

ORIGINAL PAPER

EVALUATION OF ATTITUDES TOWARDS OLD AGE AMONG OLDER ADULTS IN AN INSTITUTIONAL FACILITY

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Abstract

Aim: The aim of the research was to determine attitudes towards old age in older adults living in institutional facilities, and to compare them with the population standard. A further aim was to determine differences in attitudes towards old age by gender, age, level of education, and self-sufficiency in the older adults surveyed. **Design:** A cross-sectional study. **Methods:** A research sample consisting of 121 elderly people living in retirement homes. Data were collected using a Czech version of the AAQ questionnaire (Attitudes to Ageing Questionnaire), and Barthel's test of Activities of daily living was used to assess levels of self-sufficiency. **Results:** Older adults awarded the highest score (most positive attitude) in the domain of psychosocial losses. In comparison with the population standard, older adults rated the domain of physical change ($p < 0.001$) and psychological growth ($p < 0.001$) negatively. The domain of psychosocial losses was assessed more positively by men ($p < 0.001$) and the elderly with moderate dependence ($p < 0.001$); the domain of physical changes was also positively assessed by men ($p = 0.001$), and older adults with university education ($p = 0.002$); the domain of psychological growth was rated more positively by adults over 85 years ($p = 0.001$), and the elderly with basic education ($p = 0.040$). **Conclusion:** Determining older adults' attitudes towards ageing in institutional care may help in the preparation of individual care plans aimed at supporting clients in areas that have been evaluated negatively.

Keywords: institutional care, quality of life, attitudes, old age, ageing, self-sufficiency.

Introduction

Ageing is often characterized as predominantly a series of losses. There are many myths and misconceptions about the process of ageing which are often regarded as fact. The ageing process is evaluated more negatively by younger people than the elderly themselves (Laidlaw et al., 2007). Attitudes to our own ageing and old age are different for each individual, and vary over time. Due to different life experiences, and other personal values, each individual adapts differently to their own old age (Vágnerová, 2007; Malíková, 2011). The period of ageing and old age can be, for many people, a positive and fulfilling period of life in which they accept their age serenely with sufficient adaptability. They do not deny the changes that their age, functional ability, and health condition require. They accept the situation with calmness and peace of mind (Malíková, 2011).

The acceptance of the fact of ageing is related to acceptance of ourselves. A person who is able to look honestly at themselves in the course of life has less difficulty accepting their own ageing and old age (Říčan, 2005). Negative life events can result in mental vulnerability in later life, affecting our attitudes to old age (Lucas-Carrasco et al., 2013). Attitudes play an important role in our psyche, are related to the need to find meaning in events, and to our understanding of the world around us. They are part of our personality, and predetermine our own understanding, knowledge, thinking and feeling (Kosek, 2004). The transfer of adults into institutional care represents a heavy burden for them, mainly due to the loss of familiar territory, background, and the sense of identity associated with them; it is also confirmation of the loss of autonomy and self-sufficiency, and a sign of the approaching end of life. Living in an institutional facility may cause negatively perceived feelings of uselessness, futility, powerlessness and dependence (Vágnerová, 2007), which may have a negative impact on the assessment of attitudes towards our own age.

The first questionnaire to evaluate attitudes towards the elderly was created in 1961 by Kogan (Kogan's

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Attitude towards Old People Scale – KAOP). The scale was created to evaluate attitudes to old age and ageing from the perspective of the young (Kogan, 1961). In 1975, Lawton developed a scale suitable for the evaluation of attitudes of the elderly themselves towards old age and ageing. It was a subscale of the PGMS (Philadelphia Geriatric Morale Scale), containing only five items, and was not suitable for a comprehensive survey of attitudes (Lawton, 1975). In 2007, a group from the WHOQOL (Laidlaw et al., 2007), developed a separate questionnaire for assessment of older people's attitudes towards their own old age called the AAQ (the Attitudes to Ageing Questionnaire). The questionnaire was based on focus groups and the Delphi method, involving participants from 15 centers around the world, including the Czech Republic. After evaluation of its psychometric properties, the questionnaire was recommended for use in various cultures (Laidlaw et al., 2007). Later, it was also validated in Brazilian (Chachamovich et al., 2008a) and French (Marquet et al., 2016) versions. Research showed a correlation between older adults' negative attitudes towards old age, and increasing depressivity (Chachamovich et al., 2008b), and a correlation between older adults' attitudes towards ageing and evaluation of quality of life (Low Molzahn, Schopflocher, 2013; Top, Eris, Kabalcioğlu, 2012). A correlation was also found between negative attitudes to ageing in older adults with comorbidities, and quality of life. In older adults with positive attitudes towards old age, no correlation was found between quality of life and the presence of comorbidities (Yamada, Merz, Kisvetrova, 2015). In institutional care, reminiscence therapy was found to have a positive impact on self-esteem, life satisfaction, and attitudes towards old age (Lin, Dai, Hwang, 2003).

