The views on ageing of elderly females living in community

J. Čeremnych, V. Alekna
Department of Gerontology Problem, Institute of Experimental and Clinical Medicine at Vilnius University

Summary

OBJECTIVE: To assess the views on ageing in older females living in Vilnius community.

MATERIAL AND METHOD. In assessing the views on ageing, the attitudes-to-ageing self-report (AAQ) created by the WHOQOL-OLD Group was applied. Depending on age, respondents were divided into five groups: group 1 (60–64 years), group 2 (65–69 years), group 3 (70–74 years), group 4 (75–79 years), group 5 (80–85 years). The indicators compared in five age groups were three scales of AAQ and a subjective assessment of individual health. The sample comprised 389 randomly selected females aged 60–85 years living in Vilnius community, stratified according to age, the average age being $70.05 \pm 6.5$ years.

RESULTS. Data were collected using the Lithuanian version of AAQ, a sociodemographic and additional health-related questionnaire. Our study, using subjective rating scales and content analysis of responses, has confirmed a relative stability of views towards ageing in older female groups ranging within 60–79 years.

CONCLUSION. The new attitudes-to-ageing questionnaire is a sensitive self-report instrument to investigate adaptation to the ageing process.

Keywords: female, ageing, health

Introduction

This paper describes data on older females’ views on aging obtained with the help of a special Attitudes-to-Ageing Questionnaire (AAQ) developed by World Health Organization Quality of Life Group (WHOQOL Group). “Ageism” (the term was introduced by Butler in 1969) as the dominating stereotype of ageing reflects a negative attitude towards ageing and gathered mostly the opinion of younger people on older people [1]. According to scientific literature, older people’s own attitudes to different aspects of their lives are rather positive than negative and cover different aspects of development and adaptation in older ages including ways of coping, adaptive strategies, evolution of the concept of self, selfcare modes, etc. In older people’s opinion, ageing means not only losses; it has a lot of positive features, including growth, development, possibility to do something. A review of the literature relevant to attitudes to ageing showed a few questionnaires to be used in studies of older adults [3]. The Philadelphia Geriatric Morale Scale, often used to measure the attitu-
des to ageing, is not adequate as a general scale [2]. According to O’Hanlon and Coleman [3], the ageing scale is not specifically developed to collect the experiences and attitudes of older people in relation to the ageing process. Evidence is lacking of the views to ageing and its leading changes of functions by older people themselves.

No special scale exists to measure the attitudes to ageing of older people themselves, and this gap was covered by the development of older adults’ attitudes to ageing (AAQ), created under the auspices of the World Health Organization Quality of Life Group during WHOQOL–OLD project. The WHOQOL-Old Group comprises a coordinating group headed by Professor M. Power, and collaborating investigators in scientific centres in UK, Spain, Israel, Hungary, Denmark, China, Australia, Norway, France, Czech Republic, U.S.A., Japan, Norway, Sweden, Canada, Lithuania, Brazil, Hong Kong, Switzerland, Turkey, Uruguay, Germany.

The new AAQ questionnaire is based on the analysis of gerontological knowledge and on the modern and classical psychometric analytical methods.

Differently from all other questionnaires, AAQ is based on older people opinions as experts, on their experience of ageing.

The AAQ was developed in years 2002–2004 following the WHOQOL Group methodology [4–6], in which a simultaneous approach to instrument development is employed [7]. WHOQOL methodology includes an intense qualitative phase of cross-cultural focus groups; the use of the summary output from these focus groups to identify common themes and issues either absent from or poorly covered in existing measures related to attitudes to ageing. These themes and issues were used to feed a Delphi exercise which included 20 scientific centres, and then to generate a set of pilot items, 44 in total, for testing with older adults. The items were then translated into Lithuanian and other local languages and back-translated into English by independent bilingual speakers. The back-translations were reviewed by the coordinating centre and any anomalies reviewed with the local centres, incorporating translation issues into a local language. AAQ was used for a pilot testing of 1356 participants from 15 scientific centres and field testing of 5566 participants from 20 centres worldwide. The AAQ is an attitudes-to-ageing questionnaire measuring physical change, psychological growth, psychosocial loss in older individuals, providing researchers with a unique scale to measure how older adults age under different economic and social conditions.

