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## Исследование проблем эйджизма и оценка отношения к возрасту в медицинской среде

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**Обоснование.** Эйджизм проникает во все области жизни, включая сферы медицинской и социальной помощи. Геронтологический эйджизм оказывает существенное негативное влияние на показатели физического и психического здоровья, функционального статуса и благополучия пожилых людей. В условиях стареющего общества исследование масштабов и особенностей данной проблемы в различных сферах жизни весьма актуально.

**Цель работы** — оценить распространенность стереотипов в отношении к старшему возрасту среди врачей первичного звена здравоохранения, студентов старших курсов медицинского вуза и непосредственно людей пожилого возраста.

**Материалы и методы.** В период с 2018 по 2022 г. проведено интервьюирование 538 человек в возрасте от 20 до 75 лет в трех подгруппах: 1) студенты старших курсов медицинского вуза лечебных специальностей, 2) врачи первичного звена здравоохранения молодого и среднего возрастов, 3) лица пожилого возраста.

**Результаты.** Выявлено, что мнения о проблемах в данном возрастном периоде у пожилых людей и убеждения врачей и студентов-медиков нередко не совпадают.

**Заключение.** При подготовке медицинских кадров необходимо формирование правильного отношения к возрасту и коммуникативной компетентности при работе с разными возрастными контингентами пациентов.

**Ключевые слова:** эйджизм; пожилой возраст; студенты-медики; молодые врачи.

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## Study of the problems of ageism and assessment of attitudes towards age in the medical environment

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**BACKGROUND:** Ageism pervades all areas of life, including the areas of medical and social care. Gerontological ageism has a significant negative impact on indicators of physical, mental health, functional status and well-being of older people. In the conditions of an aging society, the study of the scale and characteristics of this problem in various spheres of life is very relevant.

**AIM:** To assess the prevalence of stereotypes of attitudes towards older age among primary health care physicians, senior students of a medical university and directly elderly people.

**MATERIALS AND METHODS:** In the period from 2018 to 2022, 538 people aged 20 to 75 were interviewed in 3 subgroups: 1) senior students of a medical university of medical specialties, 2) young and middle-aged primary health care doctors, 3) elderly people.

**RESULTS:** It was revealed that the opinions about the problems in this age period in the elderly and the beliefs of doctors and medical students often do not coincide.

**CONCLUSIONS:** When training medical personnel, it is necessary to form the correct attitude to age and skills of communicative competence with different age groups of patients.

**Keywords:** ageism; old age; medical students; young doctors.

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## BACKGROUND

Ageism is defined as intolerance and discrimination of people belonging to a particular age group by people of a different age and manifests as stereotypes of thinking and discriminatory behavior toward this cohort of people [1]. According to the nature of occurrence, ageism can be institutional, interpersonal, and self-directed. With increasing age, a person ceases to have prejudices and stereotypes aimed at young people. On the contrary, gerontological ageism worsens with increasing age and has a significant negative effect on indicators of physical and mental health, functional status, and well-being of older people. Gerontophobia is considered one of the reasons for the increase in manifestations and prevalence of gerontological ageism, which is expressed as a feeling of fear of old age and death [1, 2].

Legislative documents in Russia do not include any restrictions on the norms of age discrimination and aimed at comprehensive support for the participation of older citizens in public life<sup>1</sup>. Meanwhile, published data have indicated that a further increase in the prevalence of negative attitudes toward older people as a global problem has aggravated during the COVID-19 pandemic [1]. Under conditions of an aging society, studying the scale and characteristics of this problem in various spheres of life is very important for the development of preventive measures and the improvement of the efficiency of providing primary healthcare to older people.

**The work aimed** to assess the prevalence of stereotypes in relation to older age among primary healthcare medical professionals, senior students of a medical university, and older people themselves.

## MATERIALS AND METHODS

This research was conducted in the period from 2018 to 2022 at the Kirov State Medical University and medical organizations in the city of Kirov, which are the bases for the practical training of students. In total, 538 participants

aged 20–75 years were interviewed and divided into three subgroups: (1) senior students of the department of general medicine of a medical university, (2) young and middle-aged primary healthcare medical professionals, and (3) older people (Table 1).