Most research focuses on the evaluation of attitudes towards old age among elderly people living in a domestic environment (Chachamovich et al., 2008b; Low, Molzahn, Schopflocher, 2013; Yamada, Merz, Kisvetrova, 2015). Several Czech studies have evaluated differences in older adults' attitudes towards old age and ageing according to their place of residence (Bužgová, Klechová, 2011), and in connection with the use of reminiscence therapy in follow-up care (Siverová, Bužgová, 2014). Determining older adults' attitudes to old age in institutional care may help professionals to prepare individual care plans aimed at supporting clients in areas that have been evaluated negatively.

Aim

The aim of the research was to determine attitudes towards old age among the elderly living in institutional facilities, and to compare them with the population standard. A further aim was to determine differences in the evaluation of attitudes towards old age in older adults according to gender, age, level of education and self-sufficiency.

Methods

Design

A cross-sectional study.

Sample

The research sample consisted of 121 older adults living in the Loučka Home for the elderly, and the Burešov Home for the elderly, in Zlín. The respondents were required to meet the following inclusion criteria: age ≥ 65 years, a cognitive function score according to MMSE test results (Mini Mental State Examination) in the range of 24 to 30 points, and consent to inclusion in the study.

First, consent to proceed with the research was requested from both directors of the retirement homes. The selection of respondents was conducted at both facilities in collaboration with the heads of the health sections, who recommended older adults most likely to meet the inclusion criteria. After evaluation by the MMSE test, respondents (if they met the specified criteria), were asked to fill in the AAQ by an authorized interviewer. Completed questionnaires were returned to the interviewer. All clients recommended met the selection criteria.

To compare the results with the population standard, a representative sample of the 60+ population of Prague was used. The respondents ($n = 325$) were selected by multistage random quota sampling so that the representation of men and women in individual age groups corresponded to their representation in the basic sample of the Prague population (Dragomirecká, Prajsová, 2009).

Data collection

For data collection, a quantitative research method using a Czech version of a standardized AAQ (Dragomirecká, Prajsová, 2009) was applied. The questionnaire consists of 24 items grouped into the following three domains (each domain containing eight items): The domain of psychosocial losses, including items related to feelings of loneliness, social isolation, withdrawal, and gradual loss of physical self-sufficiency; the domain of physical changes, focusing on physical health, fitness, exercise, and general perceptions of health; and the

domain of psychological growth, concerning mainly positive self-perception, and positive perceptions of the outside world. The domain includes experience in a positive sense, which might also be defined as “wisdom” or “maturity”.

The range of the scale for each item of the AAQ is 1–5, and for each domain, 8–40. A positive attitude means that the respondent awards low scores to negative statements about old age, and awards higher scores to positive statements.

To evaluate the respondents' general functional abilities, the Barthel Index of Activities of Daily Living (Mahoney, Barthel, 1965) was used. The test contains ten items that relate to activities usually performed on a daily basis – feeding, dressing, bathing, grooming, bladder, bowels, toilet use, transfers (bed to chair and back), mobility (on level surfaces), and stairs. Each of these items is evaluated by 0, 5, 10 or 15 points. Dependence is divided into four stages: first stage – high dependence (0–40 points); second stage – moderate dependence (45–60 points); third stage – slight dependence (65–95 points); and fourth stage – independence (100 points).

To assess cognitive function, the MMSE was used. It is a tool that can be used to systematically and thoroughly assess mental status. It is an 11-question measure that tests five areas of cognitive function: orientation, registration, attention and calculation, recall, and language. The maximum score is 30. A score of 23 or lower is indicative of cognitive impairment. The MMSE takes only five-ten minutes to administer, and is therefore practical to use routinely and repeatedly (Folstein, Folstein, McHugh, 1975).

In addition, demographic data were evaluated: age, gender, and education.

Data analysis

Data obtained using the AAQ were evaluated according to the Users' guide for the Czech version (Dragomirecká, Prajsová, 2009). Negatively worded items were reformulated. A higher average of individual items and domains indicates a more positive attitude.

Data were analyzed using Stata version 13. For a basic description of the sample, descriptive statistics (arithmetic mean, standard deviation, frequency tables with absolute and relative numbers) were used. For hypotheses testing, the Kruskal-Wallis Test was used. Statistical tests were evaluated at a significance level of 5%.