Using a combination of classical and modern psychometric methods, the final version of the questionnaire was produced for trans-cultural use. According to the WHOQOL-OLD Group methodology, descriptive data analysis was first used to examine item response frequency distributions, missing values, item and subscale correlations and internal reliability, exploratory and confirmatory factors. The scale structure was explored using an Item Response Theory (IRT) – the Rasch model, the RUMM program and the WinMira program. Item equivalence across different cultural, gender and age groups was tested. Exploratory Factor Analyses (EFA), Confirmatory Factor Analysis (CFA) in the Structural Equation Modelling were carried out. Two broad dimensions were identified: Physical and Psychological, with the latter split into two sub-dimensions: postivity / growth and negativity / loss / deficiency. IRT analyses, RUMM and WinMira analyses indicated good fits for the three subscale analyses, a good scale fit and internal reliability. The three-scale solution generally showed better Cronbach alpha and scale-fit statistics. The net effect of the RUMM and the WINMIRA analyses was the production of three 8-item scales. The actual items for the three scales are presented in WHOQOL-OLD Group paper on AAQ [8]. The PSIs (the IRT equivalent of Cronbach alpha analyses) for each scale were all good and were 0.807, 0.809, and 0.738, respectively.

The Attitudes to Ageing Questionnaire (AAQ) is a 24-item questionnaire consisting of 3 scales: psychological growth, psychosocial loss, and physical change.

This paper examines the attitudes to ageing and a subjective ageing experience by older women of different age living in Vilnius community.

Materials and Methods
A survey of older female living in Vilnius community was undertaken in 2005–2006 and comprised a random sample of 389 respondents stratified according to age.

Developed and validated for use in transcultural research during WHOQOL–OLD project Lithuanian version of the original Attitudes to Ageing questionnaire (AAQ) was used. Basic socio-demographic information was also included. Social participation describes how actively a person takes part in the activities of formal and informal groups as well as in other activities in society.

The data on items of different scales were expressed as the mean and standard deviation. Because of the non-normal distribution of most of the data, the Mann–Whitney test was used when comparing item scores among the
groups. *P* values ≤ 0.05 were considered to be statistically significant. Analyses were performed using Statistical Package for Social Science (SPSS 12.0) for Windows.

Ethical approval was given by the Lithuanian Bioethics Committee. Written informed consent was obtained from all subjects who participated in the study.

**Results**

We used a stratified sample of 389 females aged 60 years and older, living in Vilnius community (the mean age 70.05 ± 6.50 years). The main socio-demographic data are presented in Table 1. Forty percent of the respondents evaluated themselves as “healthy”, however, a considerable part (about 60%) considered themselves “unhealthy”.

The mean AAQ items scores for 3 scales are presented in Figs. 1, 2, 3. The most diverse scoring according to age was found in ratings of items of the first scale (Fig. 1). The mean scores were higher for psychosocial loss items: “difficulties to make new friends” (statistically significant in group 2 and group 5 than in younger groups), “old age as a time of loneliness” (statistically significant beginning from 70 years and older), “depressing time” (statistically significant beginning from 80 years and older). The items: “not involved in society”, “difficult to talk about feelings”, “losing physical independence” had the lowest mean scores in all age groups. Content analysis of items showed a relative similarity of views on the item “old age is mainly a time of loss” in all age groups. The importance of different types of social ties varied across the age groups; more significant losses were indicated by those aged 65–69 years and older.

Figure 2 reports data on the scores of attitudes to physical changes and provides a comparison of views on health topics by females of different ages. Their attitude to the item “a lot of energy” related to the dynamic vitality was most diverse among different age groups.