Older respondents were interviewed during the preventive medical examination of the adult population [88 (42.1%)] and when announcing the events of the Third Age University project together with the regional branch of the Union of Pensioners of Russia [121 (57.9%)]. This project has been functioning within the Strategy of Actions in the Interests of the Senior Citizens in the Russian Federation<sup>2</sup> in Kirov State Medical University since 2018 to implement continuous education for people aged ≥55 years in the fields of “first aid and care,” “healthy lifestyle,” “landscape design,” “computer competence,” etc. Face-to-face interviews were performed using the author’s questionnaire (*Appendix*), which includes 10 questions aimed at identifying the attitude of respondents toward certain beliefs about life at an older age (≥60 years). Respondents evaluated these simple statements (questions) based on his/her perception. Responses were rated in five grades [3]. In item 11, in addition to responses to the statements, respondents can freely express opinions about other problems encountered by older people.

After an introductory briefing, department residents and 5th–6th-year general medicine students took part in the survey under the guidance of teachers from the department of family medicine and polyclinic therapy.

Statistical data analysis was performed using Microsoft Excel and Portable Statistica 8.0. The  $\chi^2$  criterion was used to assess differences between indicators. Differences between two indicators were considered significant at  $p < 0.05$ .

## RESULTS

In the assessment of the attitude of the participants toward the statement “Significant problems with memory arise at an older age” (Fig. 1), results revealed that the majority

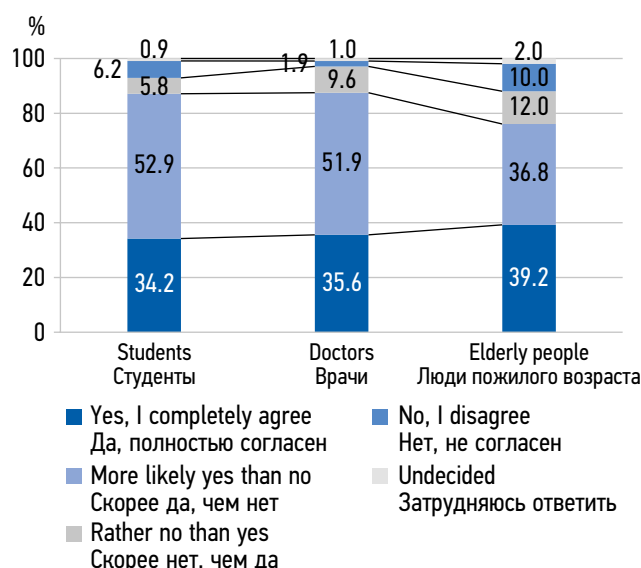
**Table.** Distribution of respondents by occupation, age, and sex

**Таблица.** Структура распределения опрошенных лиц по роду занятий, возрасту и полу

Criterion		Respondents (n = 538)		
		Students	Doctors	Older people
Total number of respondents, n (%)		225 (41.8)	104 (19.3)	209 (38.9)
Age, years		20–22	23–32	60–75
Average age and years		22.6	25.5	68.4
Sex	Female, n (%)	163 (72.4)	85 (81.7)	162 (77.5)
	Male, n (%)	62 (27.6)	19 (18.3)	47 (22.5)

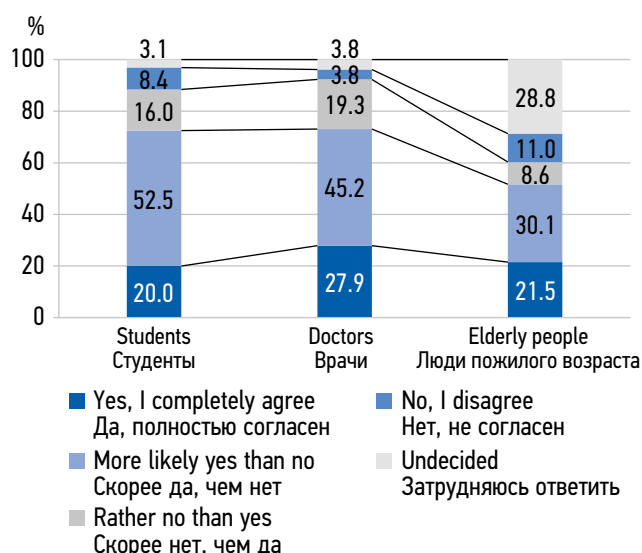
<sup>1</sup> Decree of the Government of the Russian Federation No. 164-r dated February 5, 2016, “Strategy of Actions in the Interests of Senior Citizens in the Russian Federation until 2025.” Access mode: <https://docs.cntd.ru/document/420334631>. Date of access: 03/15/2023.