Results

From the total of 121 older adults, 80 (66%) were women and 41 (34%) were men. Most respondents were in the age group 75–84 years (46; 38%), followed by the age group 85 and over (40; 33%), and the smallest group of respondents were in the 65–74 year age group (35; 29%). Fourteen (12%) respondents had received primary education, 59 (49%) had completed a vocational course, 35 (29%) had completed secondary education with graduation exam, and 13 (11%) had received university education. The ADL test results showed high dependence in 16 (13%) respondents, moderate dependence in 52 (43%) respondents, slight dependence in 48 (40%) respondents, and independence in only five (4%) respondents.

The evaluation of attitudes towards old age in individual items and domains compared to the population standard

Older adults living in a retirement home perceived old age most positively in the domain of psychosocial losses (25.3), while the domain of physical changes (19.9) was regarded most negatively. No domain was awarded the maximum value of 40; the lowest value of eight was given in the area of psychosocial losses.

When comparing the results of the research sample with the population standard, a statistically significant difference in the domains of physical changes and psychological growth was found. Older adults from retirement homes evaluated these areas significantly more negatively compared with the population standard (Table 1).

The results of selected individual items and their comparison with the population standard are shown in Table 1. In the domain of psychosocial losses, most older adults agreed with the item “As I grow older, I become physically less self-sufficient”. Conversely, fewest older adults agreed with the view of old age as a time of depression, difficulty expressing emotions, and exclusion of older people from society. Nevertheless, the older adults sampled evaluated these items more negatively than the population standard.

In the domain of physical changes, older adults agreed most often with the item “Exercise is important at any age”, although only 24% reported that they actually exercised actively. On the other hand, few older adults (< 5%) agreed with the statement “Old age is easier for me than I thought”, and “I do not feel old”.

Table 1 Comparison of attitudes to old age in selected items and domains of AAQ in older adults from HfE (n = 121) and the population standard (n = 325)

Domains of AAQ	Older adults from HfE		Standard ¹	
	Agreement ² n (%)	mean ³ ± SD	mean ² ± SD	p
Domain: Psychosocial losses		25.3 ± 6.5	25.6 ± 5.8	0.695
Old age is a time of loneliness	31 (26)	2.5 ± 1.0	3.0 ± 1.0	< 0.001
Old age is a time of depression	25 (21)	2.6 ± 1.0	3.1 ± 1.0	0.019
As I get older, I become physically less self-sufficient.	75 (62)	3.9 ± 1.1	2.7 ± 1.2	< 0.001
Domain: Physical changes		19.9 ± 4.8	23.8 ± 5.5	< 0.001
Exercise is important at any age.	82 (68)	2.5 ± 1.0	3.9 ± 0.8	< 0.001
I do not feel old.	2 (2)	2.3 ± 1.1	2.9 ± 1.1	< 0.001
I have more energy than I would expect, considering my age.	21 (17)	3.9 ± 1.1	2.9 ± 1.1	< 0.001
Domain: Psychological growth		24.1 ± 4.2	26.2 ± 4.1	< 0.001
Living to be old is a privilege.	39 (32)	2.5 ± 1.3	3.3 ± 0.9	< 0.001
Wisdom comes with age.	15 (12)	2.1 ± 1.1	3.4 ± 0.9	< 0.001
As I get older, I am more tolerant towards myself.	75 (62)	3.4 ± 1.2	2.9 ± 0.9	0.049

¹Standard – the population standard according to Dragomirecká and Prajsová (2009); ²Agreement – a number of respondents n (%) who answered the item with I agree or I strongly agree; ³the range of the scale in individual items is 1–5, in individual domains 8–40, a higher number indicates a more positive, optimistic attitude in the item/domain; HfE – Home for Elderly; SD – standard deviation; p – statistical significance

In the domain of psychological growth, older adults positively perceived their greater tolerance towards themselves, the sense of meaning in their own life, and their being a role model for young people. Fewest older adults agreed with the statement “Wisdom comes with age” in this domain. This item was perceived more negatively by the older adults surveyed than by those in the population standard.

Evaluation of the difference in older adults' attitudes towards old age regarding gender

Men were found to have more positive attitudes towards old age in all domains of the AAQ compared to women. A statistically significant difference in attitudes towards old age was found in only two domains: psychosocial losses and physical changes (Table 2).