**Table 1.** The main socio-demographic characteristics of the female age groups

<table>
<thead>
<tr>
<th></th>
<th>60–64 years (n = 115)</th>
<th>65–69 years (n = 96)</th>
<th>70–74 years (n = 82)</th>
<th>75–79 years (n = 66)</th>
<th>80–84 years (n = 30)</th>
</tr>
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<tr>
<td><strong>Mean age</strong></td>
<td>62±0.12</td>
<td>67.5±0.15</td>
<td>72.4±0.16</td>
<td>77.7±0.13</td>
<td>82.5±0.21</td>
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<td><strong>Marital status</strong></td>
<td></td>
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<td></td>
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<tr>
<td>single</td>
<td>3 (2.6)</td>
<td>4 (4.2)</td>
<td>8 (9.8)</td>
<td>6 (9.1)</td>
<td>3 (10)</td>
</tr>
<tr>
<td>married</td>
<td>76 (66.1)</td>
<td>67 (69.8)</td>
<td>40 (48.8)</td>
<td>21 (31.8)</td>
<td>5 (16.7)</td>
</tr>
<tr>
<td>partnered</td>
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<td>1 (1.0)</td>
<td>1 (1.2)</td>
<td>2 (3.0)</td>
<td>1 (3.3)</td>
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<td>separated</td>
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<td>10 (12.2)</td>
<td>6 (9.1)</td>
<td>1 (3.3)</td>
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<tr>
<td>widowed</td>
<td>22 (19.1)</td>
<td>15 (15.6)</td>
<td>23 (28.0)</td>
<td>30 (45.5)</td>
<td>20 (66.7)</td>
</tr>
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<td></td>
<td></td>
<td>1 (1.5)</td>
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<td><strong>Education</strong></td>
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<td></td>
<td></td>
<td></td>
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<td>primary school</td>
<td>9 (7.8)</td>
<td>6 (6.3)</td>
<td>11 (13.4)</td>
<td>14 (21.3)</td>
<td>9 (30.0)</td>
</tr>
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<td>secondary school</td>
<td>18 (15.7)</td>
<td>16 (16.7)</td>
<td>12 (14.6)</td>
<td>8 (12.1)</td>
<td>6 (20.0)</td>
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<td>trade certificate</td>
<td>33 (28.7)</td>
<td>36 (37.5)</td>
<td>17 (20.8)</td>
<td>16 (24.2)</td>
<td>8 (26.7)</td>
</tr>
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<td>university degree</td>
<td>54 (47.0)</td>
<td>38 (39.5)</td>
<td>40 (48.8)</td>
<td>27 (40.9)</td>
<td>7 (23.3)</td>
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<td></td>
<td>2 (2.4)</td>
<td>1 (1.5)</td>
<td></td>
</tr>
<tr>
<td><strong>Living situation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>living at home (supported by family)</td>
<td>85 (73.9)</td>
<td>72 (75.0)</td>
<td>42 (51.2)</td>
<td>37 (56.1)</td>