<sup>2</sup> *Ibid.*



**Fig. 1.** Results of answers to the question about the relationship between age and memory problems

**Рис. 1.** Результаты ответов на вопрос о связи возраста и проблем с памятью



**Fig. 2.** Results of answers to the question about the presence of difficulties associated with driving a car at an older age

**Рис. 2.** Результаты ответов на вопрос о наличии трудностей, связанных с вождением автомобиля в старшем возрасте

of the respondents in all subgroups agreed with this thesis; however, this opinion was expressed significantly less frequently in older respondents ( $p = 0.01$ ).

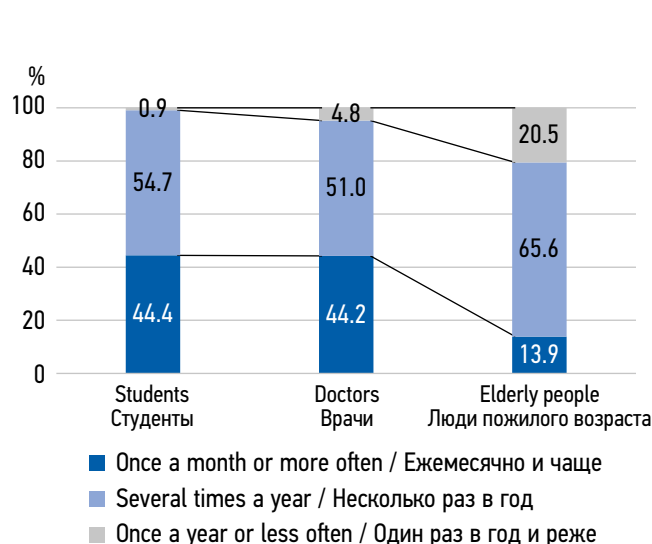
As regards the question about difficulties with driving a car at an older age (Fig. 2), the majority of the students (72.5%) and doctors (73.1%) and only every second older respondent ( $p = 0.0000$ ) agreed on this statement. Almost a third of older respondents found it difficult to answer this question due to the lack of a car.

Regarding the frequency of visits by older people to medical organizations (Fig. 3), a coincidence of opinions of the survey participants (51%–65.6%) was noted. However,

among the respondents, a higher number of older participants ( $p = 0.0000$ ) agreed with the statement that older people visit medical institutions once a year or less.

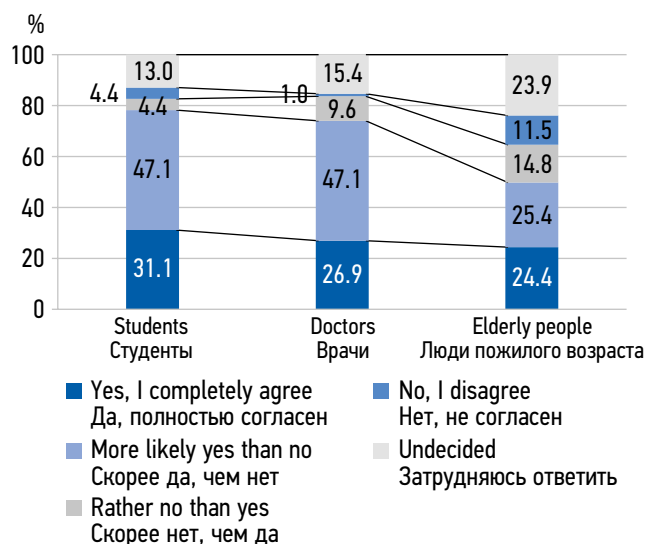
The majority of the students and doctors (78.2% and 74.0%, respectively) and only half of the older respondents agreed with the opinion that older people have significant sexual problems (Fig. 4). Older respondents more often ( $p = 0.0000$ ) disagreed with this thesis (answers “Rather no than yes” and “No, I disagree”).

In the analysis of answers to questions 5–7, doctors and students (63.5% and 56.9%, respectively) were convinced of the presence of low mood, feelings of sadness, and



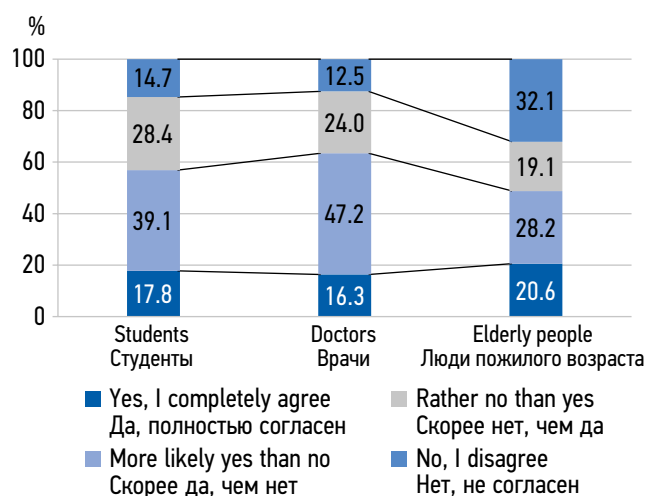
**Fig. 3.** Results of responses to the question about the frequency of contacting medical organizations with older patients