Table 2 The comparison of older adults' attitudes towards old age regarding gender

Domains of AAQ	Men (n = 41)	Women (n = 80)	p
	mean ± SD	mean ± SD	
Psychosocial losses	29.5 ± 5.7	23.2 ± 5.8	< 0.001
Physical changes	22.0 ± 5.3	18.8 ± 4.3	0.001
Psychological growth	24.9 ± 4.1	23.7 ± 4.2	0.088

SD – standard deviation; p – statistical significance

With regard to age, older adults' attitudes to old age revealed statistically significant differences only in the domain of psychological growth (p = 0.001). More positive attitudes towards old age were found in the elderly in the 85 and over age group. Surprisingly, the group also gave higher scores in the domain of psychosocial losses, and physical changes, in particular when compared with the 65–74 years age group (Table 3).

Evaluation of the difference in older adults' attitudes towards old age regarding education

A statistically significant difference in attitudes towards old age according to level of education was established in the domains of physical changes (p = 0.002), and psychological growth (p = 0.040), see Table 4.

Table 3 The comparison of older adults' attitudes towards old age regarding age

Domains of AAQ	Age groups			p
	65–74 yrs (n = 35)	75–84 yrs (n = 46)	85 and over (n = 40)	
	mean ± SD	mean ± SD	mean ± SD	
Psychosocial losses	23.3 ± 6.8	26.2 ± 6.8	26.1 ± 5.6	0.065
Physical changes	19.0 ± 3.5	19.1 ± 4.2	21.5 ± 6.1	0.184
Psychological growth	23.1 ± 4.0	23.1 ± 3.2	26.0 ± 4.6	0.001

SD – standard deviation; p – statistical significance

Evaluation of the difference in older adults' attitudes towards old age regarding levels of self-sufficiency

When evaluating the difference in older adults' attitudes towards old age according to levels of self-sufficiency, the categories of slight dependence, and independence were merged because of the small number of respondents in the category of

independence. No statistically significant differences were found in the domains of physical changes, and psychosocial growth. A significant difference was established only in the domain of psychosocial losses ($p < 0.001$). Older adults who were totally dependent on another's assistance rated items in this domain least positively (Table 5).

Table 4 The comparison of older adults' attitudes towards old age regarding education

Domains of AAQ	Primary (n = 14) mean ± SD	Vocational course (n = 59) mean ± SD	Secondary (n = 35) mean ± SD	University (n = 13) mean ± SD	p
Psychosocial losses	25.6 ± 6.3	23.9 ± 6.6	26.4 ± 6.1	28.9 ± 5.8	0.089
Physical changes	20.1 ± 5.0	18.3 ± 3.7	21.4 ± 5.6	22.6 ± 5.2	0.002
Psychological growth	25.7 ± 4.6	23.2 ± 3.8	24.5 ± 4.3	25.1 ± 4.5	0.040

SD – standard deviation; p – statistical significance

Table 5 The comparison of older adults' attitudes towards old age regarding level of self-sufficiency

Domains of AAQ	Dependence (n = 16) mean ± SD	Dependence acc. ADL test Moderate (n = 52) mean ± SD	Slight/Independence (n = 53) mean ± SD	p
Psychosocial losses	20.6 ± 9.1	27.5 ± 4.5	24.6 ± 6.4	< 0.001
Physical changes	18.9 ± 7.7	20.1 ± 4.3	20.1 ± 4.3	0.172
Psychological growth	23.2 ± 5.7	24.9 ± 3.7	23.5 ± 4.0	0.148

SD – standard deviation; p – statistical significance

Discussion

In this cross-sectional study we evaluated the attitudes of older adults living in retirement homes to their age. The highest domain score (a more positive attitude) was found in the domain of psychosocial losses, focusing on feelings of loneliness, social isolation, withdrawal, and a gradual loss of physical self-sufficiency. Sak and Kolesárová (2012) found that the Czech population is most afraid of loneliness and the loss of interpersonal contacts in connection with ageing. This was not confirmed by the surveyed respondents living in institutions. A majority disagreed with the statements “Old age is a time of depression”, and “Old age is a time of loneliness”. Valtorta and Hanratty (2012) state that the feeling of loneliness decreases with increasing age. Similarly, Victor et al. (2005) found the lowest incidence of feelings of loneliness in those aged over 85. Indeed, the lowest average score (reflecting a more negative attitude) was reported in the youngest age group (65–74 years), in the domain of psychosocial losses.

The lowest total score (a more negative attitude) was found in the domain of physical changes, focussing on physical health, fitness, exercise, and general perceptions of health. According to Kuchařová (2003) it is having sufficient physical strength and taking an active approach to life that result in an individual's positive attitude to old age and ageing.

In addition, a study by Sijuvade (2009) revealed that most respondents indicated health status deterioration, and dependence on others as the worst parts of ageing.