<td>14 (46.7)</td>
</tr>
<tr>
<td>living with family (not in own home)</td>
<td>6 (5.2)</td>
<td>3 (3.1)</td>
<td>4 (4.9)</td>
<td>1 (1.5)</td>
<td>2 (6.7)</td>
</tr>
<tr>
<td>living at home (unsupported)</td>
<td>18 (15.7)</td>
<td>17 (17.7)</td>
<td>34 (41.5)</td>
<td>24 (36.4)</td>
<td>12 (40.0)</td>
</tr>
<tr>
<td>no data</td>
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<td>4 (4.2)</td>
<td>2 (2.4)</td>
<td>4 (6.0)</td>
<td>2 (6.7)</td>
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<td></td>
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<tr>
<td>professional</td>
<td>36 (31.3)</td>
<td>13 (13.5)</td>
<td>3 (3.7)</td>
<td>1 (1.5)</td>
<td>–</td>
</tr>
<tr>
<td>worker</td>
<td>12 (10.4)</td>
<td>5 (5.2)</td>
<td>2 (2.4)</td>
<td>1 (1.5)</td>
<td>1 (3.3)</td>
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<tr>
<td>retired</td>
<td>61 (53.1)</td>
<td>73 (76.1)</td>
<td>71 (86.6)</td>
<td>64 (97.0)</td>
<td>25 (83.3)</td>
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<td>5 (5.2)</td>
<td>6 (7.3)</td>
<td>–</td>
<td>4 (13.4)</td>
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<tr>
<td><strong>Welfare</strong></td>
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<td></td>
<td></td>
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<tr>
<td>well above average</td>
<td>6 (5.2)</td>
<td>4 (4.2)</td>
<td>3 (3.7)</td>
<td>9 (13.6)</td>
<td>1 (3.3)</td>
</tr>
<tr>
<td>slightly above average</td>
<td>5 (4.3)</td>
<td>8 (8.3)</td>
<td>7 (8.5)</td>
<td>4 (6.1)</td>
<td>–</td>
</tr>
<tr>
<td>average</td>
<td>67 (57.3)</td>
<td>46 (47.8)</td>
<td>43 (52.4)</td>
<td>44 (66.7)</td>
<td>19 (63.3)</td>
</tr>
<tr>
<td>slightly below average</td>
<td>29 (25.2)</td>
<td>23 (24.0)</td>
<td>20 (24.4)</td>
<td>5 (7.6)</td>
<td>5 (16.7)</td>
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<tr>
<td>well below average</td>
<td>6 (5.2)</td>
<td>11 (11.5)</td>
<td>9 (11.0)</td>
<td>3 (4.5)</td>
<td>5 (16.7)</td>
</tr>
<tr>
<td>no data</td>
<td>2 (1.8)</td>
<td>4 (4.2)</td>
<td></td>
<td>1 (1.5)</td>
<td>–</td>
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<td><strong>Activities in community</strong></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>yes</td>
<td>12 (10.4)</td>
<td>15 (15.6)</td>
<td>8 (9.8)</td>
<td>5 (7.6)</td>
<td>8 (26.7)</td>
</tr>
<tr>
<td>no</td>
<td>80 (69.6)</td>
<td>65 (67.7)</td>
<td>60 (73.2)</td>
<td>50 (74.2)</td>
<td>22 (73.3)</td>
</tr>
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<td>16 (16.7)</td>
<td>14 (17.0)</td>
<td>11 (18.2)</td>
<td>–</td>
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</tbody>
</table>
The views on ageing of elderly females living in community