**Рис. 3.** Результаты ответов на вопрос о частоте обращения в медицинские организации пациентов старшего возраста



**Fig. 4.** Results of responses to the question about the presence of sexual problems in older people

**Рис. 4.** Результаты ответов на вопрос о наличии сексуальных проблем у лиц старшего возраста



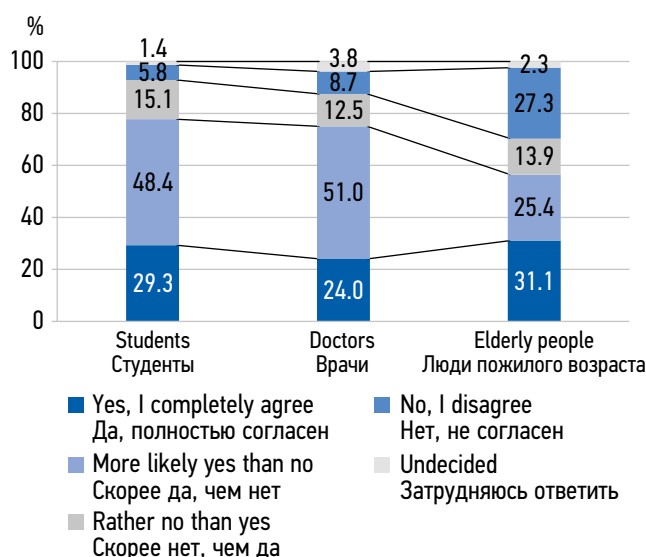
**Fig. 5.** The results of responses to the question about the decrease in mood, feelings of sadness in the elderly

**Рис. 5.** Результаты ответов на вопрос о снижении настроения, ощущении печали у пожилых людей

depression in older people more often than the older respondents (48.8%) (Fig. 5). Every third older respondent and smaller proportions (12.5% and 14.7%, respectively) of doctors and students ( $p = 0.0000$ ) disagreed confidently with these statements (answers “No, I disagree”) ( $p = 0.0000$ ).

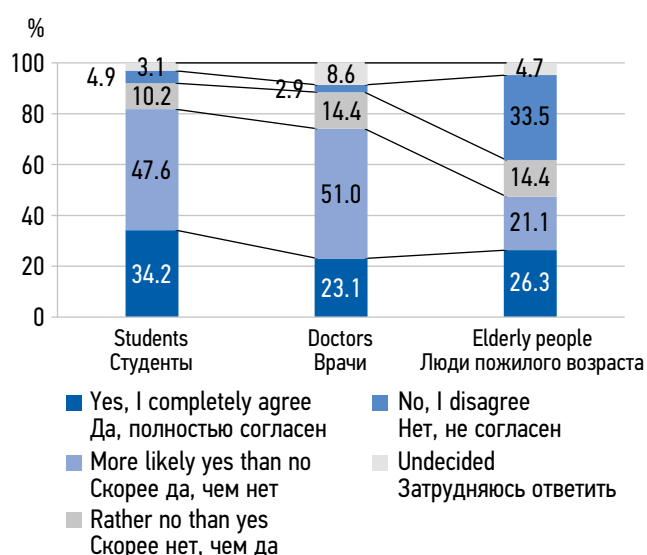
Compared with 47.4% of older respondents, the majority of the students (81.8%) and doctors (74.1%) agreed with the statement that older people have problems with paying bills (Fig. 6). Every third older respondent disagreed strongly with this statement ( $p = 0.0000$ ).