A significant number of older adults in our research did not agree with positive statements in the domain of physical changes. Nevertheless, they did agree with the importance of exercise at any age. A positive attitude towards exercise in older adults was also found in a Brazilian study by Chachamovich et al. (2008a), and in research by Dragomirecká and Prajsová (2009) in the Czech Republic. However, the pilot study (Kisvetrová, Valášková) suggests that Czech and Slovak elderly have deficiencies in the area of regular physical activity.

Older adults surveyed in our sample evaluated the domains of physical changes and psychological growth (positive perception of oneself and the world) more negatively than those in the sample of the standard population (Dragomirecká, Prajsová, 2009). A more negative evaluation of these two domains by older adults living in institutions, compared to older adults living at home, was also confirmed by a French study (Marquet et al., 2016). Older adults in France living in retirement homes evaluated all domains significantly more positively than older adults in our research sample. In addition, in

comparison with an earlier survey of older adults living in a retirement home in the Czech Republic (Bužgová, Klechová (2011), our respondents evaluated two domains (physical changes and psychological growth) significantly more negatively.

The results of this research also showed certain differences in the evaluation of attitudes towards old age according to demographic characteristics. Men evaluated old age itself more positively than women, although this fact was not confirmed by the results of previous studies (Olejnik, LaRue, 1981; Top, Eris, Kabalcioglu, 2012; Top, Dikmentaş, 2015; Marquet et al., 2016). Men's more positive attitudes towards old age were confirmed only in a Mexican study (Harris, Page, Begay, 1988). Attitudes towards old age showed a significant correlation to the age of older adults in the domain of psychological growth. Respondents in the youngest age group perceived old age significantly more negatively than those aged 85 and over. Minibergerová and Dušek (2006) suggest that the biggest change in attitude towards one's own life occurs at the time of retirement. This is often a time of uncertainty, and can be difficult to come to terms with, leading to negative attitudes towards old age. According to Krivohlavý (2011), those aged over 70 begin to feel happier.

Older adults' attitudes towards old age differed according to their level of education in the domains of physical changes and psychological growth, whereby those with university education evaluated old age most positively, while those who had completed vocational courses evaluated old age least positively. Ruth, Sihvola, Parviainen (2006) state that education makes it easier to cope with the problems of ageing and old age. It helps us keep an open mind, experience life as meaningful, and increases feelings of well-being in old age. Additionally, according to Ardel (2000), learning and education help older adults prepare for the changes that accompany old age. This fact is also confirmed by other studies (Rashid, Ong, Wong, 2012; Marquet et al., 2016). However, it should be noted that older adults with only primary education evaluated old age more positively than those who had completed a vocational course in our study.

The issues of feelings of loneliness, social isolation, and withdrawal, in the domain of psychosocial losses, were significantly more negatively evaluated by older adults highly dependent on another's care. We can assume that these clients have fewer opportunities to participate in activities in a retirement home. Individual care planning should focus on reducing the feeling of loneliness and social isolation caused by the loss of self-sufficiency in dependent clients. For

further research, we recommend examining older adults' attitudes towards old age and ageing in institutional care in the context of the targeted interventions provided.

Limitations of the study

A limitation of the study is the deliberate selection of the respondents surveyed. For comparison of the results, a population standard was used based on a Prague population. This standard may not reflect attitudes to old age in the elderly in the Czech Republic as a whole. A population standard for the whole country was not created.

Conclusion

Health staff caring for older adults play a crucial role in shaping and changing their attitudes towards old age, and in enhancing their quality of life. The task of all caregivers is to understand an older adult as a person from a holistic perspective, to respect their dignity, individuality, autonomy, and to provide comprehensive care for their physical, mental, social, and spiritual needs.

It is necessary to talk openly about the issues of old age and ageing, and to increase the awareness of the general public, and of older adults themselves. It is the only way to achieve changes in society's attitudes, and in the personal hierarchy of values of each individual, and thus prevent unnecessary fears of ageing and old age. The situation can be improved only when we realize that the phenomenon of old age affects us all. Rather than evading the issue, we should confront it, and thus allow ourselves to understand old age, and to create a society in which reverence and respect for the elderly will become the rule.

Ethical aspects and conflict of interest

Ethical rules were conformed to during the research. All respondents were informed about the aims of the study, and assured of the anonymity of the data. Completion of the questionnaire was voluntary and anonymous. The survey was a part of a diploma thesis at the University of Ostrava. The authors declare that they are aware of no conflict of interest.

Author contribution

Concept and design (RB, PU), data collection (PU), data analysis and interpretation (PU, RB), drafting of the manuscript (PU, RB), critical revision of the manuscript (RB), the final completion of the article (RB).

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