The analysis of views on physical changes and health indices revealed a relatively stable set of attitudes towards ageing among 60–79-year-old females (Fig. 2). A statistically significant decline of the score of all items in age group older than 80 years was less expressed in scoring the item “identity not defined by age”.

In the oldest group (80–85 years) females are most concerned about becoming less healthy, difficulties or burden in growing older, the lack of energy below that expected for their age, the health being not so good as expected in this age in spite of efforts to be more fit and active by exercising, expecting a healthy old age, yet persons “still don’t feel old” (Scale 2. Physical change). The data presented in Fig. 2 show that scores of the scale physical change are similar for age groups I (60–64 years), II (65–69 years), III (70–74 years) and IV (75–79 years) and differ from V group. In the later life group V (80–85 years) health did not agree with the personal feeling “I don’t feel old”.

The lowest mean sumscore was found in the age group 80 and over; it may be attributed to a worse health state of this group and the lowest scores of the items “energy”, “growing older”, “feeling old”, “decreased ability doing what I want”. Analysis of data showed that physical loss scale scores were strongly positively related to age. Similar scores of all items were found in age groups 60–64, 65–69, 70–74, 75–79, except the item “don’t feel old” in 75–79-year-old females.

The Mann–Whitney test showed that differences in scoring between the oldest female group (80+) and other respondents were statistically significant for most items.

The mean scores of the third scale psychological growth were more stable (Fig. 3). More pronounced changes were
found in subjective evaluation of three items: “diminished ability to cope”, “less pleasant things to do”, “less accepting myself”. Mean scores of items in age groups I–IV were stable with low intergroup differences. The mean score of items in the group aged 85 year and older indicated lesser abilities of accessing positive experience and probably reflected health problems.

The Mann–Whitney test showed that differences of scores among the age groups were highly significant (P < 0.001) for those with the highest vs the lowest “index”.

Our study using subjective rating scales and content analysis of responses confirmed a relative stability of views on ageing in older female groups within the age range 60–80 years.

Figure 3. Scale 3: Psychological growth

Discussion

The present paper focuses on the aspects that older people consider when answering about their personal views on aging. An individual process of weighting different aspects of attitudes toward aging resulted in different evaluation of items and intergroup differences. The new AAQ, specially created to collect the experiences of older people, was applied for a cohort of older female living in Vilnius community.

The first scale focuses on psychosocial losses: negative experiences involving psychological and social loss are explored. By means of this scale participants considered the extent to which their social roles changed and their attitude towards these changes, including losses.

Items of scale 2 are related to the experience of ageing, health and exercise. The scale includes the aspects that go beyond the only physical dimensions of health. Scale 3 focuses on positive items reflecting positive gains in relation to self. By means of this scale participants assessed the extent to which they had adapted to the situation, including the coping dimension and simply the way they felt.

Our data on psychosocial losses showed that subjectively the importance of social ties varied across age group; ties with friends and being included in society assumed greater significance. Data demonstrated a relative stability and similarity in the mean scores of items of the first scale for those younger than 80 years across the age of 60–79 years.

Data on psychosocial losses are in agreement with findings that social networks have found to be important for the well-being, health and survival of older people [9, 10]. Social ties and networks are significant predictors of survival [11]. According to a number of aging and psychosocial studies in old age, there is a predominant pattern of stability in personality with increasing age [9, 12, 13]. These studies revealed great changes accompanying aging, including attitudes to existing illnesses, wellbeing dimension and health behaviour in the general hypothesis that these changes are related to different aspects of a survival or decline of functions. A factor that appears important may be significant in a life-time perspective; for example, the coping dimension is more important for participants with less-than-good health.

According to scientific literature, studies on attitudes to ageing and healthy aging were usually not specifically designed; they were parts of wider studies on aging, and their results were limited, as unificated assessment methods were absent [14].
Analysis of the mean ratings of the items revealed a stable set of attitudes among 60–79-year-old females. According to theoretical position, this fact is well known: scientific literature has confirmed a relative stability of the self until the period of frailty. Physical health has proved to be a very strong indicator of survival [10].

It is likely that attitudes to ageing as well as subjective ageing experience shift in significance over the life cycle [15–17]. This shift is much discussed in the literature, but not well understood because of a lack of comparable measurement by standard questionnaires and of methodological homogeneity.

The detected changes of ratings of items among the age groups and decrements in AAQ scores could have a predictive value and contribute to a comprehensive understanding of the aging process. This new AAQ scale will be useful for future to investigate whether the factors describing social networks and social status, and factors describing modes of adaptation and coping have any influence on the processes of healthy ageing and longevity.

According to our data, maintaining close relationships with other members of community and continuing involvement in the activities that have a personal value are results of personal active work, including adaptive strategies and a successful coping with life. Higher scores on psychological growth scale (participation in meaningful activities, planning of relationship building) are under investigation as ways to successful aging together with successful cope with various life stages and confrontation of age-specific issues and obstacles [9, 18, 19].