Response to the item that older people have problems acquiring new skills (Fig. 7) demonstrated the predominance



**Fig. 7.** Results of answers to the question about the difficulties of acquiring new skills among older people

**Рис. 7.** Результаты ответов на вопрос о сложностях приобретения новых умений и навыков у пожилых людей



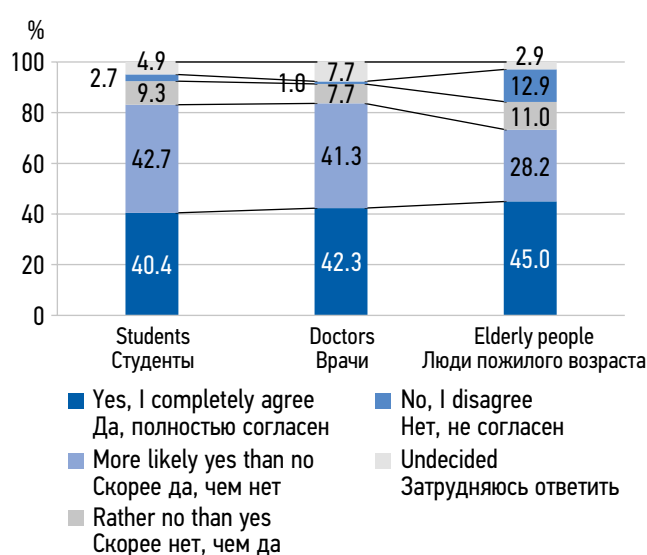
**Fig. 6.** Results of responses to the question about difficulties in paying bills among older people

**Рис. 6.** Результаты ответов на вопрос о наличии сложностей с оплатой счетов у пожилых людей

of the opinion of students and doctors about the low learning abilities of older people (77.7% and 75.0%, respectively). However, the majority of older respondents (56.5%) disagreed with this statement ( $p = 0.0000$ ).

The majority of the respondents in all subgroups agreed that older people have financial difficulties (Fig. 8). However, older participants disagreed with this statement more often than doctors and students ( $p = 0.0000$ ).

In the additional open question about other problems encountered by older people, older respondents indicated “lack of communication, entertainment, and activities” and “poor attitude of young doctors toward older people.”



**Fig. 8.** Results of responses to the question about financial difficulties in older people

**Рис. 8.** Результаты ответов на вопрос о финансовых трудностях у пожилых людей

Doctors noted difficulties in movement, cognitive dysfunction, and lack of leisure and hobby groups. Medical students indicated problems with low mobility, hearing and vision impairment, difficulty using the Internet, and suicidal thoughts.

## DISCUSSION

Ageism affects all aspects of life, including the fields of medical and social care [1, 4, 5]. The data obtained on the tendency of physicians to underestimate the capabilities of older people are generally consistent with the results of several international studies on ageism [6–8]. According to other authors, the attitude of medical workers toward older people is determined generally by the specifics of their professional communication with older patients with frailty and complications of chronic diseases.

Previously, data were published on the prevalence of stereotypical opinions about problems with memory, attention, mood, difficulties in learning and acquiring new skills, and low opportunities for employment among middle-aged and old people. In particular, employers consider teaching older workers new skills, including computer competence, too difficult [9]. Physicians and medical staff tend to refrain from discussing available medical technologies with older patients because of disinterest. This form of ageism leads to a decrease in the use of the Internet and digital platforms (Home Health) in healthcare, which reduces the availability of primary healthcare for older people [10, 11].

Moreover, sexual expression at any age is important, despite the trend toward its decrease at an older age [12]. According to the authors, the self-perceptions of older people are influenced by the stable social stereotypes about the asexuality of an older person. This stereotype led to a discussion on the lack of research on the sexual sphere in the age category [13]. A study reported the prevalence of barriers to sexual health counseling in older people, which is associated with both cultural and social factors [14]. Owing to age stigmatization and the lack of appropriate skills, most medical professionals (except urologists and gynecologists) tend to not communicate with older patients on sexual health issues. In turn, older people generally do not dare to seek medical help and often form a hidden risk group for various pathologies, including human immunodeficiency virus and other sexually transmitted infections. Thus, sexuality in older age must be recognized, and older people must be allowed to discuss their sexual health problems and experiences with a doctor.

Nowadays, healthy aging is perceived as an opportunity to maintain individual viability and quality of life in all aspects at a sufficient level and to maintain the functioning of individuals in the environment and society without stigmatization, rather than as the absence of chronic pathology. In an aging society, it is necessary to continue activities aimed at strengthening

the relationship between generations by stimulating contacts between representatives of different age groups and promoting communication and interaction.

## CONCLUSION

This research on the prevalence of stereotyped judgments about older age revealed that the opinions of older people often do not coincide with the beliefs of doctors and medical students. The attitude toward people aged >60 years is significantly better than that of students and young and middle-aged doctors. The latter may be due to their focused attention on the medical problems of this age group because of the relatively rare contact with older people who do not experience such problems. In this regard, when training medical personnel, a correct attitude toward older age and communication skills competence with different age groups are necessary.

