevance of the development of gerontological care for the elderly, it is necessary to improve training programs in this area, aimed at increasing the level of gerontological knowledge and overcoming ageism.

The systematic inclusion of gerontological educational programs for the training of medical specialists reduces the level of ageism among healthcare workers and is a necessary condition for increasing empathy towards elderly and senile patients.

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