Our research indicates that older female view older age as a time when they can take steps promoting higher levels of functioning. The data showed a similar need and potential to adapt to aging in a wide range of domains, including physical and psychosocial. The ability to successfully adapt to the physical limitations associated with ageing influenced the scores of all three scales of the AAQ. The close interrelationship among the three scales of AAQ means that changes in one area may negatively affect other areas; thus, poor physical state is usually a deterrent to effective social functioning. Losses in one area may be substituted for or deficits counterbalanced by improvements in another, so that the total AAQ scores are less negatively affected.

Emphasis was laid on the need for research into the relationship between successful ageing and attitudes to aging. It is necessary to stress that functional autonomy is a core condition of successful ageing; the age- and time-related changes in functional autonomy correlated with the psychophysical resources [15, 21].

Our findings are important in confirming the AAQ to be a well validated measure for screening old people and providing comparable information on views to ageing. The items selected for the AAQ demonstrate good performance for valid comparable measures across different populations. The AAQ focused on three different aspects of ageing: psychosocial losses relevant to older adults in which old age is seen primarily as a negative experience; items related primarily to health, exercise and the experience of ageing itself; positive items reflecting positive gains.

According to the WHOQOL-OLD Group [8], the AAQ will permit the assessment of the impact of service provision and of different health and social care structures on personal attitudes, especially in the identification of the possible consequences of the QOL policies of older adults and a clearer understanding of investment areas to achieve best gains in the QOL. A related issue is the estimation of the impact of physical and psychological interventions in a range of different conditions related to old age. The unique cross-cultural approach to the development of the measure means that comparisons can be made between different cultures. The exacting standards of instrument development used for the AAQ mean that such comparisons run less risk of cultural bias and provide cross-cultural validity for the assessment of attitudes to ageing across the older people. As the European Community becomes increasingly integrated, cross-cultural studies are an issue of growing importance. The use of cross-culturally developed measures is of generalizable cross-culturally validity and ensures that the measures have the same value in different cultures [22, 23].

The AAQ will help to learn more about successful aging and to inform and transform community’s thinking about growing old, to assess the vital and vigorous life in later years, to evaluate the onset or progression of decline, to explore the concept of successful aging, or “aging well”, which means the extension of the physical, mental and emotional health period in an individual life span.

**Conclusions**

The attitudes to ageing questionnaire is a sensitive self-report instrument to investigate adaptation to the ageing process.

Our study using subjective rating scales and content analysis of responses have confirmed a relative stability
of views on ageing in older female groups within the age group of 60–79 years.

References


22. Hawthorne G, Davidson N, Quinn K et al. Issues in conducting cross-cultural research: implementation of an agreed international protocol designed by the WHOQOL Group for the conduct of fours groups eliciting the quality of life of older adults. Qual Life Res. 2006.


Received 9 September, 2006
accepted 27 November, 2006
GYVENANČIŲ VILNIAUS BENDRUOMENĖJE VYRESNIO AMŽIAUS MOTERŲ POŽIŪRIŲ Į SENĖJIMĄ TYRIMAS

J. Čeremnych, V. Alekna

Vilniaus universiteto Eksperimentinės ir klinikinės medicinos instituto Gerontologijos problemų skyrius

Santrauka

Darbo tikslas – ištirti ir įvertinti vyresnio amžiaus moterų, gyvenančių Vilniaus miesto bendruomenėje požiūrį į senėjimą.


Rezultatai. Klausimyno skalių indikatoriai buvo analizuoti ir lyginti visuose amžiaus grupėse. Tyrimų duomenimis, vyresnio amžiaus moterų požiūriai į senėjimą priklauso nuo amžiaus; taip pat nustatytas santykinis požiūrių stabilumas iki 79 metų amžiaus.

Išvados. Naujas požiūriui į senėjimą tirti skirtas klausimynas AAQ leidžia tirti požiūrių dinamiką senstant bei išryškinti amžiaus bei ligų sukeltus pokyčius.

Raktažodžiai:

pagyvenę žmonės, senėjimas, sveikata