## ADDITIONAL INFORMATION

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**Author contributions.** All authors confirm the compliance of their authorship, according to the international ICMJE criteria (all authors have made a significant contribution to the preparation of the article, read, and approved the final version before publication).

The contribution is distributed as follows: *M.S. Grigorovich* — study concept and design; *E.Yu. Vyuchugzhaniina* — collection of part of the material, analysis of the data obtained; *M.S. Grigorovich, E.Yu. Vyuchugzhaniina, A.A. Podushkina* — writing the text; *E.M. Limonova, K.D. Guloyan, A.A. Podushkina, I.A. Gvozdeva* — collection and processing of materials; *M.S. Grigorovich, E.M. Limonova, K.D. Guloyan* — literature review.

## ДОПОЛНИТЕЛЬНАЯ ИНФОРМАЦИЯ

**Источник финансирования.** Подготовка публикации не имела финансового обеспечения или спонсорской поддержки.

**Конфликт интересов.** Авторы декларируют отсутствие явных и потенциальных конфликтов интересов, связанных с публикацией настоящей статьи.

**Вклад авторов.** Все авторы подтверждают соответствие своего авторства, согласно международным критериям ICMJE (все авторы внесли существенный вклад в подготовку статьи, прочли и одобрили финальную версию перед публикацией).

Вклад авторов распределен следующим образом: *М.С. Григорович* — концепция и дизайн исследования; *Е.Ю. Вычугжанина* — сбор части материала, анализ полученных данных; *М.С. Григорович, Е.Ю. Вычугжанина, А.А. Подушкина* — написание текста; *Е.М. Лимонова, К.Д. Гуляян, А.А. Подушкина, И.А. Гвоздева* — сбор и обработка материалов; *М.С. Григорович, Е.М. Лимонова, К.Д. Гуляян* — обзор литературы.

## Appendix / Приложение

***Dear respondent!***

*We invite you to answer a series of questions regarding attitudes and beliefs about older age (> 60 years).*

Please enter your age \_\_\_\_\_. Sex \_\_\_\_\_.

Please indicate if currently you:

- are on retirement;
- are studying (year \_\_\_\_ student);
- are working (position \_\_\_\_\_).

**Please, read the age-related statements below and tick one answer that best presents your opinion.**

Do you agree with the following statements?

1. **Older people have significant memory problems.**
  - A) Yes, I completely agree
  - B) More likely yes than no
  - C) Rather no than yes
  - D) No, I disagree
  - E) Undecided
2. **Older people (60+) experience difficulties with driving a car.**
  - A) Yes, I completely agree
  - B) More likely yes than no
  - C) Rather no than yes
  - D) No, I disagree
  - E) Undecided
3. **Older people (60+) applies to medical organizations (hospitals and clinics) for any reason:**
  - A) Once a month or more often
  - B) Several times a year
  - C) Once a year or less often
4. **Older people (60+) have significant sexual problems.**
  - A) Yes, I completely agree
  - B) More likely, yes than no
  - C) Rather no than yes
  - D) No, I disagree
  - E) Undecided
5. **Older people (60+) generally experience lower mood, feelings of sadness, and depression.**
  - A) Yes, I completely agree
  - B) More likely yes than no
  - C) Rather no than yes
  - D) No, I disagree.
6. **Older people generally experience a feeling of uselessness and are a burden to others (relatives and society).**
  - A) Yes, I completely agree
  - B) More likely yes than no
  - C) Rather no than yes
  - D) No, I disagree.



**7. Most older people (60+) suffer from loneliness.**

- A) Yes, I completely agree
- B) More likely yes than no
- C) Rather no than yes
- D) No, I disagree
- E) Undecided

**8. Older people (60+) have difficulty paying bills (e.g., utility bills using terminals).**

- A) Yes, I completely agree
- B) More likely yes than no
- C) Rather no than yes
- D) No, I disagree
- E) Undecided

**9. At an older age (60+), acquiring new skills and abilities is difficult.**

- A) Yes, I completely agree
- B) More likely yes than no
- C) Rather no than yes
- D) No, I disagree
- E) Undecided

**10. Older people often experience significant financial difficulties (low pension, expensive medicines, etc.).**

- A) Yes, I completely agree
- B) More likely yes than no
- C) Rather no than yes
- D) No, I disagree
- E) Undecided

**11. Please indicate problems encountered by older people, in your opinion, which are not presented in this questionnaire:**

1) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

2) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

3) \_\_\_\_\_

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